Quality Initiatives

Entries in the 16th Annual ACHS Quality Improvements Awards 2013

Supported by Baxter
Quality Initiatives

Entries in the 16th Annual ACHS Quality Improvements Awards 2013

Including the Student Award 2013 | University of Newcastle

Supported by: Baxter
## 2013 QI Award Winners and Highly Commended

### CLINICAL EXCELLENCE and PATIENT SAFETY – Winner

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peninsula Health and Austin Health Vic</td>
<td>Clinical Systems Project Teams</td>
</tr>
<tr>
<td><strong>Project:</strong>  Improving Safety, Quality and Efficiency of Care through the Development of an E-MR</td>
<td></td>
</tr>
</tbody>
</table>

**Judges citations:** Good example of collaboration between sites and demonstrates continuous and quantified improvement.

### CLINICAL EXCELLENCE and PATIENT SAFETY – Highly Commended

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange Health Service NSW</td>
<td>Medical Unit</td>
</tr>
<tr>
<td><strong>Project:</strong> In Safe Hands – Structured Interdisciplinary Bedside Rounds</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Perth Hospital WA</td>
<td></td>
</tr>
<tr>
<td><strong>Project:</strong> Management of Intoxicated Patients Within a Central Business District Emergency Department</td>
<td></td>
</tr>
</tbody>
</table>

### NON-CLINICAL SERVICE DELIVERY – Winner

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monash Health VIC</td>
<td>Dietetics and Central Production Kitchen</td>
</tr>
<tr>
<td><strong>Project:</strong> Innovative Improvement to Food Services for Patients with Allergies</td>
<td></td>
</tr>
</tbody>
</table>

**Judges citations:** A simple do-able project. Stood out because it was different. Transferable to other situations.

### NON CLINICAL SERVICE DELIVERY – Highly Commended

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mater Health Services QLD</td>
<td>Mater Education</td>
</tr>
<tr>
<td><strong>Project:</strong> Student Placement Online Tool - SPOT</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA Country Health Service South West</td>
<td>Home Safe Project Team, ICT and Clinical Governance Unit</td>
</tr>
<tr>
<td><strong>Project:</strong> Home Safe Project</td>
<td></td>
</tr>
</tbody>
</table>

### HEALTHCARE MEASUREMENT – Winner

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathurst Health Service NSW</td>
<td>Physiotherapy and Surgical Ward</td>
</tr>
<tr>
<td><strong>Project:</strong> Up and at ’em. A Trial of early Mobilisation in Elective Orthopaedics in the Rural Context</td>
<td></td>
</tr>
</tbody>
</table>

**Judges citations:**

- Innovative. Well measured. Clearly demonstrated Improvements. Transportable – can be used anywhere.
- Examined Length of Stay, pressure ulcers and dollars involved as well as patient outcomes.

### HEALTHCARE MEASUREMENT – Highly Commended

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepean Blue Mountains Local Health District NSW</td>
<td>Perioperative Suite</td>
</tr>
<tr>
<td><strong>Project:</strong> Today or Not Today? Emergency Surgery within 24 Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthscope VIC</td>
<td>Healthscope (corporate office)</td>
</tr>
<tr>
<td><strong>Project:</strong> MyHealthscope Public Reporting</td>
<td></td>
</tr>
</tbody>
</table>

### STUDENT AWARD – WINNER

<table>
<thead>
<tr>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrospective audit of piperacillin / tazobactam usage in a tertiary referral hospital</td>
</tr>
</tbody>
</table>
Aim
To automate clinical care activities, including prescribing, drug administration, radiology and pathology test ordering and results reviewing; supporting clinical care by providing efficient, effective and timely access to patient data, at the point of clinical decision-making, whilst minimizing duplication of information collection for both patient and clinicians.

Abstract
Austin Health and Peninsula Health have been pioneering the use of clinical information systems in Victorian hospitals through their role as lead agencies tasked with implementing electronic work flows in the move to a fully electronic health record across the Victorian public hospital system. One of the major aims was to implement Electronic Medication Management (EMM) to reduce medication errors, which remain the second most common type of medical incident reported in hospitals.

Austin and Peninsula have been implementing this project in parallel during the period 2009-2013; working to a common schedule with shared milestones. This initiative has already delivered improved quality, safety and efficiency of patient care by providing medical staff, allied health staff and nurses with the capability to electronically prescribe, administer drugs, order investigations and review results with electronic access to a range of clinical information at the point of decision making.

Baseline data was collected prior to the go lives, including medication errors, pharmacist interventions and observational studies of junior medical staff prescribing medications. Implementation was split in to two phases with initial early evaluations of the system across the two health services demonstrating a decrease in medication errors, high system usability and enhanced efficiencies.

The health services continue to provide ongoing education for staff and monitoring of the system to ensure it meets the needs of its users. Their close relationship also continues, with ongoing discussions between representatives of the two services regarding increasing the system’s functionality to further improve patient safety and efficiency.

Both health services are Australian leaders in the field of Computerised Provider Order Entry (CPOE) especially in electronic medication management. The significant work on electronic prescribing completed by Peninsula and Austin will not only inform the clinical system’s rollout to other Victorian hospitals, but to health services throughout Australia.
Clinical Excellence and Patient Safety

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The electronic clinical system has enabled:
- a centralised Alerts Management System which identifies patients at-risk has been established across all sites and services – Acute, Mental Health, Sub-Acute and Community. An electronic notification system is available which allows for prompt patient identification by specialty units of patients at increased risk of harm e.g. Infection Control, Advanced Care Planning, HARP and Diabetes.
- patient clinical information is available at point of care across all sites of each Health Service
- e-discharge summaries are sent to general practitioners and other health service providers in the community
- enhanced clinical decision support at the point of ordering
- history immediately accessible on presentation.

EQuIP Principle 2: Effective Leadership
Austin Health and Peninsula Health nominated to be Victorian lead agencies as it was an opportunity to be early adopters of health information technology, which, as cited in the literature, is an enabler of patient safety, quality and efficiency (Simon et al., 2013). The implementation of electronic health records and health IT systems is considered among the highest priorities of modern healthcare systems (Kaye et al., 2010).

First health services to implement an electronic prescribing system that complied with Australia’s National E-Health Transition Authority and able to streamline PBS approval.

First public health services in Australia to implement EMM in an Emergency Department.

Thousands of staff trained in the new system which involved meticulous implementation planning and change management to ensure safety and quality of care was not compromised during the change from a paper system to an electronic system.

Robust governance models across both agencies with an emphasis on multidisciplinary representation and collaboration.

EQuIP Principle 3: Continuous Improvement
Many patient safety features have been implemented which include real-time patient identification through scanning barcoded patient ID bands, drug dose recommendations, adverse drug reaction reviews and checks on allergies and test or treatment conflicts. Examples of these safety features include: antimicrobial alert decision support, high dose insulin alert and a renal dose alert.

Clinician orders can now be standardised across the Health Services yet may be individualised for each doctor or specialty unit by using order sets (a combined set of medication, pathology, radiology and patient care orders). It has patient centred decision support in that evidence based clinical guidelines are available at the bedside to support treatment decisions. Examples of evidence-based ordering through use of order sets include Warfarin, Prednisolone, Clozapine and Ischaemic Heart Disease.

Access to a range of electronic reports e.g. Discharge summary compliance, allergy recording, alerts, recording of VTE risk assessments which enables timely access to clinical performance data.

EQuIP Principle 4: Evidence of Outcomes
Initial early evaluations of the system across the two health services have found:
- a decrease in medication errors – comparison of 12 months post go-live in sub-acute areas with the same period 12 months previous revealed an average decrease in medication incidents across the two health services of 55%.
- types of errors / near misses included a reduction of:
  - 67% in missed doses
  - 25% in prescribing errors
  - 72% in wrong drug errors
  - no medication errors due to legibility issues.
- improved documentation of allergy status. In 2007, the adverse drug reaction box on the written drug chart had 95% completion but only 68% accuracy.
- in March 2013, there was 99.9% completion of allergy status (93.2% within 24 hours) and 99.9% accuracy of
allergy status.
- usability of the system – login response time of 2.29 seconds, average transaction time of 0.61 seconds and 7.5 clicks per order.
- GPs are now receiving e-discharge summaries from the Emergency Department and acute Mental Health units. Current monthly compliance rate is 73% (n= 934) and 94% (n=71) respectively.
- overall electronic discharge summary compliance has increased from a median of 68% to 83% completed within 48 hours over the past 2 years.
- improved access to data to monitor and change clinical practice in test ordering.
- no incidences of lost drug charts.
- pathology and radiology status is now tracked on-line.
- efficiencies in the Pathology and Radiology Department have been realised.

**EQuIP Principle 5: Striving for Best Practice**
Both agencies are very well-placed to progress to a high level on the International Healthcare Information and Management Systems Society (HIMMS) Rating Scale (assesses progress to a fully integrated e-MR).

Both agencies are members of a state-wide enhancement clinical committee and state-wide clinical reference groups which meet regularly to discuss ways to increase the efficiency and effectiveness of the system and clinical workflows.

**Innovation in Practice and Process**
Austin Health and Peninsula Health are leading the way in the implementation of an e-MR in Australia, in particular with the introduction of electronic medication management across acute (including Emergency), sub-acute and mental health services. They are the first health services to build a full Australian drug catalogue.

**Applicability to Other Settings**
This project has attracted substantial interest across Australia and New Zealand. The significant work on electronic prescribing completed by Peninsula Health and Austin Health will not only inform the clinical system’s rollout to other Victorian hospitals, but to health services throughout Australia.

The Health Services have gained a great deal of knowledge regarding the critical success factors for a successful healthcare information technology implementation which they can impart to other organisations.
Clinical Excellence and Patient Safety Submissions – Highly Commended

MANAGEMENT OF INTOXICATED PATIENTS WITHIN A CENTRAL BUSINESS DISTRICT (CBD) EMERGENCY DEPARTMENT.

Critical Care Division Drug and Alcohol Service
Royal Perth Hospital
Perth WA

Tracey Sinclair  Linda Brearley
Dr Amanda Stafford

Aim
To improve access to community alcohol and other drug (AOD) services for intoxicated patients by reducing AOD intoxication related presentations in our ED.

Abstract
Many medically stable patients with alcohol and other drug (AOD) intoxication are transported to emergency departments (ED) when these patients can generally receive more appropriate care in other settings.\(^1\)

In 2010-2011, RPH ED experienced a 36% increase of AOD related presentations, with a further increase of 18% in 2011-2012. The development of AOD ED initiatives was paramount, given that 92% of all AOD discharges from RPH 2010-2011 were under the care of emergency medicine.\(^2\) We identified solutions to address this increased activity including:

1. More robust referral practices including a clinical pathway for sobering up services within the ED.
2. Expanding the RPH ED AOD Clinical Nurse Consultant (CNC) service to seven days a week.
3. Consulting with Drug and Alcohol Office and Salvation Army to extend hours and funding for the Sobering Up Centre.

We identified the admission of intoxicated persons into a tertiary ED is an ineffective way to engage people with community AOD services. In addition, there was a duplication of service with a Sobering Up Centre within two kilometers of RPH. When auditing we identified a large number of intoxicated patients bought into the ED by police and ambulance services. Our project was influenced by key quality principles and a patient-focused approach of ‘right care, right place, and right time’.\(^3\)

We systematically reviewed and worked with our partners to find solutions to the ‘boomerang effect’ of change, where patients were admitted to Sobering Up Centre but then later returned to RPH ED. This resulted in collaboration with our partners to develop a direct pathway from Sobering Up to Next Step Inpatient Withdrawal Unit in September 2012. In July 2012 we achieved our goal for the extension of the Sobering Up Centre hours.

In April 2013, a direct pathway between St John Ambulance Australia and Sobering Up Centre was implemented and the Drug and Alcohol Office (DAO) confirmed a commitment to maintain funding for the Sobering Up Centre for the next five years.

In May 2013, we identified a 22.9% reduction in admissions from the previous quarter for intoxicated patients to our emergency observation ward (EMW). This was followed by a sustained reduction in AOD presentations in June and July 2013. These were the lowest admission levels to the EMW within the last 18 months. It also resulted in a reduction of approximately $70,000 in over-all costs for the ED. Bridge House community AOD service reported a marked increase in persons accessing their community assessment, detoxification and rehabilitation programs.
Application of EQuIP Principles

**EQuIP Principle 1: A Consumer / Patient Focus**
- Focusing on the patient; at-risk and marginalised group.
- Greater equity and increased access to services.
- Increasing access to community services.
- Safe and cost-efficient non-government service alternatives.
- Utilising resources and funding and avoiding duplication of services.
- Supporting clinical teams with clear, concise pathways, clinical practices and education.
- Working in partnership with secondary, primary care service providers, and non-government and community government organisations to deliver a continuum of care.

**EQuIP Principle 2: Effective Leadership**
- Consultation: Networking with all community partners.
- Governance: The Executive provided clinical governance and data support.
- Primary driving role: RPH Drug and Alcohol ED service drove the project with Medical Consultant and RPH’s Critical Care Division’s Nursing Director support.
- Communication: Ongoing internal and external education of all staff within the ED. Provision of clinical pathways to support practice change. Resource manuals and promotional material.
- Advocating: Nursing Director, Medical Consultant and D and A CNC collectively met with funding providers.
- Benchmarking: Similar program with University of Louisville Hospital, USA and community AOD service provider and international best practice principles.
- Other states: Sobering Up Centres operate successfully in Victoria, Western Australia and the Australian Capital Territory. South Australia has had a twenty four hours a day, seven days a week (24/7) Sobering Up Centre for the past 24 years.
- Internationally: The project was presented in poster format to the Inaugural Mental Health and Addiction Nursing Conference in New Zealand June 2013, to encourage other services to look at similar pathways in there provinces.
- Accepted for WA Health Conference Awards November 2013.

**EQuIP Principle 3: Continuous Improvement**
Identified issues:
- review of the activity of RPH ED D and A service showed an increase of 36% for AOD patients in the last eighteen months
- large number of regular presentations of intoxicated persons bought into the ED by ambulance and police services
- difficult to engage with community AOD services
- duplication of care.

Continuous improvement although ongoing, can be defined in specific stages:
- identifying our key objectives, benchmarking
- identifying and consulting with partners and stakeholders
- advocating for extension of Sobering Up Centre hours to 24/7
- defining pathways and criteria with partners
- implementing changes to clinical pathways and practice through education
- evaluating the effects of the changes
- working with partners to improve and create alternative pathways
- auditing the results
- feeding back to stakeholders.

**EQuIP Principle 4: Evidence of Outcomes**
- A review of the new pathways developed across our service demonstrated a sustained reduction in presentations to the RPH ED in May, June and July 2013, to the lowest levels of in the past 18 months.
- Reduction in costs to RPH ED.
- Direct pathway from RPH ED to Sobering Up Centre.
- Direct pathway from Sobering Up Centre to Next Step.
Clinical Excellence and Patient Safety

- Direct ambulance pathway to Sobering Up Centre.
- A review of ambulance patient transfers from Sobering Up to RPH ED Centre identified 3 episodes with deteriorating conscious states. In each case patients had consumed additional alcohol and substances following their admission to the Sobering Up Centre. These were episodes of impulsive, deliberate self-harm whilst intoxicated resulting in the need for more intensive medical management. All partners managed their roles and the patients’ safety and care effectively.
- There has been one patient transfer to RPH ED with acute alcohol withdrawal syndrome after hours as Next Step Services were not open. This patient was later admitted to Next Step withdrawal service to continue with a detoxification program in the community.
- Anecdotally, follow up with Bridge House AOD services reported an increase in the numbers of persons accessing their assessment, detoxification and rehabilitation services.

EQuIP Principle 5: Striving for Best Practice
According to Limpahan *et al.*, 2013, the best practices provide feasible standards for evaluating and improving how patients transition out of the ED. This includes providing a framework for emergency department leaders for expanding their collaboration with community partners. Our processes and results demonstrate we have evaluated and improved patient transition to community services for sobering up and provided new pathways and frameworks for ourselves and our partners.

Benchmarking our processes with the recommendations in the Mason P and Bennett G (2004) briefing paper demonstrates a marked similarity with practises and interventions in our service and implementation of the new clinical pathways to Sobering Up services by our partners and us. The areas in which we reflect their recommendations include:

- assessments of users to include their drinking
- use of evidence based assessment tools – World Health Organization’s Alcohol, Smoking, Substance Involvement Screening Test (ASSIST) and Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar)
- recording of alcohol consumption and areas of concern in clients’ notes and care plans
- functional links with local specialist alcohol agencies that ensures seamless care for clients who are in receipt of care from both services
- leaflets giving appropriate information about alcohol for substance users
- reference material available for staff including, Alcohol Drug and Information Service (ADIS) telephone and clinical advisory AOD services.

Specialist clinicians who perform drug and alcohol assessments are trained to:

- enquire about alcohol and assess overdose risk
- deliver brief interventions advising clients about the risks associated with use
- use of motivational interviewing and cognitive-behavioural therapy skills in the context of alcohol use
- assess clients for alcohol dependence with evidence based assessment tools
- be familiar with the way in which local alcohol services work.

Innovation in Practice and Process
Often health services work in silos with individual service issues as opposed to working collaboratively. The uniqueness of this quality improvement project is the marrying of old processes with new, tertiary with community, government with non-government. These new service models reflect the principles and values of our current state and regional health service strategic plans. This project hallmarks the value of working collaboratively with partners for improved patient and service outcomes.

Applicability to Other Settings
Benefits of these initiatives for other settings may include:

- a health focus as opposed to legal approach to the issue of intoxication in our community
- new models of care and practice that can be replicated in other health services and communities
- a cost-effective service utilisation
- Improved access – anecdotal information provided by partner services indicates improved access to drug and alcohol services
- capacity building – allowing our and other WA metropolitan emergency departments to increase their capacity and maximising the value of tertiary beds through the reduction of costs and ceasing the
Clinical Excellence and Patient Safety

duplication of services.

References
Aim
The aim in introducing this model of care was to create an inclusive health care team, with a focus on engaging the patient and their family.

Abstract
Structured interdisciplinary bedside rounds (SIBR) is a transformational way of delivering health care. It involves a process where key clinicians involved in the care delivery process meet with the patient and their family each day on a structured / scripted round, sharing and crossing checking information gained from the previous 24 hours of care.

This model is in complete opposition to the traditional model of health care delivery where medical, nursing, allied health and the patient had their structured format to delivery of care with minimal cross pollination of clinical care planning. It has been widely evidence in the literature, good patient care is dependent on well-functioning clinical teams. Early results from this model are aligned to this concept.

After experiencing the impact which SIBR had in Emory University Hospital, Atlanta, this model seemed the obvious next step in engaging the patient, whilst simultaneously scripting the focus of nursing care to identified parameters.

Within the acute medical ward at Orange Health Service identified care focus areas are:
- falls risk
- deep venous thrombosis prophylaxis
- advanced care directives
- indwelling catheter
- intravenous cannula
- observations.

The addition of the patient journey board enabled seamless communication between the broader health team and the patient and their family.

The project aimed to create an inclusive healthcare team, who were geographically located in a physical unit rather that the traditional model of medical team traversing across the facility to review and prescribe treatment for patients. This initial step created the clinical team on the acute medical unit. Having the nursing, medical and allied health team all co-located has provided a supportive, seamless environment where each health professional is not only being held accountable for their contribution in the patients’ care but also a learning environment where each discipline learns and respects each other’s contribution to patient care.

A review of complaints and incidents did suggest there were opportunities to improve how health care was delivered on the acute medical ward. Many complaints suggested our care planning was poor and patient engagement in care.
also non-existent.

The results achieved from this model have been astounding and tell us we are on the right track both in terms of patient safety but more significantly patient/family engagement.

In Safe Hands demonstrates an integrated care model not seen before in the health setting. The core value of this model of care is patient engagement. Each morning when nursing staff first introduce themselves to the patient, the patient is asked their goal for the day which is documented on the bedside patient journey board. The patient journey board is the communication tool utilised on the SIBR round to document the estimated date of discharge, plan of care for the day, family questions and answers. Nursing, Medical and Allied health data gathering and specialty specific rounds and examination occur before the daily SIBR round.

The addition of the patient journey board enabled seamless communication between the broader health team and the patient and their family. Having the nursing, medical and allied health team all co-located has provided a supportive, seamless environment where each health professional is not only being held accountable for their contribution in the patients care but also a learning environment where each discipline learns and respects each other’s contribution to patient care.

In Safe Hands ward was launched in September 2012. Nine months of experience to date has allowed us to compare outcomes for a similar cohort of patients. Patient & Family experiences prior to the intervention can be estimated from previous state-wide patient surveys & some early post-implementation patient experience feedback. It is hoped to replicate the state-wide patient survey questions and extend them using similar methodology in the next few months to be presented later in the year.

Impacts on the Whole of Hospital strategies that can be indirectly attributed to the success of the In Safe Hands ward include:

- ED bed block
- elective surgery cancellations
- Medical outlier numbers in Surgical wards
- NEAT Admitted target for Medical patients to the In Safe Hands ward.

In Safe Hands model of care is now “the way we do things round here”. Accountable shared Nursing & Medical leadership is explicit, data driven and will soon include a Patient & Family advisory council. KPI’s for the ward include efficiency targets including weekend discharge rates, close monitoring of readmissions and routine 48hr post-discharge telephone follow-up. Telephone & secure messaging of discharge summaries and medicine reconciliation is integrated with primary care & other chronic care / continuing care initiatives.

The transferability, adaptability and logical coherence of this transformational change is evident by the enthusiasm of 100 multidisciplinary clinicians and managers from >12 facilities across the State that attended the inaugural “In Safe Hands SIBR” residential school in June 2013. Some of their feedback is paraphrased below:

“Thank you to the Orange team for what you are doing for the NSW public health system and for the Clinical Excellence Commission with your multidisciplinary ward rounds.”
Aim
To improve the clinical management of paediatric gastroenteritis.

Abstract
The use of anti-emetics for children experiencing vomiting has historically been considered inappropriate due to the risk of adverse events. Treatment of vomiting in children has been limited to fluid and electrolyte replacement; this creates an almost automatic inpatient bed episode.

Studies have looked at ondansetron for the management of children with gastroenteritis. Results show minimal adverse events, decreased inpatient episodes and shortened lengths of stay.

On consultation with the Emergency Department (ED), Paediatrics and Pharmacy, ondansetron wafers were supplied to ED. A nurse-initiated protocol outlined the appropriate administration of ondansetron to children including age, exclusion criteria, diagnosis, weight for dosage and degree of dehydration.

After implementation of the new ondansetron treatment protocols there was a decrease in the number of admissions as well as an overall decrease in length of stay for the children who required admission.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The hospitalisation of children creates a period of severe disruption to the family unit. Gastroenteritis and the vomiting child is a major reason for families presenting to emergency departments from both a state and national perspective. The vomiting and dehydrated child strikes fear into the heart of parents and leaves them feeling helpless, thus requiring assistance from their local hospital. Families look to their local hospital to stop their child’s physical distress and ensure their health and safety in the most efficient and shortest timeframes possible. Should the child require admission, the parents want the stay to be effective but as short as possible so as to return to their other children, homes and work. The use of ondansetron for gastroenteritis has achieved all of these expectations for our local families.

EQuIP Principle 2: Effective Leadership
Ondansetron has been utilised effectively for children undergoing chemotherapy and for post-operative nausea and vomiting. The literature on the use of ondansetron for the management of paediatric gastroenteritis is minimal. The literature advises the need for more research.
Whilst ondansetron has been used sporadically across other facilities in the state, this is the first time a small metropolitan hospital has undertaken a project to look at the clinical effects of ondansetron for the front line management of paediatric gastroenteritis.

**EQuIP Principle 3: Continuous Improvement**
The implementation of this project has provided our emergency department with a clear protocol on the treatment of paediatric gastroenteritis in conjunction with the state clinical practice guidelines. Ondansetron has now become a standard pharmacological impress item in the Emergency Department. The ongoing use of ondansetron as part of a management protocol will see continued improvements in the overall management of paediatric gastroenteritis as its safety and effectiveness become obvious.

**EQuIP Principle 4: Evidence of Outcomes**
The statistics provided by the project show clearly that ondansetron is effective in decreasing the number of inpatient episodes for gastroenteritis, improving discharge and clinical care of paediatric gastroenteritis and shortening overall length of stay for those children requiring admission. This is in line with current literature describing the use of ondansetron for paediatric gastroenteritis.

**EQuIP Principle 5: Striving for Best Practice**
The use of anti-emetics for children experiencing vomiting has historically been considered inappropriate due to the identified risk of adverse events. This has resulted in the treatment of vomiting in children being limited to fluid and electrolyte replacement; this creates an almost automatic inpatient bed episode.

The paediatric and critical care groups within the hospital believed that the literature pertaining to the use of ondansetron for the management of paediatric gastroenteritis was positive. This literature was presented to both groups and the district pharmacy representatives.

Although ondansetron is being used sporadically at other facilities, until now, the overall clinical outcomes have not been measured.

**Innovation in Practice and Process**
The use of ondansetron as a safe and effective method for the treatment of paediatric gastroenteritis gave our hospital emergency department a formal, structured and linear approach to treating this specific population.

The efficiency of ondansetron led to 81% of all paediatric gastroenteritis presentations being discharged directly from the emergency department and potentially prevented the same number of children from requiring invasive venipuncture and cannulation. When compared to previous years this result was very positive.

A policy and procedure for the use of ondansetron in children has been endorsed as part of the Emergency Department’s standard practice. Nurse-initiated protocols for the use of ondansetron in children with gastroenteritis have been constructed and implemented. The nurse-initiated protocol and the policy in use at Fairfield will be endorsed across the Local Health District.

Pharmacy representatives from Sydney South West Local Health District will permit ondansetron to be placed on impress as a standard drug for use in children presenting with gastroenteritis.

**Applicability to Other Settings**
Our district will see approximately 1200 children per year with gastroenteritis. The author plans to approach other SWSLHD facilities to undertake a multi-centred clinical trial with the possibility of a well-powered study to show that ondansetron is well-tolerated in children and can prevent unnecessary traumatic events and hospitalisation as well as decrease the length of stay for those admissions that are clinically appropriate. Such a high-powered study would lend itself to facilitating a change of practice across NSW and possibly at a national level.

A change in the management practice of a common paediatric illness such as gastroenteritis will dramatically improve productivity, performance and service quality for health facilities across the district and possibly at a national level. Even more so when noted, that no additional resources were required to implement this practice.
Aim
To optimise rehabilitation outcomes in patients with moderate to severe neurological impairments that lead to physical dysfunctions through the provision of a Computerized Robot-assisted Training Program (“the Program”), and to facilitate an early rehabilitation and improve time efficiency while minimising physical strain to patients and physiotherapists.

Abstract
The Queen Elizabeth Hospital (QEH) is the first hospital in Hong Kong to offer a Computerized Robot-assisted Training Program (“the Program”), in addition to a conventional physiotherapy program, for the rehabilitation of patients with various kinds of neurological disorders. The Program includes both (1) the Robot-assisted Gait Training, and (2) the Robot-assisted Arm Training. Specific protocol and guidelines for the Program were developed. Continuous quality improvement measures are in place in areas of (1) training and service monitoring; (2) risk control; and (3) patient safety and focused care. Research studies were conducted to evaluate the Program’s effectiveness.

Continuous monitoring of rehabilitation outcomes has also been performed for patients undergoing the Program. Significant improvement in all outcome measures including gait speed, walking capacity, spasticity measurement, balance, limb coordination and functional independence measures were detected, demonstrating beneficial effects in the reduction of impairment and disability for patients with neurological conditions.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Gait and arm dysfunctions are prevalent in patients who are suffering from different kinds of neurological disorders. Learning to walk and move the arm again have never been easy tasks for them. The Program has been suggested to be a beneficial treatment option for the rehabilitation of the said groups of patients (“the patients”) via the provision of high-intensity, task-specific, interactive movement to the exercised limbs.

The Physiotherapy (PT) Department of QEH has been providing one-stop comprehensive neurological rehabilitation programs to the needy patients for the whole spectrum of care which, accounting for about 25,000 number of annual patient attendance, involving about 10% of all stroke patients in Hong Kong. The implementation of the new Program instils new hopes in these crippled patients who can have opportunities to have the great and delightful experience of moving the affected arm and walking again at an earlier stage of rehabilitation.

EQuIP Principle 2: Effective Leadership
The Program was developed by the PT Department of QEH and has been hallmarked the first-ever and exemplary Program of its kind in Hong Kong. With the implementation of this new Program development, specific protocols, guidelines and treatment regimes for the Program were developed. Training and development fund was solicited for
providing accreditation training for a group of experienced physiotherapists as Program Trainers including overseas training and experience exchange. Our guidelines have been taken as a reference for other local hospitals including private hospitals in the delivery of a Robot-assisted Training Program.

**EQuIP Principle 3: Continuous Improvement**
Continuous Quality Improvement (CQI) measures have taken place in areas of (A) training and service monitoring; (B) risk control; and (C) patient safety and focused care.

- **Training and Service Monitoring:** An on-going Program evaluation mechanism is in place. The Program is greatly welcome and appreciated by patients who reported significant reduction of spasticity, improved walking ability and speed, increased active control over their body and limbs.
- **Risk Control:** PT practice guidelines for the use of robot-assisted therapy and guidelines on cleaning and disinfection procedures of the system and its accessories have been developed. Daily cleaning and operations check, and monthly user preventive maintenance are the existing practice.
- **Patient Safety and Focused Care:** Based on continuous and close monitoring with the patient feedback on the safety and comfort during training, a custom-made cabinet for proper storage of various parts of the system devices, use of protective padding to reduce friction and pressure relief at high pressure points, and a specially designed chair with a safety belt were made to ensure comfortable gait training and safe seating in arm training.

**EQuIP Principle 4: Evidence of Outcomes**
The Program commenced in January 2011 and May 2012 respectively for the robot-assisted gait and arm training. Up till now, more than 120 neurological patients have been treated. The Program is highly praised by patients in whom good rehabilitation outcomes were reported. Significant improvements in all outcome measures were demonstrated in our Program evaluation and research studies. Continuous monitoring of all patients undergoing the Program also has reflected persistently positive effects in rehabilitation outcomes. Such promising results and experiences were shared with peers and stakeholders on various platforms, local and overseas, e.g. Hospital Authority Convention 2012, 2013; Kowloon Central Cluster Convention 2012, 2013; Hospital Management Asia 2012; ACHS Periodic Review 2012; 2nd Singapore Rehabilitation Conference—RehabTech Asia 2013; Asia Pacific Stroke Conference 2013.

**EQuIP Principle 5: Striving for Best Practice**
The Program incorporated with conventional PT treatment can facilitate much earlier rehabilitation training and generate more promising results for patients with moderate to severe neurological impairment. The Program can provide intensive, repetitive, task-specific arm and ambulatory functional training for the needy patients in an enriched environment. Such an approach can incorporate a severely weakened limb with little movement or even no movement into engaging a supra-acute functional arm and ambulatory training. It helps to shorten the patients’ length of stay in hospital and to promote Occupational Safety and Health for physiotherapists and supporting staff in the course of the Program delivery.

The Program implementation has been awarded with:
1. Asian Hospital Management Award 2012; and
2. Queen Elizabeth Hospital: Outstanding Team Award 2013.

**Innovation in Practice and Process**
The Robot-assisted Gait Training Program developed by the PT Department of QEH has been hallmarked the first-ever and exemplary program of its kind in Hong Kong.

Process summary:
- Review of Service needs: neurological disease burden
- Benefits and feasibility review on implementation of the Program
- Solicit funding for installation of the system
- Implementation of Robot-assisted Training Programs at PT Department, Queen Elizabeth Hospital
- Accreditation training: train the trainers
- Development of the Program guidelines and treatment regime
- Formulation of treatment protocol in local context
- Specific goals setting of the Program
- Outcome Measures and continuous Program evaluation
Clinical Excellence and Patient Safety

- Media attention – local newspaper reporting
- Continuous Quality Improvement Measures:
  - Training and Service Monitoring
  - Risk Control
  - Patient Safety and Focused Care

Key to success:
- Program leader / senior management support
- Committed, competent and concerted team efforts

Applicability to Other Settings
With our successful experiences and Program enhancement, 7 other PT Departments (including private hospitals) in Hong Kong have been installed with Robot-assisted Gait Training System to serve the purpose of rehabilitation enhancement of needy patients with neurological impairment.
ROYAL PRINCE ALFRED HOSPITAL (RPAH) NURSING AND MIDWIFERY CLINICAL STANDARDS PROGRAM (NMCSP)

Executive Unit
Royal Prince Alfred Hospital
Camperdown NSW

Jennifer Thorncraft

Aim
To provide a process to improve patient care through the regular review of care against clear acceptable benchmarks and mandating the use of action plans to address areas of non-compliance.

Abstract
Nurses and Midwives play a central role in the delivery of appropriate, safe, effective care. As Nurses and Midwives at RPAH we hold great pride in the high quality of patient care that we deliver to our patients.

Monitoring the quality of care nurses and midwives provide is difficult to achieve without the use of clinical indicators. The use of organisational-wide clinical audits provides a process to review patient care provision through the regular measurement of clinical indicators against clear benchmarks and the implementation of action plans for those areas not meeting benchmarks.

RPAH Nursing and Midwifery Clinical Standards Program has been established to provide a means by which we can demonstrate our commitment to maintaining the highest standard of care provision possible by creating a series of nursing sensitive clinical indicators.

As a nurse-led initiative the Clinical Standards Program is a simple process that is systematic and effective. The program has been developed to be used by clinical units to enable staff to effectively benchmark the care they provide against acceptable standards.

The program allows the nursing and midwifery service to:

- explore other structural measures of nursing care beyond simple nursing staffing models
- examine broader aspects of the processes of nursing care, especially those related to patient safety, such as incomplete assessments or documentation
- standardise provision of care, examine the influence of nursing care and practice on positive patient outcomes
- focus on patient-centred care, and incorporate appropriate risk adjustment approaches.

Audit design and structure:

- The audits are designed to be nursing/midwifery specific and to reflect the care provided by our service.
- All ward and units within RPAH are required to complete these audit tools as per a timetable.
- The current audit tools utilised are:
  - Admission and Discharge
  - Adult Observation chart
  - Assessment and monitoring
  - Basic Documentation
  - Falls assessment and risk
  - Fluid Balance
Clinical Excellence and Patient Safety

- Hand Hygiene
- Medication administration
- Patient Identification
- Patient satisfaction survey
- Peripheral Intravenous Access
- Pressure injury
- Shift to shift handover
- Staff satisfaction
- Standard precautions
- Suction and Oxygen
- Resuscitation trolley
- S4 Drug register
- S8 Drug register.

- The Nursing / Midwifery Unit Manager is responsible for the overall compliance with the audit programme. It is highly recommended that the audits be performed by the clinical staff to engage them in activities relevant to their unit and to help to raise awareness of current clinical performance.

- The Programme is overseen by a peak nursing and midwifery body, the Nursing and Midwifery Advisory Council (NaMAC), the Chair of which is the Director of Nursing and Midwifery (DONMS).

- The primary purpose of the peak committee is to oversee the implementation of the program, monitor compliance, compare performance with criteria and standards, assist in the implementation of change and ensure improvements to the nursing and midwifery service are sustainable.

History of implementation:
- The NMCSP has undergone many changes and enhancements since its inception in 2007.
- It was originally a paper based audit program. This has now moved into a more advanced online format through a purpose built database with better reporting and monitoring capabilities.
- There is ongoing education around the program and the clinical audits are regularly reviewed and updated in response to changes in the clinical environment.
- Ongoing re-enforcement of its importance to nursing is required.
- The completion of clinical audits on a regular basis has proven to be a key element in meeting many criteria within the National Safety and Quality Health Service National Standards.

Process:
- Auditors complete mandatory monthly audits. There is a timetable that currently consists of 18 audit tools which are mandatory for all wards / units. These audits are based around Nursing / Midwifery provision of care and compliance with local policy.
- Audit information is entered into the online database.
- The area manager is required to discuss the results with the nursing / midwifery team and to develop a local action plan for any results below the benchmark KPI of 85%.
- The peak committee reviews each unit’s audit results and action plans.
- The peak committee also determines whether broader strategies are required to address any areas of clinical care which are falling below acceptable levels across the organisation.
- Changes are implemented where required.

Changes to the program could include:
- to individual audits
- relevant policy changes identified as necessary through the review of audit results
- increased education for staff with a focus on the rationale and intent of the program
- changes to equipment available identified as necessary through the review of audit results.

The NMCSP strengthens the process of identifying and reviewing issues relating to policy compliance and quality patient care. The program also enables a structure by which to evaluate any changes made to clinical policy and procedures.
Clinical Excellence and Patient Safety

There is a structured process for reporting from ward level through to the nursing executive via the NaMAC.

The results of the audits and action plans are analysed and change is made where required.

Nursing and Midwifery Unit Managers have implemented changes including:

- re-education of staff thorough in-services and bedside teaching
- creation of easy to use “Drug register Rules” folder that sits beside the drug cupboard for staff to refer to
- a handy “How To” sheet attached to the S4/S8 Drug cupboard
- memos to staff, and discussion at staff meetings of particular issues relating to compliance
- audits have been reviewed and updated in-line with current policy and practice
- staff have been informed of audit results and compliance rates
- review of ward / unit processes
- review of equipment used / purchased in the area.
- spot checks of mandatory checks, e.g. S4/S8 cupboard and resuscitation trolleys by the NUM / MUM or in-charge
- ICU have implemented “Manic Monday” to ensure staff complete and update Waterlow Pressure Injury / Skin integrity assessments every week as per policy.

The audit program has been in operation for 3 years. There is a strong reporting structure through the NMCSP committee. This committee then reports to the NaMAC which is chaired by DON&M.

For all results below 85% action plans are submitted to the nursing executive by the manager of the ward and are reviewed by the NMCSP committee. Any issues identified through the review process will be tabled for discussion at the NaMAC.

The action plans need to have a plan for better compliance when the next audit is completed – e.g. re-training, education.

The SLHD is currently considering implementing the NMCSP within both inpatient and outpatient services across the District.

The NMCSP has been a key element for RPAH in meeting many of the National Safety and Quality Heath Service National Standards.
A PILOT STUDY TO FACILITATE AND REFINE THE REFERRAL PATHWAY FOR PATIENTS ATTENDING THE EMERGENCY DEPARTMENT WITH A ‘HIGH RISK’ FOOT COMPLAINT.

Diabetes Multi-Disciplinary Foot Clinic
Lyell McEwin Hospital. North Adelaide Local Health Network
North Adelaide. SA

Suzanna Parkyn

Aim
To facilitate and refine the referral pathways of patients attend the Emergency Department with a ‘high risk’ foot complaint.

Abstract
Purpose: The aim of this pilot study was to facilitate and refine the referral pathway for patients seen in the Lyell McEwin Hospital Emergency Department with a foot complaint, most commonly in the setting of pre-existing diabetes, who have been identified as at ‘high risk’ for foot amputation. Appropriate and timely pathways were created to help with patient flow and overall patient management. Issues with the current processes were identified when an existing patient, who was recognised as being at high risk for lower extremity amputation (LEA) had an adverse outcome when managed by a service which did not specialise in the management of the high-risk foot. There were four main goals in implementing this pilot:

1. To help provide a timely, safe and effective patient journey
2. To help facilitate SA Health’s broader healthcare plan of ‘Right care, right time, right place’ and the ‘4 hour emergency department rule’
3. Make hospital staff and patients more aware about the complex issues and management of the ‘high-risk’ foot
4. Raise awareness of the extent and severity of diabetic foot disease in our health service.

Methodology: The National Evidence-Based Guideline, Prevention, Identification and Management of Foot Complications in Diabetes, was published in 2011 and highlights the need for a multi-disciplinary team to be managing the complex nature of diabetic foot disease. The Diabetes Multi-disciplinary Foot Team (including Podiatrists, Endocrine Physicians, Vascular Surgeons, Diabetes Educators and Hospital at Home) is an essential hospital unit which can facilitate the appropriate and timely management of this specialised group of patients to manage and prevent LEA. This team provided an ‘on call’ service with the use of multimedia, to facilitate the safe, effective treatment of patients presenting with foot complaints to the Emergency Department. Education sessions were provided to all staff involved. The pilot project was implemented on the 1st of July 2012, however, in the year previous to this, research and background preparation, including approvals and all associated documentation, was compiled. The project continues to run and patients are continuously being referred from emergency in a timely manner.

Results: Data spanning the year was analysed for the Pilot. For the period of July 2012 – June 2013, 64 patients had been referred, 58 via direct phone referral and 6 via an out-of-hours pathway. The main reason for referral was for infection; however there was a wide range of issues including burns, ingrown nails, Charcot joint, ischemia and general injuries / trauma. Of the 64 patients, 27 (42.2%) were admitted directly to the Lyell McEwin Hospital for treatment while another 6 (9.4%) patients were directly transferred and admitted to other Adelaide hospitals (admission rate of 51.6%). The main reason for admission was infection requiring intravenous antibiotics (40.6%)
with 9 (14.1%) patients requiring urgent amputation or revascularisation. 8 of the patients had a combination of medical co-morbidities which also required hospitalisation. Unfortunately 7 (10.9%) of the patients who presented required an immediate below knee or above knee amputation (BKA / AKA) due to sepsis and 3 patients had a planned BKA after failed improvement of ulcers with known osteomyelitis. Of the patients referred to the Foot team only 9 (14.1%) were previously known to the team. 31 of the 64 (48.4%) patients seen were discharged directly from the ED and provided with follow up in an appropriate setting for their presenting complaint, including 4 referred to the Hospital at Home program for IV antibiotics at home. Comparing the admission rate from patients seen in the first six months of the project to the second six months there was a significant decrease. July – Dec 2012 reported an admission rate of 60%, however it was only 37.5% from January to June 2013.

**Conclusion:** This pilot highlights the significant number of patients attending the Emergency Department with high-risk foot complaints. There were a remarkable number of new patient presentations who presented very late in their disease process. The Foot Team was able to assist with timely admission where required and facilitate ‘hospital avoidance’ and appropriate decision making to discharge those patients not required to be seen in an acute service. This ultimately aids patient recovery and saves the hospital money in a time of financial strain. Most importantly, it ensures appropriate management of a condition that requires highly specialised and skilled management. This snapshot audit is believed to be an underestimate of the number of patients attending the Lyell McEwin emergency department with ‘high-risk’ foot complaints highlighting the need to increase education to facilitate timely referrals and re-assess current Foot Clinic staffing levels to cope with the volume of referrals. It may also reflect the patient’s socio-economic status, health literacy and ability to ‘self-manage’ with a chronic condition. The service will continue and reasons for late presentation will be further investigated.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

This pilot process was implemented with a consumer focus. Unfortunately one of the regular Podiatry patients experienced an adverse outcome on presenting to the Emergency Department and it was his story that prompted the need for change. He was involved in a consultation process with the hospital and members of our Foot Team in ways to improve the system. We believe that this gave this patient an immense sense of achievement in being able to facilitate change and ultimately assisted in his ability to accept the adverse outcome experienced. The outcome was that the way patients who are at risk of foot complications who presented at LMH ED would be managed would be changed. This included education in recognising the condition and risk by ED staff, a mechanism to contact the Foot Team directly and early review by a podiatrist in ED to facilitate further input, if required, by other members of the Inter-Disciplinary team.

The main goals in implementing this pilot were to:

1. Help provide a timely, safe and effective patient journey.
2. Help facilitate SA Health’s broader healthcare plan of ‘Right care, right time, right place’ and the ‘4 hour emergency department rule’.
3. Make hospital staff and patients more aware about the complex issues and management of the 'high risk' foot.
4. Raise awareness of the extent and severity of diabetic foot disease in our health service.

Patients have appreciated the change in service especially those that had presented to ED before the project was in place. They feel like the process of being seen is quicker and more streamlined. Patients who were called and seen directly from the waiting room, bypassing ED altogether, appreciated the decreased waiting time and more streamlined service delivery. These patients met the team that would manage their care throughout the whole condition from the beginning, improving communication and overall outcomes. It also empowered patients to contact the appropriate managing team if they were experiencing problems and required earlier review. Surveys have been created for patients who have attended the department and experienced the new pathway.

**EQuIP Principle 2: Effective Leadership**

This project was well-received and supported by all aspects of staff from LMH. Executive down to clinicians on the floor were happy to be involved in the project and supported the implementation and continuation of the project. Refining the referral pathway of ‘high-risk’ foot clinic patients presenting to the hospital is an innovative approach that had not been trialled in any other hospital in South Australia. This was a project which assesses multiple aspects
of care within a particular setting. It helped improve emergency department waiting times and provided a different way of thinking in regard to bringing in external teams not usually working in the emergency department. This new pathway also helped all staff with further learning as most received education sessions regarding the implementation of the project, improving their knowledge of what constitutes, and how to manage, a ‘high-risk’ foot that presents to emergency.

**EQuP Principle 3: Continuous Improvement**

Referral procedures for patients attending hospital are essential processes which should be streamlined. Any changes to this everyday practice which can improve overall patient care should be implemented. Patients who attend the LMH ED with a ‘high-risk’ foot complaint such as ulceration should be managed by an appropriate team. It is therefore logical to suggest that the team is involved in the patients’ care from initial presentation. Technology has progressed greatly in recent years, so it was determined that it could be used to improve communication and referral pathways within the team. An iPhone was obtained instead of a pager. This way, with patient consent, photographs of the presenting complaint could be obtained. This helps improve patient care in multiple ways. One, it allows for initial presentation to be visually recorded to help monitor change, whether it be improvement or deterioration. Two, it also helps streamline the referral process to external clinicians who may not be onsite. Advice over the phone or strategies for patient management including transfer to external hospitals for surgery can be improved with visual prompts to help assess acuity of the presenting condition.

**EQuP Principle 4: Evidence of Outcomes**

Throughout the pilot, data have been collected to help analyse the effectiveness of the project. Multiple aspects of the project have been assessed from number of referrals, reasons for referral and discharge location from ED whether it be admission or complete discharge from service or to other outpatient clinics. Outcomes of treatment were also measured for some patients while they were admitted to hospital. Data were compared from the first and second halves of the year and with the most impressive statistic being the decrease in hospital admission rate from 60% to 37.5% in the second six months. Data regarding total ED presentation were also analysed and compared to presenting referrals to foot clinic to benchmark number of referrals highlighted as ‘high risk’ that were officially referred. A second gratifying outcome was the high rate of “new” patients to our service that were identified, enabling us to engage them in ongoing diabetes management and risk factor management.

**EQuP Principle 5: Striving for Best Practice**

The National Evidence-Based Guideline, *Prevention, Identification and Management of Foot Complications in Diabetes*, was published in 2011 and highlights the need for a multi-disciplinary team to be managing the complex nature of diabetic foot disease. The Diabetes Interdisciplinary Foot Clinic reinforced this best-practice model in the implementation of this project. Some research was undertaken to investigate current models that exist nationally and internationally. To get this pilot project started, background work was completed by a team of multi-disciplinary clinicians who were participating in the SA Health LEADS Course June 2011–2012. The LEADS course required participants to work on a project which would benefit SA Health whilst participants learnt the skills and values of leadership. This particular project was led by Suzanna Parkyn, Senior Podiatrist at the Lyell McEwin, however group members covered the spectrum of health, including doctors, nurses, allied health and ambulance officers. Research into other like projects or hospital protocols was undertaken and found to be minimal.

**Innovation in Practice and Process**

This project has been commended by multiple clinicians and organisations for its innovation and applicability to helping manage the ‘high-risk’ foot. The ideas behind it, whilst simple, are effective and help streamline current processes within the hospital to make care to a patient more timely and safe and in the process, efficient. As it is a simple intervention, it is sustainable and does not require excessive ongoing education. The project has been recognised by the National Lead Clinicians Group in their (National LCG) Awards for Excellence in Innovative Implementation of Clinical Guidelines. Unfortunately the work was not selected as a finalist, however the application was assessed to be exceptionally informative and demonstrated an innovative approach that the National LCG wanted to showcase. The Foot Clinic was subsequently invited to present a poster at the National Clinicians Network (NCN) National forum on 13 June 2013, in Sydney.

The data for the first six months of this pilot project were also presented at the inaugural Sydney Diabetic Foot Conference held in Liverpool, in May. The project was very well-received and since its presentation, multiple hospitals from around Australia have asked for more information regarding the project.
Applicability to Other Settings
This project is very applicable to other settings, is sustainable and addresses a service-wide challenge for all Inter-Disciplinary Foot Teams nationally. The management of ‘high-risk’ feet is very complex and requires a team approach. This is the case with multiple co-morbidities. Other conditions routinely managed by a team of specialists could also adopt similar principles to this project and create referral pathways for patients entering the emergency department. These teams could be contacted on initial presentation to help facilitate a timelier and patient-centered approach. This could also help ease the pressure on ED staff and spread the case load. In regards to the model of this particular project, the data and concept have been very well-received in the High Risk Foot Teams working in hospitals around Australia. Currently there has been interest from Foot Clinics in Sydney, Perth and Queensland to implement a similar model and pathway in their emergency departments, to facilitate an improved pathway for high risk foot patients.
To reduce the amount of time children with possible appendicitis stay in the Emergency Department and ensure best practice in managing these children.

Abstract
Appendicitis is a common and potentially serious illness that can be difficult to diagnose. The Emergency Department (ED) at The Children’s Hospital at Westmead sees up to ten patients each day with possible appendicitis and many stay in ED for over four hours. The National Emergency Access Target mandates more timely care for these patients, therefore our group considered better management strategies for these patients.

After this review of delay for patients with possible appendicitis in ED, we developed a clinical guideline that included a risk stratification tool, known as the Paediatric Appendicitis Score. Post-implementation, the average time in ED for possible appendicitis patients reduced by one-third and the number who departed ED within four hours increased from 7% to 29%.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The diagnosis most often feared by families of children with abdominal pain is appendicitis, but this diagnosis often involves transfer between hospitals and long waiting times. This project streamlines the diagnostic process and will allow more children to remain closer to home during care.

EQuIP Principle 2: Effective Leadership
The project develops a model for care of children with possible appendicitis at district metropolitan hospitals, avoiding unnecessary transfer to tertiary centres.

EQuIP Principle 3: Continuous Improvement
A 2011 review of ED activity at The Children’s Hospital at Westmead showed around 60% of all patients departed within four hours. One of the largest groups remaining longer in ED was those individuals awaiting admission with possible appendicitis. In October 2012, a four-week audit of abdominal pain presentations found that each day approximately ten patients presented to ED, of which three were thought to have appendicitis. For patients with possible appendicitis, the average time in ED was 9.4 hours and only 7% of patients departed within four hours. The project team came together to identify the possible causes of delay and to identify opportunities for improvement.

The primary intervention in this project was to implement an ED guideline that included a risk stratification tool for possible appendicitis. The aim was to integrate and streamline care between teams, facilitating either earlier discharge or earlier surgical review in ED. The Paediatric Appendicitis Score (PAS) (Samuel, 2002) was chosen as a suitable tool for dividing patients into low, medium and high-risk for appendicitis (Adibe, 2011; Bhatt, 2009; Escriba,
EQuIP Principle 4: Evidence of Outcomes
Over six months, the average time in ED for all patients with possible appendicitis fell from 9.4 hours to 6.4 hours and ED departure within four hours rose from 7% to 29%. This is roughly equivalent to an extra bed space for almost eight hours every day.

EQuIP Principle 5: Striving for Best Practice
The possible appendicitis guideline and PAS assessment have now been established as a standard approach to ED management. The score will become part of the electronic record. Further development of the PAS score will involve risk stratification to identify children who can avoid blood tests and those who can be safely discharged for later review.

Innovation in Practice and Process
The use of a published score for appendicitis within an Emergency Department guideline for the care of children with possible appendicitis is a new practice. The guideline details an innovative process incorporating risk stratification then urgent surgery, observation or discharge.

Applicability to Other Settings
There is interest from district level hospitals in the Sydney metropolitan area in using a score to guide external referrals to tertiary paediatric centres by identifying low-risk patients. This would allow these patients to remain close to home. The National Paediatric Emergency Research Collaborative (PREDICT) is interested in investigating this further.
REDUCING INFECTION IN NEONATAL INTENSIVE CARE (NICU)

Neonatal Intensive Care Unit (NICU) of John Hunter Children's Hospital
Hunter New England Local Health District
Newcastle, NSW

Justine Parsons  Chris Wake

Aim
To reduce the incidence of Hospital Acquired Infection by 30% in infants born less than 32 weeks gestation.

Abstract
Hospital Acquired Infection (HAI) is a common problem for premature infants, particularly at the lower gestations. Year 2010 saw an increase in HAI in JHCH NICU to 20.9% for babies born less than 32 weeks gestation.

An awareness of the increased rate of HAI led 31 multidisciplinary staff to form a Clinical Practice Improvement (CPI) group and commit to reducing hospital-acquired infections focusing on babies born less than 32 weeks gestation. The group undertook CPI training and identified four broad areas of practice that were judged major contributors to infections in the unit: 1) the insertion and handling of central venous line (CVL) catheters, 2) hand hygiene, 3) staff and visitor illness and 4) environmental hazards.

Four subgroups worked on making practice changes that have been introduced sequentially over the intervening years. These changes reduced the sepsis rate for babies <32 weeks from 20.9% in 2010 to 11.9% in the first quarter of 2013.

Application of EQuiP Principles

EQuiP Principle 1: A Consumer / Patient Focus
The most important consumers in the service are the premature infants cared for in NICU with parents and families also important consumers.

Many infections are considered avoidable with best practice in infection prevention. Avoiding infection reduces the risk of morbidity and can improve long-term outcomes, and is therefore a very consumer-focused endeavour that benefits the baby and family while reducing health service resource use.

EQuiP Principle 2: Effective Leadership
In 2010, ongoing infection surveillance revealed the HAI rate was almost 21% in infants born less than 32 weeks gestation. A nurse educator engaged thirty-one interested multidisciplinary staff to form a CPI group that resolved to reduce this rate by 30%.

The four key areas of greatest need identified were:
- issues around CVL catheter care
- staff and visitor issues
- hand hygiene
- environmental issues.
Clinical Excellence and Patient Safety

**EQuIP Principle 3: Continuous Improvement**

The CVL Catheter Group:
- redesigned the procedure for insertion of central lines – sterility, rapid closure of site, reduced nursing scrub-time developed a clinical practice guideline (CPG) for all staff to follow
- ensured staff carrying out the procedure are now limited to experienced staff only
- investigated and purchased new line access devices to create and maintain a fully closed system.

Staff and Visitor Group:
- hand hygiene practices encouraged and reinforced; development of “Visitors House Rules”, and “Staff House Rules” with wide advertisement
- staff and visitors wearing clothes below the elbow, jewelry, watches, false nails and nail polish contravening NSW policy are targeted to ensure compliance
- presentee-ism (presenting at work when sick) was addressed with staff and every effort made to make families aware of the risks of visiting while unwell with information in the handout on hand hygiene and on the new signage at the entry to NICU.

The Hand Hygiene Group:
- developed posters and pamphlets on hand hygiene
- trialed various hand hygiene products and two selected for acceptability and effectiveness
- installed an automatic dispensing station
- introduced a procedure for families visiting their baby, ‘5 Steps to your Baby’.

Environmental Issues Group:
- a major effort was made to de-clutter the environment of known infection risks such as soft, fluffy toys
- the oversupply of stock was addressed, with particular effort made to reduce the amount required in the patient space; this reduces opportunity for colonization
- avoiding invasion of the space being used for sterile procedures such as CVL line insertions became a priority: dividing screens were purchased; increased vigilance around preventing other unnecessary staff being in the procedure area is also undertaken.

**EQuIP Principle 4: Evidence of Outcomes**

The aim of reducing the sepsis rate in all babies < 32 weeks gestation by 30% was met, falling from 20.9% to 11.9% by the first quarter of 2013.

Hand hygiene compliance rates improved slowly as shown below but with a decrease in early 2013. This is the target of current efforts to improve rates once again.

**EQuIP Principle 5: Striving for Best Practice**

In the Australia and New Zealand Neonatal Network (ANZNN), mean late onset sepsis rate for babies < 28 weeks is 29.0% and for babies 28-32 weeks is 7.1%. We have moved from one of the poorer ranked units to one of the better performing with our reduction in HAI.

**Innovation in Practice and Process**

The more traditional approach to practice improvement has been for a panel of senior experts to determine what needs doing and direct staff to do it, and for one or a few changes to be selected for trial and before and after results compared.

In this project, we undertook to use the expertise of staff at the bedside, supplemented with formal training in Clinical Practice Improvement to develop a suite of changes that the staff would be committed to introducing. Ownership and therefore commitment developed through staff involvement from the very beginning, introducing changes that made sense in the local situation, that were backed up by the literature review and were seen as achievable.

This is slowly shifting the ‘culture’ towards vigilance around HAI.
Clinical Excellence and Patient Safety

Applicability to Other Settings
The approach of engaging multidisciplinary clinical staff, tapping into their expertise and willingness to be involved, and then gaining their commitment to change outcomes has proven very effective. The approach is applicable to any clinical service. It requires leadership from senior staff to be involved and support the process, but also to be prepared to listen to junior staff and accept group planned changes rather than trying to impose their ideas of what is required.
Aim
The aim of this project is to develop and implement an individualised Renal Care Pathway for all pre-dialysis patients by empowering patients to self-manage, thus improving the uptake of home dialysis therapies.

Abstract
In October 2011, development and implementation of a Renal Care Pathway was initiated, aiming to improve the experience of pre-dialysis patients. Based upon feedback from patients / carers and staff interviews, plus research of clinical guidelines, the development of the Renal Care Pathway facilitated a new model of case management, subsequently embedded into clinical practice. The results have been evident via improved care co-ordination, enhanced patient preparation for dialysis, improved patient psychosocial welfare, increased number of patients planned for and commencing home dialysis, empowering patients by giving them the confidence, knowledge and skills to be actively engaged in their own care. Additionally the project resulted in significant expenditure avoidance of $750,000 in 12 months.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Implementation of a Renal Care Pathway involved reviewing pre-dialysis patients’ journey, empowering patients via improving communication and multi-disciplinary decision making in terms of chosen dialysis modality, conservative management as an alternative to dialysis therapy, and patient self-management. Staff and patient surveys formed the impetus for care pathway development. This process has resulted in better co-ordination to meet patient needs regarding clinician engagement, timely and appropriate dialysis access, and improved education, increasing patients’ ability to self-manage their condition in the community. The pathway is a local solution and has also resulted in reducing confusion for people in the pre-dialysis phase of their journey toward long-term care.

EQuIP Principle 2: Effective Leadership
A Committee was set up to provide governance, monitoring and support to the self-selected ‘Champions’. Multi-disciplinary groups were formed. Each group was allocated a Champion to promote development and implementation, to provide the commitment and leadership for effective change process directly from within the Renal Department.

The following activities were used to develop the Renal Care Pathway:
- formation of Working Party to develop care pathway framework and documentation
- liaise with Chronic and Complex Care program to identify best practice
- adapt appropriate model to needs of the Renal Service
- develop a case management model suitable for renal patients
- liaise with Renal Electronic Medical Record System Steering Committee Renal eMR development
- identification of resources necessary to cope with initial high numbers of care pathways
education of staff re: changes to care planning
develop and enact an implementation strategy.

Comprehensive research and diagnostic activities were undertaken, including:
- reviews of the National C.A.R.I. (Caring for Australians with Renal Impairment) Guidelines and available international Guidelines, NSW Health Renal Dialysis Costing Studies
- review and analysis of Australian and New Zealand Dialysis and Transplant Registry data
- structured patient / carer (consumers) interviews
- staff interviews and multiple workshops involving a mix of multi-disciplinary participants within the Renal Service to analyse the obstacles in the patient journey.

The data and feedback of research activities combined with the literature search results confirmed the key elements required to be implemented for the success of the Renal Care Pathway.

**EQuIP Principle 3: Continuous Improvement**
The introduction of a standardised Renal Care Pathway, developed by staff, supports sustainability. Embedding the change into clinical practice has the potential to provide positive impact towards Goals 11 and 12, NSW Strategic Plan 2021, of reducing potentially preventable hospitalisations and increasing patient satisfaction. The Renal Care Pathway is being embedded into the Renal Electronic Medical Record Project, replacing current paper version by September 2013. This will further support sustainability and will allow replication to the rest of the State.

**EQuIP Principle 4: Evidence of Outcomes**
Outcomes of this project to date include:
- achieved 100% (n=179) in 12 months of new pre-dialysis patients commencing on a structured multi-disciplinary care pathway ensuring appropriate multi-disciplinary planning allowing for the planned initiation of dialysis therapy at an appropriate time
- number of patients planned for home therapies has risen from 19% to 56% (n=101) in 12 months
- improved psychosocial care due to the introduction of a valid psychological assessment tool for all new patients, ensuring timely and appropriate referral to the Renal Psychologist if required
- significant expenditure avoidance of $750,000 in 12 months since introduction of the care pathway due to increased uptake in home dialysis (28%)
- pre-implementation interviews demonstrated a commonality of issues identified by patients, carers and staff; identifying a need for optimised implementation of the relevant guidelines
- post-implementation interviews have demonstrated increased improvement in care co-ordination, improved patient satisfaction with their care and better structure for the patient’s preparation for dialysis, including psycho-social welfare
- some issues such as concerns in regard to accessing parking and transport were out of the scope of this project.

**EQuIP Principle 5: Striving for Best Practice**
Implementation of the Renal Care Pathway improves the quality of patient care through:
- dedicated pathway defining the ideals of an appropriate patient journey
- appropriate referrals to multi-disciplinary clinicians
- clear guidelines on dialysis access management in the pre-dialysis phase
- centralised data management system, communication and accurate information exchange
- effective pre-dialysis education program without long waiting lists
- increased uptake of home-based dialysis.

**Innovation in Practice and Process**
The implementation of the Renal Care Pathway was encompassed within an Accelerated Implementation Methodology which facilitates rapid and effective implementation of changes to organisational process. This involved a number of multi-disciplinary clinicians including: Allied Health (Social Workers, Dieticians and Psychologists), Renal Medical Staff (Registrars to Staff Specialists), junior and senior nursing staff, Hospital Executives, consumers, Information and Technology personnel and SWSLHD Community Participation Network. The introduction of the renal care pathway is unique and original with no other of its kind being undertaken within Australia. The introduction of the Renal Care Pathway is unlike any other initiative of its kind being undertaken within Australia. This project will contribute to international evidence helping to develop new insights into the
influence of properly structured integrated Renal Care Pathways on patient education, modality planning and the empowering of patients towards self-management.

**Applicability to Other Settings**
The introduction of standardised renal care pathways developed and owned by staff supports sustainability. The care pathway is being included into the Renal Electronic Medical Record Project which commenced in 2012, replacing the current paper version in September 2013 to ensure all staff can access the information. This will further support sustainability and will allow replication to the rest of the State much more conveniently. The model of care can easily be adopted by other renal service providers nationally and internationally. The success can, in large part, be attributed to the stakeholders as well as dedicated clinical and governance leadership. This model of care, can, by bridging the knowledge / practice gap, be replicated to produce sustainable improved financial and quality of care, advances in patient safety and patient outcomes.
MULTI-DISCIPLINARY TEAM TRAINING FOR OBSTETRIC EMERGENCIES

Mater Mother’s Hospital and Mater Practice Improvement Unit
Mater Health Services Brisbane
Brisbane QLD

Sarah Janssens  Catherine Cooper
Sharon Clipperton  Pauline Lyon

Aim
To promote clinical excellence in emergency settings using a comprehensive program of immersive multi-disciplinary team skills training.

Abstract
Emergencies in obstetric patients are commonly life threatening events. Some emergencies occur frequently, such as post-partum haemorrhage, and some, such as inverted uterus, may not be experienced by a clinician within their lifetime. All obstetric emergencies require prompt action, effective leadership and teamwork to avoid catastrophic outcomes for mothers and babies. The challenge for today’s health care workforce is how to develop and maintain emergency skills in an environment of reduced clinical exposure and high patient safety expectations. Simulation training has been used in obstetrics for many years, but training has typically consisted of attending individual courses and been confined to single disciplines with little emphasis given to the interaction between disciplines in an emergency. The Mater Mothers Hospital has embarked on a program of multidisciplinary simulation training for obstetric emergencies aiming to improve skills and teamwork in emergencies. The program consists of monthly day long “Maternity Emergency Management” (MEM) days in our simulation centre, fortnightly in situ mini-MEM’s throughout all clinical areas of the hospital and quarterly advanced simulation afternoons “A-MEMs” consisting of more complex scenarios. This program aims to improve patient outcomes by allowing clinicians from all disciplines to practice, improve and reflect on their skills and communication in an interactive and safe learning environment. Participants report marked improvements in their confidence to manage obstetric emergencies. Clinical outcomes are to be monitored by a “Safety Score”.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Clinicians are the primary consumers in this program. The benefits however, flow onto our patients and we plan to monitor our patients’ safety parameters. Training in obstetrics historically was a “sink or swim” experience with trainee doctors and midwives being exposed to a vast amount of clinical work, mostly learning by their errors. Clinicians learnt by experience with little regard for patient preference or safety. Recent increases in the number of training doctors and midwives have led to a significant decrease in the amount of clinical exposure clinicians have while training. This, coupled with the well-overdue focus on the importance of patient safety and complying with patient preferences has meant that trainees in obstetrics and midwifery may not even be exposed to common obstetric emergencies during their training, leaving them unprepared to deal with emergent situations. The pendulum may have swung too far and a shift in the way clinical and teamwork skills are taught is required to correct this deficiency in training while maintaining patient safety and autonomy. Immersive simulation is a key element in the solution. Team training in obstetric emergencies has been shown to improve objective measures of teamwork
and clinical obstetric outcomes.\(^1,2\) Our program has been developed to provide a safe learning environment for both clinicians and patients.

**EQuIP Principle 2: Effective Leadership**

Deficiency in non-technical skills especially leadership and communication are major components of adverse clinical outcomes in emergencies, accounting for 70\% of the root causes of sentinel events in some hospitals. Crisis Resource Management (CRM) is a set of principles developed in the aviation industry and modified for use in the health sector that aims to reduce human error in high-risk situations. Leadership, team work and effective communication are key elements of CRM principles and are the focus of the MEM program. During the debrief following a scenario participants are facilitated to reflect and discuss the leadership behaviours displayed during the scenario, including who was the leader in the room (if any) and what behaviours they displayed that made them an effective leader (or not). In considering these questions participants come to realise the importance of leadership in an emergency, who might lead and how to do this effectively. Taking a leadership role requires skills and confidence which we believe can be learnt outside of the clinical setting. MEM aims to impart this confidence by giving participants an understanding of the principle that anyone might be called upon to be a leader in any given situation, and a chance to practice in a safe environment. A particular focus on leadership in MEM is that leadership should be explicitly stated, and the Medical Officer in the room might not always be the best person to be the leader in certain circumstances.

**EQuIP Principle 3: Continuous Improvement**

The MEM program is purposely inclusive of clinicians from multiple disciplines with a broad range of experience. The learning experience of the graduate midwife may be different to that of the senior obstetrician, but participation by such a broad group demonstrates to all that learning is a life-long experience. A large portion of the day is spent in “debriefing” following participation in the simulation scenarios. Trained staff facilitate the conversation using principles of “debriefing with good judgment”. This style of debriefing encourages the participants to not only reflect on how they performed, but to consider what factors, internally and externally, lead to their behaviours. Once they understand the set of knowledge and beliefs that cause them to perceive a situation or behave in a certain way, (known as a “frame”), they are able to understand if a shift in frame is necessary to prevent their making a similar error again. As an example, a frame for a junior midwife might be, “I wouldn’t know anything more than an obstetrician, I can’t speak up.” Exploring and readjusting this frame is vital to that junior midwife’s ability to feel confident about speaking up in the future. This is done through gaining new insights (such as the obstetrician in the group discussing how they sometimes get overwhelmed and want someone to suggest ideas), developing and practicing skills (such as graded assertiveness) and developing and understanding that every member of the team is responsible for the outcome of every patient. The debriefing session is a vital part of learning in simulation, and it is a skill which can be translated into the clinical world. By teaching the participants how to reflect on their actions collaboratively and explore their own frames, they can continuously improve their clinical performance and spread a culture of reflective practice throughout the organisation.

**EQuIP Principle 4: Evidence of Outcomes**

Response to the program so far has been extremely positive. Participants indicate a marked improvement in their confidence to deal with emergencies following attendance at a MEM day. Patient safety parameters will be monitored with a “Safety Score”. The score consists of a denominator of all births except planned Caesarean Section and a numerator of serious adverse event in mother or baby. Maternal events include hysterectomy, admission to ICU and blood transfusion (max. score of one point per mother) and Neonatal outcomes include seizures, pH < 0.05 or unplanned admission to the nursery of a normally formed baby >37/40. (max. score one per baby). Formal and informal feedback has been very positive from all participants, with much of the feedback focusing on how valuable the teaching of communication and leadership skills is.

**EQuIP Principle 5: Striving for Best Practice**

While the focus of MEM is CRM principles, clinical excellence is the primary aim. The MEM program understands that it is more than knowledge and technical skills that determines outcomes in emergencies. The core elements of knowledge and skill must be the foundation, but these elements require translation into effective action to deliver clinical excellence. Clinical guidelines and policy are integrated into the learning at each scenario. Scenarios are used to highlight important evidence-based policy points, or to update clinicians in changes to recent policy points or new policies. Best practice also involved clinicians working together collaboratively. MEM is coordinated by a
multidisciplinary team of Midwives, an Obstetrician and Anaesthetist. This demonstration of collaboration at a senior level, especially during the simulation training, helps to perpetuate a culture of mutual respect and collaboration.

**Innovation in Practice and Process**

While simulation for medical training is not new, traditionally it was limited to “skills drills” focusing on technical skills and operating in silos of separate disciplines. We believe the MEM program is unique in women’s health, having a coordinated approach to embed multidisciplinary simulation training in everyday work with varying levels of complexity. The focus of the MEM program is to replicate the usual working environment with clinicians across disciplines of varying levels of experience. Each scenario provides the opportunity for clinicians to improve their leadership, teamwork and communication skills. In particular scenarios involving obstetric / midwifery and non-obstetric disciplines such as anaesthetics, paediatrics or emergency medicine highlight the differences in knowledge, terminology, skills and perceptions that different disciplines bring. Extremely high levels of communication and leadership are required to prevent human error when clinicians from such different backgrounds work together. Bringing clinicians together in simulation highlights this need and helps to improve relationships and collaboration across both education and clinical work.

**Applicability to Other Settings**

Multidisciplinary simulation can be applied in any clinical setting. While we are fortunate to have a simulation centre, most of the simulation that occurs is considered low fidelity and could be accomplished with basic facilities and imagination. A combination of simulation centre and in-situ simulation is important. The two most important factors in developing the MEM program is training of staff to design and facilitate simulation and then developing staff “buy in”. Health Workforce Australia has run the very successful NHET-sim training course which has been attended by all of our faculty. The development of “buy in” depends on ensuring that simulation remains a safe learning environment through respecting confidentiality, careful pre-briefing, well designed scenarios that replicate real clinical situations, sensitive but thought provoking debriefing and normalisation of simulation training as a routine part of “being at work”.

**References**

IMPLEMENTATION OF A MULTIDISCIPLINARY CRITICAL CARE OUTREACH SERVICE

Intensive Care Unit
Armadale Health Service (AHS)
Armadale WA

Sara Lennon  Jacqui Donnelly
Denver Prince  Dr Kieran Lennon

Aim
The aim was to provide multidisciplinary critical care expertise to the wards, in order to support ward staff, follow-up patients post ICU, and recognise and respond to patient deterioration in a timely manner, to limit adverse outcomes.

Abstract
A high rate of adverse clinical events, related to clinical deterioration, resulted in a team of experienced clinicians establishing a new, multidisciplinary Critical Care Outreach Service. The team, consisting of doctors, nurses and physiotherapists, working in ICU, with extensive experience in critical care, provide an immediate response team to the general wards as well as a follow-up service to patients recently discharged from ICU.

The service implementation is linked to the introduction of a scoring observation ADDS Chart (Adult Deterioration Detection System, Queensland Health; Preece et al., 2010) throughout the hospital. Both of these projects aligned with the recommendations from NSQHS Standard 9: Recognising and Responding to Deterioration in Acute Health Care (2012).

The service was introduced in November 2012, and continues today.

Evaluation has been via both quantitative and qualitative methods. The service has been well received by ward staff, with key themes of positive perception linked to support for staff, patients / carers, safety, team and an improved system (Lennon, 2013). The service has led to a change in the nature of emergency Medical Emergency Team (MET) calls.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
- Aim to improve patient safety and outcomes.
- The system encourages the patient, relative and/or carer to alert staff to deterioration if they are concerned.
- Qualitative research highlighted reduced stress for patients and improved communication.

EQuIP Principle 2: Effective Leadership
Collaboration and engagement with:
- RRCD (Standard 9) Committee
- Critical Care Advisory Group
- key stakeholders within the hospital
- South Metropolitan Health Service (SMHS).

AHS offered significant leadership into group work across all hospitals in SMHS to develop and implement a standardised ADDS Observation Chart. Work is in progress to develop paediatric and maternity ADDS Chart versions.
Clinical Excellence and Patient Safety

The ICU Team at AHS identified the areas of concern, in relation to patient safety, and led the implementation of an innovative service to help to address them. They have developed, and continue to run, the Outreach Service at no additional cost to the organisation.

**EQuP Principle 3: Continuous Improvement**

Measures to ensure continuous improvement include:

- Outreach service audit and review, with recommendations
- ADDS Chart / RRCD Standards audits to ensure quality / identify gaps in service
- MET call case reviews and feedback
- collaboration with Quality and Safety Department – shared objectives
- input to education on RRCD and critical care
- collaboration with South Metropolitan Health Service to develop services and share good practice.

**EQuP Principle 4: Evidence of Outcomes**

- Results from qualitative MSc research project which show a positive perception of the service.
- Qualitative data showing positive and negative aspects of the ADDS Chart.
- MET call data review to show a change in the nature of MET calls and a reduction in calls relating to a delay in recognising and responding to clinical deterioration.
- Qualitative data showing a positive perception of the role of physiotherapy within the Outreach Team.
- See full report for data related to Outreach Service activity (Outreach calls and Follow-up).

**EQuP Principle 5: Striving for Best Practice**

Internationally, the benefits of Outreach programs have been notoriously difficult to prove using traditional methods such as the randomized controlled trial (MERIT Trial; Hillman et al., 2005). England and Bion (2008) advocate the use of process measures to evaluate these services, not only traditional outcome measures.

Due to the positive feedback from staff who value the service, and the improvement in the nature of MET activity, the latest Outreach Report (July, 2013) recommended the continuation of the Outreach service at Armadale Health Service.

**Innovation in Practice and Process**

Unique in Australia due to its inclusion of senior ICU physiotherapists in the core team.

Unique in WA due to implementation of a recognition and response model, not only a follow-up service post-ICU.

**Applicability to Other Settings**

This model could be mirrored in any acute hospital setting.

A key strategy for success is the team membership and leadership of the service by ICU. This requires buy-in and leadership from the ICU Consultant team.
Aim
To approach staff profile in the Maternity Unit around patient care to drive out workforce inefficiencies by providing multidisciplinary team stability and establish a basis for future clinical workforce planning.

Abstract
The competing priorities of roster management and patient safety were re-aligned in a Level 5 Maternity Unit at Dubbo Base Hospital which began operating in a crisis mode from June 2011. Ever-increasing rates of sick leave by midwives and a chronic long-term midwife shortage were considered as compromising patient care due to poor skill-mix and low team morale across the Maternity Department. The partnership (commencing in July 2012) between the Clerical Support Officer (CSO) and an incoming Director of Nursing (DON), to introduce rigorous rostering practices that made safe patient care the focus of the rostering decisions, resulted in a more efficient and safer maternity service.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
A crisis meeting of the Maternity and Obstetric multidisciplinary team with the hospital executive staff indicated that there was a growing loss of faith and that excessive workloads were impacting on patient care, staff retention and budgetary pressure. An incoming DON partnered directly with the CSO to review rostering practices that plagued the Maternity Unit, with consistently high occasions of sick leave, exiting midwives, poor clinical supervision arrangements and the inability to recruit to key positions. In the absence of strategic planning, the rostering decisions which impacted directly on direct patient care were regularly made in short-term crisis mode.

EQuIP Principle 2: Effective Leadership
A collaborative nursing model (CNM) was found to offer the project leaders the necessary guidelines for the development of the midwifery workforce based on the Nursing and Midwifery Office Ways of Working Project. Entrenched and nepotistic rostering practices were replaced by clear leadership from the A/Director of Nursing and empowerment of the CSO to ensure corporate efficiencies in the workforce and a safe environment for patients. The CORE value of collaboration and openness for safe teams to achieve the best possible outcomes for our patients who are at the centre of everything we do became the benchmark.

Midwifery workforce sick leave occasions throughout 2011 were ever-increasing with 604 occasions in total for the year: the occasions hit a peak in May-June 2011 with 80 occasions during a one-month period. During 2011, overtime rates were also high and noted to be increasing and resignations plagued the Unit. The existing midwifery workforce was covering two-thirds of rostered vacancies and the remainder were being filled through staff overtime, sourcing casuals and agency staff at a major cost to the service. IIMS data management reflected a poor reporting culture confined only to mandatory triggers. Multidisciplinary team meetings regularly addressed the midwife shortage and this escalated to a crisis meeting at the executive level. A low therapeutic milieu was evident at staff
Clinical Excellence and Patient Safety

team meetings and staff rostering in the unit was being corrected by nursing administration in a reactive way on a daily basis.

**EQuIP Principle 3: Continuous Improvement**
The processes and structures which are in place to ensure the sustainability of the rigorous roster practices are developing a more accountable culture that places unit need above individual roster preferences. The detailed leave database is maintained by the CSO who has the time to attend these databases as the role is no longer consumed with reactive sick-leave management. Executive management will continue to have input into leave allocations and monitor sick, annual and study leave according to the policy.

**EQuIP Principle 4: Evidence of Outcomes**
Significant reduction in occasions of staff overtime over 2011 - 2013.

Sick leave also reflects the downward trajectory of figures from the last quarter of 2012: total sick leave episodes for 2011 were 604; in 2012 there were 488 episodes, and the year-to-date is 141 episodes of sick leave, supporting the measures in place.

Staff satisfaction has been evaluated through decreased sick leave and overtime and the reduction in resignations. It is also evident in the reduced number of shifts available for casual staff to fill, verbal feedback at ward meetings and from individual staff to management with a decrease in complaints about staffing shortfalls and low skill-mix, along with the decreased number of shifts required to be filled by managers after hours. A permanent Nursing Unit Manager has been appointed, two senior midwives who resigned in 2011 when the crisis was peaking have returned to the Unit, and a third returning midwife is also in the recruitment process to re-join the team.

**EQuIP Principle 5: Striving for Best Practice**
The entrenched culture that saw preferential rostering impact on patient safety requirements led to nursing administration assuming control of roster creation. The DON partnered with the CSO to present a fair and equitable roster which was balanced equally amongst the competing priorities of patient safety, organisational needs and the work-life balance requirements of all staff.

The CSO set up a sick-leave tracking system and an annual leave database to identify and resolve the number of staff with excess leave. A roster health check in the form of a staff questionnaire was created to raise staff awareness of the rostering system in place and offer the opportunity for providing feedback. Memos were sent to all staff and initial resistance from individual midwives was approached on a consultative basis and no resignations resulted directly from the implementation. The focus on patient safety as the priority resonated with the midwives and the changes in rostering supported them by avoiding the fatigue caused by crisis filling of shift vacancies.

The DON regularly reviewed the sick-leave management process with roster requests and study leave approvals considered in the context of workforce shortages. The CSO raised staff awareness employing numerous reinforcing communication measures such as email correspondence advertising vacant shifts, displaying the sick-leave policy for staff and thank-you notes to staff when vacant shifts were filled.

**Applicability to Other Settings**
Feasibility can be rated on cost savings to the organisation, improved staff retention and patient safety as a result of safer workloads and improved team performance. Transferability could occur in any maternity unit with major midwife workforce challenges and skill-mix issues. The initiative used existing positions and no further resources were required to attain demonstrable results in workforce performance measures.

While the District was under a directive to reduce overtime usage at the time of the initiative, the achievement of a sustained workforce re-structure here was the result of rigorous rostering practices, partnering clinical teams collaboratively with executive administration and removing inefficiencies in skills allocation and service provision.
THE USE OF A BLADDER SCANNER AT SIMULATION TO ACHIEVE CONSISTENTLY FULL BLADDER VOLUMES

North Coast Cancer Institute
Coffs Harbour Clinical Network (and other members that cover Port Macquarie and Lismore)

Leah Cramp Vanessa Connors Maree Wood

Aim
To increase bladder volume reproducibility for prostate radiotherapy patients by increasing their bladder filling compliance and decreasing treatment delays.

Abstract
In pelvic radiation therapy it has been established that increasing the dose to prostate or pelvic cancers achieves better local control. However, dose escalation is limited by the increased toxicity to normal tissues.\(^1, 2\)

The principle dose-limiting structures in prostate radiotherapy are the bladder and rectum.\(^2\) Controlling bladder volume can help decrease the motion of internal anatomy and minimise toxicities by reducing the volume of bladder and rectum being irradiated and also moving the small bowel out of the treatment region.\(^1\)

The North Coast Cancer Institute (NCCI) recognised the need to standardise bladder volumes for both planning and treatment and devised a method to increase bladder volume reproducibility by utilising a Verathon 9400 Bladder Scanner.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Prostate patients attend treatment every day for up to nine weeks and make up 25% of our workload across all three NCCI sites (approx. 300 patients per year). Non-compliance with required bladder preparation had a large impact on our workflow.

Some patients under-filled their bladder which lead to potential increases in toxicities. Others over-filled their bladder to uncomfortable levels thus extending treatment times as they were not able to hold to the completion of their treatment.

This resulted in daily time delays for patients receiving treatment and bladder status becoming stressful for patients.

EQuIP Principle 2: Effective Leadership
A study methodology was used to determine the extent of the problem and scope for improvements. 524 bladder volumes were reviewed from retrospective data. A range of 250-350cc was determined to be an “ideal” bladder volume for our planning dose constraints to be achieved. An in-house study was conducted using the Verathon 9400 Bladder Scanner to assess patient’s bladder volumes at CT simulation to ensure the desired volume was achieved. Time and volume data for 34 patients were recorded and a comparison was then made between the Bladder Scan Group (BSG) (n=17) and non-BSG (n=17).

EQuIP Principle 3: Continuous Improvement
The bladder filling procedure, along with supporting documentation and requirements, was drafted to educate patients and staff on various aspects of the bladder-filling process. Education letters to patients were revised and
updated, whilst further collaboration was made with our Cancer Care Coordinator to ensure the importance of general hydration was discussed at the initial consult.

Formal staff training on the use of the Verathon 9400 Bladder Scanner was conducted by a product representative from Verathon Medical. This was to increase staff compliance and decrease errors associated with variable users.

To ensure all three NCCI departments adopted the bladder-filling procedure together and consistently, an “integrated” management method was used. Reporting frameworks were established to support ongoing review by evaluating treatment images to determine if the Verathon 9400 Bladder Scanner’s effectiveness is still valid on treatment.

With the support of management, the use of the Verathon 9400 Bladder Scanner has been extended to all pelvic radiation therapy patients requiring bladder-filling protocols, rectal, gynae, and anal cancer patients.

**EQuIP Principle 4: Evidence of Outcomes**

The implementation of the Bladder Scanner resulted in a smaller required bladder-volume range, meaning patients were not required to hold onto large, often uncomfortable full bladders. Planning constraints were decreased in the BSG, theoretically reducing toxicities. Weekly scans showed the non-BSG were able to proceed to treatment 75% of the time, whereas the BSG were able to 92.7% of the time. This is an increase in compliance of 17.7%, resulting in less patients being taken off the bed to resolve bladder issues before commencing treatment.

**EQuIP Principle 5: Striving for Best Practice**

Recently, we audited 20 patients in Coffs Harbour to evaluate whether our current practice is still yielding positive results. 620 images were analysed on a pass or fail basis. 4% of images failed due to bladder or bowel issues at the time of treatment. 50% of these images failed due to the patient’s bladder either being under- or over-filled. Since our last evaluation of these data, we have improved a further 3.8%, bringing us to a 96.5% “Pass” rate at treatment.

**Innovation in Practice and Process**

Ongoing efforts are focused on refining the Bladder Scanner’s use on treatment while exploring applicability in all bladder-filling treatments. It may be possible to evaluate further individualised hydration plans for patients.

**Applicability to Other Settings**

The methodology and procedures developed are both relevant and transferable to all radiation therapy departments across Australia. Our department has already been contacted on a number of occasions to share our process and its success.

**References**


Aim
To create twelve short interrelated films to meet the educational requirements of the clinical leadership team in order to implement their plans for improved care of acutely deteriorating patients.

Abstract
A series of twelve short films was made by a group of doctors and nurses, dedicated to implementing new national patient safety and quality standards for deteriorating patients. The film-making process defined specific expectations for all clinical staff regarding patient care, cemented relationships between managers and clinicians and there have been no Category 1 Serious Clinical Incidents since the initiatives were implemented.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The hospital executive team recognised that there was an unacceptable number of serious clinical incidents related to acutely deteriorating patients (consumers). Coupled with the need to address the Australian Commission for Safety and Quality in Healthcare’s new national standards of best-practice, particularly Standard 9 (Recognising and Responding to Clinical Deterioration in Acute Healthcare), a committee was created to address these issues. The committee’s challenge was to energise the workforce and empower individuals throughout the hospital to step up to the challenges of achieving change for their patients. They elected to do this through an innovative hospital-wide education program based on original, focused, entertaining short films that all focus on a patient (consumer) journey through the hospital.

EQuIP Principle 2: Effective Leadership
The film project was used to efficiently and rapidly introduce a series of new initiatives to clinical staff throughout RNSH (e.g. role of the newly created Intensive Care Unit-led, multidisciplinary, Rapid Response Team) as well as improve compliance with existing initiatives (e.g. Between the Flags Program).

Twelve interrelated short films / chapters of a movie were scripted by the clinicians on the Standard 9 Committee, based on the educational requirements to implement their plan for improved care of the deteriorating patient locally.

They then partnered with key stakeholders within the institution, including executives, managers, doctors and nurses of various levels, to “star” in the various chapters of the film. This process demonstrated to the audience of staff members throughout the hospital a unified, considered, institutional commitment to leading change regarding how the hospital manages deteriorating patients.

There was no budget for the project. The script development, set design, sound, lighting, cinematography and post-production development were done entirely utilising the talents and good will of hospital staff. This aspect assisted in cementing a personal ownership of and commitment to the entire change initiative.
Clinical Excellence and Patient Safety

The following films were creating, chronicling a patient’s journey through Royal North Shore Hospital:

• Chapter 1 – Introduction to the Standards (narrated by Sue Shilbury, General Manager)
• Chapter 2 – Clinical Handover (narrated by Brenda Gillard, Manager of Patient Quality and Safety)
• Chapter 3 – Use of Standard Observation Charts (narrated by Dave Wastell, Between the Flags Co-ordinator)
• Chapter 4 – Frequency of Patient Observations (narrated by Dave Wastell, Between the Flags Co-ordinator)
• Chapter 5 – Recognising Clinical Deterioration (narrated by Kathryn Rieger, DETECT program educator)
• Chapter 6 – Ordering Yellow Zone Review (narrated by Mary Dowling, Deputy Director of Medical Services)
• Chapter 7 – Ordering Red Zone Review (narrated by Jonny Taitz, Director of Medical Services)
• Chapter 8 – Rapid Response Team Review (narrated by Dr Liz Hickson, Clinical Lead of Rapid Response Service)
• Chapter 9 – Code Blue Response (narrated by Sarah Webb, Resuscitation Co-ordinator)
• Chapter 10 – Changing the Call Criteria (narrated by Dave Wastell, Between the Flags Co-ordinator and Rosemary Sullivan, BTF Manager)
• Chapter 11 – End-of-Life Planning (narrated by Barbara Dougan, Head of patient experience)
• Chapter 12 – REACH Initiative (narrated by Karen Luxford, Clinical Excellence Commission)
• Chapter 13 – Red Zone EMR Form for the Rapid Response Team (narrated by Sharlene Horner, EMR team and Dr Liz Hickson, Clinical Lead of Rapid Response Service)
• Chapter 14 – Conclusion and Credits (narrated by Sue Shilbury, General Manager)

EQuIP Principle 3: Continuous Improvement

The films have become a key component of nursing and medical staff hospital orientation programs. The films are available on the ICU intranet as reference material for the Rapid Response Team and plans are underway to embed the films on the hospital intranet.

There is ongoing review of key performance outcomes for the RRT and BTF initiatives. The Standard 9 committee has the skills to create additional educational films as well as re-edit and update existing films as the need arises. New additions are in process (e.g. to address identified problems in RRT and cardiac catheter laboratory management of deteriorating patients).

The film on how to complete the Red Zone form on eMR has led to a high rate of compliance and these data have informed the committee regarding more specific educational needs of responders. This need is being met through a dedicated weekly teaching program (based in the ICU but open to all hospital staff).

EQuIP Principle 4: Evidence of Outcomes

1. Qualitative feedback on the films:
   • Cast and crew (28 individuals) – globally positive experience and opportunity to be the face of the institution and leaders in organisational improvement
   • Audience (viewed by >400 staff) – enjoyable, engaging, entertaining at times, helpful, not too much.

2. Benefits:
   • Tangible: No SAC 1 serious clinical incidents since introduction of the Standard 9 plan on February 11, 2013; improved compliance with all of the Between the Flags program requirements; reduced rate of patients experiencing cardiopulmonary arrests; trend to reduced hospital mortality.
   • Efficiency: A common, streamlined approach to education has been created; reduced time for staff members to acquire institutional knowledge regarding local practice and expectations through large screenings.
   • Other: Some of the films have assisted the successful introduction of and/or compliance with other initiatives (e.g. film regarding the Clinical Excellence Commission’s REACH program relevant to Standard 2 Partnering with Patients) and another on Clinical Handover (Standard 6).

EQuIP Principle 5: Striving for Best Practice

The Standard 9 Committee recognised and valued the diverse talent of clinicians with non-clinical skills such as project management and hobby level film-making to create an educational backbone for their strategic plan for best practice for deteriorating patients at Royal North Shore Hospital. Mass screenings / viewings of the films for/by staff members, combined with achieving compliance with the processes exemplified in the films, has improved management of deteriorating patients throughout Royal North Shore Hospital. The process of creating and screening the films also fostered positive relationships between executives, managers, nurses and doctors of all levels in an unprecedented and effective manner.
Innovation in Practice and Process
A group, consisting of an executive sponsor, Patient Safety and Quality Manager, two Staff Intensive Care Specialists and two senior nurses, designed a strategic plan that they believed would translate into improved clinical outcomes for clinically deteriorating patients at Royal North Shore Hospital. This plan was centred on an innovative education plan for the entire hospital workforce utilising short films created for the people, by the people for the common benefit of patients.

The film project was designed by clinicians, empowered and supported in implementing local solutions. It has united the clinical and management workforce enabling collaborative teamwork and more integrated care between hospital departments and disciplines.

Applicability to Other Settings
Several of the chapters are currently being shared with other NSW hospitals. Of broader relevance to the entire public sector is evidence our films provide of how movie-making can be employed as an instrument for facilitating institutional change. The creative process and educational value of films for true team building and education is enormously powerful. With consumer-level technologies and sufficient enthusiasm, films of sufficient quality can be produced by non-professionals, without the need for expensive production costs that are barriers to enlisting professional film makers.
Aim
To improve the quality of care provided to older adults in the community who have been identified as being at risk of falls whilst in hospital, by improving the quality and quantity of Clinical Handover information contained in onward referrals to community healthcare providers regarding falls risk.

Abstract
Older adults are at increased risk of falls following discharge from hospital, and although prevention strategies to manage this falls risk are well documented they are not commonly implemented. Adding to the complexity of this issue is that it involves the patient crossing the care continuum, and it is not always clear which health professional group is ultimately responsible for managing the patient’s falls risk. The Theoretical Domains Framework (TDF) (Cane, O’Connor et al. 2012) was utilised to systematically identify barriers and enablers and to identify implementation strategies to overcome this evidence-practice gap. Clear project aims that align with both the Australian Best Practice Guidelines for the Prevention of Falls and Harm from Falls in Older People (Australian Commission on Safety and Quality in Health Care, 2009) and the National Safety and Quality Health Service Standards (Australian Commission on Safety and Quality in Health Care, September 2011) were established. Intervention strategies that were most likely to be successful in overcoming the relevant barriers were identified. A multi-faceted intervention strategy was implemented, central to which was reinforcing a partnership between Flinders Medical Centre and the Southern Community Falls Prevention Team, Primary Health and Transition Services (PHandTS).

Outcomes include improving the proportion of patient records which contain documented evidence of identified falls risk and an onward referral for a comprehensive falls risk assessment following discharge from the primary site; the percentage of times the handover of information about falls risk from the primary site meets a standardised set of criteria for handover quality (ISBAR); and evidence of a change in consumer awareness of their own risk of falls and the management strategies that have been put in place to mitigate this risk.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Consumers were identified to be both staff (Physiotherapists from Flinders Medical Centre and Physiotherapists and Occupational Therapists from the Southern Community Falls Prevention Team (SCFPT)) as well as patients who were at risk of falls on discharge from hospital. The 3 major issues that were affecting our consumers were identified to be: 1) Patients who are at risk of falling on discharge from hospital were not routinely identified, 2) Documentation of high quality clinical handover of information relating to patients who were identified to be at risk of falling on discharge from FMC, was not occurring routinely or consistently, and 3) Patients were not involved in the process of identification of their falls risk, or planning for management of this risk – on many occasions they were not even aware that a referral had been made to a community healthcare provider. The project addressed each of these issues.
EQuIP Principle 2: Effective Leadership
Within Flinders Medical Centre a ‘Healthy Hips Project’ Governance Committee was established to oversee issues relevant to the planning and implementation of the practice change – to consistently lead and manage the change process and to ensure the practice change was both relevant and acceptable to both Flinders Medical Centre and the Southern Community Falls Prevention Team. Representatives from this Committee met regularly and were in frequent contact with representatives from the Southern Community Falls Prevention Team. In addition, both sites were represented at the Flinders Medical Centre Falls Prevention Committee which was primarily responsible for ensuring that National Standard 10 (Preventing Falls and Harm from Falls) of the National Safety and Quality Health Service Standards (Australian Commission on Safety and Quality in Health Care, September 2011) was being addressed at FMC.

EQuIP Principle 3: Continuous Improvement
Throughout the implementation phase of the project several strategies were employed in an attempt to reinforce the interventions and ensure project sustainability beyond the period of project funding. These strategies included: 1) A three month period of conducting small ‘snapshot audits’ of the intervention strategies and feeding these outcomes to staff, 2) Establishment of a Falls Committee within the Physiotherapy Department, and inclusion of the new processes into the Physiotherapy Department orientation procedure, 3) Establishment of a name for the project in an effort to begin to build a brand and make the project easily identifiable, and 4) Allocation of Physiotherapist staff time into the staff roster to ensure that a staff member was always allocated to overseeing the falls risk identification and referral processes to the community as standard procedure.

EQuIP Principle 4: Evidence of Outcomes
Whilst formal post-implementation data have not yet been collected (it is scheduled to begin in January 2014 and will continue for 6 months), ‘snapshot audits’ have been conducted to allow for feedback of data to be provided to staff in ‘real time’ to reinforce the practice changes.

EQuIP Principle 5: Striving for Best Practice
The Healthy Hips Project has developed strategies which are in accordance with 7 sections of the National Health Standard 10: Preventing Falls and Harm from Falls. (See full report for details.)

Innovation in Practice and Process
To the knowledge of the project leader and team, no prior work has been done toward improving the outcomes for patients at risk of falls and harm from falls across the transition of care from the acute sector to the community sector. Past research has focused on inpatient falls, and falls in the community, but not on the transition from acute to community when patients are at a high risk of falling due to deconditioning during their hospital admission.

Applicability to Other Settings
The improvement in Clinical Handover processes gained in the Healthy Hips Project can potentially be applied to all Allied Health disciplines across SA Health, to improve clinical handover provided in the hospital discharge summaries for all patients. This is in accordance with the National Safety and Quality Health Service Standards (Australian Commission on Safety and Quality in Health Care, September 2011) Standard 10: Clinical Handover. The principles of the staff education process involved in the Healthy Hips Project could also easily be applied to other allied health settings.
ORGANISATION OF PATIENT SAFETY WALK ROUNDS IN TUEN MUN HOSPITAL, NEW TERRITORIES WEST CLUSTER, HONG KONG HOSPITAL AUTHORITY

Quality and Safety Division
Tuen Mum Hospital
Hong Kong

Dr. K S TANG
Ms Bonnie WONG
Mr. Andy KWOK
Ms Adeline CHEUNG

Aim
To learn good practices in visited units, to identify areas with patient safety concerns, to engage staff participation and to share good practices with staff.

Abstract
Ensuring patient safety is a top priority of Tuen Mun Hospital (TMH) in the New Territories West Cluster (NTWC). Therefore, in 2009, a Patient Safety Walk Round (PSWR) programme was introduced by TMH’s Quality and Safety Division to allow hospital management to better understand what was happening in the wards / units.

The aims of PSWRs were to learn good practices in visited units, to identify areas with patient safety concerns, to engage staff participation and to share good practices with staff.

In 2Q 2009, TMH conducted her first PSWR in a theme basis, which a new walk round approach was introduced after a visit by a US expert in November 2010.

Since then, weekly ward- / unit-based PSWRs were held in all areas of TMH. In each walk round, two management executives were invited to participate in a two-part walk round – part one is a discussion with frontline colleagues while part two is a visit of the wards / units. Good practices were appreciated and risks were identified. The risks were immediately discussed for risk mitigation and improvement. All wards / units in TMH would be visited once a year.

After each walk round, a report which shows the good practices and areas for improvement would be produced. The responsible quality staff will follow up and monitor if the improvement measures originating from the recommendations are in place. The observations would also be shared in relevant hospital management meetings. Any risks identified as hospital-wide would be thoroughly discussed and improvement actions would be later implemented as a standard practice. Furthermore, to allow staff to learn good practices of different departments, the observed good practices are shared in yearly an open staff forum.

Since February 2013, individual department heads were invited to join the PSWR. This arrangement could broaden the mind of department heads on one hand and allow them to share their own good practices on the other hand. Further, similar walk rounds are conducted in Pok Oi Hospital since January 2013, which is another hospital under the management of the NTWC.

The effect of PSWR could be reflected in the significant reduction of 33.5% decrease in reported incidents from 2008 to 2012.

To conclude, the PSWR is a programme hallmark by staff participation, communication enhancement, potential risks identification and ensuring patient safety in our system.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Patient Safety Walk Round (PSWR) in Tuen Mun Hospital (TMH) allows hospital management to understand the ward / unit situation by inviting hospital management executives to visit the patient caring areas, e.g. wards or out-patient clinics. The environment and workflow in patient caring services would be observed. Comments and identified risks would then be shared with the frontline ward / unit managers for consideration of improvement. Improvement actions made could address the identified risk and directly benefit patients during their stay in hospital.

EQuIP Principle 2: Effective Leadership
In each walk round, two management executives (e.g. service directors and general managers) were invited to participate in a two-part walk round – part one is a discussion with frontline colleagues. The frontline staff could share their quality programs and expressed their patient safety concerns. The concerns would be addressed and followed up subsequently.

Part two is a visit of the wards / units. Good practices were appreciated and risks were identified. The risks were immediately discussed for risk mitigation and improvement. All wards / units in TMH would be visited once a year.

After each walk round, the observations would be shared in relevant hospital management meetings. Any risks identified as hospital-wide would be thoroughly discussed and improvement actions would be later implemented as a standard practice. Furthermore, to allow staff to learn good practices of different departments, the observed good practices are shared in yearly an open staff forum.

EQuIP Principle 3: Continuous Improvement
In 2Q 2009, TMH conducted her first PSWR in a theme basis, which a new walk round approach was introduced after a visit by a US expert in November 2010.

Since then, the PSWRs were conducted as weekly ward- / unit-based visits. In each walk round, two management executives (e.g. service directors and general managers) were invited to participate in a two-part walk round – part one is a discussion with frontline colleagues. The frontline staff could share their quality programs and expressed their patient safety concerns. The concerns would be addressed and followed up subsequently. Part two is a visit of the wards/units. Good practices were appreciated and risks were identified. The risks were immediately discussed for risk mitigation and improvement. All wards / units in TMH would be visited once a year.

After each walk round, a report which shows the good practices and areas for improvement would be produced. The responsible quality staff will follow up and monitor if the improvement measures originating from the recommendations are in place. The observations would also be shared in relevant hospital management meetings. Any risks identified as hospital-wide would be thoroughly discussed and improvement actions would be later implemented as a standard practice. Furthermore, to allow staff to learn good practices of different departments, the observed good practices are shared in yearly an open staff forum.

Since February 2013, apart from the senior hospital management, i.e. hospital chief executive, service directors and general managers, individual clinical or administrative department’s head were included in the senior executive list for invitation to join the walk rounds. This arrangement could broaden the mind of department heads on one hand and allow them to share their own good practices on the other hand.

For every walk round, apart from a report which would be produced by the facilitator, a register is produced for record and analysis. The updated progress would be input in regular time interval to evaluate the effectiveness of the follow up actions.

Further, the PSWR has extended its scope in organising similar walk rounds in Pok Oi Hospital in January 2013, which is another affiliated hospital under the management of the New Territories West Cluster, Hong Kong Hospital Authority.

EQuIP Principle 4: Evidence of Outcomes
According to the definition of Sentinel Events (SE) and Serious Untoward Events (SUE) by the Hong Kong Hospital Authority, the number of SE remained steady from 2008 to 2012 at about 4 cases per year, while the number of SUE dropped from 7 cases in 2010 (1st year in implementation of SUE) to 5 cases in 2012 in TMH. Due to the small data
size, the effect of PSWR in preventing serious incidents might not be well-reflected; however, the effect of PSWR could be obviously reflected in the significant reduction of 33.5% decrease in reported incidents from 2008 to 2012.

The implementation of PSWR was also highly commended by the ACHS Hospital Accreditation surveyors which 13 Extensive Achievements had been awarded in the Hospital Accreditation Program in TMH in 2010.

**EQuIP Principle 5: Striving for Best Practice**

In the patient safety walk rounds, ward / unit environment and workflow are reviewed. All risks identified are followed up by the ward / unit manager accordingly. On the other hand, observed good practices are being shared among hospital staff in an open staff forum yearly. In 2012, 70 areas are visited in Tuen Mun Hospital in the Patient Safety Walk Rounds. More than 320 good practices and 170 areas for improvement were identified. By sharing good practices and following up the areas for improvement, patient safety is enhanced.

Staff also welcomed the walked round of hospital management executives as they could raise their concerns and received direct feedback from senior hospital executives. The positive atmosphere developed in PSWR provides motivation for both frontline and management to collaborate closely in enhancing patient safety.

With the positive outcomes and feedback of PSWR, the project has won an award in the Patient Safety Category in the Asian Hospital Management Awards 2013.

**Innovation in Practice and Process**

Not applicable.

**Applicability to Other Settings**

The format of the PSWR is applicable to other healthcare settings. The PSWR has extended its scope in January 2013 in organising similar walk rounds in Pok Oi Hospital, which is another hospital under the management of the New Territories West Cluster, Hong Kong Hospital Authority.
**Aim**
To reduce the frequency and cost of routine pathology testing during the acute-care period for primary, unilateral total knee or hip arthroplasty (TKA, THA) using a simple needs assessment algorithm by a minimum 25%.

**Abstract**
Activity-based funding motivates cost-containment at a local level and, thus, scrutiny of routine practices for their budgetary impact. Unnecessary pathology testing following elective knee or hip arthroplasty creates unnecessary expenditure and patient discomfort, and burdens limited pathology resources. **Aim**: This Pre-Post Intervention study aimed to reduce the burden of routine pathology testing by a minimum 25% during the acute-care period for total knee or hip arthroplasty (TKA, THA). **Method**: Medical records of primary, unilateral TKA or THA patients were audited over two consecutive five-month periods. After a baseline period, a protocol using a simple ‘needs’ assessment algorithm identifying when further testing was appropriate was introduced for five routinely and commonly performed blood tests. Primary outcomes included average number and total cost of pathology tests per patient. Radiology and electrocardiograph testing were monitored to assess stability of other investigative practices across the period. Complications, clinical reviews and length of stay were monitored to ensure the leaner testing approach did not undermine patient safety. Patients with and without complications were analysed separately. **Results**: 324 patients (Pre, n = 173; Post, n = 151) were included; 281 did not have a complication (Pre, n = 148; Post, n = 133), whilst 43 did (Pre, n = 25 (14%); Post, n = 18 (12%)). Per patient, the numbers and costs of pathology tests overall decreased (p < 0.001) by an average of 44% (from 9 to 5 tests) and 43% (a saving of $66) respectively in the complication-free cohorts. Other investigative testing remained unchanged as did markers of patient safety and length of stay. Reductions in tests and cost reductions were observed for patients with complications, but these did not reach statistical significance in this small subset. **Conclusion**: For every 100 patients undergoing arthroplasty, a simple pathology request algorithm could save the ward $6,600 and may spare laboratory resources. A demand management algorithm for pathology testing after elective surgical procedures is an effective, appropriate and rapid method of cost containment. Our study provides preliminary data for benchmarking pathology requests in this area, and is one few studies addressing excessive testing in elective post-surgical cohorts.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**
In this public hospital context, the patient, the orthopaedic ward and the pathology department were identified as consumers.

A reduction in pathology testing would avoid unnecessary patient discomfort and, for publically funded facilities, reduce the financial burden for the ward and department.

**EQuIP Principle 2: Effective Leadership**
An audit in 2011 conducted by researchers exposed the high number of medical investigations patients were...
subjected to during their acute-care episode.

A multidisciplinary team involving senior clinicians was formed to address the problem. We recognised that rationalising the number of routine investigations performed for knee and hip arthroplasty could be an effective, safe, and ergo, appropriate method of cost containment whose benefits potentially could be immediately realised.

**EQuIP Principle 3: Continuous Improvement**

The team reviewed the results of the preliminary audit to identify problem areas and possible causes of excessive investigations.

The literature was reviewed and possible solutions identified. Best practice in this area has not been defined.

An algorithm rationalising the number of routine investigations performed was developed and evaluated in a Pre-Post study.

**EQuIP Principle 4: Evidence of Outcomes**

Overall number and cost of pathology investigations decreased by 44% and 43% respectively in patients without complications.

Importantly, other investigative practices remained unchanged as did markers of patient safety such as the rate of complications and clinical reviews, indicating that the leaner testing approach did not compromise patient outcomes.

**EQuIP Principle 5: Striving for Best Practice**

As benchmarks are not currently available in the literature, our study provides preliminary data for establishing pathology testing benchmarks in this area. We anticipate an average of 5 pathology tests per complication-free patient per admission for primary unilateral TKA or THA to be appropriate practice.

**Innovation in Practice and Process**

The use of an algorithm to rationalise pathology testing is not in itself innovative, but its use appears to be innovative in the current setting and even in any elective post-surgical setting.

A pathology testing algorithm should be considered for inclusion in future evidence-based models of care for arthroplasty and other elective surgical procedures.

**Applicability to Other Settings**

Our protocol is readily transferable to other elective surgeries. All care providers are forced to examine the inputs which constitute episodes of care in order to fall within budgets. Diagnostic investigations clearly represent a sizeable, yet modifiable input and, thus, adoption of a method which modifies this input provides an opportunity to contain costs. The reduced physical burden on the patient is self-evident.
A RANDOMISED CONTROLLED STUDY OF THE EFFECTS OF ORAL INTAKE OF WATER IN DYSPHAGIC PATIENTS WHO HAVE BEEN PRESCRIBED THICKENED FLUIDS WITH CONSIDERATION TO QUALITY OF LIFE AND HYDRATION LEVELS.

Allied and Community Health
West Wimmera Health Service
Nihil Vic

Martha Karagiannis

Aim
To research and implement a Free Water Policy for dysphagic patients that ensures the safety of patients, but also to improve the range and consistency of fluids able to be consumed.

Abstract
- 100 patients recruited into research study.
- A total of 76 sub-acute patients completed the study.
- Patient satisfaction measured using a modified Wong-Baker scale.
- Those patients who were allowed Free Water reported remarkably higher levels of satisfaction with the drinks.
- Patient hydration was measured in millilitres.
- Those patients who were allowed Free Water increased their fluid intake by 22%.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Wider choice of oral fluids for patients: Study designed to improve the intake of standard – normal fluids to the fluid intake of dysphagic patients

Patient satisfaction with improved fluid intake options.

EQuIP Principle 2: Effective Leadership
- A multidisciplinary team ensured the effectiveness of the research.
- Organisation-wide policies and protocols were implemented with Board of Governance endorsement.
- All relevant staff were made aware of the research being conducted and their roles were carefully assigned to match skill sets.

EQuIP Principle 3: Continuous Improvement
Daily fluid intake which indicate that patients in the intervention group consumed an average of >300mL more fluid after water was allowed compared to the fluid intake of the control group.

EQuIP Principle 4: Evidence of Outcomes
- 100 patients recruited into research study.
- A total of 76 sub-acute patients completed the study.
- Those patients who were allowed Free Water increased their fluid intake by 22%.
- Intervention group (those allowed Free Water) reported a more positive response than the control group (means 5.8 and 8.4, respectively; P = 0.094).
Clinical Excellence and Patient Safety

EQuIP Principle 5: Striving for Best Practice
Our results indicate increased total fluid intake in the patients allowed access to water, and the quality of life surveys very strongly confirm the dissatisfaction of patients to diets composed of only thickened fluids.

We recommend that sub-acute patients with relatively good mobility should have choice after being well-informed of the relative risk. On the basis of these findings we recommend that acute patients, patients with severe neurological dysfunction and immobility should be strongly encouraged to adhere to a thickened fluid or modified solid consistency diet.

Innovation in Practice and Process
Modified diets raise serious clinical management problems with respect to hydration and quality of life and in the absence of conclusive scientific evidence, numerous hospitals, medical centres and aged care homes have adopted policies allowing free access to water. However, this is not a uniform policy with the argument being that it is predominantly based on anecdotal support, since there is minimal documented evidence to reflect the practice.

A randomised-control prospective study was designed to further investigate the effects of oral intake of water in dysphagic patients with previously identified aspiration.

Applicability to Other Settings
A standardised Free Water Policy test has been formulated for Speech Pathologists to utilise within the clinical setting which has not previously existed to ensure patient safety.

Patient hydration and quality of life is increased as a result of thin fluid consumption.

Benefits within the hospital setting are extravagant when considering that thickened fluids will not be required to be purchased as a result of a free water implementation.
Aim
The aim of this project was to reduce patient complications from peripheral intravenous cannulae- (PIVC-) associated bloodstream infections at Austin Health (AH).

Abstract
Peripheral intravenous cannulae (PIVC) are a significant cause of healthcare-associated infections – specifically *Staphylococcus aureus* bacteraemia (SAB) or ‘golden staph’ infections.

Typically, patients with SABs require prolonged intravenous (IV) antibiotic treatment. SABs can also cause serious complications such as infections of the heart valves and other organs, which might require surgery or cause death.

The aim of this project was to reduce patient complications from PIVC-associated bloodstream infections at AH.

To achieve this aim, the project developed a comprehensive program to implement a new hospital standard for PIVC.

The program for reducing PIVC-associated infections included:

- establishing a reference group to survey the evidence in the medical literature and advise on the standards required
- developing a single standard peripheral IV insertion pack
- developing evidence-based procedures for inserting and maintaining PIVC
- developing a training and credentialing program
- implementing a comprehensive surveillance and audit program of standard compliance.

The project successfully developed standard procedures for inserting and maintaining PIVC. Over 500 nurses and 200 doctors were trained and credentialed in the procedures and SABs decreased from 13 (in the year before the project) to one (in the 10 months after the rollout).

The new PIVC standard has had a massive impact on patient health and wellbeing and is estimated to save the hospital between $300,000 to $500,000 per year.

Application of EQuIP Principles

**EQuIP Principle 1: A Consumer / Patient Focus**
A patient experience video was used in the education process that involved a patient who had developed a peripheral line infection.

**EQuIP Principle 2: Effective Leadership**
The collaborative team for this project comprised the Infectious Disease and Microbiology Department, the Quality Safety and Risk Unit and the Clinical Education Unit at AH. A reference group was established to review the literature
and produce evidence-based standards and procedures that would reduce the number of PIVC-associated infections.

**EQuIP Principle 3: Continuous Improvement**

The new system is sustainable because the new AH Standard is locked into the way the hospital conducts its business. The education unit has standardised education for PIVC across the hospital. For example, at the beginning of 2013, all new residents were trained in inserting PIVCs as part of the intern orientation process. There is also ongoing training and credentialing for all new nursing staff and ongoing auditing of compliance with the standard.

To ensure ongoing sustainability for the wider community, the Department has submitted a proposal to the Australian Commission for Safety and Quality in Healthcare (ACSQHC) for a similar program to be conducted at six pilot sites, with a view to rolling out the program across Australia.

**EQuIP Principle 4: Evidence of Outcomes**

The development of the standard peripheral IV insertion pack and procedures has minimised environmental waste, reduced equipment purchase costs, ensured sterility at the point of insertion and ensured that PIVCs are not left in place for longer than 72 hours. This has reduced the risk of infections.

The rollout of the project reduced the number of infections from 13 in the year before the project to one infection in the 10 months after the rollout was completed. This project has had a massive ongoing impact on health and wellbeing of AH patients.

It is estimated that the decreased number of infections saves the hospital between $300,000 and $500,000 per year ($25,000 saved per infection avoided). The use of the standard pack has enabled a bulk purchasing arrangement and price reductions for equipment, with savings contributing to the extra cost of sterile gloves.

During the rollout, over 500 nurses and 200 doctors were trained and credentialed in the procedures. There has also been an increase in certainty among staff members who now know that students, interns, nurses and residents are all trained in a single standardised methodology.

**EQuIP Principle 5: Striving for Best Practice**

Healthcare-acquired infections (HAIs) are a major cause of human suffering and increased healthcare costs. Some of the most difficult HAIs are SABs. The two key causes of healthcare-associated SABs are poor hand hygiene (about 60% of cases) and poor insertion and maintenance of PIVCs (about 30% of cases).

Having addressed the hand hygiene standards at AH (which led to National Standards via ACSQHC), this project aimed to further improve outcomes for patients by reducing PIVC-associated infections.

Earlier work established that SABs were an under-recognised complication of PIVC. This project further reviewed PIVC-associated SABs at AH and found, on average, 13 to 16 PIVC-associated infections per year.

SAB infections can have a significant and life-threatening impact on patients. At a minimum, SABs result in 2–6 weeks of IV antibiotic treatment but they can also lead to infections of heart valves and other organs that might require surgery or lead to death.

The overall aim of this project was to develop a comprehensive program that would reduce patient complications from PIVC-associated SABs.

To achieve this, the specific objectives were to:

- review the literature and produce evidence-based standards and procedures for PIVC
- develop a standard peripheral IV insertion pack for PIVCs
- develop training and credentialing procedures for safe insertion and maintenance of PIVCs
- audit compliance with the standard and the incidence of PIVC-associated SAB infections after implementation
- put in place an ongoing six-monthly audit process that will ensure ongoing compliance.

**Innovation in Practice and Process**

The following processes were implemented to improve insertion outcomes:

- a standard peripheral IV insertion pack was produced that contained only the instruments / materials, solutions and labels required
- the new AH standard insisted on the use of sterile gloves
- a procedure was developed that included rigorous and sequenced steps for inserting the PIVC. This removes
the element of choice and ensures the process is followed correctly.

**Maintenance of PIVCs:** PIVCs inserted under emergency conditions or those that remain in place for more than 72 hours significantly increase the risk of SABs. To overcome these issues, the following processes were implemented:

- Two labels (with the time and date of insertion) were included in the standard peripheral IV insertion pack – one label for the peripheral IV dressing and the second for the patient’s notes.
- All PIVCs inserted by Ambulance staff were removed immediately on hospital admission, and all PIVCs inserted in the AH Emergency Department were removed within 24 hours of admission.
- For all other PIVCs, a new ‘AH Standard’ was passed that requires nursing staff to remove all PIVCs at 72 hours without requiring consultation with medical staff.

**Training and credentialing:** The training process was standardised for all staff and students. It involved training and viewing an online YouTube video followed by supervised testing of the process.

**Auditing for compliance:** All PIVC and patient notes at AH were audited for the correct use of stickers. The incidence of PIVC-associated SABs was also audited. Ongoing audits will be scheduled every six months.

**Applicability to Other Settings**

To ensure ongoing sustainability for the wider community, the Department has submitted a proposal to ACSQHC for a similar program to be conducted at six pilot sites, with a view to rolling out the program across Australia.
Aim
Enhance the delivery of palliative care services in the acute hospital setting, where the demand for the service relates to symptom management, discharge planning as well as terminal care, utilising the National Palliative Care Standards to guide evaluation and opportunities for improvement.

Abstract
St John of God Hospital Subiaco (SJGSH) provides integrated palliative care services to patients with both malignant and non-malignant diseases. In the past twelve months, the palliative care service provided consultation for approximately six hundred patient admissions. Less than twenty per cent of patients admitted were under the primary care of the palliative care team. In most instances patients were admitted under the care of oncologists or other medical physicians and were referred to palliative care for symptom management, discharge planning or end-of-life care.

Historically, palliative care has been reserved to provide care for the dying. Modern palliative care has evolved to include symptom management and supportive care in conjunction with treatments such as chemotherapy and radiotherapy, which are used to prolong life. The World Health Organization encourages commencement of palliative care much earlier in the disease trajectory.

The demand for specialist palliative care at SJGSH has evolved over the last five years from mostly terminal care, to now mostly complex symptom management, coordination of community care and discharge planning. Patients are referred to the service for a variety of reasons and many have complex social, physical and psychological needs. On review of referrals to the palliative care service for the previous three months; approximately seventy five per cent of the patients were receiving some form of anti-cancer treatment for the purpose of life prolongation and symptom relief. This adds another dimension to the complex nature of the specialist palliative care they require.

To ensure the highest quality of patient care was being delivered by the palliative care team the Hospital Executive endorsed participation in the National Standards Assessment Program (NSAP) which is a national framework for continuous quality improvement built on the Palliative Care Australia, Standards for providing quality palliative care for all Australians (the National ‘Palliative Care’ Standards).

The service was then reviewed against each of these standards and areas of priority were identified for improvement in the context of a modern palliative care service where symptom management, discharge planning and terminal care were offered.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
A review of the literature provided the team with the motivation and enthusiasm to pursue an in-depth review of current practice. There is vast evidence to support the benefits of palliative care intervention for patients who have a
life-limiting illness and their families. There is also a growing body of support for consultative services within acute care settings.

A review of the characteristics of the patients who are referred to the palliative care service demonstrated a change in the patient profile. Discussion with other palliative care providers at a state level both (metropolitan and rural) identified similar findings which supported this concept of a shift from end-of-life care to more commonly required specialist support for symptom management, community care, discharge planning and complex communication. To ensure the patients and families’ needs are met in accordance with the stage of illness trajectory, the team conducted patient satisfaction surveying of current patients and bereaved families. This survey highlighted that information and communication regarding the patient’s treatment plan and prognosis were of the highest importance to the patient as was involvement of the family in treatment decisions.

This information highlighted the focus for the review and helped the team to evaluate their performance against the National Palliative Care Standards. The following areas were identified for improvement:

- holistic care-planning and assessment
- bereavement support
- research
- family involvement in decision-making
- carer support
- interdisciplinary support.

**EQuIP Principle 2: Effective Leadership**

For the project to be successful it was essential to gain overall executive support which came from the Director of Inpatient Services.

The project was then divided into the six identified areas for improvement and project teams were assembled to lead each quality activity. Teams included executive members, Medical Consultants, Clinical Nurse Consultants, Pastoral Practitioners, Social Workers, Case Managers and ward Registered Nurses.

To ensure the improvements were transferrable to other palliative care environments, team members were encouraged to present their activities and findings at State and National forums to gather feedback and provide leadership to others on our innovations and experience.

In addition to this it was essential to recognise the collaboration that must exist between palliative care and other services. Members of the teams became responsible for medical and nursing presentations to health care providers which have included Communication, Symptom Management, Advanced Health Directives and Care-planning.

**EQuIP Principle 3: Continuous Improvement**

The project groups met monthly and the change process used was the Plan-Do-Study-Act approach. Teams utilised the Palliative Care Standards to set the objectives for each area of improvement, they then spent time identifying process changes that would enable them to achieve these objectives. Each plan was then implemented and evaluated using patient surveys, staff surveys, NSAP audit tools and anecdotal feedback from service providers and other members of the healthcare team. Changes were made to reflect the evaluation findings.

**EQuIP Principle 4: Evidence of Outcomes**

For each of the quality improvement activities an evaluation and improvement measure was used. These are indicated below:

**Holistic care-planning and assessment:** The palliative care service was involved in a National Collaborative which supported the improved documentation of holistic and patient-centred care-planning. A minimum of twenty patient case notes were reviewed each month over a period of six months to identify the improvements in documentation and to ensure the sustainability of the change. A number of revisions were made to the documentation process following feedback each month until a satisfactory, user-friendly process was achieved which met the criteria within the relevant national standards. By October 2011, compliance with documentation of the physical, social, emotional, cultural and spiritual assessment of the patient had shown marked improvement. Documentation audits with regular feedback were then used to ensure the sustainability of the change.

**Bereavement support:** Palliative care worked collaboratively with Pastoral Services to address the deficits in the provision of bereavement care as required in national standard eight. External providers were consulted, literature
reviewed both nationally and internationally and pastoral services led the implementation of a hospital-wide bereavement service.

Funding has now been secured to evaluate the bereavement service in a research project and representation at state conference has highlighted leadership in the area of bereavement support.

Research and Clinical Training: In accordance with the National Palliative Care Standard 11, the team is committed to involvement in research and quality improvement. In addition to the bereavement service research project, the palliative care team are participating in State and National research projects including ‘The Distress Thermometer’ and the NSAP Collaborative Outcomes project.

Family involvement in decision-making: National Palliative Care Standards 1, 2 and 3 relate to the clinical care of the patient and their family. A pre-audit of patient case notes revealed limited evidence of family involvement in decision making. The team worked collaboratively with hospital ward caregivers and managers to develop a process of inclusive communication with patients and families through routine family meetings and case note documentation of the meeting outcomes.

Evidence of family involvement through adequate documentation has been improved by implementing a family meeting with the palliative care team for all patients who are referred to the service. The meeting agenda, outcomes and plans are documented in the patient case notes and further discussion takes place at the weekly multidisciplinary team meeting to ensure all members of the health care team are informed of the patient care plan. The team are in the process of developing a standard ‘Family Meeting Outcomes’ form to be trialled on the oncology ward to improve communication with patients, families and treating teams who fall outside of the palliative care referral process. Evaluation will be ongoing.

Carer support: National Palliative Care Standard 5 related to the care of the carer. Results from a nationwide survey of palliative care services indicate limited evidence of meeting the needs of carers of palliative care patients. The palliative care team at SJGSH are now involved in a national collaborative with more than 50 other palliative care services across Australia to improve care of the carers. This process involves monthly audit of case note documentation, attendance at national collaborative meetings and cooperation at an organisational level of case management and social work to improve carer needs assessment and overall care.

Interdisciplinary support: The overarching philosophy within the palliative care definition is that care should be holistic and patient-centred. This requires a multidisciplinary approach. Evidence of multidisciplinary team (MDT) involvement has been through the documentation of outcomes of the weekly palliative care MDT meetings. Referrals to allied health are made and documented and outcomes of the referral are also documented by the MDT member. Recent audit has revealed greater than eighty per cent compliance with documented evidence of MDT involvement in patient care and holistic assessment, which has been set as a bench mark by the National Palliative Care Standards collaborative. Prior to the quality review, results indicated less than twenty per cent compliance.

MDT meetings and processes were evaluated for their effectiveness in assisting the team to achieve its objectives.

EQuIP Principle 5: Striving for Best Practice
All of the above mentioned quality improvement activities have been implemented over the last 2 years and demonstrate our commitment to excellence in Palliative Care Services. In 2012 this was recognised by ACHS with an ‘Outstanding Achievement’ being awarded at the hospital’s Organisation-Wide Survey, providing the palliative care service with recognition at a state and national level of leadership in the consultative model of service within an acute hospital setting.

Innovation in Practice and Process
An example of innovative practice which demonstrates the team’s approach to best practice is in the development of a communication workshop. Monthly data collected regarding referral patterns and anecdotal evidence of nurse requests for assistance with difficult conversations influenced the decision to provide senior nursing staff on the oncology ward with communication education. The teaching method of simulated scenarios was based on evidence in the literature by highly regarded medical practitioners in the area of communication.

The workshops were developed and implemented and evaluations were positive. The team have applied for funding to support this as an initiative for senior staff outside the oncology arena and aim to provide the workshops
annually. Services outside SJOG, including university personnel, have approached the team here for training and supervision and it has been recognised as an important part of skill development for palliative care clinicians.

**Applicability to Other Settings**

Involvement in the national collaborative over the past two years has provided the team with opportunities for networking, cooperation and development of collegial relationships with palliative care services across the country. Success with the ACHS and face-to-face contact with other service providers has created recognition from key stakeholders of the importance of innovative approaches to the delivery of palliative care. The team at SJOG have an open and sharing approach and promote their achievements and improvements in practice to other services. Requests from local and overseas visitors allow the team to model practice and gain insights into variations of practice. Representation at a state level on working parties both public and private, allow sharing of ideas and processes with the overall aim to improve the care of the palliative care patient population.
**REDUCING THE RISK OF INTRAVENOUS POTASSIUM ERRORS: A MULTIFACTORIAL APPROACH IN THE HAEMATOLOGY SETTING**

Haematology and Oncology Unit  
Mater Hospital Brisbane Limited.  
Brisbane QLD

Diana Moore  
Daniel Pocock  
Myles Sweedman  
Patrice Deveney  
Dr Kerry Taylor  
Dr Michael Barras  
Dr James Morton

**Aim**
To reduce patient harm by implementing safer systems for prescribing, dispensing and administering high dose intravenous (IV) potassium chloride in haematology patients.

**Abstract**

**Methodology:** This was a traditional quality improvement project for IV potassium use in a private haematology inpatient unit at Mater Health Services Brisbane. To understand our current state we conducted a safety assessment which included: i) retrospective analysis of medication incidents associated with IV potassium; ii) root cause analysis to identify contributing factors; and iii) prospective audit of IV potassium usage over two week period. At 12 months following implementation of a standardised prescribing, administering and monitoring form the number of incidents and potassium ampoules dispensed were compared to pre-implementation results.

**Outcomes:** Quality improvement strategies included: i) developing and implementing a standardised prescribing, administering and monitoring form; and ii) removing potassium ampoules and replacing with premix 40mmol/100mL solution. There were significantly less incidents reported in the post implementation period compared to the pre-implementation period (23 vs. 9, P<0.001). No ampoules were used in the 12 months post-implementation compared to pre-implementation (10, 100 vs. 0).

The introduction of safety systems for the dispensing, prescribing, and administering of potassium in a busy private haematology inpatient unit has resulted in complete elimination of IV potassium ampoules and a significant reduction in incidents reports, suggesting a reduction in patient harm.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

The consumers were identified by the team as both staff and patients. Well described techniques to reduce the risk of medication misadventure include reducing options for drug products and the standardisation of doses, administration times, rates and techniques.

We retrospectively analysed all medication incidents associated with IV potassium in the haematology inpatient unit that had been reported in the 12 months preceding the system changes. The three major potassium incidents that consumers faced included administration of:

1. Incorrect dose (too much or too little)
2. Incorrect rate calculated / selected (too fast or too slow)
3. Incorrect fluid volume (too much or too little).

**EQuIP Principle 2: Effective Leadership**

As this was considered a major patient safety improvement process the initiative was governed by the organisation’s peak Patient Safety body, chaired by the organisation’s Chief Executive Officer. The working party consisted of...
representatives essential to the success of the initiative and included staff from the haematology inpatient unit (medical, nursing and pharmacy staff), the organisation’s Clinical Safety Unit (Clinical Safety and Medication Safety Officers) and the organisation’s Clinical and Corporate Risk Managers.

**EQuIP Principle 3: Continuous Improvement**
We used a traditional root cause analysis methodology to identify and understand the contributing factors that led to the incidents. In addition we prospectively audited the use of IV potassium in the haematology inpatient unit for two consecutive weeks. The audit included:
- the number of IV infusions per patient;
- the amount (mmol) per bag;
- concentration (mmol/L);
- administration rate (mmol/hour) of each potassium infusion; and the number of ampoules used.

**EQuIP Principle 4: Evidence of Outcomes**
At 12 months, the number of incidents and potassium ampoules dispensed were compared to the pre-implementation results. There were significantly less incidents in the post-implementation period compared to the pre-implementation period (23 vs. 9, P<0.001). There were no ampoules used in the 12 months following the system changes, and the number of premixed solutions used after 12 months was 1214 (101 per month). Inadvertent medication errors due to IV potassium can occur at any point of the medication use cycle; dispensing and product selection, prescribing, preparation of diluted solutions, and administration. In Australia premix potassium infusions is now routine practice, however haematology inpatients units have often been overlooked as standard infusions do not meet complex patient needs. The introduction of safety systems for the dispensing, prescribing, and administration of potassium in a busy haematology inpatient unit has resulted in complete elimination of IV potassium ampoules and a significant reduction in incidents, suggesting a reduction in patient harm.

**Innovation in Practice and Process**
The standardised prescribing, administering and monitoring form incorporated many forcing functions and has resulted in clinical staff no longer needing to spend lengthy periods involved in the prescribing and preparation of potassium solutions. Additionally, the change has resulted in an average reduction of the gross mmol of potassium being used by nearly 30% which may indicate that the way in which potassium is replaced significantly impacts on the patient’s response.

**Applicability to Other Settings**
The intravenous potassium chloride prescribing, administering and monitoring form could be used by other high-risk / high-dependency clinical units where high doses of intravenous potassium replacement are needed (e.g. Intensive and Coronary Care, Emergency Departments).
INTRODUCTION OF ADVANCE CARE DIRECTIVES TO THE RESIDENTIAL AGED CARE FACILITIES (RACF’S) RESIDENTS AND FAMILIES

Geriatric Rapid Acute Care Evaluation (GRACE)
Hornsby Ku-ring-gai Health Service
Hornsby NSW

Nadia Yazdani

Aim
To achieve 80% ACD from the RACF’s when presenting to the emergency department and to clearly identify/define end of life wishes on the ACD document at the RACF.

Abstract
Advance Care Directives (ACD) package/pathway document is handed out to the RACF’s residents and families together with all other documents, such as nutrition/diet, mobility, valuables, cognition, behaviours, family dynamics, etc., prior to admission to the facility. Many of the families are reluctant to fill out the form or unsure of the circumstances of their loved ones. GRACE CNC sought views regarding changes in approaching the people in their decision making and gaining confidence in staff to manage care. The purpose of the project is to ensure 70% of residents from RACF’s have ACD’s when presenting to the emergency department.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
At Hornsby Kuring Gai Hospital (HKH) there was a high mortality and morbidity rate of approximately 23% of the nursing home patients presenting to the emergency department without ACD. Approach to end-of-life care was increasingly challenging for the doctors, nurses, families and the patient. The standardised approach to end-of-life care was raised by GRACE CNC, emergency medical officer with a family member; if the patient was unconscious or cognitively impaired.

Family members were reluctant to make a decision independently which caused delay in patient’s management in the emergency department, increased waiting time to plan care and increased unnecessary medical, nursing, and imaging for the patient.

EQuIP Principle 2: Effective Leadership
Following a review of emergency department presentation the following issues were identified:-

Communication: ACD care pathway from the RACF’s demonstrated improvements in care in the emergency department by preventing unnecessary transfers to the hospital, reduction in access block, and reduction in waiting time. The use of ACD at the RACF’s improved the knowledge and confidence of the RACF’s RN’s and the hospital nursing staff. Prior to the roll out of this project ACD’s coming into the hospital was low.

Engagement with consumers: General Practitioners were essential in the success of this project. Expectations of end-of-life management at the hospital for palliation, pain management and hydration were reviewed and approach to care at the facility was implemented.

Collaboration: The GRACE CNC was pivotal in consulting with the patient and their families, voicing their needs and values and assisting them with their decision making for end-of-life care and to provide evidence based practice and
total patient care at the RACF’s.

**Education to RACF and hospital staff:** To achieve holistic and person-centered care requires increased awareness, education, build-up capacity and decision making.

Each of the RACF’s were encouraged to have their individual ACD’s to suit the residents in their care, this has been implemented through special consideration and care pathway for either low- or high-care residents.

**EQuIP Principle 3: Continuous Improvement**
The GRACE CNC provided direct contact with patients and their families (either at the nursing home or hospital), General Practitioners and RACF’s nursing staff by providing in or out of hours in services, networking, collaboration, information sharing and education regarding end-of-life approach.

RACF’s residents and their families were encouraged to review the end of life or ACD documents and were encouraged to ask the nursing or medical professionals if they were not sure on how to answer certain questions.

**EQuIP Principle 4: Evidence of Outcomes**
100% Feedback from residential aged care facilities registered nurses, care managers, and the general practitioners indicated high satisfaction in patient’s outcome and patient focused.

Feedback from the families indicated their satisfaction and understanding of the procedure helped them make time to accompany their love ones to the imaging department.

Since the implementation of the guideline, 85% of nursing home patients in the Hornsby Kuring-Gai area have ACD.

**EQuIP Principle 5: Striving for Best Practice**
Consistent with action and approach; data were generated to meet evaluation on the pathway document, and the perception of the involvement of patients and families which was found positive responds associated with communication and approach.

**Innovation in Practice and Process**
Consistent with action and approach; data were generated to meet evaluation on the pathway, and the perception of the involvement of patients and families which was found positive responds associated with communication and approach.

This model is innovative in the residential aged care facilities and required moderate amount of resource to implement. The key to this model is communication, interaction, trust, accountability, autonomy and knowledge.

There are still few unnecessary hospital presentations to the hospital emergency department from the residential aged care facilities, which demonstrated lack of knowledge sharing with the new staff or agencies requiring improvement and ongoing education to old and new staff.

**Applicability to Other Settings**
The extent of the ACD at the nursing home has been taken to other local health districts such as Ryde Hospital, and other states in Australia such as Melbourne, Brisbane and Hobart.

The ACD pathway has been accepted and determined by all involved in direct patient care. GRACE data indicates a reduction of the number of hospital presentations by 70%, this is also evident by the emergency presentation data. Approach, communication and acceptability were critical to deliver strategies of ACD to the nursing homes patients and their families and have been well received at the hospital and RACF’s.

85% of Residential Aged Care Facilities residents at Hornsby Kuring-Gai area catchment have ACD.
**Aim**
To enhance the skills of Children’s Services staff to earlier identify and refer children with communication challenges to Speech Pathology and increase knowledge, skill and confidence working with these children.

**Abstract**
Communication disorders impact upon the social and emotional wellbeing, cognition and behaviour of individuals, leading to difficulties in the academic arena at school and effect vocational choices later in life. Early identification and referral of children with communication difficulties is essential in minimising the long term impacts of these impairments. Children’s services staff are a crucial link in nurturing communication development in the child care setting, educating parents and facilitating referrals to the appropriate professionals. Over recent years, staffing resources, workload and service delivery models have resulted in Speech Pathology services in NSW becoming increasingly centre based. This has led to decreased opportunities for interaction, communication and collaboration with Child Care Providers.

A scoping project titled ‘Enhancing Services to support Early Language Development Project’ was conducted in 2005 by Families NSW and identified two key points:
1) That supporting and enhancing early language development is a priority; and,
2) There was a need to develop strategies to address the demand for Speech Pathology services.

The Early Language Development Steering Committee prioritised 10 recommendations. Of these, recommendation 5 suggested Families NSW resources be allocated to develop and implement models of skill base enhancement for preschool and childcare workers around the topic of early language development. The Early Communication Development Training Project (now known as Chatter Matters: Helping 0-5 year olds to Communicate©) is based on this recommendation. Northern Sydney Local Health District was successful in becoming the auspice agent of the project, which was developed, evaluated and refined over four stages, spanning six years (2006-2012).

The initial stages of the project focussed on two main aims. To increase the knowledge of Children’s services staff in the area of early communication development for 0-5 year olds and secondly, to improve the ability of children’s services staff to identify and refer children with early communication challenges.

Stage one of the project involved widespread consultation, scoping of existing training programs, review of the literature and collaboration with key stakeholders to determine direction. This resulted in the development of a four week training program (four sessions, consisting of two hours in the evening) titled ‘Chatter Matters: Helping 0-5 year olds to Communicate’. Knowledge evaluation targeting the key learning goals (at week 1, 4 and 1 month post) and statistical analysis was conducted and demonstrated that participants made good gains, however there were gaps in knowledge and issues sustaining the knowledge gains beyond the course. Stage 2 therefore aimed to address these issues and the program was further refined, re-piloted and evaluated, demonstrating even greater outcomes.
Stages three and four focused on the development of a more sustainable model that coupled theory with onsite training to promote increased consolidation, application and retention of the information and skills. The four evening education sessions were conducted as in stages one and two, however the Speech Pathology Project Officer also attended the participants workplace for 2-3 hours per week. In stage 3, this was for four weeks, however in stage 4, the onsite component was increased to up to 10 weeks. The focus of the onsite component included:

- observation and consultation with Children’s Services staff regarding suspected communication impairments
- further discussion of key topic areas (either known areas of weakness or at the request of participants)
- communication screening tool training
- support for discussing recommendation for referrals with parents
- development of classroom activities with a language focus
- modeling of techniques (e.g. language stimulation) and how to scaffold these to involve children of differing communication abilities.

Stage 4 of Chatter Matters© delivered outstanding gains in participant knowledge, beyond those achieved in the previous three stages. The outcomes of this final stage of the project clearly demonstrate that the education and training program in conjunction with on-site consultation and collaborative team teaching further enhances retention of learned knowledge of skills transfer into the workplace. Whilst the need for early identification and prompt referral for specialist Speech Pathology assessment and intervention was a key focus of the project, a secondary aim was to provide knowledge to Children’s Services staff. This was achieved by the ongoing discussion, training, support, demonstration and collaborative teaching.

The four stages of this project delivered a comprehensive and effective model of education and training that has been shown to enhance the ability of Children’s Services staff to identify and appropriately refer children to Speech Pathology Services.

Application of EQuIP Principles

EQuIP Principle 1: Consumer Focus

Chatter Matters: Helping 0-5 year olds to Communicate© is the product of a Families NSW project led by NSLHD as the auspice agent. A reference group was established at the onset of Stage 1 of the project and included a Speech Pathology Project Officer, overseeing Speech Pathology Manager and Families NSW Project Manager from the Northern Sydney Local Health District (NSLHD) and participants from Ageing, Disability and Home Care (ADHC), Children’s Services Advisors, Department of Community services (DOCS), Supporting Children with Additional Needs (SCAN) and Life Start were involved. This group were responsible for overseeing the direction of the project and were involved across the duration of the project, although to a lesser degree in the latter stages.

An interagency workshop presenting the information obtained was held in stage one with key stake holders and resulted in agreement on the final direction of the project and the decision to develop a new evidence-based early communication development training program and stringently evaluate this to ensure its efficacy.

In addition to the knowledge evaluation conducted at each stage, participant feedback, satisfaction and confidence was evaluated and incorporated into each stage. At the conclusion of stage four, participants expressed their satisfaction with the evening training sessions, reporting that the program met their needs, was very informative and was delivered in an interesting and entertaining manner. Excellent feedback was received for the interactive nature of the program, demonstration resources, communication screening tool, small group activities and video examples. A parent communication checklist was also developed for stage 2 in response to participant feedback from stage 1. Participants reported that this screening tool assisted them in their discussions with the parents and being able to reference their expectations about a child’s communication development.

EQuIP Principle 2: Effective Leadership

Funding for the Early Communication Development Training Project was received from Families NSW in 2006 and Northern Sydney Local Health District was successful in becoming the auspice agent. Stage 1 of the project commenced in June 2006 with the establishment of a reference group.

The Speech Pathology Project Officer chaired this group which met monthly in the projects infancy whilst the direction was being established. The group continued to meet as the project progressed and also provided support
via phone and email. Reference group members were invaluable in their contributions to the project. Northern Sydney Local Health District was extremely committed to the success of this project.

**EQuIP Principle 3: Continuous Improvement**

The project team of Chatter Matters was driven in the pursuit of continuous improvement of outcomes and to further refine the aims of the program. Each of the stages built on the outcomes and achievements of the one before it, with the ultimate result being an evidenced based, stringently evaluated and efficacious training model for Children’s Services Staff.

The ongoing evaluation of outcomes throughout the stages revealed a number of key knowledge gaps for Children’s Services staff. Stages one and two did not achieve the gains that were expected. A change of direction was therefore implemented for stages 3 and 4, which implemented a new model of early communication development. This involved the delivery of the evening education program as in Stages 1 and 2, however the Speech Pathologist also attended the Children’s Services staff’s own work environment once a week for 10 weeks for ongoing training and consolidation of skills. The site based Speech Pathology Consultant visits allowed demonstration of practical activities that complemented the theory.

**EQuIP Principle 4: Evidence of Outcomes**

Evaluation for all four stages consisted of participant pre, post and follow up. In stages one to three, the final follow up evaluation was at four weeks, however in stage 4, this was conducted at 10 weeks following the conclusion of the onsite component. The knowledge questionnaire was based on the learning objectives of the program, as well as general satisfaction survey and presenter evaluation. Results of the knowledge questionnaire were analysed with Statistical Analysis Software (SAS v9.2).

Highlights of Stage 4 outcomes showed participant ability to appropriately:

- determine if a referral for a 2 year old with language delay increased from 21% (Wk1), 93% (Wk4) to 87% (Wk10)
- determine appropriateness to refer a child from a CALD background increased from 61% (wk1), 80% (wk 4) to 87% (wk10)
- refer for speech sounds increased from 58% (Wk1), 72% (Wk4), to 85% (Wk10)
- refer for stuttering increased from 35% (Wk1), 72% (Wk4) to 87% (Wk10)
- simplify language for a 2yr old increased from 21% (Wk1), 47% (Wk4) to 60% (Wk10)
- identify reading skills that develop in the preschool years increased from 25% (Wk1), 40% (Wk 4) and 72% (Wk10)
- demonstrate knowledge of referral processes to Speech Pathology increased from 67% (Wk1) to 96% (Wk10).

Participant satisfaction for all stages of the project was very high, however even more so in the final two stages where staff had access to the onsite component of the program. Anecdotally, they responded very positively to having access to a Speech Pathologist onsite.

Participants results on confidence in their skills and knowledge to work with these clients increased from 38% (Wk1) to 98% (Wk4).

**EQuIP Principle 5: Striving for Best Practice**

The development and implementation of both the evening education program and onsite training was underpinned by the best available evidence as well as best practice and peer review. This included:

- referring to the literature to guide the content of the program
- the content of the program being peer reviewed by experienced Speech Pathologists within NSLHD
- the utilisation of adult learning principles in the delivery of the education sessions
- conducting the education program across four weeks to allow for improved retention of information and practice of skills between sessions
- introducing an onsite training component in the participant’s workplace to consolidate and generalize information and skills learnt in the education sessions (stages 3 and 4 only).
Innovation in Practice and Process

The delivery of education sessions on communication development to Children’s Services staff is not a new concept, however very few programs have had the opportunity to be piloted, evaluated, reviewed and refined to the extent that the Chatter Matters program was afforded over the six year period.

Where the true innovation lies was the decision to deliver the program as part of an overall education and training model. Whilst the education program in isolation achieved excellent outcomes, it was the consolidation, support and collaborative teaching between the Speech Pathology Consultant and Children’s Services staff in their own workplace that provided staff with the knowledge, skills, support and confidence to apply and retain the information they had gained.

Even with the onsite component in stages 3 and 4 being of a relatively short duration, the outcomes were well beyond those achieved in the previous stages, resulting in greater retention of knowledge three months post than at the one month stage as evaluated in stages one and two. The model better serves the needs of the Children’s Services staff and provides the parent and child with a more integrated and coordinated approach.

Applicability to Other Settings

Chatter Matters has demonstrated that the collaboration model, pairing education and onsite training is a sound investment. Not only does it provide excellent outcomes, it is also a time efficient and cost effective way of improving the skill base of Children’s Services staff in the area of communication development. The program has the potential to be delivered by public or private Speech Pathologists to any registered childcare setting or staff. Chatter Matters has attracted considerable interest and requests to use the program from other Speech Pathology Services within NSW Ministry of Health and is also well known amongst Childcare settings. Funding for a rollout to other services would need to be considered and a brokerage partnership between Children’s Services and Ministry of Health Services could be an option.

References


Clinical Excellence and Patient Safety


Aim
To avoid unnecessary emergency presentation for imaging from residential aged care facilities and building strong coordinated platform for RACF’s system of care.

Abstract
Summary of methodology and outcomes:

- Unnecessary presentations to the emergency department could cause access block and an increase in waiting time and length of stay for elderly patients presenting with a witnessed fall requiring limb xray or General Practitioner referral for abdomen / chest xray or a Doppler.
- Providing access to the residential aged care facility residents and ensuring that appropriate care service is accessible when needed seven days per week directing patients to the xray department bypassing the emergency department with GP / GRACE / Imaging shared care.
- When collecting data from GRACE previous innovation “Fast Track to Radiology” guideline (2008), the strength of our current system was recognised and the key areas were identified to where improvements could be made.
- To make real changes to health system and improvements to the population health, patients experience and system sustainability required a plan for patient-centered and whole system approach to making improvements to in/out of hours care.

100% of feedback from residential aged care facilities registered nurses, care managers, and the general practitioners indicated high satisfaction in patient’s outcome and patient focus.

Feedback from the families indicated their satisfaction and understanding of the procedure helped them make time to accompany their loved ones to the imaging department.

Since the implementation of the guideline 95% of nursing home patients in the Hornsby Kuring-Gai area have complied with bypass to imaging.

Application of EQuIP Principles

**EQuIP Principle 1: A Consumer / Patient Focus**
Engagement with General Practitioners, patients and their families as well as RACF’s was the key in identifying issues and implementing a solution that transitioned across all care services.

**EQuIP Principle 2: Effective Leadership**
The data were collected and reviewed, the bypass to radiology was piloted and implemented. GP or the nursing home RN contacts GRACE to book an appointment for a resident from the nursing home after GP review. GRACE CNC books the time for the patient to bypass ED and go directly to the xray department either by patient transport or a family member.
The x-ray report will be accessed by the GP electronically. The GRACE CNC provided direct contact with patients and their families (either at the nursing home or hospital), General Practitioners and RACF’s nursing staff by providing in or out of hours in services, networking, collaboration, information sharing and education regarding x-rays bypassing emergency department.

**EQuP Principle 3: Continuous Improvement**
Following a review of imaging bypass from emergency department the following issues were identified -

**Communication:** Imaging bypass guideline from the RACF’s demonstrated improvements in care in the emergency department, yet prior to the roll out of this project unnecessary emergency presentation into the hospital was high. Preventing unnecessary transfers to the emergency department, reduction in access block, and reduction in waiting time, reaching the NEAT target and beyond was of a particular focus in regards to compliance with the whole hospital approach and total patient focused care.

**Engagement of Consumers:** Engagement with General Practitioners, Patients and their families as well as RACF’s was the key in identifying issues and implementing a solution that transitioned across all care services.

**Collaboration:** Consulting with the general practitioners and the nursing home registered nurses together with the patient and their families, and also hospital transfer and the imaging department, elderly patients now receive immediate attention and do not have to wait to be seen, which has 100% satisfaction rate among patients and their families.

**Education to RACF’s and hospital staff:** Each of the RACF’s were encouraged to have the imaging bypass flowchart at the nursing station to provide faster and more effective care for the residents in their care, this has been implemented through special consideration and care pathway for either low or high care residents.

**EQuP Principle 4: Evidence of Outcomes**
100% feedback from residential aged care facilities registered nurses, care managers, and the general practitioners indicated high satisfaction in patient’s outcome and patient focus.

Feedback from the families indicated their satisfaction and understanding of the procedure helped them make time to accompany their love ones to the imaging department.

Since the implementation of the guideline 95% of nursing home patients in the Hornsby Kuring-Gai area have complied with bypass to imaging.

**EQuP Principle 5: Striving for Best Practice**
Consistent with action and approach; data were generated to meet evaluation on the guideline, and the perception of the involvement of patients and families which was found positive responds associated with communication and approach.

**Innovation in Practice and Process**
This model is innovative in that requires a small amount of resource to implement. The key to this model is communication, phone triage, knowledge and imaging skills, interaction, collaboration with the general practitioners, imaging department, and the registered nurses from the facilities. Gaining trust and accountability and being autonomous is the key success to this innovation and guideline.

**Applicability to Other Settings**
Unnecessary presentation to the emergency department could cause access block and an increased in waiting time and length of stay for elderly patients presenting with a witnessed fall requiring limb xray or General Practitioner referral for abdomen / chest xray or a doppler.

Providing access to the residential aged care facility residents and ensuring that appropriate care service is accessible when needed seven days per week directing patients to the xray department bypassing the emergency department with GP / GRACE / Imaging shared care.

When collecting data from GRACE previous innovation “Fast Track to Radiology” guideline (2008), the strength of our current system was recognised and the key areas were identified to where improvements could be made.

To make real changes to health system and improvements to the population health, patients experience and system sustainability required a plan for patient-centered and whole system approach to making improvements to in/out of
Clinical Excellence and Patient Safety

hours care.
Aim
To improve patient care experience and increase patient overall satisfaction with nursing care by introducing patient rounding.

Abstract
Patient rounding is a systematic proactive nurse driven intervention to anticipate and address the needs of the patient. Three wards at Hornsby Ku-ring-gai Hospital (HKHS) piloted the Five “P”s (Position, Pain, Pan, Proximity and Possessions) of patient rounding. Significant patient outcomes were achieved after initial implementation which were:

- 30% reduction in patient falls
- 57% decrease in pressure injuries
- 30% decrease in number of call bells; and a
- 10% increase in the patient rating in overall satisfaction of care.

Overall there was a decrease in patient complaints and increase in patient compliments received since the commencement of the project. This project demonstrated that effective patient rounding can promote patient safety, foster team building and communication and reduce patient adverse outcomes.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
This project fits the criteria of culture focused care with shared decision making between the nurse and patient, partnerships in care and enhancing patient-centred care. Evidence has shown that routine purposeful rounding and nurse time at bedside to assess and proactively meet patient needs; thus emphasising communication and patient-centred care. Patient’s hospital experiences rely heavily on nursing presence and availability, patient rounding ensures that their nurse will regularly check on them assist with their needs.

EQuIP Principle 2: Effective Leadership
Three wards participated in this pilot project endorsed by the Nursing Executive Team. A Project Team was formed to drive, monitor and manage implementation, promote change and ensure sustainability. Pre-implementation data were collected prior to patient rounding implementation in consultation with the Clinical Governance Department.

A Project Team was formed to implement, monitor and evaluate the outcomes of the project. The Project Team conducted a trial over a three month period. Patient Rounding Tools were developed such as patient rounding pocket cards and rounding logs. Educational material for nursing staff was developed for nursing in-services prior to the commencement of the project. The Project Team utilised the Studer Group hourly rounding model in developing the tools. The implementation of patient rounding fits nicely in these two practice development methodologies and patient-centred care models. Executive leadership is essential for the success of the project. The project has been led
Clinical Excellence and Patient Safety

by the Executive and endorsed locally by the Clinical Governance Department and at Northern Sydney Local Health District level.

**EQuIP Principle 3: Continuous Improvement**
Two issues came to light when reviewing the patient experience at HKH. The following results are from the Essentials of Care program-patient stories and satisfaction results from the Patient Experience Tracker -

- **Patient Safety:** patient incidence of falls and pressure injuries in the acute wards.
- **Patient Satisfaction:** patient overall satisfaction experience rating in 2012 was 83.7%.

Communication continued to be the main category for patient complaints at HKH.

The team decided to focus on the 5 “P”s of patient rounding which were: Position, Pain, Pan, Proximity and Possessions. Three wards agreed to participate in hourly patient rounding. To measure patient outcomes baseline data collected included:

- falls rate and number of pressure injuries
- patient complaints in relation to nursing communication and attitude
- patients compliments
- length of stay
- patient overall experience with their care
- staff satisfaction
- call bell.

**EQuIP Principle 4: Evidence of Outcomes**
A power point education on patient rounding was developed for staff, patient rounding pocket cards distributed, patient rounding logs and patient rounding information for patients were also developed.

A patient rounding dashboard was developed to measure outcomes of the project. The patient rounding dashboard was developed to measure patient and staff outcomes. Reporting included (a) falls rate, (b) pressure ulcers incidence (c) call bell volumes, (d) patient complaints, (e) patient recognitions (f) patient satisfaction and (g) staff overall all rating of care.

Monthly meetings were arranged and at each meeting progress against the implementation plan was agreed and discussed. An official launch was held in each of the participating wards.

Qualitative data were also collected using Patient Rounding Logs and Patient Rounding Leadership Walkrounds by Project Team Leader and Ward Champions.

This is to ensure issues and concerns were raised and discussed and demonstrated executive commitment to the project.

Outcomes from the project include -

- decreased incidence in falls rate by 30%
- decreased incidence in pressure injuries by 57%
- decrease in patient complaints was significant and one ward received nil complaints since implementation of the project and two wards have sustained their previous results. These two wards were previously involved in the Improving Patient and Staff Experience (IPSE) Program.
- decreased number of call bells: there was a 30% decrease in number of call bell volume in one ward
- increased patient compliments: The two wards that were part of the IPSE program maintained their average compliments received per month. One ward received a 100% increase in receiving patient written compliments from patients.

Increased patient satisfaction in their overall patient care experience: there was a 10% increase from a baseline data of 83% (Very Good – Excellent) to 93%.

Reviewing the Length of Stay (LOS) and discharge of patients before 10.00am was also reviewed in the participating wards and there was a significant correlation between patient rounding and the LOS and discharge of patients before 10.00am. The combined LOS for the three wards decreased from 5.2 to 5.1 days. The patients discharged by 10.00am has increased by 30%.
EQuIP Principle 5: Striving for Best Practice
The introduction of patient rounding in the three wards aimed to improve nursing staff proactiveness with regards to anticipating patient care needs. Studer (2010) reported that checking patients frequently and on a regular basis delivers optimal outcome for the patient as it helps reduce patient falls, skin breakdown and improves patient satisfaction. Furthermore it drives more nursing care back to the bedside.

There is evidence in the literature that patient rounding (Deitrick, Paxton and Swavely, 2012) promotes patient safety, fosters team communication and improves nursing staff ability to provide efficient patient care.

HKHS strives to achieve best practice: results after initial implementation showed the patient rounding contributed to decreased frequency of call bells, decreased incidence in pressure area and falls, improvements in patient overall satisfaction of care rating.

Innovation in Practice and Process
This model is innovative in that it requires a small amount of resources to implement. The key to this model is communication, phone triage, knowledge and imaging skills, interaction and collaboration with the general practitioners, imaging department, and the registered nurses from the facilities. Gaining trust and accountability and being autonomous is the key success to this innovation and guideline.

Applicability to Other Settings
The project has attracted significant interest in the remaining wards at HKH. It is envisaged that patient rounding will be implemented across all wards in the hospital. This project is easily transferable and portable to any hospital within NSW as various hospitals in NSW have been engaged in Essentials of Care and Improving Patient and Staff Experience. The implementation of patient rounding fits nicely in these two practice development methodologies and patient-centred care models. Executive leadership is essential for the success of the project.
Aim
Within 2 years, improve the management of minimal trauma fractures with an evidenced-based approach and encourage compliance through improved patient participation and education.

Abstract
In 2011 the Agency for Clinical Innovation (ACI) Musculoskeletal Network published a model of care to accelerate the diagnosis and optimal clinical management of people with osteoporosis – a common condition affecting over 10% of Australians.

In May 2011, an Osteoporosis Fracture Prevention Service (OFPS) was established at Hornsby Ku-ring-gai Hospital (HKH) for patients with minimal trauma fracture (MTF), aiming to reduce the risk of re fracture and re-admission to hospital.

Since the program commenced, 168 six- and twelve-month follow-up phone calls have been completed and only 5 re fractures have been found (annual rate of re fracture 3%), versus the ACI’s reported 5 year re fracture rate of 35% (annual rate of re fracture 7%).

Results indicate that this early intervention program reduces re fracture rates, improves quality of life and decreases health system usage.

Focus on the patient to increase confidence in treatment, compliance and education were additional goals, in line with NSW Public Health System values (Future Directions for Health in NSW 2007).

Application of EQuIP Principles

**EQuIP Principle 1: A Consumer / Patient Focus**
The HKH Osteoporosis Fracture Prevention Service has been established in direct local response to the 2011 ACI Musculoskeletal Network model of care. The HKH model was established to address inadequate identification, screening and treatment of people with osteoporosis and reduce re fracture rates. Consumers were at the centre of this model. This service re-focuses the agenda from hospital based care to out-patient care, which is more beneficial to the patient. Increasing patient confidence in treatment, compliance and education were additional goals, in line with NSW Public Health System values (Future Directions for Health in NSW 2007).

**EQuIP Principle 2: Effective Leadership**
A multidisciplinary group was formed and stakeholders were identified and consulted. Staffing of the OFPS was established at HKH consisting of a Medical Staff Specialist (0.1FTE) and a Fracture Prevention Coordinator (0.4FTE), who is also the Bone Densitometry (BMD) Technologist (0.4FTE). The staffing and plan were endorsed by the Hornsby Ku-ring-gai Health Service Executive and Northern Sydney Local Health District Clinical Council.
**EQuP Principle 3: Continuous Improvement**

The group reviewed current practice and identified gaps – the following issues were addressed and a continuous process put in place.

**Early osteoporosis diagnosis:** At risk patients are identified by the Coordinator and Orthogeriatric Registrar, referring from the Emergency Department, the Orthopaedic Review Clinic (Fracture Clinic), outpatient clinics and the wards. Patients are invited to an initial consultation with the Medical Staff Specialist, who has expertise in osteoporosis management. Most patients have a BMD scan and pathology testing done at this appointment.

**Optimal Medical Management and Service:** At a review appointment, results are discussed and medical and self-management plans are determined. Initially, patients were recommended to return to their GP if treatment was warranted. Now scripts for antiresorptive therapy are provided or bisphosphonate infusions are arranged by the Medical Staff Specialist. Referrals are also made to other services as required, such as complex geriatric assessment or falls prevention. At the review appointment, the Coordinator provides one-on-one education, using models, PowerPoint visual aids and written information, tailored to the individual.

**EQuP Principle 4: Evidence of Outcomes**

An audit of 181 new patients seen at the weekly outpatient clinics from October 2011 to December 2012 has been completed. In this cohort, 20.5% had normal BMD. The rest were either osteopenic (51.5%) or osteoporotic (28%).

While the 30-49yo age group accounted for only 16% of the cohort, there is still a high prevalence of osteopenia (50%) and osteoporosis (10%), justifying the screening of this group who are currently neglected in other fracture prevention services.

In only 10% of the patients was there no change in medical management (this includes all cases where their antiresorptive therapy, vitamin D and/or calcium were continued).

Given that a goal of the NSW Government (NSW 2021, 2012) is to keep people healthy and out of hospital, it is of note that to date, after 168 follow-up calls, there have only been only 5 reported refractures.

**EQuP Principle 5: Striving for Best Practice**

Over 35% of patients who present with MTFs will represent with a further fracture within 5 years (Center et al 2007). Since the program commenced at HKH, there have only been 5 reported refractures (annual rate of 3%) after 168 follow-up calls. This represents not only an improvement in quality of life for fracture patients and their families, but a significant decrease in re-admissions and health system usage.

A retrospective audit of 343 cases of minimal trauma hip fractures at HKH from July 2003 to December 2005, found that 34% had a prior history of minimal trauma fractures and in this high risk group only 55% were on any treatment (calcium, vitamin D or antiresorptive therapy). This mirrors national audits which also show that only 20-30% of patients presenting with minimal trauma fractures are identified as possibly having underlying osteoporosis (Sambrook et al 2002). This is despite the fact that osteoporotic medications are subsidized on the PBS for this purpose. At the HKH Osteoporosis/Fracture Prevention Clinic, 90% of the patients have been prescribed pharmaceutical intervention, including antiresorptive therapy and/or supplementation of Vitamin D and calcium.

The model of care established at Hornsby Ku-ring-gai Hospital is based on international models, as recommended by the ACI.

**Innovation in Practice and Process**

A system to identify, evaluate and treat patients with minimal trauma fractures has been successfully implemented.

These results instill confidence that our model of early diagnosis, treatment and follow-up is appropriate, effective and sustainable. The level of positive consumer feedback also substantiates this.

A review of outcomes (e.g. compliance, refracture rate) will be conducted after the existing cohort has been followed-up for 12 months.

A business case for sustainable funding for a dedicated Fracture Prevention Coordinator has been submitted.
Clinical Excellence and Patient Safety

**Applicability to Other Settings**
This model can be replicated in other hospitals by identifying local problems and utilising local staff, who are willing to expand their role, to provide effective evidence-based care in fracture management.

Funding of a full time Fracture Prevention Coordinator will allow the Service at HKH to develop, with all patients at risk of osteoporotic fracture identified, and ultimately a second clinic in operation.
Clinical Excellence and Patient Safety

ESTABLISHING ANTIMICROBIAL STEWARDSHIP IN A CHILDREN’S HOSPITAL
INFECTION MANAGEMENT AND PREVENTION SERVICE

Royal Children’s Hospital, Brisbane
Brisbane QLD

Dr Julia Clark      Ms Nicolette Graham
Dr Michael Nissen

Aim
To develop and introduce an Antimicrobial Stewardship (AMS) program promoting best evidence based practice in prescribing antimicrobials, tailored to the needs of children and paediatric prescribing.

Abstract
Excellence in antimicrobial use in children not only contributes to the wider goal of reducing antimicrobial resistance but has specific patient and family benefits which include decreasing intravenous antibiotic use and costs. This project has developed an innovative Paediatric-centric AMS program, concentrating on delivering high quality, accessible information and education via a readily accessible, user friendly website as well as positive antimicrobial advice via chart rounds. This process has then been secondarily enforced with a non-electronic antimicrobial approval system for high impact drugs. The AMS program has linked also to the Hospital in the Home (HITH) initiative with oversight of home intravenous antibiotics. AMS programs can be successfully introduced into children’s hospital services where there is staff funding and support from the organisational executive, excellent collaboration, support and communication with pharmacy and clinicians.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
AMS programs are being developed and implemented nationally and internationally, driven by the increasing spectre of antimicrobial resistance. As the impact of drug resistance has been greater in adult medicine than in paediatrics, so far, AMS programs have been mainly directed at adult practice. Their focus is to decrease specific antibiotic use, using ID expertise and restriction/approval systems to do so. With a proportionally smaller use of high risk/restricted antibiotics and smaller burden of resistance the overall focus of paediatric AMS programs differ subtly. When asked, the priority for children and parents is the rapid and successful treatment of infection, with short hospital stays, short intravenous antibiotic courses or home intravenous antibiotics. Oral antibiotics need to be palatable and easy to take.

A paediatric AMS program was therefore designed to initially target the high risk areas of appropriate antibiotic selection and accurate dosing, to ensure optimal, rapid treatment, and decrease inappropriate intravenous antibiotic use, which frequently extends hospital stays. Hand in hand with this initiative, an enhanced Hospital in the Home (HITH) service speeded up home discharge for those children identified as requiring prolonged intravenous antibiotics.

EQuIP Principle 2: Effective Leadership
An AMS Steering committee was convened from Dec 2012, is led by a Paediatric Infectious disease specialist, includes an AMS pharmacist, microbiologist, Director of Infection Control and Infection Control Nurse consultant, Director of Pharmacy and Medical Director and co-opts subspecialists as required (e.g. gastroenterologists, respiratory, surgery). The committee provides the strategic direction for the AMS program facilitates action and
meets monthly. The program is supported from the executive across medical and surgical specialties, all of whom have endorsed a commitment to AMS.

A successful AMS program requires that prescribers improve their knowledge of appropriate antibiotics and the “right antibiotic, right dose, right route” are chosen from the first prescription. Prescribers need to be engaged in this process and able to access all the antibiotic associated information they require easily and quickly.

**Strategies to encourage participation and provide information include:**

- regular education sessions and teaching for doctors and pharmacists
- engaging “Antibiotic Champions” within the clinical workforce
- AMS Website – creation of a “one stop site” for all antimicrobial associated information.

**Strategies to change prescribing:**

AMS Clinical rounds:

- **CHAMPS (Children’s Antimicrobial Prescribing Support) rounds:** AMS/Oncology weekly chart review rounds to promote judicious use of antimicrobials and provide support/education to prescribers.
- **RCH Antimicrobial restrictions and approval system:** Locally restricted antimicrobial list aligned with LAM and PBS within one easy reference, available on AMS website.
- **HITH ID approval:** Discharge to HITH on iv antibiotics changed to require ID discussion and approval – this single intervention has decreased prolonged intravenous antibiotic use.
- **AMS pharmacist:** provides inspiration and enthusiasm engaging an overwhelmingly positive approach within pharmacy, with ward pharmacists empowered to actively contribute and feedback to prescribers.

**Methods for achieving excellence:**

Subspecialty groups encouraged to develop specialty specific infection and / or antibiotic guidelines. Local paediatric specific and population antibiogram data available to assist informing antibiotic recommendations. As these clinical guidelines are developed or reviewed, they are then easily available on the AMS website.

**EQuIP Principle 3: Continuous Improvement**

- Education:
  - an active antibiotic and infectious disease education program was established with AMS
  - e-learning portal on AMS website
  - monitoring website traffic to see the most accessed areas, to assess where more information or education could be useful.
- Guideline development:
  - identifying clinical guidelines to develop and prioritizing these in terms of clinical and patient impact.
- STOP or SWITCH campaign:
  - IV to Oral switch Guideline and Stop / Review Policy
- Aminoglycoside Therapeutic drug monitoring (TDM) working party:
  - current practices and TDM guideline under review – investigating the feasibility of Bayesian forecasting method (DoseMe®) in our paediatric population.
- Expanding CHAMPS Rounds across RCH
- Research / Audit:
  - monitoring of AMS interventions documented in iPharmacy (ongoing)
  - drug use evaluations
  - RCH antibiotic point prevalence data collected on a yearly basis over last 10 years. Ongoing analysis of trends
  - Benchmarking Paediatric Point Prevalence Study – RCH contributed data to an international comparison November 2012.

**EQuIP Principle 4: Evidence of Outcomes**

This program is now in its 10th month with formal evaluation planned at 1 year. These will include impact on key antimicrobial prescription rates, antimicrobial costs, and estimation of decreased bed days resulting from iv/oral switch or HITH discharge.

**Preliminary results:** Early indications suggest that AMS program combined with HITH service can decrease hospital stay, antimicrobial costs and change / improve antimicrobial prescribing:
Clinical Excellence and Patient Safety

- HITH discharge for intravenous antibiotics (excluding children with cystic fibrosis):
  - average of 5 children per month requiring long courses of intravenous antibiotics benefit from early discharge, with a mean home antibiotic course of 11 days.
- Decrease in high cost antimicrobials comparing 6 months prior with 6 months post AMS.
- Evidence of CHAMPS interventions, (July audit):
  - 80/103 (78%) of Oncology inpatients reviewed
  - total 60 interventions (46 clinical AMS interventions, 14 AMS/ID referrals)
  - acceptance rate: 83.3% (50/60).

**EQuIP Principle 5: Striving for Best Practice**

Antimicrobial use is compared with other Australian and European paediatric facilities, within an international collaborative study initiated though a European Group. Data from Australian sites are currently being compared and will be available shortly and will inform local practice.

The AMS chair is part of an Australian Society Infectious Disease Paediatric AMS group, through which innovation, practice developments and processes are shared between Australian paediatric facilities.

Electron AMS systems are available and increasingly adopted in adult AMS programs. We are exploring these systems actively – in terms of both costing and successful implementation at other sites.

**Innovation in Practice and Process**

This project has developed an innovative Paediatric centric AMS program, concentrating on delivering high quality, accessible information and education via a readily accessible, user friendly website as well as positive antimicrobial advice via chart rounds. This process has then been secondarily enforced with a non-electronic antimicrobial approval system for high impact drugs. The AMS program has linked also to the to the HITH process, with oversight of home intravenous antibiotics.

**Applicability to Other Settings**

Excellence in antimicrobial use in children not only contributes to the wider goal of reducing antimicrobial resistance but has specific patient and family benefits which include decreasing intravenous antibiotic use and costs. AMS programs can be successfully introduced into children’s hospital services where there is staff funding and support from the organisational executive, excellent collaboration, support and communication with pharmacy and clinicians.
ANTIMICROBIAL STEWARDSHIP: A PRIVATE DAY SURGERY’S RISE TO THE CHALLENGE

Day Surgery Unit
Skin and Cancer Foundation, Australia, Westmead Day Clinic
Westmead NSW

Sally Holmes
Pat Faga
Sharon Rollo
Associate Professor Rob Paver

Aim
To establish antimicrobial guidelines for patients undergoing Mohs micrographic surgery within an Antimicrobial Stewardship (AMS) framework.

Abstract
The escalation of multi-resistant micro-organisms has received international attention, mandating an urgent review of prophylactic antibiotic administration. Patients at the Skin and Cancer Foundation Australia, Westmead (SCFA) were routinely prescribed preoperative antibiotics. A review of evidence based literature resulted in the implementation of objective and definitive antimicrobial guidelines challenging traditional practice. Utilising clinical standards published by the Therapeutic Guidelines for Antibiotic Version 14 (2010) and Antibiotic Prophylaxis (2008), SCFA reviewed the policy and procedure to ensure that only patients who meet the inclusion criteria receive preoperative antibiotics. The reduction in antibiotic usage has not only dramatically decreased but the ordering of antibiotics in the post-operative period has also been limited to select groups of patients. Through this experience SCFA aims to provide guidance to other private day surgery units implementing an AMS program as an alternative to conventional and unchallenged clinical practices.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Skin and Cancer Foundation (SCFA), Westmead is a private not-for-profit day surgery with international recognition in Mohs micro-graphic dermatology surgery. Traditionally patients received oral antibiotics at the time of admission, and half this dose was repeated six hours later. Patients discharged with antibiotic scripts premised on the possibility of an infection were common, rather than prescribed on the principles of best practice. The practice of antibiotic prescribing has remained unchallenged at SCFA since 1995, in the absence of current objective and evidence based data.

The AMS implementation phase required the establishment of two Consumer/Patient Focus groups (CFG). The first group, the Antimicrobial Stewardship Working Party (AMSWP) consisted of senior Surgeons, a Mohs Fellow, an Executive Business Manager and Infection Control Coordinator (RN) This group was responsible for critical review of evidence and policy development for recommendation to the Medical Advisory Committee (MAC) for endorsement and implementation facility wide.

A second community based CFG, consisting of interested patients and employees of SCFA reviewed all safety and quality services at the SCFA. Specifically; to analyse, and critique the AMS program as well as provide advice and recommendations, from a patient/community perspective.
Collectively, but independently the CFG analysed and critiqued the following:

- the reduction in routine antibiotic administration;
- decreasing risk to patients receiving unnecessary therapy;
- ensuring appropriate antibiotic cover based on health status and co-morbidities;
- use best practice principles coupled with evidence based literature to ensure appropriate antimicrobials to susceptible individuals are provided; and,
- to challenge traditional practices in light of evolving trends and acceptable practice.

**EQuIP Principle 2: Effective Leadership**

Infection rates at SCFA were <0.2% for 2012 and year-to-date are <0.16%. Key outcomes in the implementation of AMS include significant reduction in antimicrobial usage. However, organisational responsibilities mandate safe and efficient patient care while maintaining a low level of infection. Therefore, supplementary pre-operative skin preparation is performed with Chlorhexidine 0.05% at every surgical procedure by the nurse prior to the doctor re-cleaning and marking the operative site.

The Therapeutic Guidelines, as recommended by the Australian Commission on Safety and Quality in Health Care, served as the primary reference document. These recommendations confine antibiotic prophylaxis to those patients with cardiac conditions associated with a higher risk of adverse outcomes from endocarditis (Page 191). Prosthetic heart valves, congenital heart disease or transplantation and rheumatic heart disease in Indigenous Australians only. Inclusion criteria also extend to infected or contaminated wounds, and surgery to oral or nasal mucosa.

Patients meeting these criteria are recommended to have Amoxicillin 2g 1 hour before procedure, or if hypersensitive to penicillin, use Clindamycin 600mg 1 hour before the procedure.

For any surgical site infections, cultures should be obtained and a full course of antibiotics prescribed based on culture and sensitivity.

Any infection at the site of Mohs surgery or excisions is treated with a full course of Flucloxacillin or Cephalexin for patients hypersensitive to penicillin. A script is written by the doctor for these patients.

Duration of procedure extending 8 hours or longer, with or without a closure, or delayed repair, such as next day, requires a script for Flucloxacillin or Cephalexin (page 311). Otherwise antibiotics are seldom necessary for clean wounds.

Lower leg surgery and groin surgery are considered high risk anatomical sites, and therefore it is recommended that a full course of antibiotics is prescribed.

In procedures in which bacteraemia is likely to occur (e.g. dental surgery, cystoscopy, perforating dermatological procedures on non-infected skin) the value of antibiotic prophylaxis has not been demonstrated. No antibiotics are recommended for patients that have had previous joint surgery (page 198).

Chloromycetin ointment was routinely applied to sutures as a prophylactic antimicrobial. The AMS has warranted the removal of Chloromycetin ointment from stock as topical antibiotics may cause skin hypersensitivity (Therapeutic Guidelines 2010), and the emergence of resistant organisms. It is therefore not recommended for prophylaxis of surgical site infections (page 309). Topical antibiotics are not routinely used at SCFA either prophylactically or on surgical site infections. Chloromycetin ointment has been deleted from impress stock at SCFA and replaced with sterile Vaseline.

Hand washing products at SCFA in general and public areas contain no antimicrobials (neutral) compounds. Hand washing solution used in all theatres is a 70% alcohol based hand rub solution, or Triclosan 3mg/g if the Healthcare worker chooses to use soap and water.

A comprehensive educational program was undertaken by the Infection Control Coordinator. This program consisted of:

- The “5 Moments of Hand Hygiene”
- Hand Hygiene competency assessment
- On-line Hand Hygiene Learning Package
- Environmental Audit evaluating a suitable workplace environment. Environments that fail to have appropriate hand hygiene products do little to support staff in meeting these objectives.
Clinical Excellence and Patient Safety

All staff have been assessed and evaluated on hand hygiene in line with AMS standards. Healthcare workers failing to meet these objectives, undertake remedial teaching prior to reassessment reassessed. AMS cannot be a standalone strategy to reduce the usage of antimicrobials. A reduction of Healthcare acquired infections (HCAI’s) has been achieved through the Hand Hygiene initiative and the aseptic no touch technique.

EQuIP Principle 3: Continuous Improvement
The new guidelines were commenced on June 4th 2013 and throughout this time evaluation of policy is ongoing:
- decreasing healthcare workers failing to perform hand hygiene from 3.6% to 0.0%
- 11% (n=3) of patients within the post-operative group received post-operative scripts however the exact reason for the script could not be established. Evaluation to ensure that patients who meet the inclusion criteria are given post-operative scripts.

Predetermined antimicrobial usage Key Performance Indicators (KPI) were not met. Predetermined KPI was set at 30%. SCFA will continue to encourage best practice with prescribing.

EQuIP Principle 4: Evidence of Outcomes
The research undertaken by Dr M. Lee (Mohs Fellow) is under review for publication through the Australasian Journal of Dermatology.

The community based Customer Focus Group are evaluating an information brochure: “Antibiotics: Do You Really Need Them...Don’t Expect To Be Given Antibiotics If You Don’t Need Them”, aimed at informing patients about the use of antibiotics and SCFA’s response to reducing antimicrobial resistance.

EQuIP Principle 5: Striving for Best Practice
Evaluating the current practices with regard to antibiotic administration further identified the following:

Pre-audit antibiotic utilisation (n=311):
- 63.0% of patients scheduled for Mohs surgery in the pre-audit group were prescribed a prophylactic antimicrobial (Keflex and Erythromycin) based on traditional practice
- 39.5% of patients were not provided prophylactic antibiotics.

Post-audit antibiotic utilisation (n=212).
48.6% of patients scheduled for Mohs surgery in the post-audit group, were prescribed a prophylactic antimicrobial (Keflex and Erythromycin):
- based on objective inclusion criteria and implementation of AMS
- 53.3% of patients received no pre-operative prophylactic antibiotics
- validation of these findings using Chi Square, clearly demonstrated the reduction as statically significant (alpha 0.05), resulting from the implementation of AMS
- the new guidelines were adopted by prescribers and resulted in a substantial reduction in the frequency of antibiotics scripts
- 66.6% of patients scheduled for Mohs surgery in the pre-audit group received routine post-operative scripts on discharge, based on traditional practice
- 12.7% of patients scheduled for Mohs surgery in the post-audit group received an antibiotic script based on the Therapeutic Guidelines (2010), and Antibiotic prophylaxis (2008) inclusion criteria
- 100% compliance with prescribers observing AMS guidelines based on evidence based and best practice principles
- all prescribers received written advice from the Medical Director advising the change of policy; however, the prescriber has the final decision
- 11% (n=3) of patients within the post-operative group received post-operative scripts however exact reason for script was not able to be established
- 50% reduction in monthly antimicrobial expenditure observed in post-audit period
- cost saving of $300 per month (minimal) on Chloromycetin Eye ointment.

Post implementation of AMS produced the following outcomes:
- 100% Compliance with prescribers to adhere to new policy guidelines related to antibiotic ordering
- evaluation of post-operative infections resulted in no increase in incidences reported post-audit compared to pre-audit infection rates
Clinical Excellence and Patient Safety

- 100% compliance following implementation of the “5 Moments of Hand Hygiene”
- 100% compliance with Hand Hygiene competency
- 100% compliance on-line Hand Hygiene Learning Package.

The following statistics relate to Department Compliance Report:

- proportion of moments missed when taking gloves off: 0.0%
- proportion of moments missed when gloves put on: 0.0%
- healthcare workers failed to perform hand hygiene: 3.6%
- proportion of healthcare workers using alcohol-based hand rub: 70.8%
- proportion of healthcare workers using soap and water: 29.2%.

Innovation in Practice and Process

The implementation phase of the Antimicrobial Stewardship program, resulting in the restrained use of antibiotics was initially tense. Associating low infection rates on antimicrobial usage had not been adequately investigated. Anecdotally, the potential for postoperative infection is limited to the low infection potential of the surgical site despite the use of antimicrobials. Quantifying this further through continued assessment and monitoring can provide significant information to more adequately measure the response to these new guidelines.

Applicability to Other Settings

The findings of this program have implications for other day surgeries and General Practitioners in which traditional antimicrobial prescribing remains unchallenged. Implementing objective and evidence based practices that focus on limiting the frequency of antimicrobial usage, and minimizing antimicrobial resistance becomes the accepted practice.

References


Aim
The aim of the Eating Disorder Partnership Project was to address the gaps identified by GPs in access to services on the Peninsula for individuals with eating disorders.

Abstract
Individuals suffering from an eating disorder form a group that has one of the highest mortality rates of any mental illness. The medical complications of those with eating disorders such as anorexia nervosa are common and can be serious and life-threatening (Mitchell and Crow, 2006). The Eating Disorder Partnership was initiated through a forum held in early 2012 with Peninsula Health and the Peninsula GP Network where difficulties and gaps in accessing assessment and treatment for patients with eating disorders were identified. An effective partnership between Peninsula Health and Peninsula General Practice Network has resulted in a GP referral pathway, improved access to medical inpatient admissions, an evidence-based Clinical Pathway for medical admissions, evidence-based outpatient treatment of adolescents, clinical practice guidelines, increased liaison with Southern Health Eating Disorder Services and education and training opportunities.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Consumer and carer representatives have been involved throughout the project and provided valuable input. They were consulted as part of the development of all documents and are currently assisting with the production of a consumer / carer brochure on how to access support for eating disorders.

As GPs are generally responsible for the initial assessment and care co-ordination for those identified with eating disorders presenting in primary care, a GP’s training, experience and knowledge of referral options is crucial in ensuring timely diagnosis and treatment (Nice Guidelines, 2004). As a result, GPs were also identified as our clients. The GPs who were part of the partnership provided a valuable perspective to the project and ensured that the GPs’ and consumers’ needs were central to the process.

Difficulties identified by GPs included:
- GPs unclear about where and what treatment may be available
- a lack of referral pathways to assist with accessing appropriate support for patients
- a perceived difficulty in obtaining inpatient treatment for adults requiring a medical admission
- a need for greater communication and liaison between internal and external service providers such as GPs
- a lack of education and training opportunities in the assessment and treatment of eating disorders for GPs
- a lack of Care Teams around patients to ensure a co-ordinated, team approach.

EQuIP Principle 2: Effective Leadership
The Eating Disorder Partnership is made up of a highly dynamic group of individual leaders and includes representatives from Peninsula Health Mental Health, Consultation Liaison Psychiatry, Community Health, GP Liaison
Unit, Medical Services and Peninsula GP Network with consultation from Southern Health Specialist Eating Disorder Service (Wellness and Recovery Centre). The partners have met regularly with a commitment to address the issues identified by GPs and develop a coordinated, evidence-based approach to the assessment, diagnosis and treatment of individuals with eating disorders.

The partnership members are multidisciplinary (Executive Director of GP Network, Medical Physician, Consultant Psychiatrist, Psychologists, Dietitians and General Practitioners) and were identified as champions for the project within their departments and services. Their leadership has ensured that Peninsula Health staff and local GPs are aware of the changes that have occurred and this has resulted in the goals of the project being achieved.

The partnership members were diligent in ensuring the Executive Directors from Peninsula Health Service were fully engaged with the project. The Clinical and Operational Directors of Medicine and the Clinical and Operational Directors of Mental Health have ensured that clinical governance structures support the ongoing program. The Executive Director from the GP Network has a lead role in the ongoing maintenance of the program.

**EQuIP Principle 3: Continuous Improvement**

The eating disorders project has used an ongoing continuous improvement cycle with identification of the issues, planning and implementation of an appropriate intervention and continuous evaluation and revision as required. For example, the Referral Pathway has been trialled, evaluated, enhanced based on feedback and implemented. It continues to be reviewed and monitored to ensure it meets staff and consumer needs. All shared documents will continue to be reviewed by key stakeholders and updated if required, on a six monthly basis as part of the ongoing Eating Disorder Partnership.

The implementation of the Adult Anorexia Nervosa Clinical Pathway was evaluated by a multidisciplinary team review following initial use and the pathway was altered to make the checklists clearer and easier to use. A continuous improvement cycle was adopted and the pathway has incorporated several cycles of development, implementation and review. The clinical pathway has become an integral and sustained component of health service delivery for patients with anorexia nervosa requiring inpatient management at Peninsula Health.

A Peninsula Health wide Clinical Practice Guideline was written in 2012 outlining expectations and providing guidance regarding the assessment, diagnosis and treatment of eating disorders across the service. This Guideline is updated as part of the continuous improvement cycle.

Education and training in assessment and treatment of eating disorders are now part of an annual education calendar.

**EQuIP Principle 4: Evidence of Outcomes**

The project was implemented throughout 2012 with ongoing education through 2013. The project addressed all of the identified difficulties.

1. **Improving Access to Assessment and Treatment through a Referral Pathway:**

A clear referral pathway has been developed that allows the referrer to search for and select the right service appropriate for the age and specific eating disorder severity and then identify the information required prior to contacting the service through specified links.

The referral pathway was launched at an education session for GPs and Private Providers on Eating Disorders in June 2013.

Feedback from GPs about the referral pathway is that “it is an exciting improvement and provides an easy identification of appropriate services and contact details”.

The referral pathway is on the GP Network and GP Liaison Websites for easy access and was included in the GP Network newsletter in July 2013 which has been sent out to 380 GPs, 90 General Practices, 120 Private Medical Specialists and four Private Hospital Sites.

2. **Improving the identification and treatment of adults requiring medical treatment for anorexia nervosa:**

Prior to the project, one or two adults a year with severe anorexia nervosa were identified either in the Emergency Department or within the hospital at Peninsula Health but their diagnosis was delayed and subsequent treatment was poorly coordinated, often with premature discharge and inadequate follow-up plans.
The partnership worked to improve the access to medical management of adults with anorexia nervosa requiring a medical admission for complications of the disorder. As a result, three key changes have occurred:

- GPs are now able to organise a Direct Admission for their patients with a call to one of the Eating Disorder Physicians
- the identification of a specific medical ward for the medical management of any patient over the age of 17 years-old with an eating disorder to ensure appropriate treatment
- the allocation of specified Eating Disorder Physicians, Dietitians, nursing staff and Consultation Liaison Psychiatry as the treating inpatient team.

3. Adult Anorexia Nervosa Inpatient Pathway:

A clinical pathway initially adapted from the Peninsula Health Paediatric Anorexia Nervosa Pathway, was developed in order to provide effective and consistent treatment while an individual is undergoing medical stabilization on the inpatient unit. The pathway is a multidisciplinary tool based on current best-practice and is initiated as soon as the patient is admitted to the ward. The checklists and reminders in the pathway outline treatment for up to 10 days.

The pathway aims to:

- prevent re-feeding syndrome and reduce adverse outcomes
- increase patients’ involvement in their care
- ensure appropriate length of stay
- support appropriate discharge planning.

Since the implementation of a designated ward and Clinical Pathway at Peninsula Health nine months ago there have been seven patients successfully treated by the team on the designated ward.

4. Early Intervention: Family Based Treatment at Community Health:

Increasing the potential for early intervention can be crucial to the recovery of consumers with anorexia nervosa, especially during adolescence. According to the Nice Guidelines (2004) family interventions focused on addressing disturbed eating should be offered to children and adolescents with anorexia nervosa. Family Based Treatment (Maudsley Model FBT) is an evidence-based, team approach to treating Anorexia Nervosa in young people (13 – 21 years). The main goal of FBT is to return the patient to healthy eating and weight using family (carer) involvement (Lock, Le Grange, Agras and Dare. 2001).

During 2012 dietitians and counsellors from Community Health participated in specialised Family Based Treatment training. In addition referral criteria were established to make it as easy as possible to identify suitable participants in the treatment. This treatment approach provides GPs and other referrers with an opportunity to access early support for those showing signs of anorexia nervosa rather than waiting until the illness is well established before accessing mental health care. Paediatricians, local GPs and other primary care providers have been informed about its commencement at the recent information and education session.

5. Improving Care Co-ordination at the Mental Health Service

Prior to the project, there was inconsistency in the provision of diagnosis and treatment of those with an eating disorder at Peninsula Health Mental Health Service and poor liaison with the specialist Eating Disorder Service at Southern Health. Improvements implemented as part of the project include:

- the development of an assessment tool that is comprehensive and includes mental health and physical risk, as well as psychological and social need
- a referral protocol between Peninsula Health and Southern Health
- providing a care team approach which clearly articulates the roles of the Mental Health Service, GPs, dietetics and other service providers
- establishment of a defined treatment plan outlining the liaison between the GP and all parts of the treating team
- implementation of a supportive therapeutic context which has been found to support consumers to explore issues and strategies that promote change (McIntosh, Jordan, Luty, Carter, McKenzie, Bulik and Joyce, 2006)
- education and training opportunities for mental health staff in the assessment and treatment of eating disorders.

The changes at the Mental Health Service has ensured that there is no longer a ‘wrong door’ principle and all
Clinical Excellence and Patient Safety

consumers referred for an eating disorder are assessed and appropriate referrals and/or treatment is provided.

6. Education and Training Opportunities:

Education has been provided since 2012 and includes:
- education to Emergency Department registrars and nurses
- the training notes posted to the registrar’s online training library as an educational resource
- education to all Peninsula Health Mental Health Services and teams
- education to the Consultant Psychiatrist’s Journal Club.

Grand Round presentation on Eating Disorders to Department Heads and Physicians, Registrars and HMOs: On 25 June 2013, 18 GPs and mental health clinicians attended an educational event ‘Eating Disorders: Recognition and Management Pathways’. The event was highly regarded, interactive and provided the opportunity to utilise case based discussion to step through all aspects of the new clinical and referral pathways and resources and services for eating disorders that are available locally to support the GP consultation and include them as a member of the care team. 78% of participants completed a post event evaluation.

Evaluation of the education sessions revealed positive responses with excellent ratings by 83% of respondents. 93% of survey respondents reported that the learning objective relating to “Understanding referral pathways and associated resources for these disorders, thus facilitating best practice care” was fully met.

Comments included:
- Now able to refer patients with eating disorder more appropriately and quickly.
- Now aware of local dietician, physicians and psychiatry available at Peninsula Health to access and refer.
- Able to direct referral to on call Specialist Physician.
- I am more confident working with these clients.
- Good to use early intervention programs for ‘at risk’ patients.

EQuIP Principle 5: Striving for Best Practice
Through consultation with other health services and the Centre of Excellence in Eating Disorders (CEED, a consultation and training body) we identified the necessary key elements of effective service provision. However, we also understood the difficulties other services had in implementing assessment and treatment options for eating disorders, particularly those services that, like Peninsula Health, are not funded as specialist Eating Disorder Clinics.

Some services had been able to provide effective interventions for adolescents but to date no other service we are aware of has been able to initiate a model of care that addresses all of the recognised challenges such as varied age and acuity of consumers and working across medical and mental health services and public and private domains.

We examined the barriers and difficulties other services had encountered and identified that a key element for our project was to ensure that the individuals who represent the partnership group are all committed to the importance of the project and have the authority to implement change at a service-wide level.

Innovation in Practice and Process

The Eating Disorders Project is an example of innovation and excellence in ensuring continuity of care for consumers with eating disorders and effective communication and liaison between service providers.

The innovation of this project has been the ability for the partnership representatives to implement change at every level and bridge the gaps between medical and mental health services, private and public domains and across the age range.

What makes this project visionary is the ability of the representatives of the partnership group to see the barriers to change as challenges that can be readily overcome. For example, there were no Specialist Physicians with experience in treating anorexia nervosa at Peninsula Health at the commencement of the project. The Medical Director put out an expression of interest to all Physicians to be a part of the project and as a result we have two Physicians who have received specialist training and provide the medical leadership.

In addition, getting GPs to attend education sessions can be difficult and ineffective. There are 380 GPs in the local area and a maximum of 20 GPs will attend any given event. Many months were spent developing the referral pathway which could double as an education tool. The tool was devised to be an immediate link to all information
that may be required for an effective assessment and referral. This tool is easy to update to maintain currency and is only a click away.

**Applicability to Other Settings**

This project has attracted interest from other health services who are struggling to implement similar improvements in access to eating disorder treatment. The project outcomes, as well as the process of implementation have been presented at a forum coordinated by the Centre of Excellence in Eating Disorders. The importance of forming a partnership that involves representatives from all relevant services was highlighted. The Referral Pathway, Eating Disorder Assessment Tool and Clinical Pathway have been made available to Clinical Excellence in Eating Disorders Consultation Service (CEED) to assist other health services.

The project was recognised by ACHS surveyors during the recent accreditation event in May 2013, one of whom commented in the summation on the effective relationship between medical and mental health services in treating eating disorders.

**References**


OLDER WISER LIFESTYLE (OWL)

Peninsula Health Community Health
PENINSULA HEALTH
Frankston VIC

Stephen Bright  Katherine Walsh
Craig Wotherspoon

Aim
To reduce alcohol-related harm among older adults through:
- developing an age-specific service model and therapeutic tools; and
- conducting evidence-based research to develop best practice guidelines.

Abstract
Many older adults are at-risk of experiencing Alcohol and Other Drug-related problems due to metabolic changes, increased medication use, medical co-morbidities, grief, role transition and social isolation. However, few older Australians access AOD services. To address this gap, Peninsula Health established Older Wiser Lifestyles (OWL), Australia’s first older adult-specific AOD service. Development of OWL was informed by benchmarking with overseas services and direct consumer input. A number of barriers to service delivery were identified including: ageism, stigma, shame, mobility, lack of transportation and medical complexities. These were overcome by developing a holistic service through strategic marketing, community development and education, screening and early intervention, the provision of outreach treatment services and the establishment of a multi-disciplinary team. OWL has been independently evaluated by Turning Point and Health Outcomes International. OWL was found to effectively reduce the use of alcohol and alcohol-related problems, while increasing social connectedness and general physiological and psychological wellbeing. By providing advocacy, training and media, OWL has shown national leadership in raising the profile of AOD issues among older adults.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
- OWL has been designed to be flexible in service delivery to best meet the diverse needs of older adults, regardless of age of onset and level of use.
- During the development of the OWL program, consultation occurred with the established Peninsula Health Community Advisory Committees, the Older Persons Community Advisory Group and the Alcohol and Drug Community Advisory Group.
- Consumer focus was a key element of the OWL evaluation design and methodology.

EQuIP Principle 2: Effective Leadership
- Through advocacy, research, evaluation, education and effective leadership, the OWL team has increased awareness and understanding of alcohol related harm to older adults, including the provision of assertive engagement and education to identified ‘at-risk communities’.
- In developing and disseminating Australia’s first older adult-specific early intervention for alcohol-related harm, OWL has lead and achieved much at a local, regional, state-wide, federal and international level, including:
  1. Establishment of a peer-led screening program within Frankston Hospital
  2. i-Pad to access the A-ARPS
3. Increasing the profile of older adult alcohol use as a health priority
4. Raising alcohol use among older adults as a priority area for response
5. Facilitated training to health care workers, including GP’s and HACC workers; and
6. Improved referral and healthcare pathways based upon evidence gleaned from OWL.

**EQuIP Principle 3: Continuous Improvement**
- OWL activities are evaluated using an Action Research framework and purpose-built evaluation tool developed by OWL staff.
- Of the 319 people who have completed this evaluation to date, 98% reported that their understanding of the age-specific issues for older adults who drink increased as a consequence of participating in the activity and that they would recommend the session to their friends.
- To measure the effectiveness of the OWL program, a collaborative evaluation, focusing on the effect of the program was conducted by Turning Point Alcohol and Drug Centre over an eighteen month period between 2011 and 2012.

**EQuIP Principle 4: Evidence of Outcomes**
The OWL program has developed its treatment modalities on older adult specific research findings and adult treatment protocols. Much of this evidence has been drawn from the experience of older adult treatment services overseas, and based upon this information and local evidence gathered through a variety of mechanisms, has achieved much, including:
- a partnership was established with the local GP network to establish an older adult-specific screening and referral process using the A-ARPS
- OWL provided training to GPs and practice nurses and consulted with individual clinics resulting in screening programs using i-Pads in three general practice clinics
- developed and implemented the Building Up Dual Diagnosis Holistic Aged Services (BUDDAHS) working alliance
- the development of an Australian version of an older adult-specific computerised screening tool
- an evidence-based protocol delivered to 200 older Australians.

**EQuIP Principle 5: Striving for Best Practice**
- The OWL team strives to ensure that their interventions are based upon contemporaneous evidence and best practice models and have included attending and presenting at many national and international conferences with a view to build the capacity and interest, of the health workforce.
- OWL interventions are based upon research and lead the sector.
- Improved health among the OWL clients was reported and captured during the independent evaluation of the program and ultimately, reports an improvement in overall health scores by service users, further imbedding and building a framework for best practice.
- The OWL team contributed to several health promotion media campaigns at local and national levels including radio interviews on Radio National and ABC Radio.
- In partnership with an older person’s steering committee and Casuarina Media the OWL team developed an educational DVD resource targeting older adults and health.

**Innovation in Practice and Process**
Direct consultation with older adults through Peninsula Health’s Older Adult Community Advisory Group and two focus groups have resulted in innovative and responsive outcomes and a range of engagement strategies that are targeted to the population:
- community education packages were developed and disseminated
- training older adult volunteers, OWL has established a peer-based screening program in the Frankston Hospital and Peninsula Health outpatient clinics using I-pads that access the A-ARPS.

**Applicability to Other Settings**
Outcomes from OWL program have included an Australian version of an older adult-specific computerised screening tool, an evidence-based protocol.

The availability of an Australian version of the ARPS (the A-ARPS) is significant as has the potential to improve the health and wellbeing of older adults and also reduce healthcare costs.
Clinical Excellence and Patient Safety

The work that OWL is involved in is directly and immediately applicable and valuable across many areas, such as:

- Aged Persons Mental Health
- Community Health settings
- GP Practices
- Hospitals
- Occupational Therapists
- Cardiac Rehabilitation
- Retirement Villages
- Community Centres and similar; and
- Allied Health Private Practice.
Aim
To increase the proportion of smokers who quit on waiting list for more than 1-month before surgery by mailing them a locally designed / produced quit-pack.

Abstract
Objective: To measure the effects of sending a smoking cessation ‘quit pack’ to all patients placed on the elective surgery waiting-list.

Design, participants, setting: Questionnaire-based study before intervention (mid-2011, 177 patients) and after (2012/13, 170 patients) conducted on day of surgery. All were identified as adult smokers at time of waiting-list placement at an outer-metropolitan Melbourne public hospital.

Intervention: Quit pack consisting of educational brochure containing cessation advice and focused on perioperative risks of smoking, together with Quitline referral form and reply-paid envelope.

Main outcome measure: Proportion of smokers who quit on waiting list for ≥ 1-month before surgery; considered a clinically meaningful duration to reduce surgical complications.

Results: An 8.6% improvement in waiting-list smokers achieving the target ≥ 1-month abstinence at day of surgery (p=0.03). The NNT of 12 (95%CI 6-240) meant 12 smokers receiving intervention would create one additional episode of clinically meaningful quitting on wait-list.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
Consumers were the central focus of this project, because consumers (smokers having elective surgery) are suffering avoidable postoperative complications as the result of a lack of a systematic approach to inform of the hazards of smoking and surgery, advise about quitting and provide tools / help for this to occur.

EQuIP Principle 2: Effective Leadership
The program was initiated by a Consultant Anaesthetist at Peninsula Health with a Public Health background, who recognised that the lack of a systematic approach to identification and lack of intervention came at a high price to smokers having surgery. ‘Stop before the Op’ is supported by and positioned within Peninsula Health’s broader smoking cessation strategy, aimed at improving the health of the whole community; a key goal of the Peninsula Health Strategic Plan. Peninsula Health is a founding Victorian member of the Global Network for Tobacco Free Health Care Services. The potential of ‘Stop before the Op’ to improve health outcomes for Victorians has been recognised by both the Department of Health and other health services across Victoria.
Clinical Excellence and Patient Safety

**EQuIP Principle 3: Continuous Improvement**

Only 10% of patients were quitting before surgery for sufficient time to reduce complications (4-weeks) Evidence for a systematic approach to perioperative quit support was incontrovertible. A telephone survey was also conducted, sampling perioperative services from 29 public hospitals throughout Victoria, showing none had a systems approach to cessation. A pilot model for intervention was developed and evaluated.

**EQuIP Principle 4: Evidence of Outcomes**

There was a significant increase in the percentage of patients reporting having quit for the target 1-month or more at the time of surgery (10.2% before compared with 18.8% after, p=0.03) (Table 2, Figure 1). This 8.6% difference meant a number-needed-to-treat (NNT) of 12 (95%CI 6-240), or 1 in 12 smokers achieving clinically meaningful quit times who would not otherwise have done so. There was no significant difference in the overall percentage attempting quitting, or the percentage quit for any period at surgery (Table 2). Before the intervention, attempts were more likely to be brief and end shortly before surgery (Table 3). There were more quit attempts lasting 1-month or more (successful and relapsing) with rates 14.1% before and 24.7% after (p<0.001). Commitment to total abstinence was frequently incomplete in those with quit times ≥ 1-week with many admitting to having at least “a puff” in the week before surgery. Before the intervention, 8 of the 26 (31%) reporting 1-week or more quit time had “a puff” within a week of surgery, falling to 8/41 (20%) after, although this difference was insignificant (p=0.38).

The use of stop-smoking medication (mainly NRT) at the time of surgery rose significantly following the intervention. 41% of wait-list patients who quit reported current use to assist quitting (p=0.002). Very few used Quitline (Table 1). Among those quit at survey, 91% in the after group and 76% in the before group reported they intended to remain quit long-term (p=0.08).

Patients were more likely to report having received “tips on how to stop smoking before surgery”, after the intervention (Figure 2) (p<0.001). Before the intervention (when the hospital didn’t formally provide tips / advice on how to stop smoking before surgery), there was no association between recall of advice and status as a wait-list quitter (p=0.41). Following the intervention, those recalling having received information on how to quit were more likely to quit and those denying it were more likely to continue smoking (p<0.001) (Figure 2).

The intervention resulted in a significant reduction in patients reporting not having received advice to stop smoking before surgery (p<0.001) and significant rises in patients recalling having been given written hospital advice (p=0.008), and advice from family and friends (p<0.001) (Figure 3). There was also increased likelihood of patients reporting stop-smoking advice from a clinician when he/she was on the waiting list; either a GP, surgeon, anaesthetist or nurse (Figure 3) (p<0.001). Overall, 40% of participants reported receiving advice to stop smoking before surgery from a clinician before the intervention, rising to 63% afterwards (p<0.001). Receiving clinician advice was associated with increased likelihood of quitting on the waiting-list, both before and after the intervention (Table 6). Attempts at quitting on the waiting list were also significantly associated with receiving quit advice from a clinician when on the waiting list (Table 4). Smoking cessation outcomes before elective surgery are significantly improved by systematic application of the printed intervention delivered at time of wait-list placement that encourages and supports perioperative quitting. If applied Australia-wide, modeling shows 6,000 surgical complications would be prevented annually at the cost of a few cents per patient and with no known side-effects.

**EQuIP Principle 5: Striving for Best Practice**

‘Stop before the Op’ represents excellence in healthcare and public health as it provides a systematic pathway for smokers to access evidence-based information, quit advice and direct access to support. This was achieved using existing resources at minimal cost and has increased Quitline referrals, increased discussion of smoking and surgery within families and with clinicians, but most importantly, increased clinically significant abstinence before surgery. Based on our NNT of 12 and 360,000 smokers having elective surgery in Australia annually\(^6\), an additional 30,000 smokers would achieve clinically meaningful cessation (≥24-weeks) if our data was generalisable and the program applied across the nation. Other research showed 4-weeks quitting reduced surgical complications with a NNT of 5\(^6\), so these 30,000 additional quitters could avoid 6,000 surgical complications. The intervention does not replace clinicians talking to patients (it appeared to significantly promote these discussions), but it does provide a minimum expected standard of care in terms of informing every single smokers and reduces the current variability in quit support.
Innovation in Practice and Process

Waiting lists are often the focus of political and community discontent, but this is an example where the time spent on the waiting list can be used to improve fitness for surgery. There are few Australian studies of interventions designed to reduce smoking in preoperative settings. Given the median waiting list time is currently 36-days in Australia\(^1\), interventions targeting patients at waiting list entry provide sufficient cessation window to reduce perioperative complications.

Applicability to Other Settings

The potential of ‘Stop Before the Op’ to improve health outcomes for Victorians has been recognised by both the Department of Health and other health services across Victoria.

The Victorian Health Minister, David Davis has set up a DH working party to develop a systematic approach to ensuring all hospitalised Victorians who smoke are identified and given a brief cessation intervention. Dr Webb has been invited to join the working party (which has met twice so far) due to the success of Stop before the Op.

Alfred Health is currently developing a smoking cessation model based on ‘Stop Before The Op’ and the Western Health Board is also considering the implementation of this model. Dr. Webb is also presenting the data to the Anaesthetic Department at Melbourne Health in August.

The data form the background paper for the new Australian and NZ College of Anaesthetists’ “Guideline on Smoking”. This was passed by ANZCA Council in July this year and the policy has been sent out to stakeholders and the ANZCA regions before final release.

[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]

References

**Aim**
The aim is for patients scheduled first for surgery have reliable start time.

**Abstract**
Peninsula Health theatre start times were increasingly late; data supported the concerns indicating only 25% of first cases started ‘on time’ with procedures starting on average 16 minutes late. The first case-start time project team utilised a LEAN / Six Sigma DMAIC approach to improvement. By seeing things through the eyes of the consumers they found there were multiple problems associated with the delayed start time for the first cases every day. Staff designed and implemented a suite of changes to streamline the processes for patients having surgery:

- improvements to the external environment with better signage and lighting
- consistent and streamlined patient information
- introduction of day prior pre-operative telephone call and a standardised checklist
- consistency with care with the same nurse calling the patient the day prior admitting the patient on day of surgery (where possible)
- visual management whiteboard to reflect patient process steps prior to start of surgery
- staggered admission times
- quarantined medical / nursing time with a ‘Time Out’ Team agreement: including workflow and communications between Surgical Services Suite and Pre-op Hold
- standardised consulting rooms layout with 5S.

This has led to decreased patient waiting time in the admissions area on the day of surgery and an improvement in patients scheduled first starting on time.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**
The consumer experience was evaluated to understand the delays they were experiencing. The consumer expectations on the day of surgery were priority focus areas for improvement.

**EQuIP Principle 2: Effective Leadership**
Operational and clinical leaders engaged front line staff to design and implement innovative change applications to achieve excellence in service.

**EQuIP Principle 3: Continuous Improvement**
Continuous improvement has been demonstrated with changes implemented for all patients scheduled on the morning theatre sessions and the next phase will be addressing the afternoon sessions.
**EQuIP Principle 4: Evidence of Outcomes**
The theatre start times operational data has shown improvement with 17% increase in theatre cases starting earlier in comparison with the year prior and a reduction in day of surgery cancellations.

**Innovation in Practice and Process**
The change to practices and processes has led to patients having reliable surgery start time.

**Applicability to Other Settings**
The methodology is widely transferrable to other healthcare settings providing day services.
Aim
Reducing readmissions due to lactation failure and establishing exclusive breast feeding soon after child birth.

Abstract
Summary of methodology and outcomes:
- Increasing the number of readmissions due to lactation failure was identified by the clinical team and discussed in Adverse Event Reviewing Meeting and Medical Advisory Committee.
- Immediate and long term corrective and preventive actions were decided.
- Midwives were assigned specially to look after post natal mothers and to educate mothers on breast feeding techniques.
- Streamlined the discharge follow-up process:
  - o contact number of the unit in charge nurse included in the discharge summary as the first contact for any clarification
  - o follow-up call by unit In Charge nurse – In Charge nurse calls all discharged mothers within 24-48 hours to check on issues with breast feeding
  - o contact information of the regional Public health midwives is passed on to every mother at the point of discharge for continuity of care
  - o hospital informs the respective public health nurse and midwife of the newborn and the mother to ensure follow up and report
  - o a mobile team to visit mothers and newborns within 5Km radius after discharge if there are issues / mothers with problems
  - o organised a special training program on Breast Feeding for nurses and midwives with the collaboration of Pre Natal Society of Sri Lanka
  - o encouraged prenatal women to attend antenatal classes
  - o continuous professional unit trainings on maternity care for nurses
  - o rate of readmissions due to lactation failure were reduced in 3 months’ time
  - o no readmissions were reported due to lactation failure in the month of June 2013.

Application of EQuIP Principles

EQuIP Principle 1.
A Consumer / Patient Focus
Obstetric unit in Hemas Hospital, Wattala is popular among the community for providing an excellent maternity care. The number of baby deliveries per month has increased from being 70-80 in 2012 to now reaching 90-100 per month within a year. Hospital introduced a value added product named “Maathru” for expectant mothers which includes all perinatal services.

While baby delivery numbers were increasing it was noted that the number of newborns readmitted within the first
Clinical Excellence and Patient Safety

2 weeks was also increasing during the previous 6 months. Both patients (antenatal mothers, post natal mothers) and clinical staff working in the maternity unit were identified as consumers.

The problems identified by the clinical team were:

1. Most of the mothers were primi para not aware about the correct breast feeding techniques
2. Some nurses were not properly trained on correct breast feeding techniques
3. Insufficient discharge education and discharge follow up by unit nurses and midwives in the area
4. Poor attendance in antenatal classes
5. Lack of family and social support.

EQuIP Principle 2: Effective Leadership

The issue was immediately discussed in the Adverse Event Review Committee and in Medical Advisory Committee. Immediate and long term corrective and preventive actions were discussed in order to address the above mentioned issues.

The following were identified as immediate and long-term corrective and preventive actions:

**Immediate Actions:**

1. Assigning midwives specially to look after post natal mothers and to educate mothers on breast feeding techniques, observe mothers for following correct techniques to ensure that the mother is fully aware on all aspects of breast feeding.
2. Discharge follow up:
   - contact number of the unit in charge nurse included in the discharge summary as the first contact for any clarification
   - follow up call by unit In Charge
   - contact information of Public health midwives passed on to every mother at the point of discharge for continuity of care
   - it was decided to have a mobile team to visit mothers and newborns within 5Km radius after discharge if there are issues / mothers with problems.

**Long-Term Actions:**

1. Organised a special training program on Breast Feeding for nurses and midwives with the collaboration of Pre Natal Society of Sri Lanka
2. Encouraged prenatal women to attend antenatal classes and communicating to obstetricians to encourage mothers to attend classes.
3. Continuous professional unit trainings on maternity care for nurses with the collaboration of nurse educator
4. Antenatal class sessions were improved with a detailed session on breast feeding with a demonstration by the midwife on positioning, burping, holding the baby, etc.

EQuIP Principle 3: Continuous Improvement

Nurses were educated to assess individual needs and problems of mothers through continuous educational sessions by Obstetricians, pediatricians.

Hospital initiated and commenced a 6 month program in Midwifery taking a batch of 15 nurses which would supplement this activity as a long term measure.

Clinical audits were started to evaluate on care plan content. Discharge follow up register was updated to document evidence. Home visits by the Public Health Midwives were ensured by informing both mother and the public Health Midwives and sharing contacts details.

Nurses and midwives were sent for a 5 day training conducted with the collaboration of Perinatal Society of Sri Lanka. With the feedback received from both consumers (patients and staff members) it was decided to implement the following in future:

1. Use audio visuals during ward rounds to educate mothers on breast feeding and new born care and to provide leaflets on discharge to educate on both mother’s and baby’s condition.
2. Refurbish the NICU to have separate breast feeding area where nurses / midwives can educate mothers with different needs.

Monthly readmission rate due to lactation failure is being continuously monitored to evaluate the effectiveness of
above initiatives.

**EQuIP Principle 4: Evidence of Outcomes**
We managed to resolve the situation leading to satisfactory outcomes by reducing readmissions due to lactation failure within 3 months.

The highest readmission rate due to lactation failure was reported in April 2013 (7.4%) and with all these initiatives it was reduced to 4% within one month’s time. No readmissions were reported due to lactation failure in the month of June.

**EQuIP Principle 5: Striving for Best Practice**
- Adopting WHO guidelines on breastfeeding and early childhood care.
- National guidelines on breast feeding.
- Involving multi-disciplinary team in care ensures the best care is given.

**Innovation in Practice and Process**
Our innovative holistic approach in resolving a problem helped us to build team work, develop competency of staff, and extend links with public health services for better patient outcomes.

Follow up call: The team came up with the idea of becoming proactive and to initiate a call to check on the well-being of the mother and the new born.

Mobile team to attend to problems at home rather than bringing into the hospital: The need to dispatch a mobile team can be gradually eliminated through partnership established with the public health midwives.

Novel approach in antenatal classes with practical’s and demonstrations: This was re-launched with more hands-on experience added to it with demonstrations by the midwife and nurses.

**Applicability to Other Settings**
The project could be commenced and rolled out with ease in any private / public hospital settings due to following reasons:
- cost effectiveness
- consumer participation
- community participation (public health midwives).
Aim
To ensure the care is planned and delivered responsive to patients needs and the necessary care is provided without a delay involving consultative and collaborative approach of the consumer and the carer.

Abstract
Hemas Hospital Wattala is 100 bed multi-specialty general hospital, built to international standards offering the highest level of medical care to its patients. Due to the unavailability of proper participation of consumers in the care delivery process, proper care is not been delivered to achieve the best possible clinical outcomes.

To overcome issues faced with previous system, the proper care planning process was introduced with the participation of cross functional team members of the hospital.

A care plan committee was established and headed by Director Medical Services. Care plan was introduced hospital wide after a conducting a pilot project. With the feedback received at the pilot project, the format was further improved.

Compliance with the care plan is continuously evaluated with clinical audit results, clinical quality indicators, patient and consultants’ feedback on nursing care. The results of the performance of the clinical indicators indicates the improvement of the care delivery process of the hospital.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Due to the poor participation of consumer in the care delivery process, proper care is not been delivered to achieve the best possible clinical outcomes. Therefore, it was identified that a requirement of a appropriate care planning process is vital to reduce clinical risks and adverse events. The followings were identified as a result of an unavailability of proper care planning:

1. Comprehensive and individualised Nursing assessment was not carried
2. Poor communication with patients and their families
3. Continuation of care was compromised.

To overcome these issues, the proper care planning process was introduced with the participation of cross-functional team members of the hospital.

EQuIP Principle 2: Effective Leadership
A care plan committee was established and headed by the Director, Medical Services. As the first step, the care plan format was designed by the committee and implemented in Medical Surgical ward as a pilot project. After analysis in the outcomes, the format was further modified which suits the requirement of the consumer and the carer. The format is designed in three commonly used languages.
Several brainstorming sessions were conducted for all nursing staff before implementing the care plan. Care Plan champions were identified from each unit and they were trained specially to drive the compliance of the care plan. Audits were conducted to evaluate the effectiveness of the care plan.

**EQuIP Principle 3: Continuous Improvement**

Care Plan-Audit process was streamlined and ongoing trainings were conducted with the help of Care Plan Champions. Audit results were analysed monthly to evaluate the effectiveness of implementation. Patient and staff feedback was taken on nursing care and evaluated monthly. This helped to improve the customer satisfaction on nursing care of the hospital. Patients’ feedback is linked to the “i CARE Award” (employee rewarding system).

The care plan was further improved after one year of implementation of the initial care plan. The new format eliminated the issues identified in the previous care plan format.

Regular detailed audits are continuously conducted to enhance the patient care delivery process and improve staff compliance of the care plan.

**EQuIP Principle 4: Evidence of Outcomes**

Compliance of the care plan is continuously evaluated with clinical audit results, Clinical quality indicators, patient and consultants’ feedback on nursing care.

The results of the performance of the clinical indicators indicates the improvement of the care delivery process of the hospital after implementing the new care plan. Overall Consultant feedback on nursing care has gone up from 25% by the end of 2012.

**EQuIP Principle 5: Striving for Best Practice**

North American Nursing Diagnosis Association (NANDA) guidelines for care planning were referred in order to improving the care plan continuously. Processes and protocols are developed to ensure that ACHSI clinical standards are fulfilled.

We were recognised by the ACHSI for implementation of international best practices through the patient assessment and care planning process.

**Innovation in Practice and Process**

Hemas Hospital, Wattala, is the first healthcare provider in Sri Lanka to implement the patient care plan in an innovative way with the collocation of a multi-disciplinary team.

It is a dynamic tool which allows changes according to varied patient’s needs. Periodic improvement is made in line with the feedbacks, audit results and international best practices.

**Applicability to Other Settings**

This set an example to many of the Sri Lankan healthcare providers as this can be customised to any healthcare setting.

Care planning processes have multiple advantages that can make it useful to other health care settings.
Aim
To determine if a digital imaging service that makes use of specially trained nursing staff to obtain retinal images could be employed to quickly and effectively diagnose at-risk babies at the Women’s and, potentially, via outreach at other health services.

Abstract
Retinopathy of prematurity (ROP) is an eye disease that affects babies born prematurely. In most cases it is mild and resolves spontaneously, but ROP can lead to blindness if not appropriately detected and managed.

The nurse-led Newborn Retinopathy Screening Service (NRSS) at the Royal Women's Hospital (the Women's) has increased the availability and sustainability of retinal screening for premature babies via tele-ophthalmology. This model could be extended as an outreach service to enable babies to be moved from tertiary hospitals to facilities closer to home.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The NRSS can provide more flexibility and comfort for the patients as the screening is able to fit into the baby’s schedule around feeding or handling times. It is also more able to fit into parent visiting times.

The Neonatal Intensive and Special Care (NISC) team has consulted with families about the introduction of the service and is currently working with families to develop consumer health information to explain ROP and the NRSS, why it is necessary and how it works.

The development of an outreach service would assist with earlier transfer of babies to their local communities to facilitate the transition to home and access to services provided by local health services.

EQuIP Principle 2: Effective Leadership
Traditionally, eye examinations have been performed by ophthalmology specialists. Previously, a single ophthalmologist was employed by the Women’s to examine approximately 20 babies each week. A diminishing pool of ophthalmologists is prepared to undertake ROP screening as it is laborious, relatively monotonous, and time-consuming. The Women's NRSS means an on-call ophthalmologist is not required, which alleviates some of the burden on the ophthalmologists. A medical imaging management system has been implemented to allow for off-site (remote) viewing of images, so that in the future the physical presence of a specialist ophthalmologist will not be required.
**Clinical Excellence and Patient Safety**

**EQuIP Principle 3: Continuous Improvement**
Many hospitals in Victoria are not able to provide an onsite NRSS, due to the lack of available suitably-trained ophthalmologists prepared to undertake retinal screening.

This results in babies either remaining in specialised tertiary institutions away from their local community, or needing to intermittently return to a centre that can provide ROP screening. The transport to move the baby from their local service to a tertiary service is expensive, and places the infant at risks associated with infant transport. This can make the local service reluctant to arrange for eye review. One of the Women’s organisational priorities is to ensure that patients are seen by the right practitioner at the right time. Ensuring that ROP screening is timely and provided in an appropriate setting is aligned perfectly with this priority.

**EQuIP Principle 4: Evidence of Outcomes**
Since it was introduced in May 2012, 1380 eye examinations (690 babies) have been performed by the Women’s NRSS.

Data have been entered into a purpose-built database to monitor the presence, severity and outcomes of ROP. The database schedules follow-up examinations so that eligible babies are logged within the system and examined at the appropriate age.

The database also enables the quality of the images acquired to be monitored. Since the initial three-month training period, the NRSS nurses have been able to acquire images of appropriate quality for ROP screening in more than 99% of examinations.

**EQuIP Principle 5: Striving for Best Practice**
Whilst direct visualisation of the retina by ophthalmology specialists is regarded as the “gold standard” in the detection of ROP, the use of digital imaging has become increasingly common and is now accepted as a viable option for screening. Smarter use of improved imaging technology through the NRSS has resulted in high quality images sufficient for diagnosis of ROP.

Through the development and evaluation of this model, we intend to generate additional evidence of best practice and set a new standard for ROP screening. External replication of the model will ensure that the project will have an ongoing impact outside the organisational boundaries of the Women’s.

**Innovation in Practice and Process**
Innovative service delivery, especially for our most vulnerable small, often very sick babies, is a hallmark of the Women’s. One of our stated objectives (The Women’s Strategic Plan 2011-2015) is to ‘invest in new clinical technology that improves women’s and newborn’s health care.’ The NRSS clearly fulfills that objective.

The storage of digital retinal images also facilitates review of ROP and can be used for educational purposes. The images can be used to explain the ROP disease to parents and staff.

Use of standardised retinal imaging and scoring/grading will assist in determining the differences in ROP rates related to care practices within or across populations.

**Applicability to Other Settings**
The NRSS has enormous potential to develop an outreach service in Metropolitan Melbourne to service Level 2 Special Care Nurseries (SCNs) that have limited access to ophthalmology support. The RetCam has a significant capital cost and the initial training requirement make it unlikely that SCNs would be able to establish an independent retinal screening program. Developing an outreach service would assist with earlier transfer of babies to their local communities to facilitate the transition to home and access to services provided by local health services.

Currently, the Women’s is working on a Memorandum of Understanding (MOU) with a secondary hospital to conduct a pilot and test the outreach capabilities of the NRSS. The MOU includes a determination of how current government funding will be apportioned appropriately to the secondary hospital and to the Women’s.
Aim
To reduce hospital-acquired infection rates, reduce morbidity and mortality associated with such adverse events, to shorten hospital admissions and to improve the patients’ and families experience at the RCH by providing an environment which facilitates the application of ‘patient-centred transmission-based precautions’.

Abstract
The planning for the new Royal Children’s Hospital (RCH), which commenced in 2006, was an opportunity to evaluate every aspect of infection prevention for the new facility. It was recognised that the new hospital provided a once-in-a-lifetime opportunity to enhance our ability to manage patients with communicable diseases. This aligned with the organisations’ priorities to reduce infection rates in our vulnerable patient population. We also adopted the hospitals’ family centered approach to patient care in the design of an individualised infection prevention program. This extended to infection prevention strategies for outpatients and visitors, Hospital-in-the-Home and for patients once they returned to the community.

Passive patient safety measures to reduce hospital acquired infections, including single patient rooms, were widely examined. Little data on the benefits of single rooms was available in the paediatric setting but evidence on viral and other hospital acquired infections and the mechanisms of transmission supported the single room model.

A collaborative approach is used for all aspects of planning and care at the RCH. Working Groups developing models of care for the new RCH had infection prevention as part of their portfolio and this has led to good practices being embedded in everyday activity in the new RCH. The multi-disciplinary Central Venous Access Device Committee and the hospital-wide Hand Hygiene program, involving families as well as staff, are examples of the successful integration of these programs.

In the thirteen month period following the move to the new RCH in November 2011 there has been a 40% reduction in hospital-acquired gastroenteritis, a 10% reduction in respiratory viral infections and 33% reduction in central line-associated infections. There has been a reduction in invasive infections caused by multi-resistant organisms, with no confirmed methicillin resistant Staphylococcus aureus (MRSA), or vancomycin resistant enterococcal (VRE) septicaemia since the move. Gentamicin resistance has fallen from 29% of invasive infections to 10%. Hand hygiene compliance has increased to the highest levels the hospital has achieved in the 10 years of formal compliance auditing. Unanticipated benefits have been the involvement of families and heightened awareness of staff in improving practices. Single rooms have negated the need for post exposure follow up, screening and reallocation of patients. These collective measures are continuing to reduce hospital acquired infection at the RCH.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus

An important driver in the planning and design of the new RCH was the needs of the children and families we care for. This family-centered approach extended to infection prevention in the new hospital. The design and allocation of single patient rooms was developed in response to parent focus group requests as well as the expectation that such physical separation would enhance infection prevention and reduce hospital acquired infections.

A patient-centred approach to the application of “transmission-based precautions” is under taken by applying the principles of risk management to each identified infection. Each risk assessment defines not only the precautions required, but considers the child’s age, developmental stage and social needs.

To facilitate the parents’ / carers’ understanding, information sheets have been developed in conjunction with the Family Advisory Council (FAC) and subsequently translated into multiple languages.

Patients with a transmissible infection can be isolated on the most appropriate ward for their underlying condition. For example, cardiology and oncology patients do not have to move to an ‘isolation’ ward, reducing parent anxiety about their care. Each ward has two negative pressure rooms to isolate patients with airborne transmitted infections, allowing this to approach to occur in a safe and manageable fashion.

Parents can remain with their children during their admission. An ensuite on each single room means that there is less opportunity for organisms to transmit to other patients from the contaminated environment. Parents can eat meals safely with their children in their own ‘family zone’, away from the ‘clinical zone’ where staff are able to practice safely.

The FAC review information for parents around multi-resistant organisms which extends to management by hospital-in-the-home (HITH) and the general community following their discharge.

The hydrotherapy pool is an enjoyable way of providing important therapeutic care. The Infection Prevention team has developed a tailored risk assessment process with the Allied Health staff to safely manage children using the pool.

Animals are an important tool for distraction therapy. The hospital’s meerkat and aquarium have been designed in such a way as to eliminate the risk of infection transmission. Animal visiting is also provided but with strict control over type of animal, the animal’s health and with consideration to the patient’s underlying medical condition.

EQuIP Principle 2: Effective Leadership

The focus of the new Children’s Hospital is that ‘infection prevention is everyone’s responsibility’. This extends from the hospital Board and Executive through to the clinical and support staff. Infection prevention strategies are discussed at all levels and outcomes reported to the Board Quality Committee, Clinical Quality and Safety Committee and divisional Innovation and Improvement Committees.

The Central Venous Access Device (CVAD) Committee has developed line insertion and maintenance packages, which include education and credentialing, and have supported CVAD-associated blood stream infection surveillance across the hospital. This provides important measures to demonstrate compliance and efficacy of our improvement strategies. The RCH is the first hospital in Australia to collect data on every line inserted in the hospital.

Ongoing collaboration with Support Services has identified opportunities to standardize practices which provide a safe physical environment for patients and staff. Documented cleaning practices have also included extensive detail on the management of the environment for patients with multi-resistant organisms.

Presentations of the effectiveness of the new hospital and treatment strategies have made to the hospital community (Clinical Practice Review; Central Venous Access Device Committee; Board Quality Committee; Short Cut Intranet video) the ACHS Hospital Accreditation Surveyors and more broadly to the international infection control community at the 2013 meeting of the Asia Pacific Society of Infection Control. The annual hospital Quality of Care Report highlights the achievements to the general community who utilise and support the hospital.

EQuIP Principle 3: Continuous Improvement

The culture of improving patient care is strong at the Children’s. This is supported with auditing, compliance and surveillance data that is used to develop and evaluate all our interventions.
Clinical Excellence and Patient Safety

The move to the new Children’s Hospital provided the opportunity to review all infection prevention and management practices. Individual departmental operational briefs were prepared before the move to ensure that staff were familiar with the new design features and work flow. The revision of the transmission based precautions for managing known or suspected infections included the design of new door alert signs and disease-specific patient placements with cleaning instructions by ward, including use of negative and positive pressure rooms.

An information sheet developed for parents / carers: “If your child has an infection” is available to download from the Infection Prevention and Control intranet site and has been translated into Chinese, Turkish, Somali, Arabic and Vietnamese. Information sheets are also available for parents / carers and staff on multi-resistant organisms.

The extensive surveillance program (which includes bacterial, viral and fungal infections as well as appropriate antimicrobial use) is used to monitor outcomes and identify opportunities for further improvement.

Hand hygiene compliance auditing is a further example of the continuous improvement approach at the Royal Children’s Hospital. Compliance data is collected in all clinical areas including Perioperative and Outpatients. The FAC was an important driver to include outpatients in hand hygiene auditing and actually involves parents in the auditing process, thus increasing consumer participation and awareness of the issue. This data is used to motivate staff to further improve practices and inform managers about the success of various interventions.

EQuIP Principle 4: Evidence of Outcomes

Improvement in outcomes has been observed in multiple areas, some predicted and others unexpected. Systematic surveillance systems, including hospital wide collection of device associated infection rates on all central lines used in the hospital and hospital acquired viral infections (principally rotavirus and the common respiratory viruses) have shown reductions in these infections.

Hospital acquired gastroenteritis (principally rotavirus) reduced 0.93/10,000 OBD in 2011 before the hospital move to 0.54/10,000 OBD in 2012 after the move; a 40% reduction. Hospital acquired respiratory viral infections reduced from 3.0/10,000 OBD in 2011 before the hospital move to 2.7/10,000 OBD in 2012 after the move; a 10% reduction.

Central venous access device (‘central line’) associated infections are a significant cause of morbidity and mortality as well as increasing length of stay and adding to the cost of healthcare. The Children’s has been focused on improving infection rates for several years, however the annual hospital-wide infection rate remained unchanged at 2.7/1000 line days for the three years prior to the move. In 2012, the first full year of surveillance after the move, the rate dropped to 1.8/1000, a 33% reduction.

Because the majority of patients are already in a single room, if they are unexpectedly diagnosed with a transmissible infection (for example whooping cough or meningococcal disease) there is no requirement to investigate room contacts or to prescribe antibiotic prophylaxis. Patient and family anxiety is also reduced. In addition, paediatric patients may be asymptptomatically shedding transmissible organisms both before their symptoms become clinically significant and after their symptoms have resolved. Appropriate placement in single rooms decreases the risks of transmission during these periods.

The proportion of multi-resistant organisms causing invasive infections has reduced following the move. Laboratory surveillance data shows that in 2011, before the move, 9% of invasive Staphylococcus aureus bloodstream infections were methicillin resistant S. aureus (MRSA), but after the move there has been no MRSA. Similarly, 50% of Enterococcal septicaemia cases in the old hospital were vancomycin resistant (VRE), but this figure fell to 8% after the move. Gentamicin resistance was seen in 29% of invasive infections in the old hospital, but only 10% in the new hospital.

Some common childhood viral infections can cause significant disease or even be fatal in compromised patients. This includes RSV in cyanotic congenital heart disease, varicella in immunocompromised patients and respiratory infections, such as influenza, in Oncology patients. Patients with these infections could not be managed on the Oncology or Cardiac wards in the old hospital, but in the new RCH there are negative pressure rooms available on every ward. Patients can therefore be cared for on the ward that can best manage their underlying medical problem, regardless of any concomitant infection.

When patients are diagnosed with a multi-resistant bacterium they are already in single rooms and there is less room screening required. In the 20 months since moving to the new hospital there has been no follow up of room contacts required when an MRO is identified.
Clinical Excellence and Patient Safety

Two negative pressure isolations rooms compliant to the Department of Health guidelines for isolation rooms in health care facilities were included in the ward and Emergency Department design. The ability to create a negative pressure environment in the Emergency Department allows for segregation of suspected epidemic/pandemic respiratory illness. A negative pressure air flow can be created in the adjacent short stay unit for use during the ‘sustain phase’ of a pandemic.

Management of patients with aerosol transmitted infections has been significantly improved in the new facility. As an example, in 2008 a child presented to the Emergency Department with a suspected viral illness that was subsequently diagnosed as measles. He had been admitted to a single room in a general medical ward with droplet precautions, however staff and patients were still at risk of acquiring measles. Follow-up by the Infection Prevention and Control Department was required for 91 patients and their families, as well as 30 nursing staff, 13 medical staff and 7 support staff. In contrast, a suspected measles presentation in March 2013 to the new Emergency Department was able to be more appropriately managed: the child was immediately placed into a negative pressure isolation room and air borne precautions were implemented. No staff or patient follow up was required.

Some specific risks have been eliminated in the new facility such as Legionella in the warm water system. Satellite reprocessing of equipment has ceased and is completely centralised to the CSSD. Air handling, including HEPA filtration and positive pressure rooms in Oncology and ICU, have reduced the risk of aspergillosis and other opportunistic infections in our immunocompromised patients.

**EQuIP Principle 5: Striving for Best Practice**

The new hospital enabled us to design and ‘engineer in’ additional layers of safety. Staff are innately supported in their practices by the physical environment and structure and have the tools to manage patients and families in a safer way.

Both before and after the move all practices were reviewed and standardised where possible and staff were re-educated, leading to sustained improvements in safe practice. Infection Prevention practices became ‘core competencies’ and part of the overall assessment and training framework for junior nursing and medical staff.

An additional benefit off the prolonged review and planning process for the new hospital has been that staff are more aware of infection prevention responsibilities in their work environment. While direct patient care remains their primary focus, staff take more responsibility in indirect aspects of infection prevention such as waste disposal, equipment management, specimen collection and food and infant feeding, thus minimising risk to themselves and the hospital community. This extends to the relationship with Spotless, the retail outlets and other providers in the Public-Private Partnership model that the new Children’s functions under.

**Innovation in Practice and Process**

Infection Prevention and Control involvement in the new hospital design ensured that risks present in the old hospital were mitigated or eliminated in the new hospital design. In addition, staff from diverse areas of the hospital were involved in planning and infection prevention was a component of all focus group discussions. An overarching Safe Design Committee coordinated the diverse aspects of infection prevention in the new tertiary hospital. Individual departmental operational briefs were prepared before the move to ensure that staff were familiar with new design features, processes and work flow.

The management of pandemics places additional strain on limited resources. We are now able to create a negative pressure area in the Short Stay Medical ward collocated with the Emergency Department. Patients requiring respiratory isolation can be safely managed in this area.

Patient rooms have defined “clinical”, “patient” and “family zones”. All single and two-bed rooms have an ensuite. Each ward and the Emergency Department have two negative pressure rooms for isolation of patients with airborne infections.

The selection criteria of furnishing and fixtures ensured all items are able to be decontaminated or are re-processable according to Australian Standards. All standard operating procedures for environmental cleaning were revised to reflect the new environment and documentation on cleaning products and their uses made available on the intranet.

**Applicability to Other Settings**

Information sheets can be downloaded for parents and carers from the intranet. These are shared, when requested,
Clinical Excellence and Patient Safety

with other paediatric units.

Numerous tours of the new hospital have been provided to other Infection Control practitioners from Victorian, interstate and international adult and paediatric hospitals.

Presentations of the effectiveness of the new hospital and treatment strategies have made the ACQSHC Hospital Accreditation Surveyors and more broadly to the international Infection Control community at the 2013 meeting of the Asia Pacific Society of Infection Control. The annual hospital Quality of Care Report 2012/13 will highlight the achievements to the general community that utilise and support the hospital. Surveillance findings and the benefits of single patient rooms will be published in a peer-reviewed journal. Data has already been shared with the teams planning the new Monash Children’s Hospital.
**Aim**
Improving communication in bedside nursing handovers through collaboration between linguists, health professionals and policy makers and managers.

**Abstract**
Data were collected via video and audio recordings of bedside handovers within MAPU. Contrasting inconsistent communication styles were identified, it was also identified that due to these differing techniques 75% of the patients were not given the opportunity to contribute to the handover. The recommendation from the research was that some communication training be implemented.

Training for staff was based using DVD re-enactments of actual handovers and involved discussion, communication strategies and role-play. Impetuous was on what you say and how you talk. A pneumonic was used to encourage consistency in communication during handover.

**CARE:** Connect, Ask, Respond, Empathise.

Evaluation occurred four months later and demonstrated positive results: patients were included in the handover, much more interaction occurring, questions being asked, information clarified and body language more open.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**
The patient and/or carer / family member are the focus of the handover. They are encouraged to contribute, ask questions and it is an opportunity for education.

**EQuIP Principle 2: Effective Leadership**
Senior clinical nursing staff on MAPU and safety quality staff put a high level of importance on this training and consistency on effective bedside handovers – opportunities were given for staff to access training and contribute to discussions and regular feedback was provided.

**EQuIP Principle 3: Continuous Improvement**
Researchers on the project have identified issues with bedside handover that they believed could be resolved through tailored communication training with staff. As incorporating consumers in clinical handover is a key component of the National Safety and Quality Health Service Standard for Clinical Handover, MAPU have found this training invaluable. As a result of the success of the training it is planned to roll out the training to other areas in the hospital. The training was supported by ongoing reflection in team meetings and following handovers about the quality of handovers and how they could be continually improved.
EQuIP Principle 4: Evidence of Outcomes
Pre- and post-training videos of MAPU staff engaging in handover showed substantial improvements including:

- nurses were giving handovers at the patients’ bedside, not in the corridor
- nurses no longer stood with their backs to patients
- outgoing nurses explicitly introduced the patient to the team and to the incoming nurse who would be responsible for their care
- the incoming nurse greeted the patient
- outgoing nurses asked the patient at the end if s/he wanted to add anything to the handover (and most patients did).

EQuIP Principle 5: Striving for Best Practice
National and international evidence of handover being a critical point in patient care when incidents can occur. Nursing and research staff identified strategies to apply best practice and this was achieved in collaboration with clinical staff, safety quality staff and UTS researchers.

Innovation in Practice and Process
There is nowhere in Australia that has documented a communication training process for clinical handover using video simulations and developed in conjunction with linguistic experts. The training has been endorsed by hospital executive and will commence in a new unit shortly with a view to the rest of the organisation.

Insights from linguistic and communication experts combined with the knowledge and experience of health professionals and policy managers has led to a unique product that meets the needs of staff at the coalface and improves patient-centred care.

Applicability to Other Settings
Clinical handover training can be easily replicated in any healthcare setting.
RESPECTING PATIENT CHOICES

Executive Team
West Moreton Health Service
Ipswich QLD

Linda Hardy

Aim
The Respecting Patient Choices program promotes residents’ rights in choosing and communicating their wishes regarding their current and future health care.

Abstract
The Respecting Patient Choices Program was introduced, implemented and delivered by Ms Rosie Laidlaw in the West Moreton Hospital and Health Service as a form of Advanced Care Planning focusing on the rights of patients in choosing and communicating their current and future health care. The program provides education and training to multidisciplinary teams in Residential Aged Care Facilities, Palliative Outreach Services, local GP practices, Chronic Diseases and Gerontology Services. Outcomes included Advanced Care Plan documentation in 14 Residential Aged Care Facilities at a sustained average of 75-80%; 80-85% ‘near to death’ residents are remaining in their place of residency; 560 facilitators have completed the E-learning module for Advanced Care Planning; 28 workshops have been conducted and 100% of facilitators agree Advanced Care Planning is an important process for residents and families.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Ipswich Hospital was experiencing significant numbers of admissions from residential aged care facilities. Residents in acute care were at risk of iatrogenic complications and in some cases residents returned to residential care in a worsened state. Treating residents in their residential aged care environment improves outcomes and residents experience less geriatric complications and a higher level of resident satisfaction.

The Respecting Patient Choices program was identified as an opportunity to collaborate with residential aged care facilities as a directed approach to improving the quality of resident care, through respecting residents choices in all matters therefore facilitating resident self-determination and reducing unwanted and unwarranted medical treatments and hospitalisations.

The Respecting Patient Choices program is a form of Advanced Care Planning that:

- trains healthcare providers to facilitate discussions and conversation about advanced care planning
- ensures plans are clear, includes the residents medical history and that decisions are based on increased knowledge and residents choices
- allows residents to discuss their values and beliefs and have documented their near death wishes
- assists healthcare providers with decision making when documentation of advanced care plans have been completed
- provides an opportunity to collaborate and partner with major health stakeholders in RACF regarding advanced care planning
- reduces unwanted and unwarranted medical treatments and hospitalisations.
The program focuses on the rights of patients in choosing and communicating their current and future health care.

**EQuIP Principle 2: Effective Leadership**

Ms Rosie Laidlaw, Clinical Nurse Consultant, introduced, implemented and delivered the Respecting Patient Choices (RPC) Program into the West Moreton Hospital and Health Service. She demonstrated effective leadership by through the training program she delivered to multidisciplinary staff, the ‘privileged’ conversations she had with patients and families during and outside office hours at their convenience and through her passion for helping patients and their families make the right choice for their current and future health needs. She engaged and developed external partnerships with residential aged care facilities, local indigenous services, and GP Practice Nurses as well as staff from all Divisions within West Moreton Hospital and Health Service.

Ms Laidlaw is a local champion and has presented the Respecting Patient Choices program to the Queensland Clinical Senate and is contributing to the Queensland Input to the national agenda. She has influenced other health services and Medicare Locals to adopt the program and has presented the West Moreton program at International conferences.

**EQuIP Principle 3: Continuous Improvement**

When the program commenced in 2009, the focus was on assisting patients in residential aged care facilities to make end of life decisions. In 2011 the focus changed and expanded to incorporate Palliative Care outreach, local GP practices, identification of early stage chronic disease patients and working with the Gerontology team. Identification of patients in the community prior to transfer to a residential aged care facility allows patients and families to make decisions earlier along their treatment journey and avoid unnecessary or unwanted treatments.

In March 2012, an additional 0.5 FTE Clinical Nurse (CN) was appointed primarily to address community clients with advanced Chronic Obstructive Pulmonary Disease (COPD) and Advanced Cardiac Disease (ACD) who meet the Gold Standards Prognostic Indicators and are defined as being in their last months / year of life, and who are in need of support and palliative care. The Clinical Nurse is responsible for working with patients to complete an Advanced Health Directive and Enduring Power of Attorney ensuring end of life decision making was in place. The Clinical Nurse has completed 276 advanced care planning documents (190 in 2012 and 86 in to date in 2013) with the information filed in community and hospital medical records.

Another initiative with external partners is the inclusion of Practice nurses working within 9 GP Clinics in Ipswich in Advanced Care Planning training. These nurses and the practices now encourage Advanced Care Planning in health assessments at 45 years and 75 years or a patient health declines.

A total of 50 family members in Residential Aged Care Facilities have participated in the Deceased Questionnaire (Austin Hospital tool) with results consistent with the Austin research completed in 2009 – families have a high level of satisfaction where their family member was part of advance care planning and this process significantly reduced anxiety levels at end of like knowing those choices were being respected.

**EQuIP Principle 4: Evidence of Outcomes**

The expected outcomes of this program were to:

- increase the number of Residential Aged Care Facilities residents with advanced care planning
- train healthcare providers to facilitate discussion in advance health care planning
- reduce ‘crisis admissions’ through the emergency department and/or ensure an increased percentage of residents from Residential Aged Care Facilities presenting to the emergency department and an advanced care plan
- promote options for residents with an advanced care plan to have end of life palliation in the residential facility.

Additional benefits from a hospital perspective are:

- to promote the Enduring Power of Attorney (EPOA) document for inpatients as stage 1 of the Advanced Care Planning process and introduce discussion with patients on the importance of completing an Advanced Health Directive whilst they retained capacity
- to influence our ‘patient-centered culture’ and open a pathway of communication on the clinical benefits and burdens of health care.

Targeted areas within the hospital – Rehabilitation, Oncology / Palliative Care, Older Persons Evaluation and
Assessment (OPERA) Unit and the satellite Renal Dialysis Unit knowing in the future, a percentage of these patients will enter into residential care at some point in their life.

Benefits from a community perspective:

- to assist community clients with advanced Chronic Obstructive Pulmonary Disease (COPD) and Advanced Cardiac Disease (ACD) and who meet the Gold Standards Prognostic Indicators.

As a chronic disease client’s age, and their disease, progresses, they will experience increasing frequency of relapse, and therefore potentially an increased number of admissions to acute care where ultimately they may die or be classified as waiting placement to a residential aged care facility.

Outcomes achieved:

- Advanced Care Plan documentation in the 14 Residential Aged Care Facilities is sustained at an average of 75% to 80%; the process information commences on entry to Residential Aged Care Facilities; interviews are scheduled 6/8 weeks post admission and Advanced Care Planning reviewed as part of the yearly Aged Care Funding Instrument process.
- Mortality data from 14 Residential Aged Care Facilities indicated that 80-85% ‘near to death’ residents are remaining in their place of residency and their wishes and choices are being respected.
- Clinical costing systems indicate a potential saving to the acute health service areas of between $60,000 to $100,000 pa, per facility due to the resident remaining in Residential Aged Care Facilities for end-of-life care.
- 60% of classified ‘interim care’ patients are having their ACP documents completed prior to discharging from acute care into Residential Aged Care Facilities.
- As of March 2013 – 560 Respecting Care Planning Facilitators have completed the E-learning modules and 60% have attended the second phase of Advanced Care Planning learning.
- The “Train the Trainer” program has extended to 98 trainers which includes Anglicare, Southern Cross Care and a further 38 Residential Aged Care Facilities on the north side of Brisbane through an initiative by Medicare Local Metro North in 2012 and an extending program into 2013.
- 28 workshops have been conducted.
- 100% of facilitators agree Advanced Care Planning is an important process for residents and families.

Modification of patient and client alert systems has established a mechanism to ensure all completed documents associated with advanced care planning are available.

**EQuIP Principle 5: Striving for Best Practice**

The Respecting Patient Choices program has been well validated (in the United States of America) and has had successful outcomes across Victoria since 2004. The program takes a systematic approach to training health care professionals to initiate conversations and facilitate discussions about advanced care planning. It ensures plans are clear and include residents’ medical history with decisions based on increased knowledge and choice, and the values and beliefs of the client. The program assists healthcare providers with decision making when documentation of advanced care plans are completed.

Results and outcomes from the Respecting Patient Choices program have been presented at state and international conferences.

**Innovation in Practice and Process**

Ongoing plans for further rollout and expansion of the Respecting Patient Choices program include to:

- advocate and strengthen the opportunity and culture to conduct these privileged “conversations” to drive patient centered care
- sustain what has been achieved in Residential Aged Care Facilities
- utilise all data sources and relevant health professionals to capture the targeted groups for future Advanced Care Planning participation
- promote a dedicated day within the Health Calendar each year for Advanced Care Planning.

Continue to promote Advanced Care Planning through the Respecting Patient Choices program in Residential Aged Care Facilities, and Enduring Powers of Attorney and Advanced Health Directives for our community.

Advanced Care Planning at Ipswich Hospital and across the West Moreton Hospital and Health Service is an ongoing process, not just an event attached to a product.
Clinical Excellence and Patient Safety

The collaborative effort ensures multiple health professionals have participative opportunities to effectively communicate and work together for the betterment of patients, residents and clients in regard to ‘end of life’ planning.

Inclusion of patients and residents who ‘do not have capacity’ through working with their Enduring Powers of Attorney or trusted representatives(s) has meant one of the growing population groups – dementia patients and/or residents – have not been excluded.

**Applicability to Other Settings**

The Respecting Patients Choices program is applicable to health facilities and practices that assist patients and families through end-of-life decisions. It has been shared with other Queensland Hospital and Health Services, Medicare Locals, non-government organisations and private GP practices through meetings, presentations and training programs.
Aim
The aim of this initiative was to develop a health care clinic that can address issues of access and equity amongst the Asylum Seeker and Refugee community and provide outstanding responsive person-centred care.

Abstract
Melbourne's south eastern suburbs are recognised for their cultural diversity and this has been boosted in recent years by increasing asylum seeker arrivals to the region. These arrivals have also placed unprecedented demand on healthcare services in both the public and private sectors.

It is widely acknowledged that refugees and asylum seekers are of the most vulnerable and marginalised in our community, with significant and complex health needs. However, refugees frequently experience difficulty in navigating a complex, unfamiliar and, often culturally challenging, health system.

The Asylum Seeker and Refugee Health Clinic (ASandRHC) was developed to address issues of access and equity through responsive person-centred care. The ASandRHC evolved in the context of a comprehensive Monash Health Refugee Health plan and clear governance model which encompasses services from across the sector.

The clinic responds to approximately 50 referrals monthly and consistently high attendance rates of around 97% indicate that clients are engaged with the service. In addition, participants stated when interviewed that they would definitely recommend this service to other members of their community and gave the service an averaged rating of nine out of ten.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The ASandRHC is committed to providing high-quality, accessible, culturally sensitive, person-centred care to asylum seekers and refugees, with a focus on the provision of comprehensive health assessments, non-urgent primary care and, most importantly, integrated care.

In consideration of the target population, the model of care has been designed to reduce barriers of access and equity by embedding a consistent approach to service provision and prioritizing care coordination and service integration.

Further, client engagement is nurtured through appointment confirmation calls, clients being welcomed to the service by bicultural workers, the use of onsite interpreters, extended appointment times, and a culturally competent workforce.

Consumer feedback at the time of discharge and at three and six month intervals post-discharge is considered integral to ensuring that clients’ experiences align with the clinic’s objectives. In 2013, an extensive qualitative
evaluation of the clinic’s efficacy from the clients’ perspective was conducted to ensure responsiveness and inform the future direction of the service.

**EQuIP Principle 2: Effective Leadership**

The ASandRHC evolved in the context of a comprehensive Monash Health Refugee Health plan and clear governance model which encompasses services from across the sector.

The ASandRHC operates on the basis of an annual plan with key deliverables, targets and timelines. However, management and staff are cognisant that refugee health is a rapidly changing landscape which demands flexibility and responsiveness. Performance is reviewed in the context of regular leadership meetings and broader team meetings, with an understanding that targeted meetings may evolve to address emerging issues. The Monash Health executive is informed of refugee health planning and performance through a designated asylum seeker group.

**EQuIP Principle 3: Continuous Improvement**

Refugee Health at Monash Health is progressive and constantly evolving. The program has organisational commitment, strong governance, a dedicated budget and committed staff, all of which contribute to sustainability. This initiative has embedded consumer participation and research within practice to ensure well informed planning, while contributing towards the broader evidence base. As well, management and staff are cognizant of the fact that refugee health is an evolving and rapidly changing area of health provision, and the ASandRHC has set up systems to respond to emerging issues in a flexible and timely manner. In addition, a comprehensive client database provides valuable information on refugee health trends, and has led to further services being incorporated into the ASandRHC.

**EQuIP Principle 4: Evidence of Outcomes**

The ASandRHC has achieved a model of care which is successful in addressing issues of access, equity, excellence and integration. This model is founded on client-centred practice and consumer participation and leads to engagement and improved health and wellbeing outcomes.

The clinic responds to approximately 50 referrals monthly and consistently high attendance rates of around 97% indicate that clients are engaged with the service.

Eighteen clients recently participated in in-depth interviews as part of a qualitative evaluation. The findings reiterated that the clinic model has effectively reduced barriers to service access. Clients consistently reflected positively on their experience with the clinic, indicating the service is culturally appropriate and meeting the needs of this complex client group. The predominate strengths of the model, as identified by clients, included the use of bicultural workers, the consistent use of onsite interpreters, and the way that clinic staff explained procedures and health conditions.

Some examples of comments made:

“[I would recommend this service] because they are providing onsite interpreting while in other services...you have to speak with interpreter by telephone...and also, the doctor here is very good”

“...everything was mentioned and explained to me. Explained that this kind of injection works for this kind of disease...so everything was explained well.”

Participants overwhelmingly expressed high levels of satisfaction with the ASandRHC, as represented by the following quotes:

“I have been happy...I do not have any issues [with this service]...I have been treated with patience and kindness...”

“The service that is provided inside the clinic, that is perfect, there are not any things that we could complain about.”

Participants stated that they would definitely recommend this service to other members of their community and gave the service an averaged rating of nine out of ten.

The ASandRHC has made a valuable contribution towards the refugee health evidence base through the development of a defined clinic model and commitment to data collection, evaluation and research. Furthermore, the clinic has played an integral role in formulating a regional response to refugee healthcare, significantly contributing to enhanced wellbeing outcomes for this community and establishing the organisation and the region as leaders in contemporary refugee health care.
**EQuIP Principle 5: Striving for Best Practice**

Refugee Health at Monash Health is progressive and constantly evolving. The program has organisational commitment, strong governance, a dedicated budget and committed staff, all of which contribute to sustainability. Client-centred practice is integral to the model of care, including opportunities for consumer participation, further fostering ongoing sustainability, responsiveness and excellence. Partnership and collaboration is also considered essential to quality contemporary refugee healthcare, and the ASandRHC has been proactive in partnering with key stakeholders, including South Eastern Melbourne Medicare Local, Foundation House, AMES and the Red Cross, thus contributing to a coordinated regional response to refugee health.

Research and evaluation has been embedded in the refugee health planning process to inform the development of the service. A comprehensive client database provides valuable information on refugee health trends. Health data has resulted in additional services being incorporated into the ASandRHC, while an identified increase in the number of clients on bridging visas led to a regional initiative aimed at improving service access and coordination. In 2013, a qualitative evaluation was undertaken exploring the clients’ experience at the clinic, with findings used to benchmark the service against its objectives and scope future investment.

Monash Health is recognised as a leader in refugee health and has attracted significant state government funding in the 2013/14 budget to support program development and expansion. Additional funding has enabled expansion of established primary care services, while new initiatives include the Refugee Health Nurse Liaison and Refugee Health Fellow positions. These new positions reflect unprecedented service innovation, and the evaluation of the pilot phase stands to inform service delivery models into the future.

**Innovation in Practice and Process**

The ASandRHC model of care is visionary, challenging traditional service delivery by building bridges across the health sector rather than nurturing silos. Furthermore, the ASandRHC has successfully engaged a vulnerable client group, and is responding to its needs in a person-centred, culturally appropriate way. In doing this, the barriers to access frequently experienced by refugees have been identified and reduced, leading to effective client-engagement and enhanced health outcomes.

Stakeholder perspectives have informed this initiative. As a result, this model of care delicately balances the requirements of the organisation with the needs of the community, while contributing towards a regional response to refugee health. This initiative has embedded consumer participation and research within practice to ensure well informed planning, while contributing towards the broader evidence base. Health plays an integral role in the resettlement of refugees, impacting all other aspects of this process. Investing in the health of this population undoubtedly has far reaching, long-term benefits for both the individual and community.

**Applicability to Other Settings**

This innovative initiative, enabling exceptional care and outstanding outcomes, is a successful model of care that could be emulated on a significantly broader scale across the state and nation. Utilising the framework designed by the ASandRHC at Monash Health, and partnering with local key stakeholders, the future for Refugee Health now looks even healthier.
Aim
To introduce a collaborative approach to medication management between patients, staff and the pharmacy supplier to increase safety and minimise risks.

Abstract
GEO Care is contracted to Justice Health to provide primary healthcare to the twelve public prisons across the state of Victoria. Medication management in the prison setting comprises an important and extensive component of staff roles (Schoenly and Knox, 2013). Prisoners are extraordinarily unhealthy, with 32% of prisoners reporting they have a chronic condition, and just over half (52%) of discharged prisoners having been prescribed some type of medication while in prison (Australian Institute of Health and Welfare (AIHW), 2013). This burden of disease, coupled with illicit drug use prior to prison (71% of males and 61% of females (AIHW, 2013)), makes medication safety, in an inherently high risk environment, even more challenging. Because medicines can be used for suicide, self-harm, diversion and abuse in the correctional setting, it is vital that the medication safety framework involves all stakeholders (prisoners/patients, clinical and correctional staff and the pharmacy supplier), has patient care as its focus and considers the environment and relevant security policies.

Following the commencement of a new contract with Justice Health from 1 July 2012, GEO Care took the opportunity to improve the medication management system overall. A full review was undertaken utilising the quality improvement cycle, of Plan, Do, Check, and Act. The planning phase involved a review of current practices, identification of improvements, and GEO Care releasing a competitive tender towards the end of 2012, for suppliers to provide pharmacy services to GEO Care sites. The implementation phase included two major changes to medication delivery that included a move to the safer mediSACHe medication delivery system, and an increase in takeaway medications for prisoners. The checking phase led to major improvements in incident management; including Root Cause Analysis of serious incidents and enhanced monthly reporting processes. The follow-up phase ensured key performance indicators were reviewed, the need for a practical medication competency was identified and governance of medication management was enhanced. Improvements were achieved by the development of relevant committees and scheduling of meetings, involvement of clinical staff, regular reporting and discussion of results, and a collaborative relationship between staff, prisoners, and the pharmacy supplier where appropriate.

The outcomes of the improvements include: a very low rate of medication errors (0.01% error rate involving prisoners for all supplied medications, for April-June 2013), empowerment of patients to take an active role in managing their own care (with between 30-70% of prisoners receiving takeaway medications on different sites), improved medication management by staff (0.04% nurse related error per prisoner head count since January 2013), improved site processes and prison safety, enhanced reporting to minimise risks and increase efficiency, and an Extensive Achievement rating from ACHS for criterion 1.5.1: ‘Medications are managed to ensure safe and effective consumer / patient outcomes’, at the recent Alignment Survey in May 2013.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Continuing self-care by prisoners is important as the majority of prisoners serve relatively short sentences, and there is regular movement within and between GEO Care sites and to external facilities such as hospitals and courts. The aims of the Takeaway Medication Program were to increase the individual’s level of self-management and awareness to empower them to take an active role in managing their own care, this links well with the ‘better lives’ model adopted across Corrections Victoria. The program reduced the number of prisoners required to attend the medical centre to receive their medications, provides continuity of care in medicine taking, reduces waste and improves efficiency. These goals are in keeping with the prison programs aims, philosophy and current community standards.

EQuIP Principle 2: Effective Leadership
A review of medication management across the organisation commenced with Executive leadership and flowed down to senior and middle managers, and then to clinical staff. The Executive staff in consultation with Justice Health and an external consultant managed the release of the tender and selection process. Once the preferred supplier was chosen, negotiation regarding services, key performance indicators and reporting were finalised. While a Medication Safety Advisory Committee was already in place and operating effectively, a regular Pharmacy Contract Meeting had to be established. This meeting measures clinical and financial outcomes against the contract, deals with any operational issues and identifies any areas for improvement.

The introduction of the Takeaway Medication Program required effective leadership from the Health Service Managers on each site, to liaise with the prison correctional staff, to agree on and develop Local Operating Procedures, and to educate staff and prisoners about the program. Continued incident monitoring was vital to reassure all stakeholders that the program is safe and will result in better outcomes.

Collaboration between GEO Care and the Pharmacy supplier has provided the foundation to develop and maintain a strong joint approach to medication safety. Review of incidents and errors are undertaken in meetings, with a concentration on improvements that can be implemented. Open and transparent consultation has improved the understanding of the challenges that both parties face and enabled negotiation of outcomes to occur.

EQuIP Principle 3: Continuous Improvement
The established meetings and collaboration between GEO Care and our pharmacy provider allows a forum to continually review practice and make joint improvements, some of these have been:
- increased clinical pharmacy hours and delivery of education sessions to staff
- introduction of electronic access to MIMS for all sites
- all medication incidents risk rated, and a Root Cause Analysis undertaken on any serious incidents
- improved management of imprest medication stock
- development of a Practical Medication Competency for nursing staff
- review of Medication Advisory Committee Terms of Reference and membership
- implementation of new Methadone and Suboxone Packaging
- introduction of dedicated fax server at pharmacy
- establishment of monthly incident report by Pharmacy supplier
- implementation of a comprehensive monthly expenditure report by patient and site.
- discharge medication Key Performance Indicator introduced
- dedicated couriers and tamper proof delivery containers implemented
- provision of three points of identification on all dose administration aids
- standardised process for the delivery, packing and handling of cytotoxic medication
- delivery of Drugs of Addiction medication in sealed security bags with security tag
- implementation of mediSACHe.

EQuIP Principle 4: Evidence of Outcomes
There have been a number of positive outcomes from implementing a collaborative approach to medication management, and these include:
- low rate of medication errors (0.01% error rate involving prisoners for all supplied medications, for April-June 2013)
- empowerment of patients to take an active role in managing their own care (with between 30-70% of
Clinical Excellence and Patient Safety

- prisoners receive takeaway medications on different sites
- safer medication management by staff (0.04% nurse related error per prisoner head count since January 2013)
- improved site processes, prisoner attendance at programs and prison safety, with improved medicines-related culture
- enhanced reporting to minimise risks and increase efficiency
- better utilisation of staff skills and resources, with reduced demand for medication administration
- extensive Achievement rating from ACHS for criterion 1.5.1 Medication Management at the recent Alignment Survey in May 2013
- supports patient self-care
- better use of prison pharmacy staff expertise
- increased access to appropriate training and continuing professional development (by clinical pharmacists)
- provides a more efficient system for the supply of medicines
- improved development of other medicines management policies.

EQuIP Principle 5: Striving for Best Practice

The review of medication reporting and committee structure has enabled improved internal benchmarking across the 12 prison sites. Any identified improvements have been rolled out across the organisation to support standardisation, continuity and best practice.

The collaborative approach that has involved prisoners / patients, clinical and correctional staff and the pharmacy supplier ensures that practice is improved across the correctional system and takes account of all stakeholders needs and expectations, rather than working in isolation.

This year GEO Care will review opportunities for medication management discussion and benchmarking, with GEO Care in the United States of America. While there may be clinical practices differences between jurisdictions, there will be some similarities and opportunities to share ideas and best practice.

Moving towards patients being responsible for holding and using their own medicines is aligned to the GEO Care quality principles of Accessible, Safe, Effective and Appropriate, Person Centred, and Continuous.

Innovation in Practice and Process

Implementation of mediSACHe is innovative for the Victorian prison system, and for health and community providers overall.

The development and implementation of a practical medication competency for nurses has complimented the theoretical medication competency that is undertaken in most healthcare settings. Given that correctional nursing is a unique field of nursing, it is particularly important to ensure nurses understand the requirements of medication administration in a practical sense, given the environment.

Applicability to Other Settings

Medication safety overall is vital in all health settings and the range of improvements are applicable, with or without local adjustments to suit the environment.

These improvements would particularly suit the health settings of community services, aged care facilities, other prisons across Australia and in different correctional jurisdictions worldwide.

Collaboration with contracted suppliers has been shown to improve outcomes for patients, the primary client, and the provider. As these improvements relate to clinical, financial and operational achievements they are applicable to both the public and private sectors.

References


DNR SMS TEXT MESSAGE REMINDER TRIAL

Confirmation Centre
Royal Brisbane and Women’s Hospital
Brisbane. QLD

Linda Reimers

Aim
To help decrease the Did Not Respond / Expired Offer rate in the OPD clinics within RBWH supported by the Confirmation Centre to:

- reduce workload in OPD Clinics
- improve Clinic attendance
- risk management for patients
- encourage patient awareness
- Continuous Improvement.

Abstract
To address the large number of patients who Did Not Respond (DNR) to our appointment offer letters and the administrative and clinical work associated within our RBWH outpatient departments it was decided to trial SMS text reminders.

The outcome of this trial was successful resulting in a reduction of 24% of patients who Did Not Respond by day 15 across our facility. This resulted in an estimated cost saving of $30 per DNR patient.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Confirmation Centre is the first point of contact to support 343 clinics across Surgical, Medical, Women’s and New Born and Critical Care and Clinical Support Services within the RBWH.

There was increased concern that high risk patients were not attending their New or Review appointments, which would potentially compromise patient health care.

The reminder service is a safety net for our patients to ensure that they are well informed of their upcoming appointments, avoiding frustration once realising their appointment was cancelled due to not confirming.

EQuIP Principle 2: Effective Leadership
This plan was implemented under the guidance of Specialist Outpatients Services Operational Group (SOSOG). The SMS Text message trial was conducted in the Confirmation Centre as it provides compliance with the current OSIS policy.

The innovative strategy utilises the benefits of modern technology, with most patients having a mobile phone number recorded in their file. It also provides the ability for staff to capture the patients who have been non contactable via mail due to address changes and not notifying the hospital.
Patients were enthusiastic about the changes advising this method of communication is good as it is not wasting resources such as paper and postage.

Collaboration with administration areas - OSIM, OPD, Ward, DEM, Admissions to ensure the mobile field in HBCIS is entered correctly.

**EQuP Principle 3: Continuous Improvement**

The DNR rate was monitored by each clinic area and reported back to the monthly SOSOG. The implementation of the SMS text message reduces the workload in the OPD clinics.

The identified cost saving of the project is $30 / patient for DNR’s in the OPD clinics.

The innovative strategy utilises the benefits of modern technology, with most patients having a mobile phone number recorded in their file. It also provides the ability for staff to capture the patients who have been non contactable via mail due to address changes and not notifying the hospital.

To monitor the trial the Confirmation Centre has been recording DNR statistics, if the trial is shown effective the SMS Texting may be implemented to help in other processes.

Decrease in mail costs associated with the OPD Expired offer letter postage.

Cost of correspondence:
- SMS Text = .23c
- Local Call = .03c
- Letter / Postage = .58c

**EQuP Principle 4: Evidence of Outcomes**

Prior to commencement of the SMS text message reminder the average daily DNR was 70 appointments. Since the 19.10.12, the average has decreased to 53 appointments which is a reduction of 24%.

Feedback from staff has been positive as response from texted patients has been instantaneous.

Feedback from patients has been immediate and favourable advising it is not wasting resources such as paper and postage.

**EQuP Principle 5: Striving for Best Practice**

In keeping up with modern technology, mobile phones are being used externally to remind clients of appointments. The use of this technology in RBWH Confirmation Centre provided a convenient and low cost service to patients who would be notified of their need to confirm their scheduled appointment on the 10th day after their letter of OPD offer being sent.

**Innovation in Practice and Process**

This is the first time that RBWH has used text messaging technology to make contact with patients for confirmation of appointments.

**Applicability to Other Settings**

The SMS text message reminder could be implemented across the hospital, which would give a decrease in the DNR rates. Some areas are now using SMS Texting to fill vacant appointment slots at short notice with great success.

There is also potential to implement this across Metro North that would assist in strategic targets for Outpatients. SOSOG has membership from each clinical service line, OSIM, Revenue, Metro North and Medicare Local.
Aim
The aim of the PST program was to establish a sustainable framework by which risks to patient safety are systematically addressed at the clinical unit level with the aim of reducing iatrogenic morbidity and mortality rates at SCGH and improving the quality of patient care.

Abstract
In 2009, Sir Charles Gairdner Hospital (SCGH) was designated as a Magnet Hospital by the American Nurse Credentialing Centre. While the hospital was successful in achieving accreditation, comment was made on the limited local awareness of nursing staff to nurse sensitive indicators (NSI) of quality care. The Magnet report commented that mechanisms for ensuring comprehensive dissemination of quality data were not fully developed and direct care nurses were not consistently knowledgeable and articulate regarding quality data outcomes.

In response to this The Patient Safety Teams (PST) concept was formed on the belief that nurses with training and resources can be champions for change and improve the safety culture which improves patient safety.

PSTs at SCGH are teams of multidisciplinary clinical staff, led by the unit Clinical Nurse Specialist, who work collaboratively to identify and address clinical risk in the local area using audit and patient safety related activity.

The PST program was introduced in 2011 on four pilot wards and there are now 27 teams in place across clinical areas of SCGH.

Qualitative and quantitative data have identified that the staff on 4 pilot wards are more knowledgeable and engaged with patient safety issues, data and strategies and there has been demonstrated improvements in outcomes in many areas of the hospital.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The aim of the patient safety program is to reduce risk and improve outcomes for patients. Consumer engagement has been sought to review and inform patient education programs introduced as part of the project.

EQuIP Principle 2: Effective Leadership
Executive level leadership ensures appropriate allocation of staff and resources to support implementation of the project. Local nursing leadership ensures accountability and engagement of ward based staff and drives the change process.

EQuIP Principle 3: Continuous Improvement
Regular auditing of practice, compliance with policy and procedure and documentation ensures practice meets the standard and risks are identified and addressed and evaluated.
**EQuIP Principle 4: Evidence of Outcomes**
An Action Research Project undertaken in 4 pilot wards provides qualitative and quantitative data to support changes and improvements in knowledge, practice and outcomes.

**EQuIP Principle 5: Striving for Best Practice**
A comprehensive review of the literature informed the development of the Patient Safety Team model. Use of best evidence supports innovation and improvements to patient care and the practice environment.

**Innovation in Practice and Process**
This systematic approach to addressing clinical risk is the first of its kind within WA health and other organisations within WA health are now seeking the opportunity to share this innovation.

**Applicability to Other Settings**
Clinical risk is inherent in healthcare and this project has widespread application.

The implementation of PSTs in the varied and diverse inpatient and non-inpatient settings of SCGH represent its broad applicability and potential throughout all areas of WA health.
IMPROVING DEMENTIA / DELIRIUM CARE IN THE ACUTE SETTING

Nursing Administration—Improving care for Older People Project
Northeast Health Wangaratta
Wangaratta VIC

Nicola Coats

Aim
Northeast Health Wangaratta’s dementia / delirium program aims to improve the care of our patients with dementia and/or delirium in the acute setting by:

- providing a structured program for the management of this patient group
- educating staff about delirium and dementia
- increasing patient safety by reduction of dementia / delirium symptoms.

Abstract
Northeast Health Wangaratta commenced an Improving Care for the Older Person Project funded by Department of Health. The focus of this project was to improve care for our patients who have dementia and/or delirium in the acute setting.

Improving care for these specific patients was of critical importance at Northeast Health Wangaratta as there were concerns regarding:

- appropriate staffing of ‘specialling’ (one to one) shifts
- lack of awareness of the needs of our patients with dementia and/or delirium
- the documentation of behavioural symptoms of dementia and delirium
- lack of standardised practice surrounding the specialized care of these patients.

This resulted in the:

- development and implementation of a Behaviour Assessment and Management Chart
- completion of ‘specialling’ guidelines
- catalogued diversional therapy library
- renovation of the Sensory Garden
- education of staff on delirium.

As a result of this, patients at Northeast Health Wangaratta can now expect an improved standard of clinical care and management.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
This project has a strong consumer focus for the reasons listed below. As you can see it highlights the critical need to improve the care we deliver to our patients who have dementia and/or delirium:

- The ageing population of Wangaratta is higher than the Victorian average.
- The ageing population highlights a critical need to improve the care delivered to our patients in the acute setting with dementia and/or delirium at Northeast Health Wangaratta.
- 70% of acute patients at Northeast Health Wangaratta are over 65 years of age.
- 55% of older persons admitted in the acute sector will experience delirium (The Toolkit, 2012).
Clinical Excellence and Patient Safety

- The acute setting introduces specific challenges to both this patient group and staff.
- Improving the safety of our patients with dementia and/or delirium by decreasing agitation and reducing the risk of falls.

**EQuIP Principle 2: Effective Leadership**
- Formation of a Leadership Committee which consisted of Project Officers, Deputy Directors of Nursing, Assistant Director of Nursing with other members co-opted as required.
- Having strong governance during this project has assisted greatly in the uptake of this project by staff members.
- This project has required engagement from many Northeast Health Wangaratta staff which demonstrates their commitment to improving the care for this specific patient group.
- Poster presentations and verbal presentations have been made on a regional level at a Best Care for Older People Forum.
- Study leave given to staff members to enhance their knowledge in the care of this specific patient group.

**EQuIP Principle 3: Continuous Improvement**
- The project team has audited patient notes to ascertain how staff were documenting behavioural symptoms of dementia and delirium.
- Information was collected from this audit and appropriate improvements were made in order to address these issues.
- Non-pharmacologic interventions were made available to staff in managing agitation and to maintain independence.
- A Behaviour Assessment and Management Chart was developed to standardise documentation and assist staff in their care.

**EQuIP Principle 4: Evidence of Outcomes**
Outcomes of this project so far include:
- only clinical staff attend to ‘specialling’ of patients with dementia and delirium
- a Behaviour Assessment and Management Chart now forms part of the medical record
- diversional therapy is now available to patients. 81% of patients have diversional therapy documented in their notes
- implementation of a ‘specialling’ guideline
- fully enclosed sensory garden
- significant decrease in falls
- delivery of education to nursing staff on delirium and the use of the Behaviour Assessment and Management Chart.

**EQuIP Principle 5: Striving for Best Practice**
Northeast Health Wangaratta consulted with an interstate tertiary referral hospital, a metropolitan hospital and our Gerontology Nurse Practitioners at the commencement of this project. It was important to apply best practice principles and learn from other facilities and experts who had already completed work around this specific care need. We were able to adapt some of their work to our facility which has resulted in some great outcomes.

This project has not formally ended for Northeast Health Wangaratta with monitoring still in progress.

**Innovation in Practice and Process**
The implementation of the Behaviour Assessment and Management Chart has assisted staff greatly in determining what maybe the cause of their behaviours of concern and provides them with the opportunity to explore any needs that are not currently being met. It also assists in the guidance of appropriate intervention.

Having access to a Sensory Garden and diversional therapy has also been very successful in the management of patients with dementia and/or delirium.

**Applicability to Other Settings**
This project would be transferrable to other health settings such as sub-acute and residential. It has already attracted the interest of another large regional hospital who are currently in the implementation stages.
Aim
To provide great clinical care, delivered in a prompt manner with a smile on our face.

Abstract
St John of God Murdoch Hospital Emergency Department (SJGMH ED) opened in 1994 and is the only private Emergency Department (ED) in Western Australia. At its peak, SJGMH ED treated approximately 26,000 patients per annum. Despite metropolitan public EDs experiencing an increase in presentations, SJGMH ED was witnessing a decline in presentation numbers.

The implementation of the “Four Hour Rule” Program into public EDs resulted in tangible improvements in patient waiting times across most public hospitals. In comparison, SJGMH ED had comparatively long waiting times with an overall 4 hour rule performance of around 60% in 2011 and 2012.

A new tertiary referral teaching hospital, in the immediate vicinity of the SJGMH site, with the ability to provide a quality and free service to the Southern Metropolitan area and local clientele is due to open in 2015. This combined with declining patient and staff satisfaction scores signified a potential risk to the performance and viability of the SJGMH ED from the impending direct competition.

More importantly, recognising that increased waiting times and delays with assessment and treatment could increase the risk of mortality and morbidity, SJGMH embarked on a series of reforms that would see an increase in the number of presentations, a decline in median wait/treatment times and improved satisfaction across the ED.

These reforms included:
• re-engineering of ED systems and processes with the aim of ensuring rapid access to the clinical area of the ED and early commencement of medical care
• reducing bed block within the ED itself and the broader hospital environment by focusing on strategies designed to assist patient departure from the ED
• introduction of new clinical and non-clinical positions, including a Professor of Emergency Medicine and Emergency Nurse Practitioner
• establishing an ED “navigator” nurse role
• creating and marketing a “No Wait Emergency Department”
• simplification of the ED fee structure
• focus on special projects including Code STEMI, febrile neutropaenia, and procedural sedation management
• implementation of an ED Shift Report to provide valuable feedback on a shift by shift basis to ED managers
• introduction of a research program within the ED
• introduction of bed to bed handover, patient white boards and discharge phone calls
• patient-centered care education
Clinical Excellence and Patient Safety

- patient feedback review.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

St John of God Murdoch Hospital routinely collects patient satisfaction data by means of satisfaction surveys, complaints and other patient feedback modalities. Data trending combined with the reduced number of ED presentations offered the organisation an opportunity to improve both its wait time for commencement of clinical care within the ED and patient and caregiver (staff) satisfaction.

The reforms were tabled at the Murdoch Consumer Consultative Committee to gauge consumer perception of the reforms. Discussions included the consumer perception of ED assessment provided by an Emergency Nurse Practitioner compared to a doctor and how wait times affected satisfaction and choice of facility. Positive feedback provided reassurance that reforms would be accepted by the community.

Issues highlighted by patients in the Press Ganey surveys included the uncertainty about their ‘journey’ and the lack of communication. The inception of an ED Navigator ensures the patient’s journey is monitored and provides more effective timing of care. The added benefit to this patient centred role is that they can communicate progress to the patient. By having a Navigator role present, the journey is monitored and more effective timing of care and better throughput can occur. The aim is to not only improve the patient journey but also to ensure excellent communication between patients, nurses, doctors and services external to the ED.

**EQuIP Principle 2: Effective Leadership**

The success of these initiatives can be attributed to the leadership both at an executive and Departmental level. The proposed reforms were developed after consideration of current best practice, available resources and liaising with relevant key stakeholders both within the hospital and the community. The Director of Medical Services and the Director of Emergency Medicine tabled an extensive paper highlighting the benefits of the proposal at the Executive Divisional Management Committee.

Recognising the proposal’s direct link to the organisation’s mission and values and its strong commitment to improving patient safety the Executive Divisional Management Committee endorsed and supported all proposed initiatives.

Executive support was critical to fulfil the more complex initiatives such as change in fee structure and the resource implications required for the Nurse Practitioner and Professor of Emergency Medicine roles. Recognising that a main driver for ED waiting times is bed availability, the executive leadership set about the implementation of a Day of Surgery Admission model of care, ensuring Hospital redevelopment plans provided facility space and process to improve bed capacity and patient flow.

**EQuIP Principle 3: Continuous Improvement**

SJGHM has a long sustained program of data analysis and continuous quality improvement. The collection of clinical indicators and various patient feedback modalities triggered the cycle of continuous improvement. When data indicated that wait times exceeded best practice and patient expectations were not being met SJGMH ED instigated sustainable solutions to improve results. Both statistical and patient satisfaction data is monitored feedback to all ED staff on a regular basis.

The reforms within the ED have been sustained and post-implementation data analysis indicates reforms have resulted in progress towards anticipated outcomes. Ongoing review of all key performance indicators and patient satisfaction data continues to gauge the success of the reforms and provides information for ongoing quality improvement.

**EQuIP Principle 4: Evidence of Outcomes**

Following implementation of the reforms median wait times in the ED have been reduced considerably. For the three consecutive years prior to reforms median wait times ranged from 40 to 50 minutes. Since the commencement of the reforms median wait times are now is consistently below 30 minutes. This improvement represents approximately 15 hours less waiting time per day, year on year.

The average number of daily ED presentations has steadily increased since the implementation of the reforms.
Marked improvements with patient satisfaction have been evidenced by an increase in percentile rank from the 33\textsuperscript{rd} percentile in 2011 to the 67\textsuperscript{th} percentile rank in 2012 for overall satisfaction in the Press Ganey Patient Satisfaction Survey. ‘Wait time before treatment area’ mean score increased 5.2 points from 70.1 to 75.3. ‘Wait time to see doctor’ likewise improved by 1.2 mean points.

The percentage of patients who left before being triaged (did not wait) has decreased from 4.4\% in the 2010/11 period to below 2\% in the 2012/13 period, indicating improved satisfaction with wait time and expectations.

Time to perfusion for ST Elevation Myocardial Infarction (STEMI) patients averaged from 90 – 180 minutes prior to the reforms. Post implementation of reforms time to perfusion now averages approximately 60 minutes.

Staff satisfaction has likewise improved with an overall mean satisfaction score of 69.0 in 2013 from a mean score of 62.3 in 2010 (+ 6.7) which correlates to an 88\% percentile ranking across both national and private peer groups. Combined with changes to rostering this can attribute to the significant decrease in leave liability and increase in staff retention rates.

**EQuIP Principle 5: Striving for Best Practice**

SJGMH’s commitment to best practice continues to mature with the recently opened Centre of Nursing and Midwifery Research and the introduction of 2 professorial positions (one in Emergency Medicine inclusive of academic support team), has allowed for introduction of a Australasian College for Emergency Medicine fellowship program and an increase in registrar presence in the ED.

Building on information provided by Press Ganey and associates new patient satisfaction initiatives continue to be implemented. Using the Australian Commission on Safety and Quality in Health Care’s National Safety and Quality Health Service Standards as a guide, changes to the handover processes were undertaken including the introduction of a bed-side shift handover and an ISOBAR handover model for intra-hospital transfers out of the ED. SJGMH’s participation in the ACHS clinical indicator program provides opportunity to benchmark attendance times for ATS scale against national best practice.

**Innovation in Practice and Process**

Moving away from a standard model of care where a full nursing assessment is undertaken at triage to a “straight back” model where the triage nurse completes an initial assessment of presenting problem and fast tracks patients into treatment area where a full assessment is completed. The use of Wi-Fi technology for bed side registration has resulted in faster admission times into treatment area across all ATS categories.

ECGs performed by St John Ambulance Paramedics are now be emailed or faxed while patients are on route allowing prompt diagnosis and preparation of the on call angiography team, improving time to perfusion for Code STEMI patients.

Challenging the norm, shift times for Medical staff and fast track bed allocation where modified to meet historical demand data – this had led to increase bed and Medical officer availability decreasing wait time by increasing throughput.

**Applicability to Other Settings**

The SJGMH ED reforms have demonstrated that both process and cultural change can occur when dedicated and inspired teams work together to improve patient outcomes. These principles can be replicated in any hospital department. The lessons learnt from the SJGMH ED reforms are now being used as a case study for other departments within the hospital. Reforms have been presented to senior leadership from all of the St John of God Health Care Divisions.

The patient satisfaction principles implemented in the ED are currently being developed into a patient centre care framework that can be utilised by all departments. The SJGMH ED reforms can be adopted by any ED wishing to improve attendance times and patient outcomes.
Aim
To reduce Day of Surgery Cancellations in the Operating suite.

Abstract
The Perioperative Unit at Lithgow consists of 2 operating rooms, 1 procedure room, a 6 bedded recovery unit, Day Surgery Unit and a Central Sterilising Department. It provides services to the clients of Lithgow and its surroundings areas.

The Perioperative Unit caters to a range of different specialties which include general, ophthalmic, orthopaedic, gynaecological, Ear nose and throat, urology, and dental surgery, plus numerous endoscopy procedures. These procedures performed on a day only basis where the patient is usually discharged on the same day of their procedure as well as extended stays where a patient may need to be recovered overnight or longer depending on the type of procedure that has been undertaken.

Key Performance Indicators (KPI’s) are an important part of monitoring perioperative efficiency and are reported to the NSW Ministry of Health on a monthly basis. The staff within the perioperative unit had noticed that there had been an increase in our KPI’s for patients cancelling or being cancelled on their day of surgery. To ensure our patients are getting timely access to surgical services, surgical waiting lists must meet the 0-0-0 for 30-90-365 day clinic al priorities. When patients are cancelled on their day of surgery for any reason it is not only an inconvenience for the patient but a waste of resources and precious time for the operating theatre. Time that another patient on the ever-growing surgical waiting list could have used.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
From January 2011 – June 2011, data showed that the day of surgery cancellation rate in Lithgow’s Operating theatres ranged from 1.4 – 3.9%, averaging at 2.5%. The NSW Health Key Performance indicator for cancellation on day of surgery benchmark is < 2%. Many patients planning to have surgery have arranged for themselves and their families to take time off work, arrange care for children, and psychologically prepare themselves for their operative procedure. When patients are cancelled on their day of surgery for any reason it can be emotionally stressful and costly in terms of working days lost and disruption to their daily lives. With such short notice it is usually time consuming and difficult to find a replacement, thus underutilising theatre time which could have been given to another patient on the surgical waiting list.

In July 2011, to reduce our day of surgery cancellation rate a working party was formed consisting of the operating suites Nursing Unit Manager, Clinical Nurse Educator, Clinical Nurse specialist, Administration Clerk and a patient representative to present our patients perspective. The working party met and through a process of elimination discussed reasons for patients being cancelled on their day of surgery. These reasons were then prioritised into 6
target areas.

These being:

1. Theatre list overbooked.
2. Patient did not confirm or staff unable to contact patient.
3. Preoperative medication/prep not taken by patient.
4. Patient unwell on day of surgery.
5. Preoperative phone call did not give patient enough time to organise anaesthetic review or other necessary tests.
6. Patient has not ceased medications as required.

**EQuIP Principle 2: Effective Leadership**

Once the 6 target areas were defined the working party began to work on gathering data to assist with finding possible solutions.

Theatre list overbooked, leading to theatre lists finishing late patients having to be cancelled.

To help prevent overbooking and late finishes it was decided to collect the average times for procedures for each surgeon for the past 6 months. These times were based on the time the patient went into the theatre and the time that they left. It was collected this way as many surgeons will state on their Recommendation for Admission form how long they take to perform a procedure but do not include the time it takes to anaesthetise and reverse their patient.

Data were also collected to determine the reasons for operating lists starting late, leading to late finishes.

For the other 2-6 target areas it was decided that the implementation of a Pre Admission Nurse 1 day a week would help to alleviate this problem. The Pre Admission Nurse would assess the patient on their pre admission assessment and contact patients preoperatively to organise preanaesthetic assessments with anaesthetists if needed before their day of surgery. They would verify with patients that they had ceased medications like aspirin/warfarin and had commenced regimes needed like bowel prep. Patients were also contacted by the Pre Admission Nurse or clerk if they had not confirmed.

**EQuIP Principle 3: Continuous Improvement**

The data that had been collected were reviewed and all theatre staff including both surgeons and anaesthetists were informed of the findings. Surgical lists were then built using the average times collated for each procedure.

To help reduce the late starts theatre staffing was reorganised to ensure equipment was ready on time e.g. endoscopes were put through decontamination cycles earlier to ensure equipment was ready for use at the start of the list. Surgeons and anaesthetists were shown the amount of time that was being wasted due to late starts.

**EQuIP Principle 4: Evidence of Outcomes**

In the second half of the year from July 2011 – December 2011 our average day of surgery cancellation rate dropped to 0.9%. In the following months the average remained below 2%:

- January 2012 – June 2012 result: 1.8%
- June 2012 – December 2012 result: 1.5%
- January 2013 – June 2013 result: 1.7%

**EQuIP Principle 5: Striving for Best Practice**

In reviewing the data for the past year it was found that the Preadmission Nurse’s role was instrumental in reducing our day of surgery cancellation rate. With this system in place patients with greater than 45 BMI’s and other comorbidities were transferred to other hospitals earlier to receive treatment rather than being cancelled on their day of surgery. Patients were given details on which anaesthetist to see preoperatively to organise preanaesthetic assessments with anaesthetists if needed before their day of surgery. They would verify with patients that they had ceased medications like aspirin/warfarin and had commenced regimes needed like bowel prep. Patients were also contacted by the Pre Admission Nurse or clerk if they had not confirmed.

Patients who did not confirm either because they had moved and did not receive their notification letter or had forgotten to contact the hospital were contacted to ensure that they still wanted their procedure. Patients with whom we could not contact were either replaced or details were given to the surgeon to follow up.

As in any hospital there are always problems with sick leave and staff shortages; it was here that the preadmission
nurse was used to replace these deficits. Thus putting them behind in their work and causing a few patients to slip through the process. To rectify this and to continue to strive to reduce our cancellation rate we have been trialling a redistribution of the Preadmission Nurses’ role to 2 hours a day. This then reduces the impact on the system if they have to be redeployed for a day and has proved to be quite beneficial, with only 1 cancellation occurring in the month of August with a patient not presenting as they had changed their mind morning of surgery.

The striving to reduce our day of surgery cancellation rate continues with the constant review and gathering of monthly data. Giving us the expertise to gauge which areas need to be reviewed to ensure that our staff can give the best possible care and our patients are able to get timely access to the services that we provide.
SAFE AND COMPREHENSIVE PATIENT JOURNEY

Central Nursing Division
Our Lady of Maryknoll Hospital
Hong Kong

Grace, Sau Ping, YEUNG

Aim
A comprehensive quality nursing care planning together with a structured user friendly assessment system to assess patients’ conditions in a simple and efficient way will ensure patient safety and comfort in the hospital.

Abstract
Patient admitted to the hospital will experience fear, depression, nervous or even pain. Having a comprehensive quality nursing care planning together with a structured user friendly assessment system to assess patient’s conditions in a simple and efficient way will ensure patient safety and comfort in the hospital. For health care professionals, without a comprehensive nursing assessment on admission to collect patient details, doctors and nurses may have difficulty to get a clear or full picture of patient’s information. In Our Lady of Maryknoll hospital, a series of hospital wide nursing care plans of admitted patients in different stages in their patient journey were standardised which were supported by the top management including: (i) nursing assessment on admission, (ii) Integrated Observation Charts with Modified Early Warning System (MEWS), (iii) nursing handover, (iv) Nursing Care Plan and (v) Discharge Planning. With a series of training, on-site briefing and consultation, the updated nursing assessments and care plans were designed in June 2012 in all clinical areas. The assessment form and care plans incorporate a number of risk screening tools on fall, pressure sore, malnutrition and suicidal ideas; current medication and initial discharge planning, etc. The form prompts nurses to initiate guideline/protocol driven nursing intervention and referrals to allied health or specialist services for identified “at risk” patients. Patient Satisfactory Survey was conducted regularly with positive feedback to our caring services.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Systematic assessment record has good applicability in all clinical areas. The success of the assessment record is evidenced by the results of staff compliance audit and overall nurses’ satisfaction of the assessment form. All in-patient departments are using nursing assessment form when admission and daily nursing care plans from Jan 2013 onwards. Patients’ conditions are regularly monitored and recorded in MEWS chart. Nursing handover form is used for handover between shifts to ensure that patients’ conditions are well noted with information of patient profile, diagnosis, assessment, treatment, continuity of care and follow up plan. Daily nursing care plan and discharge plan are developed for patients’ care and treatment during the hospitalization. With such assessment system, patients are treated and followed up in more systematic and organized ways, thus, facilitate the rehabilitation and reduce the hospitalization. Both medical and nursing staffs found that the new form was user friendly and self-explanatory on the communication mechanism supported by staff positive feedback and high compliance rate. This could facilitate that both medical and nursing staffs have same understanding on the patients’ condition during communication.
Clinical Excellence and Patient Safety

**EQuIP Principle 2: Effective Leadership**
With the support by the Nursing Executive Committee, a working group with nurses from various departments was set up in June 2012. The working group is responsible to collect staff feedbacks and design a set of brand new guidelines and forms to streamline the nursing planning and practices. The new forms and practices were piloted in various units for feasibility assessments and further collection of frontline opinions to enhance the level of user friendliness. Then, following by Staff forum, train-the-trainer sessions, on-site and task specific training sessions were organized to enhance the staff communication. Moreover, to facilitate in multi-disciplinary communication between nurses, doctors, physiotherapists, occupational therapists and health care assistants, meetings and briefing were arranged to allied health professionals to collect feedback for improvement. Regular meeting and sharing were be conducted by the working group to identify improvement area, regular review and evaluation by compliance rate and staff feedbacks before hospital wide implementation. All the new care plans were launch in all clinical areas from November 2012 onwards and compliance checks and audits were conducted in the first quarter of 2013 for evaluation.

**EQuIP Principle 3: Continuous Improvement**
Continuous staff feedbacks were collected from frontline nursing staff and they comment that reduce duplication of work and maximise their capability in providing nursing care to patients. Patient Satisfactory Survey was conducted regularly with positive feedback to our caring services.

**EQuIP Principle 4: Evidence of Outcomes**
Staff feedback survey and Patient Satisfactory Survey were conducted regularly with positive feedback to our caring services.

**EQuIP Principle 5: Striving for Best Practice**
The assessment form and care plans incorporate a number of risk screening tools on fall, pressure sore, malnutrition and suicidal ideas; current medication and initial discharge planning etc. The form prompts nurses to initiate guideline / protocol driven nursing intervention and referrals to allied health or specialist services for identified “at risk” patients.

**Innovation in Practice and Process**
Implementation of a structured patient assessment on admission facilitates patient to adapt into new hospital setting and promotes collaboration with nurses. Then a comprehensive care planning and handover promote good quality of nursing care in a team approach. Moreover a pre discharge plan not only support patient and relative but also enhance continuity of care. Both medical and nursing staffs found that the new form was user friendly and self-explanatory on the communication mechanism. All patients would receive structured orientation package which includes: introduction on hospital facilities and new ward environment, briefing on visiting hours, use of nurse calling system, nursing communication round, video show on fall prevention, etc., within two hours on admission. After completion of the ward caring activities, patients or carers are welcome to provide feedback as an evaluation of quality care. Evaluation resulted with positive feedback from patient and relatives.

**Applicability to Other Settings**
Also, the new care plans were shared to other hospitals in Hong Kong to disseminate the good practices to other hospital through workshops, seminars and forums.
HOURLY ROUNDING AND THE 5PS

Nursing and Midwifery Division
Canterbury Hospital, Sydney Local Health District
Canterbury NSW
Claire Harris

Aim
To improve detection of the deteriorating patient, patient satisfaction, reduce rates of inpatient falls, pressure injuries, medication errors, call bells and patient anxiety and complaints through intentional hourly review of, and dialogue with patient asking the 5 Ps: pain, position, possessions, pan and plan.

Abstract
The importance of communication within healthcare facilities was highlighted in the Garling Enquiry. In response to the enquiry, and also the results of the NSW Patient Survey, Canterbury Hospital nursing and midwifery staff introduced a strategy to ensure all patients are reviewed hourly by nurses or midwives. The implementation of this change in practice has improved risk management of all patients, improved pain management, reduced pressure injury and falls rates and increased patient satisfaction and sense of trust in the staff. This intentional rounding practice has demonstrated sustained benefits since its implementation.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
To fully inform the Steering Committee the results of the NSW Patient Survey 2009/10 were used to inform the committee on issues occurring at the facility.

In addition, Patient stories and Patient Experience Trackers were used to gain baseline information on patient satisfaction in a contemporaneous format in two clinical areas.

It was determined that many of the areas identified in the state wide survey and particularly in relation to Canterbury Hospital could be addressed by the implementation of an intentional rounding program. The introduction of the Hourly Rounding and the 5Ps Program is a coordinated approach to care that is designed to meet the individual needs of patients and their carers and improve access to timely quality health care. The patient outcomes in terms of satisfaction fall within the domains of communication, advocacy, introduction of staff member, management of pain and care planning has demonstrated significantly and consistently higher feedback from patients since the introduction of rounding. The quality of care provided is more consistent and there is greater coordination of care and professional responsibility from all staff. All patients now have timely access to care and are asked a number of standardised questions and given the time and opportunity to discuss any concerns they or their carers might have. The 5Ps is the questioning framework associated with the hourly rounding program at Canterbury Hospital. The 5Ps consist of:

- Pain: Is your pain adequately controlled?
- Position: Are you comfortable, do you need to change position?
- Possessions: Do you have all the possessions you need (reading glasses, buzzer)?
- Pan: Do you need to go to the bathroom / pan?
Plan: 
Do you know your plan of care?

Often a sixth P is added – plugs. This reminds staff to check all electronic equipment to ensure it is charged and/or functioning appropriately such as air mattresses and infusion pumps thereby improving patient safety.

This system promotes patient and carer/family confidence in quality of care staff are providing through accountability measures put in place and also promotes an improved level of communication between patient, carer and staff. It also increases patient involvement in their care with frequent questioning regarding patients knowledge of their plan of care. There is an increased understanding from patients and their carers on the expectations of care and the way it is delivered, resulting in a marked reduction in call bell rates due to the trusted anticipation of care delivery each hour.

More frequent review of the plan of care has led to a reduction in medication error rates. The 5Ps assist in the anticipation of patient needs, thereby ensuring effective coordination and delivery of basic nursing care for all patients.

EQuIP Principle 2: Effective Leadership

A committee was formed to drive, monitor and manage implementation, promote change and ensure sustainability. The committee membership included the General Manager, Director of Nursing and Midwifery, Director of Corporate Services, Director of Medical Services, Quality Manager, Community Participation Coordinator and staff representatives.

Education sessions for staff were held identifying the present situation, the planned change and the expected outcomes. Baseline data was collected including a 24 hour snapshot of call bell rates. This baseline data provided quantitative data in relation to rates of falls, pressure injuries, medication errors, call bell rates and complaints. Additional detail regarding the call bells was collected to determine why patients called for assistance. The following top reasons were established:

- Bathroom 15%
- IV pump alarming 15%
- Miscellaneous 13%
- Accidental buzz 13%
- Pain 10%
- Needed nurse 9%
- Positioning 4%

Ensuring this baseline data were collected enabled Executive leadership to clearly demonstrate improvement in workflow for staff post implementation.

Colourful posters were developed to promote the 5Ps strategy. A smaller poster with picture of Pea Pods and what the 5Ps represented were displayed above all patient beds. A promotional launch was organised and staff were given pea pod pens, sweet pea plants and laminated ID information cards. A quiz asking what the 5Ps were and the rationale around the strategy was held, which generated fun and interest.

Staff in each ward got together to plan what the 5Ps would look like in their area. Different “Ps” were identified for specialty areas such as Paediatrics and Maternity Services. Each group looked at their current routines and planned the hourly rounding to link in with their regular scheduled care.

A rounding log was developed and displayed outside patient rooms for staff to document rounding activity and assist in monitoring progress.

Champions in each area were identified to help role model expected behaviours. A policy and a competency tool was developed to support the introduction of the 5Ps.

The Community Participation Network, Clinical Council and Nursing and Midwifery Executive have been kept informed of progress through representation on the governing committee and regular presentations at their meetings.

Monthly review of IIM’s was attended throughout the course of the implementation, to review rates of pressure injuries, medication errors, falls, patient complaints and call bell usage. Patient stories where available were also used to inform the committee.
Managers use the rounding log to recognise and reward staff for great work, when noting the level of accountability of high performing staff, managers It is critical to reinforce that hourly rounds are to take place in conjunction with not in addition to other tasks.

Canterbury CARES, the overarching communication program is a Standing Item on the Nursing and Midwifery Executive Agenda each month.

The Director of Nursing and Midwifery Services continues to promote and teach this tool to all new nursing and midwifery staff and in addition the topic appears on the Professional Development Education Day (mandated annual attendance) for all nursing and midwifery staff, as a refresher and sharing session to discuss issues and benefits of this tool.

Results of all patient related incidents are examined each month by the Executive, Nursing and Midwifery Executive and the Clinical Council and discussion held in relation to the impact of Hourly Rounding.

EQuIP Principle 3: Continuous Improvement
Hourly Rounding has been incorporated into the Nursing and Midwifery Orientation Program each month, it has also been incorporated into the Mandatory In-service a policy was developed and a competency for nursing and midwifery staff to attend, which is a mandated one off competency.

Ongoing review of patient stories and data from Patient Experience Trackers will occur next month and results will be provided back to staff.

Staff are accountable for completing Hourly Rounding by signing off completion each hour on a log, which provides relatives a visible assurance of the frequency and standard of care provided and allow managers a quick view to gain insight in to the management of patient activity in each area of the ward or unit.

EQuIP Principle 4: Evidence of Outcomes
Staff satisfaction has improved through increased efficiency of delivered care, and nursing staff walking reduced by up to 2kms per shift and staff stating a greater control of their work flow throughout the shift, working proactively rather than reactively. Feedback from patients has demonstrated a greater level of satisfaction, with better standards of communication across all shifts regarding personal needs and expected treatments.

Monthly reviews of IIM’s continue and demonstrate an improvement in falls rates by 15% over the past 12 months.

The Pressure Ulcer Point Prevalence Survey indicates improvement with Canterbury best performing facility in the Sydney Local Health District with an overall point prevalence reduction of 40%, placing us well below national average, and a 30% reduction in hospital acquired point prevalence.

There has been no demonstrable improvement noted in patient complaints, as it was difficult to categorise the complaints into types of communication, however numbers of compliments have increased by 10% over the past twelve months, following implementation of Hourly Rounding.

An audit if call bells revealed a 40% reduction of calls over the course of an eight hour shift.

EQuIP Principle 5: Striving for Best Practice
It was and remains Canterbury’s aim to be the best performing metropolitan hospital in terms of pressure injury rates per 1000 bed days, falls rates per 1000 bed days, patient satisfaction rates, improved patient outcomes and overall reduced length of stay.

Evidential studies from the Studer Group Inc. suggested that implementation of hourly rounds incorporating specific actions could reduce the frequency of call bell usage, increase patient satisfaction with nursing care, and therefore reduce patient complaints, reduce falls, pressure ulcers and medication errors.

This process is a proactive one. Answering buzzers and taking care of a patient after a fall is “reactive”. Intentional rounding allows staff to plan care and manage tasks, thereby reducing overall risk.

Innovation in Practice and Process
This system challenges the existing model of care utilised in most nursing and midwifery areas which is reactive rather than proactive care provision. Patients are better informed and involved in decision making regarding their care, patient and carer / family confidence in the standards of care is markedly improved. Staff accountability is
maintained through the completion of the rounding log tool, which is a visible assurance to families of the provision of care.

Applicability to Other Settings
This tool can be applied to all acute and non-acute care settings, paediatric and maternity units. It has an inbuilt flexibility to adapt the 5Ps to individual units, making the tool more applicable to each clinical setting. It is therefore considered a highly transferable tool across the district.

There has been significant interest in our project expressed by other facilities both within and outside of the Sydney Local Health District. Presentations by the DONMS of Canterbury have been given to all DONMS of SLHD, the Executive of Maitland Hospital who visited Canterbury to discuss barriers they were experiencing with implementation of this tool and most recently the Nursing Unit Management and Clinical Nurse Educator staff of St George Hospital.

This tool has shown all nursing and midwifery staff that improving patient satisfaction, will additionally improve their satisfaction. Staff turnover in the nursing and midwifery division remains very low at Canterbury, and there has been minimal industrial activity within the facility since commencement of this program.
Clinical Excellence and Patient Safety

BRIDGING THE PATIENT SPECIMEN LABELLING GAP USING POSITIVE PATIENT IDENTIFICATION FOR BLOOD COLLECTION

Pathology
Alfred Health
Melbourne VIC

Joe Agostino  Hans Schneider  Danielle Tessier

Aim
To eliminate wrong blood in tube collection errors by Alfred Pathology Collectors.

Abstract
Pathology testing plays a central role in the diagnosis, monitoring and management of illness. While it is obvious that doing the right test, on the right patient, is critical to the effectiveness of safe treatment and outcomes for patients, it is a manual process with many demonstrated points of failure. Wrong blood in tube (WBIT) is a known issue in many pathology laboratories, classified when the paperwork and specimen label are for one patient, but the actual blood tube contents belong to a completely different patient. This can have catastrophic consequences in certain clinical situations and is commonly attributed to using pre-printed specimen labels and/or not labelling collection tubes at the bedside. The Alfred Pathology Service (APS) selected a point of care specimen identification and labelling module in 2011, known as the Cerner Bridge Specimen Collection Module (Bridge), that directly addresses the patient identification and specimen labelling issue and helps automate the receipt of hundreds of ward collected samples, relieving the load on pathology specimen reception. The Bridge software module allows the download of electronic orders to the pathology collectors at the bedside. Bridge, together with barcode reading PDA’S, portable printers, and the wireless infrastructure within the hospital, allows positive patient identification to be made, by scanning the patient’s unique wristband, matching the orders and printing tube labels at the point of collection. This system has eliminated wrong blood in tube collection errors by Alfred Pathology Collectors.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The objectives of the project included to achieve patient-centric care by Eliminating WBIT’s and improving patient confidence and outcomes and reducing the inefficiencies in the specimen collection and reception workflow.

The real cost to the patients impacted by WBIT incidents who receive delayed or wrong treatment can be far reaching, including severe adverse outcomes, and in some circumstances patient death.

EQuIP Principle 2: Effective Leadership
A cross-discipline project team was formed consisting of the Executive sponsor, IT Executive, Project Manager, Pathology, IT, Health Information services and Cerner team with strong representation of those most affected by the workflow change: the APS collectors. The APS collectors were identified as critical to the success of the project as they were most affected by the workflow change, so there was a strong emphasis on change management, support and training.
**EQuIP Principle 3: Continuous Improvement**

Alfred Pathology Service had been looking to upgrade their laboratory information management system (LIMS) for some time and during the research and tender process, the benefits of the Bridge system became apparent. The hospital had a responsibility to ensure that the most basic of processes in patient care, the labelling of their specimens. The initial scope of the project was to target the WBIT incidents collected by APS staff, followed by improving the efficiency of specimen receipt and processing. Requirements of the project included:

- a re-design of the patient wristband to include a new barcode (UR Number),
- roll out of a new waterproof wristband sleeve to improve barcode scanning,
- investment in mobile devices: PDA’s and printers,
- optimising the wireless network to improve connectivity,
- change management and training of 20 Alfred Phlebotomy staff in use of the devices,
- change management and training of Pathology Central Reception staff.

**EQuIP Principle 4: Evidence of Outcomes**

The Alfred had a WBIT incidence of 58 in the 19 month period prior to project implementation (Jan 2011 – July 2012). 10 of these incidents were attributed to errors made by APS staff. This 17% ratio was considered to be unacceptably high, given that there was a zero tolerance for WBIT. This group was responsible for collecting 10-20% of all patient specimens.

The project took 6 months to implement and is currently used to collect 200-300 collections per day. As a result of the Bridge solution, Phlebotomy collection rounds commence at least 10 minutes earlier each day and there is no requirement to print large collection lists if the Bridge application is operational. The Central specimen reception process is more streamlined with collection data directly populating through the interface, allowing specimens to reach the laboratories in a shorter timeframe. There have been zero WBIT incidents in the 10 months since Go-Live, when Bridge is used as intended, with barcode scanning of the patient wristband unique ID.

**EQuIP Principle 5: Striving for Best Practice**

The Bridge specimen collection project has been fully implemented since 24th August 2012 for collection rounds at the Alfred site, with more than 95% of samples being collected using the system most days. The success of the project is being regularly monitored through specimen labeling and WBIT incidents and regular engagement with APS collection staff.

**Innovation in Practice and Process**

Bridge is a cutting-edge solution, the only one of its kind in Australia and one of a handful implemented in the world. While there have been multi-million dollar investments in e-health projects across Australia, nothing else has been achieved to date to address the most basic, fundamental process in the patient journey - the labeling of the patient specimens.

The project was pursued because of the clear benefits it offered, particularly in terms of patient safety and it is a testament to the collaboration and goodwill that can be fostered through a united vision of providing safe, high quality care.

**Applicability to Other Settings**

Project success has also been shared with the Health Information Society of Australia and has recently won the “Don Walker award for effectiveness”. The benefits realised to date have also been shared with other hospital sites so they can similarly invest in technology that provides their patients with the confidence that they will not be adversely affected by delayed or wrong treatment.
THE MALABAR COMMUNITY MIDWIFERY LINK SERVICE: THE MALABAR MIDWIVES

Royal Hospital For Women
Randwick NSW

Shea CAPLICE

Aim
The Malabar Midwives Service aims to address inequities in health outcomes for Aboriginal and Torres Strait Islander peoples by providing safe, collaborative, accessible and culturally appropriate care during pregnancy, birth, newborn and early childhood period.

Abstract
The Malabar Midwives service commenced in November 2006 and is a community-based, holistic, multidisciplinary service for Aboriginal and Torres Strait Islander families. The central tenet of the service is providing Midwifery continuity of care for women throughout pregnancy, birth and afterwards. Midwives, an Aboriginal Health Education Officer, a Child and Family Health Nurse, a Social Worker and an Aboriginal Admin Assistant work in partnership with each other and the local community to provide an individualised, accessible and culturally appropriate service.

The service fosters community participation with a focus on Aboriginal and Torres Strait islander families. Aboriginal health workers who already have an identity in their community are pivotal to the process of engagement with the service at a community level.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Malabar Midwives service developed in response to a consumer focus group. Community Elders were members of the development committee. Ongoing community involvement maintained.

EQuIP Principle 2: Effective Leadership
Malabar Midwives service leads the way with an innovative team approach to the care of Aboriginal and Torres Strait Islander families during pregnancy, labour, birth and afterwards. The service models cultural awareness and multidisciplinary collaboration both within the institution and externally.

EQuIP Principle 3: Continuous Improvement
Involving local people in developing services is critical to continue to improve cultural appropriateness and build trust. The original key performance indicators continue to be improved upon and the service has substantially enhanced care provision through the team’s holistic approach. Through reflective practice and collaboration the team continually strive for improvement and are committed to the core belief that it is about ‘so much more than just having a baby’.

EQuIP Principle 4: Evidence of Outcomes
The service has had a significant impact on the Aboriginal and Torres Strait Islander community who would otherwise receive maternity care through the Royal Hospital for Women outpatients meeting numerous caregivers
throughout their pregnancy. Positive feedback has been received from the community and satisfaction is evident in the number of women that return to the service with subsequent babies and health care consults. Particular reference is made to the provision of known caregivers and the benefit of “not having to tell the story over and over again”.

Homer, C.S.E., et al., ‘It’s more than just having a baby’ women’s experiences of a maternity service for Australian Aboriginal and Torres Strait Islander families. Midwifery (2011), doi:10.1016/j.midw.2011.06.004.

**EQuIP Principle 5: Striving for Best Practice**

All staff are highly qualified, committed and professional with the same core group working in the service for the past 6 years. Ongoing professional development is maintained at a high level.

**Innovation in Practice and Process**

The Malabar Midwives model of care is a first for NSW in Aboriginal Maternal and Infant Health care. In addition the service utilises a number of innovative strategies to enhance care.

**Applicability to Other Settings**

Utilisation of this midwifery model closely linked with relevant disciplines has produced a primary health model of maternity care for Aboriginal and Torres Strait Islander families that provides a template for maternity service development in other area health services. This midwifery led model of care could benefit many maternity care facilities accessed by Aboriginal and Torres Strait Islander people and go a long way towards “Closing the Gap”. In addition the service is often held as a “gold standard” in Aboriginal Maternal and Infant Health care and is asked to share the model both statewide and nationally at relevant conferences.
Aim
The aim of the CHSALHN BloodMove Project is to provide guidance to all CHSA Regional, Rural and Remote sites to facilitate blood inventory management, wastage minimisation and improvement of the safety and quality of blood and blood product administration.

Abstract
The Country Health South Australia Local Health Network (CHSALHN) BloodMove Project is a collaborative program to facilitate best practice in blood management throughout regional South Australia. BloodMove oversees 60 regional hospitals that are supplied with blood and blood products by both regional and metropolitan transfusion services.

BloodMove is supported by the Blood, Organ and Tissue Programs (BOT) section of the SA Department for Health and Ageing and was implemented to minimise blood wastage through improvements to cold chain systems and inventory practices. Focus has been on the following:

1. Reducing the level of blood product wastage in country areas through a particular focus on inventory management, return and reissue of product through the supply chain, and supporting systems for tracking and quality measurement.
2. Link into aspects of the SA BloodSafe program with the aim of improving the safety, quality and efficiency of blood and blood product usage through audits, education, guidelines and interventions to improve clinical practice and haemovigilance.
3. Provide state-wide clinical leadership on blood related matters, including the provision of advice to the Department for Health and Ageing.

In October 2008, BloodMove was commenced with the appointment of a Level 3 Nurse Management Facilitator. Since May 2011 the BloodMove team members has expanded through the continued support of SA Health BOT Programs and County Health SALHN.

Currently the Blood Move team consists of a Level 3 Nurse Management Facilitator, Level 3 Medical Scientist and 10 Cluster Level 2 Clinical Nurses which are further supported at each site through the nomination of a BloodSafe Site Contact Nurse. This role is the resource on site for staff in relation to blood and blood products and ensures that sites action in accordance with correct CHSALHN policies and procedures through education, updating of resources and implementation of changes when required.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Blood is a precious resource that is freely donated by the generosity of volunteers, to the Australian community. While blood is provided without charge to South Australian Hospitals and patients, it is not free to produce. The cost
of blood and blood products in South Australia is substantial. All CHSALHN staff have an obligation to donors, patients and the wider community to ensure safe and appropriate transfusion practice while minimising unnecessary wastage of blood products and the healthcare budget. This obligation is in line with the Australian Health Ministers’ Conference (AHMC) Blood Stewardship Statement.

While blood transfusion can save and improve lives, it has limitations and risks, and the decision to transfuse must be made with great care. The transfusion process, from donor to recipient, involves 60 or more human interactions. With each interaction there is the potential for disastrous consequences. Critical steps in the transfusion process include:

- transportation and storage of blood and blood products
- timely availability of blood products in an emergency
- decision to transfuse and dosage prescribed
- transfusion specimen collection and labelling
- bedside checking procedure and monitoring of the patient.

**EQuIP Principle 2: Effective Leadership**

BloodMove is managed and facilitated by a Project Team which consists of:

- Medical Scientist Lead
- Nurse Management Facilitator Lead
- Regional Cluster BloodSafe Clinical Nurses (x10)
- Site Blood Contact Nurses (each site)

The Regional Cluster BloodSafe Clinical Nurses looks after a regional group comprising between five (5) and eight (8) hospitals. Their role is to assist sites to manage blood related issues which include assisting sites with:

- conducting audits
- education
- management of any adverse events
- ensuring sites have adequate resources
- reporting to regional committees
- assist with accreditation preparation
- development of localised procedures as required.

To assist with a standardised approach this team meets on a bimonthly basis via teleconferencing after the CHSALHN Transfusion Committee Meeting and reports to the CHSALHN Transfusion Committee.

This is further supported at each site through a Site Blood Contact Nurse; their role is to ensure site compliance with blood related policies and procedures, assisting with audits, investigating and management of reported adverse events and promotion to staff of participation in BloodSafe eLearning. This process is overseen by the BloodMove Leads at a State level.

BloodMove reports to the CHSALHN Transfusion Committee (TC) which meets bimonthly and consists of representation from Regional and Metropolitan Medical, Nursing, Transfusion Service Providers, the Blood Service and SA Health.

The CHSALHN TC has the fundamental role of ensuring safe practice and optimal health outcomes for patients receiving blood or blood products in all country South Australia local health sites by facilitating guidelines and practices for the quality and appropriate use of blood products, including Patient Blood Management (PBM) strategies and monitoring of usage and wastage of blood and blood products. The CHSALHN TC standing agenda items were developed to ensure compliance with EQuIP 1.5.5 and the National Safety and Quality Health Service Standards. This committee reports its outcomes and progress to CHSALHN Clinical Cabinet.

**EQuIP Principle 3: Continuous Improvement**

BloodMove is continually assessing and striving for improvement and has established:

- an effective communication network
- ongoing education and training
- appropriate cold chain security processes
- a sense of stewardship and ownership of blood-related processes.
Communication is ongoing between the BloodMove Team, hospitals and laboratories. In turn, a supportive network is now available that stakeholders can “tap into” – this supports blood management issues. This is particularly important, as BloodMove covers numerous sites across the wider rural and remote regions of SA that are supplied by various transfusion laboratories.

Since the implementation of BloodMove:
- existing communication channels have been enhanced and nurtured
- additional communication channels have been established (e.g. communication between pathology laboratories and nominated site contact nurses)
- BloodMove leads have visited sites to provide guidance, training and ongoing support to regional CHSA staff
- BloodSafe clinical nurses meet via teleconference bimonthly; facilitating discussion on blood management
- BloodMove leads provide guidance and support to “hub and spoke” stakeholders; to ensure best practice in blood cold chain management thus minimising waste.

At times there have been challenges with the BloodMove processes; these minor challenges have been resolved because of the established communication channels and continuous support offered by the BloodMove Team.

A key role of the BloodMove Team is to offer education, training and guidance on:
- accreditation and compliance with applicable standards and guidelines
- correct storage, transportation and handling of blood
- correct completion of all documentation
- emphasising the need to report blood management incidents into the SA Health Safety Learning System (SLS) patient incident database
- administration of blood and blood products to patients.

Nurturing blood stewardship and respecting this valuable donated product.

This is an ongoing process that is standardised across all hospitals in accordance with best practice.

BloodMove ensures that storage, transport and traceability for blood are undertaken in accordance with current standards, guidelines and criteria.

Compliance ensures that supplying laboratories are able to accept blood units back into their inventory for use before expiry. If there is a breach of compliance this is addressed and investigated by the laboratory, site and BloodMove Team.

Existing blood shippers and commonly used packing configuration were validated by BloodMove. Part of this validation involved examination of existing courier systems to identify possible temperature challenges during transport. It was found that the current shipper and transport system utilised was acceptable. BloodMove established that when accompanied with onsite shipper packing education the transportation of blood throughout regional SA would be assured.

To assist with the above processes forms, procedures and standard operating processes have been developed. Audit tools have also been developed and conducted to ensure compliance with correct processes. Once audit results and recommendations have been made this is followed up with the sites. Some examples of audit tools currently being used are:
- Red Blood Cell Audit
- Blood Fridge Maintenance Record Audit
- Blood Register Audit.

It has been noted that, since these audits have been conducted through BloodMove, a larger number of red cells have been audited, results have improved regarding the administration of blood, notably consent, and results can be benchmarked between sites, regions and against metropolitan data.

Evidence-based procedures have and continue to be developed to assist sites with best practice management of blood related issues.

Emergency blood management is also a key focus of the CHSALHN TC. As a standing agenda item, stock holdings are assessed for each site and changes have been made in accordance with local needs after a thorough risk assessment. This has resulted in the development of a state wide map that identifies emergency stock holdings to all
stakeholders.

To further address the PBM Module One the CHSALHN TC has convened a Critical Bleeding Subcommittee whose key focus was to assist in the development of a critical bleeding guideline in accordance with the PBM strategies.

**EQuIP Principle 4: Evidence of Outcomes**

A result of this continuous improvement has been a cultural change across regional SA on important issues such as administration of blood products, blood-related costs, inventory management and minimising avoidable blood wastage.

BloodMove has assessed sites to ensure that current guidelines, forms and policies are in place at each site. To establish what each site had in place initially, an extensive EQuIP5 Criterion 1.5.5 gap analysis was conducted at all 60 sites. Prior to the project, many sites were utilising outdated forms, resources, policies and procedures.

Significant cultural change has been brought about by the education provided by BloodMove site visits detailing the sense of blood stewardship and ownership in their duties whilst the blood is in their possession and the safety of product administration to the patient. CHSALHN hospital staff and transfusion laboratory staff now are mindful of correct process and blood wastage. Staff will now question and attempt to resolve any causes of potential and actual waste, whereas in the past such wastage was accepted as unavoidable.

BloodMove has become part of normal accepted practice at sites across country South Australia. A recent highlight for the BloodMove Team and for all stakeholders was that there was only one (1) blood unit being wasted in the whole of regional SA in February 2013 and 2 units in March 2013. The Team now investigates any wastage incidents to see if anything can be initiated to prevent waste occurring in the future. Wastage of blood in CHSALHN which was once considered unavoidable is now deemed unacceptable.

BloodMove also identified the need to upgrade / replace existing blood refrigerator assets in regional SA through an extensive blood fridge survey which was completed by all sites holding a blood fridge. This initiated an active focused replacement program and has resulted in 12 new blood fridges being purchased for CHSALHN sites. A database has also been established which assists the Transfusion Committee with identifying sites requiring replacement in the future and is a standing agenda item for the CHSALHN TC.

**EQuIP Principle 5: Striving for Best Practice**

BloodMove has determined the need to implement a standardised approach throughout CHSALHN hospitals that align with state and national guidelines and strategies but have the capacity to take in local site requirements.

In 2012, Standard 7 of the National Safety and Quality Health Service Standards further directed BloodMove and has resulted in the development of tools to assist sites to comply with this Standard.

**Innovation in Practice and Process**

BloodMove has striven to be innovative, flexible, inclusive and approachable in the implementation of the project with all stakeholders. Participation from all stakeholders has been welcomed with key personnel from these stakeholders represented on the CHSALHN TC.

Feedback and suggestions for improvement across rural and remote sites have been actively sought and implemented by the BloodMove Team.

**Applicability to Other Settings**

BloodMove is continuously assessing new systems and processes and developing evidence based procedures to further improve on administration of blood and blood products, blood wastage minimisation, cold chain security and inventory practices.

Following the success of BloodMove in regional SA, it is now being expanded to incorporate the private hospital sector within metropolitan Adelaide. The next phase of BloodMove will address “hub to hub” blood inventory management between metropolitan public and private transfusion laboratories.

The success of the BloodMove Project in CHSALHN has resulted in the National Blood Authority (NBA) promoting BloodMove on their website as a national best practice module to assist other jurisdictions and health services with achieving blood wastage minimisation as specified in the National Safety and Quality Standard 7 Blood and Blood Products and the National Blood and Blood Product Wastage Reduction Strategy 2013–17 (NBA 2013). Included in this is a flow chart to assist other jurisdictions to implement their own BloodMove program.
BloodMove Team Leaders have also been invited to present regarding their success regarding reduction of blood and blood product wastage at the recent Transfusion Update 2013 Conference and the National Blood Authority Standard 7 Symposium, 27th September 2013.

References


Aim
The Clinical Deteriorating Patient Project (CDPP) aims to improve patient outcomes in all Country Health SA Local Health Network acute care hospitals through the implementation of a framework that facilitates the early recognition, timely review and appropriate medical management of clinically deteriorating patients.

Abstract
The Country Health SA Local Health Network (CHSALHN) oversees the provision of public health care to over 94,000 health consumers in rural South Australia. The network covers a vast geographical distance and incorporates 65 hospitals which provide acute care services to more than 175,000 people presenting annually at country emergency departments.

The challenge of the Clinical Deteriorating Patient Project (CDPP) was to communicate and engage with local stakeholders despite the barriers of distance and diversity. To achieve success, the CDPP had to utilise standardised tools and uniform processes, but allow for a variety of local services. This could only be achieved through the involvement and support across South Australia of General Practitioners (GPs), Directors of Nursing and Midwifery (DON/M), visiting specialists and hospital staff.

A successful education and communication strategy was achieved through the innovative use of the clinical nurse role from the 2007 Nurses and Midwives Career Structure Review. When the CDPP commenced in October 2011, CHSALHN was divided into eleven geographical clusters. Each cluster was asked to advertise a clinical nurse position to undertake local responsibility for the CDPP portfolio. The portfolio nurses (Portfolio RN2s) attended monthly meetings with the CDPP Project Nurse and assisted with communication, education and auditing throughout their cluster.

Effective governance of the CDPP was recognised as essential to the success of the project. A policy, procedure and guideline were developed and CHSALHN leaders supported the initiative through:
- identification of a DON/M lead
- membership of nursing, medical and allied health leaders in the CDPP Steering Committee
- monthly reporting of successes and barriers to CHSALHN Clinical Cabinet.

The development of a suite of colour-coded observation charts (based on Human Factor Research) for the identification of clinical deterioration was accomplished in close collaboration with SA Health. The SA Health Rapid Detection and Response Adult Observation Chart (RaDAR chart) was introduced in all CHSALHN hospitals during March and April, 2013. Paediatric and maternal charts have been trialed in both metropolitan and country hospitals and are currently being printed prior to distribution. Individual protocols for the escalation of clinical care have been developed for each CHSALHN hospital with flowcharts individualised to effectively use local resources.

The CDPP Steering Committee considered evaluation of the project to be a priority and, all CHSALHN hospitals were asked to participate in two audits and a survey of hospital systems before processes for recognising and responding
to deterioration were implemented. The pre project audits looked at the documentation of physiological observations by nursing staff, and the medical management of patients who had deteriorated or died unexpectedly in a CHSALHN hospital. Similar audits were completed during the first three months of the project roll-out, and the results were compared. An ongoing auditing schedule was developed to evaluate and continuously improve deteriorating patient systems at both a local and organisational level across CHSALHN.

The CDPP project engendered tremendous support from clinicians across CHSALHN hospitals and the audit data supplied by sites post project, was in excess of the minimum requested (over 1,230 audit responses received). The results showed significant improvement in patient care across all sites with the documenting of a complete set of observations increased from 59% to 75% and nursing staff evaluating the level of consciousness of their patients as part of routine care.

The CDPP program is still new to CHSALHN hospitals but early results are positive. Patients are being reviewed in a more timely manner and the education around clinical deterioration continues to be of interest to staff. Online tools have been provided for both nurses and doctors and deteriorating patient modules have become a part of mandatory education.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus

The failure to identify and respond to clinical deterioration in a timely manner can have catastrophic consequences for patients, carers and staff in a health service by increasing the rate of mortality and morbidity of patients through serious adverse events such as unexpected death and cardiac arrest. There was evidence that the warning signs of clinical deterioration were not always being identified or acted on appropriately in CHSALHN hospitals due to a variety of organisational and workforce factors including:

- staff not monitoring physiological observations consistently or not understanding observed changes in physiological observations
- a lack of knowledge of signs and symptoms that could signal deterioration
- a lack of formal systems for responding to deterioration
- a lack of skills to manage patients who are deteriorating
- a failure to communicate clinical concerns, especially in handover situations.

The Clinical Deteriorating Patient Project was commenced in October 2011 with the aim of reducing harm and saving lives through the introduction of standardised recognition and response systems. Research indicated that the early identification of deterioration could improve outcomes and lessen the interventions required to stabilise patients. A 2012 survey of hospital systems in CHSALHN (based on a survey developed by the Australian Commission on Safety and Quality in Health Care) helped identify what physiological observations were being routinely monitored in hospitals, what systems existed to identify and respond to deterioration, and what the needs of each hospital were.

The National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration (National Consensus Statement), developed by the Australian Commission on Safety and Quality in Health Care (ACSQHC), was used to develop the deteriorating patient framework. Standard 9 of the National Safety and Quality Health Service Standards provided motivation for clinical staff to become involved in the project and the practical benefits of the improvements gained popular support from hospital managers and staff.

The CDPP project team recognised the need for local input in the designing recognition and response systems in CHSALHN and visits were organised to all 65 hospitals. A template for the design of a site specific flow chart to escalate clinical care was completed and left with each hospital DON/M to finalise after consultation with local GPs and discussion at clinical forums. Education sessions were provided during the visits and site contacts were identified. The Portfolio RN2 nurses were required to attend the education sessions and each nurse was given a copy of the PowerPoint presentation to assist them in providing further deteriorating patient in-services. The COMPASS education package from ACT Health was made available on desktops for staff, and links were provided to the NSW DETECT program. DON/Ms were asked to make deteriorating patient education mandatory for nursing staff and to keep a record of the completion of either the DETECT or COMPASS program. Use of the ISBAR handover tool for clinical communication was emphasised (in line with state agendas).

Overcoming the challenges of distance and diversity were a primary consideration during this project and the site
visits provided an opportunity for the project nurse to become familiar with the way individual sites functioned. Clinical staff were able to become personally involved in the project and feel ownership for local system improvements within the standardised framework of CHSALHN systems. Honest discussion of the project was encouraged and barriers to implementing the recognition and response systems were addressed. Many staff were concerned that the colour-coded observation chart and escalation protocols was not suited to rural Australia where medical cover could be limited to a single GP. Senior staff at each site assisted in designing escalation protocols that were realistic yet allowed for differentiation between a medical emergency and a clinical review.

**EQuIP Principle 2: Effective Leadership**

The need for strong leadership of the CDPP was recognised by CHSALHN and a high level of executive support was provided. The Steering Committee was comprised of medical and nursing leaders and a DON/M lead was identified to provide ongoing support to the Project Nurse and Portfolio RN2s. CHSALHN educators provided assistance with developing on-line training programs and the CHSALHN Clinical Cabinet monitored the progress of the project at monthly meetings. DON/Ms of each site were consulted and up-dated through letters, e-mail, memos and presentations at management forums. GPs were informed of the project through site activities, presentations and letters from CHSALHN.

The CDPP site visits served to both personalise and promote the project. Many CHSALHN staff became both interested and active in designing response systems that were effective in their hospital, and many unit managers became the site contact for their service. The Portfolio RN2s provided regular reports and presentations at clusters meetings and oversaw ongoing education and auditing.

Effective leadership and a comprehensive communication strategy resulted in positive anticipation towards the roll-out of the CDPP project with multiple sites volunteering to trial the SA Health RaDAR charts. Introduction of the adult chart was successfully completed across all hospitals in March/April 2013 and initial auditing has shown that the recognition and response systems implemented are significantly improving patient care: monitoring plans are being documented for 87% of patients, observations are being taken more appropriately and 75% of patients are being medically reviewed by GPs within an hour of escalation being triggered on their chart.

There is currently ongoing enthusiasm for the additional charts being introduced into CHSALHN and considerable interest in the plans for patient / family escalation. Many individual staff members have contributed to the project with the Diabetic Outreach nurses assisting with the development of a BGL chart, midwives supplying expertise for the ante- and post-natal additional charts and emergency department nurses developing a medical emergency form.

**EQuIP Principle 3: Continuous Improvement**

The CDPP Steering Committee recognised that for the project to succeed, individual hospitals needed to be able to assess and monitor their own systems. The RN2 Portfolio nurses were encouraged to develop and maintain a gap analysis for their cluster so that site improvements could reflect local needs and appropriate systems could be introduced. The initial survey and audit results were analysed at a CHSALHN level, but hospitals were also provided with individual results charted against CHSALHN averages. Post project audit results were similarly collated at a site and network level.

This has allowed hospitals to tailor their education and systems to their own needs and resources within the broader CHSALHN framework. The escalation protocols developed for each site were based on a standardised template and adhered to uniform criteria, but hospitals were encouraged to adapt the template to reflect local resources, and to own the resulting protocol so that changes to services could be included.

The ability for hospitals to both own and monitor their deteriorating patient system has enabled them to continuously identify areas for improvement, and the CDPP program has encouraged a sharing of ideas and solutions. The need for additional charts was identified by several hospital managers in response to patient incidents, an escalation sticker was developed by one of the RN2 Portfolio nurses for use across CHSALHN, and other innovations and experiences have been discussed at CDPP meetings. Evaluation criteria for the project have been developed at a CHSALHN level, and although specific audits and reports are required, hospitals are also encouraged to develop their own key performance indicators and to continue improving their services in response to feedback.

**EQuIP Principle 4: Evidence of Outcomes**

Over the past eighteen months, CHSALHN has worked closely with SA Health to ensure that the system improvements implemented in rural hospitals meet the essential criteria in National Safety and Quality Health...
Clinical Excellence and Patient Safety

Service Standard 9 as well as being consistent with state wide service delivery changes. The following actions have been undertaken.

Systems and tools:
A variety of standardised tools and systems have been developed for CHSALHN acute care facilities. These include:
- a state-wide Rapid Detection and Response Adult Observation Chart introduced across all acute facilities in March/April 2013; the chart follows the guiding principles set out by the ACSQHC and the Human Factors Research Team (Queensland University)
- a suite of paediatric and maternity charts (trialed in collaboration with SA Health, but not yet available to all sites)
- escalation response flowcharts (individualised for each site and developed in consultation with DON/M’s)
- a procedure for the escalation of care (currently being updated to be in-line with the new SA Health Policy Directive and Guideline)
- a standardised fluid balance chart (currently being trialed)
- a standardised Medical Emergency Response record (currently being trialed)
- a suite of standardised additional observations charts to be used in conjunction with the state wide observation charts (trial to commence August 2013)
- an instruction detailing the minimum standard for vital signs monitoring across CHSALHN; circulated and available on the CHSALHN intranet.

Education:
- SA Health is developing a state wide education framework. Until the framework is available, the CNMER online education site has a CHSALHN Deteriorating Patient page which is mandatory to complete for all nursing staff.
- Training in the use of the observation and escalation flow charts occurred across all CHSALHN regions with the Portfolio RN2 position implementing a train-the-trainer model of education.
- Deteriorating Patient education modules are available on the “Learn EM” education site for clinical staff. Negotiations are underway for the modules to become mandatory for medical staff and to be part of the Rural Emergency Skills Program (RESP).

Evaluation:
- Audit tools have been developed and utilised to capture pre- and post-implementation data.
- Key Performance Indicators have been identified for ongoing monitoring of systems.
- Deteriorating patient-specific incident reporting will soon be available via the SLS patient incident reporting system (request being managed by SA Health).

These achievements will be followed by the roll out of SA Health paediatric and maternity observation charts in late 2013. A process for patient and family escalation has been proposed but still needs to be implemented in CHSALHN services.

Audit Results:
The taking of vital signs is a crucial component of patient assessment that is often incompletely or inconsistently performed by nursing staff (Hogan, J, 2006). However, the regular monitoring of a patients’ physiological state must be achieved if early identification of the deteriorating patient is to be accomplished.

A complete set of observations (as specified by the hospital) was documented only 59% of the time prior to the Clinical Deteriorating Patient Project. Post project audit results indicated this level had increased to 79% in a randomly selected group of patients.

The level of consciousness (LOC) or sedation score, which research indicates is an early indicator of deterioration (Buist et al. 2004), was rarely documented in CHSALHN hospitals before the RaDAR chart roll-out. The recording of this observation improved from 17% to 64%.

The retrospective case note audit of patients who deteriorated or died in CHSALHN hospitals prior to the CDPP indicated that the frequency of observations was increased when deterioration was documented 64% of the time. This figure did not significantly change with the project (60.8%).

The CDPP implemented protocols to escalate clinical care. Prior to the project, 54% of patients who deteriorated had
care escalated within half an hour of the deterioration being documented. Post project, 72% of patients had care escalated immediately and the appropriate review occurred within the time frame specified in the protocol.

Prior to the project, many sites had no formal rapid response system. After implementation of the CDPP, 64.5% of patients who met medical emergency criteria were escalated appropriately.

**EQuP Principle 5: Striving for Best Practice**
The CDPP Steering Committee determined that CHSALHN hospitals needed to implement standardised processes that aligned with state and national initiatives but had the capacity to be tailored to the resources available at each site. The National Consensus Statement provided a national framework for the design of recognition and response systems and the CDPP project was initially based on the principles outlined in the document.

In 2012, the criteria in Standard 9 of the National Safety and Quality Health Service Standards further directed the CDPP framework being implemented. SA Health began developing a suite of observation charts and representatives from CHSALHN were members of the education, observation chart and policy sub groups.

Before designing recognition and response systems for CHSALHN, a comprehensive evaluation of processes was undertaken (see attachment Summary of Findings). Input from clinical experts was sought regularly throughout the process and ongoing evaluation was initiated.

The CDPP linked with other programs in Australia and used education resources from such programs as *Between the Flags* (NSW) and COMPASS (ACT) to train staff. The ACSQH also provided support and advice, and the Project Nurse continues to work closely with the Safety and Quality Unit, SA Health.

**Innovation in Practice and Process**
The CDPP has strived to be innovative, flexible and inclusive throughout the design, implementation and evaluation of the project. Participation from clinicians has been welcomed and feedback actively sought. With no budget for education, an effective train-the-trainer program was developed and implemented across all sites. Negotiations with the creator of the “Learn EM” on-line education site (a site providing an emergency skills program utilised by many country GPs) resulted in the development of deteriorating patient modules which were made mandatory for all CHSALHN medical staff. The ACT COMPASS program provided a free electronic copy of their education manual (with all reference to MEWS removed) for CHSALHN clinicians to use. Auditing across CHSALHN was achieved through the development of an Excel tool and use of Survey Monkey. Individual sites were responsible for identifying deteriorating patients and a variety of techniques were used. SA Health assisted with the development and formatting of additional charts.

**Applicability to Other Settings**
The CDPP program provides a flexible framework to assist with early recognition and response to clinical deterioration. Any health service in which a patient’s physiological observations are regularly escalated immediately and the appropriate review occurred within the time frame specified in the protocol.

The CDPP linked with other programs in Australia and used education resources from such programs as *Between the Flags* (NSW) and COMPASS (ACT) to train staff. The ACSQH also provided support and advice, and the Project Nurse continues to work closely with the Safety and Quality Unit, SA Health.

**Applicability to Other Settings**
The CDPP program provides a flexible framework to assist with early recognition and response to clinical deterioration. Any health service in which a patient’s physiological observations are regularly taken can utilise the colour-coded RaDAR observation charts. Escalation of care flowcharts can be adapted to reflect the needs and available resources of individual hospitals and should remain a living document reflecting changing services. Medical emergency response teams should be defined in all health services to ensure that skilled clinicians are always available when needed. The ISBAR handover tool is an easily adaptable process that supports communication between individuals, teams and services.

Education is of paramount importance to this program, but as has been demonstrated in the CDPP project, there are many freely available resources which have already been developed. Commitment and innovation can augment limited resources to achieve effective outcomes.

Evaluation is also a key requirement for this deteriorating patient project and relevant evaluation criteria are available on the ACSQHC’s website. Audit tools such as Excel and Survey Monkey are easy to use and inexpensive.

**References**


Clinical Excellence and Patient Safety

10.1016/j.resuscitation.2009.12.008


Hogan J. Why don’t nurses monitor the respiratory rates of patients? Br J Nurs 2006; 15: 489-492.


Aim
To reduce clinical risk and increase patient satisfaction at Epworth HealthCare, through a group wide approach to improving in call bell responsiveness.

Abstract
Epworth Healthcare (EHC) is the largest not-for-profit private healthcare Group in Melbourne, Australia. We have eight hospitals in the Melbourne metropolitan area, including Epworth Richmond, Epworth Eastern, Epworth Freemasons, Epworth Cliveden, Epworth Hawthorn and Epworth Rehabilitation at Richmond, Brighton and Camberwell. We provide services from acute to rehabilitation. There are 4800 plus employees, 200 volunteers and 2000 visiting medical officers. In 2012/2013 there were in excess of 61,500 inpatient admissions.

Over the last 2 years, EHC has made a commitment to improving patient care and safety. One specific project undertaken has been to ensure all inpatients’ needs are attended to in a timely manner with an organisation-wide approach to improving call bell responsiveness. It has been acknowledged that patient clinical risk would be reduced and patient satisfaction increased with timely responses to call bells. A target of 90% of call bells being responded to within 3 minutes was set. A commitment to increasing staff responsiveness to call bells focused on patient focused care, hourly rounding, leadership accountability, an investment in technology, and staff awareness. Twelve months ago, 82.9% of patient call bells were answered within 3 minutes. In July 2013 in 90.3% of all patient call bells were attended to within 3 minutes. There still remains an absolute commitment to eliminating call bell responses greater than 5 minutes. Initially 7.5% percent of call bells within the group exceeded five minutes response time. This has now decreased to 2.8%

The large scale nature of this project was ambitious, but is in line with EHC’s desire to deliver excellence in patient care, and to build a highly engaged workforce where staff and doctors can be their best and give their best. The project addresses the five principles of EQUIP.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Patients requiring care within a healthcare facility have expectations around the quality of care they will receive. Their care needs centre on technical care in relation to their disease or illness, interpersonal care that supports them during their admission, and on the amenities of care.

The direct benefit to patient care of improving call bell responsiveness is an improvement in patient safety. A patient who experiences an adverse event or clinical deterioration, and is not attended to within 5 minutes, can have significantly poor clinical outcomes. Some examples include patients who experience chest pain, those who have a fall, or those who are bleeding post operatively. Delays in responsiveness can increase the likelihood of patient falls in the high falls risk patient group.
Clinical Excellence and Patient Safety

Call bell responsiveness is also one way patients assess nursing care and make a judgment around the quality of that care. There is a minimum expectation by patients that their care needs will be attended to in a timely manner. Poor responsiveness can inadvertently send the message that the patients’ needs are not forefront in the staff’s mind, and that the patients’ needs are not the priority of those staff caring for them.

EHC enlists Press Ganey to conduct patient surveys to assess the patient’s perception of care. Survey results have shown an overall improvement in patient perception regarding their care, as well as specific improvements in patient perception relating to promptness of call bell responses.

Along with seeking feedback from patients through an external service provider, EHC also utilises a system called leader rounding to elicit patient feedback and verify care. Leader rounding is a verification process that involves each patient in the organisation having a visit from a manager every twenty four hours. It involves the manager discussing aspects of the patient’s care with them, verifying that their clinical needs and their expectations, including call bell responsiveness, are being met. Through this discussion, the manager can gauge how satisfied the patient is with their level of care. Leader rounding compliance is expected to be at 100% and is measured monthly.

**EQuIP Principle 2: Effective Leadership**

In 2009 EHC embarked on a cultural change initiative called ‘Epworth Excellence’ to take the organisation “from good to excellent”. Epworth Excellence is a way of doing business, it ensures service is delivered with care and compassion, provides outstanding development opportunities for our people and a feeling of pride and purpose in what we do. Excellence Everywhere Everyday is the driving commitment of Epworth Healthcare.

Epworth Excellence has a number of interrelated components, including:
- creating a focus on patient safety and satisfaction
- providing optimal clinical outcomes
- becoming a leading employer of choice
- developing our leaders
- instilling a model of accountability in all staff.

Call bell responsiveness is one focus of the Epworth Excellence element, patient safety and satisfaction. Strong leadership is an important part of the organisational commitment behind the achievement of improvements in responsiveness. Call bell responsiveness has been prioritised high within the accountability framework. It is a KPI of the Executive CEO, (reporting to the board), each divisional Executive, and every Nurse Unit Manager at every site. Call bell responsiveness is part of the group and each division’s operational plans. The Board requires a monthly report from the CEO on outcomes and achievements. Call bell responsiveness is included in all dashboards. Each manager has monthly accountability meetings, covering call bell responsiveness amongst their KPI’s. It is this accountability framework that EHC believes will help ensure the sustainability of the call bell responsiveness improvement.

Group call bell meetings have and continue to occur, chaired by the Executive CEO, where all divisional executives attend to share results, initiatives and strategies. This has assisted all divisions to leverage off the successes of each other, and has also allowed some healthy competition to drive results.

Workforce engagement has been essential in driving the improvement in call bell responsiveness. It has been recognised that a whole of organisational response is required to ensure we remain responsive to patients’ needs. The first step in engaging the whole workforce was to raise staff awareness of the issue, to inform them of our performance, and to provide them with daily / monthly feedback regarding improvements in performance. Communication strategies included handover, newsletters, and unit meetings. Staff within the healthcare sector generally are committed to improving patient outcomes, so it has not been difficult to inspire and motivate the workforce to commit to this project.

Unit level staff have been integral in developing strategies to both prevent call bells and to increase responsiveness. Some of the innovative and creative strategies that were initiated include preemptive rounding prior to breaks, peer to peer accountability, revising workflows, enlisting assistance of ward clerks, PSA’s and other non-clinical staff. Education was required for non-clinical staff to assist address their fear of being confronted with clinical issues raised by patients, and to provide them with appropriate responses and patient communication strategies.
EQuP Principle 3: Continuous Improvement
Hospitals are busy areas, with challenges presenting to staff continuously that can affect their ability to respond promptly to their patients. Whilst directly increasing clinical risk and decreasing patient satisfaction, the numbers of call bells per patient also provide challenges to staff, namely:

- using nursing time, decreasing ability to provide all aspects of planned care; and
- distraction (which can lead to increased errors, i.e. medication).

A key area addressed in the project was to identify reasons why the patients needed to call for assistance in the first place, and to institute strategies to preempt or decrease the patient need to ask for assistance. During the project, a number of audits were conducted to identify why patients were calling for assistance.

Hourly rounding has been implemented at all Epworth Hospitals. It involves an hourly assessment of all patients by the bedside nurse, utilising a consistent framework of assessments / questions around position, pain, pan (fluid balance needs), proximity of items, reassurance, response and treatment. The internal audits used in various departments supported that the majority of reasons a patient needed to call could be preempted by the hourly rounding behaviors. Hourly rounding enables nursing staff to preempt patient’s needs, to engage patients in their care and interventions, hence increasing patient safety and satisfaction. The resulting reduction in call bells also allows more nursing time released for patient care. The ward audits showed that the majority of calls could be preempted by improving skills and embedding rounding behaviors of nursing staff.

It was recognised across the organisation that staff were not ignoring call bells out of will or lack of patient-focused care, rather legitimate activities would impede staff from answering call bells promptly. There has been a direct observation, though, that with increased focus on call bells and the desire to answer them promptly; this has increased responding to call bells as a high priority amongst nursing tasks, increasing the importance placed on call bells requiring nursing staff attention. With the reduction in call bells, and the assistance of whole of hospital, those call bells requiring a nurse’s attention are seen as important patient needs requiring nursing intervention / assistance.

Daily reporting and analysis of results enabled staff to identify who was calling, who was caring for those patients, and to then look for ways to reduce the calls in future. Daily reporting identified call bells by time and by bed, along with response time. The staff in the units looked for ways to improve responsiveness. They looked to remove some of the barriers to call bell responsiveness or to develop strategies to reduce implications (i.e. staffing, emergencies, and multiple needs of patients). A key strategy, as mentioned, did involve the whole of organisation response from all staff (clinical and non-clinical).

EQuP Principle 4: Evidence of Outcomes
EHC worked in partnership with the two call bell system companies who had systems within Epworth HealthCare. A reporting system was established with them. This enabled a real time measurement of the average number calls per day, responsiveness within 3 minutes, and responsiveness within 5 minutes. Some call bell systems could not be adapted to allow reporting. In some areas it was unknown how long it took to respond to a call bell due to the lack of ability to capture data. EHC invested significantly in those areas by upgrading or in some cases replacing call bell systems. Reporting capacity allowed for various data ranges: hourly, by nursing shift, per twenty-four hour day, weekly, monthly, rolling 12 month etc. The data could be analysed at a bed level, ward, division or across the whole group. Automated reporting systems were created to provide timely data via outlook to a large number of staff throughout the organisation.

EQuP Principle 5: Striving for Best Practice
Call bell responsiveness is a measure of performance and of patient satisfaction. Literature searches shows a number of reports that have been able to demonstrate, that like EHC, improvement in call bell responsiveness, reduces clinical risk and increases satisfaction. Press Ganey provides patient satisfaction surveys that provide benchmarking data in relation to patient satisfaction. EHC is at the 99 percentile for organisations of its size in relation to call bell responsiveness.

The internal benchmarking, the sharing of learnings and results within a large group, has enabled EHC to drive this improvement change. EHC benchmark with a number of organisations throughout Australia and hope to benchmark call bell responsiveness with these organisations. The adoption of an organisation wide approach, the use of rigorous
measurement systems to drive performance and the accountability framework employed by EHC are examples of an organisation striving for best practice in this area.

**Innovation in Practice and Process**
The application and development of processes to incorporate technology into the improvement plan for call bell responsiveness has been significant. Pager and phone systems carried by bedside nurses have enhanced the ability of call bells to be heard at all times. Call bell tones were periodically changed to prevent inadvertent complacency with call bell tones or sounds (similar to alarm fatigue). Enunciator panels were all changed to include elapsed time as a visual prompt. This is one of the significant initiatives that enhanced whole hospital awareness and saw a 5% increase in overall responsiveness at every site whereby this initiative was introduced.

Protocols were established around call bell responsiveness. An escalation protocol was introduced group wide which involved bedside nurses being alerted to initial call, in charge staff receiving a phone text at two minutes thirty, Nurse Managers, ADON’s and Directors of Clinical Services receiving escalation phone texts at four minutes thirty. This allowed immediate assistance to be offered to both the ward staff and the patients in a timely manner.

Investment in technology, along with the heightened staff awareness is the two factors that EHC believe will allow results to be sustainable.

**Applicability to Other Settings**
The commitment to call improving call bell responsiveness at EHC has involved significant investment of time, effort, technology and finance. We believe the patient outcomes warrant the investment. Within the organisation we have taken learnings and strategies to units within the group that have shown the same replication in positive results. An example is the elapsed time function on the enunciator panels. In March 2013 one division saw an increase of greater than 5% attributed to this strategy. The same functionality was introduced to another division in July 2013, with the same immediate 5% improvement in responsiveness. There are a number of new wards and units being built within the group and the same strategies and technologies regarding patient responsiveness will be adopted within these units. Other organisations could implement similar strategies and realise the same improvement in patient safety and satisfaction.

EHC will still strive to improve outcomes in this area, looking for further reduction in adverse clinical outcomes and increase in patient perception.
Aim
In accordance with SafeQuest at Mater Health Services the aim was to improve patient safety by standardising services and promoting effective teamwork and communication. Additionally, the focus was to increase hospital efficiency and to improve staff and VMO (Visiting Medical Officers) satisfaction in the Operating Theatre complex at Mater Private Hospital Brisbane.

Abstract
Methodology: This quality improvement project was conducted to identify the barriers to patient flow in the operating theatres. Manager rounding and anecdotal feedback from staff and VMO’s identified inefficiencies in wait times for patient transport, difficulty locating orderlies, inequitable workloads, large numbers of call bells and ongoing complaints received by staff and VMO’s.

Outcomes: A root cause analysis was conducted including: a) observation audits of theatre orderly role; b) a review of the theatre orderlies work schedules; c) reporting of daily theatre call bell data; d) staff satisfaction survey e) a review of the theatre orderly rosters.

The theatre orderly model of service was reviewed and redesigned. Peak times in activity were used to reengineer theatre orderlies’ rosters to meet the requirements of the busy theatre complex.

The approach was a complex wide implementation strategy including a multidisciplinary team “Huddle” which was introduced for improved communication between Nursing Staff, VMO’s and Theatre Orderlies. Staff surveys were also conducted prior to and after the implementation, with an increase in staff and VMO satisfaction in the complex.

The outcomes of this project included a 92% reduction in the number of call bells in the theatre complex post implementation which continues to reduce each month. This is largely due to the theatre orderly being available for each theatre rather than having to ring the call bell for assistance.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
Patients, staff and VMO’s were considered the consumers throughout this project. An observational study was conducted to investigate patient flow in theatres and the correlation with the existing theatre orderly model.

Pre- and post-job satisfaction surveys were conducted of theatre orderlies. A retrospective survey was conducted throughout the theatre complex of nursing staff, VMO’s and theatre orderlies.
Clinical Excellence and Patient Safety

**EQuIP Principle 2: Effective Leadership**
As part of Mater Health Services’ SafeQuest key priorities, patient safety is underpinned by effective teamwork and communication, accountability and leadership, and the standardisation of services, amongst other things.

A clearly defined leadership model with an accountability framework gave rise to engaged senior staff who actively participated in the project.

The project identified early that its success relied on the participation of all staff, particularly the senior Theatre Orderlies, Nurse Manager and senior Nursing Staff, Service Improvement Unit and the Mater Private Hospital Executive, and as such a working group was formed.

**EQuIP Principle 3: Continuous Improvement**
The quality improvement project was conducted over a twelve month period.

It was identified that there was a need for:
- a satisfaction survey of Operating Theatre Orderlies
- an observational study of the theatre orderly work flow
- review of the number of call bells in the theatre complex
- post-implementation satisfaction survey of theatre staff.

**EQuIP Principle 4: Evidence of Outcomes**
Since the introduction of the quality initiative in November 2012, there has been an overwhelming decline in the number of theatre call bells. The total number of call bells for the month of October 2012, was 4585, post implementation the number of call bells for July 2013 were 28 which is a 99% reduction.

A multidisciplinary Consumer Feedback Survey was conducted in July 2013 with 52% of staff believing that the new service model is a more efficient mode of service delivery. 70% of Theatre Orderlies said that ‘Theatre staff worked better as a team under the new model of service’.

**EQuIP Principle 5: Striving for Best Practice**
As part of the SafeQuest key priorities at Mater Health Services, the Operating Theatres Service Improvement project highlighted the need to have a standardised and coordinated approach work schedules to improve the flow of patients throughout the theatre complex. The introduction of a multidisciplinary team “Huddle” at the commencement of each shift advocated effective teamwork and communication, and ensured clearly defined expectations of staff, resulting in the project’s outcomes.

**Innovation in Practice and Process**
Second hourly rounding was introduced in the theatre complex. The Head Orderly rounds on each theatre second hourly and the theatre CNC rounds on the opposite hour to discuss any requirements, extra or emergency cases, issues with skill mix, and a review of the orderly duties list.

“The Huddle” – is a multidisciplinary communication tool used in a busy environment to set the scene for the upcoming shift. In this short discussion, new cases, emergencies, changes to theatre lists and any issues arising in the theatre complex are discussed at each shift change.

**Applicability to Other Settings**
This project and its findings are not new ideas – however they do highlight the real results that can be obtained from a standardised approach to the way we do business. Accountability and leadership is essential to hardwiring any new initiative. Key stakeholders must be involved in the planning of any project, and clear communication and teamwork essential in the success of any implementation. This quality improvement project can be utilised in any number of work areas in the healthcare industry.
Aim
To reduce missed immunisation opportunities for children staying as inpatients in Ward 1 Wellington Hospital (Paediatric ward – under 5’s).

Abstract
Earlier this year the initiative was agreed upon with the stakeholders (internally and externally) and then there was a three month data capture phase to track the immunisation status of children coming into Ward 1 (previously Ward 19) as inpatients. From this data phase it was identified that 27% were contraindicated to have immunisations, 23% were able to be vaccinated and 50% were discharged without the opportunity to be fully immunised.

Following the data capture phase it was agreed that specific changes were to be implemented and these were tested and improvements made. These changes were related to increasing staff knowledge regarding immunisations, availability and charting of vaccinations.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
It was assessed through parent interaction and subsequent staff feedback that the parents did not want to be delayed going home by waiting to have the vaccinations.

EQuIP Principle 2: Effective Leadership
The Children’s Health Service as a whole has the support of senior management in focusing on continued service improvement in the aim of Wellington Children’s Hospital being the regional centre of excellence. Each nurse who is championing the immunisation cause has personally received a Certificate of Appreciation from the Director of Nursing, and a gift card as a token of appreciation for their contribution to immunisation coverage.

EQuIP Principle 3: Continuous Improvement
The Immunisation Facilitator ensured that she worked with the Charge Nurse Manager of the Ward and that she was engaged in this initiative and could see how her staff and the patients would benefit. This was fully supported by the medical team as part of the services focus on continued service improvement.

EQuIP Principle 4: Evidence of Outcomes
Through the education sessions it became apparent that the nurses lacked confidence and knowledge regarding the National Immunisation Schedule and they themselves were not clear or confident when addressing parental concerns. As a result, five nurse champions were identified and they continue to drive and champion inpatient immunisations.

Initially having access to the full schedule of vaccines within the department pharmaceutical fridge was problematic,
with some waits of over 1 hour for the vaccines to arrive on ward. This was addressed with the allocated Paediatric Pharmacists and subsequently a full range of scheduled vaccines is now available every day within the department fridge.

The charting of vaccinations was not always completed and sometimes delayed discharge (key consumer concern). The RMO Co-ordinator completed an immunisation education update for all new paediatric rotations. The Immunisation Facilitator gave the medical team information about the National Schedule and the data from the National Immunisation Register (NIR) are now available prior to ward rounds, readily identifying children due or overdue immunisation events and required charting.

**EQuIP Principle 5: Striving for Best Practice**

A quick reference laminated card which details the National Schedule and Adverse Events following Immunisation management plan was developed. This attaches to the RMO’s lanyards and is readily accessible. This was gratefully received as RMO’s admitted to not being familiar enough with the schedule in order to chart confidently, and pharmacy also found this card helpful.

The plan is to focus on Ward 2 (Children over 5) and Ambulatory Paediatrics. The service has submitted to the ACHS Clinical Indicators for Paediatrics 4.1 (1.1 and 1.2) for the first time this year (data include NICU and Ward1) to benchmark practice.
IDENTIFICATION AND HEALTH PROMOTION FOR RISK OF DEVELOPING DIABETES AND CARDIOVASCULAR DISEASE: THE “KNOW YOUR NUMBERS” PROJECT

Pre Admission Centre
St Vincent’s Private Hospital
Sydney NSW

Eilish Hoy

Aim
To provide health promotion on diabetes and cardiovascular diseases and to identify patients who are at risk of developing the disease.

Abstract
Diabetes mellitus is a chronic condition characterized by elevated blood glucose levels that occurs as a result of impaired insulin production or secretion. Approximately 1 million Australians have been diagnosed with diabetes and by the year 2025, 3 million Australians over the age of 25yrs will have diabetes. The United Kingdom had 2.6 million diabetics in 2010 of whom 85-95% were type 2 diabetics. The American Diabetes Association report (2011) that 18.8 million people have been diagnosed with diabetes and believe that another seven million have the disease but have not yet been diagnosed. The number of type 2 diabetics worldwide is expected to reach 435 million by 2030 according to the International Diabetes Federation Diabetes Atlas (2012 5th Edition). With one Australian diagnosed with diabetes every five minutes and with a 2-4 chance of the risk of developing cardiovascular, peripheral vascular disease and stroke this small project undertaken within the Pre Admission Centre at St. Vincent’s Private Hospital Sydney (SVPHS) aims to provide health promotion on these diseases to our patients and identify those who were about to have elective surgery and could be at risk of developing the disease.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
All patients who attend for a pre admission appointment and are over the age of 40 have a risk assessment for diabetes attended using the Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK). If the patient is of Aboriginal or Torres Strait Islander descent the risk assessment is attended over the age of 35 years. If a patient has any cardiac history an electrocardiograph is taken and all patients have their vital signs checked including a blood pressure check this is included in the cardiovascular risk assessment and if the patient achieves an AUSDRISK score of 12 or more they are provided with a referral to visit their General Practitioner (GP) for further investigations which would include a fasting blood glucose level. Obesity is a major contributor to the development of type 2 diabetes with estimates showing that eliminating obesity from the population could have the potential to reduce the incidence of type 2 diabetes by over 40%. Education regarding diet and lifestyle change is provided at the Pre Admission appointment.

EQuIP Principle 2: Effective Leadership
The Australian Council on Healthcare Standards in their visit to the facility in 2011 recommended that an improvement in how health promotion was provided for our patients be implemented. This project was then undertaken beginning with a search for current evidence which shows the increase in type 2 diabetes and cardiovascular disease which has impacted on health services worldwide. The total annual cost to Australians with
type 2 diabetes is up to $6 billion including health care costs, the cost of carers and Commonwealth government subsidies. The average annual healthcare cost per person with diabetes is $4,025 if there are no complications. According to the Atrial Fibrillation Association in Australia the cost of treating and managing stroke is nearly $25,000 AUD in the first year alone along with ongoing costs in the following years. With this in mind the Nursing Unit Manager contacted the Stroke Foundation as it was noted that health promotion was carried out in pharmacies but had never taken place in the hospital Pre Admission Centre. Patients are also educated regarding healthy diet and lifestyle changes which assist in the prevention of diabetes. The Pre Admission Centre has educated and referred 6% of patients risk assessed in 2012 for further investigation. Our local project while small in scale makes a significant contribution to this important global health problem.

**EQuP Principle 3: Continuous Improvement**

According to the International Diabetes Federation (IDF), type 2 diabetes can be prevented in many cases by maintaining a healthy weight and being physically active this is reiterated by the Baker IDI Heart and Diabetes Institute. Studies in China, Finland and the United States have also confirmed this. The International Diabetes Federation recommends that all people at risk of developing type 2 diabetes be identified by opportunistic screening which can now take place in the Pre Admission Centre. At risk patients i.e. those who have a blood pressure above 140/90mmhg and or a diabetic risk of 12 or more are referred to their General Practitioner for further investigation.

**EQuP Principle 4: Evidence of Outcomes**

The total number of patients risk assessed in 2012 was 4246 of which 279 were referred to their General Practitioner for further investigation. Therefore 6% of patients were at risk of developing type 2 diabetes or cardiovascular disease. In the six months of 2013 15% of patients assessed have been referred to their GP for further investigations. In an evaluation undertaken in June and July of 2013 25.8% of respondents who were surveyed were risk assessed with 3.2% already diagnosed as diabetics and 50% 4.8% of respondents who were referred to their GP actually did comply. All patients were given information regarding how and what they could do to reduce these risks.

**EQuP Principle 5: Striving for Best Practice**

Cardiovascular disease is the most common cause of death in diabetics (Tapp *et al.*, (2004) and reiterated by Hilaire and Woods (2013). Hypertension has been seen in 70% of people with known or undiagnosed diabetes and in 43%-53% of those with pre-diabetes. Patients are provided with information booklets provided by “Know Your Numbers” with 3 easy to follow steps. The “Know Your Numbers” project is an initiative of the National Stroke Foundation. The program aims to increase awareness of the risk of stroke, cardiovascular disease and type 2 diabetes in the community. Further information for the patient, family and friends is also made available via various websites.

**Innovation in Practice and Process**

Health promotion had not been undertaken in the Pre Admission Centre in documented form until Aug 2011 when we commenced using the diabetic risk assessment tool alone. We wished to further this study by including cardiovascular risk assessment due to the close link between the diseases. The Pre Admission Centre staff contacted The National Stroke Foundation as they had in place the “Know Your Numbers” project. This project would normally be undertaken by pharmacies within New South Wales twice yearly over a period of one week.

**Applicability to Other Settings**

This project can be rolled out with minimal financial outlay throughout hospitals in Australia and around the world. In the prevention of diabetes, educators and registered nurses have an important role in helping people to understand the risks involved and to set some goals to improve health.
Aim
The aim of this initiative was to improve the identification and non-medical management of paediatric patients at risk of anaphylaxis due to food allergies, therefore optimising their outcomes and experiences at Monash Health.

Abstract
In recent years, Monash Health Children’s wards have been challenged by an increasing need to ensure that paediatric patients with food allergies are not put at risk while in hospital. There has also been a growing incidence of parents of children with food allergies raising concerns about the potential risks and the availability of an appropriate diet.

Monash Health responded to this need for person-centred care by establishing a multi-disciplinary food allergy working party to review processes for identifying and managing paediatric patients at risk of anaphylaxis due to food allergies and identify strategies to reduce risk.

The strategies implemented as a result of the work of this group have led to a reduction in the number of food allergy related incidents, increased confidence among parents that Monash Children’s can provide appropriate food for their children, and greater awareness among staff members of patients with food allergies and how we can better care for these patients.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
According to the Australasian Society of Clinical Allergy and Immunology, food allergy is estimated to occur in 3-5% of children and 10% of infants. Eggs, milk, peanuts, tree nuts, sesame, soy, fish, crustaceans and wheat account for the >90% of food allergic reactions.

In 2011, Monash Children’s was challenged by the ingestion of fish by a child with a known fish allergy which led to anaphylaxis. Serious concerns were also raised by a parent of a child with multiple food allergies in regard to the identification of their child with a food allergy and the availability of an appropriate diet.

In addition, there were approximately 17 near misses involving children receiving food they were allergic to or children not being correctly identified as having a food allergy. Most of these occurred in the paediatric wards across Monash Health.
In recognition of the need to better meet consumers’ needs, and in alignment with Monash Health’s Patient Centred Care priority, a working party was established involving representatives from the three areas most critical to ensuring the delivery of appropriate food to paediatric patients: Monash Children’s wards, the Monash Health Central Production Kitchen and the site food service departments.

**EQuIP Principle 2: Effective Leadership**
A multidisciplinary food allergy working group – which included a parent of a child with anaphylaxis, an Allergy and Anaphylaxis Australia representative, allergists, a food service manager, dietician, quality and risk representatives and paediatric nursing ward and Emergency Department staff – ably led both a comprehensive review of food allergy incidents and an identification process of areas of risk from presentation at the Emergency Department through to admission to the ward.

These included identification of children with a food allergy, food provided in the Emergency Department and wards, food allergy knowledge and food allowed in on-site playrooms.

Risk reduction strategies were developed, including:
- completion of an allergy identification checklist by nursing staff on admission,
- above bed signage,
- practice changes such as banning food in play areas,
- a food allergy procedure to apply from the emergency department to ward admission; and
- a food allergy menu.

Dieticians and the Central Production Kitchen collaborated to develop an appropriate food allergy menu. This was done by developing a number of individually packed complete meals and by modifying some dishes from the existing menu to remove both major allergens and traces of allergens. Suitable ingredients were also sourced for each of dish and overall menu.

Control measures were also established to prevent cross contamination and produce a safe product. These included:
- obtaining specification lists from suppliers / producers for all ingredients,
- informing suppliers of the food allergy menu and the importance of avoiding cross contamination and of notifying the Central Production Kitchen of changes to ingredient specifications; this led to suppliers individually wrapping ingredients for these dishes,
- storing ingredients used for producing the meals separately,
- providing detailed information for each recipe, including the ingredient brand,
- using new ingredient packs to produce the dishes,
- preparing allergen free meals outside normal production hours; and
- testing of each dish by Food Laboratories (Aust.) to detect the presence of major allergens.

Throughout the process, advice was sought from the food allergy working group regarding dish suitability for children, food labelling, presentation and taste. To complement the food allergy menu, suitable mid-meals snacks were also developed.

The rollout of the food allergy procedure and menu was supported by an extensive education program for volunteers, nursing and food service staff.

**EQuIP Principle 3: Continuous Improvement**
The introduction of the food allergy procedure and food allergy menu represents excellence in healthcare through our:
- commitment to address areas of clinical risk and acknowledge feedback from our patients and families in relation to food allergies; and
- engagement with our patients and families to develop procedures to manage food allergies to ensure optimal outcomes and meet the nutritional needs of our patient population.

The introduction of the food allergy procedure and menu has led to an improvement in the identification of patients with a food allergy and the ability to provide tasty nutritious meals, 24 hours a day, for those with one or more food allergies.

The introduction of the risk reduction strategies provides parents of children with food allergies with confidence that Monash Children’s can identify children with one or more food allergies and provides them with appropriate meals.
Reviews of food allergy incidences and compliance with the food allergy procedures are carried out every six months.

**EQuIP Principle 4: Evidence of Outcomes**

The work undertaken by the food allergy working party has led to three key outcomes:

1. Implementation of food allergy procedures which follow the patient’s journey.
2. Development of a food allergy menu and meals which cater for children with allergies to one or more of the nine major allergens.
3. Heightened awareness and understanding of food allergies and their incidence; non-medical management of food allergies and the provision of ‘safe’ food.

The risk reduction strategies introduced have also led to a reduction in the number of food allergy related incidents from 19 in 2011 to 5 in 2012.

Food allergy procedure compliance audits conducted six months after implementation also showed a significant improvement.

Furthermore, this initiative provides parents of children with a food allergy with confidence that Monash Health can provide an appropriate meal for their child.

**EQuIP Principle 5: Striving for Best Practice**

This initiative was rolled out across Monash Children’s in September 2012 and was extended, in March 2013, across adult bed-based services. Throughout the process to develop and implement the food allergy menu, a number of barriers were overcome including sourcing suitable ingredients, obtaining specifications from suppliers, Central Production Kitchen process development, food trialling, developing food labels and meeting the cost of allergen testing.

The Central Production Kitchen and dieticians are continuing to develop additional dishes for the menu to meet our diverse patient population (e.g. vegetarian).

Through Anaphylaxis Australia, other organisations such as school camps have expressed interest in obtaining the allergy free meals, which are also now being made available to Eastern and Peninsula Health.

**Innovation in Practice and Process**

This innovative initiative was born from the desire of our front line staff to respond to the needs of our patients and their families; to provide exceptional care to a high risk patient population and to maximise the goal of achieving outstanding outcomes for our patients. The food allergy working group thought ‘outside the box’ and worked diligently to achieve an improved process that has resulted in increased awareness and compliance with the newly developed practices and procedure, both in adult and paediatric bed-based services. It has resulted in the formulation of a fabulous food allergy menu, with new, clearer labeling.

**Applicability to Other Settings**

As a credit to the food allergy working group this innovative initiative has successfully expanded from the initial paediatric bed-based service to include adult services. Furthermore, multiple organisations external to Monash Health have expresses interest in obtaining the allergy-free meals.
Aim
To develop a comprehensive, integrated and streamlined online application to capture and collate all clinical placement data, through an intuitive and efficient operational user interface for all stakeholders within our clinical placement process.

Abstract
“...Australia is likely to experience limitations in the delivery of high quality health services as a consequence of: workforce shortages...” HWA (Health Workforce 2025) 2012.

HWA examined Australia’s long-term workforce projections for doctors, nurses and midwives. The findings in their study suggest a shortage of up to 109,000 nursing positions by 2025 unless measures are implemented to increase the supply of these skilled workers.

A key objective of HWA’s Work Plan in response to this predicted shortage is building placement capacity for the clinical training of health professional students. This includes increases in both quantity and quality of clinical placements.

Concurrent to HWA compiling their report, Mater Health Services undertook a nine month review of the business processes and tools used to manage and coordinate student clinical placements across their multi-hospital, multi-campus sites in Queensland. This review found:

- management and administration of student clinical placements required a high level of manual processing and administration
- only limited technology, such as a variety of individually created spreadsheets and database systems, were used to support and administer student clinical placements, resulting in little or no transparency, especially between health disciplines.
- manual data retrieval processes that were labour-intensive and produced poor quality data were used when information was needed for business planning and funding submissions.

The key recommendation of this review was to implement a user friendly, intuitive tool that would reduce the need for manual processing and accurately record all relevant student placement information for easy retrieval when required.

When MHS went to market they found that there were no available solutions that significantly reduced manual processing by key healthcare staff. The decision was made to internally develop a solution that takes advantage of the “bottom-up information system” and allows organisational capacity for clinical placements to be maximised.

Non Clinical Service Delivery Submissions – Highly Commended

STUDENT PLACEMENT ONLINE TOOL - SPOT
Mater Education
Mater Health Services
Raymond Terrace QLD

Troy Forster Caron White
through metrics, scenario planning and analysis.

The development of SPOT – Student Placement Online Tool commenced with an internal process review of how clinical placements were administered and what data was necessary to collect for reporting and maximizing capacity, from the “bottom-up”.

**Bottom-up Information System:**
It was identified that providing student clinical placements is a complex and multifaceted process. It can involve multiple stakeholders, including educational institution faculty and administrators, clinical supervisors and healthcare service managers, clinical placement coordinators, professional and regulatory bodies, government entities and, of course, students.

SPOT has been designed with this complex bottom-up system in mind, where each stakeholder involved in the process adds their own component of information, which builds up to show the complete picture. This is different to a top-down approach in which a central clinical placement coordinator or office seeks out and enters information into a system which then filters out to the various stakeholders.

We’ve found that a bottom-up structure allows each stakeholder to accurately record their ‘piece of the puzzle’, while simultaneously accessing pertinent information entered by others. This sharing of information also acts as a verification of accuracy, as multiple sets of eyes review each entry.

**Dashboard Design:**
These processes were then converted into a series of “user dashboards”, a mock-up of a single computer application screen that intuitively supports the user to perform their actions specified in the overall process.

Bottom-up information systems rely on many individual users all interacting and sharing, contributing their own sets of data. Therefore the most important design element in these systems is the user interface, or dashboard, for each user.

SPOT’s dashboards display the most relevant and important details to the user in an intuitive and easily accessible way. They allow simple decisions to be made without switching screens and if more information is needed, they guide the user to where that information is.

Each user type has a dashboard specifically designed for their needs. This means the look, feel and functionality of two dashboards may be completely different, even though they might be presenting similar information.

For example, the Manager Dashboard and Facilitator Dashboard look and function differently in SPOT, even though both display students and their booked shifts. This is because clinical managers and team leaders interact with students very differently to facilitators, lecturers and tutors.

This dashboard design approach has allowed each individual, no matter their role, to become more than just a number on a spreadsheet. And because the individual pieces of information are accessed by users as part of their daily operations, any missing or inaccurate data quickly gets identified and corrected.

All interactions happen in real time over the internet:
- students can view available shifts, book in for shifts and view written feedback from their supervisors
- clinical staff can see their student load, assign supervisors to students and see each student’s details and photograph
- education provider staff can access all of the shifts their student has completed and booked, track their student’s progress and read feedback
- supervisors assigned to a student for any shifts can mark attendance, write feedback about the shift and get access to any important learning documents for the student they need
- placement staff can access all of this information as part of the overall data set of clinical placements.

This instant, interconnected information allows immediate, informed decisions, creates engaged, empowered users and provides more complete and accurate information that can then be collated and presented according to any number of parameters.

Having completed a basic level of functionality with the assistance of an external software development company in late 2011, SPOT was implemented across all Nursing student placements at the Mater South Brisbane campus in Semester 1 of 2012. This was followed by implementations of Midwifery in Semester 2 2012 at South Brisbane and
Non-Clinical Service Delivery

Redlands, and by Medicine and Allied Health disciplines in Semester 1 2013.

Maximising Current Capacity:
With SPOT we can now understand where our current capacity levels are and where to find efficiencies. SPOT does this in two ways, visualisation and simulation.

We integrated the data visualisation tool Tableau into SPOT, which allows any captured data to be presented in an easy to read, interactive visualisation. For example, we’re able to immediately see a graphical representation of individual area usage compared to capacity, which can make it obvious where there is under and over utilization of clinical placements. This has translated into more efficient placement decisions.

Going further than this is SPOT’s Placement Simulation module. We can now enter scenarios based around numbers and disciplines of students, their required hours and their availability to attend shifts. The advanced analytical engine will then run the simulation to determine an optimal allocation of students to areas in a matter of minutes.

This simulation can then be used to place the students accurately. It can also be used to drive decisions on how many placement positions to open to education partners and even inform reviews of current placement models, be they distributed or block.

After only twelve months of use and data collection, SPOT was able to show that current placement models led to a usage of fewer than 20% of total capacity at Mater Health Services. This was despite a common perception that we were at full capacity. Using this information in combination with Placement Simulation scenarios, MHS has been able to provide a substantial increase in student numbers for their education provider partners.

Outcomes:
Our successful development and implementation of SPOT has resulted in three major outcomes for our business:
1. We have complete visibility of our day to day student clinical placement activity across our campuses. We know in one click who is on campus today, where they are, who their supervisor is and what their learning requirements are.
2. We have an easily accessible data history that can be used in decision making and provided to internal and external stakeholders.
3. Our clinical placement stakeholders are more engaged in student education and empowered to take action. We know that in 2012 SPOT connected:
   o 820 students and
   o 74 education provider staff from
   o 12 Tertiary Education providers with
   o 2168 student supervisors and
   o 141 clinical managers and
   o 5 Directors and
   o 1 Clinical Placement Coordinator
4. The quality of the student experience has increased through the provision of easily accessible written two-way feedback between them and their supervisors, and the increase in operational efficiency allowing students to focus on the learning.

SPOT has been so successful that Mater Health Services is now making the application available to other Health Care Institutions to manage and record their own student clinical placements.

Application of EQuiP Principles

EQuiP Principle 1: A Consumer / Patient Focus
Health Workforce Australia’s modeling suggests a shortage of up to 109,000 nursing positions by 2025 unless measures are implemented to increase the supply of these skilled workers. This nation-wide shortage will adversely affect patients by lengthening waiting times and, in some cases, making some healthcare services unavailable to some parts of the community.

A key objective of HWA’s Work Plan in response to this predicted shortage is building placement capacity for the clinical training of health professional students.

A focus on this end goal of ensuring consumers and patients have access to adequate and timely health care services
has driven the development and implementation of SPOT. This tool has allowed us to plan on more than doubling the number of Nursing and Midwifery placements we offer over the next 5 years.

This benefit to the consumer will not only be borne out in the next 15 years but is happening now, with improved processes in student allocation and management allowing clinical staff to spend less time organising and more time practicing.

**EQuP Principle 2: Effective Leadership**
Mater has shown leadership by committing to the developing a tool in-house when none existed in the market place. The development of SPOT has created a more vigorous dialogue around clinical placements with partner institutions such as the Queensland Ambulance Service and University of Queensland Health Care implementing SPOT across their organisations. The mapping of the clinical placement process has also increased the dialogue with our own staff and with our partner education providers.

**EQuP Principle 3: Continuous Improvement**
SPOT’s bottom-up design has empowered all levels of staff and stakeholders to provide feedback on both the design of the application and student placement business processes. This feedback, and the ability to respond to it through the visibility provided by SPOT, has led to nine functionality upgrades since initial deployment and to multiple business process improvements.

SPOT has also led to a continuous improvement of our workforce, as the students completing placement with us who are enjoying an improved learning experience are taking up graduate jobs with us. They even bring their SPOT feedback transcript to their job interviews.

**EQuP Principle 4: Evidence of Outcomes**
The evidence of the outcome of increasing student clinical placements has been borne out by the negotiation of increased placement numbers for the next five years with the University of Queensland, School of Nursing and Midwifery and the Australian Catholic University School of Nursing and Midwifery.

Over time we will seek evidence that SPOT is helping to close the gap of the shortage of trained clinical staff forecast by HWA for 2025.

**EQuP Principle 5: Striving for Best Practice**
SPOT has been developed using the same web application technology that powers Facebook and Twitter (Bootstrap). We’ve also learnt from the social media websites in regards to the bottom-up approach, where many users interact and share in order to collate to a big picture.

**Innovation in Practice and Process**
The standard methodology for clinical placements is to implement a top-down, command and control style system of data collection. This gives a high level of control to the data seekers but suffers from lack of input from all other stakeholders. The innovation of SPOT is to incentivise the stakeholders that know the information to enter the information first hand, leading to quicker, more accurate data collection and operational benefits from increased visibility.

**Applicability to Other Settings**
SPOT is designed to encompass a multi-disciplinary, multi-specialty, multi-campus, multi-education provider approach. Our Mater system currently operates across 18 Disciplines, 7 Hospitals and 14 Education Providers, while the Queensland Ambulance Service system operates across a single Discipline (Paramedicine), 17 Local Health Areas and 5 Education Providers.
HOME SAFE

Home Safe Project Team, ICT and Clinical Governance Unit
WA Country Health Service South West
Bunbury WA

Anna Flannery        Peter Watts

Aim
The aim of Home Safe is to reduce the risk to clinical staff by promoting awareness of the risks they might potentially face when working off site, whilst also sharing risk assessment information between health care teams.

Abstract
The South West received a High Priority Recommendation (HPR) in 2010 regarding safety risks for staff working in clients’ homes. Paper-based tools were implemented in early 2011, when evaluated the need was identified for a more reliable solution. The solution being the creation of a web-based program that manages home visit risks and working alone for clinical staff visiting clients within the WA Country Health Service – South West (WACHS-SW). This project was titled ‘Home Safe’. Outcomes include: 100% of clients have a documented risk assessment before a home visit occurs; decreased duplication of clinical details; more efficient use of a single risk assessment across multiple services.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Consultation was required with multiple departments including mental health (identified as having higher risk home visits) through to community health (identified as having more frequent home visits). Shared decision making was promoted so that staff, who would be expected to use the system, were involved in the process. The application was developed with representation from community health, mental health, midwifery and aged care services.

EQuIP Principle 2: Effective Leadership
The development of the application has not only conformed to the required policies and procedures but is easier to use and safer for all clinicians out on the field. The organisation aimed to develop a system that would meet customer needs (our staff) whilst also using available technology and more reliable controls. The other WA Country Health Service regions have expressed interest in the Home Safe program and its potential application across the other six country regions.

EQuIP Principle 3: Continuous Improvement
Risk assessment completion is mandatory before a home visit can occur and completion is monitored. A major benefit from this has been the automatic monthly audit reports recording compliance with the process so the target areas are identified for further enhancement.

Ongoing feedback is received to ensure that the application meets staff and manager expectations. Further
evaluation on the success and continual improvement is scheduled for late 2013.

**EQuIP Principle 4: Evidence of Outcomes**

There is now strong visibility and a cross-reference between client risk and information with checking times. The application also prioritises the list to the next scheduled clinician check in date, as well as colour codes via the standard “traffic light” colours, easily showing any expired visit. There are escalation procedures at each site should a clinician not return in the specified time. There is now a set review date for risk assessments and an alert if the risk assessment has expired. At the time the statistical snapshot was taken and graphs were created there was a total of 3,810 Risk Assessments of clients completed and 7,640 Working Alone Appointments that were monitored, thereby demonstrating the efficient use of a single risk assessment for clients receiving multiple visits by different services.

**EQuIP Principle 5: Striving for Best Practice**

Information Technology reviewed practices in other WA Country Health Service regions to ensure an existing system was not already in place that could be adapted. The application developed by the South West integrates with the open patient administration system (TOPAS) so client details are sourced from that system promoting accuracy and prompts the need to update details if required.

With this application, which has such a broad scope and impacts many different types of clinicians and administration staff with various backgrounds, it was vital to seek a universal understanding on how home visiting and working alone visits were achieved in an effort for this system to be successful and embraced by staff.

**Innovation in Practice and Process**

The intent was always that the risk assessment form and working alone tracker system would not only support various quality assurance and administrative processes but also minimise the risk to the clinicians. The application has achieved this in a simplistic, innovative way thereby improving workplace safety and health performance. During coding the application, change management strategies to design and implement the Home Safe system were also embraced. Ongoing feedback was gained from select ‘testers’ of the application from clinical and clerical staff across departments which was imperative for the success of this application.

**Applicability to Other Settings**

This application has been implemented at 22 sites across the South West region. The database and web application have been created to allow for expansion and to potentially be used across the WA Country Health Services at minimum.

Ensuring staff get home safely, client risk assessments are completed and shared between services means services are delivered safely and the administrative requirements are reduced.
Aim
To control an outbreak of Vancomycin Resistant Enterococci (VRE) by modification to environmental cleaning methods and routines.

Abstract
1. Set up of a cohort ward where patients testing positive to VRE were nursed
2. Introduction of a dedicated Infection Prevention Cleaning Team (IPCT) – providing a rapid cleaning response to new VRE and other multi-resistant organism diagnoses:
   • address outbreaks of infections on wards by performing complete 2-step cleans of entire area / ward as required until the outbreak has passed
   • IPCT performed 644 regular 2-step cleans each month in high risk wards following a specific schedule.
3. Introduction of hydrogen peroxide dry vapour disinfection. From Feb 2012 to Feb 2013 an average of 59 disinfections were performed per month on discharge of patients on transmission-based contact precautions.
4. Outcomes:
   • The Sir Charles Gairdner Hospital strain of VRE was eliminated by January 2012.
   • The number of hospital acquired VRE detections fell from a peak of 37 in August 2011 to less than 4 cases per month since.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
These changes were introduced to prevent patients admitted to Sir Charles Gairdner Hospital contracting hospital-acquired VRE infections.

EQuIP Principle 2: Effective Leadership
From July 2011 to Feb 2012 weekly multi-disciplinary meetings attended by the manager of Cleaning Services, Infection Prevention and Control, Bed Management, Nursing and Medical Executive were instigated to plan and implement strategies to combat the VRE outbreak.

Before each strategy was implemented all relevant staff and stakeholders were informed of all aspects to ensure the implementation run smoothly.
EQuIP Principle 3: Continuous Improvement
A widespread screening policy, monitored by the Infection Prevention and Control Team, was instigated to identify new VRE positive patients. Please see the results below which show a dramatic fall in the number of new cases after the implementation of the strategies in Aug 2011.

EQuIP Principle 4: Evidence of Outcomes
These strategies to prevent and control hospital acquired VRE had a flow on effect of reducing the patient length of stay together with the number of other multi-resistant organism cases. VRE infection is known to increase mortality, length of stay and healthcare costs.

EQuIP Principle 5: Striving for Best Practice
These strategies to prevent and control hospital acquired VRE had a flow on effect of reducing the patient length of stay together with the number of other multi-resistant organism cases. VRE infection is known to increase mortality, length of stay and healthcare costs.

Innovation in Practice and Process
Sir Charles Gairdner Hospital was the first hospital in WA to introduce the use of hydrogen peroxide dry vapour disinfection.

Applicability to Other Settings
The Infection Prevention and Control Team deemed hydrogen peroxide dry vapour disinfection to be effective and as a result its use was considered for all “contact precaution” rooms on patient discharge. Due to noise issues it was introduced as an adjunctive disinfection tool between the hours of 0700 to 2200.

The prophylactic 2-step infectious cleans in high risk wards (haematology / oncology, transplantation, critical care) to help prevent high risk patients contracting hospital acquired VRE and other multi-resistant organism infections has continued. The IPCT performs 644 2-step cleans each month.
IMPROVING MEAL SERVICE FOR ONCOLOGY PATIENTS FOOD SERVICES

Food Services
Austin Health
Melbourne VIC

Vesna Kostovski

Aim
To improve the quality of food for oncology patients by engaging them in the redesign of the food services meal system.

Abstract

Background: Research published in Improving Outcomes with Nutrition in Patients with Cancer has demonstrated that early nutrition intervention is recommended to increase the outcomes and promote improved quality of life in cancer patients. In October 2012 the Food Services Department initiated a ‘redesign’ project on the two Austin Health Oncology wards.

Aim: The aims of the project were to assess the patient’s experience and implement changes to the quality of meal items offered to oncology patients.

Method: In late 2012 and early 2013, face to face interviews with oncology patients and their relative, an oncology dietician and review of patient meal survey responses were performed.

Results: Patients and their relatives identified a need to (a) improve food taste and appearance; (b) to have lighter vegetarian based meals and (c) the option of fresh salads. A redesign of food services in response saw changes to the introduction of a buffet mid-meal system. The buffet service was positively received by patients, relatives and healthcare professionals. To optimise meal choice, oncology patients were able to confirm their orders 3 hours before lunch and 3.5 hours before dinner instead of 24 hours in advance. Patients were pleased and grateful for the opportunity to alter their previous meal orders. Twenty-seven per cent of the interviewed patients expressed interest in organic food. Patients stated that organic food “tastes better” and is “more appealing”. Organic food options are now available.

Conclusion: By engaging with oncology patients at their relative’s a redesign of the meal service at Austin Health has resulted in a more flexible meal delivery system, a greater variety of mid-meal items and more organic food items.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Patients often have a negative perception about hospital food, so expectations are usually compromised from the beginning. Among the other factors, presentation of the food influences their first impressions and may alter the decision to eat or not.

Patients’ meal experiences were evaluated using monthly surveys. The surveys are a snap shot of patient’s satisfaction with the food taste, presentation and meal service delivery. Oncology patients noted dissatisfaction with the taste of some casserole dishes and suggested the need for customised menu according to their needs. Our analysis of the surveys led us to the following conclusion:
In an attempt to improve the meal delivery system interviews were also conducted with oncology patients, their relatives and an oncology dietician. The purpose of the interviews was to understand the patients’ preferences and to probe beneath the surface of survey responses and feedback.

**EQuIP Principle 2: Effective Leadership**

Some patients stated that if they could choose their food just before they eat it, it may increase their meal consumption. A three-hour lead-time allows greater flexibility and individuality of choice, dependent on the medical situation. It also means that patients are less likely to have forgotten what they have ordered making meal management easier.

Mapping the confirmation of the orders we had to take into account the operational and plating processes in the kitchen as well as ward activities. Another consideration was the number of daily interviews our Menu Monitors would need to conduct. Specifically, three interviews for ordering meal choices and three interviews for the buffet mid-meals items. Mindful of patients’ privacy and need to rest and with the aim of establishing an efficient system it was determined that the confirmation of the orders for lunch would be in conjunction with the buffet for Morning Tea. Confirmation of the orders for dinner would be in conjunction with the buffet for Afternoon Tea. Confirmations for lunch would be three hours before lunch service and three and a half hours before the dinner service.

The costing of this additional service included costing of the labour hours of the Menu Monitor. For more accurate costing, we conducted a trial in which we measured the time taken to confirm the orders for patients.

From a basic operational perspective, the 24-hours ordering system is easier to manage but it is less effective because it does not readily meet the needs of the patients. Patients felt that the meal delivery services changes had made a big improvement to meeting their needs.

**EQuIP Principle 3: Continuous Improvement**

Ongoing surveys with oncology patients will be conducted throughout the next 12 months to ensure our food service delivery times and meal based options continue to meet the needs of our oncology patients.

**EQuIP Principle 4: Evidence of Outcomes**

The successes of the review of the sandwiches and salads and the streamlining of the processes offered to oncology patients led to a review of the menu offered to all other patients. Within a few months we were able to review and improve the complete cold larder menu. We went from producing 10 different varieties of sandwiches and 12 different varieties of salads (sandwiches and salads were rotated within the 28-day cycle menu) to producing two high quality - ribbon, variety sandwiches, and two types of salads. As a result of offering the same high quality salads and sandwiches for lunch and dinner meal services we were able to reduce the waste and improve the quality of bread and meat purchased.

The reduction in waste enabled us to fund high quality sandwiches and salads meeting patient needs and expectations within the budgetary constraints affecting the hospital generally and the department specifically.

**EQuIP Principle 5: Striving for Best Practice**

Food eaten at mid-meals can make a significant contribution to the poor eaters. Studies in Australia and overseas have also shown that providing high-energy snacks can improve cancer patient nutritional intakes in a cost-effective manner.

The daily cost of the consumed mid-meal items was estimated at $45.07 or $16,451. No additional allocation of labour hours were required due to redesigning of job duties of the Food Services Assistants We were able to cover the additional 1.5 hours per day required to deliver the buffet system.

In the effort to cover the additional cost we contacted our 52 suppliers and reviewed the contracts. As a result of the new contractual agreements the cost of a loaf of bread was reduced by $0.50. We purchase 34,320 loaves of bread annually and this equates to $17,160 worth of savings.

**Innovation in Practice and Process**

During survivorship patients are often highly interested in diet to optimise their recovery and health. Embracing the organic lifestyle is a way that some patients use to deal with the cancer and increase their chance of survivorship. Therefore consuming organic food while in hospital is important to them. Study published in Business of Dietetics – Hospital Foodservice and Patient Experience: What’s New found that patients who felt in control of their diet reported a higher level of meal satisfaction and consumption.
Research on the nutritional benefits of organic food has been mixed, and there have been no studies examining whether organic produce is better at preventing cancer or recurrence. However, consuming organic food is a patient’s choice that may affect their view of their recovery.

Patients’ perceived control strongly influences patients’ meal consumption (Bélanger and Dubé, 1996; Faulkner, 2001).

27% of the interviewed patients expressed interest in organic food. They stated that the option of organic food on the menu will be beneficial to them as it will meet their nutritional requirements. Further, they were under the impression that the ‘home grown’ or organic food tastes better therefore it may improve their food intake.

To implement organic meal items on the menu, we needed to consider and structure financial, logistical and operational processes, with special consideration on Food Safety Regulations. Organic food is not produced and processed according to commercial Food Safety methods. We needed to ensure we created detailed processes to ensure total compliance. As organic food is not implemented in other hospitals we could not draw on other experiences and lessons. We undertook the following steps in satisfying patient requirements while ensuring the organic food is safe for consumption:

- Organic food is purchased from Food Safety registered suppliers who are complying with the recommended storage and handling of the food.
- We put in place Food Safety practises to control food contamination by analysing the risks and establishing appropriate documentation.
- We conduct extensive microbiological tests of the organic fresh fruit and vegetables. We analysed the results to ensure the control measures are effective.
- We have clearly articulated and documented logistical and operational processes from receiving and production to distribution.

While analysing the Food Safety implications we also had to analyse the financial implications. The costing of the organic items was challenging as the organic food market is not robust and competitive. The estimated annual, additional cost of the organic food is $11,790 or $982 monthly. The Food Services Department has an allocated annual food budget of $1,600,000 therefore the additional cost of introducing organic food choices is 0.69% of the annual food costs. We are very positive the additional costs can be absorbed within the allocated food budget.

The summary of the analysis resulted in implementing the following meal items on the menu:

- Breakfast: muesli, full cream milk, fresh bread rolls, fresh sliced bread, yoghurt and fresh fruit.
- Lunch and Dinner: soup, fresh bread rolls, grilled eggplants pumpkin and capsicums rolls, free range organic scrambled eggs, yoghurt and fresh fruit.
- Morning Tea, Afternoon Tea and Supper: yoghurt, fresh fruit and biscuits.

Organic food items are marked on the menu and will be offered to all oncology patients as an option. The organic food for mid-meals will be placed on the buffet trolley and offered to all patients.

Offering organic food items to patients while in hospital is not common; we believe Austin Health is the first hospital to offer the organic food items on patients menu therefore we were unable to find references of popular and preferred organic foods. This highlights the need for continuous review and reassessment of the popular and preferred organic food items.

Applicability to Other Settings

This project showed that a flexible meal delivery system, variety of mid-meal items and choice of organic food items is important to the needs of oncology patients. The more calories patients with cancer may consume the less likely the incidence of malnutrition will be. Feedback from patients and their relatives has been very positive and we believe that this is positively impacting on the patient’s hospital experience. This project would be applicable to other hospital that service the needs of oncology patients and shows that by redesigning the service to cater for patients needs that it would not require an increase in budget. Future projects should consider using a systematic approach to assessing nutritional status and intake to assess the impact of a flexible system with a bigger variety of meal and mid meal choices including organic items.

Cancer is a disease of the mind, body, and spirit. A proactive and positive spirit will help the cancer patient be a survivor. A positive hospital environment and customised meal service can support patients in their battle.
Aim
To develop an Intake, Information and Intervention Hub providing a simplified, streamlined co-ordination of primary healthcare services, community services and specialised services, increasing earlier identification, intervention and management.

Abstract
The Triple I (Hub), a centralised intake, information and intervention centre commenced in 2012 as one stop shop with skilled case managers taking responsibility working with primary health care practitioners. It has a boundary spanning strategy to ensure service provision is client rather than organisationally driven to ensure that clients do not “fall between the cracks” during transition of service delivery between providers. It has been effective for clients requiring access to primary, aged care and community nursing across our Local Health District (LHD). The healthcare professional, clients and carers provided positive perceptions of all aspects of the service provided by Triple I (Hub), improvement in the provision of access to services, quality of information, quality of service and customer satisfaction.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Triple I (Hub) project has demonstrated that through infrastructure redesign within available capabilities and resources, reducing expenditure via the merging of a number of call centres into centralised single point of contact, reducing duplication and fragmented communication, whilst enhancing an integrated service delivery, increasing productivity and creating a system of easier and more timely access to a comprehensive range of community services. It recognises the needs and expectations of the clients in the management of their care promoting collaboration (Patient as Partners). The project focuses on the principle that the clients are the priority. The overall result is a simplified, streamlined, co-ordinated entry into primary and community services increasing earlier identification, intervention and management. The evaluation of the service was derived from the client and carer perspective. This project potentially provides positive impact towards Goals 11/12, NSW Strategic Plan 2021, in the reduction of preventable hospitalisations and increasing patient satisfaction.

EQuIP Principle 2: Effective Leadership
Prior to integration of the call centres, the planning phase of the project involved a range of stakeholder consultation. Review of other models implemented in other states identified key elements for setting up a model which suited our needs. The project was conducted, involving clear project phases, objectives, end dates and deliverables.

A Triple I (Hub) Executive Management Committee was established. Ongoing consultation with the Chief Executive and Chairperson was undertaken in planning the location of the service and how the structure would meet the
needs of General Practitioners and the wider primary care community.

A detailed key stakeholder communication plan was collaboratively developed to ensure all disciplines were engaged in the development of the service with all necessary linkages for co-ordination, referral information, assessments and treatments encompassed.

The Triple I (Hub) Executive Management Committee continues to provide strong leadership and direction working towards consensus on the short term and long term requirements of the service, continually improving processes and utilisation of emerging technology. Strong organisational and governance structures are in place creating an integrated centre of competency with accountabilities and key performance indicators / standards enabling ongoing informal and formal evaluation of the Triple I (Hub) ensuring all shared standardised protocols, policies and procedures are based on evidence and current best practice. This innovation is creative and pursuing ongoing strategies, systems and methods for achieving the goal. Staff within the Triple I (Hub) are inspired and motivated as they have been encouraged to develop and plan the project from the beginning.

**EQuIP Principle 3: Continuous Improvement**

In 2012, call centres for intake to community nursing, aged care and other specialties were earmarked to transition to a single LHD. Implementation of the Triple I (Hub) in 2012 resulted in addressing the following issues:

- lack of one single point of contact
- unnecessary duplication of assessments
- an ineffective referral system which was difficult to access and time consuming
- ineffective transfer of care back to the General Practitioner (GP).

SWSLHD has continually strived to improve the quality of care of the patient and this project has provided us with an opportunity to improve intake and referrals to the primary and community services that meets the clients/carers needs. With the ongoing monitoring of the outcome in client care, it will enhance current practice and identify gaps for further improvement.

**EQuIP Principle 4: Evidence of Outcomes**

A number of evaluation methods were used to measure the critical data and information about key processes, outputs and results:

- Staff surveys were conducted to look at the impact of project on staff and gauge the sustainability of the model of care and their roles. Staff planning consultations and team activities was incorporated to foster the changes.
- Patient surveys were conducted to ascertain patient satisfaction in relation to the proposed integrated care and management.
- Risk management and key performance indicators were developed with buy-in of all key stakeholders to ensure appropriate governance and monitoring.

A pre and post case study example is outlined as below:

**Patient A (Pre):**

“Disjointed, too many points of contacts for differing services, long wait for contact from service provider”.

**Patient B (Post):**

“Best service that I ever had. I would willingly recommend it to other people. I received all the assistance I needed. The service was better than I expected it to be, it was prompt, intake person who answered my call was polite and showed concern for my specific needs”.

A Customer Satisfaction survey was developed utilising a valid tool at pre-implementation phase. The type of information collected was based on the following 4 key categories:

- accessibility to the service (6 questions)
- quality of information received (9 questions)
- quality of service (6 questions)
- overall customer satisfaction (1 question).

A five months post implementation survey was re-performed. All patients / carers who contacted the Triple I (Hub) via the 1300 number, were invited to participate in an independently conducted phone survey. Only those who verbally consented to participate were contacted. Customer satisfaction (Graph 1) showed the largest improvement.
from a mean score of 1.45 (pre) to 2.00 (post) implementation.

**EQuIP Principle 5: Striving for Best Practice**

The Triple I (Hub) empowers the client towards self-management, informed decision making and rights to choose and exit the service. Openness to new ways of service delivery based upon professional respect, improve equitable access to specialised healthcare services. The key principle of the project is collaboration with services, providers and clients. The VOIP telephone system and its technical advancement enhance the Triple I (Hub) in providing robust data capture live. This demonstrates commitment to innovation. Some of the principles of setting up Triple I (Hub) derived from models from other States. By adopting the good elements from the others, it has increased the efficiency and effectiveness in utilisation of tight resources. The ultimate goal has been achieved in improving client satisfaction.

**Innovation in Practice and Process**

The Triple I (Hub) has been established to improve access to the primary and community based services. The main objective of the Triple I (Hub) is to improve the patient experience on the primary and community care by implementing strategies to clients with a variety of conditions, chronic care, disabilities, dementia and older people. Good planning, infrastructure redesign and reallocation of existing resource of the project has the potential to provide positive impact towards Goals 11 and 12, NSW Strategic Plan 2021, in the reduction of potentially preventable hospitalisations and increasing patient satisfaction.

The Triple I (Hub) commenced in 2012 as a “one stop shop” co-located in the same building with South West Sydney Medicare Local (SWSML). One single phone number was promoted to the referrers and to the community through local media and community forum. The physical space was designed to support coordination amongst case managers receiving calls. Processes were formalised for case managers to work collaboratively with primary care practitioners to:

- integrate care through linking up the clients with all required services.
- provide individualised information.
- facilitate assessment and care planning within a multidisciplinary team.
- ensure the client has a General Practitioner (GP) that is engaged during the transition of care of clients.

This model has the potential to:

- increase equity of access to a comprehensive range of primary and community health care services
- enable the patient to be central to their care planning and management
- create efficiencies of service
- improve staff satisfaction.

**Applicability to Other Settings**

As South Western Sydney Local Health District (SWSLHD) continues to struggle to provide seamless, integrated and coordinated care between hospitals, primary and community services, the innovative approach implemented by us provides directions for all other Local Health Districts. We managed to maximise efficiency within existing resources hence providing best value to the health system. Our interventions are simple and easy to be replicated and maintained by any other LHDs. The Triple I (Hub) will continue expand to include the integration with other potential services.
Aim
Real Education Delivered (RED) is an adaptable education program that delivers professional support, information and learning opportunities to members of the multidisciplinary health care team within their working environment and has the potential to directly service patients, families, carers and community groups within CCLHD.

Abstract
Background: CCLHD is committed to education and professional development, facilitating a culture of lifelong learning, excellence in professional nursing practice to enable improved patient outcomes. Education opportunities offered to casual nursing staff and those that work after-hours are often limited. Surveys to validate the clinical education opportunities provided to After Hours, Nursing Support Roster and Casual nursing staff identified that they rarely, if ever had access to education within the after-hours environment. Casual staff are often excluded from the opportunity to participate in ward based education when they work within business hours. This area of concern was the impetus that inspired the development of RED.

Intervention: To address this problem, the RED mobile education resource was developed and introduced at Wyong Hospital. The primary aim of the RED program was to deliver clinical education to nursing staff within their working environment. This mode of education delivery also has the potential to reach patients directly, as inpatients and community groups and outlying facilities. Education is delivered using a trolley elaborately dressed in a theatrical red skirt with the stimulating red colour promoting high visibility aiming to attract and energise staff, captivating their interest and motivation. The mobile unit, known locally as ‘the RED trolley,’ utilises a variety of teaching methods and has the capacity to accommodate individual learning styles. RED is underpinned by the principles of adult learning, reflective practice, cultivating a consensus of curiosity and self-motivation. RED provides practical ‘hands-on’ application of clinical skills and also advocates equity and access of education for all staff, both casual and permanent employees.

Results / Outcome: The introduction of the RED Program has been enthusiastically embraced as innovative, interesting and fun by the nursing staff of Wyong Hospital and has over that time also captured the interest of allied health teams, medical officers, clerical and hospital support staff. Since its introduction in July 2012 in excess of 500 individual staff across varying disciplines have accessed this exciting mobile education resource and a review of the records show that some staff have accessed the mobile program multiple times. There have been 29 different topics offered by various presenters. Over 60 nurses from the casual nursing pool and the nursing support roster have accessed the program. It has also been well received in the after-hours environment and staff evaluation has been overwhelmingly positive. There have been expressions of interest for this initiative to be introduced at other sites across CCLHD. Qualitative evaluation also indicates favourable opportunities for staff and patient education.

Conclusion: Wyong Hospital is captured by RED...It’s incREDible; it’s tailoRED to suit your needs... REDiscover learning....become InspiRED.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Garling (2008) states... “Every person who comes to be cared for in a public hospital in NSW should be treated with respect by an appropriately skilled clinician...to achieve the best health outcomes possible for the patient”. Lack of knowledge, skills and ongoing education can lead to deficits in optimal patient care delivery. CCLHD is committed to education and professional development, facilitating a culture of lifelong learning and excellence in professional nursing practice. The importance of ongoing education for nurses is paramount and is essential in meeting the requirements of the Australian Health Practitioner Regulation Agency (AHPRA).

An evaluation of the education opportunities offered to casual and after-hours nursing staff was attended identifying the paucity of access to education, health promotion and learning opportunities. The RED program became our strategy to address existing deficits and offer access to ongoing professional development and health promotion.

The surveys distributed within the CCLHD not only validated the clinical education roles, but raised an alarming awareness. The survey identified that some staff felt that they never had access to education after-hours. The casual staff also indicated that they felt excluded from opportunities to participate in ward based education. This resulted in an area of concern as poor access to regular education makes it difficult for staff to keep up to date with current practice compromising quality patient care.

Patient-focused care is the central priority of CCLHD and NSW Health. The wide variety of complex clinical circumstances that surround patient centered care indicated the need to design a program that would engage clinicians for short periods of time and allow participation without disrupting patient care.

We recognise the potential that exists with the RED program. This program was initiated to service staff education, positively impacting on patient care. During the past 14 months it has become apparent that RED can be tailored to directly focus on health promotion for patient consumers during the hospital admission process (Stage 3 and 4 in Appendix 1). Promotion of current health care issues may assist in addressing the increasing incidence and the burden of chronic conditions.

EQuIP Principle 2: Effective Leadership
Healthcare leadership is a focal point in the rapidly growing crusade to improve patient safety, and the critical role of educational leadership in this movement is rapidly becoming recognised.

Nursing leadership has an established influence on employee satisfaction and patient care. Our challenge was to create a strategy for sustaining staff education using the philosophy and value of positive workplace culture that supports education access to all stakeholders. Implementation of the program was achieved through robust executive leadership, support from champions, managers and clinicians, all of whom influenced the acceptance of the program within Wyong Hospital. As a result we were enabled to engage our own leadership qualities and develop the specific education activity known as the RED program.

To ensure a sustainable implementation, the Director of Nursing (DoN) is the project Executive Sponsor. The program was established by two project leads and later joined by two team members several months post implementation. The team ensures consistency in implementation, promotion, maintenance, sustainability and evaluation of the program. Initial testing identified the need for an effective communication plan across the facility to capture key stakeholders within the varied disciplines.

The project leads and team members have included the program as core business and executive leaders have embraced the innovative and creative application of the program. The project has been reviewed and supported by the local area Executive DoN in view of delivery across the District (Stage 2 Appendix 1). The outcome measures are based on attendance and staff feedback utilising a qualitative response. The performance indicators are monitored and reviewed quarterly and a communication plan has been established to liaise with the Clinical Governance Unit.

EQuIP Principle 3: Continuous Improvement
Improving quality requires decisions based on data, teamwork, change management and creative thinking techniques. The NSW Clinical Excellence Commission offers the Clinical Practice Improvement (CPI) methodology which provides a framework that clinicians can utilise to embark on a review of processes and enable them to effectively design solutions to continuously improve care for patients. The continuous improvement cycle in relation to the RED program using the CPI methodology is outlined in Appendix 3. Continued Improvement and
implementation of this innovation will be sustained by:

- implementation to other sites across district
- further monitoring of outcomes
- continued marketing and promotion within a learning organisation
- sustaining networks, resources and executive commitment
- continued liaison with Clinical Governance
- using data to highlight benefits
- rewarding best practice and clinical improvement
- building a positive education culture
- implementation of direct patient education and health promotion using this strategy
- adequate resources – equipment, adequate staffing to ensure sustainability and ongoing commitment to program, RED online resource
- anchoring the program, so it becomes standard and accepted practice within CCLHD.

**EQuIP Principle 4: Evidence of Outcomes**

Appendix 2 outlines the evidence of outcomes for the RED program. The evidence is derived from the acronym RED TROLLEY, outlining outcomes from the onset of the innovation through to the current harvested results. The word train succinctly summarizes the outcome process encompassing Reality, Evidence, Data Evaluation, Trial/Tools, Reporting and communication, Observation, Learning, Leadership, Education and Training, Yield (harvest) outcome, results, KPIs.

Since its introduction in July 2012 in excess of 500 individual staff across varying disciplines have accessed this exciting mobile education resource and a review of the records indicate that some staff have accessed the mobile program several times. There have been 29 different topics which have been offered by various presenters. Over 60 nurses from the casual nursing pool and the nursing support roster have accessed the program. It has also been well received in the after-hours environment and staff feedback and evaluation has been overwhelmingly positive. There have also been expressions of interest for this initiative to be introduced at other sites across CCLHD which is greatly supported by the Executive sponsors. The much anticipated launch of Stage 2 of the Project (Appendix 1) is imminent. Qualitative evaluation exposes favorable opportunities. Data was obtained from 3 cohort groups. Information was sought from a clinician’s perspective, from a presenter’s perspective and from a management perspective. Feedback indicated a positive response and strengthened the nexus between patient centered care and nursing education (Appendix 4).

**EQuIP Principle 5: Striving for Best Practice**

The priority of the RED program aims to:

- provide a platform to augment best practice
- promote safe patient care which supports the basis of the current strategic plan for the CCLHD Caring for the Coast
- promote evidenced based care utilising policy / procedures and guidelines.

We believe best practice delivers superior results and considers sustainability and ongoing professional development. As the current health care environment can be challenging and the complexities are abundant, the educational needs of nursing staff have expanded. The Australian Nursing Federation suggests that all nurses and midwives must be provided with continuing professional development opportunities, relevant to their context of practice, and must be able to participate in continuing professional development and lifelong learning opportunities.

The delivery of ongoing education is paramount as is the teaching principles in which it is applied. Education practices support interactive teaching techniques such as those used to deliver education via the RED program. An Examination of 26 systematic reviews and meta-analyses of general continuing medical education found that interactive teaching techniques were the most effective at simultaneously improving care and patient outcomes.

A distinct advantage of the RED program is the application and delivery of quality and up to date information to staff within their working environment. The critical function of the educator is to create a rich environment from which learning and reflection can be extracted. The important implication for adult-education practice involves self-directed inquiry which produces the greatest learning. RED excels at enhancing motivation and facilitating staff to
discover a process of inquiry. Applying strategies such as this not only engages the learner but increases the collaboration and involvement of the entire health care team.

**Innovation in Practice and Process**

RED reflects a collaborative team approach and is innovative in practice and process, demonstrating the exemplary value of discovering local solutions. Enhancing the knowledge and skills that inform staff of changes and updates to practice promotes information sharing across multidisciplinary teams. This solution endorses the CORE values of NSW Health and of CCLHD\(^{16}\), focusing on openness, respect and empowerment as a collaborative solution to the delivery of safe patient care. RED is aligned to the organisation’s strategic framework and ensures a positive workplace culture, recognizing best practice, local achievements and equal opportunities.

The project was designed to be delivered at Wyong Hospital with an initial focus on casual and afterhours nursing staff. Following early testing, the scope was expanded to include core nursing staff, multidisciplinary teams and support staff. The collective project methodology was based on an education framework together with the previously mentioned CPI methodology (Appendix 3). A diagnostic study was conducted using staff surveys to establish education needs. This was followed by a solution design phase to develop a sustainable teaching program. The project team engaged key stakeholders and reviewed clinical governance requirements to establish education gaps identified in previous incidents and root cause analysis. A brainstorm session identified the need for a flexible mobile solution to reach staff in the clinical areas, across all hours and without removing them from their working environment. A communication and evaluation plan was developed to ensure program effectiveness.

The subject matter is centered on current local and state-wide policy and procedures or mandated education. Guest speakers wishing to promote their clinical specialty to the wider audience or share lessons learnt from best practice have also generated welcomed interest. RED has been utilised as an exemplary resource to promote local and statewide clinical initiatives.

Regard for appropriate methods of delivery is considered with flexible options available: simulated skill practice, clinical demonstrations, PowerPoint presentations, self-directed activity and reflective discussion. This program has the capacity to cater for diverse learning styles allowing visual, linguistic, kinesthetic demonstrations and reflection to guide and inform learning (Appendix 5). Training can be delivered to small groups or on an individual basis accommodating those with either social or solitary learning styles.

Education duration depends on ward activity. The program design allows for the team to move to alternative areas if ward activity is lively and revisit at a more appropriate time. Adult learners relish in novelty and colour, humor and eye catching approaches result in learning outcomes.\(^{13}\) Participating staff receive a card that is stamped and kept as part of the program. An accumulation of eight, short, 15 minute sessions rewards them with Two (2) CPD points and a certificate of participation. A reflection activity validating the education for use in their portfolio is offered. Hospital staff now receive face-to-face learning in situations where they had not been able to be previously released to attend training.

**Applicability to Other Settings**

The potential and feasibility for further transfer is endless. The potential for RED to be expanded directly to the patient is forthcoming with a focus on health promotion for chronic and acute illness during hospital stays. This program has the potential to become an education provider to various outlying health facilities and has the potential to reduce hospital admissions and enable staff to care for patients within their current establishment. Support and education delivered by RED to community groups will increase health promotion and may theoretically decrease future hospital presentations.

It is a cost effective project with a valuable outcome that is delivered via a flexible and credible medium, enhancing safe patient care and the professional development of staff.

Be captured by RED...It’s incREDible; it’s tailoRED to suit your needs... REDiscover learning....become InspiRED.

[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]
Non-Clinical Service Delivery

References
THE USE OF A HEALTH PASSPORT SYSTEM TO ADDRESS INDIVIDUAL EMPLOYEE RISK FACTORS FOR LIFESTYLE RELATED DISEASE AND IMPROVE WORKPLACE HEALTH OUTCOMES.

Product and Quality Management Team
Corporate Bodies Inc

Ben Jackson       Laura Edwards

Aim
To offer employees a tangible and user-friendly health resource, that will assist them to optimise their health and wellbeing and address any identified health risks.

Abstract
Introduction: Corporate Bodies International (CBI) was established in 2000 and has provided workplace health and wellbeing programs to over 700 organisations across Australia and the Asia Pacific region. CBI operates six individual state offices with over 50 employees, including university qualified health professionals such as dietitians, exercise specialists and nurses. Services delivered to a range of government, construction, manufacturing, mining and utility sectors include health assessments, flu vaccinations, seminars and behaviour modification programs. CBI’s primary focus is to provide a holistic and individually tailored approach to clients to ensure best practice in workplace health promotion is achieved.

Background: In 2006, the CBI Health Passport system was developed to support the delivery of onsite employee health assessments. A health assessment is a one-on-one consultation for an employee with a qualified health professional in their workplace, which aims to measure and compare the employee’s health and lifestyle indicators with healthy standards.

The key feature of the Health Passport system is the ‘Health Passport’; a hard copy resource used to record an employee’s health data and provide education about the health risks identified. Health Passports were designed to align with CBI’s health assessment services:

- Bronze - 15 minute health assessments (see appendix 1)
- Silver - 30 minute health assessments
- Gold - 60 minute health assessments.

Format of CBI’s Health Passport*:

- Front cover tailored to a specific client demographic (blue or white collar workplace).
- Consent and exercise screening forms (perforated page to be removed).
- Personal profile (personal and demographic details).
- Lifestyle profile (smoking, alcohol, physical activity, sleep, diet and nutrition data).
- Medical profile (heart disease, diabetes, skin cancer awareness, bowel cancer screening, prostate cancer screening, breast cancer screening, cervical cancer screening, muscles, bones, joints and influenza data).
- Mental profile (depression, anxiety and stress data).
- Physical profile (body mass index, body fat percentage, waist circumference, blood pressure, total cholesterol, HDL cholesterol, TC:HDL ratio, blood glucose, lung function, flexibility, aerobic fitness, muscle endurance, posture and abdominal strength data).
- Health profile and goals (overall risk factors for lifestyle related disease and individual health goals).
GP Referral Form (a perforated page to be removed – high-risk health indicators requiring GP follow-up within specific time-frames).

*Gold – 60 minute health assessment (format and inclusions may vary according to health assessment service selected).

Methodology: Whilst minor amendments had been made to the design of the Health Passport since 2006, in 2011-2012 CBI’s Product Manager and National Clinical Supervisor completed a comprehensive review of the Health Passport system. With a strong focus on researching evidence-based practice and improving the consumer useability of the resource, a quality management audit was completed. This revealed some gaps in the existing Health Passport system to be addressed such as:

- a review of the informed consent and exercise screening process, according to state and federal legislation
- the need to introduce a CBI specific Charter of Healthcare Rights and update the Privacy and Consent Policy
- ensuring a more stringent participant identification system
- identifying and categorising employees ‘at risk’ according to the evidence-based literature
- biomedical screening health indicators that would prompt further diagnostic evaluation (i.e. GP referral)
- the aesthetic look and feel of the Health Passport for target audiences
- better utilisation of participant feedback
- improvements to program evaluation and reporting
- nationally consistent staff training in the use of Health Passports.

A multi-disciplinary working group of health professionals completed a range of quality improvement projects in 2012 to update the Health Passport system and achieve improvement in these areas.

Outcomes: The effective provision of individualised health risk education to employees is integral to CBI’s health assessment programs.

Some of the outcomes since the implementation of the updated Health Passport have been:

- the capability to provide employers with a comprehensive de-identified health data report of their employee population
- the ability to present simple and concise health messages and national lifestyle recommendations to employees from a range of different backgrounds and demographics
- an improved evidence-base and use of validated assessment tools within the Health Passport
- a refinement of the graphic design (look and feel) of the Health Passport
- a valid informed consent / exercise screening process
- a tangible resource that allows employees to learn specific health messages, obtain validated risk assessments, advice and referral to further diagnostic testing if required
- the refinement of the GP referral system, including the successful introduction of a 24 hour GP referral follow-up call service
- effective in-house staff training and compliance monitoring in the use of the Health Passport system
- the use of participant feedback and program reflection statements to drive continuous improvements in the Health Passport system.

In 2012, CBI was awarded an increase in self-assessment rating from MA to EA with ACHS EQuIP5 for Criterion 1.1.8 (The health record ensures comprehensive and accurate information is collaboratively gathered, recorded and used in care delivery).

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
CBI works in close collaboration with clients throughout the stages of its best practice health promotion model. This results in high quality, individually tailored health programs for clients that produce health outcomes. The Health Passport specifically demonstrates a customer focus through:

- an informed consent and employee identifying system (to ensure a valid consent is obtained and the correct employee receives the intended health assessment)
- an individual exercise screening process (assessing each employee’s suitability to participate in the physical activity components of the health assessment)
• an individual health risk categorisation for a range of indicators (low, medium or high)
• a written GP referral (if required) and a follow-up call service (if a 24 hour GP referral is given)
• an overall employee health risk profile
• individual health goals to reduce the risk of lifestyle related diseases
• initial and review health assessments, to assess lifestyle modification and health improvements over time.

The Health Passport is a portable screening tool. Employees can read and complete some of the questionnaires before their workplace health assessment. It is also a resource they can keep, both as a health screening record and as a source of current health information. The portability of the Health Passport allows employees to take it to a follow-up GP appointment if further evaluation and testing is required.

A revised feedback system was implemented in 2012 by the Product Manager (see appendix 2), which captures employee feedback. This data provides valuable engagement information within the Health Assessment Program and the impact of exchanged information on the employee’s future health behaviour and outcomes.

EQuIP Principle 2: Effective Leadership
A clinical governance framework has been established to develop, maintain and continuously improve the ‘best-practice’ Health Passport system. This includes the introduction of annual quality assurance audits, clinical policy updates, staff training and certification. Furthermore a Program Delivery Model program has been implemented in 2013, to ensure a nationally consistent delivery and use of the Health Passport system by CBI staff throughout the organisation.

EQuIP Principle 3: Continuous Improvement
To maintain the ongoing success of the Health Passport system, the Product Manager develops an annual product strategy, conducts annual depth and credibility audits, reviews health promotion research and performs regular market analyses. The quality assurance of the Health Passport is further maintained by annual audits by the National Clinical Supervisor. Recommendations for quality improvements are made to executive management based on evidence-based practice, external benchmarking, staff and participant feedback.

Following the 2011-2012 Health Passport review the following updates were made to the Health Passport system:

• Informed consent scripts were introduced for all Health Assessment levels (Bronze, Silver and Gold) (see appendix 3).
• The consent and exercise screening forms were updated according to ‘best practice’ principles (see appendix 4).
• The number of participant identifiers was increased from 2 to 4 to ensure the correct employee receives the intended Health Assessment.
• A CBI specific Charter of Healthcare Rights was developed and the Privacy and Consent Policy was updated.
• The ‘overall risk’ categorisation system was updated to an aggregated total of low, moderate or high risk categories.
• The GP referral system was reviewed for ‘high risk’ DASS21 scores, blood pressure, cholesterol, blood glucose, CVD risk, AUSDRISK and smoking status (see appendix 5), according to the evidence-based literature.
• A 24hr GP referral follow-up call service was successfully introduced.
• The look and feel of the Health Passport was improved, to better suit both blue and white collar industries (see appendix 1).
• The in-house ‘train the trainer’ system of staff training was replaced with a mandatory annual staff certification program (where staff’s practical competency is now formally assessed).
• Staff induction training and annual certification is now governed by the Product Manager and National Clinical Supervisor, according to credentialing and training registers.
• The participant feedback forms have been consolidated (reduced from a 3 page document to a 1 page A4 form to be more user-friendly).
• Health program evaluation and reporting capability has improved; complex population reports can now be generated with ease, based on data from the Health Passport (which is also entered into an online database).
Non-Clinical Service Delivery

**EQuIP Principle 4: Evidence of Outcomes**
The Privacy Policy and Charter of Healthcare Rights are now on the CBI website and participants are informed of their rights and responsibilities verbally at the start of their health assessment.

The in-house privacy and consent training has been successful in assisting CBI staff to recognise when an employee is not suitable to participate in a Health Assessment (i.e. pre-existing physical injury or unable to provide valid consent).

In 2012 an internal quality management audit showed 50% of health professionals were ‘very confident’ and 50% were ‘mostly confident’ with the training and assessment methods for the clinical governance aspects of the Health Passport system (privacy and consent processes, charter of healthcare rights and GP referral protocol).

100% of staff were practically assessed as being competent to use the Health Passport system, as part of the annual health professional certification program in 2010-2012.

Between September 2011 to June 2013, 110 24hr GP referral follow-up calls were made by CBI staff (reinforcing the importance of GP follow-up for further testing and advice) to employees who had a ‘high risk’ health indicator identified during their Health Assessment.

Participant feedback forms, client reports and program reflection statements are the systems currently in place to capture engagement and participation within the Health Assessment Program. These responses are reviewed quarterly and contribute to depth and quality assurance audits for continuous improvement of the Health Passport content and design.

**EQuIP Principle 5: Striving for Best Practice**
Internal annual quality management audits will continue to ensure CBI’s Health Passport system remains engaging, sustainable and evidence-based. Currently CBI is addressing the storage of consent forms and de-identifying, deleting or destroying the online health record (which is a match of the employees’ Health Passport) after 7 years, to comply with state legislation.

The Program Delivery Model is a new clinical governance system introduced in 2013 that will ensure monthly staff compliance checks and quarterly evaluation reporting by the Product Manager. The provision of additional staff training/assessment will be delivered as required.

The Health Professional Training and Compliance Project (due for completion by the end of 2013) will ensure CBI staff are given ongoing training and compliance checks in overall Health Assessment delivery (including the use of the Health Passport system) through peer review and interactive competency assessment systems.

**Innovation in Practice and Process**
The Health Passport is a unique way to capture employee health information, with its portable size, clear visual design and informative content. Lifestyle advice is presented in the Health Passport based on current National Australian Guidelines (e.g. diet, alcohol, physical activity, cancer screening, etc.). It also incorporates validated and evidence based risk screening tools such as the DASS21 Questionnaire, the Diabetes Risk Assessment Tool (AUSDRISK) and the Absolute Cardiovascular Disease Risk Assessment.

CBI has found the Health Passport to be a successful and engaging tool for increased participation in workplace health and wellbeing programs.

The process of encouraging employees to read and complete most sections of the Health Passport (except the biomedical testing results and risks scores) prior to their onsite health assessment, allows for:

- familiarity with the health messages to be discussed with the Health Professional during the onsite assessment
- an opportunity for the employee to ask for assistance or gain further advice to modify or change lifestyle behaviour
- time to personally reflect on what motivates their health behaviour
- an opportunity to plan strategies to change or modify sub-optimal health risks.
Applicability to Other Settings

Benchmarking with similar industries has revealed other corporate health providers utilise a simple A4 health assessment record. The comprehensive and user-friendly nature of CBI’s Health Passport, provides an opportunity to improve the delivery system of health information to individuals in the workplace.

Applicable messages to other corporate health settings are:

- providing employee’s clear and personalised information about their health can sustain and motivate health change behaviour, both within a workplace and at an individual level
- a Health Passport is an innovative, user-friendly and portable health record that demonstrates a ‘client-centred’ approach to reducing an individual’s risk of lifestyle related disease
- there are some exciting opportunities to improve healthcare communication to a workforce through the use of a tangible Health Passport
- a Health Passport system that includes a GP referral for employees with ‘high risk’ health indicators ensures they are referred to diagnostic testing and medical advice in a timely manner
- workplace health assessments can be utilised to develop de-identified population health profiles, which identify prevalence of employee risk factors for lifestyle related disease
- improved collaboration between screening health providers and diagnostic health providers will ensure early diagnosis and treatment of lifestyle related disease
- by developing pathways to community services (e.g. referral services), corporate health providers can assist individuals and workplaces to provide early risk identification for chronic disease prevention
- embedding evidence-based practice into preventative health and wellbeing resources is essential to endorse national health messages
- the collection and reporting of employee health risk data to employers, is important in ensuring increased workplace engagement in health and wellbeing programs.

Corporate health providers have significant opportunities to drive and cultivate a community of healthcare practitioners, employers and employees that work together to support optimal health and wellbeing.

[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]
Aim
Enhance existing electronic documentation to provide a non-admitted patient data collection solution for clinicians, for planned and unplanned events, utilising existing eMR functions.

Abstract
Documenting non-admitted patient interactions, particularly unplanned and ‘on the run’, is a difficult task. Many unplanned interventions and communications have not been recorded into the health record in the past. A clinically-focussed custom solution was designed, meeting the need for accurate record keeping for patient safety and improving reporting outcomes for Activity Based Funding (ABF).

The Sydney Children’s Hospital’s Network (Westmead) implemented the expanded use of electronic medical record (eMR) documentation to ensure clinical interventions could be documented at the time and point of care. The Sydney Children’s Hospital’s Network (Westmead) was then able to use this information to report in the non-admitted patient stream for ABF.

Although initially developed for staff at The Sydney Children’s Hospital’s Network (Westmead), the solution has been accepted as applicable for use in other NSW Health Districts and has been adopted by the NSW Ministry of Health for the state build of the eMR. The eMR forms were implemented in February 2013.

The capacity to document and report activity has been measured with an outcome of 2200-2500 additional episodes of care reported via the forms per month.

The satisfaction of staff using the form was 72% positive on initial review and is growing as the understanding of the documentation process is explored with each team. SCHN has created a practical solution for clinical staff to capture previously intermittently documented activity for ad-hoc patient interactions. This has improved quality, safety, currency and completeness of the medical record, while meeting the need for ABF reporting in the unplanned non-admitted patient (NAP) stream.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Our primary consumers are the patients and their families and our secondary consumers are the staff who provide health care. The eMR solution was designed to meet the needs of busy clinicians, reporting and technical staff.

EQuIP Principle 2: Effective Leadership
The project provides a simple mechanism to support capture of clinical information and as a by-product to capture non-admitted activity data for services delivered by the hospital. Multiple strategic needs are met while removing
duplication in data documentation. This required strong leadership and governance. Multiple stakeholder input was gathered to ensure one process that was driven at the point of care would meet all needs for the hospital.

**EQuIP Principle 3: Continuous Improvement**

Specialty clinical documentation forms were already being charted by The Sydney Children’s Hospital’s Network (Westmead) clinical staff. To minimise the data collection impact of ABF, the project team developed additional fields within existing forms to seamlessly integrate new data collection needs with the clinical workflow. Information previously clinically captured was utilised to derive a number of data elements. New generic processes were also enabled to incorporate new users of the eMR.

The eMR is constantly evaluated and revised based on reporting via the HCRC, a clinical led network committee to sustain and improve the quality of the health record. Constant improvement is supported via governance committees and feedback mechanisms.

**EQuIP Principle 4: Evidence of Outcomes**

The aim to provide a solution within the 2012/13 financial year was achieved with implementation on 25 February 2013. The project was completed in six months.

To evaluate the efficacy of the solution, measures of the activity reported at a patient level were taken pre and post implementation. The data were measured from the production extract.

<table>
<thead>
<tr>
<th>Pre implementation</th>
<th>Post implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2013 – 0 (zero) patient level activity from clinical documentation reported</td>
<td>March 2013 - 2254 rows of patient level activity from clinical documentation reported</td>
</tr>
<tr>
<td></td>
<td>April 2013 - 2466 rows of patient level activity from clinical documentation reported</td>
</tr>
<tr>
<td></td>
<td>May 2013 – 2813 rows of patient level activity from clinical documentation reported</td>
</tr>
<tr>
<td></td>
<td>June 2013 – 2561 rows of patient level activity from clinical documentation reported</td>
</tr>
</tbody>
</table>

Other qualitative improvements include:
1. Completeness of documentation
2. Current information available immediately to all clinical staff
3. Improved recognition of services provided
4. Improved costing allocation and budget.

In a survey of form users, more than 72% of clinical staff who responded (n = 36) were “satisfied” or “extremely satisfied” with the process. Individual issues from the feedback provided have been followed up, further improving the satisfaction of staff.

**EQuIP Principle 5: Striving for Best Practice**

This is the only process that we are aware of that ensures all documentation in the record can be completed at the point of care (including from any location) with full electronic review of the existing record and electronic entering of new content, which simultaneously provides activity data. Further development requests from clinicians include collections via mobile devices (e.g. mobile phones and tablets), which is informing the team’s future priorities.

This has been shared at local and national forums and the technical specifications are freely shared for wider implementation.

**Applicability to Other Settings**

Locally, we have provided the model to all SCHN facilities. External requests for the design and build have been received within NSW Health (HealthShare) and Interstate (Royal Children’s Hospital Melbourne, Victoria). The ABF collection requirement is national and the solution has been recognised as a method that can be applied to other health organisations.
INTRODUCING STUDENTS TO CORRECTIONAL NURSING
GEO Care Australia Pty Ltd

Quality and Compliance Unit
Southbank VIC

Christine Fuller

Aim
To create a learning environment and enhance the profile of correctional nursing, by implementing an undergraduate student placement program within the prison setting.

Abstract
The maintenance of security and safety within prisons means that the movement of people in and out of correctional facilities is extremely restricted. While this meets the needs of containing prisoners and ensuring the safety of the staff and community, it also results in limited knowledge, understanding and exposure of potential employees who may wish to work in such an environment.

GEO Care was frequently approached by universities seeking to arrange placement of undergraduate nursing students, particularly in relation to the curriculum subject ‘Diverse Population Nursing’. With a commitment to teaching, research and professional nursing development, GEO Care set about developing and implementing a suitable program.

Strategically, the undergraduate program was aligned to the organisation’s strategic plan, particularly in relation to workforce capability, complimented the practice standards and quality framework, and supported both individual student development and the sector of correctional nursing overall.

A working party was established to review current understanding, expectations and issues of introducing students to the environment. A project proposal was developed and presented to key stakeholders for input and authorisation. Meetings were held with university partners and formal agreements developed including: role responsibilities, confidentiality, insurance and logistics of placements. Health Service Managers and nursing staff on each site were given the opportunity to review placement objectives, identify any service or operational implications and articulate desired outcomes.

The program was commenced in Semester 2 of 2012 across five prison sites, with a total of 19 students participating in community or mental health nursing placements, of 2-4 weeks duration. During placement, students worked towards achieving clinical competencies outlined in a formal appraisal tool. A formal evaluation following the first year was undertaken with GEO Care staff, students who had undertaken a placement and the university staff.

The benefits for students included: opportunity to work in a unique setting with a distinct patient profile and broad nursing practice, access to a restricted environment, addition to their learning continuum, and exposure to a different aspect of nursing. The benefits for staff included: stimulation and questions by students, increased knowledge and sharing of information, reflection of own practice and an opportunity to showcase the unique correctional environment and their specialised skills. The benefits for the organisation included: support for a learning environment, marketing of GEO Care, support of long-term recruitment, and development of the workforce to enhance patient care.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Key stakeholders including Justice Health, Corrections Victoria, and GEO Care managers and health staff were consulted to ensure continuity of care to prisoners, minimal disruption to the environment and the safety and security of the students.

Workforce capability is vital to ensure the provision of evidence based practice, and having undergraduate students creates a teaching and learning environment where practice is reviewed and challenged. The program led to the review and improvement of orientation, organisational processes, and policies and procedures. Fresh ideas were presented that supported professional development, new initiatives, job satisfaction, recruitment and support for succession planning.

To ensure the safety and security of students, they were allocated to a preceptor who supervised their practice at all times. To facilitate appropriate engagement, consent and confidentiality for patients, the students were introduced to prisoners when they arrive for treatment or review. This allowed an opportunity for the preceptor to explain the program, the students’ role and to ask the patient if they consented to the student participating in care delivery. Feedback from prisoners was monitored to ensure there were no issues or complaints. Overall, the prisoners found the experience positive and were supportive of the program.

EQuIP Principle 2: Effective Leadership
Executive leadership was successful in gaining internal organisational interest and support from staff, and engagement and authority from external stakeholders. A project plan was developed that outlined the responsibilities of all personnel including: students, university staff, correctional managers and officers on each site, Justice Health and GEO Care clinical and support staff. Processes were developed to ensure the student placements were organised, communicated to relevant personnel and appropriate documentation finalised. Required resources were identified and put in place to support students and staff. All potential risks were identified and mitigation strategies developed. A communication plan was implemented and a formal evaluation undertaken post-student placements.

The success of this program for staff and students alike relied heavily on the engagement and leadership demonstrated by Health Service Managers on each site. They were involved early in discussions and planning, to ensure relevant issues were identified, their sites could provide adequate support and supervision to students, and they were supportive of the program.

Agreement by experienced staff to be preceptors for the students was also vital for the success of the program. Staff who agreed to take on this role where provided with information about the program, the level of experience of the students, their learning objectives and the appraisal tool that was to be completed following the student’s placement.

EQuIP Principle 3: Continuous Improvement
This program was implemented to continue to enhance the preparation of undergraduate nursing students, improve workforce capability and support ongoing review of systems and processes and to ultimately improve the provision of clinical care to patients.

A formal evaluation of the program was undertaken following the first round of placements to provide information that would further enhance the experience and outcomes for students, staff and the organisation. Formal and informal evaluation of the program identified a number of key improvements that could be made and has led to further improvements. These included: provision of preceptor education to site staff, formalised preceptor allocation to ensure continuity for the students, review of student orientation, identification of relevant activities for students during any down time, reflective practice, improved acknowledgement of staff who participated, and greater celebration of the completion of placements with staff and students.

The fundamental questions and learnings from this quality improvement have led to a research project being undertaken to review the education pathway for graduate correctional nurses in Victoria. This research will review the availability of correctional nursing education nationally and in similar nations overseas, and will make recommendations for the future development of correctional nursing in Victoria. Ultimately the findings and
subsequent recommendations will benefit prisoner patients, individual nurses, the correctional sector and the nursing profession overall.

**EQuP Principle 4: Evidence of Outcomes**
A pre-placement lecture was provided to undergraduate students in 2012, and attendance at the lecture for 2013 has had a 150% increase, demonstrating an increased interest and building reputation for the program.

There were a total of 19 students that undertook a clinical placement with GEO Care in 2012. The students were placed across five sites, incorporating a range of prisons. 100% of students had a clear police check and attended site security orientation. A small number of students found the environment challenging, which has identified the need to increase the use of debriefing and reflective practice. All students had an appraisal completed and 100% met their placement objectives.

There were no complaints raised by patients, correctional officers, Justice Health or other site staff. The overall feedback was positive with a commitment to continue the program.

While site allocation has changed for 2013, there are five sites participating and we plan to expand this to more sites in the future.

Feedback from students was mostly positive, with a number of students expressing a desire to apply for a position in correctional nursing once they have graduated.

A small percentage of staff were not comfortable or committed to teaching and mentoring students, so further education and support will be provided to staff to enhance skills and encourage participation.

**EQuP Principle 5: Striving for Best Practice**
Clinical learning, via professional experience placement allows students to put theoretical knowledge into practice, within a consumer environment. Clinical placement is a vital and compulsory component of nursing course requirements and the correctional setting provides a unique primary healthcare experience for students.

The Chief Nursing Officer liaised with a number of other healthcare providers to review their student placement programs and discuss advantages, challenges and key learnings. GEO Care also worked closely with the University to determine specific needs, expectations and desired outcomes.

Following on from the undergraduate placement program, GEO Care is committed to reviewing the possibility of partnering with tertiary healthcare providers to develop and implement a joint Graduate Nurse Program, were newly graduated nurses could rotate to GEO Care prison sites to further develop and enhance their exposure and experience in the correctional setting.

**Innovation in Practice and Process**
The implementation of the undergraduate program was innovative for the company, as it had been previously rejected due to the perceived risks given the complexity of the environment. As GEO Care now provides primary health care to all public prisons across Victoria, it represents the majority of the correctional nursing sector and therefore can strongly influence positive outcomes.

An undergraduate placement in the correctional setting carries different risks and challenges than similar programs in other healthcare settings. Student selection, background checks, orientation and risk minimisation strategies were complex and carefully considered, with sound processes developed and communicated to the appropriate personnel.

**Applicability to Other Settings**
This quality improvement activity was presented at a recent forum with other healthcare providers in correctional health in Victoria, and the program structure, implementation and learnings could be shared with other correctional settings nationally.

GEO Care has already been approached about implementing placements for students from other disciplines. So this program could be rolled out for allied health staff such as physiotherapists, podiatrists, dieticians, dental technicians, etc.

The complexities of having undergraduate students in a highly restricted environment was overcome in this project and could be replicated in similar challenging environments such as Juvenile Justice, Forensic Services and Psychiatric...
Non-Clinical Service Delivery

facilities.
Aim
To work as a team to improve adherence to cleaning protocols through an effective auditing process and increased educational opportunities, using risk management principles.

Abstract
With the introduction of the National Standards in 2013, a baseline audit was carried out of high touch clinical areas across the facility to determine compliance with cleaning standards. This audit identified that existing cleaning procedures were ineffective in supporting the important role cleaning and disinfection contributes to reducing the risk of hospital acquired infections. Hospital and HealthShare management and staff worked together to improve the quality of cleaning and disinfection through staff education, removal of excess unused equipment throughout the facility, and best practice cleaning and audit schedules. Evaluation through re-audit and staff survey demonstrated achievement of the cleaning standards; as well as improved staff awareness of their critical role in reducing the risk of hospital-acquired infections.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
By implementing an effective audit schedule and an annual ‘Dump the Junk’ fortnight, patients are provided with an uncluttered, clean, hygienic and welcoming environment as well as reducing trip hazards. Staff are provided with up-to-date cleaning and disinfection knowledge.

EQuIP Principle 2: Effective Leadership
A project group was formed and aptly named “The Clean Team”, led by the Infection Control CNC and actively involve the HealthShare Supervisor and HealthShare Leading Hand, the Manning Hospital General Manager, a Clinical Nurse Educator and a Quality Manager.

EQuIP Principle 3: Continuous Improvement
A baseline audit identified a substandard level of cleaning, lack of knowledge and responsibility of staff on the importance of cleaning in the healthcare setting, inappropriate storage and use of chemicals, and a cluttered clinical environment and cleaners’ rooms. A systemic approach was taken to address these deficits and prove continuing constructive feedback to staff, education to staff, uncluttering of the environment, continuously monitoring via the UV disclosing lotion / black light audit tool and consumer involvement to assess the effectiveness of the project.

EQuIP Principle 4: Evidence of Outcomes
Continuous auditing provided a measure to show improvement in cleaning performance. A reduction of cleaning chemicals from 21 to 11 being used throughout the facility provided a standardised approach to cleaning. Removing two large skip bins of unwanted goods provided Education afforded improved cleaning procedures and
Non-Clinical Service Delivery

responsibilities. Staff and consumer surveys stipulated improvements we had accomplished and future ongoing
directions for the project.

**EQuIP Principle 5: Striving for Best Practice**
Scheduled continuous auditing, education, feedback, de-cluttering, re-assessing cleaners’ rooms, staff and consumer
surveys and reporting will provide us with encouragement to work as a team to strive for best practice.

**Innovation in Practice and Process**
Using a simple audit tool, including UV disclosing lotion and black light to regularly monitor compliance to cleaning
standards commenced the process on engaging staff to change and improve their cleaning practices. Participating in
this project inspired staff to work as a team to offer other suggestions to improve practices and processes, such as
relevant education, de-cluttering clinical areas, and standardising cleaners’ rooms.

**Applicability to Other Settings**
This project is easy, reproducible, and cost effective and results in a sustainable change to work practices. It can be
transferable to any healthcare setting, whether it is acute health care, or primary and community settings.
A SUPPORT PROGRAM TO ENHANCE THE TRANSITION INTO THE AUSTRALIAN HEALTHCARE WORKFORCE BY BUILDING THE CAPACITY AND SKILLS OF OVERSEAS QUALIFIED NURSES

Nursing and Midwifery Services
Hunter New England Local Health District
Newcastle NSW
Se Ok Ohr Doreen Holm

Aim
To enhance the transition of overseas qualified nurses (OQNs) into the Australian healthcare workforce by developing and implementing an innovative support program to build workforce capacity and skills.

Abstract
The recruitment of OQNs has been gradually increasing within Hunter New England Local Health District (HNE Health). During 2011-2012 at least 216 OQNs were recruited to HNE Health to address a number of workforce challenges including recruiting to a large number of vacancies and implementing the Nursing Hours per Patient Day across the District. The OQNs came from different countries, including culturally and linguistically diverse backgrounds. It was recognised that transitioning into the Australian nursing practice environment would require a range of organisational support strategies, including socio-cultural support and targeted education and training. The Overseas Staff Support Program (OSSP) was established to support OQNs by developing and implementing a variety of support strategies. The success of the transition to practice for OQNs reflected in the program evaluation indicated it enabled them to develop their confidence and competence.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Overseas Staff Support Program demonstrates a customer focus approach in support provision by understanding the needs of OQNs in the initial stage of their transition to the Australian healthcare system and society. The following challenges and difficulties during transition were identified:

- communication and language with different use of English language and medical terminology;
- differences in nursing practices including the roles and expectations of nurses, nursing practice, and procedures;
- racism and discrimination;
- social and cultural isolation; and
- culture shock.

It was identified that these challenges impacted on individual OQNs’ well-being and their ability to provide safe quality nursing care (Brunero et al., 2008; Deegan and Simkin, 2010; Konno, 2006; Ohr et al., 2010; Takeno, 2010). These challenges supported the need for a culturally constructed support program. However, prior to the OSSP, these challenges were addressed in an ad hoc manner which was usually reactive and lacking cultural sensitivity. These issues were also identified in the Garling report (3). With the recruitment of larger numbers of OQNs, a need to develop a strategy to assist the transition was identified. The OSSP aimed to increase the capability of the OQNs by providing cultural and professional support in the workplace. The improvements in the transition to practice as a result of the OSSP enabled them to develop their confidence and competence.
EQuIP Principle 2: Effective Leadership

- This initiative is directly linked to HNE Health strategic priorities, especially the following - “our staff and workplace culture (supporting and encouraging our staff)”.
- Under the HNE Health Director of Nursing and Midwifery Services (NandMS), the OSSP was piloted in 2010 and it was made available across HNE Health in 2011.
- The OSSP and the support strategies were endorsed by the District Nursing and Midwifery Managers during the HNE Health Nursing and Midwifery Senior Managers Forum.
- The program was supported by the NandMS team and a Nurse Manager engaged to lead this project.
- By attending seminars and information sessions provided by OSSP, Nurse Managers and Clinical Nurse Educators increased their capacity to support OQNs.
- Some managers and staff of other disciplines volunteered to assist the support of OQNs.

EQuIP Principle 3: Continuous Improvement

Planning for the Overseas Staff Support Program: The following activities were carried out to identify the support needs and the best practice model:

- a review of literature;
- a review of support programs in other health services across Australia;
- consultation with OQNs already employed in HNE Health and District stakeholders;
- survey of OQNs to identify needs and a survey of Nurse Managers and Clinical Nurse Educators;
- a study tour of the UK and USA by the Nurse Manager of OSSP (funded by Ministry of Health, NSW);
- review of evaluation feedback from the overseas staff professional day where 50 OQNs and international allied health professionals participated; and
- ongoing case reviews within HNE Health.

Development of support strategies and resources:

- information relating to the OSSP is included in the HNE Health recruitment / orientation pack for new employees;
- an Arrival Manual provides basic information and an overview of HNE Health to assist nurses with work readiness, and prepare them to , apply for a tax file number, open a bank account, as well as information about school choices, transport, salary packaging for relocation expense, and looking for accommodation;
- use of HNE Health community information booklet e.g. Welcome to Newcastle;
- overseas Qualified Nurses and Midwives Orientation Program (face to face): this includes education on working in the Australian Health Care system, education about working within a different culture, and clinical information;
- overseas Qualified Nurses and Midwives Orientation Manual: including policies and procedures on medications and clinical practice;
- online orientation/education program in myLink (HNE Health’s education portal) to provide information across a large geographical area.
- an online education program (Culturemate) made accessible to OQNs and HNELHD staff to enhance the culturally competent working relationships among the existing staff and OQNs;
- Fact Sheets on immigration procedures and the Overseas Staff Support Program (Appendix 5);
- provision of clinical information placed on a USB stick which consists of HNE Health policies and procedures especially clinical issues that have been identified as challenges for OQNs. Examples are medications such as including procedures for nurse initiated medication, S8 and S4 management, insulin, warfarin, and high risk medications) and the minimum standards of patient care, rights and responsibilities, and professional nursing portfolio management.
- Adopt-A Nurse Program: through this program, volunteers were recruited from HNE Health staff to provide support to the nurse and her/his family to settle in the area by assisting them with:
  - meeting and welcoming to the community;
  - shopping and finding accommodation if required;
  - inviting them for a BBQ or an afternoon tea; and
  - answering questions when necessary.
Non-Clinical Service Delivery

Implementation:
- Prior to arrival in Australia the overseas recruits were given access to the resource materials and a volunteer was provided to support them during the preparation for relocation.
- On arrival they were met by members of the Nursing and Midwifery Services and/or volunteers recruited through the adopt-a-nurse program.
- Following their initial two days corporate orientation the OQN’s were given additional orientation that was nursing specific and targeted to meet their needs.
- A facility specific induction and a period of one to five days in a supernumerary capacity were provided.
- Additional support was given, such as:
  - mandatory training
  - access to a mentoring program
  - seminars on immigration issues and living in Australia
  - OSSP Nurse Manager was actively involved and acted as a support person.

Evaluation of the program: The Overseas Staff Support Program was evaluated on an informal basis with OQN’s, Clinical Nurse Educators and Managers. A formal evaluation was undertaken by using a survey of OQN’s during March–April 2013. The results of the survey are discussed in the “Evidence of Outcomes” section.

Future scope: The Overseas Staff Support Program is continuously updated by using evidence-based practice principles. HNE Health is committed to supporting OQN’s and to build capacity by:
- offering the Overseas Staff Support Program to OQN’s on commencement in HNE Health,
- continuing to research future developments to improve the program,
- providing support to managers and staff in their workplace and,
- developing a manager’s resource manual.

A future longitudinal study on the support program and its relationship to retention of OQN’s will be explored.

EQuIP Principle 4: Evidence of Outcomes
An evaluation of the program: This approach has been a successful HNE Health initiative because it supported OQN’s to transition into the workplace and community. The result of the evaluation conducted on 65 OQN’s during March – April 2013 are as follows:

Attendance at corporate orientation and induction program:
- The majority of respondents (89%) attended at least one of three face to face orientation programs offered. Seventy one per cent (71%) of respondents attended an induction program and 84% of them had supernumerary days.
- The majority (50%) had 1-2 days supernumerary, while 40% had 3-5 supernumerary days. Thirteen per cent of respondents (13%) had more than 5 days.
- Forty two per cent of the respondents (42%) accessed the Overseas Nurses and Midwives Orientation Manual.

The usefulness of the support program:
- More than 90% of respondents who accessed the support program identified that all support strategies were useful for their transition.
- Ninety two per cent (92%) of respondents stated that they would recommend, or have recommended HNE Health as a potential employer.

Qualitative feedback from the OQN’s included:
  - “It is a great pleasure to know that somebody is there to look after you if you have no family and friends around you”
  - “…Gave me very good support in all aspects of settling in from the day of arrival and continued it for few weeks. Excellent job”
  - “All the support which I received was excellent. I had an excellent support from nurse manager, overseas staff support program to settle as a family and to settle in to the job. It will be very helpful if you continue that.”
  - “I felt I was really supported well when I started my job in the medical unit by co-workers and my nursing unit manager. I am really grateful.”
The results of the evaluation confirmed that the program has been successful in enhancing the transition of OQNs working in HNE Health. Through the involvement of managers, co-workers and volunteers a supportive working environment has developed.

**Online orientation education program:** A total of 118 OQNs and the existing staff accessed the online education/orientation program in myLink.

**Anecdotal evidence from Nurse Manager, OSSP:** The successful transition of OQNs is evidenced by:
- Nurse Managers and Clinical Nurse Educators stating the support strategies were useful;
- all of OQNs who were supported by the program currently remain employed by HNE Health;
- decreased number of referrals to OSSP with concerns and issues; and
- increased support requests from managers and educators with newly recruited OQNs.

**EQuP Principle 5: Striving for Best Practice**

This program was developed and implemented as a best practice initiative. Extensive research, an international study tour and evidence in the current literature supports the need to have culturally constructed support for the transition of OQNs. The study tour included meetings and interviews with 34 managers, coordinators, researchers and academics and 29 OQNs at seven acute hospitals, two universities and nursing professional bodies in the USA and the UK (Ohr, et al., 2013). Information gained from these sources strongly indicated that culturally constructed support such as that provided in the OSSP decreases the negative impacts of challenges and difficulties on the well-being of individual OQNs and mitigates the risks to patient safety by enhancing the provision of safe quality care.

**Innovation in Practice and Process**

The Overseas Staff Support Program is a HNE Health innovative approach. As far as the authors are aware there are no such extensive programs available in other health care settings. A review of support programs in other health services across Australia has identified that the provision of support to OQNs is carried out in an ad hoc manner and lacks organisational coordination.

Provision of education and resource materials enhanced the capacity of management and staff to sustain support to OQNs at all levels. A collaborative approach between stakeholders including Nursing and Midwifery, Human Resources, clinical staff, OQNs, volunteers, and community cultural groups provided increased cohesion and synergy. The team approach enhanced the experience of OQNs and contributed to retaining the nurses within the organisation. Currently, the Nurse Manager of the program is negotiating with the medical and allied health recruitment teams and the Organisational Capability and Learning Unit to embed the program throughout HNE Health.

**Applicability to Other Settings**

The Overseas Staff Support Program supports the transition of overseas staff into the Australian Health Care system by building the capacity of the health workforce (HNE Health, 2013; Health Workforce Australia, 2012; NSW Health, 2007, 2010 and2012) to provide safe and quality patient care. Health Workforce Australia (2012) has predicted that the dependency of the Australian healthcare system on OQNs will continue in order to meet the future Australian nursing workforce requirements. It is predicted there will be a shortfall of 109,000 nurses by 2025.

Therefore programs like HNE Health’s Overseas Staff Support Program will be very valuable for all health organisations that are likely to recruit OQNs; particularly as this program is transferable to other health care settings. The lessons learnt from the program will also apply to other disciplines who recruit overseas qualified health professionals.

The lessons learnt have been shared in the following forums and journal:
- Royal College of Nursing and Midwifery Conference, 2011,
- Pre-Decision Kit working party, NSW Nurses and Midwives Association, 2012,
- International Council of Nurses conference, May 2013,
- Australian Nursing and Midwifery conference, October 2013,
- A journal publication on organisational support for overseas qualified nurses.

[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]
Aim
To develop and deliver an innovative, educational and interactive mandatory training program that promotes clinical and non-clinical staff engagement and positive workplace culture.

Abstract
Rochester and Elmore District Health Service (REDHS) is a small rural health service in Northern Victoria.

Identified need: Corporate and Clinical Annual Mandatory Training was not well attended; staff were unable to complete further online training due to time constraints; Traditional methods of delivering mandatory training were not completely effective as measured by participant feedback and managers of staff.

Set goals:
- increase participation rates and effectiveness of training;
- encourage application of knowledge and skills in the workplace;
- enhance workplace culture, particularly relating to teamwork and person-centered care;
- demonstrate organisational commitment to employee engagement.

The working group researched literature and liaised with education consultants to develop innovative delivery methods for our required clinical and corporate mandatory competencies for all occupational groupings. As a result it was decided to run two training days, one the Annual Training Day which focuses on corporate compliance and the second on clinical skills.

REDHS working party and education consultants worked collaboratively to modify program content and delivery methods to ensure it addressed the specific needs of REDHS.

The education consultants trialed the new program with the leadership team in February 2013 to engage leaders in the organisational change process. Observations and participant evaluations analysed – program content slightly modified, however delivery method was unchanged.

From March 2013 onwards a collaborative approach to the delivery of the program has been undertaken between the REDHS team and consultant educator.

Evaluation method is via participant feedback at the end of each session as well as observation throughout the day. Observations by presenters demonstrated greater staff engagement and interaction throughout the day and very positive feedback from participants through their written evaluations at the end of each day.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
For the purposes of this project, consumers were deemed to be Executive, Managers and REDHS staff. Feedback from mandatory training delivered in previous years demonstrated a poor perception of the training day by staff and
not much value, whereas managers viewed mandatory training as a necessity.

We needed to cater for staff who have attended over previous years as well as new staff attending for the first time and meet the training needs of both clinical and non-clinical staff.

Using adult learning principles of self-directed learning, it was decided to have staff facilitate sessions in an interactive group format to utilise participants’ own knowledge and life experiences as a means of learning from each other.

The program has a strong focus on partnering with the consumer and working as a team to ensure the consumer is central to all that we do, incorporating staff’s intrinsic values of providing person centered care to their patients, residents or clients.

EQuIP Principle 2: Effective Leadership

Executive management wanted staff to be more fully engaged at work to enhance the workplace culture and ensure that staff feel empowered and valued in line with organisational values.

One of REDHS Strategic Priorities relates to “People and Culture”, specifically staff retention in order to meet our staffing needs in the future. This program forms part of the action plan to achieve REDHS strategic priority through increased staff participation and engagement.

Members of the leadership team participate in the training days and encourage staff to attend. They also receive feedback from each of the days and work with staff to further explore ways in which ideas generated can be incorporated into the workplace.

EQuIP Principle 3: Continuous Improvement

REDHS is committed to continually improving its services and their delivery. This cannot happen without the support of all levels of the organisation from the top down.

Whilst staff had been required to attend, it was seen as a boring, “necessary evil”. Presenters found it difficult to keep their delivery fresh and engaging for 11 sessions throughout the year. It was felt that the day was about “ticking boxes” and going through the motions as staff viewed slide presentations all day.

It was decided to create two separate days – one focused on corporate compliance and one on clinical skills (Annual Training Day / Clinical Skills Day).

The CEO and presenters wanted a stimulating day that was informative and fun and allowed mandatory training to be achieved in an environment that promoted engagement and staff-facilitated learning. The principles of quality improvement i.e. Plan, Do, See, Act were (and continue) to be applied.

EQuIP Principle 4: Evidence of Outcomes

Notes are taken by staff throughout the day as they complete each session and are a valuable source of feedback as previously unreported risks, quality improvement ideas and other issues come up through discussion.

Staff complete evaluations at the end of the day, overall the day has been rated as either “Very Good” or “Excellent” by 89% of participants. The evaluation asks participants to rate how much fun they had, with 77% of participants rating the day as “a lot of fun”.

Evidence collected through evaluation has demonstrated that information is being more readily absorbed and applied back in their workplace.

EQuIP Principle 5: Striving for Best Practice

Adult learning principles based upon the seminal work of Knowles (1980) and a cooperative learning technique for primary school children suggest by Aronson (1970) underpinned the development of the program. Using the fact that adults are internally motivated and self-directed and bring their own knowledge and experience to their learning, we were able to design the program to utilise these around practical application and relevancy to their everyday work.

Innovation in Practice and Process

Working with the education consultant to introduce a cooperative learning technique modified from Elliot Aronson’s Jigsaw learning technique, this technique originated in a primary education setting as a way to enhance student engagement, empathy toward each other and teamwork.
Non-Clinical Service Delivery

We have used the mandatory education program as a vehicle to introduce organisational culture change as a key latent outcome of the learning activity.

The synergistic relationship developed between REDHS educators and the education consultants through this collaboration has resulted in sharing of ideas for other education activities and enhancing capacity of all parties involved.

Facilitation of groups by staff participants is a new concept for REDHS and has proven empowering and stimulating for staff.

Using these sessions as a forum for capturing issues and suggestions is also a new concept as is associated reporting to the leadership team for action as appropriate. This has led to the identification of gaps in departmental orientation programs and highlighted where additional induction training is required.

**Applicability to Other Settings**

The consultant educators applied this learning approach to mandatory education in another rural health service in 2012, which proved highly successful. With only modification related to the specific topics addressed during the day, the successful application of the program design at REDHS, supported by the comprehensive evaluation completed by REDHS, confirms the applicability of this program in like organisations. As a structured approach based upon education theory to underpin the program design, transferability to organisations of any size is achievable.

**References**


**Consultant Educators**

LearnPRN – Educational Consultants, Bendigo, Victoria.
‘10 MINUTE TRAUMA TOPICS’

Emergency Department—Trauma
Orange Health Service
Orange NSW
Vicki Conyers

Aim
To develop and embed a sustainable, multidisciplinary, structured weekly trauma education program in the
Emergency Department that promotes a shared learning culture to advance clinical practice and patient care.

Abstract
A sustainable framework for a structured trauma weekly education program has been developed for the
unpredictable Emergency Department context. This framework and the program’s implementation have been
achieved by:

- applying adult education principles (especially relevance and practical application to workplace; appropriate
timeframe and location; learning on and in the job)
- engaging key stakeholders to support, promote and own the program
- emphasising ongoing education and learning as a priority for all staff
- marketing techniques to increase awareness and expectation as well as make learners and providers
transparent (e.g. program held on Tuesdays and Thursdays because these days start with T for trauma)
- sharing the responsibility, accountability and respect for learning and professional development in a
multidisciplinary team at all levels of seniority
- providing support and building- in a tangible direct incentive of professional development points
- continuously evolving the process and extending the learning audience by publishing key points from
delivered sessions on the team information drive
- recognising the value that a small education program can contribute to creating a ‘learning organisation’
culture.

The program has achieved outcomes that demonstrate uptake and sustainability with:

- 84% of sessions occurring when scheduled over a 10 month period
- 63 topics have been presented (only one repeat topic)
- diversity of presenters across the multidisciplinary team – Enrolled Nurse to Emergency Physician and allied
health
- consistently good attendance with numbers of attendees ranging from 7 to 23, averaging 14 with a median
number of 15 attendees at each session
- staff snapshot evaluation that identifies positive learning outcomes and relevance to role, a 100% response
rate identifying 10 minutes as an effective time limit and 100% of responders recommending the learning
strategy to others.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Engagement of clinicians and stakeholders in a sustainable education program builds organisational capital. Keeping up with the current literature and evidence-based practice improves the care delivered to patients and the knowledge base of staff involved in delivering care. Staff as consumers and providers of education evidence their support of the program by their attendance over an extended period of time and support for the program. Changes in practice as well as knowledge also evidence both a clinician consumer and patient focus.

Applying a philosophy of case reviews in the topics chosen enables staff to experience the concept of walking in the family and patient’s shoes’. It allows staff to directly reflect on our clinical practice with a view to looking for continuous improvement.

EQuIP Principle 2: Effective Leadership
Key leadership stakeholders were engaged from the inception of the program to both support and lead by example. This included Emergency Department medical team, the Trauma Director, the Nursing Unit Manager and Clinical NUMS (CNUM), the Trauma Clinical Nurse Consultant (CNC) and Clinical Nurse Educator (CNE). The success and innovation of the program has been recognised, acknowledged and espoused by the hospital’s executive leadership team. Staff at all levels in and beyond the ED team are shown respect, gratitude and support for their presentations.

EQuIP Principle 3: Continuous Improvement
Structural changes to improve the program have been documented and implemented since inception by using a ‘proof of concept’ log which demonstrates continuous evolution and positive gains. Changes such as the CNUM taking on the timekeeping role and presenters providing up to but not exceeding 5 key learning points from their presentation for publication have been positive examples.

Improvement in clinical knowledge and reference to the evidence base is increasingly being demonstrated by presenters citing research articles, clinical trial findings and reputable websites. Staff are increasingly seeking local data to include in their presentations and improve the relevance to the local context. Clinical practice changes such as improved compliance with Trauma Call criteria, correct application of warming blankets and use of silver based dressings for burn wounds are being demonstrated.

EQuIP Principle 4: Evidence of Outcomes
Outcomes are evidenced by compliance of sessions occurring as scheduled; consistently good attendance at sessions; Diversity of presenters across medical, nursing and allied health disciplines; Staff evaluation of their learning as a result of the program.

EQuIP Principle 5: Striving for Best Practice
Developing programs that foster a ‘learning organisation’ culture strives to improve healthcare quality. This program encourages critical thinking, reflection on practice, review of the latest evidence base and published best practice guidelines from expert bodies, ongoing professional development both individually and for the team delivering care and application to the local context.

Innovation in Practice and Process
The innovation for this project was generated through identification of gaps in trauma education and driven by a need to design an education / training concept that was deliverable in the context of an Emergency Department. Innovation in the process is identifiable in the 10 minute timing, location where the program is held, monthly timetable for dedicated T (for trauma) days, scheduling that takes advantage of a captive opportunistic audience, incentives that satisfy mandatory ongoing professional development requirements. Innovation in practice is being seen in the approaches presenters are taking to get their learning across.

Applicability to Other Settings
This education framework whilst developed in response to identified gaps in Trauma education for the Emergency Department context has much greater scope for other healthcare settings. It can be used in facilities and departments of varying sizes from small rural Emergency Departments to large metropolitan tertiary referral centers. It can also be applied across discipline areas such as (but not limited to) obstetrics; intensive care; surgical and medical wards; paediatrics; oncology; palliative care, medical imaging; pathology.
Aim
To bring about integrity, improvement and innovation to the health information management portfolio including medical records management, patient administration system (PAS) data integrity and clinical coding.

Abstract
Since 2012, Wheatbelt has commenced a large quality review and improvements regarding the health information management portfolio, for the purpose of bringing about best practice, ensuring compliance with policy and standards and ongoing monitoring and benchmarking of improvements within this area. The Innovation, Integrity and Improvement (I^3) program has been developed to ensure the best approaches to management of records, clinical coding and data collection, use and storage is continually improving and monitored.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
With a focus on improving the physical medical records management, including the appropriate collection, storage and use of the information within a patient’s record, allows staff a more standardised approach to management while allowing consumers access to a best practice record, with a specific order and standardised documents in use. This is in association with the Australian Standards, allowing a consistent and standard approach, facilitating the release of information to patients, careers, legal entities, government agencies and the state coroner.

EQuIP Principle 2: Effective Leadership
The implementation of an auditing program whereby every hospital site in the Wheatbelt Region has a medical record audit undertaken by the Manager, Corporate and Health Information annually, in addition to the development of site, district and regional reports to the managers, bringing accountability back to the individual sites, whilst monitoring trends in non-compliance and improvements. Also the development of intranet pages with comprehensive resources and information regarding medical records, PAS data entry standards and policies has ensured that staff across the region utilise the Information Management team more frequently, including requests to undertake presentations and forums and undertake training.

EQuIP Principle 3: Continuous Improvement
The development of independent auditing and trending of compliance with Australian standards and policy is used to monitor ongoing improvements and track issues in the management of medical records. Changes in the practice for clinical coding and reporting against the key performance indicator (KPI) on the monthly WACHS Dashboard allows for monitoring timeliness of coding, highlighting improvements. Implementation of independent auditing through cost savings made in the implementation of scanning for clinical coding has allowed a more targeted improvement program for clinical coding bring about improved and more comprehensive coding for research and activity based funding purposes. Also as the Wheatbelt predominately utilises General Practitioners for the medical workforce, the Medical Advisory Committee meeting table results as a means of communicating issues back to them.
Non-Clinical Service Delivery

**EQuIP Principle 4: Evidence of Outcomes**

Reporting of medical record audit results by individual sites, district and region allows for tracking compliance and improvements. The most recent being the Western Wheatbelt District Medical Records Report whereby improvements were noted in 26 of the 30 criteria of the audit - some by as much as 30%. In terms of clinical coding, the Scanning for Clinical Coding Evaluation Report highlighted that in the space of 12 months, with 7 small sites moving to scanning, timeliness increased from 33 uncoded days to 21 uncoded days and a reduction in backlog from 303 records to 147 records. Significant reduction in coding edits was also identified due to the ability to access information remotely to address edits, compared to waiting until another visit to the site. Since this, another 8 sites have been transitioned to scanning which will be evaluated later in 2013.

**EQuIP Principle 5: Striving for Best Practice**

The Australian Standard 2828.1 Paper Based Health Records is the best practice for the management of the medical record, which is what the Wheatbelt Medical Record has been developed on. Recommendations made based on the results of the medical records audit reports is to ensure that best practice records management is undertaken. In addition, the development of the health information management intranet pages for the purpose of providing up-to-date and relevant information to staff in the region, promotes best practice in data integrity, records management, clinical coding and policy compliance.

**Innovation in Practice and Process**

The implementation of scanning for clinical coding is an innovative project that moved to adopt technological advances to reduce the travel requirements of the clinical coders, reduce costs associated with the employment of contracted coders, allow for easier access to records to action edits and mistakes more quickly, improve compliance with the KPI of 100% of cases coded within 4 weeks of patient discharge, and better manage regional backlog. In addition, the use of the intranet pages as a means of promoting the Health Information Management portfolio.

**Applicability to Other Settings**

This I^3 Program implemented in the Wheatbelt is a large and vastly encompassing program that has been worked on for the last 12 months, and will continue to grow and develop. This program can be applied to other health services, and has already started to. In the WA Country Health Service, the scanning for clinical coding has recently been adopted by the Kimberley Region, Great Southern Region and the Midwest Region to improve compliance with the coding timeliness. The independent auditing of coding is another area that has gained momentum in the WA Country Health Service for the purpose of promoting accuracy in coding for research and activity based funding purposes. Medical records resources are also being shared across several regions, as by placing the Wheatbelt resources on the intranet, other WA Country Health Service staff are able to access and use this no matter their region. The development of the reports as seen in the full report are a means of relaying the project parts to the other Managers of Health Information across WA Country Health through tabling at the WACHS HIM Network. A recent meeting with Queensland Health also discussed scanning due to the large country component of the state, similar to WA. Scanning has also been identified as having applicability in a more clinical forum, with possibility of expansion of scanning to the Pharmacy area for medication reconciliation audits and increased auditing of medication forms by regional pharmacists. Essentially the program has several components all of which can be adopted in other areas of health as a whole, or individual components, based on the service’s need.
RESEARCH GOVERNANCE TO FOSTER HEALTHCARE RESEARCH THAT IMPROVES PATIENT CARE

Ethics office
St John of God Health Care Subiaco Hospital
Subiaco WA
Ms Gorette De Jesus

Aim
To develop a rigorous, robust SJGHC Research Governance Framework to foster Healthcare Research that improves patient care.

Abstract
Healthcare Research is pivotal to the acquisition of new knowledge. It forms the evidence base for continuous quality improvement and the delivery of health service excellence. The pathways by which research is reviewed, conducted, monitored and ultimately translated into improvements in clinical and health outcomes and/or solutions to health problems must be efficient and effective. Efficient and effective pathways allow for accelerated translation. Accelerated translation is increasingly important in an ever competitive environment where there is mounting pressure to deliver treatments, therapies and services which are accessible, affordable and par excellence i.e. “leading-edge” or at the very least reflective of current best practice. A Research Governance Framework refers to the means by which the organisation (through the shared responsibility of its researchers, Human Research Ethics Committee (HREC), staff/caregivers and other stakeholders e.g. external sponsors and collaborators), addresses and is accountable for the scientific quality, safety, privacy and confidentiality, financial probity, legal/regulatory matters, risk management, and ethical acceptability of the research it sponsors or permits on its sites. A rigorous, robust Research Governance Framework that engages all stakeholders at all stages of research development, and integrates the various key processes for research consideration (“ethical and scientific”, “operational” and “legal”) has allowed St John of God Subiaco Hospital to realise accelerated research translation and thereby achieve the goal of maximum healthcare impact/benefit for its patients.

Various Research Governance solutions have been implemented over the past two years to:
- promote an ethical research culture that creates new knowledge,
- streamline and ensure thorough review processes for research,
- accelerate research translation.

Simultaneously, an emphasis on risk management has ensured research is considered in terms of acceptable levels of organisational risk. The SIGHC risk management model involves communication and consultation with stakeholders, identification, analysis and evaluation of risks, risk rating and appropriate action, and ongoing monitoring and review of risks.

Our Hospital has been the flagship of SJGHC, able to raise its research profile – both in terms of the volume and impact of research, and to position itself as a leader in research risk management. This has culminated in St John of God Subiaco Hospital’s “outstanding achievement” (OA) standing in the recent EQuIPS hospital accreditation survey in 2012.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus

The most significant consumer-focused initiative to streamline and improve the timeliness of the review of research has been the adoption of SJGHC’s three different pathways for Ethical Review of Research. This pragmatic solution provides a review of research commensurate with the “risks” associated with the research:

- **Formal / Full Review:** this pathway is for studies which are more than low risk, e.g. clinical trials.
- **Expedited Review:** This pathway is for “low risk” studies that include many of the Quality Improvement (QI) projects with a human component (i.e. QI conducted with or about people).
- For “negligible risk” studies, there is no formal review but notification is made to the Chairman / Executive Officer of the Committee, e.g. research using existing collections of data / records that contain only non-identifiable data.

For all proposed research, the Committee advises in writing of ethical approval / outcome within a week following Committee meetings. If there are any queries or conditions of approval, the researcher’s reply is reviewed by the Committee out of session. In this way, researchers do not have to wait to the next scheduled Committee meeting to be advised of the review outcome. This consumer focused process has ensured that all (i.e. 100%) of proposed research studies in the past 2 years have been ethically reviewed and researchers advised of the outcome as per the NHMRC-set standard time-frame: approval within 60 calendar days of submission.

Also, other initiatives such as the ongoing move towards a “paperless” Committee process, and the exploration of an integrated information technology (IT) database solution for research management and reporting, ensures that the Committee is well placed in the future to continue providing timely and effective review of research – particularly as research is growing both in volume and complexity. These initiatives permit quicker access to key research governance data to promote research, accelerate research translation and inform the development a long term Research Strategy.

These initiatives do not subtract from the primary focus of review: the relative benefits versus the costs of the research and how the research can provide maximum benefit for patients. The SJGHC Ethics Committee, through the Scientific Review Sub-Committee, together with the relevant SJGHC Participating Site(s) in the research, looks closely at the rationale behind each research proposal to ensure the research:

- is driven by clinical needs,
- answers a new research question,
- is scientifically well-designed to answer the research question.

EQuIP Principle 2: Effective Leadership

St John of God Subiaco Hospital is a leader in actively pursuing solutions to promote an ethical research culture, develop effective and efficient research review processes, and accelerate research translation. This commitment to the pursuit of excellence in research and research governance began with the commissioning of the “Johnston Review” into research. Many of the Johnston Report (April 2010) strategic recommendations for growing and supporting the Hospital’s research profile have been implemented, such as the establishment of the Anaesthesia Research Unit and the appointment of a Director of Nursing and Midwifery Research (with a co-current academic position at Curtin University). More recently, the Hospital has employed a Director of Research to oversee and guide the organisation in building a long term, Research Strategy.

SJGHC, through its Ethics Committee, has demonstrated leadership being amongst the first and only a few organisations nation-wide to be awarded National Certification for its multicentre ethical review processes. The underlying principle behind this Certification is to reduce duplication in ethical review processes and streamline research review and governance processes for researchers. Accordingly, SJGHC has also entered into agreements with both MercyCare and Barwon Health to be the “Reviewing Human Research Ethics Committee (HREC)” and the “Accepting HREC” respectively, for research conducted at MercyCare, and at both the Geelong and Warrnambool public and private (St John of God) hospitals. As a “Reviewing HREC”, other organisations can accept the ethical review of our SJGHC Ethics Committee. As an “Accepting HREC”, SJGHC Ethics Committee can accept the ethical
review of another HREC.

The development of protocols such as the *Guidelines for the ethical review of Human Quality Improvement (QI) Projects* is in keeping with the principle of moving away from a “regulatory model” of research ethics where ethics is seen as another compliance process imposed on researchers, towards a model that encourages a culture of research ethics and educates in ethics so that researchers understand, appreciate and are actively involved in “thinking and doing ethics.” The Guidelines encourage caregivers to think ethically about their QI ideas and develop their QI project in a recognisably more scientifically robust manner to allow formal presentation and/or publication of results with greater scientific merit. This also constitutes a “learning” process for research novices; a gradual introduction to research. Through this process, many St John of God Subiaco Hospital nursing caregivers have begun smaller, nursing-focused human QI projects. The Guidelines have encouraged caregivers to disseminate their project results more widely (e.g. at industry conferences, presentations amongst peers, publications in journals) thereby contributing to translation of QI results into improved clinical practice.

**EQuIP Principle 3: Continuous Improvement**

The *SGJHC Research Handbook* is the key Research Governance Framework reference document that include terms of reference of relevant Committees and outlines the processes, guidelines, protocols, checklists and proformas that support the review, approval, conduct and monitoring of research. The Handbook also includes reference material and resource information to assist in the design and submission of research proposals. It is publicly available on the SJGHC Intranet and website.

There is continuous quality improvement of the *SGJHC Research Handbook* informed by:

- unsolicited feedback from researchers, caregivers and Hospital Executive on any gaps, revisions, clarity, explanation and other refinements or additions required to guidelines, protocols and procedures and proformas
- solicited feedback from researchers, caregivers and Hospital Executive on any gaps, revisions, clarity, explanation and other refinements or additions required to guidelines, protocols and procedures and proformas
- advisory bodies, namely the NHMRC who invite public consultations on specific ethical issues
- national developments, e.g. the 2012 McKeon Panel investigation into Research in Australia.

Improvements in the Handbook have resulted in greater integration of the processes of ethical-scientific, operational and legal review of research. Researchers are made aware upfront of SJGHC’s legal and insurance requirements, and are advised to begin the legal review process simultaneously as the ethical review process. The operational review and approval process from each SJGHC Participating Site in the research, is ideally completed before the research is submitted for ethical and legal review (as required). However, if timing is an issue for the researcher, the SJGHC Ethics Committee has the flexibility to review the proposed research ethically. Final approval is then subject to confirmation of Participating Sites(s) approval. All ethical and final approvals are coordinated through the SJGHC Ethics Office where a central database record of the progress of each submitted research proposal is maintained.

Some of the specific improvements made to the Handbook include:

- multiple refinements to the *Clinical Trial Agreements – Legal and Insurance Guidelines* which outline the SJGHC requirements in relation to insurance, indemnity and compensation arrangements for different types of research and include SJGHC-specific Clinical Trial Agreement Proformas
- revisions to the *SGJHC Participating Site Operational Approval Form* – the means by which SJGHC participating hospitals review and grant operational approval for the research to be conducted on their site
- *Guidelines for the ethical review of Human Quality Improvement (QI) Projects.*

**EQuIP Principle 4: Evidence of Outcomes**

The SJGHC Ethics Committee reports annually on its activities, the organisation’s research activity and development trends, and key performance indicators (KPIs), to the SJGHC Board of Management through the Group Chief Executive Officer. The Group Director Medical Services and Risk receives the minutes of every SJGHC Ethics Committee meeting and has regular meetings to discuss progress and proceedings with both the Chairman and the Executive Officer of the Committee.

KPIs are:

1. Active caregiver participation in ethical decision-making.
2. Ethical policies and protocols.
3. Active, well governed and ethical research program.
4. Caregiver awareness of / understanding and commitment to Ethics.

The past two years have witnessed an emerging strong, ethical research culture at SJGHC. There is greater caregiver awareness of, understanding and commitment to Ethics and more active caregiver participation in research ethics. This is reflected by the increase in the volume of research, specifically nursing research and “human QI” projects reviewed by the Committee. Also, there is the success of the two inaugural in-house research ethics training workshops conducted at St John of God Subiaco Hospital which targeted and brought together various stakeholders to discuss issues and expand understanding of research ethics: members of the SJGHC Ethics Committee and the Scientific Review Sub-Committee, as well as SJGHC researchers, clinical trial coordinators and research support staff.

Ethical research policies and research governance protocols are principally outlined in:

- **SJGHC Research Involving Humans Policy** with its emphasis on the management of conflicts of interest in research both from the researcher and HREC perspectives; and
- **SJGHC Research Handbook**, which undergoes regular review and revision as part of continuous quality improvement.

SJGHC research which has historically developed in an ad hoc manner is being strategically reviewed and developed with a longer term focus. This Research Strategy is also guiding the research governance solutions being implemented in the Hospital.

**EQuIP Principle 5: Striving for Best Practice**
St John of God Subiaco Hospital has strived for rapid research translation to ensure “leading edge” or at the least current best practice. Considerable effort has been made to investigate, contribute to, and learn from others striving for the same objective.

The SJGHC Ethics Committee has actively contributed to Government-led reviews that have called for public submissions on issues of research ethics, research governance and research strategic development. For example, the Committee has made submissions on various NHMRC reviews of select chapters of the National Statement on Ethical Conduct in Human Research (2007). The Hospital and the Committee both made verbal and written submissions to the Australian Government commissioned McKeon Panel tasked with reviewing and developing a ten year strategy for health and medical research development in Australia.

The Committee has also conducted regular consultation with other private, including Catholic healthcare organisations (e.g. Epworth and Cabrini), as well as public health care organisations (Sir Charles Gairdner Hospital, Princess Margaret Hospital, etc.) and government bodies such as the Health Department of Western Australia, in matters of research governance processes. This has allowed the parties to share information and arrive at solutions, for example, legal guidelines development, and exploring options for an integrated IT database solution, etc.

The newly established St John of God Subiaco Hospital Anaesthesia Research Unit has benefited from the transfer of knowledge and expertise on clinical trial management matters, obtained from existing hospital clinical trial units such as the Clinical Trials Oncology.

**Innovation in Practice and Process**
Innovation in the SJGHC Research Governance Framework is evident in initiatives such as the streamlining of ethical review processes via memorandums of understanding (MOUs) with Barwon Health and with MercyCare. More recently, the SJGHC Ethics Committee has also been approached by a Day Surgery Hospital for ethical review of research.

In turn, this well-developed Research Governance Framework has supported and contributed to a growing and innovative research program at St John of God Subiaco Hospital. For example, the St John of God Biobank that operates at St John of God Hospital Subiaco, is conducting the latest in innovative molecular oncology research – notably in breast, colorectal and gynaecological cancers. Over recent years, the Biobank researchers have been the recipients of many competitive research grants and produced prominent publications in this pioneering field of medicine.
Applicability to Other Settings
St John of God Subiaco Hospital can continue to learn from others in similar or alternative settings of how to further improve research governance, particular as there are few examples of how research and research governance can specifically be performed well in a private hospital setting. For example, there are particular legal issues that are peculiar to a private hospital setting – relating to insurance, indemnification and the fact that clinicians operating as researchers are not generally employed by the private hospital but rather are accredited to the hospital.

Likewise, there is a considerable amount which other organisations would be able to learn from St John of God Subiaco Hospital, in particular reducing unnecessary bureaucracy and duplication in the review and monitoring of research, protocols which encourage communication and data sharing amongst stakeholders to integrate the ethical-scientific, legal and operational review of research, strategies to improve caregiver engagement in the research development process, and initiatives to develop an organisation’s long-term Research Strategy and Development Plan. The solutions we have implemented have allowed us to realise accelerated research translation and our goal of maximum healthcare impact for patients.

The NHMRC will be conducting a Clinical Trial Governance Forum in September 2013, which will be well-represented by SJGHC caregivers from the SJGHC Ethics Office, SJGHC Legal Services and the St John of God Subiaco Hospital Director of Research. This Forum will be discussing ways to streamline ethical and governance review processes for clinical trials and acting on mechanisms to further establish an effective and consistent approach across the country, with prioritised actions and lead agents. The St John of God Subiaco Hospital Director of Research, Dr Nik Zeps, is one of the facilitators of the workshop and it is envisaged that SJGHC will play a major, leadership role in acting as a major lead agent.
CRITICAL PARTNERSHIPS – CONSUMER RELATIONSHIPS INTEGRAL TO IMPROVING CARE, ACCESS AND LEADERSHIP

Executive Unit
WNSWLHD Orange Health Service
Orange NSW

Catherine Nowlan  Phil Baker
Meegan Connors  Susan Patterson

Aim
Through innovative engagement of consumers in healthcare design and delivery improvement in the consumer experience will be achieved by building capacity in stronger and more resilient healthcare teams that are inclusive and responsive to the needs of those who interface with the health service.

Abstract
In 2011 the Orange Health Service Executive Team recognised consumers as “CRITICAL PARTNERS” in planning and decision making following the redevelopment and relocation project. The Executive Team needed to ensure the health service continued to capture the inputs and needs of consumers and the community. A stakeholder analysis was completed to determine who our partners where and how we engaged with them. The review highlighted the need to consider how the organisation could improve consumer contribution through removing obstacles and barriers to effective consumer engagement – creating trust and valuing input.

The recognition of the ‘power and meaning’ of consumer perspectives has perpetuated the integration of consumer partnerships beyond routine – the partnerships developed see consumers and healthcare providers working together to improve quality of care, access to services and leadership throughout the organisation. Consistent with the literature consumer and community engagement supports health service improvement, including safety and quality of health services and individual health care.

Beyond planning and design consumer perspectives continue to be sought, supported and reported on to enhance service delivery and models of care. Recruitment of consumer representatives for peak safety and quality committees and service redesign projects has resulted in significant improvement to clinical outcomes and patient experience. Additionally, implementation of strong patient led models of care has seen a reduction in readmission rates, rates of health acquired infections, reduced length of stay and most importantly delivery of care in the right place at the right time through robust patient flow.

Concurrent attention has been directed at:
- Consumers – be they with patients, carers, staff, or community groups and neighboring facilities
- Relationships – and how they are created and sustained through engaging with people and processes
- Integral – values that permeate the importance of engagement, understanding and partnership
- To – mechanisms available that support and drive inclusive participation
- Improvement – that derives from shared learning, experience, analysis and decision making
- Care – that meets the needs and expectations of those who deliver and receive it
- Access – that provides the right care in the right place at the right time
- Leadership – that values input from consumers and is inclusive and responsive to their needs through leader rounding and open forums.

This attention has resulted in the ‘CRITICAL’ partnerships model having over 460 Volunteers and 18 consumer
representatives on peak safety and quality committees and Health Council. Through the robust nature of consumer participation the facility has sustained a 100% overall satisfaction rating for service and care provided since 2011 an improvement of 10% on previous data.

Complaints where communication is identified as a contributing factor have reduced by 81% and where inconsiderate, rude and hostile behavior has reduced by 34%.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

Australian and international research demonstrates that the engagement of consumers in their healthcare and treatment has contributed to improve health outcomes for individuals and groups. Communication and behavior between partners in care can have significant consequences on patient outcomes where care delivery and decision making is not shared or communicated effectively.

Orange Health Service has embraced the opportunity to build upon previous consumer engagement processes through building capacity and skill in the leadership team and middle management. Introduction of the ‘Improving Patient and Staff Experience’ (IPSE) program in 2011 has been the catalyst for engaging with patients and carers in real time directly related to the healthcare experience. Utilisation of the Patient Experience Tracker (PET) devices equipped patients, carers and staff with an immediate and secure means for providing feedback.

Patients and carers as consumers are essential to the planning and redesign of services and models of care at Orange Health Service. The introduction of new models of care - ‘Case Load Midwifery’ and ‘In Safe Hands – Structured Interdisciplinary Bedside Rounds’ has resulted from active consumer participation and involvement. Services have been designed to provide an inclusive and supportive model of care that enables consumers to more actively participate in making decisions that are well informed. Both models of care place consumers and healthcare providers as equals, working together to achieve that best possible health outcomes through goals that are set and prioritised by the consumer.

The organisation values consumer involvement and recognises the benefits of consumer input in balancing the views of healthcare professionals and service providers to ensure that service delivery better meets the needs and expectations of those who require it. The health service has a number of consumer representatives that actively participate in internal patient safety committees. Through this level of consumer engagement in governance and decision making at Orange Health Service capacity to significantly improve patient experiences and satisfaction has been enhanced.

Continued support and engagement with our volunteer groups as integral partners in service delivery and planning is evidenced by groups reaching their 40th, 45th and 90th year in 2013. The health service has seen 55% (208) growth in the total number of registered volunteers in years.

Implementation of the ‘Arts in Health’ program has seen the growth in partnerships between Orange Health Service, Orange City Council and Orange Regional Art Gallery. This program has enhanced the aesthetics of the hospitals blank canvas into one that has generated international interest as a mechanism for improving consumer experiences and also health outcomes.

Consumer feedback is actively sought both formally and informally from patients and consumers in relation to their experience. Traditional methods of conducting General Inpatient Satisfaction Surveys and review and analysis of complaints data evidences a reduction in complaints overall by 81% where communication was a contributing factor. A 9% improvement associated with care and treatment has also been evidenced.

**EQuIP Principle 2: Effective Leadership**

Orange Health Service Executive team commenced a culture change management journey in 2011 to create a successful consumer centered health service. Through establishment of an agreed set of values and acceptable behaviors that clearly articulates the organisation’s focus on consumers and leaders who continuously convey the message to all levels of the service has removed barriers and embedded the change in organisational culture. 100% of departments throughout the health service have established agreed values and behaviors that underpin the way services are delivered and measured.

Orange Health Service Executive team are committed to ensuring consumer participation is central to business
operations. The executive team is responsive to the needs of consumer – patients, carers, staff and community – through monthly leadership rounds. Each executive team member is rostered to visit a department and speak with staff / team members in relation to issues affecting them or impacting on their ability to provide care and services. Monthly Leadership and Accountability reports further enhance to system and process improvement both within and across teams. Results of the information collected monthly are reviewed and actioned by the Executive team in partnership with the appropriate Head of Department.

Through the commitment to building capacity and generating trust a leadership planning day enabled the design of the “Building Stronger Teams – Six Pillars” framework. The framework has established six domains of focus requiring action either immediately, in twelve months and over the next two years. The domains are – Communication, Leadership and Accountability, Education and Training, Relationships with Neighboring Facilities, Activity Based Funding and Vision for Tertiary. Updates on performance against the focus areas are provided to the Orange Health Service Health Council – Consumer Volunteer Committee.

Inclusion of consumer representatives on peak safety and quality committees has ensured that approaches to quality improvement include the inputs and feedback from partners in care delivery and recognises the benefits of consumer input in balancing the views of healthcare professionals and service providers to ensure that service delivery better meets the needs and expectations of those who require it.

**EQuIP Principle 3: Continuous Improvement**

Improvement strategies needed to be considered for enhancing consumer participation across all levels of the health service post relocation to the current ‘greenfield’ site in March 2011. Consideration and analysis of the organisation’s needs, analysis of stakeholders and opportunities to more openly engage with consumers was undertaken to determine priorities for progression.

Through recognising and valuing people, their ideas and inputs the health service has encouraged introduction of new ways of doing business, enhanced teamwork and recognised excellence in service delivery. This has been achieved through executives and managers fostering a culture of learning throughout the organisation, equally from its successes and failures to promote patient centered care and the importance of reflective practice - “walking in the patient’s / carer’s shoes”.

The health service has proactively implemented approaches to quality improvement through the inclusion and correlation of feedback about patient experiences alongside clinical and operational data. The successful implementation of new models of care that are patient led has been based on consumer desire to be more directly involved in decision making about care delivery and alternatives available.

The CRITICAL partnerships program has evidenced the successful establishment of a consumer centered care approach in response to identified areas of need identified through patient feedback and consultation with advisory groups.

A number of initiatives have been implemented and sustained through active consumer participation including:

- Way Finders Program
- Arts in Health Program
- ‘In Safe Hands – Structured Interdisciplinary Bedside Rounds’
- Health Council Orientation – Department Specific
- ICU Patient Diaries – Windows to critical care
- Patient Experience postcard
- Consumer Representative Roundtable.

Outcomes of consumer participation are monitored regularly to ensure opportunity for improvement is not lost. Outcomes are reported monthly to the peak safety and quality meetings to enable active consumer input. This has resulted in simple and effective ways of improving service delivery with resounding results.

**EQuIP Principle 4: Evidence of Outcomes**

The evolution of the CRITICAL partnerships program evidences a significant increase in consumers directly participating in their care and service delivery. Engaging with consumers at all levels of the organisation has resulted in increased adherence to safe practices such as hand hygiene, inclusion in decision making about care and service planning, reduced length of stay and overall satisfaction with the healthcare experience, and patient information...
Non-Clinical Service Delivery

provided at Orange Health Service.

Through proactive shared models of learning and recognition of the value consumers be they patients, carers, staff or community groups has created and molded the Orange Health Service to be an inclusive and responsive service provider. Through interdisciplinary models of care that engage the patient and carer as well informed decision makers has resulted in a reduction in complaints where communication is identified as a contributing factor have reduced by 81% and where inconsiderate, rude and hostile behavior has reduced by 34%.

This attention has resulted in the ‘CRITICAL’ partnerships model having over 460 Volunteers and 18 consumer representatives on peak safety and quality committees and Orange health Service Health Council. Through the robust nature of consumer participation the facility has sustained a 100% overall satisfaction rating for service and care provided since 2011 an improvement of 10% on data correlated against 2009 results.

Further to the outcomes highlighted above the processes and systems embedded in Orange health Service for consumer participation have received met with merit status during periodic review.

**EQuIP Principle 5: Striving for Best Practice**

The ‘CRITICAL’ partnerships program is evidence of the development and growth of active engagement with consumers on all levels – individual, service and systems level. The implementation of this model has and will continue to extend the organisation’s partnership with consumers to ensure improvements in care, access and leadership.

The Orange Health Service strives to achieve best practice and service excellence through acknowledgement and recognition of the importance of developing and sustaining effective working relationships with all members of the healthcare team.

Engagement between consumers, community and the health service has contributed to improved health care and health services. This program has and will continue to evidence how consumer and community engagement contributes to improved health outcomes at an individual, service and systems level.

Establishment of meaningful engagement of consumers and communities has been integral to the effective health service planning, design, delivery, monitoring and evaluation by Orange Health Service.

**Innovation in Practice and Process**

The approach to enhance the partnerships is innovative and unique to the requirements of the Orange Health Service. Through proactive engagement and implementation strategies consumer centered models of governance have been developed to ensure that the consumers centered approach remain connected and central to key planning and decision making processes. The design of governance models has evolved through robust consultation with consumer representatives to ensure roles and accountabilities are understood and partnership needs are met.

Incorporating consumers in the planning and design of the new electronic information kiosk will ensure relevant information is available at key entry points to the facility will further enhance mechanisms for engaging consumer in services provided.

**Applicability to Other Settings**

Consumer engagement programs such as ‘CRITICAL’ partnerships are applicable in all healthcare settings. Consumer engagement and participation should be viewed as the foundation for improving health outcomes and influencing decisions about the ways health care is designed and delivered.

Implementation of the project evolves directly from a desire to make a difference, a commitment to hurdle the barriers of involving consumers and evoking trust in partners and understanding it doesn’t cost a thing to listen, acknowledge and empower others to participate in your journey to excellence.
Aim
To develop, maintain and monitor an effective emergency response and business continuity framework for Children’s Health Queensland Services.

Abstract
The EQuIP review cycle was an effective mechanism to monitor the implementation of strategies which were tested through several actual emergency and disaster incidents over the period from 2009 to 2013.

Quality tools and processes such as gap analysis, incident debrief and operational review were utilised along with the Studer Group Hardwiring Excellence 90 Day Action Plan and Team Brief tools to track progress of actions implemented an inform staff.

Emergencies including New Year’s Eve 2010 Power Failure Emergency at the Royal Children’s Hospital (Code Yellow), the January 2011 South East Queensland/Brisbane Flood (Code Yellow / Brown), November 2012 severe storm building damage to North and South Tower (Code Yellow) provided an opportunities to reflect upon the effectiveness of the organisational Emergency Response using the emergency and disaster management systems in place.

Subsequent ACHS Surveyor recommendations were actioned and improvements monitored through to implementation.

An Emergency Planning Committee was established and provided oversight to the review and implementation of emergency and disaster management response systems and procedures. The committee is chaired by the General Manager Operations and functioned under the authority of the Health Service Chief Executive. The committee reports to the Patient Safety and Quality Committee.

Outcomes:
1. Emergency Management and Planning – Intranet page
2. Documented Procedures including risk assessment and audit strategy for:
   - CHQ Procedure 62435: Emergency Management
   - CHQ Procedure 62430: Emergency Operations Centre
     - Attachment One: Incident Briefing
     - Attachment Two: Incident Action Plan
     - Attachment Three: Situation Report
     - Attachment Four: Record of Telephone Call
     - Attachment Five: Contacts Log
     - Attachment Six: Incident Message Form
     - Attachment Seven: Incident Message Log
3. Documented Procedures for all Emergency Codes:
   - CHQ Procedure 62421: Code Yellow
   - CHQ Procedure 62424: Code Black
   - CHQ Procedure 62420: Code Brown
     - Code Brown procedure included testing/validation of the procedure through use of the EMERGO Train System Exercise. The Code Brown Procedure includes a Mass Casualty Sub-Plan and a Pandemic Sub-Plan)
   - CHQ Procedure 62422: Code Red
   - CHQ Procedure 62425: Code Purple
   - CHQ Procedure 62423: Code Orange
   - CHQ Procedure 62426: Code Blue (Developed by Medical Emergency Advisory Committee)

4. **Essential Services Contingency Plan**

5. **Emergency Operations Centre – Room and equipment:**
   - Fit out the Emergency Operations Centre with the required resources to enable full functionality.
   - Training program reviewed and endorsement by Emergency Planning Committee.

6. **Powerfail equipment:**
   - Report detailed analysis of essential power supplies for the RCH campus – Implementation by the Royal Brisbane and Women’s Hospital.
   - Trial of emergency lighting system within the Department of Emergency Management and implement recommendations.

7. **Emergency Management and Business Continuity Project:**
   - All clinical and non-clinical areas have completed individual emergency and business continuity plans
   - All Emergency and Business Continuity Plans are retained in a consolidated manual in Emergency Operations Centre.

**Application of the EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

During the Brisbane flood emergency in January 2011 the principles of family centred care influenced the executive decision to modify the model of care provided to families and children so that even after medical care had concluded they were able to stay within the hospital in a ward after discharge until it was safe for them to return home. In effect a “home in the hospital” service was provided whereby parents looked after their children with minimal supervision.

Many compliments were made by patients and families during this period.

The Consumer Liaison Officer was stationed at the Volunteers desk in the main entrance of the hospital and was available to assist and support where possible.

**EQuIP Principle 2: Effective Leadership**

The activity was led by the General Manager Operations under the authority of the Health Service Chief Executive. The activity was supported by Divisional Executive and Managers accountable for implementation of actions listed on the 90Day Action Plan.

**EQuIP Principle 3: Continuous Improvement**

**Organisation Wide Survey 2009**

**Recommendation:** The Code Brown procedure is tested using a drill or desk-top process such as Emergo-train.

**Surveyor’s Comments:** There is an Emergency Preparedness and Continuity Management policy and a Code Brown Emergency Plan. Counter terrorism has recently been the issue adopted as the paradigm for emergency
management and the Emergency Preparedness and Continuity Management policy does not deal with epidemics. At the
time of the survey CHSD was dealing with an influx of patients requiring assessment for H1N1 influenza and
previous planning for responding to SARS had proven helpful, but not fully adequate in dealing with foreseeable
contingencies. All areas of CHSD have a real or desk-top emergency or evacuation drill each year.

Self-Assessment 2010
Action: Funding has been allocated and 2 staff to have been sent to Emergo training. The desk-top drill is scheduled
for August 2010, with a regular timetable endorsed by Executive for implementation thereafter.
Surveyor’s Comments: The recommendation has been progressed and is near completion

Periodic Review 2011
Recommendation:
1. An action plan clearly identifying actions taken to date and those matters outstanding following the January
2011 floods be progressed. The action plan identifying the relevant senior officer’s responsibility and the
timeframe for completion of actions be progressed as a matter of importance.
2. An action plan clearly identifying actions taken to date and those matters outstanding following the
December 2010 power surge be progressed. The action plan identifying the relevant senior officer’s
responsibility and the timeframe for completion of actions be progressed as a matter of importance.

Self-Assessment 2012
Action:
1. Action plan in place, all corrective actions completed; controls monitored through the Emergency planning
Committee, with input from relevant accountable officers.
2. Action plan in place, all corrective actions completed; controls monitored through the Emergency Planning
Committee.
Surveyor’s Comments: Well done on addressing recommendations 1 and 2. The surveyors will be able to review this
progress at survey.

Organisation Wide Survey 24-28 June 2013
DRAFT Surveyor’s Comments: There is clear evidence of commitment by the Executive and managers to a safe
organisation and practices have been implemented that ensure this. The survey team acknowledges the impressive
work undertaken by the organisation in emergency and disaster management. Comments are made under actions
15.18 and 15.19 to support Met with Merit ratings for these actions.

15.18.1 - Met with Merit: The organisation has demonstrated that improvements in systems for the management of
emergencies and disasters is evident throughout the organisation, is sustainable and built into day to day operations.
This was demonstrated in a recent Code Brown disaster where systems were tested and worked well. This
improvement has been built into day to day operations. Regular “mock” emergencies are conducted in the
Emergency Department together with EMERGO exercises and are regularly evaluated.

15.19.1 - Met with Merit: Evaluation and improvement of staff training and competencies has been demonstrated by
the organisation following actual disasters (floods, power outage and damage to roofs). The organisation
demonstrated evidence of improvements in staff training both at orientation and in regular emergency exercises and
drills and annual disaster exercises.

EQuIP Principle 4: Evidence of Outcomes
Children’s Health Queensland funded the training of several Emergency Department staff to become accredited to
oversight the use of the Emergo Train System (ETS).

“The ETS is an interactive educational simulation system developed at the Centre for Teaching and Research in
Disaster Medicine and Traumatology (KMC) at the University of Linköping, Sweden.

ETS can be used for education, training and simulations of emergencies and disasters. ETS can be used to test and
evaluate incident command systems, hospital preparedness and surge capacity.
Emergo Train System also consists of a training concept with an association of ETS Educator faculties who run Senior instructor courses around the world. ETS have been spread in to 29 countries and over 900 ETS Senior instructors have been certified.”


A whole of hospital disaster preparedness exercise was held at the Royal Children’s Hospital (RCH) on November 7 2012. It utilised the Royal Children’s Hospital Mass Casualty Sub-Plan to the RCH Code Brown – External Emergency Procedure.

**Scenario Overview:**
The scenario occurred on a weekday afternoon and involved a stand collapse following an explosion at Suncorp Stadium. There were 34 patients who presented as a result of the disaster over a 2.5 hour period, and an additional 20 non-disaster related presentations to the emergency department in that time.

There were 13 critical patients, 9 of whom required intubation and ventilation. There were 7 patients who had to be in the Operating Theatre within 2-3 hours of arrival for life-saving intervention and an additional 12 patients who required surgery within the first 6-12 hours.

A total of 12 patients required timely Paediatric Intensive Care Unit admission. There was 1 preventable death and 2 preventable complications.

**Staff Involved:**
The exercise involved 50 participants with representatives from Executive, Department of Emergency Medicine, Paediatric Intensive Care Unit and High Dependency Unit, Allied Health, Anaesthetics, Social Work, Radiology, General Surgery, Day Procedure Centre, Patient Safety and Quality Service, Patient Flow and Staffing Unit, Communications and Media, General Paediatrics and Administration support. There was no representation from Orthopaedics or the other surgical sub-specialties.

There were 21 instructors involved in the running of the exercise on the day including instructors from other campuses such as Mater Children’s Hospital, Royal Brisbane and Women’s Hospital, Redcliffe Hospital and The Prince Charles Hospital.

**EQuIP Principle 5: Striving for Best Practice**
The Emergency Planning Committee was able to benchmark its procedures with other facilities including the Princess Alexandra Hospital and Gold Coast Hospital.

The State-wide Disaster Management Plan included the response provided by the Herston campus which included both the RCH and RBWH. The RCH was disentangled from this arrangement and developed its own procedure which is documented in [CHQ Procedure 62435: Emergency Management](http://www.emergotrain.com/Default.aspx).

**Innovation in Practice and Process**
Opportunities for efficiencies around instant communication with key decision makers at the front line were identified upon review and debrief after Emergency Responses. This prompted the introduction of the use of IPhone and iPad devices to be rolled out.

The benefits in daily communication through these devices continue to be effective for a variety of essential communications, e.g. security incident, urgent recalls, etc.

Regular staff huddles have been implemented to ensure timely communication with decision makers to support Patient Flow and Staffing Unit, ward and area nurse managers on a daily basis. The confidence that staff have developed around this methodology ensures effective communications during emergency and disaster responses.

**Applicability to Other Settings**
The work undertaken in preparing the current Emergency and Disaster management structure, functions and resources will enable similar systems and processes to be applied to the new Queensland Children’s Hospital opening in December 2014.
Aim
The aim of the PIRSS project was to implement and evaluate an evidence-based, organisational-wide post incident staff support program.

Abstract
Peninsula Health is committed to fulfilling its duty of care to employees by taking all possible steps to support staff following critical or traumatic incidents. Until recent years, Peninsula Health like most other health services in Australia, utilised Mitchell’s (1983) Critical Incident Stress Debriefing (CISD) model to provide support to staff following critical incidents (Devilly and Cotton, 2003). Research into the process of re-exposure to trauma involved in CISD found that it may in fact adversely impact recovery for some individuals (Cochrane, 2009) and in some cases can precipitate Posttraumatic Stress Disorder (PTSD) (Bledsoe, 2003). The NICE Guidelines (2005) recommended the provision of practical, social and emotional support as the preferred model following trauma. Psychological First Aid was developed to incorporate these principles and is the recommended response for individuals and communities affected by an emergency event (Department of Human Services 2005).

To our knowledge the only research on Psychological First Aid which has been adapted to an organisation is the U.K. Royal Mail Group. The study found that the most important thing that workers needed following an incident was to feel supported by their managers and that this was related to perceived organisational support, normalising reactions, and getting back to normal quicker (Rick and O’Regan, 2006). Peninsula Health adapted the Royal Mail protocol and the Post Incident Response: Staff Support (PIRSS) policy was introduced during 2012. The initial results from staff surveys are positive, showing that most respondents received support from their managers following an incident and felt the organisation cared about their well-being thus enabling them to feeling confident about returning to their role / carrying out their normal duties. Ongoing input is required to ensure that culture change is permanent and maintained over time.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The human resource function within Peninsula Health incorporates staff into their consumer group. It is also considered that satisfied staff create a positive environment which is important in developing trust amongst patients, families and visitors.

Working in a health service is both rewarding and challenging and in the course of completing their duties staff may be exposed to critical and at some times distressing incidents. Such incidents may lead to a range of physical, cognitive, behavioural or emotional reactions, immediately after and in the days and weeks that follow.

Peninsula Health has always striven to protect the physical and psychological health of staff and volunteers working within the organisation, particularly following events that may have exposed them to threats of harm, acts of
violence, caring for those with serious injuries, unexpected death or suicide.

The PIRSS program is designed to provide support to staff members who have been exposed to these types of events in order to aid recovery. Showing support to staff members is important in ensuring they know their contribution is valued and that the impact such incidents may have on them is recognised by the organisation.

**EQuIP Principle 2: Effective Leadership**

Peninsula Health has taken a proactive approach to developing and implementing a new model of support for staff. At the start of the project there were very few organisations that did not use CISD (despite the recommendations against its use) and our investigations found that most health services were also struggling to find an acceptable alternative model. This required Peninsula Health to show leadership and provide direction in developing and implementing a protocol that was innovative but aimed to provide safe and effective support to staff. The CEO, Peninsula Health Board and Executive Directors fully endorsed and supported the organisation-wide implementation of the PIRSS protocol and continue to support the development of strategies and systems that encourage managers and senior staff to develop their skills.

One of the challenges of implementing the PIRSS policy was changing the culture of managers who underestimated the importance and effectiveness of their support to staff and who were used to this support coming from peer supporters or external agencies. It requires an ongoing commitment to motivate those in senior positions to take responsibility for the wellbeing of their staff following incidents. Leadership for the program is the Human Resources PIRSS Coordinator who is a resource for managers and is often in attendance following critical incidents supporting and training managers in delivering PIRSS.

**EQuIP Principle 3: Continuous Improvement**

An in-depth literature review to investigate the available models and evidence-based approaches to supporting staff following a critical incident and consultation with other Health Services HR departments and industry experts (organisational psychology and corporate workplace Employment Assistance Providers) led to the development of the model for PIRSS.

The recommendations made by NICE Guideline (2005) were incorporated as well as key aspects of the UK Royal Mail model (Rick and O’Regan, 2006) which includes manager support on the day of the incident and the offer of a Support Post Trauma meeting with their manager. The protocol for Peninsula Health includes staff having access to immediate and practical managerial support, the provision of information, normalisation of reactions, the offer of a one-on-one support session with immediate manager, and watchful waiting to monitor those who may be at risk of developing PTSD.

In preparation for the commencement of the PIRSS protocol in early 2012 the following actions were implemented and form part of the ongoing continuous improvement cycle:

- formal discontinuance of the ‘Peer Support’ CISD Debriefing program
- the establishment of a PIRSS Coordinator portfolio
- the development of the PIRSS protocol
- the launch of the new PIRSS policy through email, newsletters, management and executive meetings
- delivery of new tools developed by the authors including a laminated ‘Managers Guide’, eLearning packages to assist managers with the new approach, an intranet page, a PIRSS Brochure
- the production of a video demonstrating ‘checking-in’ conducting a PIRSS session and ‘watchful waiting’
- integration of information and notification systems into VHIMS (electronic incident report database), Code Black/Grey manuals and Internal Emergencies Procedures
- the monitoring of managers’ completion of PIRSS eLearning
- a PIRSS Clinical Practice Guideline.

**Post Incident PIRSS Protocol:** The main features of the PIRSS protocol follow the steps outlined below:

1. Immediate Check-in is facilitated by the manager or person in charge of the shift which includes offering practical support and a follow-up PIRSS session if required.
2. Manager-Led PIRSS Session takes place ideally within 24-48 hours of the incident. It includes providing information, emotional support, normalising reactions and information about the Employer Assistance Program (EAP).
3. Watchful-Waiting occurs for a period of up to four weeks and includes checking-in to see how the person has
been going since the incident and the offer of a further PIRSS session if required.

4. PIRSS Review Session. If symptoms do not seem to be getting better it is recommended that the staff member access the EAP service for further support.

EQuIP Principle 4: Evidence of Outcomes

The initial evaluation of the PIRSS protocol includes post incident staff surveys which are sent out two to four weeks following the logging of an incident on VHIMS. The survey was adapted from the Royal Mail study survey which enables a comparison with the Royal Mail study and ensures the ongoing continuous improvement cycle.

Post Incident Survey Data Description: A total of 132 surveys were sent out to employees following a distressing or clinical incident between March 2012 and July 2013. A total of 46 surveys have been returned to date giving a total percentage response of 35%.

Outcomes of the Survey:

Nursing is the predominant occupational category represented at 72%, with 13% Allied Health. Respondents were asked to rate the incident according to its effect with 41.3% reporting it to be ‘very upsetting’, 34.8% reporting it as ‘a bit upsetting’ and 13% rating the incident as ‘totally devastating’.

Checking-In on the day of the incident: The importance of a manager or other senior staff member providing direct support to the staff member is one of the cornerstones of the program. 82.6% of respondents indicated that their manager or other senior staff member had checked-in with them. Results show that for 39.5% it occurred within an hour, 34.2% the same day, 13.2% the following day and for 10.5% within the week.

Rating of Support on the day of the incident: The respondents were asked how they rated the support offered by the organisation on the day of the incident with 68.2% rating the support as either good or excellent.

Post Incident Response: Staff Support (PIRSS) Session: PIRSS sessions are offered by Peninsula Health managers to staff involved in distressing incidents. Results show that 24.4% attended a session with 28.9% declining a session. PIRSS sessions occurred within 24 hours (50%), within 48 hours (10%), within 3-5 days (30%) or within a month (10%).

Rating of PIRSS Session: The respondents were asked how they rated the support offered by the PIRSS session and 91% rated the support as either good or excellent.

EQuIP Principle 5: Striving for Best Practice

The implementation of PIRSS and initial findings provide us with information about the importance of the PIRSS protocol and the necessity of ongoing education and training for managers in providing this support. As the results of the surveys clearly demonstrate, the overall support given by the organisation following an incident can be an important determinant of overall perceived support and may be central to providing a safe and effective response to individuals who are involved in a distressing or traumatic incident.

Although only a quarter of respondents attended a one-on-one PIRSS session, it was rated very highly. The 11 staff who had attended a PIRSS Session demonstrated a higher satisfaction rating on the outcomes than those who did not on most scales:

- 91% of those who had attended a session agreed or strongly agreed that they ‘realised what they were experiencing was normal in the circumstances’ (compared with 49% of total respondents).
- 100% of those who had attended a session agreed or strongly agreed that they ‘had a better idea of what to expect in the coming days or weeks’, 100% ‘knew where to obtain information should they need it’ and 100% ‘had a better idea of where in the organisation they could go for support’ (compared with 47%, 67% and 60% respectively of total respondents). This result was replicated when reviewing the satisfaction with organisational support; also:
  o 91% of those who had attended a session agreed or strongly agreed that they ‘felt the organisation cared about their wellbeing’ (compared with 55% of total respondents)
  o 73% of those who had attended a session agreed or strongly agreed that ‘the support enabled them to get ‘back to normal’ quicker’ (compared with 44% of total respondents)
  o 82% reported that they ‘felt confident about returning to their role/carrying out normal duties (compared with 73% of total respondents).

These results show the value of the support provided by the PIRSS session as an effective method of providing
practical information and support to staff and improving outcomes in a safe and effective manner.

Of note, 44.5% of respondents reported that “No one has mentioned a PIRSS session”. This result is similar to the Royal Mail study which found 46% reporting that they had “never heard of it” and highlights the importance of continuing to strive for excellence and bringing about culture change. As a result, managers have been reminded to clearly articulate to staff that the offer of further support is a PIRSS session at check-in. The outcome of the survey will be incorporated into ongoing manager training as it reinforces the importance of managers offering and providing a one on one session following critical incidents.

**Innovation in Practice and Process**

Informed by the evidence of Psychological First Aid and the UK Royal Mail, Peninsula Health was committed to implementing a safe and effective model but this required us to be innovative in our approach as there was no standard protocol developed from Psychological First Aid that could be transferred to a health setting. Our results support the beneficial outcomes found by the Royal Mail study which found that support from managers is significantly associated with perceived organisational support, normalising reactions, and getting back to normal quicker.

The collaborative approach and leadership of the Acting Director Human Resources and Head of Psychology in combining their individual expertise and experience were key success factors in the development and implementation of the PIRSS protocol.

The PIRSS protocol includes innovative and effective training tools to assist managers to make the significant change in their practice. This included an investment in a video production in which the practicality of immediate ‘checking-in’, conducting a PIRSS session and ‘watchful waiting’ are demonstrated. This tool is a central part of the training process and is available for refreshers at all times.

**Applicability to Other Settings**

The initial results show that the PIRSS approach is a promising model of staff support that is readily transferable to many different work settings. Peninsula Health has shared PIRSS materials, video and Clinical Practice Guideline with La Trobe Regional Health Service which is now in the process of implementing the model.

**References**


A psychosocial model for post emergency individual and community support. Department of Human Services 2005.


http://www.thecochranelibrary.com


Aim
To introduce a fair and transparent appraisal method for non-executive staff and thereby effectively utilise the non-executive work force and adaption of practicing volunteer involvement in supplementary work.

Abstract
Hemas Hospital Wattala is 100 bed multi-speciality general hospital, built to international standard, offering the highest level of medical care to its patients. The

Proposed Performance Management System was a graphical, non-favorable, continuous assessment and simple. In the initial stage a pilot project was implemented for maintenance technicians. Employee detail files, department Key Performance Indicators, annual development schedule and departmental goal tree were introduced. Data collected in employee detail file that contains general information of employee, copy of previous appraisal form, description of contribution to the departmental goal tree, training plan and job description of the employee.

We have introduced Criteria for Key Performance indicators based on completed work orders, job oriented task, and volunteer involvement in supplementary work, discipline, critical incident and career development. The pilot project implemented for maintenance technicians was a success and it was agreed to implement in other departments as well.

All non-executive staff were given a fair knowledge about the new Performance Management System before implementing, through number of training sessions, workshops and demonstration sessions conducted in the department.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The new performance management system encourages better customer service through motivated work force driving positive job attitudes.

The New PMS is based on a scoring system which evaluates the individual achievements in 04 aspects: All staff is assessed daily based on the above criteria and their score is updated. Score level of each staff member is graphically displayed in the department and staff can see their current status at any time. By seeing this, the staff are self-motivated to increase their score and their performances thereby.

EQuIP Principle 2: Effective Leadership
The new Performance Management System was proposed and introduced by the executives in the engineering department as an outcome of the Supervisory Development Program of the hospital. Human Resource team and the Chief Engineer with his team was voluntary accepted the task of implementing the new system in the engineering department. Designing of the new format, conducting training and implementation was done by the team.
**EQuIP Principle 3: Continuous Improvement**
When the new Performance Management System was introduced to the engineering department in 2011, the scoring model included only 04 criteria: Involvement in critical incidents, Number of completed work orders, Innovative self-planned activities and Disciplines. In 2012 we identified a few other measurements which can improve the system further and included in the assessment criteria.

There is a plan to revise the Job Descriptions and new duties and responsibilities will be added according to their achievements and the technical knowledge.

This performance management system is linked with the “I–Care” award and the spot award to encourage the better service.

**EQuIP Principle 4: Evidence of Outcomes**
Since this Performance Management System is transparent and unbiased, the job performance of the non-executives increased significantly. That was reflected in the number of total work orders that they have completed during the given period.

It was clearly evident when the customer feedback forms were evaluated that number of complaints against the engineering services has reduced during the above period.

**EQuIP Principle 5: Striving for Best Practice**
There are plans to link this new performance management system with Human Resources Information System and upgrade it as an online performance evaluation system for non-executive staff of the entire hospital.

This has been planned to be introduced as a scoring model which will be periodically updated by the Head of Departments and the staff would be able to see their current status of performance. With that we hope to self-motivate the staff to improve their performances by scoring more.

**Innovation in Practice and Process**
The success of this project is due to the novel concept which was very practically adapted to the hospital setup. This system itself encourages the innovative skills of the individuals and spontaneous encouraging factor for the staff to think and work innovatively.

**Applicability to Other Settings**
This new Performance Management System can be applied to any settings easily with no cost. This system allows adjustments which is flexible to any non-executive employee category.
THE SYDNEY CLINIC – UNIVERSITY PARTNERSHIPS

Allied Health Department
The Sydney Clinic
Bronte NSW

Rosemary Clancy    Elma Fourie

Aim
To build and strengthen professional working relationships between The Sydney Clinic (a Healthscope Ltd hospital) and Australian Universities’ Psychology departments, in supporting Master of Clinical Psychology, Forensic Psychology, and Counselling Psychology graduate programs in partnership.

Abstract
Partnerships have been initiated by Sydney Clinic Allied Health Department with 8 universities’ Masters level psychology (Clinical and Forensic, and/or Counselling) graduate programs, to enable a core role in the professional development of graduating psychologists and clinical psychologists. Graduates completing these 2-year masters programs then register as psychologists with Australian Heath Practitioner Regulation Agency (AHPRA). Following this, they then practice as Clinical Psychology Registrars for a further 2 years. The Sydney Clinic has a role in both of these stages of a psychologist’s continuous professional development, mentoring both Masters level psychology interns, as well as Clinical registrars, through these stages.

Each of the universities offering the above Masters programs are undergoing, three-yearly accreditation reviews with APAC (Australian Psychology Accreditation Council) and The Sydney Clinic management team has been involved in these recently for UNSW (Forensic Master’s program) and ACAP (Clinical Master’s program).

From early 2009 to August 2013, 29 graduates have successfully completed placements at The Sydney Clinic and met AHPRA competencies in order to complete University Masters requirements and to register as psychologists.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The Sydney Clinic is committed to training graduate psychologists in adherence to evidence-based treatments and worldwide best practice mental health treatment principles, in order to foster the highest degree of professionalism in candidates. Consumers benefit through the application of these psychological training principles, knowing that treatments offered will be effective and that therapists will adhere to high professional standards and be subject to ongoing review through professional organisations such as AHPRA and the Australian Psychological Society, and Government bodies such as Medicare, and via ACHS accreditation processes.

EQuIP Principle 2: Effective Leadership
The Sydney Clinic is committed to effective leadership in the field of training graduate psychologists in evidence-based treatments and worldwide best practice treatment principles, in order to foster assured professionalism in candidates, and better treatments for patients with psychiatric conditions.
EQuIP Principle 3: Continuous Improvement
The principal supervisors at The Sydney Clinic have undergone extensive training in their professional field and then undertaken supervision training in order to become Honorary Supervisors with each of the listed universities. More recently, further supervisor training was offered by Macquarie University Psychology department and UNSW’s forensic master’s supervision coordinator, further strengthening these partnerships and creating potential for improved quality in training, and in service delivery to mental health clients.

EQuIP Principle 4: Evidence of Outcomes
As of August 2013, 29 graduates have successfully completed placements at The Sydney Clinic and met AHPRA competencies in order to complete University Masters requirements and to register as psychologists.

During the period from 2009 to 2013, eight of these graduates have achieved paid employment at the Sydney Clinic after successfully completing placements at The Sydney Clinic and registering as psychologists (having met AHPRA competencies in order to complete University Masters requirements and to register as psychologists).

EQuIP Principle 5: Striving for Best Practice
1. By being involved in the universities’ accreditation processes, the Sydney Clinic has a role in ensuring a close working relationship with the psychology departments, supervision coordinators, and improved training in essential psychological competencies for graduate students. The Sydney Clinic management have been involved in these recently, for UNSW (Forensic Master’s program) and ACAP (Clinical Master’s program).

2. As a result of support (and specifically, supervisor training) from partner Universities, the Senior Clinical Psychologist has been AHPRA-approved to offer enhanced supervision capability (Principal and secondary supervision to provisional psychologists and registrars).

Innovation in Practice and Process
Through involvement in 1) graduates’ training, 2) our partner universities’ accreditation processes, and 3) taking up supervision training offered by these universities, The Sydney Clinic ensures close working partnerships with the psychology departments, supervision coordinators, and improved training in essential competencies for graduate students.

The universities’ graduates benefit from working in a multidisciplinary setting with a complement of over 40 psychiatrists, specialist mental health nurses, and psychology staff working in close collaboration.

The universities’ supervisor training programs benefit The Sydney Clinic supervisors personally by assisting their CPD and meeting AHPRA supervisor requirements, and The Sydney Clinic generally, by ensuring best practice treatments and training are kept in the foreground of staff practice.

Applicability to Other Settings
Effective partnerships with universities’ psychology departments mean private psychiatric clinics generally, can have ready access to expert academic and clinical research staff, and recent developments in clinical literature and best-practice mental health treatments worldwide. These partnerships, when instituted widely across private psychiatric clinics, offer the potential to foster improved training standards, and generally lift quality patient outcomes, in safe and collaborative working environments.
IMPROVEMENTS IN THE ST JOHN OF GOD SUBIACO HOSPITAL OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

Occupational Safety and Environment
St John of God Subiaco Hospital
Subiaco WA

Claire Hand    Sonja Jennings
Peter Mckay

Aim
Improvement in Occupational Health and Safety (OHandS) management systems through the implementation of hazard prevention programs and promotional programs with the aim of reducing work related injuries.

Abstract
Improvement in OHandS has been a major focus for St John of God Subiaco Hospital (SJGSH). SJGSH launched an OHandS Cultural Improvement Strategy in October 2010. The goal of this strategy is to improve the OHandS management system and culture at SJGSH. The aim is to ensure that OHandS is a priority for all caregivers and that this is reflected in behaviours that meet OHandS expectations and standards.

This strategy included the following key strategic objectives:
1. Improving general OHandS communication and awareness and caregiver involvement through the implementation of an OHandS promotional campaign and educational program.
2. Actions to ensure clear responsibilities and accountabilities for OHandS performance.
3. An OHandS recognition scheme to reward and recognise proactive safety efforts to further reinforce positive safety behaviour.
4. Engaging active, genuine, and continuous senior leadership support for the OHandS cultural improvement process.

As a result of actions implemented to achieve these objectives, performance in this area has improved significantly. There have been the following major outcomes:
- improvement in the number and standard of activities leading to reductions in injuries such as workplace inspections and risk assessments
- reduction in our rates of injury, including our lowest Lost Time Injury Frequency Rate in the last 10 years.
- In July 2013 an external Occupational Health and Safety (OHandS) Management System Audit was undertaken by Ace Health and Safety Pty Ltd. The audit was a ‘best practice’ assessment against the National Self Insurance Audit Tool. An audit score of 95% compliance was achieved
- external recognition of our efforts by the Australian Council of Health Care Standards in August 2012 with a rating of Outstanding Achievement for the criteria 3.2.1 Safety management systems ensure safety and wellbeing of consumers / patients, staff, visitors and contractors
- SJGSH was a finalist for the Work Safety Award WA 2012 for the criteria of Best Workplace Safety and Health Management System (private sector).
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
This major OHandS strategy represents a consumer focus in services provision as demonstrated by extensive consultation with key customers and stakeholders including managers and OHandS Representatives, ensuring that OHandS Representatives have a leading role in leading and participating in the improvement strategy and implementing an OHandS Recognition and Reward Program to acknowledge those caregivers who make significant contributions to improve OHandS.

EQuIP Principle 2: Effective Leadership
St John of God Subiaco Hospital (SJGSH) has a strong commitment to Occupational Health and Safety and has developed a high performing OHandS and risk management system. Effective leadership is exemplified by ongoing investment in improving the OHandS Management System, including resources for the OHandS program, such as dedicated time for the completion of OHandS Representative duties, and equipment to improve the safety of manual tasks.

EQuIP Principle 3: Continuous Improvement
The foundation of the SJGSH OHandS Management System is the Australian Council of Health Care Standards’ EQuIP5 (Standard 3.1.1) and the Australian Standard 4801: 2001 OHandS management systems. Each element of the OHandS Management System is subject to the EQuIP quality improvement cycle, including plan, do, evaluate and act. Evaluations range from major audits of the entire OHandS management system to the effectiveness of solutions to specific workplace hazards.

EQuIP Principle 4: Evidence of Outcomes
The outcomes of the SJGSH OHandS management system are significant and are reflected in the following results:
- reduction in the Lost Time Injury Frequency Rate
- a 430% increase in hazard and near miss reporting from 126 in 2010 to 542 in 2012 whilst maintaining a high resolution rate
- excellent OHandS survey results from caregiver, manager and OHandS Representatives.

EQuIP Principle 5: Striving for Best Practice
Benchmarking with identified leaders in areas of best practice has enabled significant improvements to the OHandS Management System. This has included health industry and other industry OHandS leaders.

In addition, the completion of regular benchmarking activities occurs routinely with other metropolitan hospitals for identified OHandS hazards.

Innovation in Practice and Process
The OHandS Management System improvements have been informed by the experience of high-risk industries, including the mining and construction industries.

The approach we developed for OHandS improvement is innovative and useful. We were able to deliver on targets and aims by implementing actions relating to each OHandS objective.

Applicability to Other Settings
Strategies implemented as part of the SJGSH OHandS Management System improvements have been recognised as good practice and adopted in other settings, including within health care and external to the organisation.
AN INNOVATIVE ARTS-BASED EDUCATION PROGRAM FOR CHILDREN AND YOUNG PEOPLE AT THE ROYAL CHILDREN’S HOSPITAL MELBOURNE

The Royal Children’s Hospital Education Institute
The Royal Children’s Hospital
Melbourne VIC

Glenda Strong       Lauren Sayer
Bridie Mackay       Tony Barnett

Aim
To ensure outstanding learning opportunities are included in a model of care that takes into account the learning needs of patients as part of their holistic care in a hospital setting.

Abstract
The Royal Children’s Hospital (RCH) Education Institute provides innovative, world-recognised best practice in education pedagogy to support the learning needs of patients at The Royal Children’s Hospital. Our team of talented teaching professionals uses spaces in the hospital in innovative ways to ensure patients remain engaged as learners during their stay at the RCH.

The 2010-13 Strategic Plan of The Royal Children’s Hospital includes a key action to ‘ensure provision of evidence-based educational support for patients in an innovative and creative patient-centred learning environment’. Over the last two years the RCH Education Institute has introduced a truly innovative approach to children’s learning in hospital to ensure that patients’ education needs are considered in a holistic and patient-centred model of care.

The Education Institute is committed to evidence based practice as a method of program delivery. Our teaching pedagogy is based on research evidence of learning strategies that have been shown to have a great effect on children’s education and achievement. Embedded in a personalised learning model, an Individual Learning Plan (ILP) is developed for every patient that is educationally supported at the RCH. The ILP empowers learners to choose the direction of their learning through collaboration with our teachers.

Our integration of the Arts in our learning program has led us to develop partnerships with the education arms of outstanding cultural organisations, including The Australian Ballet, Melbourne Symphony Orchestra and Victorian Opera, bringing their creative programs to children in hospital.

Design thinking principles that combine empathy, creativity and rationality to analyse a problem and fit solutions to the context underpin our teaching and learning model. The recent inclusion of an Individual Learning Plan as part of a patient’s official medical record is a clear indication of the progress we have made in introducing, and integrating the education needs of patients to a medical setting.

The outcomes of our service are reflected in smooth transitions to school when patients are discharged from hospital, and continued engagement in formal learning pathways.

Through an absolute dedication to the educational needs of children and young people who miss or disengage from school due to a health condition, the RCH Education Institute has successfully stitched itself into the fabric of The Royal Children’s Hospital. Educational events are regularly celebrated in the hospital, including Education Week, Literacy and Numeracy Week, Children’s Book Week, Science Week and Children’s Week. The Education Institute leads these celebrations to showcase the hospital as an innovative learning environment. An outstanding
achievement in the last year was the recognition of our learning program by the OECD in a case study of innovative learning environments around the world.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**
The patient is central to all of our research and practice and this is evident in the development of Individualised Learning Plans (ILPs) for every child that receives education support at The Royal Children’s Hospital. The Individual Learning Plan is a dynamic document that forms part of the patient medical record and contains an agreed learning program negotiated between the patient, the teacher and the parent/s or carer/s. Learning goals are determined and a program to support the achievement of these goals is developed with student, teacher and parent input. The inclusion of an ILP for paediatric patients in the hospital medical record is, we believe, a first in a hospital setting and it reflects the hospital’s commitment to holistic, patient-centred care. Patient and family satisfaction is measured through regular evaluations of our programs.

**EQuIP Principle 2: Effective Leadership**
The Education Institute operates on a distributed model of leadership with a leadership team that represents each of our divisions. The Leadership team led the development of our recent Strategic Plan with the input of every member of the Education Institute staff.

Our Strategic Plan demonstrates the commitment of the RCH Education Institute to lead in the development, provision and dissemination of evidence-based models of teaching and learning for children and young people with a health condition. It provides direction for our organisation and individual staff to focus on our vision for all children and young people with a health condition to be engaged as learners.

All of our staff are encouraged to contribute, develop and learn through a tailored professional development program that ensures our teaching staff are informed in the area of contemporary pedagogy in education. Our corporate staff undertake extensive training to ensure they are well equipped to manage a highly ambitious and growing organisation. Members of our research team are strategically linked with RCH campus partners and other research organisations and contribute to significant research projects at the health and education interface.

The Education Institute teaching and research teams support the development of emerging professionals through ongoing involvement with local university programs, providing professional placement and mentoring opportunities for students throughout the year. We also support secondary schools students in the local community through work experience programs in the hospital. Our staff are regularly invited to present at local, national and international conferences in health and education. Our research team published nine research papers in the 2012-13 period, in Australian and international journals.

Our staff have been recognised as experts in the field of teacher development and education through speaking invitations at national professional learning events facilitated by The Australian Institute of Teaching and School Leadership (AITSL). Our teachers have been asked to present around their use of Design Thinking methodology at upcoming ABC education events and around advocating for their profession through the Centre for Strategic Education Early Career Teacher Days. Our presence in virtual learning spaces has also been recognised by federal government body Education Services Australia through the awarding of our Head of Teaching and Learning as one of 30 national teacher champions of the educational social network Scootle Community.

**EQuIP Principle 3: Continuous Improvement**
As a learning organisation we have an absolute commitment to reviewing and improving our practices. We foster partnerships with cultural and educational organisations to support our innovative approach to learning in hospital. Community arts and education programs are integrated with our personalised learning approach to give children in hospital access to rich learning opportunities. The education programs of The Australian Ballet, Melbourne Symphony Orchestra, Victorian Opera and State Library of Victoria are implemented in our hospital setting and aligned with children’s personal learning goals. Our volunteer program links the skills of volunteers with the learning needs and goals of patients. Our research team undertakes ongoing evaluation of our programs and conducts research to inform best practice in our delivery of education support to children and young people associated with The Royal Children’s Hospital.
EQuIP Principle 4: Evidence of Outcomes

The primary outcome of our work is reflected in the Education Institute’s vision that children and young people with a chronic health condition are engaged as learners. Research has shown that children and young people with chronic health conditions are at greater risk of disengagement from education and learning and that disengagement is linked to poorer achievement and worse health and quality of life outcomes later in life. Our education program is an opt-in service for RCH patients, yet the majority of patients eligible for our service volunteer to participate in our learning program.

An online Satisfaction Survey was conducted with RCH ethics approval in 2012, to capture student and family responses to the education support they receive through the RCH Education Institute. Findings indicated that 83% of respondents were satisfied with the education support. One-third of the students surveyed indicated that learning in the hospital was better than learning in a regular school environment.

EQuIP Principle 5: Striving for Best Practice

Our 2013-15 Strategic Plan incorporates our mission statement to: Lead in the development, provision and dissemination of evidence-based models of teaching and learning for children and young people with a chronic health condition. Our Strategic Plan is an ambitious document and is supported by an active implementation plan to ensure our strategic goals are achieved.

Our teachers form part of an interdisciplinary team of medical, allied health and teaching professionals dedicated to providing the best holistic care for each patient in The Royal Children’s Hospital. The expertise of cross-disciplinary staff contributes to our teachers’ ability to understand the individual needs of each child they work with. The RCH Education Institute is led by our Executive Director, a leader of Teaching and Learning who is responsible for integrating the latest innovations in thinking, practice and technologies for education. Our Executive Director leads a professional learning program for RCH teachers to support these innovations to achieve world-class practice.

In 2012, a major global project from the OECD identified the RCH Education Institute as an Innovative Learning Environment from a selection of learning environments around the world. Our creative approach to children’s learning in hospital was considered to be ‘highly innovative and effective’ according to the criteria of the OECD. See http://www.oecd.org/edu/ceri/inventorycases.htm.

Innovation in Practice and Process

The RCH Education Institute Education Support Team creates vibrant learning spaces in a health environment and supports personalised learning opportunities across the RCH to assist children and young people in their growth and development as learners. Our teachers also provide advice about educational issues to young people and their families through specialist clinics. Underpinning the work of the RCH Education Institute is a commitment to building rich learning opportunities within the RCH where children continue to make connections to learning and encounter stimulating learning environments.

In 2012-13, the RCH Education Institute developed an application for iPad and iPhone that provides an interactive learning experience for children based on the artworks and animals that live in The Royal Children’s Hospital. The app is available as a free download in the Apple iTunes store and can be used and enjoyed by children, carers and teachers anywhere, not just in the hospital.

Learning across RCH is predicated on the idea that through embracing the learner’s passion and natural curiosity we get the best learning possible. Our learners will reach their full potential both academically and socially when given the freedom to define and solve their own real problems. They are supported in this process through the explicit teaching of learning strategies in literacy, numeracy and design thinking methodology.

Design thinking is the ability to use a systematic process to understand people and situations, define problems, and come up with innovative solutions. At RCH we work with students on design challenges linked to their learning passions identified in their Individual Learning Plans. Design topics are passion based learning projects where students go through the steps of the design thinking process.

Learning at the RCH begins with a conversation with as many stakeholders as possible around passions and learning goals to develop an individual learning plan (ILP). Teachers talk to the learner, parents / carers, school and interdisciplinary team in the hospital to develop the plan, which becomes the tool for teachers to develop learning
intentions for teaching sessions. These ILPs help us to match the skills of individual teachers to the student’s learning goal, to ensure the best possible instruction for each learner.

The more encouraging and responsive children’s environments are, the more likely the child will grow, develop and cope positively. We believe that strong links between art and education encourage creative learning to be explored to its fullest potential. We have undertaken six arts-driven publishing projects with RCH patients over the last year, in which patients have contributed design, text and illustration to produce a series of published books.

The appointment of a Head of Arts Education to our teaching team in 2013 has strengthened our capacity to provide rich learning possibilities through the Arts. An artist-in-residence program funded through an Arts Victoria grant in 2012-13 has linked a visiting artist with RCH patients and teachers to design a mobile gallery space that can share children’s artwork across wards in the hospital.

**Applicability to Other Settings**

The Education Institute teaching and learning model lends itself to applicability in a range of settings. Despite children’s right to an education, not all children and young people with a chronic illness receive education support during periods of school absence such as in hospital or during periods of recovery at home. Research suggests that in Victoria, for every child that receives support from the RCH Education Institute, another two hospitalised children with chronic illnesses do not receive equivalent support.

The critical importance of the presence of a hospital-based teacher enables partnerships to be formed between the child, family, hospital based teacher, regular school based teacher and student peers that enable the student to stay connected and engaged with their education and learning pathway.

The evidence-based pedagogy ensures that effective learning strategies are used. The RCH Education Institute model of support is applicable for use not only when student is in hospital, but also in other out of school settings such as during recovery at home, and may also be used for children and young people who miss substantial amounts of school for reasons other than a serious health condition. The planned opening of the new Monash Children’s in Victoria in 2017 is an obvious candidate for the Education Institute model of education support for children and young people in hospital.
Aim
To improve research ethics and governance in order to facilitate and increase good clinical research.

Abstract
Identifying the Issues (background): High quality clinical research is an important element of a successful academic hospital. A strong research capacity directly improves patient care, attracts high quality clinicians and creates an enquiring culture that encourages best evidence based medicine. The Royal Children's Hospital (RCH) is collocated with the University of Melbourne (UoM) and the Murdoch Children’s Research Institute (MCRI); together they make “The Children’s” campus.

This report outlines the role of the Research and Ethics department in improving the ethics and governance structure and processes, which in collaboration with a series of linked initiatives undertaken on “The Children’s” campus significantly increased our capacity for and output of high quality clinical research.

In 2007, the campus partners agreed that clinical research should be a priority; all agreed there should be an increase in the quantity and the quality of clinical research. There are numerous challenges in creating an environment that supports high quality clinical research. Between 2006 and 2008 a series of internal and external reviews were commissioned to examine the current state of clinical research, perceived barriers to clinical research and, most importantly, the way the three Campus partners worked together. A review, published in the Medical Journal of Australia, demonstrated that many of our clinicians lacked the basic skills in clinical research (Babl and Sharwood 2008).

On a macro level the reviews identified a need for better cooperation and integration between Campus partners, however other barriers to quality in clinical research included; lack of funding, space, and mentoring, inadequate training in clinical research, inadequate lines of accountability, the isolation of clinical researchers and a lack of awareness of existing clinical research support structures. The focus of this report was the findings that lengthy and difficult ethics approval processes and inadequate research governance were major barriers. Educating clinicians in how to do clinical research was also identified as a major priority in increasing quality clinical research.

Improving Research Ethics and Governance (methodology): In 2008 a Clinical Research Governance Steering Committee was established under the leadership of the Director of Clinical Research and the Director of Research and Ethics, responsible to the Campus Research Committee. The steering committee has senior representatives from all three institutions as well as consumer representation; researchers on campus. The remit of the committee was to identify the ethics and governance related barriers to research to enable improvements to be designed and implemented by Research and Ethics. The 5 main areas identified and the process improvements that were made are outlined below:

Education and Training: Improving clinical research governance requires a commitment to train clinical researchers. Substantial philanthropic funding from the Macquarie Group in 2008 allowed the Clinical Research Development
Office (CRDO) to be established. The aim of CRDO was to increase clinical research capacity. Over the next 5 years CRDO worked closely with the Research and Ethics Office to design and provide seminars on Good Clinical Practice (GCP) and other aspects of how to do clinical research, prepare templates for protocol development and other documents needed for clinical research projects, provide study binders for researchers to identify and collate their documentation, and provide one-to-one advice for new clinical research projects. The focus was on building a core of experienced and well trained researchers and research coordinators. CRDO also set up a coordinator’s forum to discuss and share ideas and issues, and a buddy program to mentor new coordinators.

**Risk Based Ethics Review Process:** The resources and time required to obtain ethics approval was identified as a major barrier. The solution proposed by the committee was a new risk-stratified ethics approval process. In line with the NHMRC National Statement on Ethical Conduct in Human Research (2007) (National Statement) a process was designed for an expedited review of both Low and Negligible risk research. The revised process meant that only high risk (or “greater-than-low” risk) research was reviewed by the full Human Research Ethics Committee (HREC). Low and Negligible risk research could now be approved at an HREC Chair level; with delegation provided from the HREC and in line with National Statement requirements. Additional quality review checks were implemented including a scientific review (by an internal but independent expert in the field) for low risk research and a review conducted at office level for completeness of documentation and governance for all research (i.e. signatures of investigators, supporting departments, budget, agreements, indemnity and insurance etc.).

**Researcher accountability:** Another key to this process of improving the ethical review was to increase the quality of applications received by the Research and Ethics Office. Under the National Statement, an institution needs to be satisfied that its human research meets relevant scholarly or scientific standards. One way to provide this assurance is with evidence of peer review of the scientific basis of a clinical research protocol. Peer review is seen as a key indicator of quality assurance in research and thus was implemented as an essential process to ensure that relevant and scientifically sound research is undertaken on campus. Thus a pre-submission peer review process was designed and a peer review proforma created to provide researchers a simple process that placed the accountability for quality research back into their hands.

The purpose of the pre-submission peer review is to determine if the proposed research has merit. Each research project must be carefully designed to both answer the research question and to safeguard the health and safety of the participants. The primary purpose of the peer review is to identify technical flaws of such magnitude that without modification the project is scientifically invalid and therefore unethical. Peer reviewers may take the opportunity to suggest changes that will improve the methodology and/or conduct of the project. Peer reviewers may also assist the ethical review process by identifying ways to minimise participant risk or burden. As the research protocol must be followed strictly by the researcher team throughout the duration of the study, the final protocol must be clear and provide enough details for all those involved in the study to use it.

Adequate lines of accountability are necessary for raising and resolving issues (including ethical concerns, breaches of protocol, complaints etc.) and holding the researchers accountable. Thus a further processes improvement was made to mandate a “Line Manager” approval for each Principal Investigator for each research project. The line manager must be a person to whom the Principal Investigator normally reports in their employment, such as an RCH head of department or a MCRI group leader. While the Line managers are not specifically accountable for the oversight of the researchers’ conduct and responsibilities in practice they are used to Promoting accountability in researchers and on a more practical level provide assurances that the necessary resources are available for the research project. The line manager thus provides a contact point for the escalation of any issues that cannot be resolved with the principal investigator, and to oversee the appropriate resolution of the issues, such as those exposed in Monitoring (described below), HREC concerns and complaints from participants or other researchers.

**Electronic processes:** Feedback from researchers indicated that the vast amount of photocopying and paper required for ethics applications (22 copies, one for each of the committee members) was a major deterrent and complaint. A business case to the RCH Executive showed that the cost required for photocopying and paper in a single year for research across the campus far exceeded the cost of purchasing iPads for each of the HREC members. Thus processes were modified within the office, including procedures on electronic signatures and storage and security of electronic documents, and a full electronic review process was implemented. As of the December 2011, to coincide with the move to the new hospital the Research and Ethics Office became entirely electronic. Not only has this reduced our carbon footprint but this has reduced the time and resource burden for researchers and contributed to
the decrease in total time to approval (outlined below) as documentation can be instantly provided to reviewers, and back to the office, without having to rely on internal and external mail systems.

**Auditing Program:** In order to review the quality of research being conducted and to ensure researchers are following research protocol as well as other relevant research guidelines and legislation an Auditing Program was designed and implemented by the Research Governance Officer under the direction of the Director of Research and Ethics. For the researchers’ the program is seen as an important education process designed to detect, correct and prevent potential and existing problems in their research. Findings and outcomes of monitoring visits are addressed by the Principal Investigator (and the Line Manager where necessary) and reports of common monitoring findings are reported to the RCH and MCRI Executive and also form the bases is future education and training by the office.

**Increase in Good Clinical Research (outcomes):** From 2007/8 to 2012/13 there has been a substantial growth in research. Between 2008 and 2012 the number of publications produced by MCRI has risen from 448 to 610. In 2008 the MCRI was awarded 8 NHMRC grants for clinical research worth $3 million. In 2012 the MCRI received 21 grants for clinical research worth over $10 million. In 2013 the MCRI was awarded 3 of Australia’s six Centre’s for Research Excellence (CRE) in clinical research; in Emergency medicine, Rehabilitation medicine and Newborn medicine. This adds to the current 4 clinical research CREs we already hold in allergy, language, biostatistics and newborn medicine. MCRI’s share of the total NHMRC funding for clinical research has also steadily grown.

Other measures of growth in clinical research are the number of research projects commenced each year. In 2008 Research and Ethics received 153 applications, of which 34 were clinical trials. In 2012 this had doubled to 296 applications of which 56 were clinical trials.

The improvements in the risk based review process have shown dramatic decreases in the time to approval for research projects submitted. Table 1 shows these decreases, which range from a 23% decrease in high risk research (requiring full HREC review) to a 72% decrease in low and negligible risk research (which are now reviewed via an expedited pathway).

*Department of Health Key Performance Indicator for Clinical trial Time to Approval is 6 weeks (30 days). RCH HREC has an average of 5.7 weeks; and in 2012 was under the 6 week time to approval in 73% of the trials.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**
Consumers were involved in this process in a number of ways:
- initial internal reviews undertaken in 2008 consulted a variety of researchers to understand their needs in conducting good clinical research and understand their main barriers to doing so;
- the Clinical Research Governance Steering Committee, who were tasked with identifying he main priorities for improvement and assist in creating solutions had consumer involvement; and
- the implementation of pre-submission peer review was another way to involve consumers in improving the quality of research produced.

**EQuIP Principle 2: Effective Leadership**
The Children’s Campus partners are aligned at the highest strategic level by the Campus Council. The Campus Council has an independent chair and each organisation is represented by CEO and board chairman (or equivalent). In 2008 the Campus Council established a Campus Research Committee (CRC) with senior representation from all Campus partners, specifically to maximise research outcomes and facilitate a Campus wide research agenda. The Clinical Research Governance Steering Committee (CRGSC) was responsible to the CRC in recommending the process improvements (outlined above). After the finalisation of the project the CRGSC was disbanded however the CRC remain an effective body to whom future strategies for improvement are taken by the Director of Clinical Research and Director of Research and Ethics and other relevant stakeholders.

**EQuIP Principle 3: Continuous Improvement**
In 2010 the RCH Ethics office was awarded an Outstanding Achievement (OA) for by ACHS as part of the Organisation-Wide Accreditation for the criterion “the organisation’s research program promotes the development of knowledge and its application in the health care setting, protects consumers / patients and manages organisational risks associated with research”. Following this high praise the Research and Ethics Office has continued its improvement efforts, finalised the recommendations made by the Clinical Research Governance...
Steering Committee and investigating further improvements via feedback from consumers. Some further improvements that have been made are procedures for the use of clinical data for research and the creation of a campus governance framework.

**EQuP Principle 4: Evidence of Outcomes**
The improvements in clinical research ethics and governance have provided (or assisted to provide) the following outcomes:

- decrease in overall time to ethics approval by up to 73%
- large number of clinical research Centres of Excellence (CRE) awarded by the NHMRC
- increase in numbers and amounts of NHMRC grant funding
- increases in the number of clinical research projects and clinical trials conducted on campus
- increases in the number of research publications produced by the campus

**EQuP Principle 5: Striving for Best Practice**
Our robust Monitoring program was the first of its kind in Victoria, and it has since been adopted and adapted by other sites in the state and nationally, as has our approach to a risk-based review (e.g. Westmead Hospital).

The CRDO website is regularly accessed by external researchers (as seen using Google analytics), and the templates for protocols, study management documentation and other templates are regularly used at other sites.

CRDO has been asked to give educational seminars to several hospitals around Melbourne (e.g. Melbourne Health, Peninsula Health) and has increasing numbers of researchers attend the RCH based seminars from other hospitals.

**Innovation in Practice and Process**
A 2010 NHMRC audit of research governance and practice demonstrated a very high level of achievement in meeting required standards. Of note by NHMRC was the pre-submission peer review process (an innovative process which had not been seen by the accreditors before), the robust monitoring program and improvement ethos of the governing body (as per the Research and Ethics office). This enabled our aspirations of accreditation by the NHMRC to be realised and implementation of Harmonisation of Multicentre Ethical Review (HOMER) principles as a single ethical and scientific review site for multi-centre research.

**Applicability to Other Settings**
In order to share the resources and processes that we have designed and implemented for our campus the RCH has been instrumental in setting up two subcommittees under the Bio21 Hospital Research Director’s Forum (HRDF) (who address high level issues around hospitals and their role in research); a Hospital Research Managers Subcommittee and a Research Governance Officers Network.

The Hospital Research Managers Subcommittee provides a forum in which to discuss matters of mutual interest and concern and to provide a vehicle for development of a variety of research governance initiatives to support education, capacity building, collaboration, financial administration etc. The subcommittee supports the activities of the HRDF by working collaboratively to streamline and support research governance and infrastructure in Victorian hospitals.

Both of these committees share issues and solutions (or ideas for solutions) for improvement, working towards the common goal of improving research ethics and governance processes in order to grow Victoria’s research effort and facilitate good quality research for our patients.

*For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS*
Aim

To provide a coordinated and systematic approach to all aspects of emergency management as we moved to the new RCH.

Abstract

The Royal Children’s Hospital (RCH) has been providing outstanding care for Victoria’s children and their families for over 140 years. We are the major specialist paediatric hospital in Victoria and our care extends to children from Tasmania, southern New South Wales and other states around Australia and overseas. In 2011, RCH moved into a brand new facility which has been purpose built for children and the way we care for them today and into the future.

In Emergency Management (EM) our focus is primarily keeping people safe. We have achieved this through our understanding and knowledge of the New RCH fire management systems, emergency procedures, training, drills, and investigation and follow-up post real events.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus

The primary focus of EM at the RCH is always to keep people safe – patients, visitors and staff. This is achieved through our understanding and knowledge of the new RCH fire management systems, emergency procedures, training, drills, and investigation and follow up post real events.

As we prepared to move to the new hospital, the Emergency Management Coordinator (EMC) was heavily involved in the planning and review of the EM infrastructure. This involved reviewing the Fire Engineer’s report and supporting documentation, understanding how the new technology interfaces with our staff and updating a large number of emergency procedure and associated training programs and liaising will all key internal and external stakeholders.

EM is working on four key areas identified as essential in proving a safer environment for staff, patients / families and visitors:

1. Each Department or collaborative area identifies positions that shall be responsible for zone warden duties. This responsibility is identified within respective position descriptions (PDs), and is integral in the annual Performance Development and Assessment Program (PDAP) ensuring zone warden training and tasks are addressed. A zone warden PD has been developed.
2. The development of a process so that managers are able to ensure all staff they are responsible for, attend an annual fire drill or fire drill substitute.
3. Development of an emergency plan for our basement car parks and work areas.
4. Development and inclusion to the EM Training Plan of a skills retention program.
EM at RCH is a continual process of evaluation of what we say we are going to deliver against what we actually deliver. It’s about delivering services to our community in a sustained manner, at all times. Evaluation is also benchmarking RCH against other hospitals and vice versa. One of best forums for sharing ideas between health services are the Central Hospital’s EM Meeting and Forum and Victorian Hospital’s Emergency Management Committee. RCH played a key role in the establishments of these committees.

An example of benchmarking is in the area of Clinical aggression management, in assessing our then current practice against other hospitals in 2011. We concluded RCH Code Grey responses, appeared less than satisfactory, with our reporting system not sufficiently robust enough to provide evidential support of satisfactory clinical outcomes, especially in the areas of sedation and restraint management. While we were able to estimate the cost to the organisation, in terms of code grey response, we also considered the physical and mental impact on staff, who were exposed to verbal aggression or even physical violence. A hidden cost which was more insidious and difficult to quantify were the number of ‘mental health’ days taken due to staff being exposed to workplace aggression. Besides developing a client focused ‘behavior of concerns’ approach to managing aggression and strengthening our reporting systems, RCH has appointed a full-time ‘Clinical Nurse Consultant – Code Grey’, to lead and manage the code grey program and lead the RCH Aggression and Violence Prevention Committee.

EQuIP Principle 2: Effective Leadership

Strategic oversight is an essential tool in providing effective leadership. RCH is part of a public private partnership arrangement. In collaboration with the facility owners, the facility managers and campus partners the Emergency Management Unit is responsible for the development, implementation and maintenance of the emergency plan, emergency response procedures and related training. Working in this type of relationship is new to us and we had to develop effective ways of working together that are sustainable and productive. We believe we have demonstrated this by the volume of complex issues that have been resolved.

At RCH we have adopted a three tiered approach to EM leadership based on operations (i.e. zones wardens, team leaders for Medical Emergency Team (MET) and Code Grey), tactical (i.e. Chief Warden, Clinical Coordinator and Facility Manager) and strategic (i.e. RCH Incident Commander and Hospital Incident Management Team (HIMT) section leads). Our approach to managing the response and consequences of emergencies can best be summarised in the following chart:

We strengthen our leadership and response capabilities through training and exercises, such as:

- Emergotrain mass casualty simulator exercise (annually)
- fire and other emergency drills (~120 per annum)
- emergencies on the helipad
- Code Black exercise, in collaboration with Victoria Police
- entry level and skills retention programs for all emergency responders and leaders
- delivery of first aid and fire extinguisher training to departments that have risk assessed their environment and have requested additional response capability.

Issues identified through these programs are managed within the ‘continuous improvement cycle’ (Appendix One: The Eight step Process Improvement Cycle). The new hospital is much larger than the old campus which has raised a number of issues with EM. A key to dealing with this has been getting people at a local level involved and responsible for emergencies in their own area. For example: zone wardens are now responsible for developing their own emergency action cards (room searching and people management) in their area. This has resulted in a decentralised approach with the EM unit acting as mentors and empowering staff to be more active in managing their areas.

This model was adapted from work Sundnes and Birnbaum Health Disaster Management Guidelines for evaluation and research in the Utstein style.

Examples of entry / input into the start of the process arise from:

- actual incidents, followed by a critical incident review, debriefs and analysis
- drills (i.e. fire drills, Emergotrain or Code Black exercises) where ‘exceptions’ are identified
- changes to function or role.

In Emergency Management our key principles of continuous improvements include:

- maintaining a customer focus
- understanding that all activates are processes (i.e., Codes, BPC arrangements) and that:
o people work on the process (create it, manage it)
o people work in the process (making it happen, actively contributing to the process)
o understanding the nature of variation and when appropriate to take appropriate measures to ensure a good outcome.

- leadership focus in defining:
  o a clear definition and understanding of where EM is going
  o necessary guidance
  o setting future goals, with due consideration to resource allocation to projects that will make a difference
  o measuring improvement (which is more a qualitative rather than a quantitative indication of improvement).

The Emergency Management Unit has delivered sustainable improvements in a number of EM activities including:

- EM plan for transition to the new RCH – move planning and beyond
- appropriate and safe use and maintenance of the RCH helipad
- training in new EM procedures for staff including zone wardens, chief wardens and the Hospital Incident Management Team (HIMT)
- staff having a better understanding of how best to stay safe at work during an emergency (we know from experience that the best way to engage with staff is to drill them – this often brings up contentious issues, which demonstrates that people are actually thinking about how best to stay safe at work).

Whenever an incident occurs, there is a detailed debrief process that occurs for the staff involved and an analysis of what went well and what we could have done better. If necessary this may result in a change to the procedure or in practice.

An example of this occurred when nursing staff on a ward (ward A), initiated a code red response, due to the smell of smoke in their utility room. This resulted in this ward and the adjacent ward (ward B) activating their zone warden response to the incident, and initiating the activation of their local emergency procedural activities. During this period, operating theatre attempted to deliver a patient to Ward B, in the belief that only Ward A was impacted. On analysis of the incident, procedures were amended so that theatre will not deliver a patient to either the impacted or adjacent ward, until the code stand-down has been announced.

**EQuIP Principle 4: Evidence of Outcomes**

As part of mandatory training, staff are trained in how to respond to emergencies by completing the e-learning Emergency Procedure Annual training package. The package was developed in collaboration with the Emergency Management Unit and the Learning and Development Team. Compliance for this mandatory training package is set at 90% - we are currently at 93% of staff who have completed this package. The success of this process was due to the buy-in and support of manager’s commitment to ensuring their staff understand what they have to do in an emergency.

In 2013 the training package was evaluated. The results indicated that there were some misunderstandings that need to be clarified and some areas that needed to be better articulated. Three examples are outlined in Appendix Two.

In 2012, the Emergency Management Working group (EMWG) was formed, comprising of representatives from a number of areas in the hospital including chief and zone warden representatives, clinical operations and facility management (Spotless). This working group is viewed as an operational and tactical level decision-makers, and has a “doing” role when it comes to reviewing incidents including the debrief process; recommending changes to EM systems based on learning’s and change to evidence-based practice; and reviewing and reporting against agreed performance measures for EM. The chart below represents the emergency management committees and how they facilitate a process of informing the Board of Management on EM matters.

The Emergency Management Planning Committee (EMPC) provides strategic direction, with the last two committees providing an audit and governance oversight.

The KPIs for the EMWG are:

- 95% or greater of drills have been completed as per the annual drill schedule
- 90% of staff have completed the EMAT
• all zones have at least one trained zone warden
• for our 128 ‘populated’ zones we have ~ 460 zone wardens. In this calendar year we have delivered zone warden training to 75 staff members (47 via internal training (RCH has developed its own training course based on a National Standard) and 28 via an external provider)
• all incidents are investigated: this includes reports from responders and the Facility Management team and where necessary debriefs and critical incident reports are prepared. All incidents are reported to the EMWG and any other relevant areas.

Other outcomes have included:
• extension of ‘Colour graphics software, licence improve workflow processes in the fire control room
• conducting annual ‘Code Brown’ patient surge exercises with ~ 200 staff involved
• training:
  o Chief and Zone Warden
  o Hospital Incident Management Training
  o CBR
  o Victoria Medical Assistance Team
• recently purchased new PPE
• due to issues identified through drills:
  o restructured zones that were not correctly aligned to fire management system
  o change the emergency tones to announce verbal indicators of what the tones mean (“Alert” / “Code orange”)
  o identified that not all ‘fire’ labelled doors are 2-hour rated, with new additional signage on the 1-hour fire doors
  o improving signage for families to understand what they need to do in an emergency within the car park
• practical outcomes in response to the Pandemic / Influenza business continuity planning, involved the purchase / stockpiling of $214 K of PPE and swabs.

Many other examples were presented at our recent ACHS periodic review with RCH receiving Met with Merit for all Emergency management criteria.

EQuP Principle 5: Striving for Best Practice
We have as our foundation a sound engineering and fire strategy. Our challenge is now further embedding in our staff the safety aspects of human behavior to develop a safety engineering strategy that evolves a sound, robust and sustainable fire protection strategy and fire evacuation strategy. We define strategy ‘as a long-term plan of action designed to achieve a particular goal’, where we make best use of knowledge and data to formulate a plan for success. Striving for best practice involves ensuring our people have the right knowledge and information, as gleamed by understanding the principles of dynamic risk assessment, to make them safe.

Innovation in Practice and Process
RCH strives to stay contemporary in Emergency Management. We ensure we are working towards conforming to the requirements of relevant Australian Standards, Building Regulation Codes, Department of Health requirements and other required national standards (i.e. EQuIP) and aim to exceed these requirements. In the process of setting out our project goals and objectives, we often are faced with challenges that require new technologies and techniques to assist us. An example of this is in achieving the objective of managers ensuring all their staff attend an annual fire drill, where we are using new technology to RCH to record staff who attending a fire drill and allow for data sharing with the ~ 150 RCH cost-centre managers.

The RCH Emergency Management Coordinator is responsible for developing and implementing efficiencies and effective process, thus looking to others to learn from. Examples of learning opportunities include:
• national and international conferences (i.e. Canada 2009, Israel 2012)
• exercises (Radiation exercise in Israel 2012 and an Active Shooters exercise in Melbourne 2013)
• membership to World association for Disaster and Emergency Medicine
• LinkedIn emergency management forums.

EM is now engaging with the Family Advisory Committee (FAC) and having their input into such things as signage and the placement of 5 telephones in our main public space area, to assist families contact our emergency number when it becomes necessary to report an emergency.
Applicability to Other Settings
In preparation for and the post move period we focused on developing new procedures and process for managing emergencies, utilising the new technology available to us, and delivering staff training to all staff, zone and chief wardens, and the Hospital Incident management Team. Post move we concentrated on the task of settling into the new facility, dealing with excessive number of internal emergency activations and discovering and reconciling issues with the fire management system, ensuring our systems are robust in managing emergencies. In 2013 our focus has been the further development of the skill base required for responding to emergencies, namely our 460 zone wardens, 25 chief wardens, and the Hospital Incident Management Team. We have also invested resources and dollars in enhanced our business continuity arrangements and developing a stockpile of PPE for Influenza / Pandemic contingencies.

EM has moved significantly from being a centralised process, to an entity still prepared to stand-up and lead when necessary but arrives at decisions now in collaborative manner taking into consideration our campus partners and our clients. We are of the opinion our ability to act and respond to emergencies has greatly improved due to the process of decentralising EM to the local level that is fully supported by an appropriate organisational response.

Since the move RCH has been approached by Bendigo Health in seeking advice on ensuring EM considerations are embedded early in the design of their new hospital. Ballarat Health has also sought RCH input into managing emergencies on their currently being built helipad.

[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]
CONSUMER ENGAGEMENT - A NEW FRONTIER

Strategy and Improvement
The Royal Children's Hospital
Melbourne VIC

Scott Swanwick  Peter MacDougal
Jane Miller

Aim
The RCH has identified 29 committees requiring consumer representation of at least one consumer of the RCH to enable us to deliver on our commitment to “Great Care” (Excellent Clinical Outcomes, Zero Harm, a Positive Experience and Timely Access).

Abstract
A consumer is defined in the NSQHS as members of the public who use, or are potential users, of healthcare services. A similar definition is provided by the Department of Health (Victoria): people who are current or potential users of health services. This includes children, women and men, people living with a disability, people from diverse cultural and religious experiences, socio-economic status and social circumstances, sexual orientations health and illness conditions. However it is our belief that, as the RCH is the leading paediatric healthcare organisation for the state, we need to broaden the definition of consumer to include the many and varied health professionals from other organisations that use our services.

Currently the RCH has over 85 consumers on committees throughout the organisation and work continues to facilitate consumer participation (refer to Appendix I). This includes developing means for staff to seek input from consumers irrespective of whether or not a consumer is required to sit on a committee or working party.

Consumer participation is actively promoted at the RCH in accordance with:
1. The RCH Quality Plan 2011-15: Every Patient, Every Family, Every Time
2. The NSQHS 2 Partnering with Consumers:
   (1.1.1) Consumers and/or carers are involved with the governance of the health service organisation
   (1.1.2) Governance partnerships are reflective of the diverse range of backgrounds in the population served by the health service organisation, including those people that do not usually provide feedback.

To enrich this process the RCH also has an active consumer representative data base that is used to gain input from a wider user group of parents, patients, and community members. Recruitment for this data base in done through word of mouth (staff and consumers), advertising on the RCH website “Get Involved” (Appendix III) and from discussions with external support agencies such as HeartKids Australia. To date the register is 55 consumers strong and growing.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
At present, there are several committees or working parties currently seeking a consumer representative. These committees are working in conjunction with RCH consumer advisory groups to gain the user view on their work until
Non-Clinical Service Delivery

a consumer can be appointed.

Requests for consumers committee / working group members are distributed and advertised in many different ways with the advice and support of the Manager, Consumer Participation.

**Internally:**
- Providing information (refer to Appendix II) to:
  - associates, friends, families of existing committee members and consumer representatives
  - RCH staff
  - volunteers
- Displaying posters in family rooms (Appendix II)
- Advertising in RCH Quality of Care Report
- Advertising on RCH website (refer to Appendix III)
- Externally
- Providing information to:
  - support agencies (such as Amaze)
  - other health care organisations, including community health centres
  - schools and kindergartens
  - other organisations (Victoria Police / Country Fire Authority / State Emergency Service)
  - Health Issues Centre
- Advertising in RCH Quality of Care Report
- Advertising in support agency magazines
- Advertising through school councils.

The recent development of the RCH facebook page allows for a new medium for recruitment and inclusion of consumers of our service.

**EQuIP Principle 2: Effective Leadership**
The RCH have been an active leader in the area of consumer engagement, requested to speak at forums, workshops and conferences about our processes, challenges and outcomes thus far. This has not only been provided by staff of the RCH but also by consumer representatives themselves.

Through the consumer and staff forum discussions held at RCH we have identified the need for a more formalised approach to how consumers and clinicians can work together. This will lead to the development of a workbook about consumer engagement that can suit the need of all users, ensuring this ongoing objective is sustainable in the future.

It is noted however that the current actions of our consumer representatives on RCH committees has highlighted to our staff that having a consumer in the room is a strong positive. This has led to an increased level of comfort in staff to engage with / work with consumers at many levels access the organisation.

**EQuIP Principle 3: Continuous Improvement**
At a recent Consumer Forum, held at the RCH the consumer recruitment approach was discussed in depth.

Exploring the issues of:
- barriers and solutions to becoming a consumer representatives in health care,
- different ways people can become involved,
- how to advertise the need for health care consumer representatives,
- the induction process involved and
- importantly, how to help healthcare staff see the patient is more than just a patient.

The invitation of quest speaker, Andrew Ford the Chief Executive Officer for the Volunteer Fire Brigades of Victoria, allowed us to look into another organisation and learn from their process and consider how their experience could apply to the RCH.

Whilst the RCH consumer representative population is predominantly created by the parents of our patients the RCH undertook the opportunity to hear the voice and work with our adolescent and young person patient group at the Young Peoples Forum. The themes from this forum have then been cultivated into various reports and recommendation, such as “Towards an Adolescent Friendly Children’s Hospital”.

16th Annual ACHS Quality Improvement Awards  Page 249 of 309  Quality Initiatives 2013
**EQuIP Principle 4: Evidence of Outcomes**

In respect of the RCH aim state above, to date the RCH has 62% of its “required” committees with consumer representation, of the remaining committees all are currently recruiting consumers and have established connections with the RCH consumer advisory committee groups to progress the work they are undertaking, ensuring the “voice of the customer” is heard.

Examples of work produced by consumers supported through the RCH committee structure:
- The Youth Advisory Council DVD “Child Rights”.
- The Family Advisory Council DVD “Patient and Family Centered Care”
- The Resuscitation Committee in conjunction with the FAC “Parent Imitated MET”.

**EQuIP Principle 5: Striving for Best Practice**

Achievement as outlined by June 2013 ACHS Accreditation Survey – Periodic review:
- Standard 2 Partnering with Consumers: 14 criteria met at satisfactory level and 1 met with merit.

As noted by ACHS survey team in their report........ “RCH has become very active recruiting, training and inducting members from consumer and community groups.....”

**Innovation in Practice and Process**

To help remove common barrier to consumer engagement at the RCH (and many healthcare agencies) we have explored the use of different methodologies to get consumer and clinician together, such as:
- barriers of geography (how do we hear the voice of the user that lives remotely);
- child care (we are caring for families with children of many ages and ability);
- work commitments.

The RCH has made available to consumers on committees the ability to access and be present at the meeting through teleconferencing, videoconferencing (using our TeleHealth network) hence negating the barriers many of our potential consumers face.

The RCH also provide onsite child care through our volunteer services for consumers where required, to be able to come and contribute to our organisation and know their child is safe and happy.

*For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS*
REAGENT INVENTORY CONTROL IMPROVEMENT – A CROSS ORGANISATIONAL SIX SIGMA

Application Experience
Department of Pathology
Hong Kong Baptist Hospital
Hong Kong
Dr. K.H. Li

Aim
Complying EQuIP Principles, a Six Sigma Project looks into ways to improve the current reagent purchasing, delivery and storage system to:

- assure a steady supply of quality working reagent at least a month ahead of the expiration date,
- enhance cooperation between all concerned parties (within and between organisations),
- embrace corporate social responsibility by training up future talents through internship program.

Abstract
Established in 1963, Hong Kong Baptist Hospital (HKBH) is a modern and well established private hospital. It is one of the social service institutions of the Baptist Convention of Hong Kong. As a Christian hospital, HKBH strives to honour God by serving the needy, to ensure the physical, psychological, social and spiritual well-being of individuals, and to fulfil our mission of providing holistic healthcare. Our strong and dedicated team of chaplaincy staff offers religious and spiritual support to our staff, patients and their families with sensitivity and compassion.

Under the Medical Department of the Baptist Convention of Hong Kong, HKBH started as a clinic in the 1950s and gradually developed into a general hospital as it is today. Following the extension of the South Wing in 1979, and the completion of the East Wing and Block D in 1982 and 2008 respectively, HKBH sought to maximise its contribution to the healthcare industry and grew to be a large modern private medical institution with more than 850 beds and staff strength of over 2,200. The new Block E is expected to be in service in April 2015 and it will represent an important advancement in the services of HKBH.

With vision, HKBH embarks on corporate social responsibility as a fundamental culture. Since the launch of Caring Organisation Scheme in 2002, HKBH has been awarded the Caring Organisation Logo for ten consecutive years. Apart from the provision of quality medical services, we always strive to demonstrate our care to the community. The logo affirmed our commitment to the community. Every year, HKBH supports various intern programs to train up our younger generation with skills and experience to prepare their integration into society.

This summer, HKBH collaborate with Ortho-Diagnostics (Johnson and Johnson) for an intern program to train up future talents and to streamline the existing laboratory reagent inventory control process to ensure a steady supply of quality reagents. In fact, Johnson and Johnson Family of Companies is a multinational corporation which strives to bring innovative ideas, products and services to advance the health and well-being of humanity, directly in touch with more than a billion human lives through the health care productions and services. One of the company’s missions is to deliver precise and efficient customer services in order to provide a secure and health environment for global community.

The project runs in a Six Sigma approach, sharing the managing experience from Johnson and Johnson which is known as a Six Sigma operating company. A black belt qualified project leader from the laboratory is selected to manage the team which, in addition to the three interns, is formed with a staff mix at all levels from both...
organisations. The program runs with a six sigma approach with 5 typical phases - Define, Measure, Analyse, Improve and Control (Fig. 1). In fact, the six sigma approach fits well to the EQuIP Principles.

The achievement of the 6-sigma project:
1. Develop a user friendly inventory station with customised proprietary software.
2. Adopt a new inventory process, safely reduce storage space accordingly.
3. Reduce the quantity of expired stock with the improvement in purchase flow communication and real time forecast.
4. Reduce number of pressing orders.
5. Decrease lead time by 50%, from 60 to 27 days.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
As a rule of thumb, consumers (patients, clinicians and nursing staff) at any clinical laboratory are highly concerned about the report standard quality and turnaround time. The chemistry pathology laboratory in HKBH always strives to meet this vital obligation.

In fact, HKBH is the first private hospital in Hong Kong to invest the enGen automation tracking system in chemical pathology laboratory. The full automation leads a way to laboratory process re-engineering and then industrialization.

As a proven industrial golden standard, Six Sigma stands for product quality to consumers at a level of 3.4 defects per million opportunities which all laboratory professionals are praying for. To achieve such a prestigious standard, from time to time, systematic approaches equipped with statistical management tools are applied to address the voice of consumers (VOC).

This year, the chemical pathology laboratory collaborates with Johnson and Johnson in a summer internship program to share experience in six sigma project management, a first attempt seldom in clinical laboratory.

EQuIP Principle 2: Effective Leadership
Six Sigma project team is built up from members from different units at various levels. A project champion from high level management is responsible for the project to ensure an on-track development while subordinate members will work together towards the target with mutual understanding and compromise with discussions based on evidence and statistical analysis. A black belt qualified leader from the laboratory is selected to manage the activity.

EQuIP Principle 3: Continuous Improvement
Since the installation of the enGen automation tracking system, the chemical pathology laboratory has been running more efficiently despite facing stringent manpower supply in medical scientist profession and tight budget control in private hospital. Moreover, while laboratory automation does reduce the risk in human errors, the laboratory keeps on seeking for quality improvement.

Six Sigma approach is well acknowledged for any organisation as a piece of continuous quality improvement tool to address for the ever-changing customer requirements practically in a way to focus on the key input factor in continuously priority.

This unique project looks into ways to improve the current purchasing, delivery and storage system with clear communication between the vendor and customer. The laboratory can then be ascertained with a steady supply of quality working reagent at least one month ahead the expiration date.

EQuIP Principle 4: Evidence of Outcomes
The project runs in a Six Sigma approach with five typical phases: Define, Measure, Analyze, Improve and Control (Figure 1).

Define Phase: To perceive to the voice of customer (VOC) which concerns about the quality reagent supply, the team in the first step must have an understanding of the overall process of the supply chain. A SIPOC chart (Suppliers, Inputs, Process, Outputs, Customers) is thus drawn to identify for the scope of investigation.

Measure Phase: In this phase, the overall process is broken into more detailed steps in detail and the current performance baseline is the selected critical point to be measured. The baseline serves as initial points for future
possible improvement roles.
With detailed process flow map, the team members pick up the key essential steps to improve the inventory control. The possible causes and effects to the process output are then enumerated. A fish bone diagram illustrates the rational arguments which explain the preferential elements to be improved. The diagram visualizes all the potential causes of problems i.e. People, Materials, Equipment, Methods and Environment.

With the help of the fish bone diagram, the team members candidly rate potential causes to their level of importance (Table I). From the table, 8 factors with higher marks (>6) are selected for further exploration. The factors are then examined by an Effort and Achievement (Table II) to focus on a practical root cause prioritization. The factors on table II are rated according to their “effort” and “achievement”. “Effort” is the effort needed to spend on improving the factor. “Achievement” is the effect of the factor if the desired result is achieved. “Total” is the product of effort and achievement. From this table, we found that “needs advanced training” and “stock organisation” are two most important factors we should focus to make improvements on.

The Pareto Chart (Figure 5) also indicates that the Inventory System Application and Fridge Stock organisation are the primary factors which account for 80% of the existing inventory system quality.

As Six Sigma projects always focus on critical factor for improvement within limited available resource to ensure good return on every effort invested. At this point, the team accepted the inventory system. The refrigerator storage issue will be dealt with later when two new refrigerators are delivered.

Analysis Phase: Once the root cause is identified for improvement, the inventory system process would then be analysed with Cause and Effect Matrix (table III) in depth with respect to the rating of seven items in Critical to Quality (CTQ) along the detailed process stream. The matrix analysis gives high marks to two issues, which is, the stock level check and the inventory data base set up. The two aspects are then analysed for long term improvement and quick fixes (LEAN approach) if applicable.

Inventory Process:
- **On-hand Stock Level**: By enhancing the communications between vendors and the laboratory in standardised manner, the risk of transportation delay will be much reduced with less stock required. Currently two month stock on hand is required. However, with customised inventory program, one month stock on hand is adequate, a 50% reduction.
- **Lead Time**: The existing lead time takes from thirty to sixty days, depending on the match on the ordering and shipping schedule. Upon standardised communication schedule between the vendor and customer, the lead time could then be kept to the minimum. A shortened lead time could prolong shelf-life of the working stock.
- **Urgent Orders**: With the current system, the vendor is being requested frequently for urgent reagent delivery. There are about 5-6 urgent orders each month. A better controlled system would such urgent and unexpected order.
- **Time for Inventory Stock Updating Upon Reagent Usage**: Currently, the used reagent is recorded when the empty package being disposed. It will take around three days for empty reagent package to be recorded. This implies a risk of insufficient stock within the gap when database does not reveal the present status. Such risk could be eliminated when each reagent pack has been recorded once it has been opened.

**EXCEL In-house Data Base**:
With the existing Excel format work sheet, reporting has been filled with difficulties. Perplexity and time cost surrounds the information selection process.

The Excel worksheet appears lengthy.

There is no data protection applied to the Excel worksheet thus prone to accidental corruption.

Through the analysis, it indicates that a user-friendly inventory program system is much more desirable to simplify process with higher security. Meanwhile, timely reports in standard format from the program provide unambiguous information flow between the supplier and the customer, ensuring a steady supply of quality reagent.

Improve Phase:

**Introduction of a customised inventory program**: The idea to build up a database from common office utility program like the existing Excel database was abandoned. An on-shelf inventory program, “InFlow” was selected as a basic and reliable
platform for straightforward customization.

The customised program records all basic purchase information of each reagent item, and tracks all the past records. The customised program could bring prominent work flow changes in laboratory. It could also produce printed version of a precise and highly organized report with just a simple mouse-click. Six useful reports are preset in the program to cater for the daily application in chemical pathology laboratory:

1. Inventory Details Report sorted by categories illustrates current stock level in detail with item name, catalogue number, lot number, expiry date, quantity and unit price.
2. Reordering Report sorted by category shows items’ name, catalogue number, current quantity, minimum stock level and order quantity.
3. Purchase Order Report sorted by purchasing order number with items’ name, order date, catalogue number, purchase request number, quantity and price.
4. Delivery Track Record Report shows the movement history from the vender to the customer with items’ name, date of delivery, lot number, expiry date, catalogue number and quantity.
5. Purchaser Order Delivery Report shows the corresponding Purchasing Order number for each item. It is sorted by items’ name, showing purchasing order number, order date, catalogue number, Purchasing request number and quantity.
6. Reagent Consumption Report shows the use history of each reagent in an assigned period of time with item name, date, lot number, expiry date and personnel involved.

Apart from the customised one-click reports, reports can also be exported in other formats such as Excel, Word and Adobe PDF for further functional use. As planned, bi-weekly, an Excel summary sheet will be e-mailed to the vender who will then contact the customer to work out any preventive measures accordingly.

Control Phase: Upon the introduction of the customised inventory program at hand, responsible staffs are trained for the new system with the newly established Standard Operation Procedure. Both old and new systems are run in parallel for one month for stability observation.

**EQuIP Principle 5: Striving for Best Practice**

Quality management is fundamental to the chemical pathology laboratory where runs routine statistical process control every day. The total quality control concept turned into total quality management system in late 20th century. In 1988, Motorola in America revealed the successful experience to the world in the quality management with Six Sigma approach. Since then, the way of Six Sigma quality management has substantially influenced the business operation of many famous companies, Johnson and Johnson is one.

The chemical pathology laboratory is always looking for ways to keep a steady supply of quality reagent for the best reliable testing quality, from day book to electronic Excel work sheet. A more powerful relatively indexed data base system such as Access would be a better choice for the purpose.

While looking for improvement in reagent delivery quality, the project obviously is a unique opportunity to answer for the problem with a sophisticated approach where the well-known Six Sigma tool applied across organisations, levels, disciplines and generations. Members are impressed with the progress made with their active participation and commitment to the Six Sigma management way.

**Innovation in Practice and Process**

Indisputably, quality at Six Sigma level is a premier industrial standard and laboratory testing service is not an exception. To reach such a prestigious trade standard, quality improvement project runs in a Six Sigma way. The project will cycle through phases in Define, Measure, Analyze, Improve and Control (DMAIC) for continuous service improvement to Critical to Quality (COQ) and Critical to Customers (COC) with respect to the Voice of Customers (VOC).

It is a collective team effort to identify meaningful and manageable project scope aimed with SMART (Specific, Measurable, Attainable, Relevant and Time bound). Team members from all levels are led with qualified leaders who motivate the team in a way based on TARGET (Truth, Accountable, Respect, Growth, Empowered and Trust). This ensures that a Six Sigma project runs to success in a shortest time.

The short summer internship project proves that the Six Sigma management tool is useful to match and exercise the
Non-Clinical Service Delivery

EQuIP Principles. The project builds on a logical platform base evidenced with statistical analysis. The DMAIC will cycle on and on again to address for the VOC with appropriate and prompt process changes.

In the summer of two months, customised reagent inventory software has been developed to ease the reagent purchase and storage activity with new process flow to both the vender and client. The purchasing lead time can then be reduced by 50%.

**Applicability to Other Settings**

During a group presentation on the projects progress, managers from other laboratory were excited and interested in the new customised software. It proves the success of the collective idea from all the team members, a practical idea to the key input which is critical to quality and customer.

On the other hand, all the team members learned from the project the useful and practical application of the DMAIC activity cycle for business and process change to fit the customer requirement. Unquestionably, the DMAIC opens the door to succeed with continuous improvement.

*[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]*
Aim
The aim of this initiative was to provide safer person-centred care by improving teamwork, optimising communication between multidisciplinary team members and actively involving patients and carers in their plan of care.

Abstract
Creating a culture of safety in healthcare organisations requires multiple caregivers to work together as an effective team with the goal of achieving desired patient outcomes and preventing harm. At Alfred Health, General Medicine implemented a team communication training program and a structured interdisciplinary bedside round (SIBR) as a methodology for the multidisciplinary team to come together to review a patient’s condition and develop a coordinated plan of care, while facilitating full engagement of the patient and/or carers in the process. This has resulted in a marked improvement in team-based ward rounding, medical record documentation and several quality indicators in a busy medical unit with high patient turnover.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Dedicating time by the bedside to provide clear explanations about symptoms and disease severity and to answer even the simplest of questions can remove a patient’s fear and anxiety, and aid their recovery. Each day at 11am the multidisciplinary General Medical team group together and conduct SIBR with their patients. They dedicate a specific amount of time and follow a structured format which includes a guiding proforma and a safety checklist. The team-patient interaction is completed only when the ‘plan for the day’ is verbalised and agreed upon by all members of the team, including the patient.

EQuIP Principle 2: Effective Leadership
A multidisciplinary governance team was established including representation from medical, nursing, allied health, clinical governance and pharmacy staff to choose appropriate methodologies for practice change. An intensive team building program was undertaken using TeamSTEPPS® (Team Strategies and Tools to Enhance Performance and Patient Safety) methodology to improve interdisciplinary relationships and communication across all levels of staff. The Structured Interdisciplinary Bedside Round (SIBR) implemented at Alfred Health in mid-2011 is based on the work of A/Prof Jason Stein from Emory University in conjunction with work from the NHS by Dr Gordon Caldwell to address the quality of care through the use of a structured safety checklist.

EQuIP Principle 3: Continuous Improvement
During the establishment of a new model of care for General Medicine in 2010, “delays in decision making”, “communication” and “lack of teamwork” were identified as barriers to achieving safe and effective care. Ward rounds were not multidisciplinary, were time consuming, poorly documented and patients were not active participants in the process. The introduction of SIBR created major cultural change in interactions between team members and their patients. Sustaining this change required constant vigilance to reduce the chance of ‘cancelling’
the SIBR if the ward was too busy. Elements of SIBR include: cross checking the diagnosis, treatment, and progress with the patient and care team; use of a quality and safety checklist aimed at preventing predictable hospital complications; shared problem solving; and verbalising a plan for the day. During SIBR, key members of the healthcare team have explicit roles and responsibilities that contribute to delivery of safe, high quality patient-centered care. Since its implementation, the General Medicine Team has continually reviewed and evaluated the process, incorporating adjustments along the way, to accommodate practice requirements as well as staff and patient feedback.

**EQuP Principle 4: Evidence of Outcomes**

A total of 387 staff have been trained in TeamSTEPPS® over the last 24 months. One third of the participants are nursing staff, a further one third are medical staff and the remaining third are allied health, pharmacy and ward support staff. This represents a major achievement in multidisciplinary training engaging all disciplines. Observational audits undertaken of SIBR using the dimensions of leadership outlined in the TeamSTEPPS® program have identified a steady improvement in team structure, leadership, situation monitoring, mutual support and communication skills. Medical record audits have identified improved documentation of Medical Unit (by 40%), date (by 12%) and time (by 70%) of the ward round. Documentation of team members present has improved from 10% to over 50%. Documentation of working diagnosis has had an absolute increase of 45%. Areas of risk reduction align with the National Safety and Quality HealthCare Standards. These include: infection prevention through minimising the use and duration of urinary and intravenous catheters; medication safety and prescribing targets such as ensuring patients receive appropriate VTE prophylaxis; monitoring for early signs of clinical deterioration through review of the graphic observation chart. Falls and pressure ulcer risk assessments are reported by nursing staff through their SIBR preparation checklist. Audits of the risk based checklist have shown increased documentation of DVT prophylaxis from 33% to over 70%, with similar results for the presence of a consensus resuscitation plan.

**EQuP Principle 5: Striving for Best Practice**

TeamSTEPPS® is an evidence based teamwork training program developed from over 25 years of research on competencies necessary to achieve high performing teams. Within these principles a variety of skills, competencies and checklists are clearly articulated and developed to translate the concepts into practice. The core principles lead to changes in knowledge, skills and attitude of the team members, demonstrated by a shared mental model, mutual trust and team orientation.

**Innovation in Practice and Process**

Acute General Medicine is one of the fastest growing inpatient hospital services across the Australian health system. General Medicine provides acute hospital care for populations of older people, with complex combinations of acute health problems, multiple co-morbidities and additional functional, emotional and social needs. These patients are at high risk for preventable error and delays during their hospital stay. This initiative was designed as an innovative model of ward rounding which promoted a positive experience for the patient and staff; used geographical co-location of the patients according to their care needs and addressed competencies required of care providers to meet these needs.

**Applicability to Other Settings**

The pilot of TeamSTEPPS® was concluded in 2012, but the success of this initiative and the SIBR round has continued. The model is being promoted nationally and internationally and was recently cited in an editorial by Dr Gordon Caldwell published in the Journal of the Royal College of Physicians Edinburgh. Over 30 groups from across Australia are now registered users of the SIBR video website. In addition, a partnership with TeamSTEPPS® South Australia has allowed further training and sharing of resources, including Master training for Alfred Health staff. TeamSTEPPS and SIBR are a model for local Safety and Quality improvement that also meets demands for patient flow and throughput – Ticking all the boxes.
Aim
Primary aim to decrease length of stay for joint replacement patients by 20%, with secondary aims to increase quality of life outcomes; consistency in anaesthetic / post-operative analgesia; decrease incidence of pressure ulcers; and admissions to Rehabilitation Unit.

Abstract
- 2011 heralded a significant shift in the model of care for Bathurst Health Service Orthopaedic Services.
- Increasing demands for total hip and knee replacements, increased waitlist times (compared to peer hospitals and National averages); increased lengths of stay and inconsistent models of anaesthetic and post-operative service delivery highlighted the need for change.
- Secondary sequelae from these increased lengths of stay were increased pressure ulcer incidence, increased rehabilitation bed use and occupancy rates and inconsistent post-operative analgesic regimes that limited functionality and capacity for enhanced recovery.
- Under the framework of activity based funding, a new multi-disciplinary model of care was developed. A single blinded randomised control trial involving 64 patients (32 in control and 32 in intervention groups) was conducted assessing the efficacy of early mobilisation on length of stay, secondary sequelae development and overall quality of life using the Short Form 36 (SF-36).
- Outcomes included:
  - significantly decreased length of stay;
  - $1,466,460.30 savings;
  - increased quality of life / patient satisfaction;
  - decreased post-operative complications (pressure ulcers);
  - consistency in post-operative functional analgesia;
  - efficiency in service provision.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
- Outcome factors such as patient satisfaction and interdisciplinary communication as well as quality of life outcomes were addressed. In order to best ascertain gaps in satisfaction, participants in the study were encouraged to participate in using a pre-set structured questionnaire. The validated short form 36 (SF-36) was utilised in this instance to provide the key data.
- The quality of life data were assessed pre- and post-operatively, ensuring patients were the key focus of the
trial and how their experience and overall quality of life could be improved from their surgery and through early mobilisation.

- Standardised pathways for anaesthetics and post-operative functional analgesia, reduction in pressure ulcer occurrence, and decreased length of stay were developed so as patients could be safely home within a shorter time frame, with fewer complications and with associated improvements in quality of life.

**EQoP Principle 2: Effective Leadership**

- The trial was a multidisciplinary approach to patient care, all had input into the clinical focus and changes required to current practices of post-operative joint arthroplasty management.
- Advice and recommendations from the multidisciplinary team were readily welcomed to study improvements, with regular feedback provided to all staff on trial progress. This inspired and continually motivated the team on progress and outcomes.

**EQoP Principle 3: Continuous Improvement**

- From the increasing trends in average length of stay, pressure ulcer incidence, and introduction of activity based funding, ways to improve service delivery were reviewed.
- The trial regularly reviewed strategies that monitored improved outcomes in patient care, reduced length of stay, and incidence of pressure ulcer development. This was through continual review of patients, early intervention if pressure ulcers developed and ways of future prevention enacted.
- Meetings with Anaesthetic department in obtaining functional post-operative analgesia for patients was vital, and the early mobilisation of patients the night of surgery also assisted this. This has now become embedded as standard practice.

**EQoP Principle 4: Evidence of Outcomes**

- The ethically approved single blinded randomized control trial commenced in January 2012 and completed May 2013, with full analysis of the result completed at this stage.
- The results achieved were: Significant increases in quality of life physical components in the intervention group with a 51.8% improvement compared to baseline function at a six week follow up. There was a 12% increase in the control group.
- Statistically significant decreases in pressure ulcer incidence, with none in the intervention group and 6 in the control. This was related to the epidural patient controlled analgesia post-operatively being non-functional and this evidence presented to anaesthetic department and practices changed as a result of this evidence. No pressure ulcers have developed in joint arthroplasty patients in 2013 in the study period.
- A clinically and statistically significant mean length of stay reduction in acute ward admission of 42% and rehabilitation admission length of stay decrease of 58%.
- Based solely on these occupied bed day decreases, the estimated per annum economic benefits/savings for this core clinical group across the period of the study was $1,466,460.30
- Incidental findings: The intervention group was independently mobile earlier (2.44 versus 4.75 days) with a subsequent statistically significant decrease in admission to the Rehabilitation unit (one form intervention group, 13 in control group), a further saver of costs.
- No readmissions of any of these patients, and no adverse events in intervention or control groups.

**EQoP Principle 5: Striving for Best Practice**

- Only two other studies worldwide have looked at an early mobilisation focus in elective total joint arthroplasties. Neither of these are Australian based; nor have a rural focus. This study is the first to look at this process in the rural Australian context.
- The core interventions for this study were two fold — sitting on the edge of the bed on the day of and a medication of functional post-operative analgesia to allow this to occur safely. The results achieved have shown the simplest solutions often enable the best outcomes.
- The early mobilisation and post-operative functional analgesia achieved optimal patient outcomes through reduced complications in pressure ulcers, reduction in length of stay, and significant improvement in their quality of life with associated economic benefits to the hospital.
- This model has application for easy transferability to other surgical settings including major gynaecological procedures/major abdominal procedures, and applicability to any facility undertaking joint arthroplasties, the world over. This project and subsequent study required a commitment from all the multidisciplinary team, Medical, Nursing, Allied Health to achieve the outcomes of the trial and significant improvement in patient quality of life.
Innovation in Practice and Process

- The early mobilisation project undertaken has now become embedded in the ethos of nursing, allied health and surgeons alike.
- A new standard of practice, development of local key performance indicators (reduction in pressure areas, decreased length of stay, improved quality of life) and desire to improve patient care and outcomes, combined with significant cost savings, has ensured top down support for sustainability.
- Ongoing development of the project continues, with the integration of this strategy to core clinical groups.
- The key to the trial was it needs to be a multidisciplinary approach, for a small outlay of cost, major gains were attained, simplest solutions are often the best and finding ways to work smarter not harder.

Applicability to Other Settings

This pilot study has provided foundation for the notion of early mobilisation in the elective orthopaedic population:

- Results showed a downward trend in length of stay, pressure ulcer incidence and increased quality of life compared to the current standardised pathways.
- Further research is required, within similar contexts / patient demographics to confirm the findings of this study.
- This process is easily adaptable, safe and cost effective equating to transferability between sites within or external to the Local Health District.
- Future scope of the study is a feasibility study reviewing Nurse initiated early mobilisation outside Physiotherapy hours providing the same intervention; application to other surgical procedures to decrease length of stay.
- Local Health District support of a multicentre trial; and application to whole Local Health District as standard post-operative management for total joint arthroplasties.
Aim
The purpose of this project was to enhance the surgical journey of the patients in the emergency 24 hour category at Nepean Hospital.

Abstract
This Clinical Redesign Project was designed to enhance the surgical journey of the emergency patient booked in the E24 category (surgery to be completed within 24 hours from time of booking) at Nepean Hospital. This is the largest group of emergency surgery patients at Nepean, accounting for an average of 46% of the emergency surgery workload. The Ministry of Health sets a KPI of 85% for patients in this category, however, at Nepean the average performance was 73%. This meant many patients in this category were fasted and cancelled, sometimes repeatedly, preoperatively. This impacted on the patient’s length of stay, bed availability and patient, carer and staff satisfaction. The project successfully met and exceeded the 85% benchmark by February 2013.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
With improved performance on this indicator, patients do not need to stay longer in hospital, reducing the availability of beds for other patients and the faster access to surgery has had a positive effect on patient and carer satisfaction.

EQuIP Principle 2: Effective Leadership
This project demonstrated leadership by both the Project Sponsor in supporting an initiative to refine and streamline the patient journey for patients requiring surgery; and the Project Leads in drawing together their team to have input on the process, participate in workshops and to deliver solid outcomes.

EQuIP Principle 3: Continuous Improvement
This project has assisted in strengthening the continuous improvement culture through a consultative process with staff, stakeholders and patients and carers. This project has spurred others on to tackle other issues and challenges facing Surgery and Operating Theatres.

EQuIP Principle 4: Evidence of Outcomes
- Eliminated the Emergency Surgery in 72 hours (E72) category. Nepean Hospital is the only Facility in the NSW to have achieved this outcome.
Nepean Hospital is currently meeting the Ministry of Health and the Surgical Services taskforce KPI of 85%. This target has now been successfully reached for 10 consecutive months.

- Preoperative length of stay is being reduced by the Orthopaedic and Plastics teams.
- A preoperative nursing checklist has been developed and implemented.
- The Emergency booking form is in development to go electronic (on-line) including mandatory field completion to ensure all patient and procedure details are recorded.
- Patient and carer satisfaction has measurably improved with more positive patient journey stories being reported and a reduction in complaints.
- Staff satisfaction has also improved significantly. Medical and nursing staff have both embraced the changes with no resistance and the changes have been operationalised.

**EQuIP Principle 5: Striving for Best Practice**

This project aimed to deliver faster access to surgery for patients. The Project Leads and team had a vision for a more streamlined and well co-ordinated patient journey whilst also providing significant benefits in terms of bed days saved, reduced length of stay for patients and contributing to the optimal utilisation of theatres.

**Innovation in Practice and Process**

This project won the Chairman’s Award at Nepean Blue Mountains Local Health District’s Quality Awards for its significant contribution to patient safety and quality of care. The Project Leads and project team searched for better ways to process the requests for surgery; maximise the use of resources and utilising technological solutions to deliver an enhanced patient journey for surgical patients.

**Applicability to Other Settings**

The outcomes for this project are transferable to other facilities across the state – in particular, the ability for sites to eliminate the E72 category. The preoperative checklist and on-line booking forms may be transferable subject to appropriate IT infrastructure with state-based implications. Key process improvement learnings can be applied to patient journeys in other care settings as well as other aspects of surgical patients’ journeys across the District.
Aim
MyHealthscope (www.MyHealthscope.com.au) was developed to display comprehensive clinical and quality performance data for Healthscope’s 44 private hospitals.

Abstract
Public disclosure of hospital performance has been routine in the USA and UK for many years, however this is not the case in Australia. The MyHospital website, mandatory for Australian public hospitals, was launched in 2010, however has been slow to include quality outcome data.

MyHealthscope (www.MyHealthscope.com.au) was developed to display comprehensive clinical and quality performance data for Healthscope’s 44 private hospitals. By developing the MyHealthscope website, we hoped to highlight to the community the high quality of care in our hospitals.

MyHealthscope was launched in November 2011. Hospitals are rated against established industry benchmarks and averages in categories including falls, infections, rehabilitation outcomes, unplanned hospital readmissions, unplanned returns to the operating theatre and emergency department waiting times. Where possible, categories align with the MyHospitals government website. New key performance indicators (KPIs) are continually under development. Hand hygiene data was added in early 2012 and four additional indicators in 2013.

The Healthscope Board made the decision to publish not only positive outcomes, but also negative. At a national level all (21/21) key indicators showed performance at or better than the established benchmark. At the individual hospital level 95% (611/645) indicators are equal to or better than the industry rate. For the 5% outliers, an action plan to improve rates is described on the website.

Besides reporting performance outcomes, MyHealthscope provides resources for patients and visitors, including tips for improving safety. Consumers were involved in drafting the webpages and reviewing the content, to make sure that it was relevant and clearly understood.

Healthscope is the first private hospital group in Australia to voluntarily publish comprehensive performance data, and has been recognised with an “OA” (Outstanding Achievement) accreditation rating at corporate accreditation. In 2012, MyHealthscope won two Australian Business Awards in the categories of Innovation and Community Contribution.
Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
MyHealthscope has been written for consumers. Consumers are able to access clinically significant information relating to any of Healthscope’s 44 hospitals.

MyHealthscope also offers useful resources for patients and visitors including tips for improving safety and preventing infection, such as hand washing techniques.

Consumers were involved in drafting the webpages and reviewing the content, to make sure that it was relevant and clearly understood.

Consumer participation in development of MyHealthscope:
- consumer consultants involved in drafting and reviewing
- changes made according to feedback
- specific section for patients / visitors – “How can you help?”
- links to resources for consumers to improve quality and safety
- layperson explanations preferred, e.g.: hand sanitiser rather than “alcohol based hand rub”.
- evaluation of MyHealthscope – involving consumers.

EQuIP Principle 2: Effective Leadership
From the first concept presentation to the Managing Director of Healthscope, Robert Cooke in mid-2011, the Board and Executive have shown significant vision and leadership regarding MyHealthscope. The Executive and Board did not hesitate in approving the project and supporting it at every milestone. MyHealthscope has become a key defining characteristic of the company and quality outcomes are spoken about with great pride and equal importance with operational and other business outcomes. The Board and Executive have shown MyHealthscope full support and recognise the value it adds to the business. Leadership from Managing Director Robert Cooke and Chief Medical Officer Michael Coglin has been outstanding and is exemplified by the internal email in Appendix 2.

EQuIP Principle 3: Continuous Improvement
MyHealthscope (www.MyHealthscope.com.au) was developed to display comprehensive clinical and quality performance data for each of Healthscope’s 44 private hospitals. Healthscope was the first and remains the only Australian private healthcare provider to publish detailed quality performance data.

On the website, each Healthscope hospital is rated against established industry benchmarks for 21 clinical and quality indicators. These indicators help patients make informed decisions about their healthcare. The website was launched in November 2011. In June 2013 there was a major update, increasing from 15 to 21 indicators (345 to 645 KPIs across all hospitals nationally).

The indicators are: Accreditation ratings, Health improvement for rehabilitation, Health improvement for mental health (both clinician and consumer rated), Falls, Emergency waiting times, Infection rates, Hand hygiene, Obstetric length of stay, Babies born with a healthy Apgar score, Unplanned return to theatre, Unplanned readmissions and Pressure injuries.

Both positive and negative results are displayed on MyHealthscope. It is one of the first private hospital groups in the world to include any “less than favourable” outcomes. This is absolutely critical to continuous improvement. Without inclusion of negative data, the website is a mere marketing exercise. Inclusion of all rates inspires improvement. Greater transparency is beneficial to patients, doctors, hospitals and the healthcare system. Although Healthscope has been benchmarking a large suite of Quality KPIs for over 5 years, internal motivation for improvement has increased as a result of public reporting on MyHealthscope.

EQuIP Principle 4: Evidence of Outcomes
National aggregated data show that Healthscope either meets or exceeds industry standards for all 21 indicators.

Across the 44 hospitals Healthscope owns and operates there are 645 indicators in total. Of these 645 indicators, 611 (95%) are equal to or better than industry average.

At its Corporate Accreditation survey last November, the Australian Council on Healthcare Standards awarded Healthscope an outstanding achievement (OA) (national leader) for MyHealthscope.
Healthcare Measurement
The website also won two Australian Business Awards in the categories of Innovation and Community Contribution.

Most importantly, the original 15 indicators have shown improvement from year 1 to year 2 – showing an impact on hospital and staff behaviour and clinical care.

In the first 3 months after the launch, MyHealthscope averaged approximately 1000 web hits per month.

Media outcomes were strong. On release of infection data on the MyHospitals website in November 2011 there was close to 50 negative stories and one positive story. In contrast, the MyHealthscope launch a week later, resulted in over 140 positive news stories and not a single negative report.

Positive feedback has been received from the private insurance sector, government agencies, private and public hospital groups and even the Federal Minister for Health.

Many favourable quotes were received about MyHealthscope, however only a few can be included here:

- “I was pleased to see the information that has been released by the Healthscope group this week. This is an important step as it clearly demonstrates that there is a desire of some in the private sector to also transparently report performance indicators. I strongly support the principle of Healthscope’s actions. I want to see this reporting become standard practice with the private sector”. Nicola Roxon (Minister for Health and Ageing 2011)
- “A terrific initiative… “I am very pleased that you are taking a leadership role in this area. Congratulations, I am hopeful that you will be showing the light for others to follow.” Richard Bowden, BUPA Australia

EQuIP Principle 5: Striving for Best Practice
MyHealthscope shows innovation in use of ACHS Clinical Indicators to further drive best practice. Using MyHealthscope, individual hospitals can easily identify potential problem areas and develop strategies to improve their ratings. Internal benchmarking over many years already allowed hospitals in the Healthscope group to learn from each other about best practice. Research shows that public reporting further energises organisations to improve or maintain high standards and focus on areas of priority. External publication provided an added impetus for improvement, particularly when hospitals understood that results would be published whether good or bad. Best practice benchmarks are used for comparison in all cases.

Established best practice indicators and divinations are used wherever possible. The Australian Commission for Safety and Quality in Healthcare and the Australian Council on Healthcare Standards have worked hard to harmonise national data and Healthscope is following their recommendations. Where possible, Healthscope aims to collect quality indicators based on the recommendations of both of these bodies as well as MyHospitals. For example, Healthscope has used the standard definition for Staphyloccocus aureus bacteremia (SAB) rates since 2009. Healthscope are reporting this indicator in the same way as the public sector.

Innovation in Practice and Process
Indicator choice was based on the following criteria:

- relevant, interesting and easy to understand for general public to understand
- readily available benchmarks
- no major issues currently being addressed relating to the data
- indicators that are currently recommended by ACSQHC (Australian Commission for Safety and Quality in Health Care)
- reflect predominantly hospital rather than doctor performance
- robust and can stand up to challenges to their accuracy and integrity
- involve minimal or no manual data extraction / manipulation
- meaningful when reported on basis of crude v risk-adjusted data.

Project Timelines:

- Concept presented to Managing Director, Robert Cooke – Feb 2011.
- Executive briefing – May 2011.
- Board sign off – June 2011.
- 345 data points.
- 4 additional indicators – June 2013.
Healthcare Measurement

- 645 data points in total.

**Personnel:**

- content by National Manager – Quality and Compliance – Cathy Jones, assisted by Ruth Nguyen, Data Assistant
- assistance from hospitals, IT Department, consumer representatives
- no committees, working parties, scoping studies, budget, additional staff or consultants
- MyHealthscope implementation proves that high project budgets are not necessary if correct quality structures and processes and routine measurement are in place within the organisation as part of daily business.

**Consultation:**

- first draft generic wording – circulated to all hospitals
- feedback changed and a general script developed
- specific wording for each hospital – sent x3 times to hospital Executive team
- medical Advisory Committee consultation at each hospital
- consumer consultation – corporate and at key hospitals
- consultation and permissions obtained from external agencies providing benchmarks eg: Australian Council on Healthcare Standards.

**Applicability to Other Settings**

The MyHealthscope model of public reporting could easily be applied to any public or private hospital or healthcare organisation. All it requires is leadership and commitment to quality by the Board and Executive.

*[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]*
IMPROVING VENOUS THROMBOEMBOLISM (VTE) PREVENTION FOR MEDICAL INPATIENTS

Practice Development and Research
St Vincent's Private Hospital
SYDNEY NSW

Dr Jed Duff   Prof Kim Walker
Prof Abdullah Omari   Prof Jose Aguilera
Ms Edel Murray   Ms Belinda Johnson

Aim
To evaluate the acceptability, utility and clinical impact of an Educational Outreach Visit (EOV) on the provision of VTE prophylaxis to medical inpatients.

Abstract
Problem: Despite the availability of a local evidence-based protocol on VTE prevention, clinical audit revealed that our medical inpatients were still receiving suboptimal prophylaxis.

Aim: To evaluate the acceptability, utility and clinical impact of an EOV on the provision of mechanical and pharmacological VTE prophylaxis to medical inpatients.

Method: Nurses and doctors caring for medical inpatients received a one-to-one educational session on VTE prevention by a trained peer facilitator. The EOV intervention was designed by a multidisciplinary group of healthcare professionals using social marketing theory.

Results: 85 eligible nurses (71%) and eligible 19 doctors (73%) received an EOV. The total time spent on each visit was 63 (IQR 49-85) minutes for nurses and 92 (IQR 78-129) minutes for doctors. 97.4% of the nurses and 85% of doctors surveyed felt the EOV was effective or extremely effective and 98.8% of nurses and 78% of doctors gave a verbal commitment to conform to the VTE prevention protocol. Following the EOV, doctors’ prescription of pharmacological prophylaxis improved by 16% but there was no improvement in mechanical prophylaxis provided by nurses.

Conclusion: EOV is resource intensive but effective at influencing doctors’ prescribing practices.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
We identified a subgroup of consumers (medical patients make up 30% of our patient population) who were receiving suboptimal care and we endeavoured to address this inequality. Specifically, this project aimed to improve the provision of VTE prophylaxis to our medical inpatients.

EQuIP Principle 2: Effective Leadership
Improving VTE prophylaxis requires the input of a number of healthcare professionals (nursing, medical, pharmacy, physiotherapy) as well as the healthcare consumer. We engaged all of these key stakeholders in the planning and design of this project. The project was overseen by the Practice Development and Research Council (a multidisciplinary group with consumer representation who approve and monitor projects at SVPHS) and sponsored by the Pharmaceutics Committee (a multidisciplinary committee charged with monitoring pharmaceutical therapies and promoting the quality use of medicines).
EQuIP Principle 3: Continuous Improvement
This project followed on from previous efforts to improve VTE prophylaxis at SVPHS. In 2010, the hospital rolled out its VTE prevention protocol. The project used a multifaceted intervention targeting organisational barriers to evidence uptake including audit and feedback; policy development; alerts and reminders; and documentation aids. The project resulted in a 19% improvement in the proportion of patients receiving appropriate prophylaxis (49% to 68%). However, a significant difference between the prophylaxis rates of medical and surgical patients was noted (45% compared to 83% respectively).

EQuIP Principle 4: Evidence of Outcomes
This project was novel because it measured not only the clinical impact of the intervention but also its acceptability and utility. Process measures (acceptability and utility) were included to provide greater insight into this complex intervention which is known to have significant variation in effectiveness. In this instance, we identified that the majority of participants expressed a willingness to conform to the local protocol. This did not translate into measurable improvement in the provision of mechanical prophylaxis by nurses but did result in a significant improvement in the prescribing of pharmacological prophylaxis by doctors. EOV was found to be a very resource intensive intervention requiring up to 4.5 minutes of preparation time for every minute spent face-to-face with participants.

EQuIP Principle 5: Striving for Best Practice
This was an evidence implementation project which aimed to translate research evidence into routine clinical practice. It implemented the best available evidence on VTE prevention using the best available evidence on methods for changing clinician behavior.

Innovation in Practice and Process
Although there is a growing body of research on the use of EOV to promote evidence-based practices in the primary care setting, it has seldom been used in the acute care setting. To date, there has been no research examining the impact of this intervention on nurses’ and doctors’ compliance with VTE prevention practices.

Applicability to Other Settings
Changing any clinical practice is a difficult task but influencing prescribing practices is particularly challenging. This project has identified a change strategy that is both effective and acceptable. There are a number of other important prescribing practices where this intervention could potentially be applied such as antimicrobial stewardship and blood and blood product management.
Aim
To gather consumer feedback on whether Youth GP Clinics meet their health needs and to empower consumers to shape the way the GP clinics are operated and delivered.

Abstract
Background and Aim: For over 10 years, the Central Coast Youth Health Service has provided no cost health care for young people through Youth GP Clinics. The aim of the current project was to gather consumer feedback on whether the Youth GP Clinics meet their health needs.

Methods: Current consumers of the Youth GP Clinics were surveyed anonymously using SurveyMonkey, delivered via either an iPad or laptop.

Results: Ninety percent of respondents reported that the Youth GP Clinics met their needs. One hundred percent of consumers were satisfied with nursing care, while 90% were satisfied with the general practitioner (GP). Qualitative data indicated a desire for decreased waiting times, provision of activities while waiting and greater understanding of staff when dealing with sensitive issues.

Conclusions: The Youth GP Clinics largely meet the health needs of consumers. Feedback will guide service delivery as part of the annual planning process.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The current project directly elicited consumer feedback.

EQuIP Principle 2: Effective Leadership
The current project identified ways to improve service delivery as an essential part of everyday practice.

EQuIP Principle 3: Continuous Improvement
The current survey provided quantitative and qualitative evidence in regards to current clinical delivery.

EQuIP Principle 4: Evidence of Outcomes
The current survey provided quantitative and qualitative evidence in regards to current clinical delivery.

EQuIP Principle 5: Striving for Best Practice
The current project measured directly measured consumer satisfaction and outcomes in the context of literature about young people’s health needs.
Innovation in Practice and Process
The above project, through the use of a web based application, presents a method by which services can include consumers in their ongoing care in an effective, timely and systematic manner. Survey Monkey was chosen because as an internet application it is more attractive to young people than a pen and paper format. Participation rates in survey completion and service feedback are traditionally low, but there were no refusals from consumers in the current project. The use of a web based application is highly transferrable and feasible.

Applicability to Other Settings
The current project highlights the success of the Youth GP Clinic model: nurses collaborating with general practitioners, at a youth friendly location, to deliver a health service at no cost to the consumer. It is suggested that other services evaluate the extent to which their staff and models of care are able to meet their consumer needs. Survey Monkey allowed for greater distribution, collection and analysis and is also transferrable to other health services and settings.
Aim
Our purpose is to provide parenting support to families during pregnancy and with children from birth to school age, resident in the north and west of Victoria.

Abstract
As a result of our work families will:
- acquire sound parenting skills
- develop parenting confidence
- improve health and early childhood development outcomes
- enhance relationships and attachment
- connect to support networks in their local communities.

In 2012, an Early Childhood Professional working for the Parenting Assessment and Skill Development Service (PASDS) asked herself why PASDS clients couldn’t fill in a client satisfaction survey form like self-referred clients. PASDS clients also had important things to say about our service, and asking for their feedback would confirm the respect Tweddle staff hold for all of our clients.

At present, Tweddle runs two residential parenting programs. One targets voluntary clients with referrals from various services, whose admission is prioritised according to need. Stays for these clients are of one, three, and four day duration.

In the PASDS program, attendance is not always voluntary. Clients have been referred by DHS and are at Tweddle for 10 days to have their parenting skills assessed and developed. PASDS clients have specialist staff dedicated to their program, and have a tailored program combining observation/assessment and skill development.

Self-referred clients at Tweddle fill in a client satisfaction survey form at the end of their stay. Along with the complaints system, this form gives clients an opportunity to articulate grievances, suggest service improvements, and communicate their experience to staff. Analysis of self-referred client satisfaction based on survey forms feeds into service improvements. PASDS clients have had no such vehicle or input.

The Early Childhood Professional, with the support of the PASDS team and in the context of the organisation-wide quality framework, initiated a quality improvement project with a defined aim of creating a client evaluation that suited PASDS clients.

Preliminary investigations into a client satisfaction survey form for PASDS clients were commenced. It was identified that some but not all the questions on the self-referred client satisfaction form were suitable for PASDS clients. A draft form was designed taking client literacy and program design considerations into account. It was first implemented as a pilot, then released in its final version after analysis and modification.

A full report on PASDS client satisfaction survey results was included in the quarter 4, 2012/2013 Tweddle
performance report. Responses for twenty one (21) clients, including ten (10) comments, were covered. Going beyond the aims of the original project, the survey form for PASDS clients was reviewed and modified in response to analysis of survey results in the performance report. Analysis of results has also led to active quality improvement initiatives, which have applicability to organisations similar to Tweddle.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

Our PASDS clients are among the most vulnerable of our client base. Their issues include family violence, substance misuse, mental illness, disability, homelessness, illiteracy, and a history of DHS Child Protection involvement. Staff understand that their PASDS clients are likely to be wary of the Tweddle service and may come with negative expectations of staff behaviour, especially where there is possibility of removal of a child from a family. This reality makes the establishment of a working partnership between client and staff members both very challenging and very important to the achievement of positive outcomes. Staff work in partnership with clients to develop their parenting skills and confidence, while also nourishing their sense of self-esteem and empowerment. This takes a great deal of skill and insight from PASDS staff, who are trained to act with patience with clients who may not repay them overtly during their short stay. A client satisfaction survey for PASDS clients, that applies particularly to their program, is a new indication of respect for our clients and regard for their ideas and opinions.

The survey must be carried out in a way that is appropriate for these clients, and respects the constraints of their program.

A relatively high proportion of PASDS clients have difficulty filling out a form without help, and staff developed protocols for helping those with literacy or language challenges. For example, staff may:

- sit with clients one on one to complete the survey,
- assist with writing answers and reading them for confirmation, paraphrasing questions in ways that are better understood where literacy or vocabulary is limited,
- use an interpreter where English is the second language; and
- most importantly, confirm with the client verbally if they have understood each question and response.

Where possible, staff give this assistance without unduly influencing client responses.

**EQuIP Principle 2: Effective Leadership**

The family partnership skills demonstrated by staff are integral to the achievement of client and program goals. It is their mentoring and interviewing skills that produce program outcomes. The indicators we measure are not physical factors such as blood pressure and heart rate, but changes in capacity, changes in behaviour, increase of safety behaviour, better caring for their children and increased confidence. A client satisfaction survey does not measure clinical outcomes, but is an aid to understanding client satisfaction, uncovering areas of client dissatisfaction, and identifying opportunities to improve practice, services or facilities.

Effective leadership with the goal of ongoing quality improvement at Tweddle is a coordinated effort of staff at all levels, acting together to develop and sustain quality improvement initiatives from any staff member. Mentoring and supervision programs support staff capacity to evaluate and improve their own work with clients based on evidence they collect.

Taking the lead in quality processes at Tweddle, the executive team and the Board have embraced the new Quality Framework, which sets out the Tweddle principles that underlie excellence in quality of care, describes the various arms of quality management, and sets out a review timetable for each. This framework was accepted by the Board in draft form in October 2012, and is now a working document, still under active consideration.

An arm of the Framework is the Tweddle Quality Plan, which is a list of quality improvement projects that have been authorised by a director. This plan is monitored by the Tweddle Quality Committee, meeting monthly, to consider the current status of improvement projects, identify those needing attention, and to lend support and encouragement where necessary.

New quality projects for inclusion in the Plan are submitted using Quality Improvement Project Proposal Form, which itself had undergone many reviews and improvements since its inception in August 2012. The aim of this form is to guide staff in their planning of a new project. It prompts staff to consider: the implications of their project
throughout the organisation; the non-financial costs; the relationship of their project to the Tweddle Strategic Plan; project success indicators, milestones and impacts; and issues such as associated risks and OHS implications.

Another arm of the Framework is the quarterly organisation performance report, which presents to Board, management, and staff, current indicators of performance, showing the change of performance data over time, and analysis of findings. The performance report is intended to follow best practice in reporting outcomes: it is thorough, open, and includes current analysis of data. Reports on client satisfaction data comprise a current section of this performance report. Client satisfaction data is reported for the residential, day stay, and now PASDS programs, and provide information to the entire organisation about service evaluation by clients.

**EQuIP Principle 3: Continuous Improvement**

This quality project was initiated by an Early Childhood Professional, who started the process by wondering “why can’t PASDS clients also fill in a client satisfaction survey form?” She saw a risk that PASDS clients might feel they were less worthy because there was no form for them and inequality in the representation of input from PASDS clients relative to self-referred clients was thereby emphasised. Also, reports deriving from such form could assist her to find ways to improve her one-on-one work with clients.

Over the last year, training of staff and quality system improvements such as the new quality champions role have raised staff awareness about the quality improvement process. This embedding of knowledge about quality at the coal face at Tweddle was the environment in which the ECP was able to frame her query about a PASDS client satisfaction survey as a quality issue. This led her to take up the identified issue with the quality coordinator, who was then able to champion and support the new initiative. Additionally, the quality coordinator recognised the importance of this initiative as a key model for further quality improvement projects developed by staff.

The ECP brought her idea back to the PASDS team for discussion, and the idea was clarified using the Quality Improvement Project Form, that guided her through considerations about project objectives, success indicators, milestones, and impacts, and the project was authorised. The PASDS manager strongly advocated the proposal to the Director of Nursing, who authorised it on 21 February, 2013. This project then became an item on the Tweddle Quality Plan which had the attention and backing of Tweddle management.

Work on the new client survey form began. A pilot was developed as discussed below, and analysis of results from the pilot led to the implementation of a new form after a minor change. When the project had progressed past publication of the first report on PASDS client satisfaction, the project evaluation form was used to guide an evaluation of the project’s development and its outcomes.

This project has been well publicised within Tweddle through its publication in the Tweddle Performance Report, and it is hoped that its success will inspire more quality initiatives.

**EQuIP Principle 4: Evidence of Outcomes**

A report on PASDS client evaluation survey outcomes was included for the first time in the Tweddle Performance Report for the 4th quarter 2012/2013. It covered all surveys collected, 21 in all, and listed all eleven client comments. Full results are shown in the appendix.

Of the 11 comments, 4 expressed satisfaction with the program. Three described satisfaction with some staff and services, dissatisfaction with others. Two clients were dissatisfied with their interactions with clients from the other Tweddle residential program, and one expressed sadness that her baby was not coming home with her. Staff were gratified at the positive comments and were interested in the negative ones. In general, the comments suggest that these clients are paying attention to the questionnaire, have understood it, and value the opportunity to provide feedback.

Opportunities for change identified from analysis of the comments are:

1. **Improvements to the quality of food offered to clients.** A better nutrition plan for clients is being put in place by the Clinical Nurse Consultant in consultation with the Facilities Manager and Quality Coordinator. This plan predates this survey. The PASDS and residential client satisfaction surveys will be useful to see how changes to nutrition provisions are reflected in client responses in the future.

2. **Quality of information provided before admission.** As a result of this report, it was seen that poor levels of client satisfaction were associated with the information received before coming to Tweddle. The interim PASDS manager is preparing an information leaflet for DHS, to provide them with accurate information about the Tweddle PASDS program, to assist them to correctly prepare their clients for the program. When
the client evaluation data is presented for the next quarter’s performance report, it will be possible to see if client satisfaction has improved for this item.

3. Interactions between clients of the two residential programs is another area inviting exploration. Results from the satisfaction surveys of self-referred clients reveal corresponding concerns. The issue has sparked interest amongst clinicians and preliminary discussions will be held at team meetings.

4. The form itself needs improvements relating to difficulties not noticed in the pilot:
   a. It was decided that the question about information received before coming to Tweddle was vague, and could cover all sorts of information clients might have received. For this reason, the question has been changed to specify information provided by DHS. This will have the effect of destandardising this question over the two quarters, but will make data more meaningful in the long term.
   b. Some questions needed to be more specific and relevant to program goals. The question asking whether clients had been given “good ideas about parenting” has been substituted with a question about whether clients were satisfied that their confidence with parenting had improved. The two questions about the facilities have been replaced with a question specifically about the quality of the food.

Because results from the first report on the client evaluation survey appear in the recently published 4th quarter performance report, there may be more feedback from readers about possible service or survey form improvements.

EQuIP Principle 5: Striving for Best Practice

The quality coordinator, in collaboration with the PASDS team, worked with the early drafts of the PASDS client satisfaction survey form to ensure they were of a high standard. First, the self-referred client form was examined. It was felt that some but not all the questions on this form were suitable for PASDS clients. Questions not relevant were the question about first contact with the organisation, having a say in program goals (for PASDS clients, most goals are set by DHS), and pathways after finishing the Tweddle program.

Also, practice at another early parenting centre was explored. In the alternative setting, PASDS clients complete the same form as other clients. It was decided that PASDS clients at Tweddle needed their own form, otherwise the number of questions not relevant to PASDS clients might underline differences between clients from the two residential programs, rather than similarities.

Questions in the PASDS form kept consistent with the form already in use were those asking whether clients felt treated with respect, whether they were satisfied with the facilities and whether they were satisfied with the help they received.

Refinements to the PASDS form included new questions about:

- the information PASDS clients were given in relation to the program before admission,
- the pre-admission meeting,
- whether information was easy to understand; and
- whether they had any role in deciding what to learn during the stay at Tweddle.

It was seen as important to include space for client comment as each client’s experience of the program is different and their feedback need not be limited to the questions listed on the evaluation form.

Issues relating to client language, literacy and comprehension were taken into account in the design of new questions as well as in the development of protocols for collecting the forms. PASDS clients present with a variety of learning difficulties, literacy and language barriers (where English is the second language) and therefore fewer, shorter questions using simple concise language are more appropriate.

In order to develop new questions that were consistent with best practice for survey question design, a literature search was undertaken.

After the first draft of the questions list was complete, Dr Renzo Vittorino, former Tweddle research coordinator, and lecturer in evaluation at Latrobe University, was consulted about the efficacy of the questions and the design of a pilot survey. His suggestions were incorporated into the survey and procedures for carrying out the pilot. A simple Agree / Disagree format was implemented to make analysis easier, to better show trends over time.

Finally, in March 2013, a pilot PASDS client satisfaction survey form was agreed to and printed. The form was piloted with eight (8) clients for a month, who were asked a series of set questions after filling in the form:
Does the client understand what the preadmission meeting was?
Was there anything in the form that the client found confusing?
Does the client understand the meaning of all the words? (e.g. preadmission meeting, respect, information, facilities)
Did the client find the form easy to follow?
Was there anything the client thought wasn’t relevant?
How did the client feel about filling in the form?

During the pilot clients reacted well to the invitation to fill out the pilot form and reported that they understood the questions. One improvement was made to the form at this stage and this was the use of smile and frown face emoticons to denote “agree” and “disagree”. The survey form was finalised. It was entered into the Survey Monkey database, and staff now entered client survey information into Survey Monkey.

As discussed above, after the first report on PASDS client satisfaction data was published in the Tweddle Quarterly Performance Report, results were analysed and the form was modified as a result. Client satisfaction data for PASDS clients continues to be collected and will be reviewed every three months, after publication in the Performance Report.

The process of development of this quality project from the “wondering” of a PASDS staff member to development and implementation of a PASDS client survey form, has confirmed the effectiveness of quality improvement processes at Tweddle, and consolidated staff understanding of the quality cycle. New quality directions that follow on from analysis of survey results will continue the process of quality improvement. It is expected that ongoing collaboration with other Early Parenting Centres will provide more input about evaluation of PASDS client satisfaction and improvement of client outcomes.

**Applicability to Other Settings**

A health service is often challenged in providing a range of services to clients from a diversity of cultural and socio economic backgrounds. It is in these circumstances that we need to be vigilant that we offer equality in opportunities to provide feedback to each and every individual accessing our services. Subsequently, in providing our story on this part of our quality journey, we see that other services could benefit from reflecting on the vehicles that they use to gain client feedback and the equity around their approach. Our project is an application of the concept of ‘a fair go for all’ and has resulted in greater participation of staff and clients in the quality processes at Tweddle.

**References**


**Aim**
To develop a mental health information management culture and technology infrastructure capable of supporting comprehensive care for the population.

**Abstract**
The expected and actual performance levels were established for selected KPIs to help define accurately the existing ‘performance gap’ for WSLHD. A presentation on WSLHD performance was prepared for presentation/discussion in our monthly MHIDP Steering Committee meetings. Items discussed included:
1. Actual trends of several KPI’s (monthly and yearly)
2. Extent of the gaps (between expected and actual)
3. Why the gap exists?
4. What was causing it?
5. What could be done to fix it?

It was agreed that the performance levels for some of the KPIs needed to be improved. To achieve this it was decided to:
1. Implement procedures to monitor all KPI’s frequently.
2. Implement training programs for our staff to improve skills and knowledge levels
3. Develop new tools for effectively monitoring of our performance (KPI’s).

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

7 Days Post Discharge Follow-Up: Seven days post discharge community care is a measure of continuity of care and support of mental health consumers in the community following a discharge from a mental health inpatient service.

Readmission to Hospital Within 28 Days: Readmission to Hospital within 28 days of discharge has become one of the most widely used Key Performance Indicators in Australian health care. It is seen primarily as a measure of the effectiveness of hospital care. In the mental health setting the indicator measures the effectiveness of inpatient psychiatric care.

Outcomes Readiness: This indicator measures the proportion of acute inpatient and ambulatory mental health episodes with clinical outcome measures completed. It is a National Mental Health Performance Indicator and measures the availability of outcome measures to inform clinical care and service management.

Community Contacts: This indicator is a measure of activity by community mental health services. A contact is recorded where a clinician is working directly with a client, or indirectly about or for a client (e.g. a case conference, a meeting with family or carers). The indicator compares recorded community mental health contacts with the (number) expected from the ambulatory FTEs employed by different teams/services.
Community Care Hours: This indicator measures the proportion of community mental health staff time involved in client-related activities. Client related activity includes direct staff-client contact and indirect client-related activity such as travel to home visits, case conferences and note-taking. Non client-related activity includes team business and administrative, educational and other professional activities.

**EQuIP Principle 2: Effective Leadership**

It was through the coordination of a large team made up of both internal and external parties working together (including InforMH, MHIDP Steering Committee, executives, Team managers and clinicians) that the following projects were initiated as a rapid response to find both short and long term solutions for issues identified:

- SCI-MHOAT On-Line Training
- Business Objects – Reports (IP and Ambulatory)
- Dashboards:
  - Community Contacts and Clinical Hours – Instant YTD KPI
  - Community Contacts and Clinical Hours – Monthly KPI (trends)
  - NSW Performance Comparison (YTD)
- Monthly Performance Presentation.

**EQuIP Principle 3: Continuous Improvement**

To ensure these improvements are sustained, executives and managers thoroughly communicate all progress and challenges faced in the Mental Health Information Development Program steering committee meeting on a monthly basis. All communication, decision etc. from this meeting is then effectively shared with managers/staff at all levels on a regular basis.

**EQuIP Principle 4: Evidence of Outcomes**

The SCI-MHOAT eLearning modules, BO reports, dashboards and presentations have all played a great part in improving WSLHD performances relating to a number of Key Performance Indicators over the last 24 months. These include:

- **Ambulatory Contacts** – Target 80%:
  - July – December 2010: 50%
  - July 2012 – June 2013: 114%

- **Clinical Hours** – Target 80%:
  - July – December 2010: 40%
  - July 2012 – June 2013: 94%

- **7 Days Post Discharge Follow-Up** – Target 70%:
  - July – December 2011: 31%
  - June 2013: 72%

- **Outcome Measures** – Target 70%:

  - **Ambulatory**:
    - July 2010 – June 2011: 48%
    - July 2012 – June 2013: 71%

  - **Inpatient**:
    - July 2010 – June 2011: 105%
    - July 2012 – June 2013: 115%

  - **Outcome Readiness** – Target 80%:
    - January – June 2012: 23%
    - July – December 2012: 31%.

**EQuIP Principle 5: Striving for Best Practice**

The 7 Days Post Discharge Follow-Up KPI reveals the responsive community care and support system for people discharged from hospital following a psychiatric episode, which is essential for the clinical and functional stability of the patient and minimisation of hospital readmissions. The 28 Day Readmission KPI is seen primarily as a measure of the effectiveness of hospital care. In the mental health setting the indicator measures the effectiveness of inpatient psychiatric care. Outcomes Readiness is for the Mental Health Outcomes and Assessment Tools (MH-OAT) protocol
which requires routine outcome measurement at admission, discharge and also at periodic reviews for extended episodes of care. Outcome and Assessment Tools in use include the Health of the Nation Outcome Scale (HoNOS), Life Skills Profile (LSP), Kessler-10 (K10) consumer self-assessment. The Child and Adolescent services use HoNOSCA and the self-assessment Strengths and Difficulties Questionnaire (SDQ), as well as a number of other tools relevant to Child and Adolescent services. Older Persons’ services use HoNOS 65+ and Resources Utilization Groups - Activities of Daily Living tool (RUG-ADL), as well as the more general Adult tools. The Community Contact and Community Care Hours measure the level of service/activity and clinical hours provided by staff to the community for mental health services.

**Innovation in Practice and Process**

I have been innovative in the methods of providing access to vital information to executives / managers to help in the management and decision making tasks to improve our mental health key performance indicators affected by performance quality levels for services provided. New processes / methods were introduced for enhancing staff knowledge and skills and also for providing relevant and accurate information to managers / staff in a timely manner. These processes included a new Business Objects reports tool (for mental health) allowing on-going creation of new (essential) reports for management and staff, an on-line training facility for the mental health information system (SCI-MHOAT) users and development of dashboards showing (managers and staff) performance levels in relation to services they provide (mental health) to clients.

The development of reports and dashboards are an on-going process within WSLHD.

**Applicability to Other Settings**

The tools mentioned above have been designed for services to achieve goals through timely access to accurate and relevant information, allowing the regular monitoring and thus improving of productivity and functionality of existing resources. All of the performance tools including dashboards, reports and presentations may be used in other services (including non-mental health). The model used to implement changes at WS LHD Mental Health also (with minor changes) may be incorporated into any situation within any service, at any location.
MONITORING CONSULTANTS’ PERFORMANCE – WHO WOULD DARE?

Metro North Mental Health - RBWH
Royal Brisbane and Women’s Hospital
Brisbane QLD

Ben Chapple  Dr Vikas Moudgil
A/Prof. Brett Emmerson

Aim
Enhance reporting transparency and performance accountability of consultant psychiatrists through the use of a Key Performance Indicator (KPI) dashboard and formal review process.

Abstract
Consultant Psychiatrists represent the senior clinical decision makers within Metro North Mental Health - RBWH. Despite this, traditional mechanisms of clinical performance measurement have focused on the effectiveness of middle management roles, such as team managers and nurse unit managers. The performance of individual consultants has remained unmeasured, and largely unknown.

A consultant KPI dashboard was implemented in December 2012. The dashboard compares the performance of consultants (and associated registrars / clinicians) on a range of national performance domains. These domains incorporate consumer centric measures such as effectiveness, efficiency, continuity and safety. Additional indicators measure costs, consumer flow, and timely report completion.

With the exception of inpatient costing, the indicator data is updated weekly, with a one-week reporting offset. Performance is assessed at the consultant, unit and organisation levels. The dashboard also allows users to drilldown to individual consumer records. When a consultant’s performance on an indicator lies outside acceptable tolerances, they are notified in writing of these ‘Exceptions’. Bi-monthly, all consultants are required to present a verbal report on any exceptions, in the presence of their peers.

Key outcomes to date include the following:
- a reduction in 28 day readmission rate, and corresponding opportunity cost saving of $1.8 million dollars
- improved completion of discharge summaries and Mental Health Review Tribunal reports in a timely manner
- better adherence to estimated day of discharge, improved follow up of consumers post-discharge, and an ongoing low percent of consumers secluded during their admission.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Linking consultant performance to individual consumer outcomes is the primary objective of the consultant’s dashboard. When providing their bi-monthly exception report, consultants are expected to present and discuss outcomes for individual consumers. This ensures any negative impact on the consumer is not lost through data aggregation.

The dashboard is deliberately designed such that consumer level data can only be obtained after first selecting the consultant responsible for their care. While subtle, it is hoped over time this will continue to reinforce to individual consultants the link between their performance and the outcomes (both good and poor) of the individual consumers they are accountable for.
The provision of data with only a one week reporting delay facilitates a more timely response to a consumer’s mental health needs. For example, 28 day readmission is traditionally reported with a two month delay: one month to capture all separations, then another month for the most recently discharged consumer to be potentially readmitted. It can therefore take up to three months until the service reports the readmission. By identifying the readmission within a week of it occurring, preventative measures can be deployed to prevent further readmissions and minimise any negative impact on the consumer that may result from recurring hospitalisation. Some indicators on the dashboard are drawn from the national performance domains. The performance domains are consumer centric. By reporting the corresponding indicator(s) for various domains, the service can describe how ‘effectively’, ‘efficiently’, ‘continuously’ and ‘safely’ a consultant manages the care of consumers. These are powerful terms, and serve to remind the consultants of why routine performance measurement is required.

The ability of the Mental Health Review Tribunal (MHRT) to make appropriate decisions about a consumer’s care can be impaired by delays in receiving required information. This can contribute to a number of poor consumer outcomes, such as loss of trust in the mental health system, damaged rapport, and friction between mental health service providers and employees of external agencies. The dashboard therefore captures the consultant’s ability to provide information seven days prior to the consumer’s MHRT hearing, and the number of Section 238 reports that remain outstanding.

Adherence to an accurate Estimated Day of Discharge (EDD) ensures patient flow through the inpatient unit, and improves the consumer’s discharge process. The ability of consultants to discharge consumers within 24 hours of their EDD is therefore included in the dashboard.

**EQuIP Principle 2: Effective Leadership**

The executive director of MNMH – RBWH reviews performance of individual consultants on a bimonthly basis. Each consultant is sent formal written correspondence identifying any exception(s), and a request to present verbally at the next monthly consultants meeting. The meeting is attended by the executive director of MNMH – RBWH, as well as the clinical director and all consultants of the service. During the meeting the consultant dashboard for the month in review is displayed on an electronic whiteboard, and the consultant is expected to talk through each of their exceptions. Trend data and consumer level information are also displayed for each consultant for each exception. Consultant names are not masked in any way. The review and any ensuing discussion is done in a collegial, not prosecutorial manner. The aim is to identify areas of underperformance, and identify recurring issues and countermeasures that may assist all consultants in improving their performance. Ultimately this will also benefit consumers.

Consultants occupy the positions of ultimate clinical accountability throughout the service. Monitoring their performance is therefore an effective mechanism for improving performance of the entire service. A consultant’s performance can only improve if the performance of members of the consultant’s team also improves. For example, completion of discharge summaries is traditionally the role of the registrar assigned to the consultant. However the dashboard deliberately records performance against the consultant; it is up to the consultant to make sure their registrar is completing the required tasks. This concept promotes a ripple-down effect of quality improvement by all members of the consultant’s team, across both inpatient and community settings and also outside the medical profession. The consultant takes both the blame and credit for their team’s performance. Clerical errors by administrative staff can prove just as detrimental to a consultant’s reported performance as a poor clinical outcome.

**EQuIP Principle 3: Continuous Improvement**

Targets are set for most dashboard indicators. Compliance with the targets is trended each month at the consultant, unit and service levels. Furthermore, reported exceptions and trended data are incorporated into the annual Performance Appraisal and Development (PAD) for all consultants.

The requirement for consultants to provide regular verbal exception reports in front of their peers encourages them to continuously improve their performance. While the focus of the peer review is on poor performance, quite often good / exceptional performance by a consultant on one or more indicators is evident. This presents an opportunity for the consultant to share strategies used to meet or exceed reporting requirements, in addition to receiving public recognition for good performance.

The ability for consultants to identify outcomes for individual consumers via the dashboard, combined with the requirement to report outcomes at a consumer level amongst peers, promotes continuous improvement. The Mental Health Information Manager attends the consultant exception reporting meetings to manage display of the
consultant’s data, but also to answer data integrity / indicator definition queries from the consultants. Data quality issues are therefore identified and addressed quickly and reporting enhancement suggestions acted on. This in turn promotes continuous improvement in dashboard functionality and clinician engagement with the initiative.

**EQuIP Principle 4: Evidence of Outcomes**

Reducing the elevated 28 day readmission rate for MNMH – RBWH has been an ongoing challenge. Table 1 compares the number of readmissions and associated costs for the first 10 months of the 2012/13 financial year, with the same period from the preceding financial year. Data for readmitted consumers is highlighted red; non-readmitted consumer data is highlighted blue.

During this time, the readmission rate for the service reduced from 22.4% (486 / 2173) to 18.4% (356 / 1935). The 4% reduction represents fewer consumers being readmitted, who when readmitted were in for a shorter period of time (9.8 vs 10.4 days on average). This in turn translates to an ‘opportunity cost’ saving of over $1.8 million dollars. Spending less time treating consumers who are readmitted has allowed the service to focus on the treatment of non-readmitted consumers. Table 1 shows these consumers actually had an increased length of stay (11.4 days to 12.2 days on average) from July 2012 to April 2013. The higher treatment cost of this group was offset by the ‘savings’ from the readmission group, and yet the service still managed to reduce bed occupancy (down 5.5%). The consultant’s dashboard and associated exception reporting, along with other clinical initiatives, contributed towards the reduced 28 day readmission rate.

The dashboard was first published in December 2013, and routine performance review of the consultants commenced in March 2013. Appendix B contains a series of charts showing monthly performance improvement for MNMH – RBWH over this period. A summary of the performance improvement is as follows:

- compliance with estimated day of discharge: improved from 57% in December 2012 to 74% in July 2013 (Appendix B, Chart 1)
- completion of discharge summaries within 48 hours has increased from 60% in December 2012 to 80% in July 2013 (Appendix B, Chart 2)
- the 28 day readmission rate remains constant at 19% from December 2012 to 18% in June 2013 (offset by one month for complete data – Appendix B, Chart 3); the fact 28 day readmission has remained consistently below 20% since April 2013 is an achievement for the service.
- Post Discharge Community Contact has increased from 47% in December 2012 to 57% in July 2013 (Appendix B, Chart 4)
- the percentage of MHRT Reports completed 7 days prior to the hearing date has increased from 57% in December 2012 to 92% in July 2013 (Appendix B, Chart 5).
- the proportion of consumers secluded at least once during an admission is less than half the upper threshold of 12%, from January 2013 onwards (Appendix B, Chart 6).

**EQuIP Principle 5: Striving for Best Practice**

The performance of individual consultants is visible to all other consultants within the same MHSO. There are a few positions, such as the clinical and operational directors and executive director, who can review performance of all consultants across MNMH. These factors combine to motivate consultants to improve their performance relative to their peers.

The focus on exception reporting, and rapid rectification of data quality issues, encourages consultants to continually strive for best practice.

The indicator set contains a mixture of both easily-achieved and stretch targets (such as 75% for MHRT compliance). This provides consultants with enough quick wins to not become discouraged, yet enough of a challenge to not become complacent.

**Innovation in Practice and Process**

To the best of our knowledge, no other mental health organisation in Australia routinely measures the performance of consultants in this manner.

The dashboard is quickly becoming the single source of truth for the organisation. Supplementary initiatives, such as the development of Access Data Projects, enable clerical staff to enter data required for real-time reporting directly to the dashboard server. This further reinforces the concept of a single source of organisational truth.

The initial cost of the software, hardware and training of in-house staff was approximately $55,000. Ongoing
Healthcare Measurement

maintenance costs of the reporting system and data marts are less than 10% of this figure. This represents a good return on investment, especially when compared to the $1.8 million dollar reduction in treatment costs associated with a drop in the 28 day readmission rate by 4%.

Applicability to Other Settings

In July 2013 the reporting system (and consultants dashboard) was implemented across Metro North Mental Health. This includes the Prince Charles Hospital and Redcliffe – Caboolture Hospitals.

The dashboard has been presented at the most recent Queensland Health Mental Health Information Management forum. It was also presented at the annual meeting of the Mental Health Roundtable.

Other non-mental health service lines within RBWH have expressed an interest in how the dashboard may apply to their work environment.

[For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS]
Aim
To reduce patient harm by implementing safer systems for prescribing, dispensing and administering high dose intravenous (IV) potassium chloride in haematology patients.

Abstract
Methodology: This was a traditional quality improvement project for IV potassium use in a private haematology inpatient unit at Mater Health Services Brisbane. To understand our current state we conducted a safety assessment which included: i) retrospective analysis of medication incidents associated with IV potassium; ii) root cause analysis to identify contributing factors; and iii) prospective audit of IV potassium usage over two week period. At 12 months following implementation of a standardised prescribing, administering and monitoring form the number of incidents and potassium ampoules dispensed were compared to pre-implementation results.

Outcomes: Quality improvement strategies included: i) developing and implementing a standardised prescribing, administering and monitoring form; and ii) removing potassium ampoules and replacing with premix 40mmol/100mL solution. There were significantly less incidents reported in the post implementation period compared to the pre-implementation period (23 vs. 9, P<0.001). No ampoules were used in the 12 months post-implementation compared to pre-implementation (10, 100 vs. 0).

The introduction of safety systems for the dispensing, prescribing, and administering of potassium in a busy private haematology inpatient unit has resulted in complete elimination of IV potassium ampoules and a significant reduction in incidents reports, suggesting a reduction in patient harm.

Application of EQuIP Principles
EQuIP Principle 1: A Consumer / Patient Focus
The consumers were identified by the team as both staff and patients. Well described techniques to reduce the risk of medication misadventure include reducing options for drug products and the standardisation of doses, administration times, rates and techniques.

We retrospectively analysed all medication incidents associated with IV potassium in the haematology inpatient unit that had been reported in the 12 months preceding the system changes. The three major potassium incidents that consumers faced included:

- Administration of:
  1. Incorrect dose (too much or too little)
  2. Incorrect rate calculated / selected (too fast or too slow)
  3. Incorrect fluid volume (too much or too little).
EQuiP Principle 2: Effective Leadership
As this was considered a major patient safety improvement process the initiative was governed by the organisation’s peak Patient Safety body, chaired by the organisation’s Chief Executive Officer. The working party consisted of representatives essential to the success of the initiative and included staff from the haematology inpatient unit (medical, nursing and pharmacy staff), the organisation’s Clinical Safety Unit (Clinical Safety and Medication Safety Officers) and the organisation’s Clinical and Corporate Risk Managers.

EQuiP Principle 3: Continuous Improvement
We used a traditional root cause analysis methodology to identify and understand the contributing factors that led to the incidents. In addition we prospectively audited the use of IV potassium in the haematology inpatient unit for two consecutive weeks. The audit included:

- the number of IV infusions per patient;
- the amount (mmol) per bag;
- concentration (mmol/L);
- administration rate (mmol/hour) of each potassium infusion; and the number of ampoules used.

EQuiP Principle 4: Evidence of Outcomes
At 12 months, the number of incidents and potassium ampoules dispensed were compared to the pre-implementation results. There were significantly less incidents in the post-implementation period compared to the pre-implementation period (23 vs. 9, P<0.001). There were no ampoules used in the 12 months following the system changes, and the number of premixed solutions used after 12 months was 1214 (101 per month).

EQuiP Principle 5: Striving for Best Practice
Inadvertent medication errors due to IV potassium can occur at any point of the medication use cycle; dispensing and product selection, prescribing, preparation of diluted solutions, and administration. In Australia premix potassium infusions is now routine practice, however haematology inpatients units have often been overlooked as standard infusions do not meet complex patient needs. The introduction of safety systems for the dispensing, prescribing, and administration of potassium in a busy haematology inpatient unit has resulted in complete elimination of IV potassium ampoules and a significant reduction in incidents, suggesting a reduction in patient harm.

Innovation in Practice and Process
The standardised prescribing, administering and monitoring form incorporated many forcing functions and has resulted in clinical staff no longer needing to spend lengthy periods involved in the prescribing and preparation of potassium solutions. Additionally, the change has resulted in an average reduction of the gross mmol of potassium being used by nearly 30% which may indicate that the way in which potassium is replaced significantly impacts on the patient’s response.

Applicability to Other Settings
The intravenous potassium chloride prescribing, administering and monitoring form could be used by other high risk / high dependency clinical units where high doses of intravenous potassium replacement are needed (e.g. Intensive and Coronary Care, Emergency Departments).
IT’S NOT ALL ABOUT THE OUTCOMES - USING MULTIDISCIPLINARY REVIEW OF PROCESS TO FACILITATE CHANGE

Mater Mothers Hospital Birthing Services
Mater Health Services
Brisbane QLD

Catherine Cooper         Dr Michael Beckmann
Susan Foyle

Aim
To define “optimum care”, encourage clinicians to self-audit, discuss, reflect on practice, and propose changes to policy / process, with an overall aim to improve compliance and improve outcomes for women and babies.

Abstract
Where no adverse outcome occurs, cases are rarely reviewed in audit despite the potential there may have been unrecognised serious deficits in care. Process for change management is driven by incidents and clinical review and there is limited assessment of the impact of these activities on clinical outcomes. We re-designed our clinical audit sessions (Multidisciplinary Maternity Audit Review Sessions (MMaRS) using the innovation of compliance bundles which are comprised of a series of measures defining the optimum process, which the clinician-auditor uses to appraise the clinical process. If there is compliance with the “optimum process” then the outcome (whether good or bad) should reflect delivery of appropriate clinical care. Data on level of compliance to criteria and areas for improvements are recorded, allowing us to identify and track improvements in care, and measure the effect of education or implementation of new practice / policy.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
In a large healthcare organisation providing care to many thousands of healthcare consumers each year, systems like compliance bundles allow the organisation to have confidence that women will receive the same evidence-based care (defined in policy / procedures) irrespective of whether that care is delivered by a junior doctor on Sunday at 3:00am or by a senior midwife on Monday at 3:00pm.

EQuIP Principle 2: Effective Leadership
The sessions are always facilitated by an obstetric consultant and a senior midwife working together and role modeling effective, respectful inter-disciplinary collaboration. This demonstration of collaboration at a senior level helps to perpetuate a culture of mutual respect and a shared vision of the way forward, empowering junior staff to speak up and have a voice.

EQuIP Principle 3: Continuous Improvement
A series of compliance bundles were developed as a proactive way of reviewing care. In this system a random selection of cases are chosen for review according to the process being reviewed. (e.g. induction of labour, vaginal birth after caesarean section). The bundles enable clinician-auditors to measure whether all cases undergoing a particular process meet certain quality indicators for that process. By reviewing the same compliance bundle for several sessions, the quality indicators for a process become embedded and consistency of care should be an outcome.
**EQuIP Principle 4: Evidence of Outcomes**
All data collected during MMaRS are logged onto a database which enables us to track our compliance with optimal process over time. We also record and track the areas for improvement and the actions taken to address the needs identified. These actions might include: changes to policy, changes to existing procedures or new procedures implemented, education around best practice, areas identified for research or improved methods of information dissemination.

Overall patient safety parameters are monitored with a “Safety Score”. The last 3 years’ worth of maternity Safety Score data demonstrates a significant improvement in safety.

**EQuIP Principle 5: Striving for Best Practice**
The quality indicators which make up each compliance bundle are written by a multidisciplinary team and based on best practice evidence. If during the process of review, an additional indicator or need is identified, or if new evidence comes to light requiring a change, this is incorporated into the compliance bundle. In this way, we ensure that we are striving towards compliance with best practice at all times and that the goals are continuously being evaluated. The data derived from these audit review sessions are evaluated and actioned on a continuous basis.

**Innovation in Practice and Process**
Compliance bundles look at optimal process regardless of outcome: we are able to review those cases in which there may have been an unrecognised deficit in care. This is a proactive and preventative method of reviewing our delivery of healthcare.

This system is also innovative in that it involves a multidisciplinary group, reinforcing collaboration and respect between disciplines and influencing and reinforcing the learning of correct process as they become familiar with the compliance bundles.

**Applicability to Other Settings**
This innovation of reviewing cases based on compliance with optimal process through a multidisciplinary forum of audit, discussion and education is easily transferable to other settings. It is a relatively simple process for clinical leaders to describe the optimal process, and no impediment to ongoing review / refinement of bundles to ensure they continue to reflect best practice. By improving compliance with optimal processes, clinical outcomes should improve, and can be applied in any healthcare setting.
ARE PRESSURE INJURY INCIDENTS UNDER REPORTED?

Peninsula Health
Skin Integrity
Frankston VIC
Meagan Shannon

Aim
To ascertain the rate of under reporting of pressure injury incidents within Peninsula Health.

Abstract
Reporting of pressure injury incidents within the hospital environment is considered to be a fundamental quality activity and forms part of a quality culture. Overall adverse events rates range from 2.9% - 16.6% in acute care hospitals with a number of barriers to good reporting identified. In Australia pressure injuries are under reported approximately 65% of the time.

The implementation of the statewide electronic incident reporting system, Victorian Health Incident Management System (VHIMS), at Peninsula Health in July 2010, allowed for exploration of the reporting of pressure injuries occurring within the health service and in particular to determine if under reporting was an issue.

A qualitative retrospective study was undertaken to compare reported pressure injuries through comparison of the Wound Management Chart (WMC) audit results against the reported incidents for the same patient within the VHIMS reporting systems. Results show that pressure injuries were under reported 22% (n = 46) of the time, a markedly lower rate compared to the literature.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Peninsula Health is committed to the provision of safe, high quality care. A fundamental component of this is the monitoring and evaluation of clinical performance through robust audit and monitoring of incidents. Positive consumer outcomes rely on more than just reporting and monitoring however, it is also essential that health services interrogate data to effectively identify opportunities for improvement and facilitate change.

EQuIP Principle 2: Effective Leadership
Peninsula Health’s portfolio model sees specialist Clinical Nurse Consultants (CNC) playing a key role in leading best practice clinical care across high risk areas such as skin integrity and falls. The Skin Integrity CNC has demonstrated strong and effective leadership and role modeling through the employment of continuous improvement principles to identify and investigate potential safety and quality issues within the health service – in particular, the recognition that the introduction of new technology and systems can provide opportunity to explore data through a new lens.

EQuIP Principle 3: Continuous Improvement
The statewide electronic incident reporting system, Victorian Health Incident Management System (VHIMS), was introduced into Peninsula Health in July 2010 and allowed for exploration of the reporting of pressure injuries occurring within the health service and in particular to determine if under reporting was an issue.

The 2011 VHIMS Policy Guide\(^{(8)}\) advocates seven steps for the management of incidents:
In this study, only the first three steps were reviewed.

Monthly audit data is collected regularly in every clinical ward from the Wound Management Chart (WMC) document (Appendix 1) and submitted to Skin Integrity as part of a suite of Key Performance Indicators (KPI).

The following is collected from the WMC via the WMC audit tool (Appendix 2):

- Patient UR (identification number)
- Wound Chart Document complete – yes or no
- Weekly Wound Tracing of photo attended – yes or no
- Wound Management Explained to Patient – yes or no
- Wound Type: - Leg / foot ulcer; Pressure injury; Malignancy; Surgical breakdown; Skin tear; Trauma; Infection or Inadequate documentation
- Wound Condition: Inadequate documentation; Deteriorated- patient condition; Deteriorated- Wound infection; Healed; Improved; New wound; New patient or No change
- Location of wound: - Heel/foot; Head; Abdomen; Leg; Arm / hand; Nose; Lip or Back / sacrum
- If Pressure Injury stated what stage it is - Stage 1; Stage 2; Stage 3; Stage 4; Deep Tissue Injury or Unstageable.

If an identified pressure injury was reported on the WMC audit tool, the UR identification number of the patient was used to search the VHIMS system. If there was a pressure injury incident report for this patient, the injury was counted as reported, if no report could be found, the pressure injury incident was considered unreported.

Four wards were chosen at random for inclusion in this study, two each from acute and sub-acute services. Audits / incidents from August - October 2010 were included in the initial study.

EQuIP Principle 4: Evidence of Outcomes
75% (n=31) of pressure injuries audited on the WMC audit tool had a VHIMS incident report submitted.

100% (n=31) of those reports had an accurate Incident Severity Rating (ISR).

Ward B had a 33% reporting rate and was noted to have poor reporting of admitted pressure injuries. A VHIMS Quick Guide was developed and distributed to support accurate reporting process and education was provided. This ward was reviewed again for the period Jan – March 2011 with an improvement from 33% (n=6) to 66% (n= 9) for VHIMS pressure injury reporting.

The initial study was repeated for the period March - May 2012 for follow up evaluation and review. At this time the study was broadened to include 14 wards throughout Peninsula Health including acute, sub-acute and residential aged care.

This repeat study revealed a 78% (n=46) accuracy of pressure injury reporting on VHIMS. When compared to reporting rates in the literature this is a highly favorable result suggesting a strong culture of quality and safety among the clinical staff on the targeted wards.

EQuIP Principle 5: Striving for Best Practice
Reporting of incidents within the hospital environment is considered to be a fundamental quality activity to help reduce errors in health care and the reporting of pressure injury incidents is included in this quality culture. One study\(^1\) revealed that adverse events rates range from 2.9% - 16.6% in acute care hospitals. Australian studies\(^2-4\) have identified some of the major barriers for reporting as: lack of feedback, long forms, insufficient time and unfamiliarity. Interestingly nurses more commonly report incidents, undertake training and express favorable attitudes than doctors. The more frequently reported incidents were immediate events such as falls or medication errors rather than incidents which occur over time such as pressure injuries or infections.

One Australian study\(^2\) found that nurses were slightly more aware of the reporting system than doctors but
Healthcare Measurement

significantly more nurses were able to access, complete or know what to do with the incident report than doctors, though casual nurses were considerably less likely than permanent nursing staff. This study further discovered that the better reported incidents were immediate or witnessed events such as falls or medication errors which were both reported approximately 99% of the time and were consistent with the staff’s views on the necessity of reporting these incidents. Interestingly the least reported incidents were the ones that were considered to occur over time or were generally considered to be complications of prolonged hospital admission such as hospital acquired infections which were upwards of 50% of the time; post-operative DVT due to inadequate prophylaxis were reported upwards of 35% of the time; drug error made but not given to the patient (near miss) were reported upwards of 40% of the time and pressure injuries were reported upward of 35% of the time. Meaning that the under reporting of pressure injuries was potentially as high as 65%. All these incidents were in direct congruence with what the staff perceived should be done.

Similar findings were found in the US(5) except that it was identified that 86% under reporting of incidents occur and that most hospital incident reporting systems do not capture most patient harm. A UK(6) study identified lack of clarity regarding what should be reported and fear of punitive action as a factor responsible for lack of reporting and a Korean study(7) recognised lack of middle management leadership and lack of reporter anonymity as barriers to reporting. However, all studies conclude that incident reporting is a valuable process for learning and developing safe environments for staff and patients and that adequate resources and infrastructure will aid action and feedback processes. Also that good incident reporting systems that interrelate are needed to produce efficient data gathering and management for analysis.

Understanding if the reporting of pressure injuries within Peninsula Health is accurate will help ensure that care issues are being managed and addressed accurately and that there is no oversight with the pressure injury data. It can help guide the development of policies and procedures to ensure best care and practice is maintained.

Innovation in Practice and Process

The introduction of a new, statewide incident reporting system was recognised as an opportunity to both evaluate and reinforce the importance of a safety and quality culture within clinical staff. In addition this aligns strongly with the requirements of the newly implemented National Safety and Quality Health Service Standards. Peninsula Health seized the opportunity to reflect on its own practices and processes to ensure interventions were targeted and effective and would result in improved patient outcomes and experience.

Applicability to Other Settings

The review of pressure injury reporting was undertaken within existing resources and used existing audit data minimising the impact on specialist and ward staff. The use of the statewide electronic incident reporting system and an audit commonly undertaken in health services to complete the project supports its application within other health services across Victoria.

For more information on data referenced in appendices / tables, please contact the submitting organisation or ACHS

References


16th Annual ACHS Quality Improvement Awards  Page 289 of 309  Quality Initiatives 2013
Aim
To systematically improve the informed consent experience for every consumer who receives a blood transfusion at Bunbury Hospital.

Abstract
A sentinel event involving an ABO incompatible transfusion in the Emergency Department triggered a review of the blood management systems and processes at Bunbury Hospital. A baseline audit of consent processes was undertaken which indicated there was no documented consent for 53.9% of consumers. The South West Transfusion committee was formed as the governance group for blood and blood product management and actively monitors the clinical indicators and the effectiveness of implemented strategies. Of particular note has been the sustained decrease of the failure to document informed consent since the first half of 2011 which means all but 10% of consumers have documented consent. The aim is 100% and Bunbury Hospital has made significant progress in closing the gap between actual clinical practice and best practice.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
To ensure consumers felt fully informed about their treatment with blood products a consumer audit tool was developed that reviews the ‘informed’ nature of the consent process. Results from August 2013 showed that 100% (8/8) understood the reason for their blood transfusion and 100% were given adequate time to consider and sign the consent form. Bunbury Hospital identified that, traditionally, consumers with chronic anaemia would be admitted to hospital and, on average, required a length of stay longer than three days. Bunbury Hospital instigated a full clinical service redesign project for this cohort of consumers which resulted in a new care pathway.

Consumers with chronic anaemia are now infused as day cases in the medical day infusion lounge with the result that infusion occurs within the clinically recommended timeframes and consumers are not inconvenienced by a protracted stay in hospital.

EQuIP Principle 2: Effective Leadership
The South West Transfusion committee has this year been identified as the leader for Country Health Services and is now the Transfusion Committee for the whole of WACHS and has expanded membership to include multidisciplinary representatives from each of the other six WACHS health regions. WA Country Health services covers 2,525,306 square kilometres and extends from the Kimberley region in the to the Great Southern region in the south, the Indian Ocean to the west and Northern Territory and South Australian borders in the east.

The success of this committee has been achieved by ensuring all publications and resources are relevant to each of the seven WACHS health regions, thereby ensuring compliance with best practice, standardisation for clinicians and reduction in duplication of resources. Other hospitals within the regions will be aiming to achieve Bunbury Hospitals’ sustained success of documented, informed consent.
Healthcare Measurement

**EQuIP Principle 3: Continuous Improvement**
The Transfusion Committee’s main focus is that of continuous improvement through Bunbury Hospital’s participation in the ACHS clinical indicators for transfusion medicine. A local action plan is developed and improvements are targeted at identified gaps. The most recent audit found that consumer vital observations were not being performed consistently in line with best practice requirements. Targeted education was delivered to nursing staff to raise awareness of the importance of observations in the early detection of adverse transfusion reactions and clinical deterioration.

The Transfusion Committee reviews all clinical incidents reported as a result of transfusion medicine, and a register of all incidents is collated and risk rated with actionable outcomes including identification of emerging themes.

**EQuIP Principle 4: Evidence of Outcomes**
The percentage of consumers with documented, informed consent has increased over the past four years from 46.1% to 90.2% however has been sustained since the first half of 2011. A consumer survey has been developed in 2013 with the aim that all consumers receiving an elective blood transfusion at Bunbury Hospital, from 1 October 2013, will receive it until the organisation is certain that consumers are informed and satisfied with their experience.

There have been no further sentinel events for ‘Haemolytic blood transfusion reaction resulting from ABO incompatibility.’

From the Organisation Wide Survey report from September 2012 there was commendation from the surveyors: “Blood management systems and practices have been comprehensively reviewed and the improvements are substantial. The blood transfusion committee is congratulated on its leadership in managing the changes to achieve improved patient safety”.

**EQuIP Principle 5: Striving for Best Practice**
The Transfusion Committee conducts regular literature reviews and benchmarking across Australia and internationally in relation to transfusion medicine practice, in order to determine applicability or changes to current policies and procedures. As an example, the recent publication of the CRASH-2 trial in the Lancet journal has led to an amendment in the Massive Transfusion Protocol recommending the use of Transexamic Acid in the first 3 hours.

**Innovation in Practice and Process**
Bunbury Hospital has systematically reviewed all its processes in relation to transfusion medicine as part of their continuous quality improvement cycle. Associated work, other than that already listed, includes: Increased utilisation of Intravenous Iron therapy for those consumers known to be Iron deficient thereby avoiding allogeneic blood transfusions. This development has been particularly successful within the Obstetric area.

**Applicability to Other Settings**
The substantial work undertaken by the SW Transfusion Committee has now been shared with the other six WACHS regions for their review and commentary to ensure that flexible standardisation occurs, that is to promote best practice with local adaptation to meet the needs of each service within the region. For example, the remaining WACHS regions will adapt a procedure such as the Bunbury Hospital specific “Obtaining platelets from Perth in critical situations procedure” to ensure it meets the needs of their local services.
DEVELOPMENT OF A NEW PHYSIOTHERAPIST-LED SHOULDER ASSESSMENT CLINIC

Physiotherapy
Monash Health
Clayton VIC
David Harding

Aim
The objective of this service innovation was to measure and improve access to the orthopaedic service by commencing a physiotherapist-led Orthopaedic Shoulder Clinic.

Abstract
After its waiting list for patients with shoulder pain to see a surgeon became unsustainably high, Monash Health moved to find a better way to provide service to such patients for whom access to timely, correct treatment is important for achieving good outcomes.

Many patients seen in the Monash Health upper limb orthopaedic service do not require surgery or the specific skills of an orthopaedic surgeon. Many can instead be managed effectively by a skilled musculoskeletal physiotherapist.

The objective of the service innovation was to improve access to the orthopaedic service by commencing a physiotherapist-led Orthopaedic Shoulder Clinic.

This innovation has resulted in the elimination of the previous extensive waiting list, with all patients now able to access the right care at the right time. Patient and surgeon satisfaction with the changes has also been high.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Historically, there has been a high demand for specialist services. The demand for upper limb orthopaedic services over the past few years had outstripped the ability of Monash Health to provide appointments for all referred patients. This had led to a waiting list of over 500 patients, with waiting times for category 2 patients of up to 230 days.

Clinical criteria were drawn up by the orthopaedic unit and physiotherapists to determine patients that could be triaged to be seen by physiotherapists rather than surgeons. This would allow better use of orthopaedic surgeons' time in clinic to consult with patients who required surgery.

The main objectives were to:
- reduce the waiting list,
- offer effective conservative treatment to patients who did not require surgery; and
- allow more time for surgeons to consult with patients who did require assessment for surgery.

We surveyed our patients after the change to check their satisfaction with the new system and were able to confirm that we were meeting the needs of the target group.

EQuIP Principle 2: Effective Leadership
Discussion between key stakeholders, including the Monash Health Outpatients Service, Director of Orthopaedics, ACCESS Unit, physiotherapists and local clinic managers, were held to develop the planned service innovation.
A new triage process was developed whereby the physiotherapist triaged all shoulder patients to the upper limb orthopaedic service. Triage was based on a set of clinical criteria that determined if patients were seen in clinic by a physiotherapist or surgeon.

Patients on the waiting list who met the criteria for assessment in the Physiotherapist-led Shoulder Clinic were contacted and offered appointments in the new clinic. Patients who required a surgical opinion were referred to the orthopaedic surgeons.

**EQuP Principle 3: Continuous Improvement**

The Physiotherapist-led Shoulder Clinic continues to run alongside the Orthopaedic Clinic. An education program and clinical competencies have been developed to ensure a high level of care is provided to patients, while also training new staff as part of succession planning.

To ensure the ongoing sustainability of the service, a new staff member at Dandenong Hospital has begun training in this role, with a further staff member at Monash Medical Centre to commence training in the near future.

**EQuP Principle 4: Evidence of Outcomes**

In its first year, 221 new patients were seen in the Physiotherapist-led Shoulder Clinic. Of these, 88 patients (40%) required no further appointments and were discharged from the orthopaedic service.

After a year of operation, the waiting list for patients to see a surgeon had been eliminated.

Surveys of patients, orthopaedic surgeons and referrers were conducted in late 2012/early 2013 at all three sites. These indicated that despite 49% of patients expecting to see an orthopaedic surgeon in clinic, 100% of patients were satisfied with the outcome of their visit.

Some 86% of orthopaedic surgeons felt that the appropriateness of referrals had improved and 85% felt the overall experience of working in the outpatient service had improved since the commencement of the Physiotherapist-led Shoulder Clinic.

**EQuP Principle 5: Striving for Best Practice**

Our change in practice has achieved excellence in health by ensuring that our upper limb orthopaedic service can now see all patients in the time frames that are clinically appropriate.

The patient waiting list, which numbered greater than 500 people, no longer exists. Category 2 patients who were triaged to be seen in six to eight weeks and waiting up to 200 days are now seen in the clinically appropriate timeframe.

Patient satisfaction with the changes has been high, as is surgeon satisfaction.

The triage process for shoulder patients has improved as all triage is now completed in a timely manner by a consistent group of physiotherapists who understand the waiting times for clinics. Previously, new Registrars or Fellows asked to triage did not always understand the waiting times for patients or recognise referral patterns.

The new clinics only require 0.2 EFT per week of physiotherapy time. There is a little more time involved in triaging. However, for a very small investment in clinical time, a very large, sustainable change has been made to our system that improves patient outcomes.

**Innovation in Practice and Process**

By developing this clinic, using input from a number of sources and writing comprehensive criteria, a co-operative model of care has been implemented. This has resulted in a more effective use of practitioners’ time, whether they are surgeons or physiotherapists. In turn, this has led to increased patient and staff satisfaction, large reductions in waiting lists, and patients being able to access the right care at the right time.

**Applicability to Other Settings**

In an effort to sustain and this innovative and successful initiative, additional physiotherapists are being trained to undertake the new role in the physiotherapy-led clinic. There is no doubt that with appropriate consultation and the development of referral criteria, this model could be applied to not only other orthopaedic clinics, but also other areas of clinical practice and other professional disciplines.
IMPROVING ACCESS TO ORAL HEALTH SERVICES FOR SUPPORTED RESIDENTIAL SERVICES RESIDENTS

Community Health
Monash Health
Clayton VIC
Dr Ramini Shankumar

Aim
The aim was to measure the current status and need for improved oral services for Supported Residential Services residents and to provide residents, staff and proprietors with improved oral health assessments, referrals, information and education.

Abstract
Residents of Supported Residential Services facilities are among Victoria’s most disadvantaged citizens, with little disposable income, high levels of disability, chronic health issues and low social participation.

The oral health of many of these residents is significantly compromised by a history of poor oral hygiene practices, poor diets and poly-pharmacy. This is further compounded by an inability or unwillingness to seek out services due to failure to prioritise own health, low motivation and self-esteem, lack of knowledge about services and transport issues.

A pilot project conducted by Monash Health in 2011/2012 demonstrated the high need of this client group, with 96% of the patients screened requiring further treatment. Some 80% of clients had some disability and required assistance with access to treatment services.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Supported Residential Services operated privately throughout the south eastern suburbs are funded and monitored through the Department of Health. This low socio-economic client group is at high risk of serious oral disease. A significant percentage of Supported Residential Services residents have mental health issues, disabilities and/or alcohol and drug problems which can lead to them being at risk of homelessness. These factors make this a difficult cohort to engage with and effect change.

The Oral Health initiative has been developed to ensure that residents are screened as to the status of their oral health. Their dependency level is also assessed by Medical and Allied Health Access / Eastern Region Mental Health Association workers to determine their ability to manage oral hygiene practices and travel to receive treatment.

Residents who require further intervention and assistance with access are assisted to and from dental visits. Staff and proprietors are engaged in improving oral hygiene practices in the settings. Treatment is provided and any further intervention scheduled.

It is hoped that, through this project, the Supported Residential Services client group will have improved oral health and many serious long-term problems will be alleviated.

The benefits of this program are that it:

- ensures the needs of the Supported Residential Services clients are met,
- adopts an innovative approach in addressing the barriers for access to care,
Healthcare Measurement

- establishes collaborative and mutually beneficial partnerships with stakeholders and Supported Residential Services management / staff; and
- uses pilot project data to develop a service model and to secure recurrent funding for a regional project to include the Southern, Peninsula and Gippsland regions.

We identified and satisfied the following expectations:

- an increase in clients attending regular oral health appointments,
- improved oral health for Supported Residential Services clients,
- improved perception and value of oral health by Supported Residential Services staff,
- engagement of Supported Residential Services staff and development of ongoing relationships,
- reduced Supported Residential Services client anxiety associated with dental visits,
- a regular, systematic appointment system for Supported Residential Services clients,
- provision of a holistic, collaborative approach to Supported Residential Services client health,
- increased use of oral hygiene products by Supported Residential Services clients outside of clinical setting; and
- increased knowledge of oral health by Supported Residential Services clients.

Residents who require further intervention and assistance with access are assisted to and from dental visits. Staff and proprietors are engaged in improving oral hygiene practices in the settings. Treatment is provided and any further intervention scheduled.

It is hoped that, through this project, the Supported Residential Services client group will have improved oral health and many serious long-term problems will be alleviated.

**EQuIP Principle 2: Effective Leadership**

A collaborative project team was formed with expertise in oral health and working with Supported Residential Services clients which included representatives of external stakeholders such as Peninsula Health, MY health, Community Support Options, Department of Health, Eastern Region Mental Health Association and the Bairnsdale Regional Health Service (Gippsland). The involvement of Supported Residential Services management was also imperative to the success of this project.

After a lengthy consultation process, a service model was developed, based on:

- providing oral health education and information to Supported Residential Services residents, staff and proprietors. This was done through providing oral health packs to residents, and giving further dental training for Medical and Allied Health Access workers and Supported Residential Services staff. This included viewing the DVD *Brushing up on oral health*, which provides guidance for disability support workers.
- improving the oral health practices of Supported Residential Services residents by promoting changes to daily living within the Supported Residential Services, and developing and reinforcing individualised oral health care plans. This included regular good oral hygiene, healthy diets and regular dental examinations.
- facilitating improved access to dental services.

Existing rapport with Supported Residential Services clients assisted Medical and Allied Health Access workers to improve engagement of these clients by:

- engaging and communicating with Supported Residential Services proprietors/staff about client oral health issues. This is important as most Supported Residential Services clients are transient and, due to cognitive impairments, may be unable to retain information,
- engaging and assisting clients with their appointments; and
- supporting clients during the actual treatment to reduce anxiety.

Utilising existing linkages of Eastern Region Mental Health Association with Supported Residential Services facilities enabled Monash Health to:

- improve engagement of Supported Residential Services clients,
- assess client ability in relation to their mental health,
- contribute with the development of service model and engagement strategies; and
- provide transport assistance e.g. taxi vouchers.

**EQuIP Principle 3: Continuous Improvement**

A service model has been developed to ensure a consistent approach by all partners and service performance monitoring has been implemented to review processes and outcomes.
Ongoing work is planned to improve partnerships with Supported Residential Services proprietors/staff. Collaborative work with all stakeholders is proposed to ensure oral health is included in residents’ overall care plans.

In relation to client centred objectives, it was paramount that oral health education and information be provided to proprietors / staff so that they could support residents to improve their oral hygiene. Such engagement is vital due to the high percentage of the client group having intellectual disability.

To meet the needs of the target group and assist in the effectiveness of the initiative, oral health messages and oral health kits are modified to take into account the disabilities present. Specialised tools such as electric toothbrushes are included in the oral health kits and mechanisms put in place to assess client ability to practice oral hygiene measures.

**EQuIP Principle 4: Evidence of Outcomes**
In 2012, clients from five Supported Residential Services facilities were surveyed regarding access to services. They were asked how recently they had visited a dentist, with the vast majority saying they could not remember having done so.

Between 1 July 2012 and 30 June 2013, 10 Supported Residential Services facilities were targeted in the Southern, Peninsula and Gippsland regions. Some 232 residents received screening and 171 clients were provided with oral health education. Oral health education sessions were attended by 25 Supported Residential Services staff and 203 oral health kits were distributed. More than 125 clients were referred for dental treatment.

Screening of Supported Residential Services residents during 2011/2012 showed that 92% required treatment. This had reduced to 45% requiring treatment after the introduction of the initiative. This very significant decline in the number of residents requiring treatment demonstrates the effectiveness of this initiative.

**EQuIP Principle 5: Striving for Best Practice**
This partnership initiative recognises that preventive health care and oral hygiene help maintain a person’s independence and quality of life and can decrease the need for emergency care.

The effectiveness of the initiative was enhanced working closely with others who have particular areas of expertise or knowledge. This included:

- using existing stakeholders in the facilities - Medical and Allied Health Access and Eastern Region Mental Health Association - to develop trust between residents and oral health staff,
- overcoming barriers such as cost, transport, lack of knowledge and fear which were preventing Supported Residential Services residents from seeing a dentist by taking oral health education and oral health assessments into the Supported Residential Services facilities and then providing a referral process for residents to receive dental treatment at our dental clinics,
- engaging proprietors by including oral health staff in forums organised for proprietors,
- establishing a stakeholder group with all partners,
- developing an agreed service model for this client group; and
- working with general practitioners in obtaining medical information.

**Innovation in Practice and Process**
By recognising that preventative health care and oral hygiene can help maintain independence and quality of life, and may decrease the need for emergency care, this partnership has examined the issues around providing these services from an innovative angle. Because the primary focus was the consumers (the Supported Residential Services residents), barriers and issues were seen from their perspective. This led to new ways of providing care, from facilitating transport for residents to assessing residents in their own homes (see Figure 1). In turn, this has increased residents’ engagement, compliance and satisfaction, and a significant decline in the number of residents requiring treatment.

**Applicability to Other Settings**
This innovative, collaborative partnership across three regions has proven to be highly successful for Supported Residential Services residents, staff and proprietors in the provision of improved oral health assessments, referrals, information and education. The success of this initiative is therefore applicable to services well beyond those of Monash Health.
NURSE DRIVEN CLINICAL GOVERNANCE

Risk Manager and NUM Anaesthetics / Recovery
Kareena Private Hospital
Caringbah NSW

Kim McNally  Emily Dearing

Aim
To improve our monitoring and data collection systems in clinical risk review and management to enable better patient outcomes through nurse driven clinical governance.

Abstract
A clinical risk review committee was established to drive the management of risk and was nurse led. It enabled our high risk incidents rated one to two to be decreased and risks rated 3-4 to be better managed leading to better patient outcomes. The data was able to be analysed and fed up to the medical and executive level and fed down to nurses at the clinical level.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The clinical risk review committee sought to link reviews with that of the requirements of the ten National Health Standards to ensure these standards were identified and acted upon to ensure patient safety was at the forefront.

EQuIP Principle 2: Effective Leadership
Clinical indicators and Key Performance Indicators have been used to provide measures to inform quality improvement programs and that quality assists in improving safety, better outcomes and greater efficiency. This was done in conjunction with the clinical risk review committee developing and collecting data to improve performance within the hospital.

EQuIP Principle 3: Continuous Improvement
Improvements have been seen following an increase in education, dissemination of information and commitment by the clinical risk review committee. This is evidenced through improved incident reporting, improved documentation during and post MET calls, improved transfer times from the wards to critical care and the gathering of data to improve practices to decrease blood usage. Anaesthetic clinical indicators is another area where major improvements have occurred through data collection and analysis, for example post-operative Hypothermia with the assistance of the clinical risk review committee.

EQuIP Principle 4: Evidence of Outcomes
The clinical Risk Review committee has played a major role in improving its overall organisational quality improvement culture. With the collaboration between departments and with the identification of their needs and concerns we have been able to address risk in a much more systematic approach which in turn has supported a very robust quality management system.

EQuIP Principle 5: Striving for Best Practice
The clinical Risk Review committee has played a major role in improving its overall organisational quality improvement culture. With the collaboration between departments and with the identification of their needs and concerns we have been able to address risk in a much more systematic approach which in turn has supported a very robust quality management system.
Healthcare Measurement concerns we have been able to address risk in a much more systematic approach which in turn has supported a very robust quality management system.

**Innovation in Practice and Process**
The introduction of the clinical risk review committee has enabled us to close the quality improvement loop by ensuring improved identification of trends and thereby actions allow us to make changes hospital wide. The introduction of these processes has allowed us to highlight key areas where changes and improvements were required and engage ourselves and our staff in appropriate quality activities to make these changes and review their effectiveness. This improvement has the potential to decrease the workload of the nursing and medical staff as it assists in identifying and reducing poor outcomes for patients. The clinical risk review committee and all its surrounding processes has supported our quality care and excellence.

**Applicability to Other Settings**
The Clinical risk review committee setup is applicable to all health care facilities that are passionate with a genuine desire to improve patient care and outcomes. It is our thought that with continual management it has the potential to shorten our length of stay and increase patient flow within our hospital and it increases compliance to hospital policy. The Clinical Risk Review Committee links the National Standards with a forum to assist in ensuring the link between all is completed and maintained.
MEASURING CLINICAL OUTCOMES IN COSMETIC MEDICINE

EPICLINIC PTY LTD
IMAGING RESEARCH
Adelaide SA

Dr Michael Molton

Aim
Produce a non-invasive quantitative evaluation system using three-dimensional scanning technology to measure outcomes in cosmetic medical practice.

Abstract
Pilot study to quantitatively measure outcomes in minimally-invasive cosmetic medical procedures using three-dimensional scanning technology followed by clinical application. Project is subject to ongoing research and automation by the author in collaboration with the University of Western Australian and the Australian Research Council over the next four years.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Consumer demand for cosmetic medical procedures has risen significantly in recent years yet no quantitative measuring system has been forthcoming. Contemporary consumer demand is for procedures which are subtle, do not attract unwanted attention and do not alter the persona of the consumer. Epiclinic has developed a quantitative healthcare management assessment system to precisely demonstrate to the consumer what changes have physically occurred as a result of treatment, or the system can be used to quantify the ageing process as it occurs, with or without treatment.

EQuIP Principle 2: Effective Leadership
Following initial research into systems used in engineering which might prove adaptable to the project and a pilot study, Epiclinic has entered into a collaboration with the University of Western Australia, funded by the Australian Research Council to lead the development of the project to the market place for introduction as a universally accepted tool in quality measurement in cosmetic medical practice.

EQuIP Principle 3: Continuous Improvement
The project has already provided much insight into what physically happens to the ageing face when treatments are applied furthering the knowledge of clinicians and improving outcomes. The research program with UWA is ongoing and tracking of quality of outcomes as the application of technology is refined.

EQuIP Principle 4: Evidence of Outcomes
A prospective double-blind pilot study produced compelling evidence that the system could identify change with high sensitivity and specificity.

EQuIP Principle 5: Striving for Best Practice
Epiclinic’s first premise in 2008 was to determine the socioeconomic impact of cosmetic medical procedures and found a 30% improvement as perceived by patient questionnaire. Next was to determine whether this perceived positive impact was due to real or placebo effects. In order to demonstrate this, a reliable quantitative assessment of...
Healthcare Measurement outcomes was necessary so that we could be more confident that the positive impact was due to real, not imagined (placebo), changes. SAFV scanning is the result of this journey for striving for best practice.

**Innovation in Practice and Process**
Not only did SAFV scanning prove to be a successful method of mapping changes due to cosmetic medical intervention. The innovation permits the patient to see three-dimensional views of the facial features that are not usually observed of the self. The system also tracks morphology changes where no treatment occurs to observe the dynamics of the ageing process.

**Applicability to Other Settings**
Breast reconstruction and body contouring.
Aim
To improve the outcomes of patients undergoing robotic surgery, through application of systematic, routine clinical audit.

Abstract
Epworth Healthcare (Epworth) has been at the forefront of Robotic Surgery in Australia since 2003. Epworth’s Visiting Medical Officers (VMOs) have performed many Australian-first procedures using the robots in areas including cardiothoracics, colorectal, endocrinology, gynaecology and urology.

Robotic surgery is a minimally-invasive surgical technique that involves the use of a computer to guide miniature instruments that are attached to robotic arms. The surgeon sits in the corner of the operating theatre and directs the movement of the robotic arms. A three-dimensional (3D) camera helps guide the surgery and provides unparalleled vision for the surgeon. Using hand and foot controls, the surgeon manipulates the camera and instruments deep inside the patient’s body, allowing precise and delicate surgery to be performed through tiny incisions.

Ensuring the safety and quality of the innovative robotic approach was a priority. In support of this, systematic, routine clinical audit was implemented to measure and monitor care outcomes and complications. This system use automation to minimise the human effort required and ensure consistency of report output.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
Robotic surgery offers a viable alternative to open or laparoscopic approaches. It has seen patients choose the approach and benefit from shorter hospital stays, minimal surgical complications, lower risk of infection, reduced incidence of blood loss and blood transfusion rates, and quicker return to normal activity.

EQuIP Principle 2: Effective Leadership
The Quality and Risk division has actively engaged senior hospital executives, Clinical Institute chairs, and surgeons who are experts in their fields to audit the performance and review the outcomes of robotic surgery on a quarterly basis.

At Epworth, Clinical Audit is a clinically-led initiative in which healthcare professionals compare actual practice against agreed, documented, evidence-based standards with the intention of modifying practice where indicated, thereby improving patient care.

As a result of these initiatives, a Robotics Sub-committee was established and is chaired by the Epworth Centre for Robotic Surgery’s Director. The multidisciplinary membership of this sub-committee includes hospital executives, specialist VMOs, nursing leaders and analysts. This commitment at senior leadership level has seen a drive for quality improvement, benchmarking and maintaining a high standard of service delivery for Epworth’s patients.
Healthcare Measurement

EQuIP Principle 3: Continuous Improvement
Since its conception in Quarter 1, 2012, the Robotic Surgery Quarterly Audit has sought to examine the average length of stay, multiple theatre events in a single episode, ICU admissions, complications, blood transfusions, and readmissions with the primary aim of improving standards and practice where possible.

Each complication is individually reviewed and presented to the sub-committee, any necessary and subsequent action is discussed within this multidisciplinary setting.

The quarterly audits have also enabled Epworth to observe variance in practice across its campuses and as a result, the organisation has now achieved standardised practice methods, thus facilitating and striving for continuous improvement.

EQuIP Principle 4: Evidence of Outcomes
A key result of the quarterly audits has seen clinical and executive leaders work together to enhance outcomes. This is particularly evident when looking at the [average] length of stay of radical prostatectomy patients. Campus A and Campus B consistently displayed close to double the length of stay when compared with Campus C in Quarters 1, 2, and 3, 2012.

This prompted a review of the care plans and modification of clinical pathways at each campus to minimise unnecessary day stays. The length of stay has now equalised across the campuses in Quarter 3, 2013.

The reduction in length of stay of radical prostatectomy patients has also driven an overall decrease in length of stay for robotic surgery patients.

EQuIP Principle 5: Striving for Best Practice
The use and application of this quarterly audit model acknowledges the significance of utilising data and transforming it into measurable information that supports informed decision-making and improved patient outcomes. Collaboration between clinical and non-clinical staff, continual review of driving factors and effects, and the resulting practice modifications have also been recognised as a core component for striving for and accomplishing best practice.

Innovation in Practice and Process
The evolution of this outcomes-centred audit model is a leap towards consistent clinical measurement. It can be used to support surgical governance structure, assess individual VMO performance, flag adverse patient outcomes, and evaluate the safety and effectiveness of existing and emerging robotic procedures. The quarterly audit also serves as a template for the development of future audits at Epworth. The delivery of reports for use in measurement captures the benefits of automation in identifying patients, collating patient information, formatting the output and delivering the product via email to audit committee members.

Applicability to Other Settings
The framework for the Robotic Surgery Quarterly Audit can and has been adapted to monitor the effectiveness and appropriateness of service delivery across a range of specialties. As such, Epworth has been able to contribute to the process of continuing clinical education, encourage evidence-based practice and deliver demonstrable improvements in patient care.
Aim
To implement an integrated patient safety report and engage the organisation in patient safety monitoring from Board to bedside.

Abstract
As with all health services Epworth HealthCare, a not-for-profit health care provider, has a responsibility to monitor and maximise patient safety. Achieving this in a consistent integrated manner was never more important than in the period of seven years when Epworth grew from one site to seven sites. This complex governance setting necessitated the integration of existing reporting systems and management cultures.

Commencing in 2009 the KPI system has been progressively improved. This improvement has included standardised collection methodologies, agreed KPI definitions, automated data extraction and longitudinal tabling/charting.

The staged approach began with a single month view of numeric results that was used to capture the first group wide set of measures. All data entry, calculation and data access were performed manually. Separate data tables were used for each level of governance and all figures were collated and used centrally with no unit involvement.

The second stage included several changes including data cell formatting to identify missing data, the addition of a comment section to capture a summary of the context and contributing factors and the establishment of a data dictionary for all data items and KPIs.

Transition to the stage three saw the biggest changes including:
- reporting of 13 months in a single view
- the application of upper and lower control limits with automated variance flagging
- implementation of standardised, automated extractions from hospital inpatient systems
- integrated data between hospital inpatient and incident reporting systems
- categorisation under priority areas
- a single report for hospital, Epworth executive and Board level reporting.

The transition to the current system has included:
- a move to rate based reporting to enable the inclusion of external benchmarks
- application of internal tolerances that reference, but may exceed the external benchmark
- implementation of a formalised indicator set in the hospital incident system to further remove duplication and improve consistency and enhance transparency
- categorisation of KPIs under the National Safety and Quality Health Service (NSQHS) Standards.
- the indicator data feeds to and from Epworth’s working groups that are devoted to delivery against the National Standards
- revision of the definitions manual.
Healthcare Measurement

The systems impact of the integrated system has been felt through confidence in the reported data at all levels of the group, the ability to monitor across Epworth’s seven sites consistently and efficiently, reduced duplication, increased reporting, transparency and accountability, dissemination of results throughout the organisation and improved patient safety. With the link from unit level through hospital level to group level data to unit level it is possible to interrogate the reason for good and poor results as well as drive improvement and achieve accountability in the right areas.

The impact on clinical outcomes is driven by changes to the care that is delivered, to organisational processes such as risk assessment and to a cultural shift towards excellence. There is however, no question, at Epworth, that the availability of robust, clearly presented data that is integrated across all levels of the organisation and between systems had been vital in identifying and driving opportunities for improvement and demonstrating these. Evidence of clinical improvement is shown below in Figures 5-8. The incidence of ‘Stage 3 and 4 pressure injuries’ and ‘falls with harm’ is notably down while the number of near miss incidents and patient satisfaction are up.

Although the results are improved the benchmarks have been set to drive improvement and will be modified to maintain this effort. Settling for ‘good enough’ is not acceptable in an organisation where the intent is ‘Excellence, Everywhere, Everyday’.

Application of EQuIP Principles

EQuIP Principle 1: A Consumer / Patient Focus
The consumer (patient) is at the core of in this entire initiative as the aim is to ensure safe care is provided to patients.

Of particular relevance is the inclusion of 8 measures targeted at achieving Standard 2 ‘Partnering with Consumers’. These measures are all about evaluating the service from the consumer perspective and include both process and outcome measures. They have been chosen to best reflect a high level view of the consumer.

KPI results have been provided to the newly formed Consumer Participation Committee to guide its formation.

EQuIP Principle 2: Effective Leadership
The integrated reporting system provides direction for Epworth HealthCare in a consistent way from Board the bedside. The use of a consistent approach to reporting breaks down barriers between levels of the organisation and between business units within. This enhances sharing of improvement approaches and supports accountability between 7 separate hospital sites and across the group wide topic based (National Standard) working parties.

Through creating a link between all levels of the organisation the clinical workforce is motivated as they can see that their care is relevant, that reporting of incidents ‘goes somewhere’ and understand whether outcome are getting better or worse.

EQuIP Principle 3: Continuous Improvement
The system has been implemented to monitor outcomes patient care. The methodology has been continually reviewed and upgraded to improve effectiveness, efficiency and engagement. The upgrades have included review of definitions, refinement of data extractions, clearer presentation and alignment with National Standards. Throughout these upgrades the ability to monitor has been maintained rather than restarting with each revision.

EQuIP Principle 4: Evidence of Outcomes
As with all outcome improvements the use of the integrated reporting system is not the ultimate cause of them but is a vital component. Without knowledge of actual performance there is no reliable way of knowing the current situation and whether improvement has occurred.

The incidence of ‘Stage 3 and 4 pressure injuries’ and ‘falls with harm’ are notably down. Both areas had targeted efforts to change hospital processes such as risk assessment, increase knowledge about treatment and prevention strategies. Alongside this was the sharing of information about unit, hospital and group rates. Through use of the integrated system, information was consistent, clear and easily accessed. These data now support the relevant working party in its effort to improve outcomes.

The near miss incident rate was a measure of an organisational objective to drive the culture of incident reporting. From a very low base at the time of reporting the target was first achieved within three months and has stabilised...
well above target for the last 6 months. Reporting rates were disseminated to units around the health service along with education about the definition of near miss and the need and value of reporting.

Another measure that has seen improvement in the time since reporting began is Patient Satisfaction. In early days, although reported at management levels, the results did not improve. Following the dissemination of results beyond management, an improvement can be seen.

**EQuIP Principle 5: Striving for Best Practice**  
The reporting system uses a range of benchmarks from external settings. From each of these the most challenging was chosen as the listed external benchmark. From these options, internal tolerances were chosen. Many matched the external benchmark while others exceed this.

These tolerances will be reviewed during 2013 so that where a tolerance has been achieved it may be reset at a higher standard to drive further improvement. Settling for ‘good enough’ is not acceptable in an organisation where the intent is ‘Excellence, Everywhere, Everyday’.

**Innovation in Practice and Process**  
The processes for collecting and collating the data use a large amount of innovation. Through direct access to raw inpatient routine datasets, the application of filters and automated delivery of preformatted data, the people responsible for data entry and analysis can be assured that data arrives in a timely, reliable and simple manner. This reduces the need for time consuming and error prone manipulation.

A specific example of this is unexpected readmissions where a set of patients are identified who have a reason for readmission that is likely be unexpected. This list is automatically extracted and distributed to relevant reviewers. This all occurs automatically without any human input. The choice of codes for inclusion and their application to an automated system provides efficiency through innovation.

**Applicability to Other Settings**  
The reporting methodology could be readily applied to most health services. The data that is used is found in standard national datasets and incident management systems. Incorporation of these data requires local commitment from clinical leaders, management and information services. The reporting is based on widely available software.
**REDUCTION OF TIME ON OXYGEN AND LENGTH OF STAY FOR INFANTS WITH MODERATE BRONCHIOLITIS USING A NOVEL PROCEDURE THAT EMBEDS HEALTH POLICY IN A PAEDIATRIC CLINICAL TRIAL**

John Hunter Children’s Hospital  
Hunter New England Local health District  
Newcastle NSW  

Elizabeth Kepreotes  
Bernadette Goddard  
Bruce Whitehead

**Aim**

To develop and test standardised procedures for commencing and weaning oxygen that incorporate NSW Health policy and reduce time on oxygen and length of stay (LOS) for infants enrolled in a randomised control trial.

**Abstract**

The project describes how innovative, standardised procedures for commencing and weaning oxygen [previously unstandardised between clinicians] were incorporated into the design of a pilot randomised control trial (RCT) conducted in the John Hunter Children’s Hospital (JHCH) Medical Unit (H1) and the Emergency Department (ED). These procedures use the principles of Between the Flags (BTF) and the New South Wales (NSW) Standard Paediatric Observation Charts (SPOCs) to guide clinical care in a standardised manner for both treatment arms of the RCT.

A core component of the project was to develop standard operating procedures for the trial that would generate objective data to measure the primary endpoint of time to weaning off supplemental oxygen for infants with moderate bronchiolitis.

To test the safety and efficacy of the new procedures, historical data from 2007 (n=81) before the experimental oxygen delivery devices were introduced into care, were compared to preliminary RCT data (n=30) randomly selected for data entry with 1:1 from both groups in an *a priori* analysis.

The ‘EBB’ method for weaning oxygen requires infants commence on maximum oxygen therapy for their randomised treatment arm [Experimental = High-flow nasal prong warm humidified oxygen (HFNP WHO) 1L/kg/min 1:1 oxygen:air flow; Standard therapy = 2L/min cold nasal prong oxygen]. After three hours on maximum therapy, infants may then wean as per the EBB method, using the track and trigger SPOC observation charts (NSW Ministry of Health) to titrate oxygen rates to clinical need until they are weaned to room air. The first hour of assessment plus the three hours on maximum therapy in the ED equates to the required National Emergency Access Target (NEAT) of 4 hours in ED. Weaning may then begin and should start after transfer to the medical ward.

Results of the *a priori* analysis found median time on oxygen was reduced from 39.6 hours to 25.00 hours and a mean LOS reduced from 3 days to 2 days respectively. The completion of a comprehensive economic and social cost benefit analysis of outcomes is an integral component of the RCT.

**Application of EQuIP Principles**

**EQuIP Principle 1: A Consumer / Patient Focus**

The study was designed with a consumer focus that infants have no non-standard invasive therapy or testing, and parent involvement and education is a key part of this RCT.
Parental satisfaction with the devices in the context of the child’s ability to sleep, feed, and rest comfortably was also measured at 30 days.

Reducing time on oxygen and subsequent length of stay are significant outcomes for parents who may miss employment and family time due to the infant’s hospitalisation.

**EQuIP Principle 2: Effective Leadership**
The research team behind this RCT includes leaders in the fields of paediatric respiratory medicine, paediatric emergency medicine, and researchers from the Hunter Medical Research Institute, the University of Newcastle, and the University of Melbourne.

**EQuIP Principle 3: Continuous Improvement**
The delivery of supplemental oxygen is a very common intervention in paediatric healthcare. This study will inform best practice for supplemental oxygen use in the management of the most common respiratory infection in Paediatrics [48,314 respiratory tests run in 2012 by NSW hospitals that test for the viruses associate with bronchiolitis] (NSW Health, 2012).

**EQuIP Principle 4: Evidence of Outcomes**
Evidence of decreased time on supplemental oxygen and subsequent length of stay, regardless of any treatment difference between therapies, is directly attributable to the novel standard operating procedures developed for the RCT.

**EQuIP Principle 5: Striving for Best Practice**
Oxygen delivery in paediatric wards in NSW has not changed significantly in over twenty years. The experimental devices provided an opportunity to test new ways of caring for children who require supplemental oxygen in hospital settings. Bronchiolitis was selected as the diagnostic group to study because the only effective medical treatment for this viral infection is good oxygenation, rest, and nutritive support. This reduces the confounding variables and increases the likelihood of demonstrating a treatment difference if one exists.

The use of NSW Health policy, designed for an alternative purpose, which now provides a standardised weaning procedure for supplemental oxygen delivery, is innovative and our evaluation has found it to be best practice in paediatric respiratory medicine for the population under study.

**Innovation in Practice and Process**
A literature review found no evidence / consensus-based paediatric procedure for commencing and weaning supplemental oxygen in a systematic manner. The primary outcome (time to weaning oxygen) and secondary safety outcome (time to treatment failure) required defined procedures for oxygen commencement/weaning and treatment failure that could be applied to both the standard and experimental trial arms.

**Applicability to Other Settings**
The EBB procedure may be used with any nasal prong oxygen delivery system (standard, low-flow, high-flow) in the ED, ward, or ICU setting in any NSW Health facility. It may also be adapted to other track and trigger observation systems that are used in other states / territories. When started in ED it helps to identify patients who need critical care early, as evidenced by persistent red zone observations despite maximum therapy, thereby reducing the risk of transferring a deteriorating infant to a ward based setting.

The principles of the procedure may also be transferred to titrating ‘as required’ (prn) drugs for treatment effect e.g. 1-4/24prn salbutamol puffers prescribed for asthma – wean to 4/24 if observations are in the blue or white zone; continue 1/24 if observations are in the yellow zone; and note treatment failure if observations are in red zone and escalate care immediately.

**References**
1. Between the Flags is linked to NSW Health policy and is designed to help clinicians recognise and manage clinical deterioration.
2. Track and Trigger observation charts used to detect deterioration in paediatric patients in NSW since 2010.
3. Mild bronchiolitis does not require supplemental oxygen and severe/life-threatening bronchiolitis would require critical care supportive therapy.
Background:
Piperacillin/Tazobactam (P/T) is a commonly used broad-spectrum antibiotic. The worldwide increase in multi-resistant organism infections can be linked to the inappropriate use of such antibiotics. This problem can be curbed by effective antimicrobial stewardship (AMS) programs, including electronic drug usage surveillance systems such as Guidance-MS.

Aim:
We aim to analyse the appropriateness of P/T prescriptions in a tertiary referral hospital in Newcastle, and to determine the adequacy of the hospital’s current AMS program in relation to P/T use.

Methods:
Prescriptions of P/T to inpatients were identified retrospectively by the Hospital Pharmacy Department at John Hunter Hospital (JHH) for a one month period (June 2013). Indications and clinical data were obtained from patient records. Inpatients at JHH prescribed P/T (ICU excluded) during the one month period were eligible for inclusion. A total of 175 patient records were audited and identified patterns of inappropriate usage.

Results:
175 patients were prescribed P/T during the month of June 2013. The mean duration of P/T therapy was 7.2 days. 38% of prescriptions received Guidance approval. Overall, 49% of prescriptions were judged appropriate.

Conclusion:
P/T prescribing at JHH is frequently inappropriate, despite the best efforts of their antimicrobial stewardship program. The low rate of Guidance use was particularly concerning. The study made recommendations to improve the hospital’s AMS program.
Contact and Information

Inquiries regarding the Australian Council on Healthcare Standards (ACHS) Quality Improvement Awards, should be directed to:

The Australian Council on Healthcare Standards

5 Macarthur Street
Ultimo NSW 2007
Australia

📞 +61 2 9281 9955
✉️ +61 2 9211 9633
📧 achs@achs.org.au
🌐 www.achs.org.au