



# PATIENT SAFETY AND QUALITY IMPROVEMENT LEAD PROGRAMS

Project Summaries 2017-2018

The logo graphic for The ACCHS Improvement Academy is a large, stylized 'C' shape. The left side of the 'C' is dark blue and filled with a pattern of small white dots. The right side of the 'C' is a gradient from green to yellow. The background of the cover features abstract, overlapping shapes in various shades of blue and green.

The ACCHS  
**Improvement  
Academy**



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Patient Safety Lead Program and Quality Improvement Lead  
Program Project Summaries 2017-2018

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## ACHS Improvement Academy Faculty for Patient Safety and Quality Improvement Lead Training Programs

The Improvement Academy would like to acknowledge the contribution of the following Faculty members who contributed to the success of these programs and the resulting projects contained in this booklet :

### **Australian and NZ Expert Faculty**

Ms Bernie Harrison - Director ACHS Improvement Academy, NSW

Dr Cathy Balding - Managing Director of Qualityworks PL, VIC

Ms Helen Eccles - ACHS Consultant Assessor / Educator, NSW

Ms Helen Ganley - Principal Data Sanity, NSW

Dr Lynne Maher - Director of Innovation, Ko Awatea, Auckland

Dr Mark Burgess Project Office, ACHS, NSW

Mr Peter Hibbert - Program Manager, Australian Institute of Health Innovation,

Dr Tim Smyth - Practice Principal, Health Sector Law, NSW

### **International Experts via video and webinar**

Dr Brent James - Chief Quality Officer Intermountain Health Care Utah USA

Prof Maxine Power Director of Innovation and Improvement Science, Salford Royal NHS Foundation Trust and Managing Director of Haelo, UK

## FOREWORD



I am delighted to write this foreword for the second ACHS Improvement Academy Patient Safety Lead and Quality Improvement Lead Program Project Summaries booklet, for projects undertaken during 2017 and 2018.

With the publication of the inaugural edition of the booklet last year, a platform was created that allowed the many exciting projects achieved by graduates to be published and available to a broader audience.

The response from those considering undertaking a Lead Course when seeing the booklet was recognition that the weight of achievement from the two respective programs was certainly worth the level of investment required.

The scope of the different projects undertaken by the two Lead programs is an indication of the reach the Improvement Academy has had throughout the Australian healthcare industry, and indeed, for this year – beyond our shores.

Program participants run the gamut of clinicians and quality and safety managerial positions from large metropolitan hospitals to smaller rural and remote services and everything in between. This year the complexity of projects has been just as varied as with the first year, and the core principles of quality improvement science continue to underpin the courses.

It is important to remember that many people have contributed to the Academy's success since it was launched, and I wish to personally thank the Academy's Faculty, and its Director, Bernie Harrison, who have all contributed and shared their knowledge and expertise.

We live in an era of ever-expanding knowledge creation, and with it some responsibility to ensure new knowledge is put to good purpose.

Whether it is the sharing of lived experiences, problem-solving or determining a new way forward when the status quo has been around forever, the Improvement Academy's lead Training programs have a very definite goal. Their aim is to ensure participants are exposed to learnings that are grounded in a specific framework but are also inventive when making a world of difference to delivering patient quality and safety ideas.

At ACHS we are very proud of what has been achieved in a relatively short period of time with the Improvement Academy and trust that this booklet will impress readers with contemporary health education offerings that meet international best practice in the field of quality and safety.

Dr Christine Dennis  
**Chief Executive Officer, ACHS**  
 October 2018

## OUR TWO LEAD TRAINING PROGRAMS



The launch of the Improvement Academy in 2016 marked a significant development in the educational offerings provided to the health system both in Australia and internationally. The Academy used a curriculum framework which builds on the concept of 'dosing'. That is, providing just enough training in quality and safety relative to the role in the organisation.

Both Lead level programs, the Quality Improvement Lead (QIL) and Patient Safety Lead (PSL), are based on international best practice in quality and safety. They draw on the experience and expertise of Intermountain Healthcare USA, Ko Awatea NZ and Salford Royal Foundation Trust NHS England. They also draw on the work of the Institute for Healthcare Improvement, Virginia Mason Production Systems, the Agency for Healthcare Research and Quality USA and the Australian Institute for Health Innovation (AIHI).

The training programs are provided predominantly by an Australian-based faculty who are recognised internationally as experts in the field of quality and safety, combining both practical experience and publication in academic literature. Each program is run over 12 months. The advantage of an Australian faculty is that the course content (which as well as meeting international best practice) is customised for the unique Australian and Asia Pacific health context.

These two Lead Level programs have proved very popular since their launch. The IA has overseen three PSL and three QIL training program with nearly 185 attendees. This has resulted in more than 100 completed projects with the remainder moving to final completion in the next six months. These projects will certainly make a difference to patients and their families. They have included (but are not limited to), topics such as: reducing admissions on a general medical ward, reducing paperwork for day surgery nurses, improving standardisation of a hospital morbidity and mortality system, improving ICU discharge swab compliance, reducing catheter-acquired urinary tract infections for surgical patients, exploring paediatric inter-hospital transfer to identify risks, development of an online program for persistent pain management, improving healthcare accreditation survey processes, reviewing quality auditing, prevention of inadvertent

perioperative hypothermia, reducing in-hospital falls, raising accidental overdose awareness, supporting women who decline recommended maternity care, and reducing unplanned readmissions < 28 days for ATSI people.

Publication of this booklet has a twofold purpose. It showcases some of the demonstrated outcomes of the projects and encourages sharing and application of the projects more broadly across the health system. The projects chosen were selected due to the quality of the submission to the IA.

The ACHS acknowledges with thanks the contribution and co-operation of the participants, and their managers who provided support and sponsorship to join the program and the considerable expertise provided by an extensive external faculty of trainers.

If you would like more information about any of the Academy's programs, please go to:

[achs.org.au/improvement-academy/improvementacademy.achs.org.au](http://achs.org.au/improvement-academy/improvementacademy.achs.org.au)  
+61 2 9281 9955

Bernie Harrison Director ACHS Improvement Academy



### Lead level

The Lead group are employed in roles within organisation to lead change and improvement. They need a high skill level and expertise in patient safety and quality improvement; in particular they are expert in improvement science and collaborative improvement methods. They understand human factors and reliability theories and can begin to work with front line teams to prospectively design and redesign care to prevent harm. They sit on consumer councils within organisations to ensure changes meet the needs of patients and families. They are senior within the organisation working closely with the executive and board to drive continuous improvement.

### Practitioner level

This level is applicable to a wide range of staff with different roles. Most likely they will be middle managers with direct responsibility for patient care. This level can also include finance and other administrative services such as informatics. Their work should be informed by a clear understanding of the principles and practice of continuous improvement in healthcare. They should actively encourage and support the professional development of other members of their team. This level reflects a leadership role in quality improvement. This group should role model and champion change and innovation within their own local environment.

### Foundation level

All staff working in health care settings who should have a raised awareness of principles that underpin quality improvement to drive patient safety and higher levels of service delivery. In addition the foundation level should include patient and carer. It is recommended that staff new to the organisation receive an introduction to quality improvement at induction programs.

*Adapted from the Health Foundation - Inspiring Improvement: Building Capability to improve safety. Event Report, August 2014*

*“It has helped me look at things differently and formalising improvement science in day-to-day activities.”*

**Ajay Valayudhan, Freemantle HS WA**

*“I liked the diagnostics, there are all these thoughts going through my head on how to improve things with the key learnings. I like that you can show people how you’ve made your improvements.”*

**Dianne Conlon, Beaudesert Hospital, WA**

*“Learning about all the human factors involved in quality improvement science and why projects can fall over. As well as the ability to network with like-minded people and have my eyes opened to international best practice, not just my own health service or the state.”*

**Catherine Frame, Toowoomba Hospital, QLD**

*“The most important thing for me was learning about the diagnostic causes, which is something I can apply to my ideas. It is being able to show people the problem and share it with different groups, and this course has given me the opportunity to see that different approaches are possible.”*

**Ami Horne, Redcliffe Hospital, Brisbane**

*“Being able to apply a strategic diagnosis to a set problem, and having a process to work through it. I already have those skills, but now have a better framework to use for a whole service.”*

**Clare Thomas, Sunshine Coast**

*“The value of learning improvement methodology processes, how reliability science principles impact on safe patient outcomes and what happens when methodology isn’t applied. Also, how this can impact on changing behaviour and culture in the workplace?”*

**Catherine Manns, Darling Downs, QLD**

*“As an experienced Quality Lead, this course was a great opportunity to revisit and reinforce theory, and keep up-to-date with contemporary learnings, to consolidate my practice in embedding quality and safety initiatives. The course provides a robust framework and strengthens the rationale behind what you need to do, and why. My advice is to undertake a project currently planned as part of your role – the course was very helpful in achieving my project’s outstanding results.”*

**Catherine Ryan, Private Royal Brisbane Women’s Hospital**

*“I learnt an awful lot, my interest in patient safety and quality has always been there, but I have not worked in the area. This course has allowed me to link everything together and given me the space to practice. It has been absolutely invaluable and I would recommend it to anyone.”*

**Julie Wantling, POWH, Metro North**

*“I was most excited about the research already completed, the way the data was collected and presented was advanced leaving no doubt as to the results. Will be introducing these systems to my service.”*

**Tracy Johnston, Central Queensland Health Service**



# PATIENT SAFETY LEAD PROGRAM

## Project Summaries

### About the Patient Safety Lead Program

The Patient Safety Lead Training Program (PSL) has been designed for senior staff within healthcare organisations who lead patient safety activities including: root cause analysis, design of recommendations that lead to improvements in patient safety, open disclosure, and legal and governance responsibilities for patient safety.

This 12 month program provides practical skills and theories that can be translated back into the workplace.

Participants will have an immersion in the patient safety literature and contemporary approaches to organising for patient safety. This course will focus on the proactive design elements to reduce risk of harm from health care including: human factors engineering and reliable design principles and will draw on concepts from other industries which are recognised as having high reliability e.g. mining, nuclear power and aviation.

It will also provide insights and understanding from studies of patient safety and successful healthcare examples in building safe and reliable care.



*Patient Safety Lead graduation ceremony, held on 17 November 2017 in Sydney*



*Patient Safety Lead graduation ceremony, held on 23 April 2018 in Brisbane*

# COMMUNICATION IN THE AGE OF INNOVATION



**Catherine Beavis**  
Patient Safety Officer  
Retrieval Services Queensland

## Background

Retrieval Services Queensland (RSQ), Queensland Health, is a major component of aeromedical retrievals and disaster management. RSQ provides clinical coordination for the aeromedical retrieval and transfer of all patients from parts of northern New South Wales to the Torres Strait. Specialist medical and nursing coordinators in paediatric, neonatal and high-risk obstetrics support the clinical coordination of these patients by road in metropolitan areas of Queensland. RSQ is also responsible for the statewide clinical and operational leadership and governance structure of Queensland Health’s specialised and contracted retrieval services and aeromedical transport providers across the state, ensuring whole-of-system performance monitoring and subsequent policy and system enhancement and development.

## Problem/Aim

RSQ started the centralised aeromedical hub for Queensland. Despite communication being the critical feature of the organisation, the internal and external communication pathways were not formally developed. The main reasons for this were rapid expansion, few management staff responsible for many aspects of the service, and a developing safety and quality framework. Current literature reiterates the improvement of organisational culture in the delivery of safe, reliable patient care and improving safety outcomes. In addition, effective, reliable and safe communication is a foundation of patient safety. Repeatedly,

‘communication breakdown’ has been highlighted in root cause analysis (RCA). This project reviewed the culture of internal communication, in relation to patient safety, within a rapidly growing and evolving aeromedical hub. This was in conjunction with the introduction of an on-line clinical and logistics record system, ‘Brolga’, in October 2017.

## Measures

Data were collected through monthly staff-initiated audit requests (March – November 2017), a staff communication improvement survey (November 2017), and pre- and post-Brolga surveys (October and December 2017).

## Design

The project focused on audit notification and staff communication processes. High-order flow charts, cause-and-effect diagrams and two surveys were conducted.

The following interventions have been introduced:

- a monthly safety huddle including patient safety officers from RSQ and the service providers on teleconference for 30 minutes to raise cases for discussion and quickly gain information – this was a sub group formed from the Statewide Integrated Governance Meeting (STIG), where all service providers meet to discuss pertinent clinical governance matters.
- the RSQ Management Morning Huddle – every Monday, a dynamic, stand-up Huddle is conducted via videoconference with RSQ’s Townsville office, to

ensure all senior management are able to brief each other about their work, current operational issues and forward plans.

- a weekly staff forum. Developing and successfully implementing this forum has been the most critical stage leading up to the launch of Brolga. This forum has been used as the main source of information dissemination regarding Brolga. It has a scope of operational, educational, patient safety and ‘round table’, and has included topics such as wellness and emotional intelligence, giving staff more personal skills to utilise at RSQ and better understanding of the challenges it faces.

Other interventions to assist in this improvement project include:

- formal debriefing to respond to the effect of telehealth on RSQ staff highlighted in 2017 and first conducted on 31 October

- safety huddles during the day shift to improve situational awareness
- formation of the Christmas Party Committee.

### Results

RSQ staff notification of potential cases for audit remained steady over the project period. Results demonstrated no change in compliance, but this has recently improved with the introduction of an electronic records system. Interventions around RSQ internal communications have succeeded and a future benefit is the potential increase in notifications, particularly with the introduction of online medical records.

### Conclusion

This project’s aim to create a more cohesive, engaged workforce at all levels has succeeded. Six months of interventions have demonstrated an increase in staff satisfaction and

engagement and an ongoing stability in staff notification of cases for audit. At every organisational level, this initiative has moved RSQ from an authoritative to more affiliate leadership and team style, which is more inclusive and transparent and allows staff to present ideas, identify issues and provide solutions.

### Next steps

RSQ’s future plans include:

- further implementation of current quality management and improvement process to transition from incident management to outcomes-focused quality improvement
- maintaining and improving staff communication processes gained from outcomes of the project’s data
- moving towards a more innovative and research-driven organisation.



# REVIEW OF MEDICATION PROCESSES IN THE GENERAL MEDICAL WARD OF BEAUDESERT HOSPITAL WITH THE AIM OF REDUCING ADMINISTRATION ERRORS



## Dianne Conlon

Clinical Nurse Consultant Quality and Patient Safety  
Beaudesert Hospital, Metro South Health, Queensland

### Background

The Australian Commission on Safety and Quality in Health Care (the Commission) has published abundant resources about elements of medication safety to keep patients safe.

### Problem/Aim

Beaudesert Hospital is the rural hospital of the Logan Bayside Health Network. Reported medication errors were increasing and were higher than the statewide average in the winter of 2016.

### Measures

Administration tasks were reported as the highest category of issue with 41/85 = 48% of reported incidents from August 2017 to February 2018. The human factors elements of medication selection in the environment of a busy medication room were identified as the key elements for improvement by the project team to reduce medication errors.

### Design

In the first cycle of review, the team identified changes to the medication room environment as a solution to combat errors in drug selection. A 'zone of silence' was instigated, and nursing staff members preparing medications were requested to wear 'DO NOT DISTURB' vests to identify them to other team members to discourage disruptions. These were infrequently used and other strategies were brainstormed by the team.

Within the next cycle of review of the environment of the medication room, a move to electronic medical records was planned and workflow reviews took place for all frequent nursing tasks. This was the ideal opportunity to review draft electronic workflow processes against the recommendations of the Commission outlined in Electronic medication management systems: A guide to safe implementation (3rd edition). The team identified the key issue of access to computers within the medication room as a barrier. With only one computer it was not possible to match the current processes to the draft workflows of the electronic medical record. In addition overcrowding of the medication room environment was present again as a result of only one computer being available for use. Patient care was, as a result, delayed as only one nurse was able to prepare medications against the electronic record at any time.

Further team brainstorming occurred in the review of the draft electronic workflow processes to find solutions. Taking the medications to the lockable individual patient bedside cabinets was identified as a solution to altering the environment of the medication room. The medication boxes were selected on admission by the registered nurse against the order on the electronic medical record in the medication room, taken to the bedside and locked in the patient's bedside cabinet. The medications were near the patient, and the nurses had access to the electronic record where they were preparing medications at the

bedside and would not need to crowd the medication room at any time. Selection errors were detected as some medications were suitable to be scanned for reconciliation against the prescription prior to administration to ensure that they were accurate.



Barriers to the implementation of this strategy for process improvement

were identified as cost and patient movements.. The cost was associated with an increase in amount of medication boxes available in the medication room for dispensing to patient bedside cabinets; however, the same amount of medications would be consumed overall. The risk of incorrect medications available in the bedside cabinet especially when patients were discharged or moved to different allocated bed areas was also identified as a risk for implementation of the strategy

**Results**

Medication administration from the lockable bedside cabinets using the electronic medication chart was implemented in January 2018. Initial clinical incident reports show a reduction in medication administration errors for January– March to 11/38 = 29%.

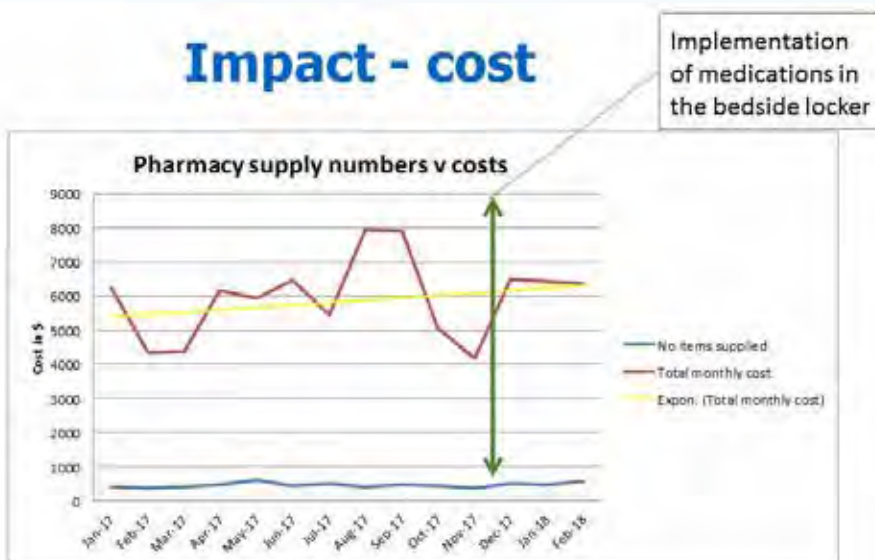
**Conclusion**

The implementation of electronic medication records, review of the environment of the medication room, and allocation of medications to the patient bedside cabinets are all strategies that have significantly reduced medication administration errors. These initiatives in the digital environment continue to be monitored, reviewed and modified to ensure that the processes are patient centred and efficient for nursing staff caring for patients. These initiatives are improving medication administration processes, thereby having a positive influence on reducing avoidable patient harm as an outcome of health care at Beaudesert Hospital.

**Next steps**

Optimisation of these strategies (especially on admission, allocated bed area movements and discharge) are in progress. Promotion of these improvements will be conducted at Medication MAYhem month (May in-service calendar) and through the network Medication Safety Committee.

**Impact - cost**



# REDUCING THE PAPERWORK: GIVING THE NURSES BACK TO THEIR PATIENTS



## Catherine Frame

Nursing Director Clinical Governance

Darling Downs Hospital and Health Service, Queensland

*Left to right: Nursing Director Clinical Governance – Catherine Frame and Nurse Unit Manager at the Day Surgery Unit – Craig Harrower*

## Background

Accurate documentation is necessary for communication and the delivery of safe, quality patient care. However, nurses have to complete increasing amounts of documentation to not only direct patient care but also demonstrate compliance at audit and aid in receiving quality incentive payments.

## Problem/Aim

Toowoomba Hospital day surgery unit (DSU) admits and discharges on average 20–25 patients per day plus emergency presentations. Documentation required for the admission process can be upwards of 10 different forms, all with multiple pages. As a consequence of increased documentation requirements, the DSU has been forced to increase its approved registered nurse (RN) hours by a minimum of two full-time equivalents per week for the last 3 years. This increase was required to complete the six necessary admissions by 7.30 am, critical for ‘start on time’ and maximising theatre utilisation in line with the hospital and health service key performance indicators. This equates to approximately 20 hours of admitting time required prior to midday to ensure theatre commences on time for both morning and afternoon lists. This project aimed to reduce the burden of paperwork in the DSU by removing duplication and in turn increase direct nurse–patient care by 20% within 6 months.

## Measures

Initial data collection was conducted through an observational audit over a shift to gain a ‘snapshot’ of the challenges. This revealed that 40–60 minutes were required to complete the documentation, with at least 10 forms completed and duplication of key patient information across six different forms.

A template was used to label each form with time taken for completion, type of procedure being undertaken and the RN years of experience in this clinical setting. The audit studied the suite of documents in the audit and the type of duplication across the forms, quantifying the documentation burden placed on staff.

## Design

The planning phase focused on:

- audit of existing processes
- focus groups
- formulation of a documentation admission model.

The main interventions were implemented using Plan-Do-Study-Act (PDSA) cycles:

- remove all inpatient-based documentation from the DSU admission model
- educate DSU nurses on the new model
- audit schedule against the new process, inclusive of documentation
- review clinical incident data in alignment with the audit schedule.

## Results

The main priorities are to ensure safe patient care and accurate clinical documentation while:

- reducing documentation duplication
- increasing nurse–patient care time
- ensuring documentation is appropriate to the service being delivered.

Five months after intervention completion, an observational audit revealed that the changes had resulted in a reduction of 44% in time to complete required documentation, equating to 6 hours of nursing documentation time being saved per 24 hours, and a continued reduction in reported clinical incidents.

## Conclusion

Reducing clinical documentation by eliminating duplication, ensuring that it is specific to the service being delivered, is an important and practical option to improve staff satisfaction and patient flow, and reduce the need to increase nurses in any clinical setting. The project was able to deliver on expected outcomes at no cost to the delivery of quality and safe patient care. This improvement project was not without its challenges because of age-old mindsets and significant changes to practice. However, the outcomes will ensure that these changes continue and spread throughout the health service. These outcomes have streamlined documentation and reduced workloads that detract from nurse–patient care time.

## Next steps

Phase 2 commenced in May 2018 with a review occurring at two of the seven rural surgical facilities. The review identified an existing streamlined documentation process at both rural facilities comparable to that implemented at the DSU in Toowoomba. However, patient flow issues were identified at one of the two sites because of ageing infrastructure, which will require further exploration. The remainder of the rural surgical sites will be reviewed over the coming months to determine which, if any, implementation from the Toowoomba Hospital DSU project is required. The entire project is due for completion by December 2018.

## Average times for completion of documentation on admission



# STANDARDISATION OF THE HOSPITAL MORTALITY AND MORBIDITY SYSTEM



## Anne-Marie (Ami) Horne

Patient Safety Officer  
Redcliffe Hospital, Metro North  
Hospital and Health Service

## Background

A morbidity and mortality (M&M) meeting is a regular conference held by an interdisciplinary team in a hospital, and involves peer review and discussion of issues that occurred during the care of a patient, including adverse events, a complication or death. The primary purpose of an M&M meeting is to allow learning from issues by modifying judgment and clinical decision-making to prevent the repetition of these events and to improve patient care. The M&M review also provides the opportunity to share good practices.

In 2016, the New South Wales Clinical Excellence Commission published a guideline for the conduct and report of M&M meetings, which outlined the key principles and features of an M&M meeting; however, this relates

to NSW health policies and legislation and there is no rationalisation about how clinicians should select cases and what specific format should be utilised. There are suggestions for case selection and which data should be reviewed, such as clinical incidents where harm was sustained.

Australia has developed a consensus list of hospital-acquired complications (HACs) that attract penalties as a forcing function to reduce the number of adverse events and improve the quality of care provided. Significant resources are deployed to ensure that the health system supports the continued good health of Australians, but despite this effort, an unacceptable portion of Australian hospital admissions is associated with an adverse event. One in every nine people admitted to a hospital in Australia develops a complication. (1) Reviewing all deaths, complications and adverse events ensures that HACs undergo scrutinisation and that quality improvement activities are developed, and lessons learnt and shared, across the facility, thus improving patient care and reducing the incidence of complications and the severity of adverse events.

## Problem/Aim

Redcliffe Hospital has 256 beds. The Emergency Department sees an average of more than 160 patients per day and 20% of patients seen are admitted.

There was a varied processes for M&M reviews at Redcliffe Hospital.



Although there was an M&M review process in place, there was a varied level of maturity and significant variation including membership, scheduling, data reviewed, selection of cases, lessons learnt and quality improvement plans.

All deaths were reviewed, according to the key performance indicator (KPI) set by the local health service, within 14 days after death. There was a Death Review Committee; its members reviewed all the deaths, however, the review of morbidity was variable across the system. The death review model at the time was clinician dependant, as the documentation had limited structure and was open to interpretation. The governing committee was reviewed, and it was determined that a Quality Assurance Committee was needed. The Patient Safety Committee (PSC) was deemed the most appropriate committee to take over this role.

This project aimed to ensure that:

- M&M and death review guidelines are developed and endorsed within three months,
- a toolkit is developed and endorsed within two months,
- commencing in January 2018, each clinical service will present on monthly rotation at the PSC (governing committee),
- 100% of the clinical services have a 'terms of reference' (TOR) within three months,
- 100% of the clinical areas have scheduled meetings planned for 2018 within four months,
- minutes from the M&M meetings are tabled at the PSC within six months.

### Measures

Ten clinical departments were identified to participate in the new M&M review project. Four of these had a process and regular meetings, either monthly or quarterly. Of the other six, two did not have an M&M review process and occasionally joined the other services to participate. In addition, two other departments were identified during the gap analysis.

The following issues were identified:

- Documentation was not standardised.
- Minutes were not collated, to a central forum
- There were no TOR.
- There was no standardised approach for case selection; cases were often selected according to clinician preference rather than specific criteria.
- There was a need for more transparency of shared learnings
- Death reviews were not always completed within the 14-day KPI.
- The death review form was not contemporary

### Design

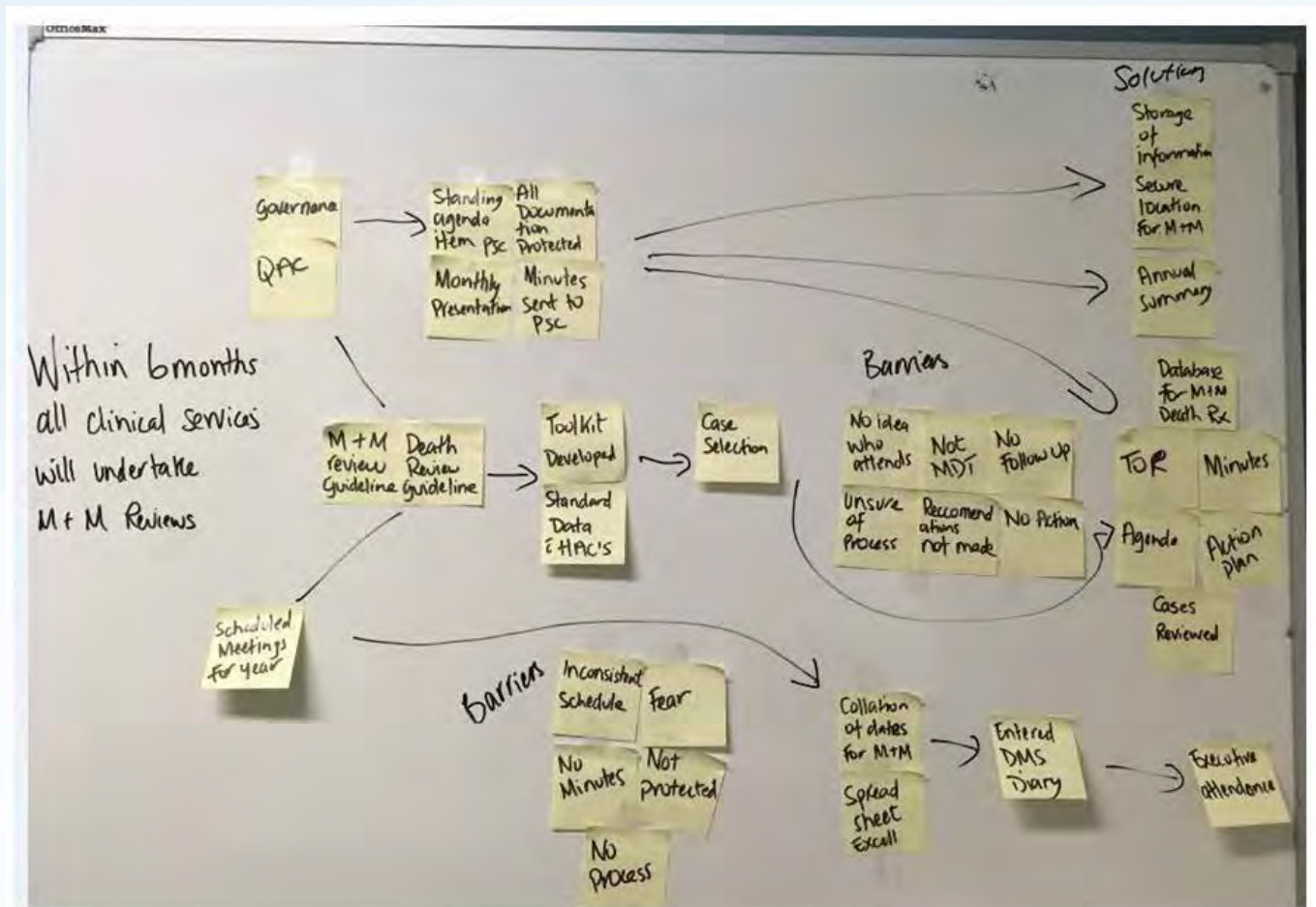
A quality improvement (QI) team was formed consisting of the patient safety officer, data analyst, director of safety and quality, mortality and morbidity clinical nurse, clinical director of surgery service line and director of medical service (DMS).

A literature review was undertaken to examine M&M review procedures. There was consensus on what information should be reviewed in the M&M review process but limited information regarding case selection.

Engagement commenced with each clinical department director or chairperson of the established M&M review processes. Meetings were held to identify the current processes, data currently reviewed and type of data which can be provided, and type of documentation utilised.

Discussion with the QI team, as well as compiling a cause-and-effect diagram and a driver diagram, assisted with development of an action plan. The plan consisted of the development of guidelines for M&M and death reviews, a toolkit, a dataset including HACs, and a schedule of meetings for each clinical department and presentations at the PSC.

After the guidelines were drafted, feedback was sought and changes made, and the guidelines have been endorsed and published. Review of the coded data for complications, with inclusion of the HACs, has provided criteria for case selection for inclusion in the M&M review meetings.



All of the M&M review reports are prepared for submission to a Quality Assurance Committee.

Communication occurred in person and follow-up either in person or via email; this was vital to ensure that all services were involved and were able to provide feedback and that assistance was offered with the transition to the new documentation.

Ongoing communication and attendance at the M&M review meetings ensures that the process is followed, that lessons are learnt and shared within the team, and that actions are documented and followed up at the next meeting. Every month, the chairs and clinical directors receive an automated list of complications, HACs and health round table (HRT)

benchmark reports. Complications are being recorded in the clinical incident management system, and often an interdepartmental review has occurred prior to a request for information from the executive team.

Plan-Do-Study-Act (PDSA) cycles were used to trial the interventions and assess compliance with undertaking the M&M review process. Review of

the baseline data in November 2017 indicated that four out of the 10 clinical departments had had an existing M&M review process in place for over five years. These four departments changed over to the standardised templates, which included TOR, agenda, minutes and case review. A PowerPoint presentation template was supplied but has not yet been utilised.

Meetings are scheduled for the year and invitations have been sent to members of the interdisciplinary team. The DMS has also attended these meetings for the past two months.

Five departments undertook some form of review but were not consistent with scheduling meetings, invitations outside of the medical profession, or minuting cases discussed or lessons learnt. Collaboration with the M&M review chairs has enabled dates to be scheduled, minutes to be compiled and utilisation of the data supplied to assist with case selection.

Monitoring is ongoing, involving a monthly review of the number of M&M meetings held per year, minutes sent to the PSC and numbers of adverse events.

## Results

This project has had the following outcomes:

- Guidelines have been developed and endorsed.

- The toolkit has been developed and is being utilised.
- Since January, three clinical departments have presented at the PSC.
- Work is ongoing towards all clinical services having a TOR—five out of 12 have a TOR.
- Ten out of the 12 clinical services have provided dates for meetings for 2018.
- For the past three months, four out of the 12 clinical services have sent minutes to the PSC.
- The DMS has been invited to and attended M&M meetings, which has been received well by the staff.

The following lessons and limitations are noted:

- Clinician confidence is increasing to enable broader discussions within the interdisciplinary team.
- The M&M review process is only one component of the patient safety officer's role, and workload will determine how much time can be spent supporting the clinical departments. The M&M review process will mature and become embedded in clinical practice, resulting in less support required.
- The new death review process will commence in May and assist with case selection and discussion for the M&M review process.

## Conclusion

The new standardised process for M&M review has commenced; the new process assists with case selection. The PSC is vital to ensure that the M&M review process is in place in all departments and to provide ongoing review. The process needs further embedding in practice.

## Next steps

In the future, it is proposed to continue to:

- encourage interdisciplinary team reviews,
- work towards all clinical services having a TOR and sending the minutes to the PSC,
- implement the revised death review documentation and process,
- purchase a database.

## Acknowledgements

The author thanks the Director of Safety and Quality, DMS, clinical director of surgical service line, mortality nurse, data analyst and M&M chairs.

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1. Duckett 2018

# MULTI-RESISTANT ORGANISM (MRO) DISCHARGE SWAB COMPLIANCE IMPROVEMENT PROJECT



**Asako Ito**  
Staff Specialist  
St George Hospital,  
Kogarah, Sydney

## Background

The current intensive care unit (ICU) at St George Hospital, Kogarah, Sydney, has 15 beds (12 multi-bedded, three isolation rooms). In addition, the high dependency unit (HDU) has 12 beds (eight multi-bedded, four isolation rooms) and the cardiothoracic unit (CICU) has five beds (multi-bedded), making a total of 32 beds. St George Hospital ICU is moving into a new ICU on 21 November 2017. The new ICU will be a maximum 52 single-bedded ICU with a mixture of ICU/HDU patients and a pod dedicated to CICU.

The planned move to the new ICU provided a good research opportunity to compare multi-resistant organism (MRO) acquisition rate in the ICU before and after a change from a multi-bedded to a single-bedded ICU. Therefore, a prospective comparative study of MRO acquisition rate in the ICU over 2 years (M.A.R.I.) was designed (current ICU, October 2016 – September 2017, compared with new ICU, February 2018 – January 2019). As part of the study data collection, it was noticed that discharge swab compliance was poor. This project was developed as a part of M.A.R.I. to address this problem.

## Problem/Aim

MRO acquisition in the ICU is an important problem. Recently at St George Hospital ICU, there was a major outbreak of vancomycin-resistant enterococci (VRE). Such an outbreak has significant impact on ICU bed

allocation because of the limited number of isolation rooms available to cohort MRO-positive patients. Further, the limited number of isolation rooms on the wards also affects discharge destination.

The MRO screening policy at St George Hospital has recently been updated to comply with the NSW Health policy directive. At St George ICU, the true incidence of ICU-acquired MRO is unknown, as patients have not been swabbed on discharge until recently. To collect data on MRO acquisition rates in the ICU, discharge swabs need to be performed. Improving MRO discharge swab compliance will help the process of obtaining data on MRO acquisition in the ICU. This will help improve patient care by identifying MRO species causing infection in individual patients and preventing the spread of MROs. A combination of early detection, isolation, appropriate treatment and prevention of cross-contamination can all contribute to preventing the spread of MROs.

## Measures

At the time of ICU admission, usually at least two doctors and two nurses take handover from the relevant team. Working as a team, ICU staff need to assess, diagnose and treat the patient simultaneously. Once the patient is stabilised, doctors enter the patient and chart medications on the clinical information system (CIS) and order routine testing (bloods, thoracic radiography) and further imaging according to needs.

In contrast, discharging patients from the ICU is usually completed by one nurse and one junior ICU doctor. Discharge is often completed under time pressure, as there is often an urgent need to transfer more critically ill patients to the ICU. In addition, the nurse performing the discharge usually takes care of the next patient. Nurses are responsible for taking MRO swabs (admission and discharge) and completing microbiology request forms among other tasks.

Patients admitted to the ICU for more than 48 hours and who survived to ICU discharge were recruited. Methicillin-resistant Staphylococcus aureus (MRSA)/VRE swab compliance rate was calculated on admission and discharge. Discharge swab compliance rate was persistently lower than admission swab compliance rate. The cause of the low MRO discharge swab compliance is complex and multi-factorial. Some of the barriers to compliance are the healthcare provider, system, patient and cost.

## Design

The following interventions were introduced:

- CIS alert (started in October 2016). When a person logged into the CIS, the reminder 'Don't forget MRO swabs on discharge' came up on the screen each time. This worked best among other interventions. Unfortunately, this was lost as an alert trigger when a new CIS was introduced in June 2017

## MRO Screening Swabs in Intensive Care Unit

MRO = Multi-Resistant Organisms



### What are Multi-Resistant Organisms?

MRO are resistant bacteria that are unable to be killed by many of the antibiotics commonly used. Some examples of bacteria are Methicillin Resistant Staphylococcus Aureus (MRSA) and Vancomycin Resistant Enterococcus (VRE). If we find MRO, we can treat with stronger antibiotics if needed (if causing infection). We will isolate or group you with other patients with same bacteria.

### Why are screening swabs important for you?

The goals of MRO screening are to prevent MRO causing infection in an individual patient and to prevent spread of MRO. This is important to improve patient care, as well as costs to the health care system.

A combination of early detection, isolation, appropriate treatment and prevention of cross contamination can all contribute to prevent spread of MRO. Screening is an important part of infection control, and is Intensive Care Unit policy. We appreciate your understanding and cooperation, and are happy to answer any questions.

<p><b>1</b></p> <p><b>WHO</b></p> <p>All patients admitted to Intensive Care Unit</p>	<p><b>2</b></p> <p><b>WHEN</b></p> <p>On admission, weekly thereafter and on discharge</p>	<p><b>3</b></p> <p><b>2 SWABS</b></p> <p>1. Both nostrils 2. Rectum (bottom)</p>
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Reviewed by The St George Hospital Consumer Advisory Group

- tick box in nursing discharge summary (started in October 2016). This provides a reminder in the form of a checklist. Interestingly, this reminder had minimal impact on swab compliance. This may be because nurses are able to discharge a patient without ticking a box. Additionally, this tick box can be hidden in the large amount of tick box information the nurses are required to address at the time of patient discharge
- reminder email to nurses/nursing staff meeting (intermittent basis). There are over 200 shift-working nursing staff at St George ICU. Reminder emails are sent to the nursing staff's work email

accounts. It is impossible to know how many nurses access their work email accounts, and with what frequency. Nursing staff meetings usually take place in weekday daytime hours. As the ICU is a 24-hour service with shift work to cover this, many nurses are not able to attend these meetings

- patient information sheet (started in mid-September 2017). Patient refusal was raised at a nursing staff meeting. To minimise patient refusal, a patient information sheet was developed to improve patients' understanding of the importance of MRO swabs. Even at discharge, many patients may not be fully awake, may have an

inability to concentrate or may not have enough time to understand. Some patients may feel that the swabs are too invasive. This intervention was introduced in September, and will need further ongoing monitoring to ascertain effectiveness.

### Results

Data were collected on 525 patients over a 13-month period (October 2016 – October 2017). The discharge compliance rate has fluctuated but is still low despite interventions. MRO discharge swab compliance is critical to obtain accurate data on MRO acquisition rate in the ICU.

	Oct '16	Nov	Dec	Jan '17	Feb	March	April	May	June
Total number of pts	83	76	79	66	73	78	61	72	79
still in the unit	0	0	0	0	0	0	0	0	0
> 48hrs stay, lived	44	40	35	30	33	46	37	39	49
Admit MRSA	43 (97.7%)	40 (100%)	30 (85.7%)	28 (93.3%)	33 (100%)	43(93.5%)	34(91.9%)	37(94.9%)	48 (98%)
Admit VRE	41 (93%)	36 (90%)	28 (80%)	27 (90%)	33 (100%)	38 (82.6%)	33(89.2%)	36(92.3%)	47 (95.9%)
D/c MRSA	22(50%)	13 (32.5%)	3 (8.6%)	7 (23.3%)	9 (27.3%)	13(28.3%)	17(45.9%)	16(42.1%)	16 (32.3%)
D/c VRE	12 (27.9%)	9 (22.5%)	1 (2.9%)	5 (16.7%)	6 (18.2%)	12(26.1%)	15(40.5%)	10(26.3%)	16 (32.3%)

	July	Aug	Sep	Oct	Feb '18	March	April	May	June
Total number of pts	75	88	78	86	188	230	218	245	223
still in the unit	0	0	0	0	0	0	0	3	3
> 48hrs stay, lived	43	54	33	45	106	101	82	90	80
Admit MRSA	40(93%)	53 (98.1%)	31 (93.9%)	38 (84.4%)	99 (91.7%)	81 (80.2%)	70 (85.4%)	83 (92.2%)	70 (87.5%)
Admit VRE	38 (88.4%)	46 (85.2%)	31 (93.9%)	38 (84.4%)	93 (86.1%)	80 (79.2%)	65 (79.3%)	82 (91.1%)	69 (86.2%)
D/c MRSA	8(18.6%)	13 (24.1%)	6 (18.2%)	5 (11.1%)	35 (32.4%)	41 (40.6%)	27 (32.9%)	34 (37.8%)	38 (47.5%)
D/c VRE	8(18.6%)	11 (20.4%)	6 (18.2%)	4 (8.9%)	33 (30.6%)	39 (38.6%)	27 (32.9%)	33 (36.7%)	35 (43.8%)

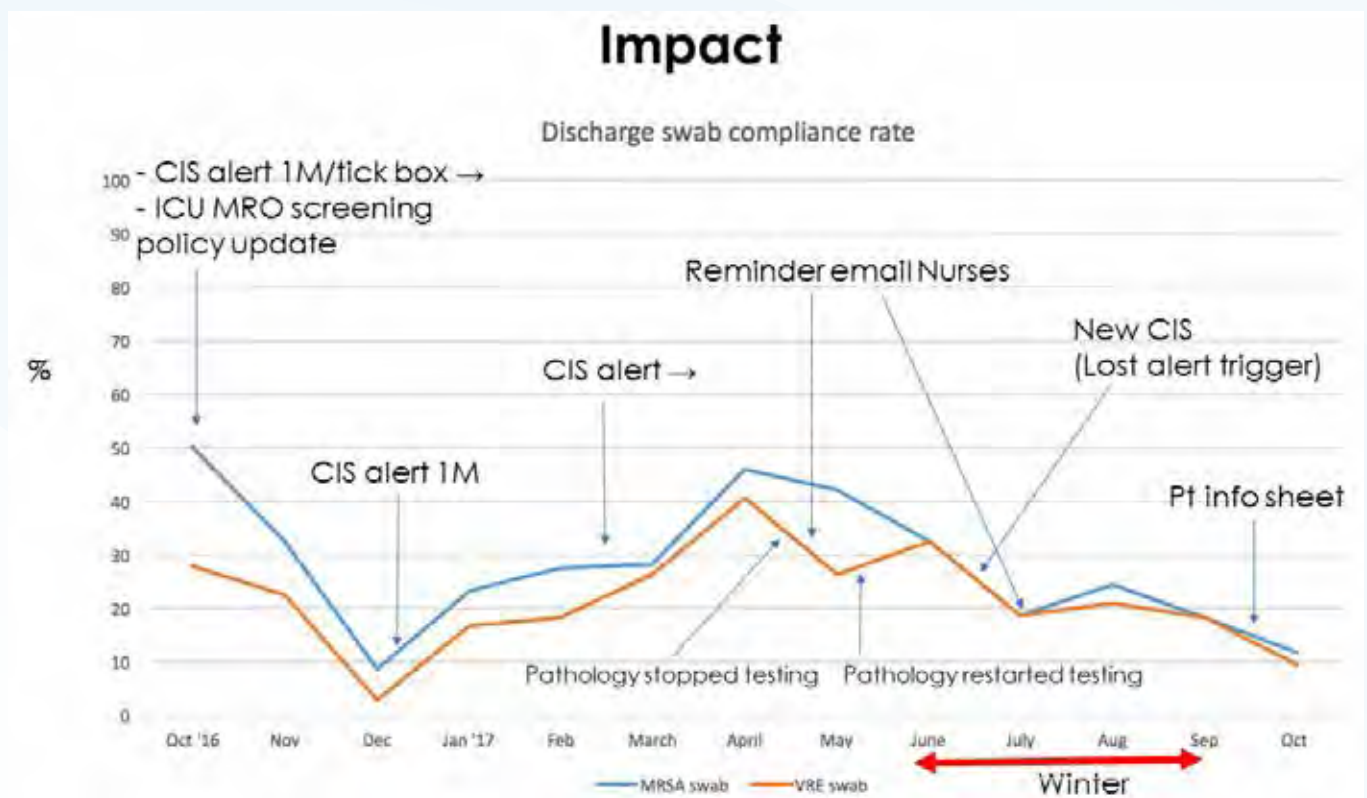
### Conclusion

Increasing MRO discharge swab compliance has been challenging. It will be important to share the St George Hospital ICU experience with other ICUs in and out of the health area in a collaborative process. This project has the potential to improve patient care and reduce cost, so it is worthwhile continuing efforts to increase compliance.

### Next steps

St George ICU plans to move its physical location to a new building in November 2017. After this move is complete, there will be an opportunity to revisit interventions to increase MRO discharge swab compliance. The CIS alert was an effective intervention, and ideally this can be configured in the new ICU. This could take the form of a simple alert or a more complex

alert that prevents a discharge summary being printed. The latter would likely be more effective to increase compliance but may hinder workflow. Another plan is to examine the problem from the nurse and patient perspectives by qualitatively examining the barriers to compliance by surveying or interviewing nursing staff and patients.



# REDUCING CATHETER-ACQUIRED URINARY TRACT INFECTIONS IN SURGICAL PATIENTS



## Dianne Jolley

Quality and Safety Manager  
Nepean Hospital, Nepean  
Blue Mountains Local Health  
District, NSW

### Background

Australia is falling behind many other countries when it comes to urinary tract infections (UTIs) in hospitals. A total of 1.7% or 95,000 patients acquire a UTI annually in hospital. These patients stay about 4 days longer in hospital, which equates to 280,000 public hospital beds each day. (1)

The Nepean Hospital Surgical Department is part of the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP). The NSQIP is a data-driven, risk-adjusted, outcomes-based programme to measure and improve the quality of surgical care.

Data have been collected from the Nepean Surgical Department for the past 18 months and submitted to the NSQIP for evaluation of a range of complications including, but not restricted to, morbidity and mortality, length of stay, venous thrombosis/embolism, surgical site infections, UTIs and readmission rates.

### Problem/Aim

From the abovementioned data collection, it was identified that the number of patients acquiring UTIs following surgery was above the benchmark and that the majority of these were due to catheterisation during and after surgery. The division of surgery embarked on the project to reduce the number of catheter-acquired UTIs.

### Design

This improvement plan involved a colorectal surgeon, the quality and safety manager, the newly appointed clinical nurse consultant (CNC) urology and the NSQIP data manager. A working group was

formed incorporating key personnel from surgical specialties, exclusive of orthopaedics, and an executive sponsor was found.

The working group identified a number of issues that it considered contributed to the catheter-acquired UTIs, and to test these theories, a number of focus groups were held with frontline staff for their impressions. Workflow for patients attending theatre for minor procedures was reviewed, and it was identified that indwelling catheters were being inserted with no evidence of the benefits and usually by the most junior medical staff. In addition, the NSW Ministry of Health had recently released a policy guideline in 2016 outlining best practice, and a procedure for the local health district (LHD) was developed for the insertion and management of indwelling catheters. It was recognised that there were a number of areas to target from the information gathered from the focus groups and from the literature reviewed.

The group acknowledged that, in addition to an LHD procedure for catheterisation of adult patients in the acute setting, the following interventions were required:

- reduce the number of unnecessary catheterisations
- run a 'get it off the floor' campaign
- review the equipment available
- review the resources available for patients
- improve the education of staff.

The 'get it off the floor' campaign was run as a poster competition during Urology Week to identify how to improve compliance with hanging catheter bags from hangers rather than placing them on the floor. Education workshops were run by the CNC



urology on aseptic technique and catheterisation, and the colorectal surgeon worked with the surgeons to reduce the number of unnecessary catheterisations in theatre.

### Results

For October 2016 – October 2017, the number of patients with identified catheter-acquired UTI at Nepean Hospital in the patient cohort for this project reduced from 2.91% to 1.71% of average risk as described by ACS

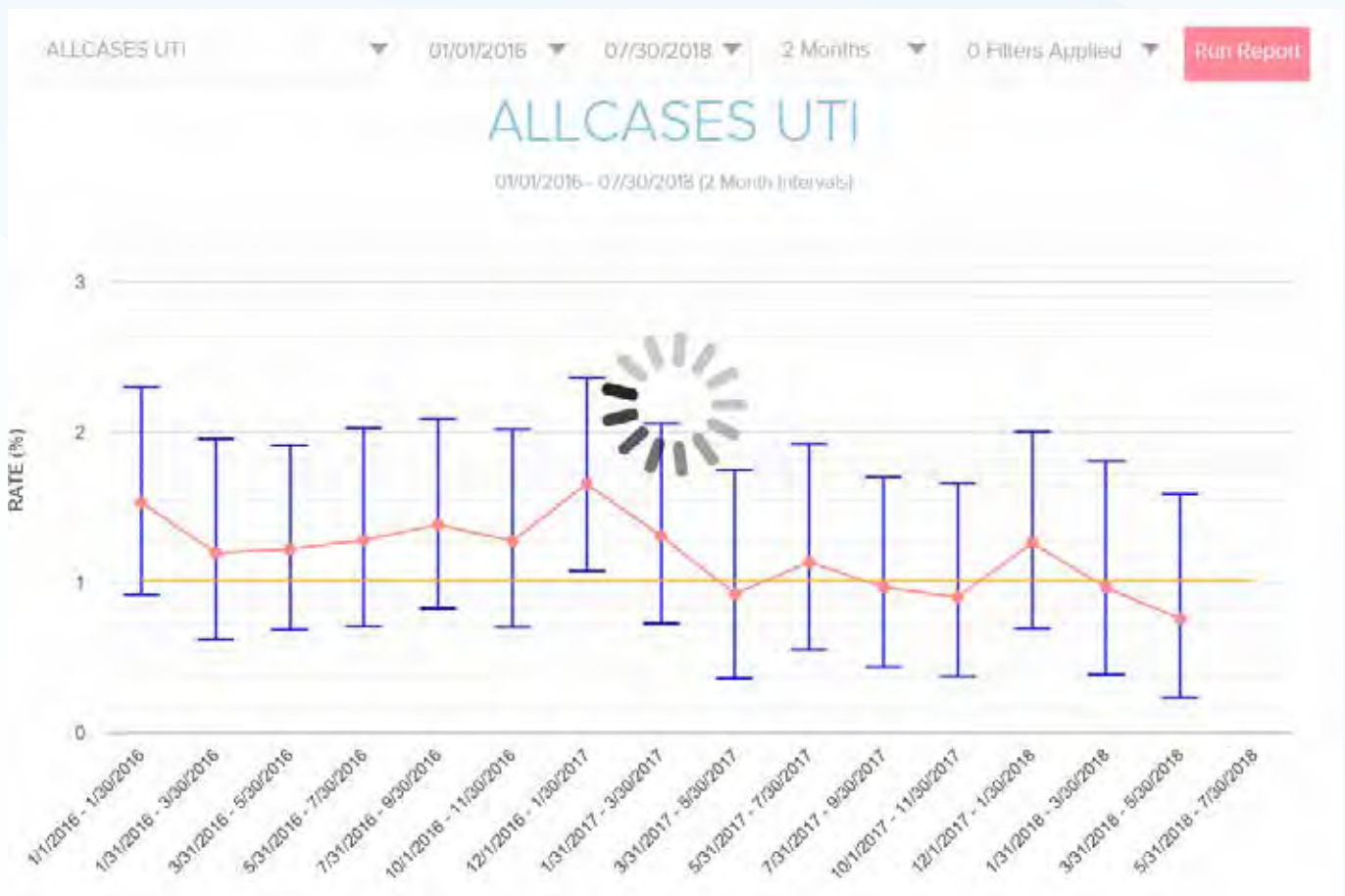
NSQIP data. Below is the NSQIP report, which shows a steady reduction in UTI from March 2017, when the programme began, to July 2018.

### Conclusion

All the initiatives were introduced as a bundle and it is difficult to identify any one practice change that has affected the outcome, but the most significant practice change appears to be the reduction of unnecessary catheterisations in the operating theatres by the surgeons.

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# EXPLORING PAEDIATRIC INTER-HOSPITAL TRANSFERS ACROSS THE HEALTH SERVICE TO IDENTIFY AND RAISE AWARENESS OF THE CLINICAL RISKS



or while being transferred. There have been a number of clinical incidences and reviews in morbidity and mortality meetings, as well as anecdotal evidence, raising concerns for the safety of patients involved in IHT.

## Problem/Aim

The aim of this project was to identify the issues/risks that have led to clinical incidents of paediatric patients undergoing IHT within the health service. This information is to be presented to the Transfer of Care Committee and Patient Safety and Quality Council with the intention of:

- suggesting changes to the existing outcome measures so that they more accurately reflect patient outcomes in relation to quality and safety
- proposing interventions that lead to improvement in the safety of IHT.

## Measures

Mapping the transfer journey was complex because of fragmentation of documentation and the use of multiple systems. Despite both digital and paper processes in place, data critical to the clinical process were not easily accessed. Specifically, data relating to decision-making, risk stratification and skill of staff involved in the transfer process were difficult to obtain even on review of the clinical notes.

## Dr Clare Thomas

Paediatrician

Sunshine Coast Hospital and Health Service, Queensland

## Background

Patients requiring a higher level of paediatric care are admitted to a paediatric ward at Sunshine Coast University Hospital (SCUH) and require an inter-hospital transfer (IHT) if they are in one of the four surrounding smaller peripheral emergency departments. On average, two to three patient transfers occur per day, with one transfer per week of a high-acuity patient. High-acuity patients, who do not meet the threshold for specialised medical retrieval, often have a high risk of deterioration awaiting transfer

## Design

This complexity meant that a number of strategies were implemented to determine the actual risks:

- review of 15 clinical incidents to assist in identifying a number of key issues and themes for consideration
- audit of current process
- completion of iPassport document
- completion of iTransfer document (results pending)
- working with inter-professional focus groups consisting of medical, nursing, junior and senior staff
- process mapping to map the differences between work as

imagined (WAI) and work as done (WAD)

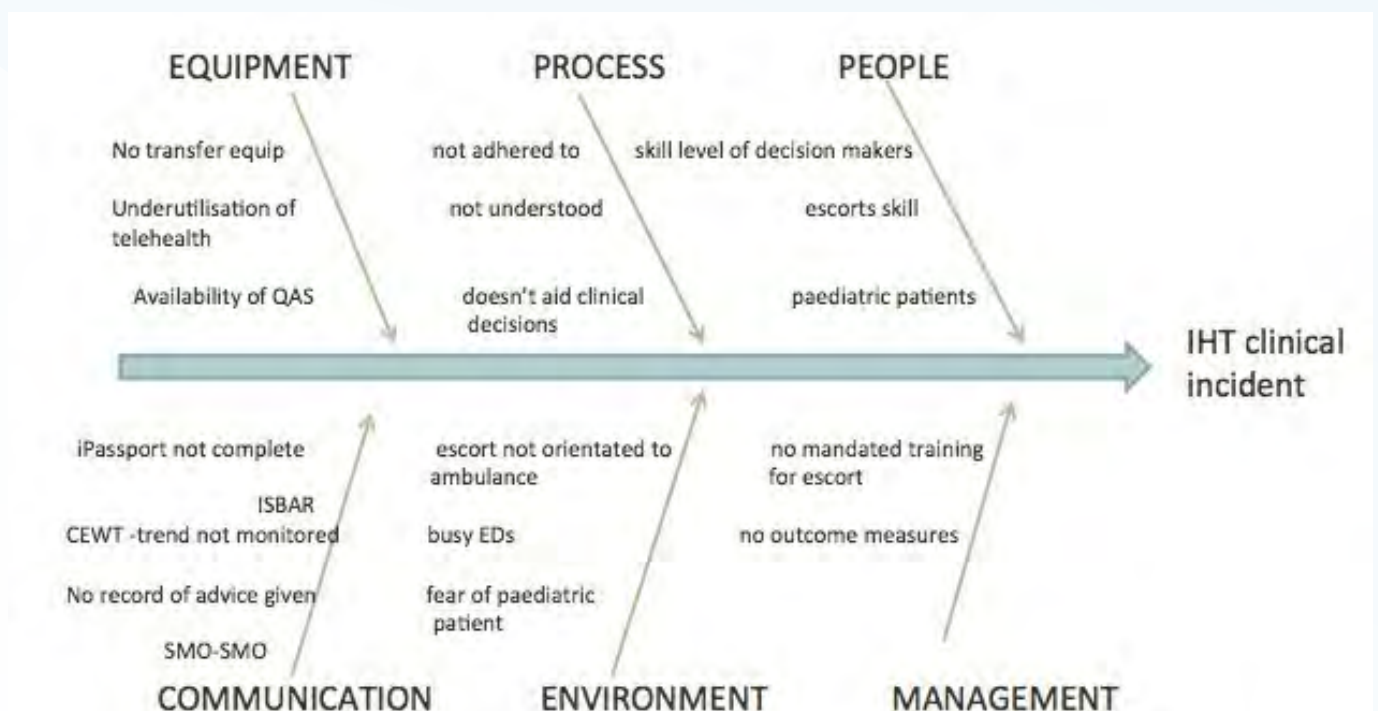
- cause-and-effect diagram to identify causes of problematic IHT
- multi-voting to allow clinical staff to vote on what they think were the most problematic issues
- consumer engagement by patient and family surveys (results pending)
- survey of staff involved in escorts providing qualitative and quantitative data.

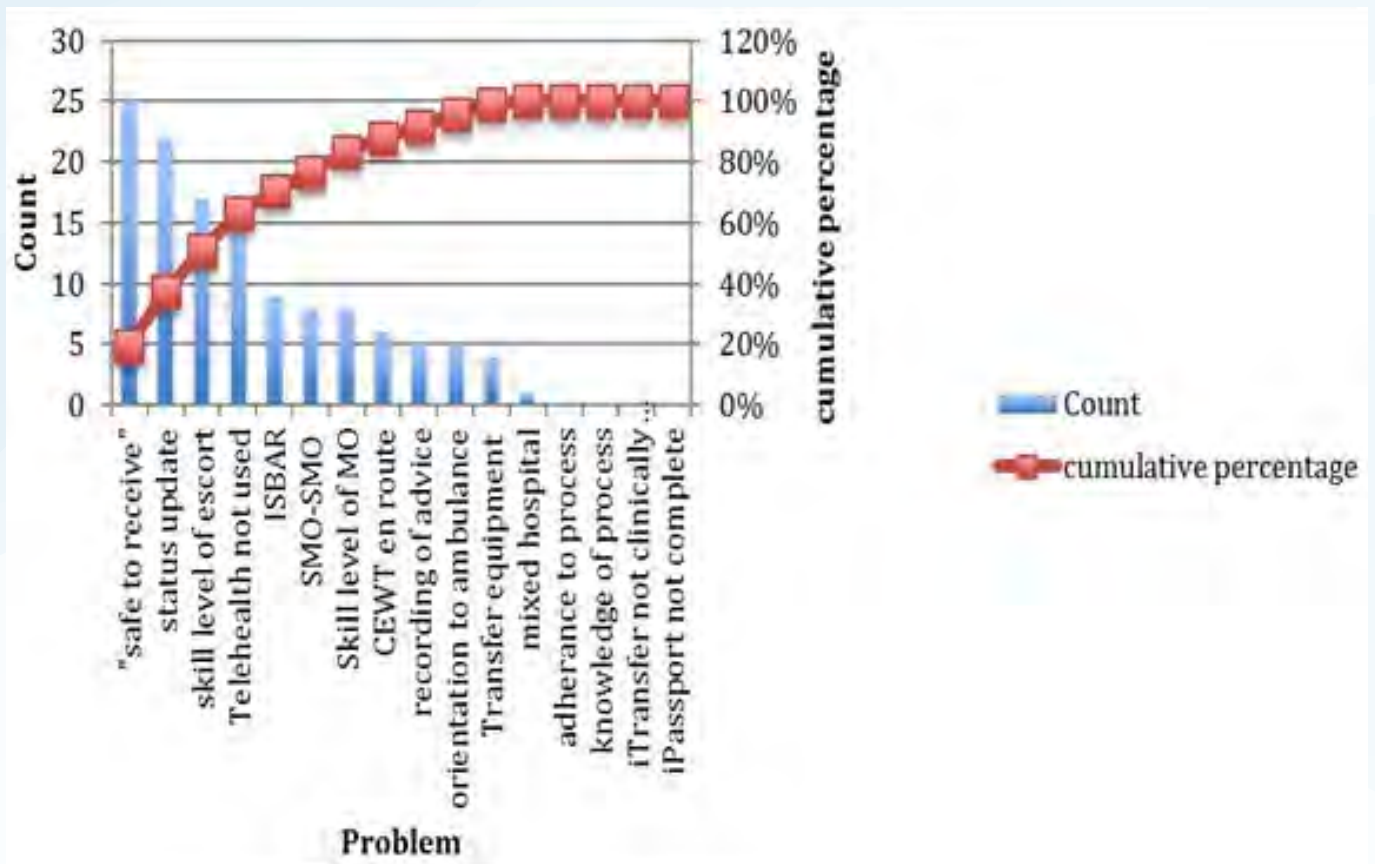
identified with a review of clinical incidents. Audits using current outcome measures showed less than 50% of documentation was being completed.

Process mapping revealed a lack of consistency in knowledge of how the current IHT procedure works. Staff then identified issues that they felt contributed to the problems in IHT and this was illustrated in a cause-and-effect diagram. Multi-voting results were analysed and displayed in a Pareto chart. The top four problems were 'safe to receive', 'status update', 'skill level of escort', and 'telehealth not used'.

## Results

Themes such as issues with communication, delays and unrecognised deterioration were





'Skill level of escort' was further explored using survey monkey. Of concern, 100% of nurses who responded did not have training in how to conduct a paediatric IHT. The qualitative data revealed a lack of defined criteria for nurse escorts and that using an escort denudes the referring hospital of key staff.

### Conclusion

The data collected are invaluable to inform the interventions required. Agreed suggestions will undergo Plan-Do-Study-Act (PDSA) cycles to ensure

that the right solutions are adopted. Proposed changes include comparison of the use of telephone and telehealth consultations for IHT, with the trial running over 6 months. Staff will be surveyed, and outcomes and recommendations will be presented to the Transfer of Care Committee.

Following the proposed interventions there will be a repeat of the measurement process with newly developed measurement outcomes and comparison of clinical incidents pre- and post-intervention. This will undergo multiple PDSA cycles.

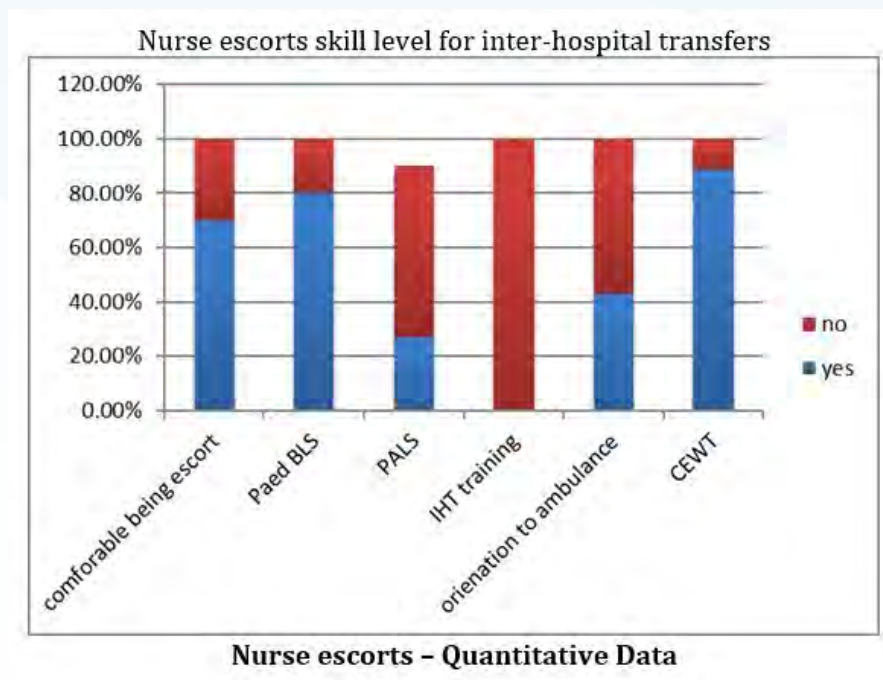
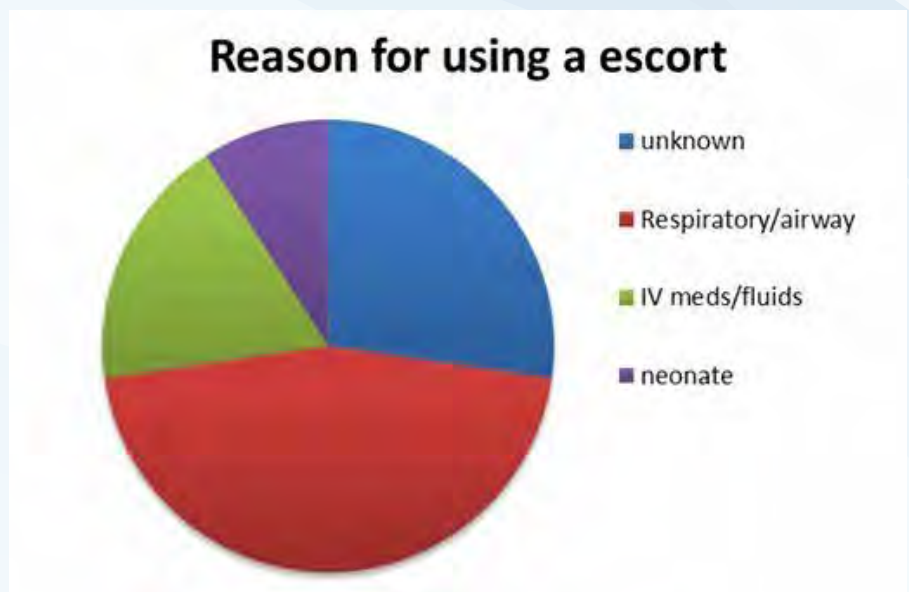
Through actively participating in the project, staff members are informed of the problems and are using this knowledge to better mitigate the risks for the paediatric patient undergoing IHT.

### Next steps

The executive director of Innovation, Quality, Research and Education has requested a formal risk analysis and has assigned two project officers to work with the Paediatric IHT Working Group.

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*“Coming from a small hospital the course has been great for me to meet other people. Probably the biggest part has been the diagnostics, whereas in the past I learnt to go on just a gut feeling. It has been an important step for me to be able to flesh it out. It has been really good.”*

**Johanne Davis, Peninsula Private Hospital**

*“The networking and regular contact with like-minded people has been invaluable. The QIL program has definitely enhanced my own knowledge of quality improvement and made me think outside the box. How we engage with our patients, families and greater communities from the very first contact, can be critical to a lifetime of expectations.”*

**Galina Ramensky-Manoilof, Redcliff Hospital**

*“Using the science of quality improvement gave staff a chance that this might work. Having to manage a work-based project has been critical to the success of the course for me, otherwise it likely wouldn’t have happened. I also took away a focus on what you can achieve in terms of improvements, not what you can’t do.” (Erin)*

*“The course has allowed me to consolidate learnings from other courses in a more practical and systematic way. It has been particularly useful in demonstrating the importance of data pre and post change and how winning the hearts and minds of staff increases the success and sustainability of changes implemented.” (Stephen)*

**Erin Finn, Stephen Caddick, Sandy Lewis, West Moreton**

*“I am really glad to have done the QIL course, to have a new approach, to make new friends and the opportunity to do quality improvement in a systemised way.”*

**Helen Yu Pik Ling, Hong Kong Baptist Hospital**

*“To make myself do the diagnostics, and actually follow the quality improvement process was great. Timing was key, having the patience to wait for engagement of the correct stakeholders who have competing priorities. With the right data, it can really drive motivation within the leadership team. I am glad we pursued it, and owned it. Now they are really keen to own it.”*

**Sharon Anne McAuley, Lady Cilento Children’s Hospital**

*The tools and diagnostic processes were invaluable. It has been stronger than a lightbulb moment for me. Previous education (in quality improvement science) has usually been very solution/implementation focused and this course is very much about understanding the problem first, so you get the right solutions and they gave us the tools to do it.”*

**Katie Robinson, Children’s Health Queensland Hospital and Health Service**

# QUALITY IMPROVEMENT LEAD PROGRAM

## Project Summaries

### About the Quality Improvement Lead Program

The Quality Improvement Lead Training Program (QIL) has been designed for senior staff within healthcare organisations who lead quality improvement activities including: patient-based care and co-design; improvements in patient safety, outcomes, efficiency and access to services; and those who need to design new models of care particularly for chronic and complex disease management across continuums of care.

Participants will receive an immersion in quality improvement science and theories.

They will gain skills in leading and sustaining change processes, measurement for quality improvement using statistical process control charts and engaging with consumers in healthcare improvement. This course will focus on clinical practice improvement and its implementation in healthcare learning from successful international partners including, but not limited to: Intermountain Healthcare USA and Salford Royal Foundation Trust UK NHS.



*Quality Improvement Lead graduation ceremony, held on 1 December 2017 in Sydney*



*Quality Improvement Lead graduation ceremony, held on 5 May 2018 in Brisbane*

## IMPACT ON SERVICE ACCESS OF AN ONLINE PROGRAM FOR PERSISTENT PAIN MANAGEMENT



### Denise Beaudequin

Principal Project Officer

### Angela Hodge-Polak

Senior Occupational Therapist, Tania Morris | Director  
Sunshine Coast Persistent Pain Management Service, Nambour General  
Hospital, Nambour, Queensland

*Back row (standing), L to R: Dr Paul Cadzow, Consultant Psychiatrist; Carl Stubbs, Senior Physiotherapist; Kerry Bartley, Clinical Nurse; Dr Navid Amirabadi, Pain Medicine Senior Registrar; Dr Elizabeth Grosso, Rehabilitation Physician; Dr Denise Beaudequin, Principal Project Officer; Dr Raveendran Harish, Pain Medicine Specialist*

*Front row (seated), L to R: Kimberley Anderson, Administration Officer; Leigh Howes, Administration Officer; Dr Tania Morris, Service Director, Pain Medicine Specialist; Angela Hodge-Polak, Senior Occupational Therapist.*

### Background

Persistent pain is a common and costly health condition. (1,2) Long wait times for appointments with specialist persistent pain management services are commonplace in Australia (3) and are correlated with deterioration in patients' health-related quality of life and psychological wellbeing. (4)

Chronic pain is estimated to affect 20% of the Australian population, with associated costs exceeding \$34 billion. (2) The median wait time from referral to first appointment is estimated to be 150 days for a public pain management service compared with 38.5 days for a privately funded service. (3) Evidence indicates that a multidisciplinary approach providing education, self-management, pain coping skills and functional improvement is an effective mode of therapy for many chronic pain patients. (5-8) Early intervention and use of evidence-based treatment could halve the economic cost of chronic pain. (9)

### Aim

This project aimed to improve access to care for patients waiting for a first appointment with a major regional pain service by offering a multidisciplinary model of care with the use of an online program, 'Reboot Online'. Specific aims were to reduce mean wait time for a first appointment by 30%, and to reduce waitlist numbers by 25%, by June 2018.



**Measures**

Process measures for the intervention included number of waitlisted patients, number suitable for Reboot, and the numbers registering for and completing the program. Outcome measures examined were pre- and post-implementation waitlist numbers, length of wait in days for a first appointment and number of patients having an initial service

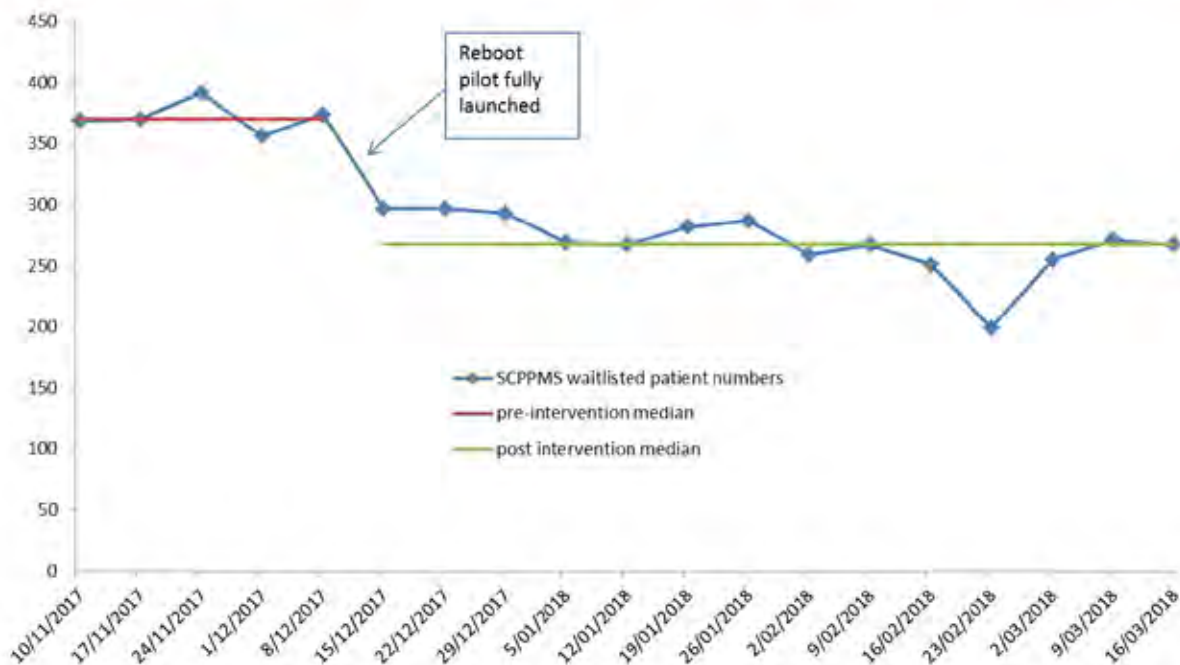
event per month. Clinical outcomes were assessed using the Kessler Psychological Distress Scale, Patient Health Questionnaire-9, Brief Pain Inventory, Pain Disability Index, Pain Self Efficacy Questionnaire and Tampa Scale for Kinesiophobia.

**Design**

Waitlisted patients were offered a comprehensive telephone assessment

by an advanced practice clinician. In the course of the consultation, the patient was offered complimentary access to a web-based pain education and self-management program, 'Reboot Online'. (10) During this program, participants progress through a series of eight lessons, which provide 16 hours of integrated learning and support. The program content includes an activity component with a graded exercise program and other

**Outcomes: Sunshine Coast PPMS - waitlist numbers 27% ↓**



established features of chronic pain management, such as pacing, goal setting, activity planning, thought challenging, communication skills and stress management. Clinicians monitor participation and clinical outcomes obtained from patient questionnaires completed before, during, on completion and 3 months after program completion.

Plan-Do-Study-Act (PDSA) cycles commenced with resource development (clinician guides, patient communiques, telephone scripts and patient registers) and delivery of clinician education to support integration into clinical practice. After Reboot 'prescribing' began, workflows and resources were adjusted using PDSA cycles until optimum processes were achieved.

## Results

Waiting times for first clinical contact with the pain service were 33% shorter in the group prescribed Reboot compared with the group unable to access Reboot. There was a 97% increase above the state median in

numbers of patients having an initial service event in the first 2 months of the project, and a corresponding 27% decrease in waitlist numbers. Patients' clinical outcomes improved for all measures between Lesson 1 and Lesson 8 of the programme.

The graph illustrates the decrease in the overall number of waitlist patients of Sunshine Coast Persistent Pain Management Service.

## Conclusion

Early indications are that Reboot is an economical, efficient means of providing earlier clinical contact, clinician monitoring and pain education for those on pain service waitlists. Further evaluation will be used to ascertain acceptability to patients and clinicians and cost-effectiveness of the program. Reboot has multiple applications along the pain rehabilitation continuum, and is a beneficial adjunct for patients receiving specialist pain treatment or for supporting patients after discharge or being managed in the community by general practitioners.

## Acknowledgements

This project was funded by the Clinical Excellence Division, Queensland Health, as a result of a proposal supported by the Steering Committee of the Statewide Persistent Pain Management Clinical Network.

This pilot implementation and evaluation was made possible by the administration and clinician teams at Sunshine Coast Persistent Pain Management Service. Other sites throughout Queensland are in earlier phases of implementation.

THIS WAY UP Reboot Online was jointly developed by the Clinical Research Unit for Anxiety and Depression (CRUfAD) and the Department of Pain Medicine at St Vincent's Hospital, Sydney. THIS WAY UP (<https://thiswayup.org.au/>) is a not-for-profit initiative, funded by the Australian Government Department of Health and CRUfAD.

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# IMPROVING THE SURVEY REPORT REVIEW PROCESS OF THE AUSTRALIAN COUNCIL ON HEALTHCARE STANDARDS



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The Australian Council on  
Healthcare Standards, NSW

## Background

Hundreds of accreditation surveys are conducted by the Australian Council on Healthcare Standards (ACHS) annually, and it is always looking to improve its services. At the conclusion of the onsite survey at the member organisation, the survey report is submitted to the ACHS by the survey coordinator via an online assessment reporting tool (ART). This is a requirement of the National Safety and Quality Health Service (NSQHS)/EquiP National (EN) programme. In addition, the key performance indicators (KPIs) as directed by the Australian Commission on Safety and Quality in Health Care (ACSQHC) regarding the turnaround time for submission of the draft survey report need to be met. The first draft submission to the organisation for review and finalisation is 30 business days from the last day of the survey. Any delay in the turnaround time leads to decreased customer satisfaction and KPIs, and requirements by the jurisdiction not being met, as well as increased accountability for the customer services manager (CSM).

## Problem/Aim

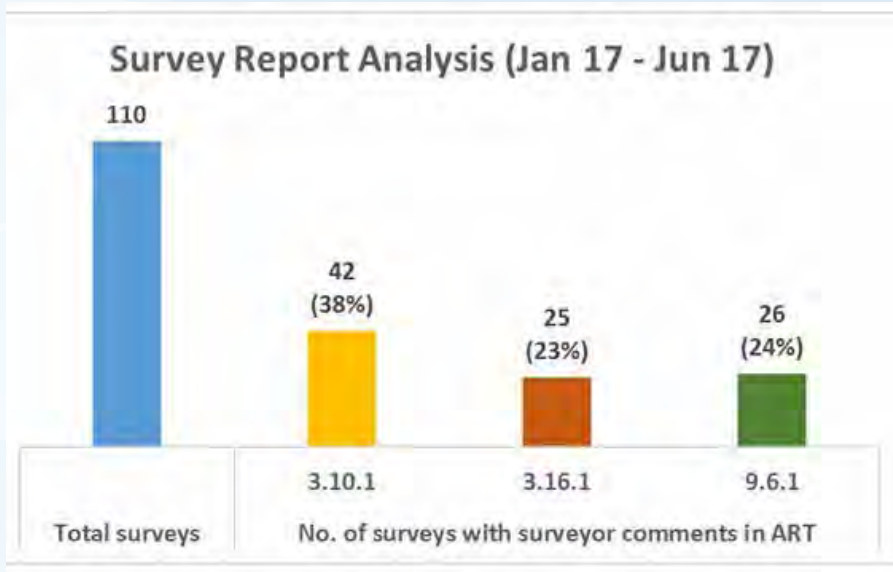
The aim of this project was to provide the member organisation with a comprehensive completed survey report in a timely manner to enable the organisation to progress its quality journey efficiently, and to ensure that the ACHS meets its KPIs and requirements as prescribed in the accreditation scheme.

## Measures

Feedback was taken from the CSMs and consumers (ACHS members), and the project team performed a cause-and-effect analysis of delays in sending draft survey reports to the organisation for review. The most common cause of delays was incomplete reports being submitted to the ART because of the ACHS survey report submission rules not being followed.

Several core actions from the NSQHS standards (3.10.1, Training in aseptic technique; 9.6.1, Training in basic life support; and 3.16.1, Compliance with relevant national or international standards and manufacturer's instructions for cleaning, disinfection and sterilisation of reusable instruments and devices regularly monitored) require comments in the survey report by the coordinator. The aim is to provide evidence of the organisation's compliance as per the requirements specified by the ACSQHC advisories (A13/08 and A16/03).

Data were collected for the total number of surveys conducted during the survey period January 2016 – June 2017. Data were extracted from survey reports submitted to the ACHS that had comments regarding the three core actions mentioned above. In addition, data were collected regarding survey reports that were not sent to the organisation for review within 30 business days from the last day of the survey.



### Conclusion

Initial interventions were effective in improving the turnaround time for submission of the draft survey report to the organisation within 30 business days, achieving the target of 100% in the following 4 months. However, these interventions need further review to ensure that the target of 100% completed survey reports submitted to the ART is achieved by December 2017.

### Next steps

The designated intervention was tested using the Plan-Do-Study-Act (PDSA) process and is currently in the second test cycle.

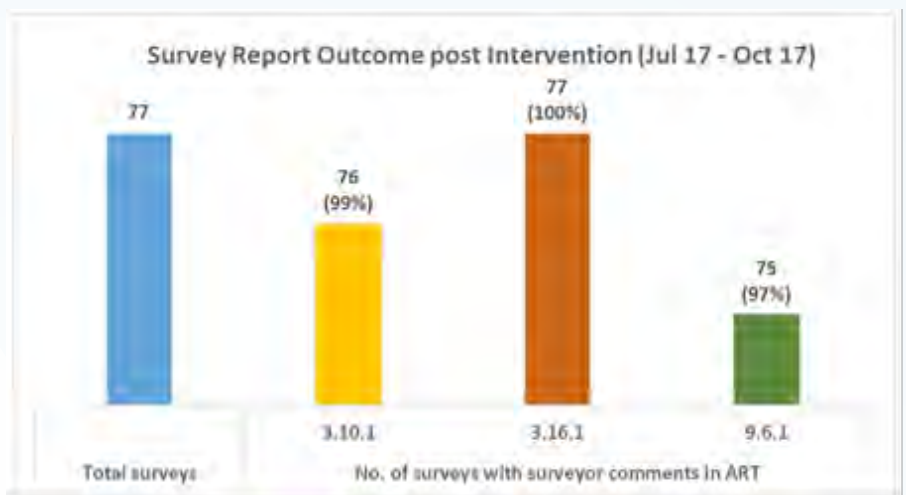
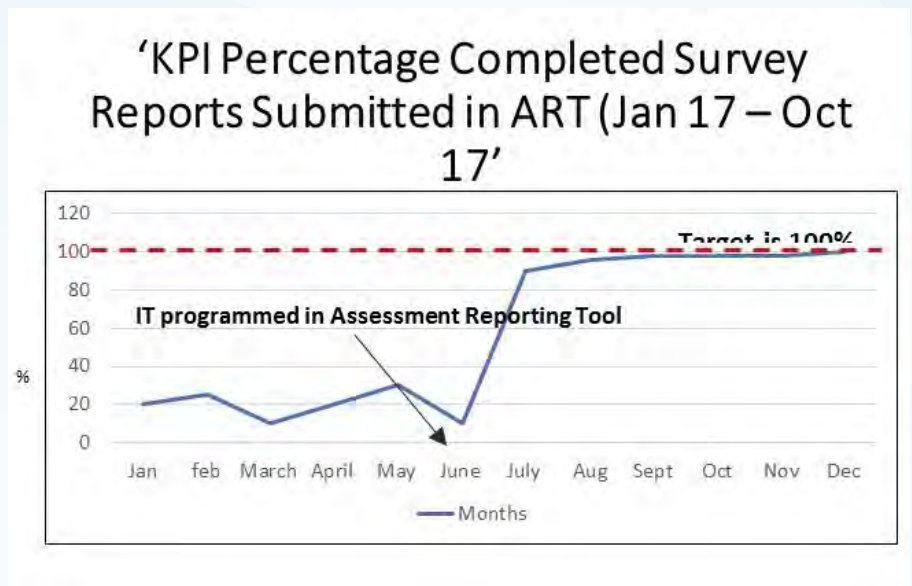
### Design

From 1 July 2017, the information technology (IT) team at the ACHS created mandatory fields in the ART (ACHS online tool) for Actions 3.10.1, 9.6.1 and 3.16.1 so that no survey report can be submitted to the ART by the survey team without providing comments regarding these three core actions. Pop-up screen alerts were set in the ART for the coordinator, indicating that the requisite actions have missing comments.

### Results

Completed survey reports submitted to the ART from January to October 2017 improved for Action 3.10.1 from 38% to 98% (60% improvement), for Action 3.16.1 from 23% to 100% (77% improvement) and for Action 9.6.1 from 24% to 97% (73% improvement).

Turnaround time for submission of the draft survey report to the organisation (within 30 business days from the last day of the survey) from January to October 2017 improved from 74% to 100% (26% improvement) in the 4 months following implementation of the first intervention.



# REVIEW OF QUALITY AUDITING AT THE MACKAY HOSPITAL AND HEALTH SERVICE, QUEENSLAND



## Lee-Ann Farley

Director Clinical Governance and Patient Safety

## Kim Proud

Quality Coordinator – Clinical Governance and Patient Safety

## Background

During accreditation, a surveyor identified that a large number of audits were undertaken at the Mackay Hospital and Health Service (HHS); however, the results were not the stimulus to drive change or improvement. Additionally, the perception of staff was that they were over-auditing, resulting in disengagement, which negatively influenced the safety and quality culture. A review of the EQUIPNational auditing schedule and tools was conducted. Benchmarking against other health services showed that the Mackay HHS’s independent auditing schedule was comparable to, and in some cases less than, other HHSs; however, auditing fatigue remained an issue. Key themes included auditing fatigue, suboptimal EQUIPNational auditing results, comments from surveyors, focus group feedback and Queensland Bedside Audit (QBA) results.

## Problem/Aim

The aim of this project is to improve the standard of care across the Mackay HHS by improving the safety and quality culture of the organisation and reducing the number of ‘less than 70%’ indicators by 30% within 6 months.

## Measures

From the identified needs, a monitoring and responsive model was proposed, enabling management teams and frontline staff to be proactive in the management of indicators within the auditing framework. The Multi-Standard Audit Tool (MSAT) is modelled on the QBA with additional HHS-targeted questions, resulting in the removal of 2,060 questions per year. The MSAT is divided into three audits—patient experience, observation and documentation—and is compiled against the EQUIPNational standards. The MSAT indicators have a target of 100% and the ‘red flags’ are those indicators with compliance of less than 70% (<70%, see table below). Rationalising the audit tool to the MSAT has significantly improved usability and reporting capabilities.

## Design

Interventional strategies included the development of the MSAT with <70% red-flag indicators; red, amber and green (RAG) reporting templates; quality improvement reports for red flags; and auditor resources. The target for each indicator is 100%, with 65 indicators currently monitored. There are two MSAT auditing periods each year. After each auditing cycle,

Summary of Outcomes By Year/Period													
Bowen Hospital   Clermont MPHS   Collinsville MPHS   Dysart Hospital   Family Division   Medical Division   Mental Health & AODS Division   Moranbah Hospital   Division of AHSAAAS   Surgical Division   Whitsunday Health Service													
Year	Period	Have you seen or been given information about your healthcare rights?	Did staff explain the Australian Charter of Healthcare Rights?	Were you shown around the bed area, room and warding facilities on admission?	Did you receive the help you needed with activities of daily living eg. meals, showering, walking?	Do you know how to make a complaint or complaint?	Your care relies on hospital staff sharing information with each other. Have you been part of these discussions in the past 24 hours?	Were you, a family member or carer involved in the development of your plan of care?	Were you, a family member or carer involved in your discharge planning?	Did you receive information on preventing pressure ulcers?	Did you receive information on preventing falls?	Are you aware of the Ryan's Rule process?	Did you receive information about specific medication, treatment options, benefits and associated risks prior to starting any medications?
PE		2.1 PE	2.2 PE	2.3 PE	2.4 PE	2.5 PE	2.6 PE	2.7 PE	2.8 PE	2.9 PE	2.10 PE	2.11 PE	2.12 PE
Target		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Patient Experience													
2018	1 (Jan-Feb)	80%	100%	96%	97%	81%	89%	90%	81%	72%	74%	90%	82%
2017	2 (Jun-Jul)	89%	100%	93%	97%	87%	97%	90%	87%	88%	87%	90%	90%

red indicators (<70% compliance) are reviewed and investigated, and mitigation strategies implemented. This includes identification of a re-auditing schedule to assess the success of implementation.

The development of the MSAT and resources has been a local innovation, and the following factors are critical to success:

- testing with targeted groups
- modification of the audit based on identification of the gaps in clinical care measurement and feedback in relation to the relevance of audit questions to the majority of units.

The audit is conducted; subsequently, analysis and identification of corrective actions occur at unit level, and re-engagement of focus groups facilitates re-evaluation and modification of the audit tool and reporting templates. This ensures that after each auditing period the audit questions are relevant and appropriate; the reporting template is concise and robust, and relevant data are captured; the auditing workforce is engaged and satisfied with the tools being used; and the operational management teams are assured that the auditing cycles are targeted and delivering outcomes.

Explanation of abbreviations in audit documents are as follows:

- MPHS – Multi-purpose Health Service
- AODS – Alcohol and other drugs service
- AHSAAAS – Allied Health, Sub Acute and Ambulatory Service
- PE – Patient Experience
- DOC – Documentation
- URN – Unique Record Number
- DOB – Date of Birth
- ADRs – Adverse Drug Reactions
- VTE - Venous Thromboembolism

Summary of Outcomes by Year/Period					
Division of AHSAAS   Medical Division   Surgical Division   Family Division   Mental Health & AODS Division   Dysart Hospital   Moranbah Hospital   Clermont MPHS   Whitsunday Health Service   Bowen Hospital   Collinsville MPHS					
Year	Period	Is the patient's identification (minimum of URN, Name, Address, DOB, Sex) completed on all pages of the medication chart and if patient label used name is handwritten below?	Is there a medication history documented in the clinical record?	Are the patient's allergies/ADFs including N/Known Allergies (NKA) documented on the medication chart?	Is there documented evidence of a VTE risk assessment?
DOC		4.1 DOC	4.2 DOC	4.3 DOC	4.4 DOC
Target		100%	100%	100%	100%
Medication Safety and Invasive Devices					
2018	1 (Jan-Feb)	57%	37%	93%	80%
2017	2 (Jun-Jul)	45%	71%	87%	64%

### Results

The first audit period results identified 343 red-flag (<70%) indicators, and the second audit period results identified 195 red-flag (<70%) indicators, equating to a 43.15% reduction in the total number of red flags (<70%) across the HHS. Units not achieving the full complement of audits required have reduced from 48.7% compliance for the first auditing period to 29.17% compliance, which equates to a 19.53% improvement. In October 2016, the Mackay HHS achieved at or better than the state average in 82% of indicators and, in the 2017 QBA, achieved a 12% improvement (94%).

Cultural change has been achieved with heightened engagement of frontline staff and auditors. The MSAT has been included as a standing agenda item in divisional and unit meetings, and is a key inclusion in unit/facility safety and quality action plans and EQUIP National safety and quality operational plans.

Cultural change has been further measured through a feedback survey, which identified that 60% of staff agree that the implementation of the MSAT has improved the auditing process. This survey will be redistributed to key stakeholders 12 months post-implementation.

### Conclusion

The MSAT has been a valuable tool for driving change. It has achieved improved patient care and clinical outcomes, improved auditing workforce compliance, and enhanced engagement and accountability of EQUIP National standards committees.

### Next steps

Future initiatives include increased compliance percentage from 70% to 80%; investigation of auditing capability within the digital hospital platform; and dedicated auditing teams to enhance accuracy, efficiency and compliance with minimal impact on patient care.



*“I have found the whole course to be fabulous, including the speakers and also being provided with tools which can be used to break down the problem and figure out our direction.”*

**Lyndel Gray, Clinical Excellence Division Queensland Health**

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*“I have really appreciated the opportunity to consolidate prior experience and learnings. In my role as a S&Q Coordinator I regularly conduct Quality Improvement initiatives, I now feel equipped to teach and lead others in the process. The ACHS QIL Program has given me the confidence to articulate the this and ensure that QI has a place on every agenda in the organisation.”*

**Bernadette Harmer, Metro North Hospital and health services**

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*“For me, I work in Safety and Quality with no formal training; it is just something I fell into that I love. So I knew what I was doing but I didn’t know why. Now I have the why.”*

**Heather Ronay, Metro North Hospital and Health Services**

# PREVENTION OF INADVERTENT PERIOPERATIVE HYPOTHERMIA



**Dr Nicolas Fernandes**  
Consultant Anaesthetist

**Mr Patrick Ferguson**  
Clinical Nurse Specialist, Operating Theatre

**Dr Helen Jones**  
Registrar Anaesthesia

Rockingham General Hospital,  
Western Australia

## Background

Inadvertent perioperative hypothermia (IPH) is defined as a body temperature below 36°C in the post-anaesthesia care unit (PACU). Perioperative hypothermia is an unfortunate consequence of a variety of unavoidable factors during surgery. Although these factors cannot be avoided, measures can be taken to prevent or, at least, minimise this drop in body temperature.

A number of independent studies have shown that IPH can lead to adverse events including myocardial infarction, increased bleeding, increased need for blood transfusion and wound infection. These may result in increased morbidity to the patient and financial burden on the care provider. Further expense is incurred by delayed recovery from anaesthesia and prolonged hospital stay.

IPH is considered avoidable and is an Australian Council on Healthcare Standards (ACHS) clinical indicator of good perioperative care (CI3.3). The aggregate rate appears to alter in different periods, but the aim is to have an incidence below the aggregate rate.

## Problem/Aim

The study hospital had struggled to keep the incidence of IPH low for many years. Given its small size and relative homogeneity of patients and staff, this seemed abnormal. Therefore, this project aimed to ideally reduce the incidence of IPH to zero or at least a level below the incidence in comparable hospitals.

## Measures

The temperature recorded in the PACU is entered into the theatre

management system (TMS) electronically. Unfortunately, it is very difficult for most staff members to access these data because of licensing restrictions. Therefore, to capture these data, a data collection sheet was devised, which followed the patient from admission through all the steps of the procedure to determine where there may be a drop in temperature

In addition, both quantitative and qualitative data were collected in the last Plan-Do-Study-Act (PDSA) cycle, and patients were encouraged to give feedback.

## Design

In the design of the project, various contributing factors were considered:

- environment. The ambient temperature plays a major part in maintaining normothermia. However, in the study hospital, albeit small, this proved to be an insurmountable problem. The temperature appears to be controlled by thermostats, the engineers and the external temperature. After attempting to address this issue, the authors agreed that it would not be productive, especially as the recommended theatre temperature would still predispose to IPH.
- measurement of temperature. Patient temperature was being measured using a Braun tympanic thermometer. This device when tested yielded different values on consecutive uses on the same patient. The authors concluded that, although it appeared to work well on anaesthetised patients, it was not consistent on awake patients. After trialling various devices, the authors chose the

- VeraTemp (Marne) professional thermometer for the PACU.
- patient. Patient factors play an important part. Age, body habitus (low weight) and comorbidity predispose to IPH.
- equipment. Various pieces of equipment are used to keep patients warm. They range from passive heating devices to forced air warmers and fluid warmers. The authors selected the Bair Paws (3M) gown, which is a patient gown with a built-in forced air warmer that works with the existing warmer in theatre.
- education. Education and raising awareness of the detrimental effects of IPH were deemed critical to the success of the project. Further, the team was educated on the correct technique of tympanic temperature measurement.

The following interventions were therefore introduced for this project:

- education of staff. Awareness was raised by key personnel who worked as ‘champions’ in their respective areas
- introduction of a new thermometer in the PACU
- patient warming. Bair Paws gowns were purchased after demonstrating efficacy and cost-effectiveness to the Hospital Executive Group.
- Plan-Do-Study-Act (PDSA) cycles were used in the application of the interventions as follows:
- In the initial cycle, the hypothesis was that the use of a forced air warming device on its own would address the issue. This process was audited, but the incidence of IPH was nevertheless high.

- Data from the first cycle showed that patients arrived at the theatre hypothermic, which made it more difficult to normalise temperature in a relatively short time. Use of a device to warm patients before they came to the theatre was explored in the second cycle.
- Despite the above measures, there remained an incidence of IPH of approximately 10%. Therefore, in addition to the above, the thermometers were examined and an education programme implemented in the unit in the third cycle.

### Results

A combination of staff education, patient preparation and active pre-warming achieved a 100% prevention rate of hypothermia in the subgroup of patients undergoing surgery. For

logistical reasons, patients undergoing endoscopy were excluded, but subsequent interrogation of the TMS data system showed the rate to be the same (i.e., zero incidence of IPH).

### Conclusion

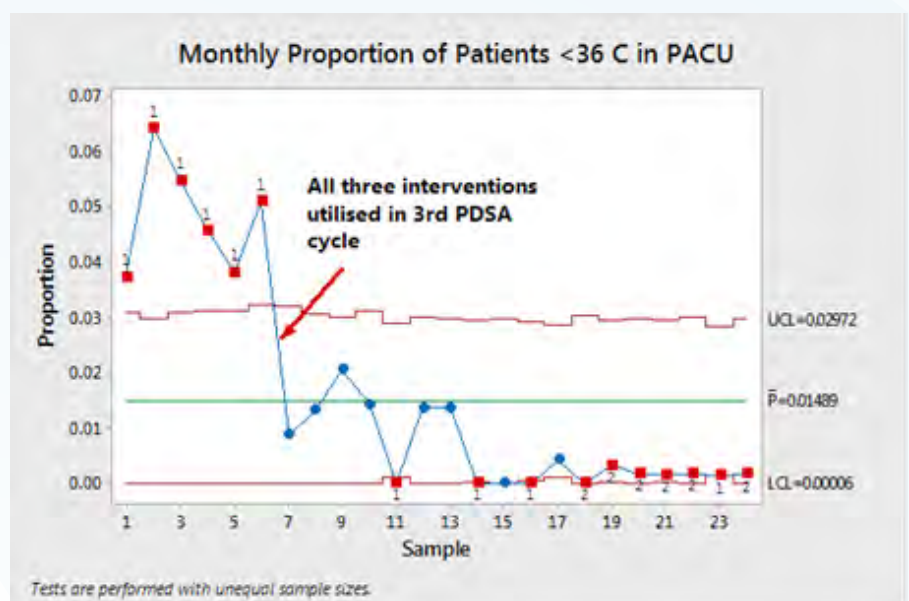
Achieving a goal depends on meticulous planning, involvement of all stakeholders, repeated PDSA cycles and perseverance.

### Next steps

The next step is to repeat the study with both patient subgroups and continue to maintain the current levels with further education, scrutiny of the data and PDSA cycles.

### Acknowledgements

The authors thank Ms Bernie Harrison.



# CLINICIAN-LED PROJECT TO REDUCE IN-HOSPITAL FALLS



**Erin Finn**  
Director Clinical Governance

**Stephen Caddick**  
Team Leader Quality

**Sandy Lewis**  
Senior Consumer Liaison Officer

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## Background

Inpatient falls are the most common adverse event reported in hospitals.

## Problem/Aim

Benchmarking data from the Health Roundtable have shown Ipswich Hospital as an outlier among peer hospitals for both its rate of all in-hospital falls and its rate of falls with serious harm (fracture or intracranial injury). The aim of this improvement project was to reduce the rate of all falls, and the rate of falls with serious harm, at Ipswich Hospital.

## Design

A working group of multidisciplinary frontline clinicians from a variety of wards in the hospital was formed to explore the factors it believed contributed to falls at Ipswich Hospital. The Pareto principle was applied to prioritise the factors that the clinicians considered most important.

At its next meeting, the working group brainstormed potential interventions for each key contributing factor. The potential interventions were then prioritised for testing by using a cost/effort matrix, focusing on low-cost/low-effort for initial trials. The two chosen interventions for trial were:

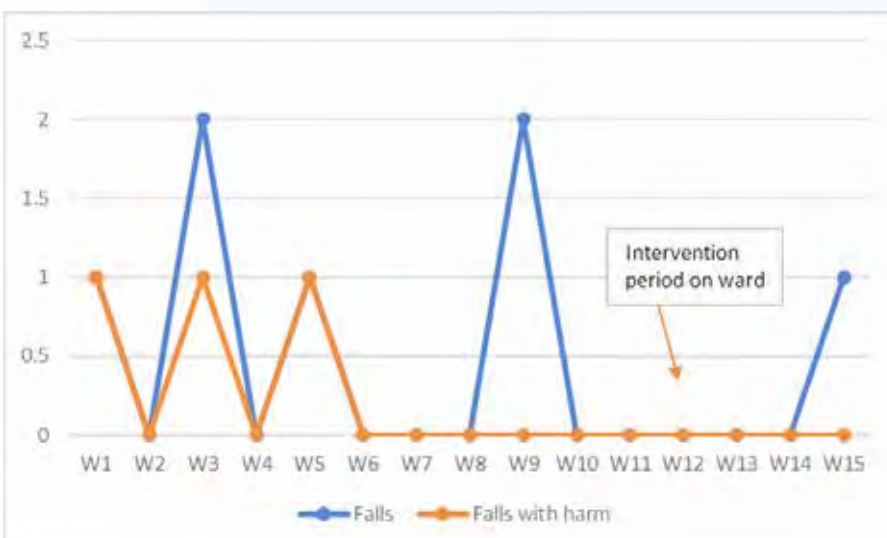
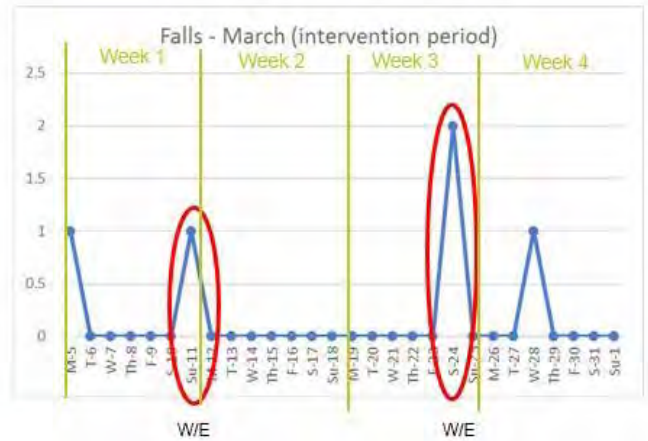
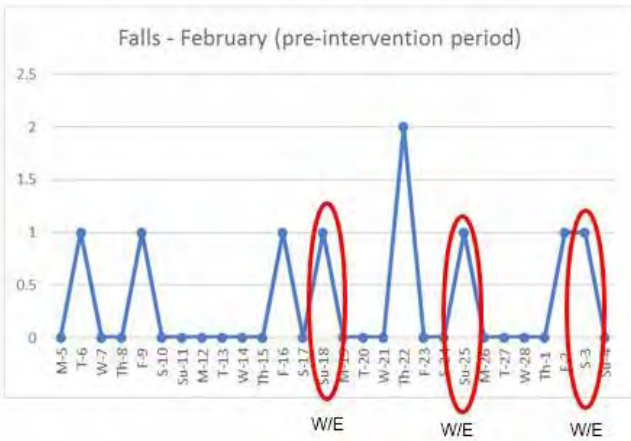
- improved interdisciplinary communication using a patient flow manager (PFM) application
- improved compliance with timely nursing falls risk assessment and management planning.

These interventions were tested in PDSA cycles, each in separate wards.

## Results

The interdisciplinary communication intervention on Ward 7C involved physiotherapists directly entering patient mobility information in the PFM (from which nursing handovers are created). There was some role confusion in the first week, but this reduced with changed communication strategies in Week 2. In Week 3, the process was working smoothly, and by Week 4, staff were keen to roll out the new process further. Initial results were positive, with falls reduced from nine (13.6 per 1,000 occupied bed days) in the month preceding the intervention to five (6.8 per 1,000 occupied bed days) in the intervention period, a reduction of 6.8 per 1,000 occupied bed days (with one of those occurring on the first day). Excluding the first day of the trial, only one fall occurred on a weekday during the intervention period, with the remaining three falls occurring on a weekend when physiotherapists were not present to update the PFM. This apparent effect warrants further exploration.

The reliable risk assessment intervention on Ward 7A initially involved reminders to staff of the need for timely risk assessment, followed by a daily review of each patient chart by either a quality coordinator or the ward's clinical development facilitator (CDF). In the second week, noncompliance data were displayed in the ward on a safety cross. Initial results were again positive, with compliance rapidly increasing and sustained over the trial period. There were no falls in the ward during the intervention period.



### Conclusion

While the authors are cautious about drawing conclusions at this early stage, the early data that are available suggest that both interventions appear promising to reduce falls at Ipswich Hospital. Further time is required to determine the sustainability of the interventions, as well as their long-term effect on falls rates.

### Next steps

During April, Ward 7C tested the combined effects of the two initial interventions, which resulted in a further reduction in the number of patient falls to four (5.8 per 1,000 occupied bed days), a reduction of 1 per 1,000 occupied bed days). The next step will be to implement the two interventions across all medical wards.

### Acknowledgements

The project team would like to acknowledge the members of the working group: Carol McLennan, Scott Jen, Kim Brown, Vicky Bates, Scott Brown, Megan Bool, Denise Woodford, Sharon Kwiatkowski, Leah Ireland, Shelley Smith, Sam Woodhouse and Craig Hulme.

# RAISING OVERDOSE AWARENESS



## Crystal Fowler

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### Background

In the period July 2016 – July 2017, the Mid North Coast Local Health District (LHD) conducted incident reviews into the accidental overdose deaths of six clients.

### Problem/Aim

The investigation revealed that each of the clients had injected lethal doses of opiates. It became apparent that the deaths occurred in the company of a number of other drug users who did not recognise or respond to the deteriorating condition of the deceased.

This project sought to develop a strategy for raising awareness of overdose and overdose response among clients who use opiates.

### Design

The project had an initial investigation stage, which included research on current strategies in use by other services, specifically, the pilot program trialling client-administered naloxone and other health promotion activities such as 'save a mate'.



The next stage of the program was to review and discuss the results of the investigative research within the team and formulate a locally based strategy. The final stage aimed at raising awareness through a number of community-focused activities. These



were highlighted by the LHD holding a client BBQ breakfast and information session on 'International Overdose Awareness Day'.

The LHD also undertook awareness-raising activities with community services by raising the discussion at community precinct meetings and memorandum of understanding meetings with representatives from the NSW Police and NSW Ambulance, and other key stakeholders.

### Results

Preliminary results indicate an increased awareness of the availability of naloxone in the community. Requests have been received by both the NSW Ambulance and the NSW Police Force to provide ongoing education, and interest from clients of the service has increased. The success of this project and others like it has been recognised by the NSW Ministry of Health, which is now in the process of developing statewide policy directives and guidelines for the distribution of take-home naloxone.

## Conclusion

This project by the Mid North Coast LHD continues with the following mission statement:

- to raise awareness of accidental overdose
- to provide 100% of opioid treatment programme (OTP) clients with basic overdose first aid information to reduce accidental overdose incidents.

## Next steps



Kits are supplied to all drug and alcohol clients who either use or associate with people who use opiates and are at risk of overdose. These kits have been designed with rural living in mind as some clients reside over 30 minutes from emergency services, thus needing additional resources. Both naloxone ampoules (with barrels and tips) and Prenoxad pre-filled injections are provided; this gives clients the option of which method they prefer to use and the possibility of treating two or more patients if required while waiting for an ambulance to arrive.

Prior to clients being given a take-home kit, they must attend a brief 15-minute education session with a qualified staff member and be assessed as competent by the in-house addiction medicine specialist; they are then written a script and given a kit. An internal log is kept of all clients with kits, and staff members remain in contact for follow-up support and advice as required. This log is also used to track expiry dates so products can be replaced.

# SUPPORTING AND PARTNERING WITH WOMEN WHO DECLINE RECOMMENDED MATERNITY CARE



**Lyndel Gray**

Principal Project Officer  
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of Health, Queensland

## Background

In 2016, a Queensland maternity services forum focused on statewide public hospital service delivery and identified areas, including informed decision-making, for improvement. One of the suggested actions for improvement included statewide guidance for ‘partnering with women who decline recommended maternity care’. Statewide guidance when women decline clinician-recommended maternity care was developed with the aim of providing support for consumer and clinician partnerships. Initial support will be provided in the form of a guideline with associated implementation resources for use within Queensland public hospital facilities. The implementation resources include, but are not limited to, clinical templates for use by clinicians and women, and consumer information.

## Problem/Aim

Any competent adult has the right to decline recommended healthcare. However, when a woman wishes to decline recommended maternity care (e.g., induction of labour), this presents challenges to both the woman and the clinicians. A pregnant woman may make decisions in the best interests of herself, her unborn baby or her family. When the woman is not actively involved in her maternity care decision-making to the extent that she wishes to be involved, or when clinicians regard the foetus as a patient with separate rights to the pregnant woman, the woman’s

autonomy is undermined. Concerns about respect for autonomy, and other basic human rights, have led some women to disengage from health care. For clinicians, there may be apprehensiveness around potential professional and legal ramifications associated with maternal and foetal safety.

## Measures

Qualitative information in the form of clinician and consumer feedback was the main measure used for improving the guideline. Initial feedback was received from co-leads. Then, feedback was recorded from two working group meetings and one statewide consultation. Endorsement of the guideline will be sought from the working group and other statewide groups.

## Design

Because of the desire for strong consumer involvement in this project, one of the guideline co-leads was a consumer. The other co-lead was an obstetrician. Initial drafts of the guideline were developed with the active assistance of the consumer co-lead and reviewed with the assistance of both co-leads.

As this was a statewide project, a multidisciplinary working group was convened. There was large interest from clinicians and consumer groups from across the state in working on this guideline. Because of the large diverse working group, and as there were multiple maternity projects occurring



simultaneously, it was decided to proceed with online rather than face-to-face working groups to develop the guideline. The working group had email and telephone access to the project manager, and the consumer co-lead communicated by telephone or online with many of the consumers. This proved successful with active engagement of consumers, clinicians, ethicists, lawyers and academics.

The strategy involved multiple rounds of guideline consultation, initially with the consumer co-lead and then with both co-leads to ensure a balance between clinician and consumer focus. Following working party consultation, some feedback themes were identified—for example, the request for supporting resources and the use of certain ‘legal’ references considered threatening to the consumers. There was also feedback on the use of the word ‘decline’ rather than requesting ‘specific’ or ‘non-standard’ maternity care. However, it was noted that these practices have different legal and care connotations.

The next rounds of consultation involved statewide clinicians and consumers, as well as the working group. Statewide consultation was important as it raised slightly different issues to the working group and engaged more clinicians. While the working group remained engaged, the volume of feedback decreased and was less onerous to incorporate into the guideline with each round of consultation.

Queensland Health

Clinical Excellence Division

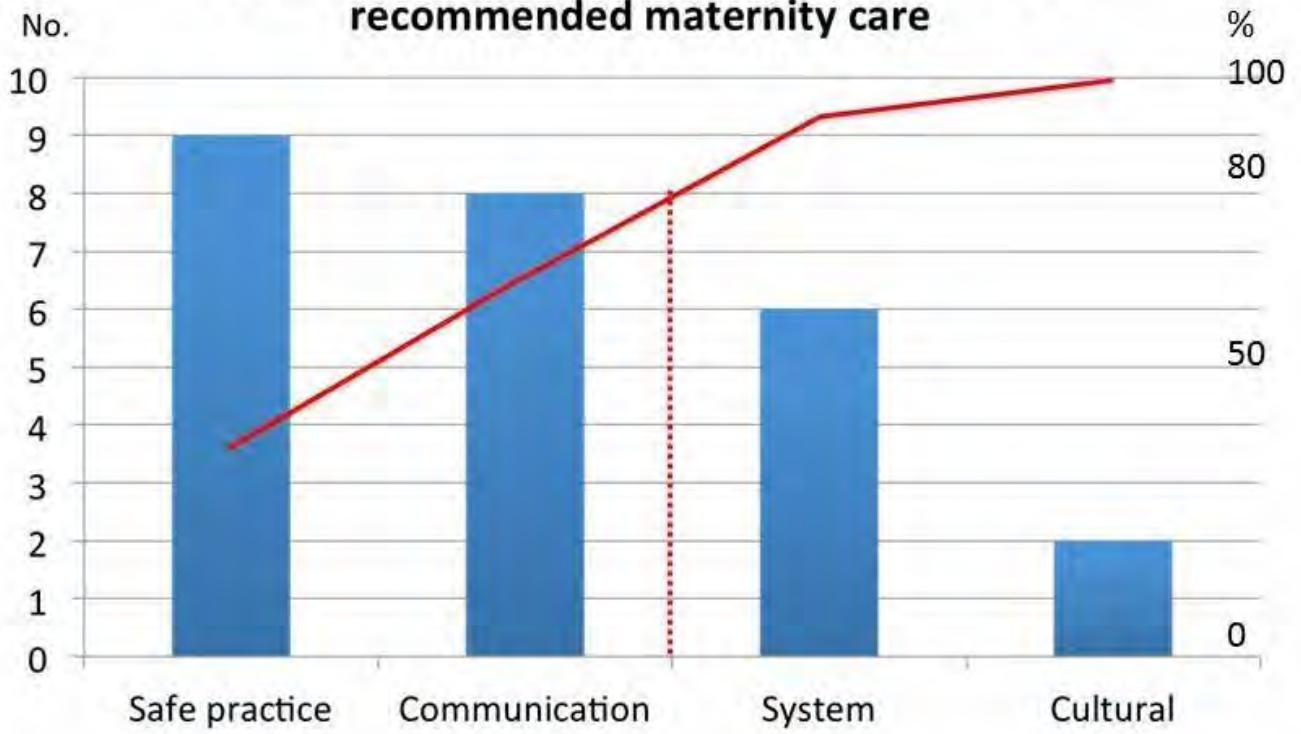
Guideline

Partnering with the woman who declines recommended maternity care

Queensland Government

# Pareto Chart

## Concerns associated with women declining recommended maternity care



## Results

The feedback has been overwhelmingly positive on the development and content of the guideline, including comments such as:

- ‘I can see there has been a lot of amazing work done on this and there is some great information here.’ [Consumer]
- ‘Thank you for the opportunity to review the guideline and for all the work your team has provided in developing this guideline. Well done.’ [Midwife]
- ‘Thanking you all for drafting a comprehensive, well-structured document.’ [Metro Obstetrician]
- ‘Thank you for the opportunity to comment on this document. It is very heartening to see the level of commitment and excellent work.’ [Academic]
- ‘This is a very necessary and timely document. It is extensive covering every possible thing.’ [Rural Obstetrician]

## Conclusion

While a guideline alone will not automatically improve clinical practice, the richness, applicability and subsequently the implementability of this statewide guideline has been assisted through the process by:

- addressing the consumer and clinician need that was raised at a statewide forum
- including a consumer as a co-lead
- the diversity of the working group, which included multiple consumers and clinicians from diverse backgrounds
- the statewide working group, where most hospital and health services’ maternity services have had a stake in the guideline’s development
- statewide consultation raising further awareness and ownership
- responding to feedback
- the provision of supporting resources within the guideline.

## Next steps

The next steps for this project include a trial of the clinical templates and other resources (e.g., consumer information) within different maternity service levels, and in facilities that have implemented integrated electronic medical records.

# HUMAN SERVICES STANDARDS ACCREDITATION IMPROVEMENT PROJECT 2017



**Andrew Harrison**  
The Australian Council on  
Healthcare Standards, NSW

## Background

In 2012, the Victorian Department of Health and Human Services (DHHS) introduced the Human Services (HS) standards to help protect vulnerable clients across Victoria. All services that are funded or registered by the DHHS to provide human services to clients must meet the HS standards. In addition, not only must service providers achieve compliance against the HS standards through independent review, but they must also meet the governance and management standards of an independent review body (e.g., the Australian Council on Healthcare Standards [ACHS] EQUiP National). Further, the HS standards themselves include mandatory file audit tools, a requirement for two independent reviews every three years and strict reporting requirements.

## Problem/Aim

Through onsite visits and interviews with service providers, it was uncovered that a number of ACHS members (service providers) had a low level of understanding/satisfaction with the ACHS HS standards accreditation. On two occasions, failure to list all in-scope funded programs in the pre-survey assessment (PSA) submissions resulted in assessors needing to return and reassess service providers.

The overall mission of the project was to improve members' understanding of and compliance with the ACHS HS standards accreditation programme requirements.

## Measures

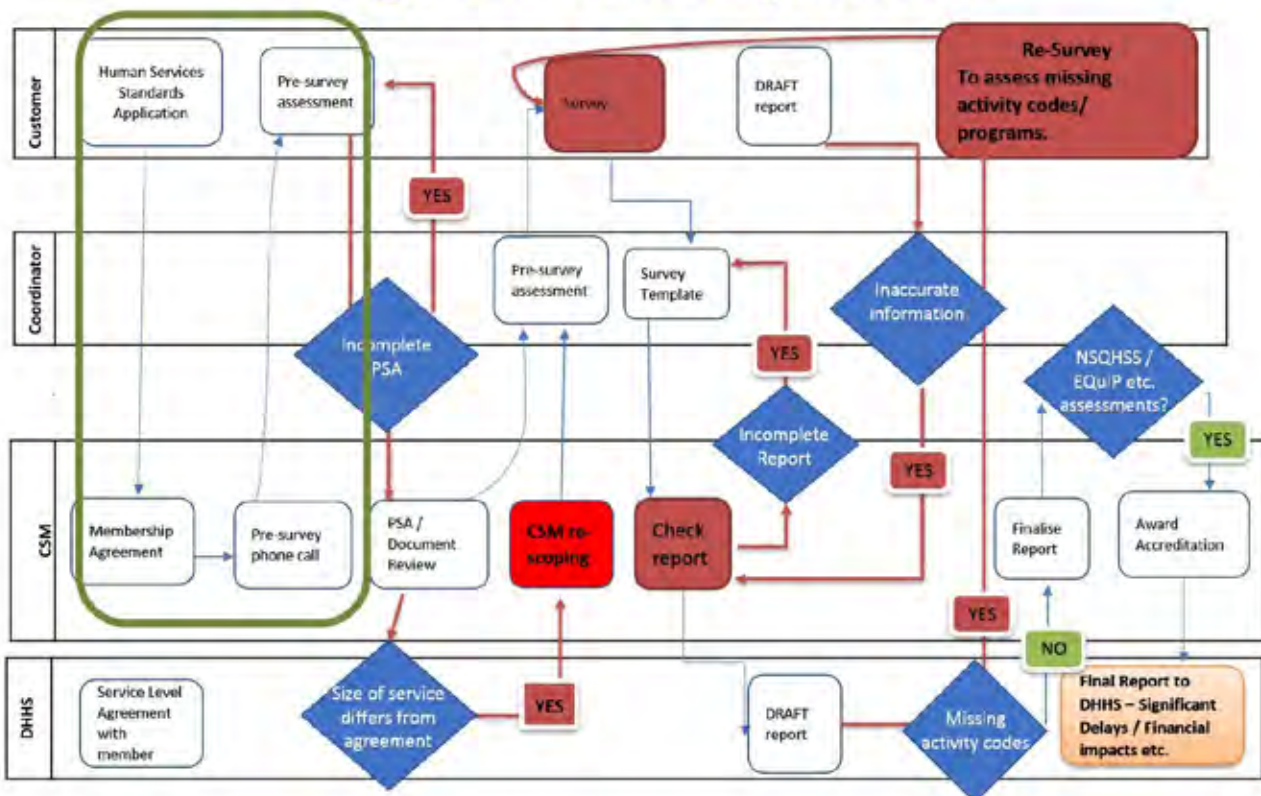
Further research uncovered a broad range of issues requiring improvement and enabled a baseline from which to improve. File audit within the ACHS identified that up to 75% of PSA submissions by service providers were not correctly completed, increasing the risk of HS standards requirements not being met.

Member feedback forms pertaining to HS standards were reviewed, uncovering low response rates, which could not be relied upon to gain accurate market analysis. A member experience survey was sent out using an online survey tool. A high response rate to this survey enabled a focus on three key improvement areas, with 36% of customers less than satisfied in each of these three areas:

- pre-survey requirements
- accessibility of ACHS resources
- governance and management requirements.

A surveyor/auditor online survey highlighted that over 40% of surveyors found information provided by the ACHS did not meet their needs. The issue of 'governance and management' standards was again identified as a concern. A process flowchart was developed, which clearly identified areas of concern and causes of reporting delay.

## Diagnosis of the problem



### Design

Through assessment of research, it was decided that initial interventions should focus on the establishment of practical and clear pre-survey resources for HS standards accreditation members and surveyors. In addition, a new survey reporting tool to replace the MS Word version was introduced. A training session was also held with assessors. These all aimed to reduce variation in PSA submissions and ensure that the somewhat complex HS standards requirements were understood.

### Results

The initial wave of interventions has not been in place long enough to enable a full Plan-Do-Study-Act (PDSA) cycle to take place. A PSA audit will be regularly conducted in the future to help assess whether interventions are improving member understanding. Further, separate service provider and assessor satisfaction surveys will be conducted again after interventions have had time to take effect to assess satisfaction rates.

Initial customer and auditor interviews and comments received have shown positive feedback on the resources developed and new HS standards reporting tool.

### Conclusion

During the course of the project, a number of issues were identified, such as the high number of errors in pre-survey documentation and a high level of assessor dissatisfaction. The establishment of internal ongoing measurements in these areas will enable a more robust and proactive internal reporting system to drive quality improvement.

### Next steps

These business measurements could feasibly be rolled out into other accreditation schemes.

# IMPROVING THE SURVEYOR WORKFORCE REAPPOINTMENT PROCESS



**Raelene Heaney**  
Supervisor, Surveyor Workforce  
The Australian Council on  
Healthcare Standards, NSW

## Background

The Australian Council on Healthcare Standards (ACHS) is recognised as one of the leading healthcare accreditation providers in Australia. To maintain this status, the surveyor workforce needs to have the correct skillset, experience and expertise. This will ensure that the member organisations are confident that surveyors sent to conduct accreditation surveys are of the highest standard.

## Problem/Aim

A process needs to be created to ensure that the ACHS can be confident that the surveyor workforce is:

- highly skilled
- experienced
- proficient in all programs offered by the ACHS.

The reappointment process is the pivotal point in the surveyor cycle that gives the ACHS an opportunity to reassess the skills of coordinators and surveyors. This allows the ACHS to assess their ability to:

- use the electronic and Word tools for submission of survey reports
- have a good rapport with member organisations
- work cohesively in a team
- write meaningful reports
- conduct interviews on surveys
- conduct summation meetings at the end of the survey.

The reason for this project was to investigate and eliminate the gaps in the current process that have resulted in:

- reappointments being missed
- surveyors being reappointed without meeting all the requirements

- surveyors being reappointed without all required documentation being on file.

It was evident that the entire process needed to be reviewed to negate any reputational risk to the ACHS. Therefore, the aim of this project was to have 100% of all reappointed surveyors meet all reappointment requirements within 6 months, and to ensure that all documentation of the new process is easily accessible to all members of the surveyor workforce team. As the ACHS is the leading organisation in accreditation services, documented and easily accessible evidence of the reappointment process of all surveyors is essential.

## Measures

It was recognised that the current reporting system was inaccurate and the data untrustworthy. Investigations into the reporting tool were instigated. The reporting had irrelevant data and was not capturing the indicators required in the reappointment process. Documentation for past reappointments was cumbersome to locate and at times incomplete. This was of concern as this identified that not all staff could easily find current and completed required documentation.

Changes to the reporting tool were initiated and another relevant report was added to ensure that manual lookup was only limited to one component (feedback); this reduced the time in the administrative stage of the reappointment process for ACHS staff.

New reporting systems revealed missing documentation, which initiated a sub-project of the police record check as a requirement for appointment. After the data for the police record check were implemented

into the reappointment process, outstanding checks decreased from 131 to 12 in October 2017 (and have since decreased to nine outstanding checks).

### Design

The following interventions were introduced:

- a coordinator/surveyor reappointment form. This is a summary of all the requirements that the coordinator/surveyor needs to be reappointed for a further 2 years. This is kept in a folder and facilitates easy overview for reappointment or non-reappointment
- a new education report. This captures all education that the coordinator/surveyor has attended, including mandatory criteria for reappointment.

Previously, this was a manual look up for each surveyor.

The reappointment report was modified to include all relevant requirements for reappointment, to remove data that were irrelevant and to ensure user friendliness and flow. It was also tested for accuracy. The new education report was tested and did not initially capture all required data; however, it was modified and is now capturing these data.

### Results

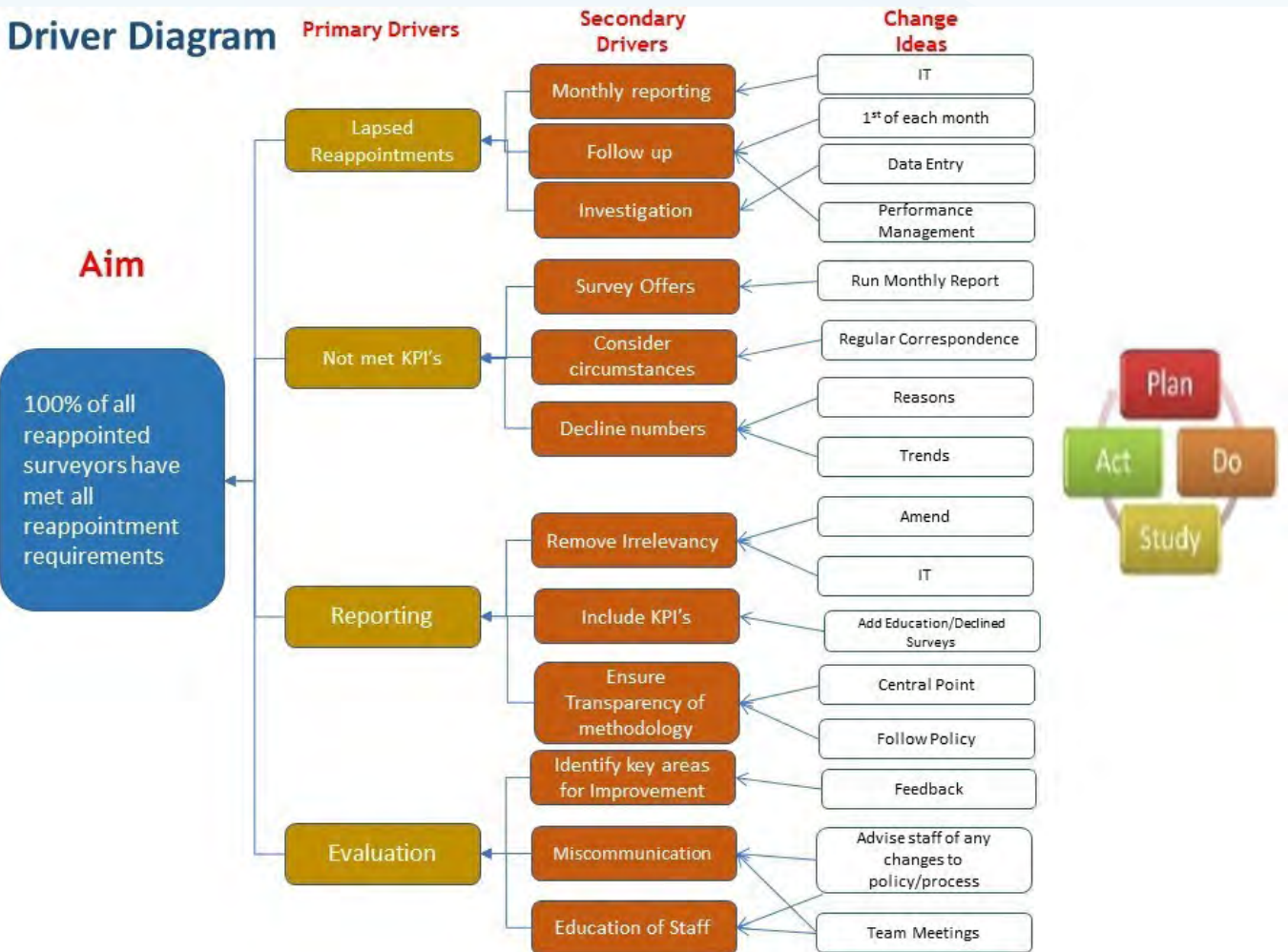
The present system enables 100% of all reappointed surveyors to have met all ACHS requirements. Refresher training surveys are offered to surveyors who have not met all requirements, and reappointment is not given until the training surveys have been carried out and evaluations are complete.

### Conclusion

Interventions were successful in improving the reappointment process. All documentation is easily accessed by the surveyor workforce team. Since the introduction of the new processes, all reappointments meet 100% of the requirements. Reports are straightforward and data are relevant to enable a smooth reappointment process. A cumbersome time-consuming manual process has become a highly efficient electronic process. The project will be formally completed by July 2019 once a full cycle of reappointments has been finalised.

### Next steps

Processes are now in place for 1-year reappointments to capture surveyors who have a small deficit in meeting all requirements.



# REDUCING UNPLANNED READMISSIONS <28 DAYS FOR ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE



Aboriginal and Torres Strait Islander communities will significantly reduce the impact of frequent admissions and readmissions to hospital.

## Aim

This project aimed to reduce the number of unplanned readmissions within 28 days for Aboriginal and Torres Strait Islander people at Bairnsdale Regional Health Service by 30% by June 2018.

## Measures

Data regarding unplanned readmission <28 days for Aboriginal and Torres Strait Islander people were the start point for this project. Community consultation and feedback is critical to any cultural improvement and, with the support of the Koori Hospital liaison officer, large amounts of qualitative data were obtained and collated from patient satisfaction surveys, visiting and talking with the four local Aboriginal Community Controlled Health Organisations (ACCHOs), direct consumer feedback and community consultation. Themes were identified and adapted into a Pareto chart. The four main themes were:

- sterile environment
- cultural awareness of staff
- identity issues at registration
- costs of medication.

## Julie Lawrence

Improvement and Innovation Advisor  
Bairnsdale Regional Health Service, VIC

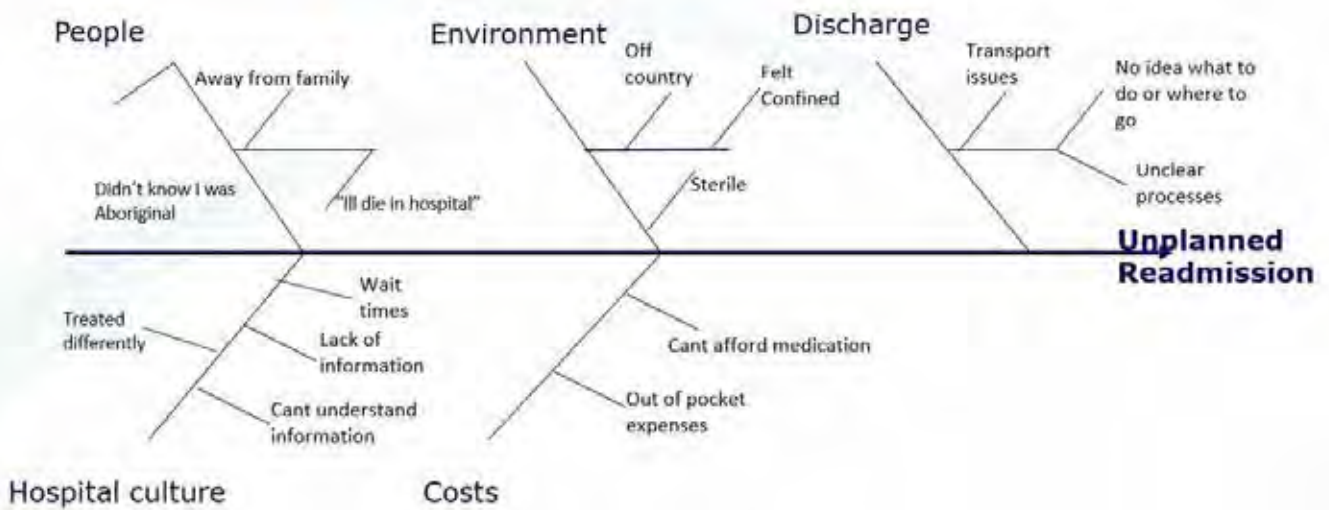
*Left to right: Project Officer Aboriginal Health Unit, Danielle Thomson, Aboriginal Access and Support Officer - Lynette Bishop, Koori Hospital Liaison Officer - Bonnie O'Shanassy, Care Coordinator Aboriginal Health - Amanda Blandford and Improvement and Innovation Advisor - Julie Lawrence*

## Background

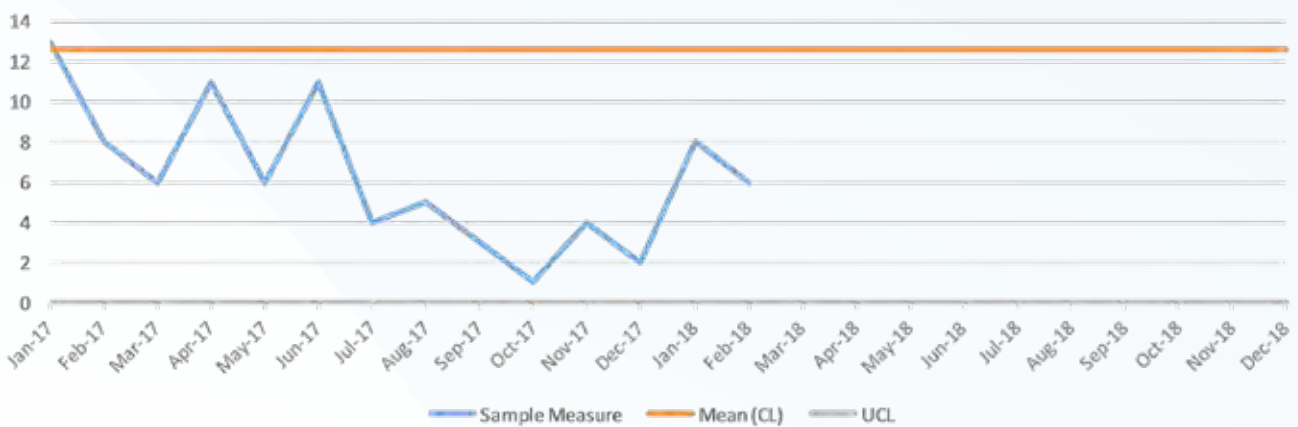
Compared with non-Aboriginal Australians, Aboriginal Australians experience a significantly lower life expectancy, and higher levels of disease and disability. Healthcare organisations have a vital role in improving access to evidence-based care and acknowledging the ongoing inequalities in health outcomes for Aboriginal and Torres Strait Islander people, and in improving responsiveness to Aboriginal and Torres Strait Islander communities and individuals. The capability of hospitals to actively take an adaptive approach with capacity and capability building across organisations working with



# Cause and effect



Aboriginal Unplanned Readmission Bed Days



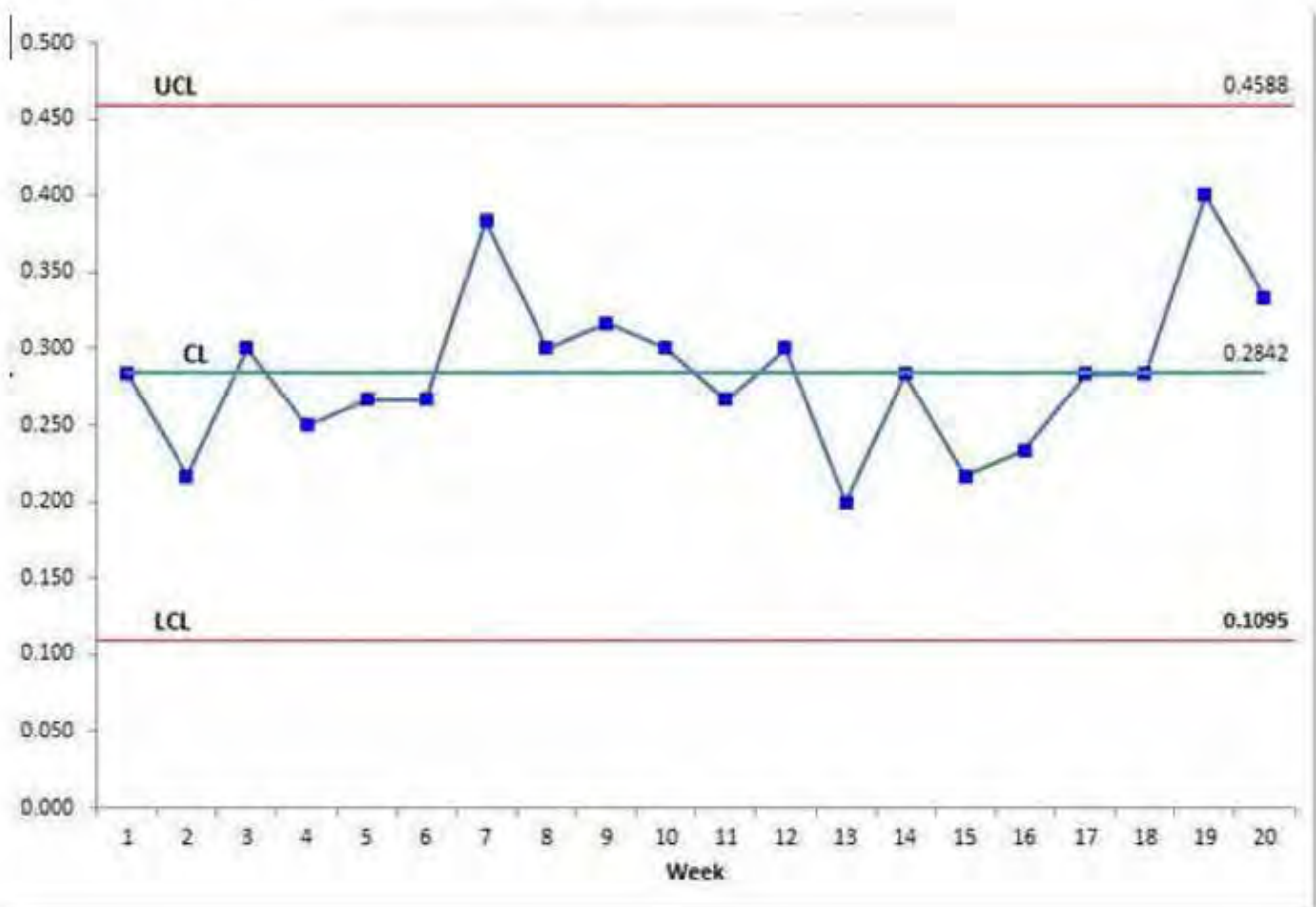
### Design

A multidimensional admission and discharge planning form with a case-management approach aimed at reducing all-cause readmissions was developed and evaluated. This enabled identification of factors that may predict readmission and

subsequent mortality as well as factors that identify patients who are most likely to benefit from early interventions. It has had a number of iterations to reflect the most valuable information.

A new clinical nursing role evolved, evidencing value in a care coordinator position dedicated to facilitating appropriate discharge interventions and liaisons with the ACCHOs and primary care providers for Aboriginal

Aboriginal Inpatient Feedback - A&D form



people. This role continues to evolve with Plan-Do-Study-Act (PDSA) cycles and organises:

- early identification of support services to enhance successful discharge
- follow-up appointments
- collaboration with the primary care provider/ACCHO
- Geewan scripts (hospital-funded discharge scripts)
- follow-up calls within 48 hours.

Another key action was to merge the care coordinator, Aboriginal access and support worker and Koori Hospital liaison officer into a specialist workgroup reporting directly to an executive director.

An initial survey showed that 70% of staff did not feel comfortable or confident asking about the patient's origin at registration. 'Asking the question' training was rolled out using local cultural consultants, and a significant improvement was evidenced by pre- and post-intervention surveys. A new evidence-based training tool is being designed to be widely tested among peer hospitals. Bedside audits showed a 72% increase in the 'Yes' answer to 'Were you asked if you were of Aboriginal or Torres Strait Islander origin at admission?' in March 2018.

## Results

The following results were achieved:

- reduction of more than 30% in unplanned readmissions
- improved patient experience (67% improvement in patient satisfaction)
- reduced bed days and associated costs (\$4,606 per day saved for common diagnosis related groups)
- improved identification at admission
- improved staff cultural competence
- hospital-funded discharge scripts (cost v. unplanned readmission)
- decreased discharge against medical advice (DAMA) from inpatient and emergency departments
- sharing of certain tools nationally.

## Conclusion

A whole-of-organisation approach is required to improve health outcomes for Aboriginal and Torres Strait Islander people. A key learning point was that initiatives must be carried out in consultation with the community and should never be tokenistic. Recognising the many different cultures, heritages, beliefs and relationships with the land, and the

extensive knowledge that exists among Aboriginal and Torres Strait Islander people, will help ensure success. The Aboriginal hospital liaison officers are not responsible for carrying out the improvements but are essential in liaising between the community and the expert advisors.

## Next steps

It is time to make an active difference in improving health outcomes for Aboriginal and Torres Strait Islander people, and sharing which interventions work is key to progress.

The success with this project will be continued by:

- ongoing analysis to develop predictive equations for the risk of readmission
- finalisation of the 'Asking the question of origin' training tool.

# V.O.I.C.E.—VALUING OUR INSIGHTFUL COMMUNITY EXPERIENCES



**Galina Ramensky-Manoiloff**  
Safety and Quality Coordinator  
Redcliffe Hospital, Metro North  
Hospital and Health Service,  
Queensland

## Background

Engagement with consumers and the community has become paramount within healthcare. How this engagement framework is developed, implemented and monitored is critical to not only immediate but future benefits within all levels of the organisation.

The Redcliffe Hospital is a 300-bed regional hospital. Established in 1965, the hospital has a proud history of delivering services to the local community. Current demands, pressures and challenges have seen a growing, diverse community with younger-aged cohorts and an increasing elder and frail population. In response to the release of the Connecting for health 2016–18 strategy and overarching strategic directions, it was crucial to review and revamp outdated consumer and community engagement committees and structures to have greater and more meaningful engagement and collaboration with the consumers and community. The development of a sustainable and robust consumer and community engagement strategy and vision was crucial. This instigated the organisation's commitment and responsibility to embed and partner with its consumers and community in all aspects of service delivery in future planning and through shared experiences and voices.

## Problem/Aim

The organisation identified the need for greater engagement with consumers and community across the whole organisation. Historically, there were only various adhoc projects and service activities that networked with consumers. With the release of a whole-of-hospital and health service strategy for 2016–18 in November 2015, devolvement and implementation of this strategy by the hospital at the local level varied greatly. While pockets of outstanding engagement practices were evident at the hospital, particularly with maternity and cancer care services, general hospital interactions and linkages were limited.

The focus of this project was to review the hospital's ageing engagement strategy and realign and develop a contemporary framework. This included a revised vision that encapsulated overarching priority objectives including mapped and identified tangible key initiatives for improvement. It was also critical to ensure collective levels of involvement were considered, including sustainable measures to ensure achievement.

In summary, this project aimed to review, develop and establish a consumer and community engagement strategy and vision that not only supported overarching strategic priorities and direction but also aligned and supported evidence-based practice for patient- and consumer-centred care.

## Measures

An initial environmental scan of the hospital's existing consumer and community engagement strategy demonstrated poor rates of robust inclusivity and collaborative activities with the consumers and community. Although the existing outdated consumer and community engagement strategy aligned with overarching guiding principles and objectives, there were limited key initiatives and measures in place.

Historically, local development of consumer and community engagement strategy was undertaken at the committee level with limited engagement with other levels of the organisation, which resulted in partial buy-in and shared responsibility with key stakeholders. Review of baseline data collections on consumer engagement activities logged into Oracle Database (which holds evidence of all safety and quality initiatives across the hospital and health service) demonstrated favourable numbers of consultation activities, but very low numbers in collaborative initiatives and activities. From activities recorded for the period 2015–2016, only an average of two collaborative activities were recorded per year. For the project to show improvement in inclusivity and collaborative engagement with the consumers and community, it was planned to overhaul the hospital's strategy and vision while measuring its success through monthly pinpoint analysis, various monitoring methodologies and monthly review of an associated workplan. Oracle was also used to review the success of project outcomes.

## Design

This project resulted from a total review of the existing Hospital Consumer and Community Engagement Committee. It was identified that, with the newly revised terms of reference, it was essential to develop a shared responsibility and commitment to increase engagement with the consumers and community.

A project team was formed consisting of the safety and quality coordinator, director of safety and quality, and director of planning and performance to instigate developing a new hospital framework. An initial environmental scan of the hospital's existing framework was undertaken, including various mapping sessions to review spectrums of existing engagement. This was then mapped back over strategy priorities, and a draft consumer and community engagement strategy was developed. Continual engagement and communication with key stakeholders occurred through meetings, emails and presentations at various other forums throughout the project cycle, and the draft framework was presented, discussed, revised and endorsed by both the Hospital Consumer and Community Engagement Committee and the Senior Leadership Team. An associated workplan was then developed as a monthly monitoring tool to ensure key initiatives were progressed.

Several Plan-Do-Study-Act (PDSA) cycles were used continually throughout this process:

PDSA cycle 1: Initial review identified gaps and opportunities for improvement in the existing strategy and framework. This was done through a series of mapping exercises, which included analysis of baseline data and best practice methodologies. All work was presented to key stakeholders, and feedback received indicated that further work needed to occur to ensure alignment and shared responsibility were realised. This entailed development of a new framework and strategy.

- PDSA cycle 2: A draft framework was developed, including strategies to move forward, and a revised vision undertaken and reviewed by the project team.
- PDSA cycle 3: The newly developed framework was presented to the Redcliffe Hospital Consumer and Community Engagement Committee and endorsement obtained to progress to the Redcliffe Hospital Senior Leadership Team (SLT) for executive endorsement.
- PDSA cycle 3: The framework was presented to the SLT. Several corrections and inclusion of other initiatives requested were undertaken, and final endorsement was obtained.
- PDSA cycle 4: An associated workplan was developed through mapping of key initiatives of key stakeholders and allocation of timeframes.

## Results

A whole-of-hospital vision framework and a strategy for consumer and community engagement, including an associated workplan, were developed, endorsed and implemented.

Since implementation in September 2017, there has been an increase in collaborative activities undertaken throughout the organisation. These rose significantly by 350% in 2017. There has been an increased presence of hospital exposure in the greater community, with key stakeholders and executives becoming members of newly developed community forums and focus groups.

Engagement with the community is continuing to grow with a consumer recruitment drive instigated, and three consumers have already submitted their expressions of interest.



Hospital clinical champions are also invested in this area with consumer- and community-focused surveys being undertaken. Clinical champions have developed iLearn information packages for consumers in the Emergency Department. Because of this project, greater staff awareness has been evidenced with more requests for consumers to be part of decision-making committees, as well as active members in service planning initiatives. It is anticipated that this number will continue to grow in 2018.

Some of the project findings have revealed positive improvements in consumer engagement across the organisation. Greater staff awareness has resulted in more consideration of consumers being partners in healthcare. One limitation has been restricted access to Oracle to record activities. Therefore, all the initiatives occurring across the organisation were not always recorded. Many areas have now included this in their everyday business.

Consumer and community engagement is critical to today's health, but the question of sustainability and how the organisation continues to increase momentum in this area is continually raised. Without dedicated staff in this area, some activities have been delayed or not fully undertaken because of conflicting deadlines and portfolios.

## Conclusion

In summary, consumer and community engagement is crucial to all aspects of healthcare. Prior to this project, consumer and community engagement was evolving in pockets within specific services; however, there was no whole-of-hospital approach, vision or direction. There were no tangible measures of success or key performance indicators (KPIs). Today, there exists a whole-of-hospital approach to consumer and community engagement. In addition, there are measures and KPIs as well as associated workplans and, in particular, staff champions, who consider consumer and community engagement when processes are undertaken.

## Acknowledgements

The authors thank the Redcliffe Hospital Consumer and Community Engagement Committee and the Senior Leadership Team, as well as the director and acting director of safety and quality and the director of planning and performance.

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# PARENTING SUPPORT ACCESS IMPROVEMENT



## **Katie Robinson**

Nurse Manager, Quality and Safety Child and Youth Community Health Service

## **Catherine Marron**

Nursing Director, Ellen Barron Family Centre

## **Sonya Preston**

Director of Nursing, Specialised and Statewide Services Children's Health Queensland

## **Problem/Aim**

Reporting for the Children's Health Queensland Quality and Safety Board demonstrated that 26% of families were waiting longer than the recommended timeframes (long wait) to be seen at the tertiary parenting centre. The Children's Health Queensland Board and executive leadership have zero tolerance for long waits across the organisation. Other early parenting centres in Australia report experiencing similar challenges with intake and admission processes and have implemented various solutions to address concerns.

## **Measures**

A systematic analysis of organisational performance data provided initial information on the problem. Analysis of these data and using a tested quality improvement framework enabled better understanding of the key issues affecting waiting times and the instigation of proactive steps to address issues.

## **Design**

This involved a process-mapping exercise, which defined the process components, explored barriers to access from referral to admission and prioritised the areas that could be actioned. In addition, an appreciative enquiry approach was used to gather qualitative data about the

experience of staff, stakeholders and consumers, and to explore their ideas for improvement. Areas prioritised for improvement were identified across different aspects of the process or patient journey and categorised into three working areas:

- referral and support
- (concurrent) intake processes
- administrative practices.

A formalised implementation approach (Plan-Do-Study-Act [PDSA] cycles) was used as part of the quality improvement framework to allow tests of change during the process and rapid adjustment.

## **Results**

The new administrative and communication processes have resulted in the number of families





being seen in time improve from 68% in 2016 and 71% in 2017 to 80% over the first 6 months of implementation (2018). This improvement means that there are fewer families waiting longer ( $n = 12$ ) than recommended to be seen and that, of those waiting, 60% have a pre-organised admission date.

### Next steps

The second phase of system improvements began in July with implementation of a single referral form and an electronic referral system to improve accessibility and transparency of referral progression. Next steps will involve a dashboard to monitor data and progress in real time, and redesign of the intake and categorisation process as well as the pre-admission interview. The final planned improvements relate to the Children's Health Queensland digital health strategy and include a new scheduling system, contemporary patient-driven booking and confirmation systems, and centralised referral.



# THE GLOW PROJECT: CHANGING THE MODEL OF CARE IN A PERINATAL MENTAL HEALTH UNIT



## Carole Rodden

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St John of God Burwood Hospital,  
Sydney

## Background

In 2016, patient and caregiver satisfaction levels in the 12-bed perinatal mental health unit at St John of God (SJOG) Burwood Hospital were well below the key performance indicators (KPIs) required by SJOG healthcare and compared poorly with peer comparison groups. There was also an increase in patient complaints regarding the quality of care provided by caregivers in the unit. In addition, the unit had experienced two serious incidents within a few months. The combination of these factors indicated that the unit could be exposed to significant financial, reputational and clinical risks.

## Problem/Aim

The 2015–2016 Press Ganey Patient Survey revealed overall patient satisfaction rates of 73%. Nursing care and group therapy were identified as particularly problematic:

- Satisfaction with nursing care was rated at 77%.
- Helpfulness of group therapy was rated at 70%.

In conjunction, caregivers were reporting significant levels of dissatisfaction. The 2015–2016 Press Ganey Caregiver Survey revealed overall caregiver satisfaction rates of 72% and suggested some degree of caregiver disengagement.

Patient Experience of Care (Pex) Survey data for Private Mental Health Alliance (PMHA) hospitals measured at the

time of discharge from the service revealed that many of the domains were rated well under the 90% KPI and further highlighted deficits in both outcomes of care and quality of care. The unit was also receiving complaints regarding the quality of care and negative posts on its Facebook page.

In addition, two incidents had resulted in babies being placed at risk of harm.

The aim of the project was to increase patient and caregiver satisfaction and patient experience of care results to 90%, to reduce adverse events to 0% and to reduce complaints by 50% within a 12-month period.

## Measures

Consumer and caregiver engagement was sought to further analyse the root cause of these issues.

Structured interviews were undertaken with both patients and psychiatrists regarding their experience of the service. The issue identified as causing most dissatisfaction was lack of support for mothers and infants, particularly at night. Both mothers and psychiatrists identified fatigue as having an adverse effect on the mothers' mental state and their ability to form an attachment with their child.

Other areas of dissatisfaction were the lack of consistency in staff approach to care, poor orientation to the service, a group therapy program that did not meet mother/family needs, lack of individualised care and caregiver attitudes.

## Design

A full-day workshop was held for caregivers in the unit. The results of the Press Ganey Patient Survey, PEx Survey, and patient and visiting medical officer (VMO) interviews were discussed, in addition to the results of the Press Ganey Caregiver Survey.

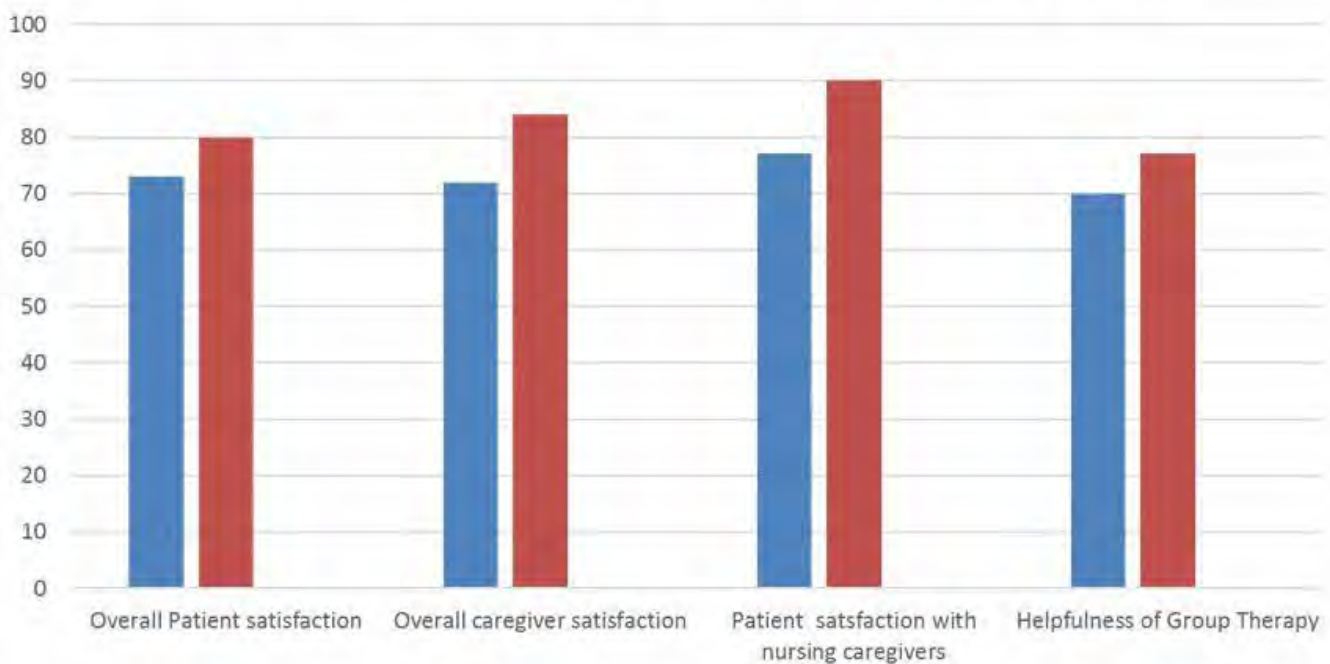
An action plan was generated in collaboration with caregivers and the project management team to introduce a new model of care.

The strategies identified in the action plan included:

- an agreed and documented model of care including an increased level of baby care
- development of a welcome booklet for mothers to orientate them to the unit and the new model of care
- identification of standards of behaviour for caregivers (non-negotiable behaviours)
- review of the therapy program in consultation with mothers and caregivers
- adoption of a recovery-oriented mental health framework and primary care model.

The implementation group met each month to review the strategies. The nurse unit manager (NUM) met with patients weekly to gather feedback regarding the strategies and their general experience of care. Incidents and complaints were monitored monthly. Various monthly audits of the medical record were also undertaken to assess the uptake of the recovery-oriented framework and primary nursing model.

Comparison of Press Ganey survey results 2015 and 2017



Patients continued to report that care of babies remained an issue as some staff members chose not to follow the new model of care, preferring to continue working in their old ways. The NUM also had to remind staff members that nonadherence to non-negotiable behaviours would result in performance management conversations. A baby care plan was implemented that required caregivers, in collaboration with the mother, to document the level and type of baby care that would be provided each day/night. Compliance with the model of care significantly improved with the introduction of the baby care plan. In addition, the PMHA devised a new therapy program with significant patient milestones.

## Results

There has been a 50% decrease in complaints, and no critical incident, in the last 12-month period.

Patient satisfaction has increased from 73% to 80%, and staff satisfaction has increased from 72% to 84%; in addition:

- satisfaction with nurses is 90%, up from 77%
- helpfulness of group therapy is 77.3%, up from 70%.

Outcomes of care and quality of care have also improved as shown by the following changes in responses:

- ‘My sense of wellbeing has improved’ (86% to 90%)
- ‘I am more hopeful about my future’ (89% to 90%)
- ‘Hospital staff were available if I needed to talk to them’ (80% to 90%)
- ‘My treatment plan met my needs’ (73% to 84%)
- ‘I have been involved in planning the care I needed after I leave hospital’ (73% to 90%).

## Conclusion

In conclusion, the pilot project met its aims and targets and has been rolled out to other units in the hospital. However, sustaining the cultural change was difficult and relied on the project team and NUM driving the change and making caregivers accountable to the model of care they had articulated for themselves.

The introduction of the new model of care, incorporating a recovery-oriented approach with increased staff care of babies, resulted in:

- mothers and partners being less fatigued and able to manage the demands of parenthood
- fewer incidents of harm to self or infants
- a standardised and consistent approach to care
- improved outcomes of care and quality of care as demonstrated by Pex data
- fewer complaints.

The review of the therapy program and development of the welcome booklet following consultation with patients contributed to increased patient satisfaction results and ensured patient expectations were met in most instances.

Increased caregiver satisfaction resulted from improved caregiver training opportunities, fewer patient complaints, a clearly articulated and standardised model of care, and reduced patient incidents.

## Thank you from Patient Safety Lead graduate Ami Horne

*“Thank you Bernie for guiding, supporting and facilitating this PSL course. Thanks to Mark, Tammy, Sharon, Ian and Bernie for today by listening to our presentations, providing suggestions for further development and stopping us from freaking out!*

*We are all grateful that the ACHS Improvement Academy saw the need to develop this course, providing training and an opportunity for like-minded people to come together and share their knowledge and experiences.*

*The PSL team felt that this course provided practical tools and processes enabling us to apply theory/methods into practice and exposing us to new strategies. We loved the opportunity to network and develop professional links in QLD and nationally.*

*We have learned the sharings from experts and all the interactions from the various presenters and organisation.*

*We have all enjoyed Tim’s presentation on clinical governance and the webinars, which provided ‘food for thought’.*

*So, in conclusion: we enjoyed the PSL course and would thoroughly recommend the course to our colleague’s and executives.*

*We were the sparks that grew into embers, but sought t direction from the ACHS Improvement Academy. We are now smouldering and the fire (passion) is increasing in size as this is our enthusiasm and hopefully we will start to ignite sparks in our colleagues to head toward zero harm.”*

**Ami Horne, Redcliffe Hospital, Brisbane.**

# MEALTIME SUPPORT PRACTICES: IMPROVING PATIENT EXPERIENCE



## Julie Stephens

Clinical Risk and Quality Manager  
St John of God Bendigo Hospital,  
Melbourne

*Left to right: Lily Kloester ANUM; Alison Barrett RN; Brendon Key EN; Eliza Mayberry RN; Lisa Gellatly EN / DVA Co-ordinator --- all from the Medical Unit.*

## Background

The impetus for this project came from a patient's daughter who expressed concern regarding her father's nutritional and fluid intake due to a lack of assistance by hospital staff at mealtimes. The project was undertaken in a 28-bed medical unit in an acute-care private hospital.

## Problem/Aim

The aim of this quality improvement project was to improve service delivery in a medical unit by providing the right assistance to patients at mealtime. This means that all patients (100%) receives the assistance and support they want or need on receipt of breakfast, lunch and dinner by 31 December 2017.

## Measures

An investigation revealed that on average for every meal there were one or two patients who were not receiving the assistance they required at mealtime, resulting in decreased nutritional intake, poor patient experience and food wastage.

Nurses were undertaking other nursing care activities and were providing insufficient mealtime support in a timely manner. Patients were reluctant to call for assistance as they did not wish to worry the nurses, who were very busy. Catering staff collecting the meal trays were not encouraged to identify patients who had not eaten their meals.

## Design

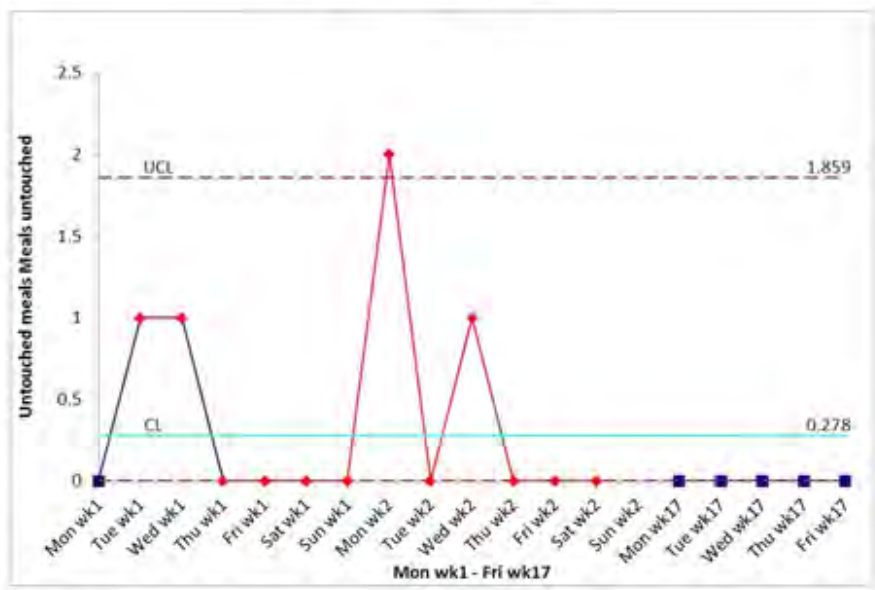
A trial was undertaken implementing 'protected' mealtimes and the introduction of coloured meal trays, indicating the level of patient assistance required. These two initiatives have been successfully used in the United Kingdom and in other Australian healthcare facilities. The project team consisted of the catering manager, nurse unit manager, dietitian, medical unit ward clerk, and quality and clinical risk manager.

Protected mealtimes became a priority rather than other non-urgent nursing activities, releasing staff to provide support and assistance. Patients were assessed on admission for the level of assistance needed at mealtime and assigned a coloured tray. The coloured trays became an easy visual for staff and volunteers to provide the right assistance by the most appropriately skilled person.

## Results

There have been no complaints regarding lack of mealtime assistance since the beginning of the trial in the medical unit. The trial identified that food wastage occurred when ward staff did not update the patient management system.

Run chart – food wastage

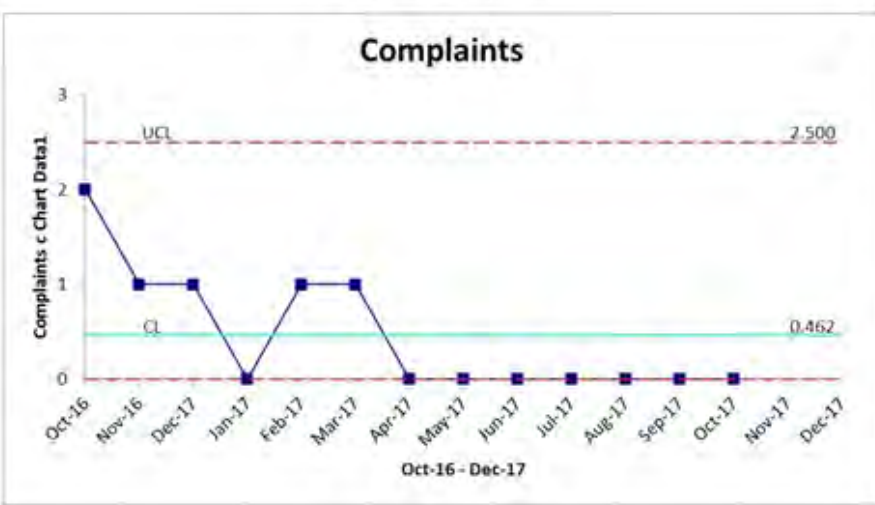


In the first week, there were two untouched meals on consecutive days, both by the same patient and for the same reason, preparation for procedure. The patient was on a blue tray, and fasting had not been entered in the interventions and brief advice (IBA) system.

In the second week, three meals were returned untouched. The two patients on the 3/5 were on lime-coloured trays. One patient was not hungry and did not need assistance, and the other should have been on a blue tray and was not assisted. On the 5/5, the patient was fasting, which should have prompted an entry in the IBA system.

In the 17th week, there were no untouched meals returned. The catering staff informed the authors anecdotally that the nurses were much better at entering any changes in meals in the IBA system, which was an unplanned improvement!

Run chart – complaints



### Conclusion

The protected mealtime did not have the same impact on improving mealtime support as did the coloured trays.

### Next steps

Supported mealtime practices will be rolled out across the hospital, with the primary focus being on the provision of coloured meal trays to assist staff identify which patients require assistance with their meals.

# REDUCING MEDICATION ADMINISTRATION ERRORS AT A LOCAL MENTAL HEALTH UNIT



## Sizwile Tshuma

Clinical Nurse Consultant  
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Shellharbour Hospital, Illawarra  
Shoalhaven Local Health District,  
New South Wales

## Background

Research has indicated that medication errors contribute to unintended harm to consumers of health services.

## Problem/Aim

The mental health unit in this study has the highest rate of medication administration errors within the local health district. The aim of this quality improvement project was to reduce medication administration errors in the mental health unit by 50% within 6 months.

## Design

The project used clinical practice improvement methodology to engage staff and consumers in process mapping the medication administration process from the nurse to the point of care. Both consumers and nursing staff identified several ideas to reduce medication administration errors and to improve the experience for the consumer.

The project tested several ideas in multiple Plan-Do-Study-Act (PDSA) cycles within the mental health unit. Improvement ideas were either implemented, modified or left for a later date on the basis of cost, run chart data, mental health unit consumers and team feedback.

## Results

Ideas that were successfully implemented include:

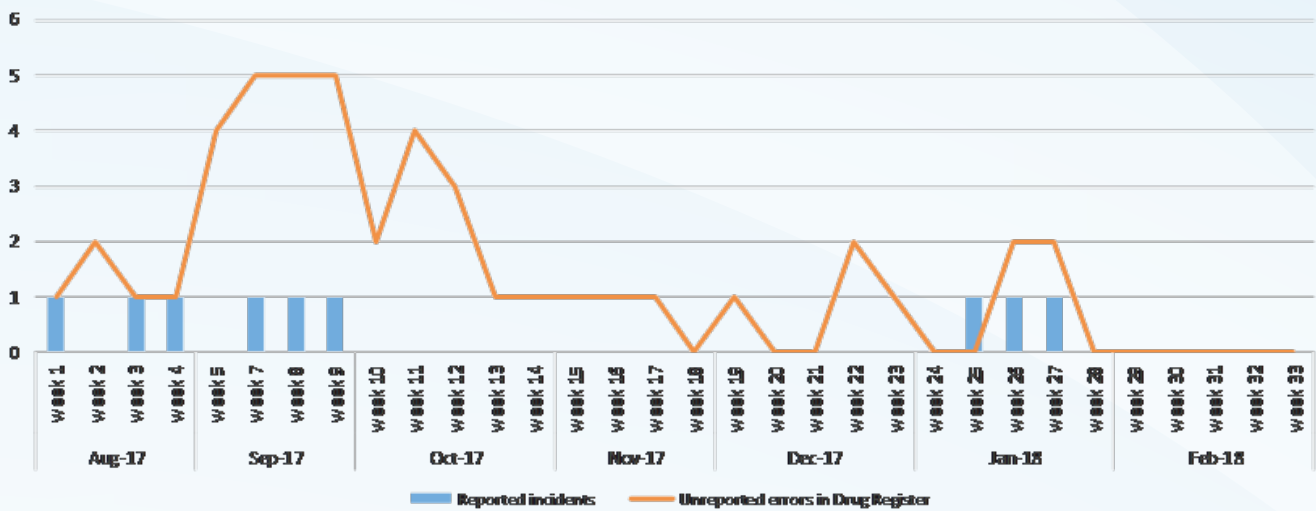
- individual folders for medication charts
- redesign of medication room (e.g., swipe access for security, decluttering, ventilation and glass panel in door for visibility/safety)
- medication administration education
- night-station medication room closure
- weekly auditing of drug register
- one-on-one coaching
- feedback from consumers at the Weekly Consumer Meeting.

Run charts demonstrate a reduction in reported and unreported medication administration errors as a result of these interventions.

The huge reductions in reported and unreported incidents in September and October 2017 were due to daily auditing of drug registers, delivery of staff education, one-on-one coaching and implementation of individual medication chart folders.



**Medication administration errors  
Aug 2017 – Feb 2018**



### Next steps

Sustainability of these improvements is yet to be established over the next few months. Further PDSA cycles will continue as the outcomes of the project become embedded in practice. Hopefully, long-term gains will improve consumer experience and adherence to their medication, and dissemination will be achieved by sharing lessons learnt with other mental health units.

# PAST HISTORY MATTERS: IMPROVING COMPLETION OF THE MENTAL HEALTH PAST HISTORY FORM



## Genevieve Watt

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Local Health District, New  
South Wales

## Background

One of the domains of the Scottish Patient Safety Programme is the need for infrastructure that drives effective risk assessment and safety planning. Part of this is ensuring that standardised formats are in place for summarising risk history, current risk assessment and safety plans that take account of specific needs of patients.

The Ministry of Health (MOH) policy directive Mental health clinical documentation requires that all public mental health services use standardised forms to document care. The past history (PH) form aims to enhance communication and coordination between healthcare teams and consumers from admission onwards to ensure that consumers receive high-quality care that is holistic and safe and that addresses their needs. Therefore, PH information assists with formulation of the current consumer presentation, including risk factors, and provides crucial information in providing appropriate care, and lack of standardised PH documentation has the potential to negatively influence consumers' health outcomes. In summary, this formulation provides an understanding that becomes the foundation upon which treatment is based and provides a written record for communication with others. (1)

Research has shown the importance of standardising electronic medical record (eMR) client information that is collected over time. (2) In addition, multiple reports and methods have been issued to monitor completion rates of the PH form, and a new eMR PH report has been developed to improve reporting, monitoring and appropriate action.

## Problem /Aim

The Sydney Local Health District (SLHD) Mental Health Service (MHS) has 850 full-time-equivalent staff working across five community centres and three hospitals, and completes approximately 400 inpatient and 400 community assessments each month.

In 2016, the MHS implemented the state-based eMR suite of clinical documents. The mental health paper assessment forms were replaced with two electronic forms to make up the comprehensive assessment—a current assessment form and a PH form. Staff were not familiar with conceptual and procedural requirements in moving to this modified format (e.g., when and how did the PH fit into the overall assessment?). Initially, the PH information was very briefly documented in the eMR current assessment form, and an audit completed in 2016 showed poor comprehensive completion of PH information in the current assessment.

A staff eMR survey conducted in 2017 highlighted the difficulties staff were experiencing to find and complete key information/documentation in the eMR, such as risk assessment information. They found the process of navigating the various functionalities in the eMR difficult, tedious and not streamlined, with duplication of the same information in various places. Evidence shows that, for technology to be used effectively and as intended, end users must find it easy to use and must perceive that the technology will improve efficiency. The survey asked the clinicians to rate their level of skill and knowledge using the eMR PH. More than 30% of staff rated it as unsatisfactory/unsure. The staff survey highlighted the need to explore

ways to increase clinician completion of the PH form, and to increase the clinical utility of having a consolidated summary of relevant historical information and risk factors.

In addition, an audit in early 2017 indicated that PH form completion rates of the MHS were 29% and that, over the past 24 months, four serious incidents had occurred. Documentation was identified as a factor requiring improvement.

The MHS had no standardised process to document PH information. Therefore, this quality improvement project was part of an overarching project to ensure that the MHS embedded the use of all the new electronic clinical documentation into clinical practice (and policy). The PH form has a specific focus in that it is a living document in the eMR that accrues longitudinal information—there is only ever one history document for each consumer of the service.

This project identified multiple issues pertaining to poor completion of the PH form, such as:

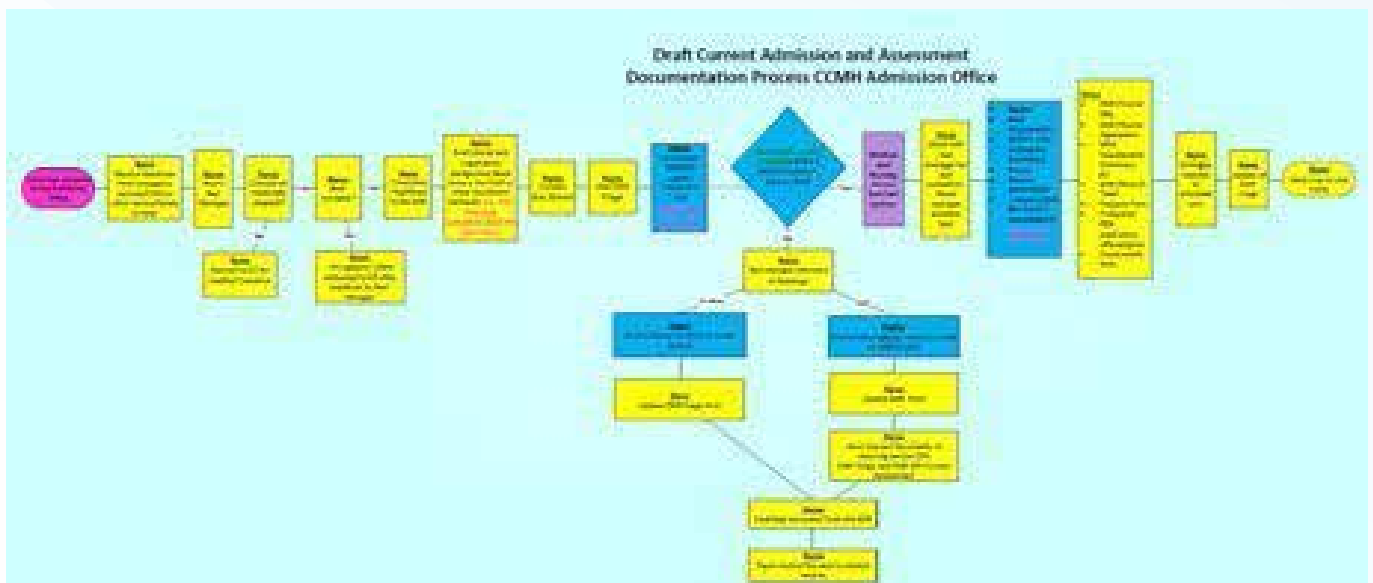
- Information was incomplete and non-standardised.
- The consumer was required to repeat PH information at each admission.
- Staff lacked understanding on how to find and use a living eMR form.
- There were delays in communication and omission of important information to inform care.
- Clinical managers were unable to effectively monitor PH form completion.
- The trauma-informed care (TIC) model was not being used effectively. The PH form is used for trauma screening. In this model, recent and past histories of trauma are identified and these experiences are acknowledged.

- There was lack of information at assessment in areas such as past suicidal behaviour, medical history, psychosocial factors, family history, forensic history and substance use. These factors are crucial for evaluating risk and providing the best treatment options.

This project aimed to increase the completion rate of the mental health PH form to 60% for all SLHD mental health admitted consumers within 6 months.

**Measures**

A variety of audits were completed to measure completion of the PH forms within the service. A documentation audit conducted at the commencement of the project in May 2017 indicated that 29% of admitted MHS consumers had a completed PH form. The same audit was conducted again in November 2017 to compare the results after 6 months of targeted interventions.



An eMR survey was conducted in 2017 to survey clinicians on their level of skill and knowledge using the eMR PH form. The survey results were used to guide staff training and education needs.

## Design

Flowcharts were developed to identify patient flow, roles and responsibilities during the assessment process. Clinical documentation and current procedures through the admission process were mapped, and a new process of documenting PH was established and was incorporated into policy. It was determined that improving compliance with this form would allow healthcare staff to identify issues early and reduce the risk of harm. This required a change in work culture and removing other internal barriers to compliance.

A brainstorming meeting was held with a multidisciplinary team of advanced trainee doctors, the director of mental health, clinical and facility directors, eMR managers and nurse managers. This involved staff from both community and inpatient settings. This brainstorming activity helped identify barriers to completion of the PH form, and an affinity diagram and a cause-and-effect diagram were developed. The main barriers were that staff were not aware of the new PH form and how to incorporate it into the assessment process. The affinity diagram identified the main issues as:

- clinical guidelines, procedures and policy
- documentation/assessment requirements
- technology/system and reporting limitations
- auditing/monitoring
- training/education
- resources
- communication.

Other meetings were held to work out Plan-Do-Study-Act (PDSA)



cycles to address the main barriers identified by using the quality tools mentioned above.

Information sessions were held for clinical staff to educate them on how to optimise the eMR to document PH and to provide an overview on assessment requirements and TIC principles.

The eMR training provided to MHS staff was reviewed to ensure that it captured the unique completion requirements of the PH form in the eMR. The review required a change in the eMR training checklist, quick reference guides and face-to-face training.

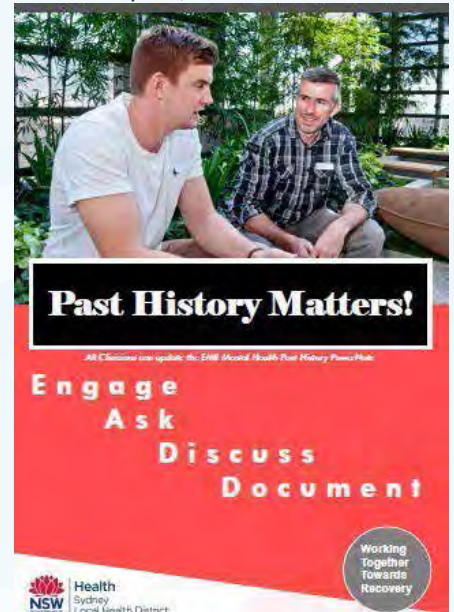
Other MHS divisions were consulted to benchmark and explore solution options.

The following interventions were introduced:

- Changes to the eMR have been made to improve use and understanding of a 'living document'.
- Posters have been developed and posted in clinic rooms to encourage staff to complete the form in a timely manner.
- Information has been placed on the intranet to provide staff with specific PH resources.
- User guides and policies have been updated to help staff better

understand how to record clinical documentation in the eMR.

- Initially, medical staff were primarily responsible for completing the PH form in hospital, but this has



been changed to include all clinical staff.

- Weekly feedback is provided to clinical teams to enforce the new documentation process and identify gaps in information collection.
- Progress reports have been generated in the community to identify trends in the number of PH forms completed.
- The project is strongly linked to the TIC initiative, which is dependent on PH information collection to provide best treatment options.
- The trialling of the PH form is being reviewed in multidisciplinary team meetings.

## Results

A variety of audits at the end of 2016 highlighted that the eMR PH form was not being completed. A 2016 audit of the current assessment form highlighted that 86% of current assessments included PH

information. Only 33% of these had comprehensive PH information documented. These results informed the need for a targeted project to improve comprehensive assessment documentation.

A documentation audit conducted at the commencement of the project in May 2017 indicated that 29% of all admitted consumers had a completed PH form; the same audit conducted in November 2017 indicated that 56% of all admitted consumers had a completed PH form. This was 4% short of the project target of 60%.



The project identified other issues related to the eMR system usability. A staff survey in 2017 highlighted difficulties in finding and completing key documentation in the eMR, such as the risk assessment. The survey asked the clinicians to rate their level of skill and knowledge using the eMR PH form, and more than 30% of staff rated it as unsatisfactory.

### Conclusion

The November 2017 audit indicated that 56% of all MHS admitted consumers had a completed PH form. The project fell short by 4% of achieving its target aim of 60%.

This project improved PH clinical documentation by providing staff education, updating training materials, implementing new system processes and providing progress reports on the rate of PH documentation compliance

on a regular basis. Procedure and policies have been developed to guide clinicians in the completion and use of the form, and major gaps identified in the form usability and reporting have been elevated to the major MHS advisory groups and MOH to address the issues. Local system reporting solutions are also underway and the local district information technology (IT) service has developed a report that is currently undergoing testing; once this is available it will help sustain the reporting that is required to monitor completion. The service is also trialling review of the PH form in multidisciplinary team meetings as another way to review the PH information.

This project is linked to the TIC project to ensure that all clients have a comprehensive PH obtained to determine clinical care pathways and improve treatment options.

There is evidence that, when appropriately used, structured document templates have the potential to improve the completeness, structure and content of documentation. Adequate organisational support and commitment, along with policy guidance, and training for the clinicians in both completing and reviewing PH information is essential. Another potential benefit of using an eMR standardised form is the ability to analyse data to inform, communicate

and prioritise decisions on all aspects of assessment.

### Next steps

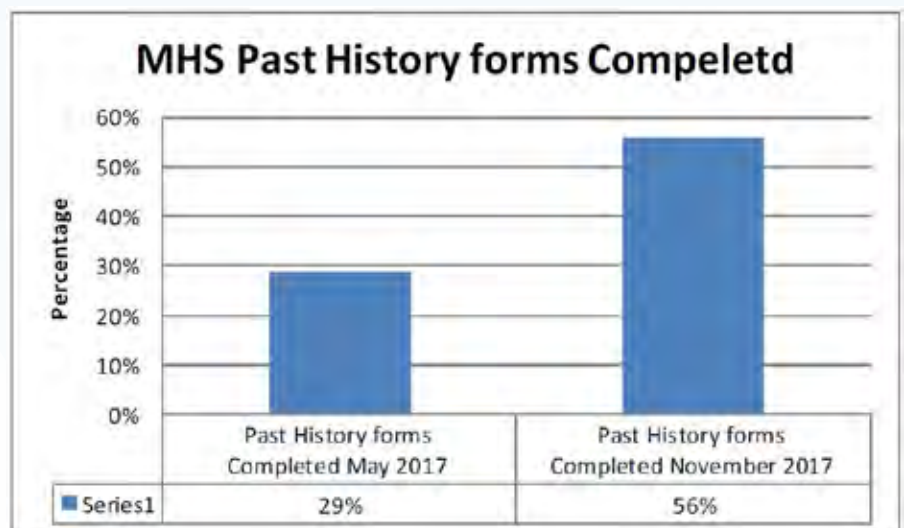
Improvements realised by this project may be continued by:

- further embedding the impact of the eMR change into the education process of clinical staff to ensure that it is standard work practice
- working with the MOH to improve the eMR standardised documentation and PH reporting
- continuing to work with the TIC Committee to promote completion of the PH information
- continuing to engage peer workers and carers to promote the collection of PH information
- finalising testing of the SLHD PH form report and reporting on PH completion monthly
- benchmarking PH compliance with other MHS divisions.

In addition, a unit is trialling the review of the PH form in multidisciplinary team meetings. Feedback will be received in December 2017.

### References

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# REVIEW PROCESS OF ENTERAL FEEDING BLENDED DIET TO PATIENTS WITH SWALLOWING DIFFICULTIES: QUALITY IMPROVEMENT IN BLENDED DIET VISCOSITY AND FEEDING PUMP EFFICIENCY



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Dietitian In Charge

Hong Kong Baptist Hospital,  
Hong Kong

## Background

Patients suffering from swallowing difficulties rely on enteral feeding as the main source of nutritional support. The use of sterile, ready-to-hang complete-nutrition diets is considered the gold standard for patients requiring enteral nutrition in the hospital. However, there was a trend of feeding household food and fluids blended to a consistency that enabled administration via an enteral feeding device. Patients reported benefits from changing to this method of feeding, including reduced diarrhoea, bloating and abdominal distension. There is a need for all stakeholders to support and maintain safe practice when enteral feeding a blended diet becomes the chosen method of feeding.

## Problem/Aim

There were 2,903 orders for blended diets from the medical wards and intensive care unit (ICU) at the Hong Kong Baptist Hospital in 2017. There were 156 verbal complaints received by catering staff regarding the inconsistent texture of blended diets. No proper viscometer was available in the kitchen to measure and monitor the viscosity of blended diets. Catering staff were confused about how to fulfil nurses' requests regarding texture fit for enteral feeding. Dietitians specifying ingredients and formulas for preparing blended diets did not realise that the water content of real food varies. Nurses administered

the blended diets to patients at the bedside by using a syringe or gravity system, and experienced difficulty in delivering the blended diets at consistent flow rates.

The aim of this project was to standardise the blended diet ingredients, formula and viscosity to suit enteral feeding, as well as upgrade the enteral feeding pump for consistent flow rate, high accuracy and efficiency. This project also aimed to improve the communication among nurses, dietitians and catering staff with clear preparation instructions, specific ingredient information, measurable viscosity, and accurate flow rate and volume of blended diet served to patients.

## Measures

“Measurement Process and Outcome (Quality and Quantity Data)

The Stakeholders' experience was collected as a quality measure. This included the catering staff and showed that there was confusion on how to prepare blended diet with the proper texture. The survey also showed that frontline nurse found it difficult to feed blended diets to patients successfully through the enteral tubes, particularly if the foods were too viscous to easily go down the tube. Further, that the dietitians were confused on how to give clear instructions to the catering staff relating to the food texture in order to prepare the blended diets.

The frequency of verbal complaints from nurses relating to:

- consistency of blended diet viscosity, and
- the time spent on enteral blended diet feeding

These two issues were collected as quality measures.”

## Design

A team approach was applied in this project, including the chief executive officer, general manager, nursing officer, advanced practice nurse, catering staff, quality and safety manager, and dietitians. The problem was reported to the Nutrition Management Advisory Committee with regard to the proper way to deliver food and nutrients to patients safely. Suggestions were collected, and the project team prioritised the most important process required to change for improvement.

Several comments were made and suggestions listed, followed by a sequence of tests in three Plan-Do-Study-Act (PDSA) cycles.

Changes were made under supervision of the project team including:

- standardisation of food ingredients
- use of a proper viscometer to monitor blended diet consistency
- an upgrade to the enteral feeding pump.

## Results

Nursing time spent on enteral feeding of blended diet was reduced by 77.8%. Viscosity of blended diets was controlled to 4–8 dPa/s to suit enteral feeding. Accuracy of feeding flow rate and volume fed to patients was increased by  $\pm 5\%$ . Stakeholder satisfaction increased and fewer verbal complaints were received.

Two viscometers are shown for comparison.

Modern Viscometer approved for purchase



The old viscometer which measured the time fluid took to travel the length of the chamber.



## Conclusion

The project team was able to identify specific process areas that required change. Intervention with three PDSA cycles tested and adopted the suggestions collected by the Nutrition Management Advisory Committee. The satisfaction outcome achieved demonstrated that enteral feeding of blended diet can be performed safely and efficiently.

## Next steps

Despite this project demonstrating improvements in the consistency and efficiency of enteral feeding of blended diet, the participation of patients and family members was insufficient. They will be invited in the next PDSA cycle to share further experiences.

As the nurse turnover rate was high, continual staff training is required to maintain good service quality level.

The improvements have been sustained and training provided in all medical and ICU wards. The PDSA cycles continue and nurse satisfaction will be reviewed. It is hoped that the improvements will provide alternative enteral nutrition support and fulfil the patients' nutritional needs, especially those experiencing discomfort after being fed commercial products. The team appreciated establishing close communications among dietitians, nurses, patients, family members and catering staff to deliver enteral blended diets to patients.

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