The ACHS Improvement Academy

Patient Safety Lead Program and Quality Improvement Lead Program

Project Summaries 2016-2017

September 2017

Patient Safety Lead Program and
Quality Improvement Lead Program
Project Summaries 2016-2017

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Foreword

The ACHS is an independent, not for profit organisation dedicated to improving the quality of health care as an approved provider of accreditation to a range of Australian and overseas healthcare providers. In addition to accreditation services ACHS also provides comparative performance data through its clinical indicator program and in 2016 launched the Improvement Academy (the Academy).

ACHS is constantly striving to meet best practice in all its areas of endeavour and to that end it has a number of new initiatives in addition to the Academy including:

- short notice surveys
- single approach to achieving dual accreditation
- the Exemplar Award Program
- and a revised Constitution

By introducing the new Academy, ACHS took the opportunity to redevelop its education offerings to both the Australian and international members. Ms Bernie Harrison, the inaugural Director of the Academy, was brought into the organisation to develop training programs to meet international best practice in the field of quality and safety.

The vision behind the Academy is to build the capability of frontline clinical and executive teams to best meet the challenges of health care provision in the 21st century. The goal is to increase the alignment of continuous improvement's connection with accreditation and benchmarking through clinical indicators, to build a whole-of-quality system for health services.

The flagship product of the Academy is its two lead programs, the Patient Safety Lead Program (PSL) and the Quality Improvement Lead (QIL) Program. This booklet provides a summary of some of the projects that were undertaken by Program participants. We are very proud of their achievements and can measure their success in the number of patients and consumers who have benefitted from their hard work. I commend this summary of projects to you and would encourage you to share widely across the healthcare system.

Dr Christine Dennis
Chief Executive Officer, ACHS

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 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.

We note that it is the first time in Australia that healthcare clinicians and managers have been able to access this type of work-based experiential training without having to head overseas. The advantage of this is reduced cost in terms of time and money, in addition to 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 Academy 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: improving team work in the emergency department, reducing falls in a medical ward, improving medication safety, improving pain management following fractures, closing the loop for families following RCA through improving linkages to open disclosure, improving assessment processes for residential detoxification, improving emergency call processes, improving the reliability of follow-up of test results, connecting patient-centred care to patient safety goals and improving supportive cancer care.

Publication of this booklet has a two-fold 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 Academy.

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.

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 - Inspeiring Improvement: Building Capability to improve safety. Event Report, August 2014

Patient Safety Lead Program

Project Summaries

"*The things that I personally got out of this program was the different ways of approaching the tasks. Before I would go back to the health centres and facilitate it, but through the brainstorming, I came up with a lot more clear information, and came to solutions much quicker. I am really looking forward to putting into practice the process I learnt from the course.*"

Robyn Dixon, Health Governance Manager
Garrison Health Services, Joint Health Command, Defence Australia

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"*I loved every moment of it. I was practically able to apply it, and put actions in place. It was a challenge to be a Team Leader, but in the future I would have a closer look at what roles they (staff) are taking on, and how this is going to impact on delivering a quality service.*"

Kara Finnimore, CNC
Patient Safety, Sunshine Coast Hospital and Health Service

"*The program was so much more than I thought it would be. It has really opened my eyes as to what is possible- and how to achieve it.*"

Sue Hazenberg, Patient Safety and Quality Improvement Service
Dept of Health, Queensland Government

About the Patient Safety Lead Training 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 (RCA), 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 emersion 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 in Sydney on 24 March, 2017

Patient Safety Lead graduation in Melbourne on 5 May, 2017

Governance and review processes around medical emergency calls in the paediatric ward: a description of current practices and recommendations for improvement

Ms Kara Finnimore | Clinical Nurse Consultant - Patient Safety
Sunshine Coast Hospital and Health Service

Background

Annually more than 150 medical emergency calls are made for paediatric patients being cared for in our paediatric inpatient unit, based on the Sunshine Coast in Queensland. The Health Service is rapidly expanding and the paediatric inpatient services are provided for across two campuses. A national approach for recognising and responding to clinical deterioration is outlined in the Australian National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration. The consensus statement outlines essential elements for ensuring governance processes are in place for evaluating, auditing and providing feedback in regards to how clinical deterioration is managed and improved.

Problem / Aim Statement

The medical emergency calls in our organisation consist of a two-tiered approach whereby concerns regarding a patient's clinical status can be escalated and result in an appropriate medical emergency response. This approach consists of either a pre-call or a full "code blue" response. There are established practices in place to activate response teams, to document events and to review events. Audit data, health record information, clinical incident data and anecdotal feedback however, suggests that there is significant variation in the quality of documentation, timeliness and quality of reviews, identification and action on areas for improvement and feedback to clinical staff. The aim of this project is to improve the review, identification, management and tracking

Left to right: Clinical Nurse Consultant Safety Improvement & Support – Kara Finnimore, Nurse Unit Manager Paediatric ward – Anne-Maree Holmes, Paediatric Consultant – Dr Clare Thomas, CN Paediatrics and Code Blue Portfolio – Roni Cole, Paediatric Clinical Coach – Jane Horsfall

of improvements regarding medical emergency calls and the feedback to clinicians.

Measurement Processes

Quality improvement methodology was utilised in the data collection and analysis phases to ascertain the baseline practices and evidence available for analysis; this included retrospective case notes and audit documentation reviews and also staff focus groups and family surveys. Strategies used also included process mapping, multi-voting prioritisation, and the use of a 'Pareto' chart to ascertain key issues then determine local actions to be implemented as part of Plan, Do, Study, Act (PDSA) cycles.

Design / Strategy

Suggestions that arose from the diagnostic phase were then considered for implementation in the PDSA cycles and included clear team leader allocation, role allocation, completion of audit strategies and feedback mechanisms. The focus for all actions was to ensure that these were locally generated, easily implemented, and easy to observe with a team-based approach.

Conclusion

The percentage of audits completed post calls, follow up of actions and feedback to staff is anticipated to significantly improve to near 100% by June 2017, with the introduction of a cluster of PDSA cycles in April 2017 and also organisation-wide improvements such as an online audit process.

Improving Gastrostomy Management

Tracy Foster | Quality Manager
Balmain Hospital - Sydney Local Health District

Background and Problem

Gastrostomy tubes and devices are a means to providing long term nutrition. As patients are living longer with chronic conditions, the use of gastrostomy tubes will increase especially in an aged care/rehabilitation setting. This was found to be the case with the number of patients being transferred to an aged care/rehabilitation facility increasing. There were also different types of gastrostomy tubes being inserted to provide medium to long-term nutrition support to patients. A medical record audit indicated a significant incidence of tube complications.

Aim Statement

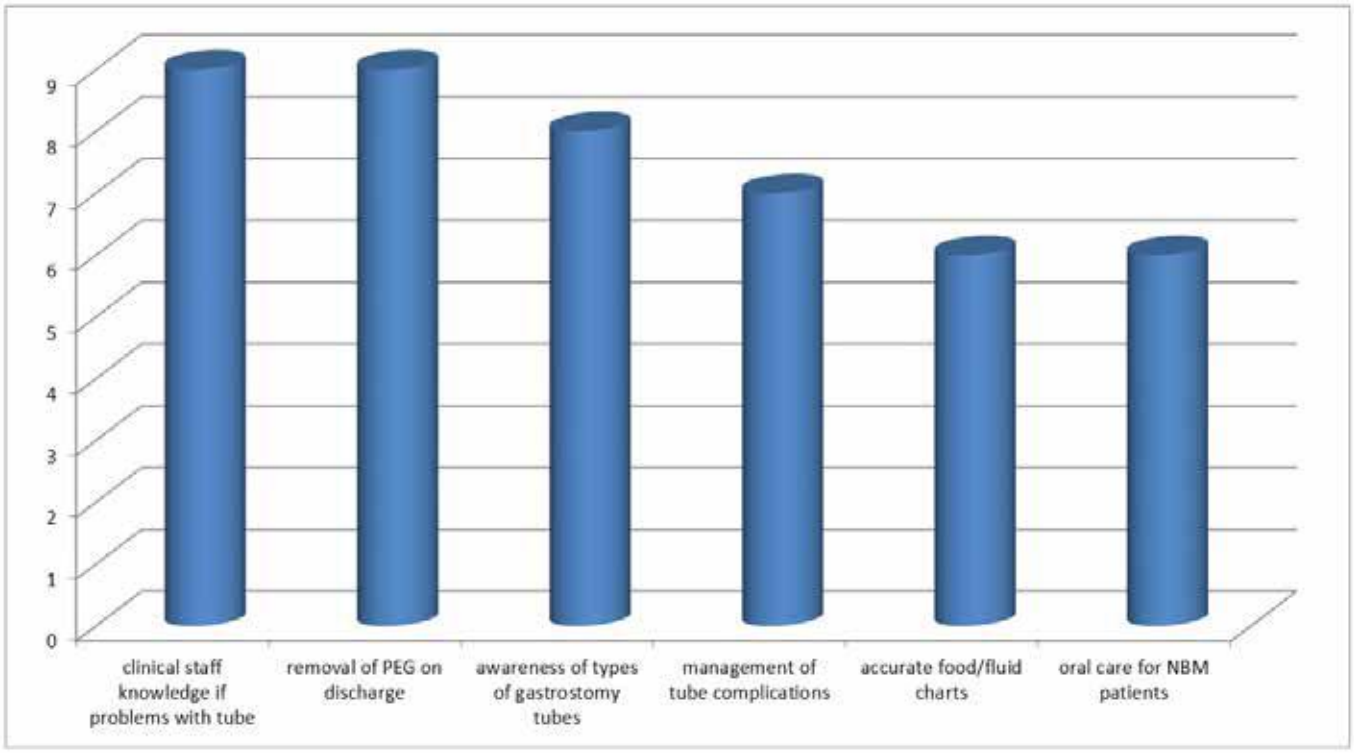
The aim of this project was to decrease the incidence of gastrostomy complications in patients by 50% within a six month time period (December 2016 – May 2017).

Measurement and outcome

An audit tool based on the ACI Gastrostomy Guidelines was developed to collect quantitative data in relation to best practice gastrostomy care. A retrospective medical record audit was completed (n=4). Baseline results indicated a significant incidence of complications (25% of records audited indicated a blocked tube and 50% indicated a site infection). There was also evidence of limited documentation relating to standard tube care (tube rotation, distance of external flange to the skin etc). A brainstorming session, including both weighted and multi-voting, was held with a multidisciplinary group of clinicians to identify and prioritise local issues relating to gastrostomy care.

Design and strategy

Interventions included a multidisciplinary education session, changes to the handover process and enrolment of the ACI Gastrostomy Credentialing course. The education session focus was to increase the knowledge and skill base of clinical staff on site in relation to gastrostomy tube management. The education was facilitated by experts in gastrostomy management from a tertiary facility. The inclusion of



Pareto Chart

the ‘Post Operative Gastrostomy Tube’ form in the handover process was to ensure information relating to the gastrostomy tube (insertion date, tube size, type etc) was available to all staff who were providing ongoing clinical care. Credentialing both nursing and nutrition and dietetics staff would ensure ongoing local resources for tube management on site.

Conclusion

There have been no ‘Post Operative Gastrostomy Tube’ forms included in the handover process for the four patients transferred with a gastrostomy tube since December 2016. It is unclear whether this is due to the form itself not having been completed on insertion or whether the form has not been copied and included in the handover. The education session was well received with good attendance across disciplines. A total of 68% of clinicians that attended completed an evaluation form, all of which contained positive feedback. The evaluation forms completed indicated that the staff found the information about tube types and tube management the most useful. Due to both changes in a number of the project team staff and changes to the patient population (contributing to a small patient cohort) the interventions have not been formally evaluated.

Next Steps

A repeat medical record audit is required to determine whether there have been improvements made in the documentation of tube care and complication rates. A handover will be provided to the new incumbents of key positions once appointed.

Tracy Foster

Review of VHIMS Clinical Incident data Royal Dental Hospital of Melbourne 2011-2016

A/Prof Werner Bischof | Clinical Advisor Specialist Care
Royal Dental Hospital of Melbourne

Problem / Aims Statement

Currently the Royal Dental Hospital of Melbourne utilises the VHIMS process for the collection, classification and notification of clinical incidents. Each individual incident is managed according to departmental requirements. However, this data provides an opportunity to review more broadly categories of clinical incidents to inform patient safety improvement across the hospital. The aim of this project is to review the VHIMS clinical incident data from 2011-2016.

Background

Dentistry in many aspects of treatment is a surgical discipline. As with other health care areas there is the potential for patient safety incidents. Patient safety research in dentistry lags behind that medicine and it has been suggested that this is due to a perceived reduced risk of harm, geographic dispersal of practices and perceived commercial and reputational risk in reporting patient safety incidents. There have been few articles that focus on patient safety reporting and/or interventions in an outpatients public dental facility and none reflecting the Australia/New Zealand context.

The Royal Dental Hospital of Melbourne (RDHM) provides emergency, general and specialist dental care primarily in an outpatients setting, however, also under sedation and general anaesthetic. The RDHM is a teaching hospital with trainees in all divisions of the profession of dentistry. In developing a Patient Safety research and evaluation program within the RDHM it was recognised that this may be best informed by a review of the VHIMS process as a form of Incident Recording System.

Measurement Process

Data was retrieved from VHIMS under the headings of Responsible Department, Overall Severity, Details, Primary Incident Type And Investigation/ Outcomes. The data was presented as prevalence and frequency findings.

Results

A/Prof Werner Bischof

Over the six years, 1754 clinical incidents were reported (yearly range 272 - 339). Of the 1469 incidents were from clinical units or department; 230 from clinical support areas and 55 from patient support areas.

The five most prevalent units were Oral and Maxillo-facial surgery, General Dentistry, Teaching clinic and Anaesthetic and Day Surgery.

The severity rating for the 1469 clinical units entries were Moderate 8.2%, Mild 63.9% and No Harm/Near miss 33.6%.

The most common primary incident categories were Adverse Outcome - Harm 44.8% and Clinical care 31.0%.

The most prevalent subgroup of Adverse Outcome - Harm was physical injury (52.0%) with the most common injury being nerve damage.

Conclusions

The review of this data documents the range of P. S. Incidents (PSI) in a major public dental and teaching hospital in Australia. The data indicates the prevalence of adverse events relating to dental care and the most frequent incident type and clinical unit. This is the first report of PSI of this kind in Australia/ New Zealand and will contribute to the international patient safety research dentistry.

Plans for next steps

The VHIMS system provides an opportunity to collect and evaluate patient safety incidents and adverse events in the RDHM. Some further education may be considered to encourage the better use of the system. The results of this review will allow for a more detailed clinical audit to identify the potential for prevention or reduction of PSI within each clinical area of the hospital.

Implementing the Queensland Adult Deterioration Detection System into public sector hospitals in Queensland

Mr Marcus Schmidt | Principal Project Officer

Patient Safety and Quality Improvement Service, Department of Health, Queensland Health

Background

John Lock, Deputy State Coroner, Queensland recommended on 28 August 2015, Queensland Health provide sufficient funding to:

- conduct research into the validation of the Queensland Adult Deterioration Detection System (Q-ADDS)
- conduct research to identify and address the sociocultural factors that influence compliance with existing hospital care escalation systems.

The recommendations were the result of findings of an inquest into two deaths in Queensland. In one of those deaths, it was found that had Q-ADDS been used it would have recognised a need for immediate action. Prior to the second death, staff didn't take a complete set of observations and didn't add up observation scores, making it impossible for deterioration to be noted.

There are three stages involved in this research:

- Stage 1 – the development of Q-ADDS (completed),
- Stage 2 – the validation of Q-ADDS, and research to identify and address sociocultural factors (underway),
- Stage 3 – the anticipated implementation of Q-ADDS in all public sector hospitals in Queensland (111 out of 114 hospitals are using Q-ADDS – the three remaining are the largest hospitals in Queensland).

Aim

The aim of this paper is to identify and address the needs of hospitals implementing Q-ADDS (stage 3).

Measurement Process

By identifying the most obvious and important matters impacting the implementation of Q-ADDS in hospitals (financial, socio-cultural impacts, validation, training and access to information), a questionnaire was designed.

The questionnaire was distributed throughout a hospital which had recently completed the transition to Q-ADDS. Responses to the questionnaire were received from health professionals at various levels. The majority of responses provided recommendations directly addressing needs which were perceived during the implementation as not being catered for.

Mr Marcus Schmidt

Multiple responses suggested delivering the online training material, face-to-face. This was because there was a low take-up of the online training material. Multiple responses also noted the content of the online training material was imperative to the implementation. The recommendation to provide scenarios was also popular, and there were a number of comments about disseminating information to clarify how the chart benefits patients.

Next Steps

A measure will be used to ascertain the success of the implementation at the next hospital, with adjustments made to the implementation plan for the subsequent hospitals.

Conclusion

With the planned adoption of Q-ADDS by the final three tertiary public sector hospitals in Queensland not using Q-ADDS it is hoped it will assist to develop expertise, the recognition of the importance of accurately completing the chart as well as facilitating further development through feedback to hopefully encourage private sector health entities to consider using Q-ADDS .

Escalation of Care in WAS

Fiona Margrie | Nurse / Midwife | Manager - Safety, Quality and Risk
Women's and Children's Hospital

Background

Women's Assessment Service (WAS) is a 24 hour/7 day a week service that provides both planned and unplanned assessment of obstetrics and gynaecological patients. It is staffed with midwifery staff that are predominately dual registration and on weekdays, medical staff are rostered to the unit. After hours and weekends, the unit has reduced medical support with medical staff not being rostered specifically to the unit.

Problems / Aims Statement

Escalation of care of a deteriorating patient was identified as a contributing factor in a RCA. Following the RCA, Rapid Detection and Response (RDR) charts were introduced to the team however a further incident also identified escalation of care as being a problem that required attention for the WAS team. The aim of the project was to increase the escalation response (as per RDR policy) to 100% and when required, Consultant involvement within 60 minutes.

Measurement Process

An initial baseline audit identified that while the RDR charts were being utilised, the escalation response did not meet the required timeframe or response trigger. Of the cases reviewed, 46% reached an escalation trigger, however 0% had the required response activated. The average time for Consultant review was three hours and nine minutes.

It was identified that there were no consistent processes for assessment of women and communication between midwifery and medical staff. The project team recognised that a standardised process would need to be defined to be able to further identify areas for improvement. A standardised assessment form was developed with plans to implement. The form aims to address multiple concerns that were identified by the team including time medical staff are informed of the patient presentation and the assessments that have been conducted.

Left to right: Charlotte Groves – Registered Midwife, Dr Elle Knights – Registrar, Kim Parker-Gray – Midwifery Unit Manager – Women's Assessment Service (WAS), Fiona Margrie – Nurse/Midwife Manager – Safety, Quality and Risk.

Results

While the form was being developed, the team also worked on determining standardised assessment/ observation requirements per triage assessment category and standardised methods of contacting medical staff. It is planned that the Assessment form will be introduced in conjunction with the standardised assessment/observation requirement and contacting medical staff. A journey board was also introduced with the aim to identify when observation where next due, plan of care and midwifery allocation. Re-auditing identified that the journey board has been helpful for communication with medical staff with improvement of one hour and three minutes for Consultant review. The journey board has had no impact on the escalation response rate. Pain triggers appear to be the response not activated.

Once a standardised approach to assessment and communication has been implemented, the team will then begin to determine the next areas of improvements.

T-REXS: Transparency, Resilience, EXcellence & Safety - A Leadership and Cultural Change Clinical Improvement Project in a Paediatric Emergency Department

Sharon Anne McAuley | Staff Specialist
Lady Cilento Children Hospital

Problem / Aims Statement

On 14th November 2014, two tertiary children's hospitals closed and then merged to a new purpose-built hospital, The Lady Cilento Children's Hospital in Brisbane, Queensland. The aim of this 12-month quality improvement project was to establish and embed a change in safety and quality strategy across the Emergency Department (ED) and in doing so, reduce reported workplace bullying and harassment. T REXS aimed to reduce reported workplace bullying and harassment by 15% (from 34% witnessed, 24% experienced and to increase reporting of feeling respected by work colleagues by 12% (to 80%).

According to Tuckman's theory of group formation, each department would likely go through the stages of forming, storming, norming and performing.[1] The 2016 Working for Queensland Survey of 2016 identified "Bullying and harassment" as one of four areas of focus.

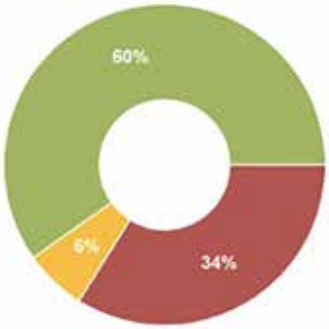
During the last 12 months have you witnessed bullying or sexual harassment in your workplace?	
Yes	34%
No	60%
Don't know	6%

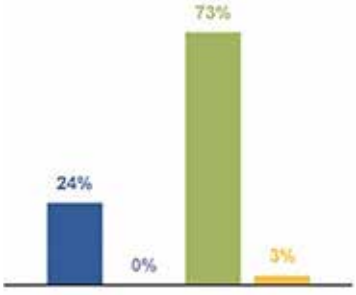
During the last 12 months, have you been subjected to any of the following in your workplace?	
Bullying	24%
Sexual Harassment	0%
No	73%
Don't Know	3%

T REXS had four streams, each focusing on small improvement projects. The true partnership (T) stream aimed to increase genuine consumer engagement. The Resilience (R) stream's remit was to increase resilience of both staff and the ED. The Excellence (EX) stream's focus was on capturing and developing innovative strategies to improve excellence to provide exemplary care. The Safety (S) stream's focus was to embed Safety 2 concepts and Children's Hospital Queensland (CHQ) values.

Measurement Process and Design

Each stream of the CPI underwent a diagnostic phase, helping them to inform the intervention strategies. Functional Resonance Analysis Method (FRAM) was used to analyse complex models. The T stream facilitated Focus groups with consumers from the Family Advisory Council members, underwent Consumer engagement training and established 'Reaching' walk-arounds: these were monthly tours of the department with a Parent representative, a Senior doctor and nurse to help understand the patient and their family's perspective and to look for ways to improve the service. A clear multi-method feedback system was developed. Results from Patient Experience surveys (online, by telephone and face-to-face) will be analysed and used to improve the service.





The Resilience stream used the comprehensive data from the Working for Queensland Survey 2016 and liaised with the organisations' executive team to support the

following changes: hot and cold debrief, resilience and debriefing training for staff, well-being training, on-site employer Assistance Programme, monthly Schwartz (reflective) meetings. A comparative analysis will be done when the Working for Queensland Survey 2017 is completed.

The Excellence team developed a R-EMIRP (a reverse-PRIME) reporting system, the PRIME system being the Queensland Health incident reporting tool. This was to encourage Safety 2 innovative thinking and to capture useful workarounds, enabling review "work as done" rather than "work as imagined". Several suggestions arose which were tested in multiple PDSA cycles in the ED. These changes were either adopted, adapted or rejected. Clinical Audit and Clinical Guideline recommendations were collated and actioned.

The Safety team produced a monthly audit of the Paediatric National Inpatient Medication Chart (P-NIMC) with rapid peer feedback. Multiple PDSA cycles occurred to help inform the focus and content of the audit and the feedback process. The 2017 Paediatric National Inpatient Medication Charts annual audit will be compared to 2016's audit-both ED and CHQ results to enable benchmarking,

The change management strategy followed Kotter's 8 steps: creating a sense of urgency, a guiding team was created, visions and strategies were established, T REXS was communicated widely in the department for buy-in, streams were empowered, short-term wins were communicated and celebrated widely, momentum was built and ultimately a new culture was established.[2]

Strategies

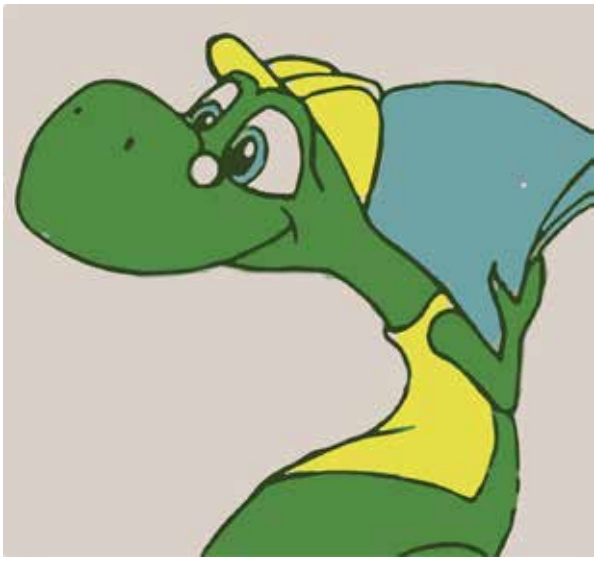
To socialise the T REXS project, a graphical representation of the T REXS project competition occurred amongst ED staff, leading to a T REXS character. A departmental competition will be held to name and create the backstory to the character. It is hoped to create a collection of outfits for a plush version of the T REXS character, by engaging ED staff to sew outfits for the T REX character. To engage consumers, a colouring-in competition will be held for the paediatric patients and their siblings, with an information leaflet explaining the concept and aims of the T REXS project to parents and carers. Posters, interdepartmental presentations and presentation at executive meetings are planned.

Results

No results regarding the reported bullying and harassment rate are available to date. A high level strategic dashboard will be created which will be aligned to our strategic goals and reviewed weekly by ED meeting. A comparison dashboard will also be created. Lessons learnt will be communicated to other departments in CHQ and also to other Emergency Departments interstate.

1. Tuckman, Bruce (1965). "Developmental sequence in small groups". Psychological Bulletin. 63 (6): 384–99. doi:10.1037/h0022100. PMID 14314073.

2. www.educational-business-articles.com/8-step-process/



T REXS - leading a cultural change

Quality Improvement Lead Program

Project Summaries

"*I got a lot out of the course - and the difference in the interstate organisations here is wonderful and being able to mix with different people find out what is going on in large health services has been valuable.*

Networking, being able to listen and engage with other people, Diagnostics – and knowing the right tools to use has given me a lot more confidence.

Also, doing a project has given me a much better understanding of the collaboration and engagement required with stakeholders, and the diagnostics involved with the process."

Bev McLaine, Kyabram – Blood Transfusions

"*I've loved it. I wanted more sessions. I came into quality without doing a course, and while all the books are great, you not expected to know how to conduct projects. The learning difference (with the Improvement Academy) was to make information presentable and with the different friends I've met – I'm really impressed.*

I would love to have more sessions. It has been really great. Totally recommend it."

Samantha Sinclair, Handovers

"*I have been a Quality Manager for two years, and prior to that a CNC for NS for 15 years, and worked there for 23 years, but as a CNC, I did a lot of quality projects and I broke every single rule. Everything valuable we have learnt has been over the nine days of the program. The thing I got most out of it was the diagnostic methods facts by far. My advice to others is: slow down, get your aim tight and invest time in this. And I really value the collaborative approach that this Improvement Academy course gave us.*"

Kylie Wright, Liverpool Hospital - Re: Falls

About the Quality Improvement Lead Training 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 emersion 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 in Sydney on 7 April, 2017

Quality Improvement Lead graduation in Melbourne on 23 June, 2017

Improving Medication Reconciliation performance within a rural health setting

Ms Melissa Ceely | Quality Manager
Bairnsdale Regional Health Service

Background / Problem

Bairnsdale Regional Health Service (BRHS) is a regional hospital with 74 inpatient beds covering medical, surgical, maternity and subacute admissions. The Emergency Department services approximately 20,500 presentations per year.

The medical model within the health service is made up of a GP admit model, and is supported by 2.5 physicians, seniors HMOs and interns. The interns are made up of a group of two who come under our own accredited training program, and five that are on a ten week rotation from a Metro hospital in Melbourne. Therefore our main frontline medical workforce come from hospitals with a ward-based pharmacist who provide medication reconciliation. We are also faced with a new medical workforce, unfamiliar with the complexities of regional health every ten weeks.

Aims / Statement

The aim of this project was to increase the compliance with medication reconciliation and to improve patient safety, ensuring (BRHS) meet National Safety and Quality Health Service Standards.

BRHS have had an on ongoing concern with meeting medication reconciliation requirements. Pharmacists spend a lot of time correcting medications upon discharge, and therefore have no time to assist with reconciliation on admission. The energy and resources needed to be shifted to the patient admission to ensure a safe level of care and effective outcomes are achieved.

Measurement process and outcome

A physician medical lead was established for the project and a meeting was held between the physician, Chief Pharmacist and myself to develop a cause and effect diagram and gap analysis. This was then presented to the key stakeholders of the Senior Emergency HMO and Medical Director. Education was given to this group on the improvement process, and stage one was agreed to with the initial aim of increasing the amount of medication reconciliation completed on admission.

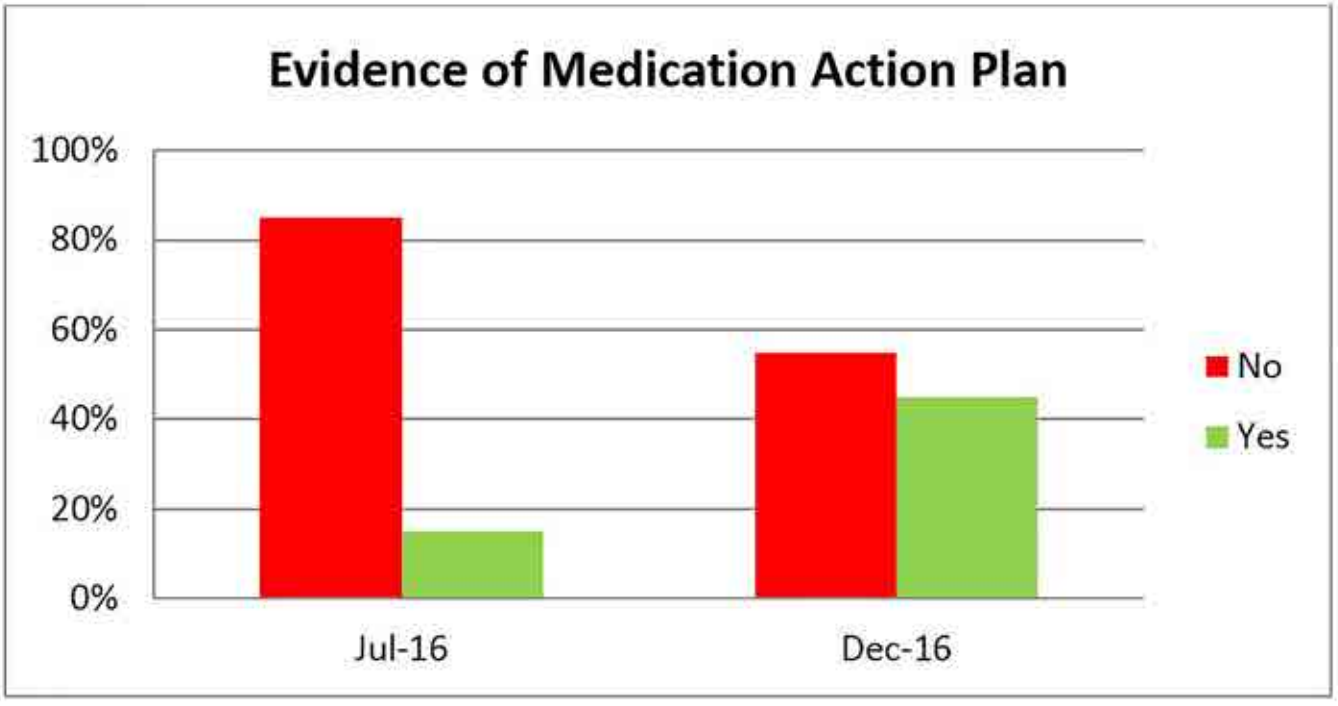


Figure 1

Design / Strategy

A brainstorming meeting was held with all interns exploring the barriers they saw to medication reconciliation and develop an affinity diagram. The agreed largest barrier was that they did not know it was their role. From this, the first intervention was developed of a clear flowchart outlining roles and responsibilities within a risk matrix.

Aggregate data of completion showed through defining clear roles in the process, the amount of reconciliation completion tripled over a six month period.

A second brainstorming meeting occurred with pharmacy staff on their issues and concerns. The affinity diagram was develop and from this a priority of the quality of reconciliation was agreed to. A model of senior medical engagement and support is being developed and currently implemented.

Left to right: Chief Pharmacist (Margie Griffiths), Melissa Ceely (Quality Manager)

Conclusion / Next steps

Throughout this process we have realised that BRHS needs to develop a model of orientation and support to our short term junior medical workforce that equip them quickly with the skills and knowledge of medication reconciliation. Through this second stage to improve the quality of reconciliation we are developing process of engagement with the senior medical workforce to ensure they create an expectation of reconciliation completion and mentoring for learning and development of the junior staff.

Improving Clinical Review through the Northern Sydney Home Nursing Service (NSHNS)/Acute Post-Acute Care (APAC) Resource Committee Redesign Project

Ms Shayne Larymore | Nurse Unit Manager / Infection Control
Northern Sydney Local Health District

Problem / Aims Statement

Reduce the delay in clinician and/or patient access for specialist advice by 30% by July 2017.

Background

APAC/NSHNS are decentralised community based nursing/allied health organisations that operate from multiple locations. APAC/NSHNS have specialist resource committees in place which are led by the relevant specialist CNC/NP or Manager as the Chair of the committee and have representatives from all sites/centres. Having these representatives at each site enables the interface between the specialist and generalist staff to enhance the knowledge capacity building within the generalist nursing to enhance their clinical practice and patient outcomes.

APAC/NSHNS Resource Committees are:

- Skin Integrity
- Chronic Disease Management
- Dementia Management
- Continence Management and Promotion
- Falls Management
- Clinical Records

Chairs of the committees have reported the following:

- The committee representatives are not seen as a resource by the clinical staff,
- Meetings are often cancelled due to lack of attendance,
- Sporadic meeting attendance,
- Lack of engagement by some representatives,
- Increased referrals to the CNCs / NP are causing delays in scheduling patient reviews. Less complex CNC referrals could be managed initially by the Resource Representative locally, enabling the CNCs to focus on more complex patients and reduce delay in a review of care.

Measurement Process and Outcome

- Delay in clinician and/or patient access for specialist advice:
  - Dementia CNC:
    - Non urgent referrals wait list of up to one month.
    - Urgent referrals next day if possible, but there can be a wait of up to one week
  - Wound CNC/NP
    - Non urgent referrals wait list of up to two weeks
    - Urgent referrals next day if possible, but there can be a wait of up to one week.
- The following surveys were conducted to support the need to redesign the Resource Representative Role to support the CNC/NP roles:
  - Recourse Meeting Chairs
  - NUMs/Managers
  - Resource Representatives
  - General Staff.
- The Cause and Effect Diagram demonstrated the results from the surveys provided the basis for the Driver Diagram.

Design: Interventions

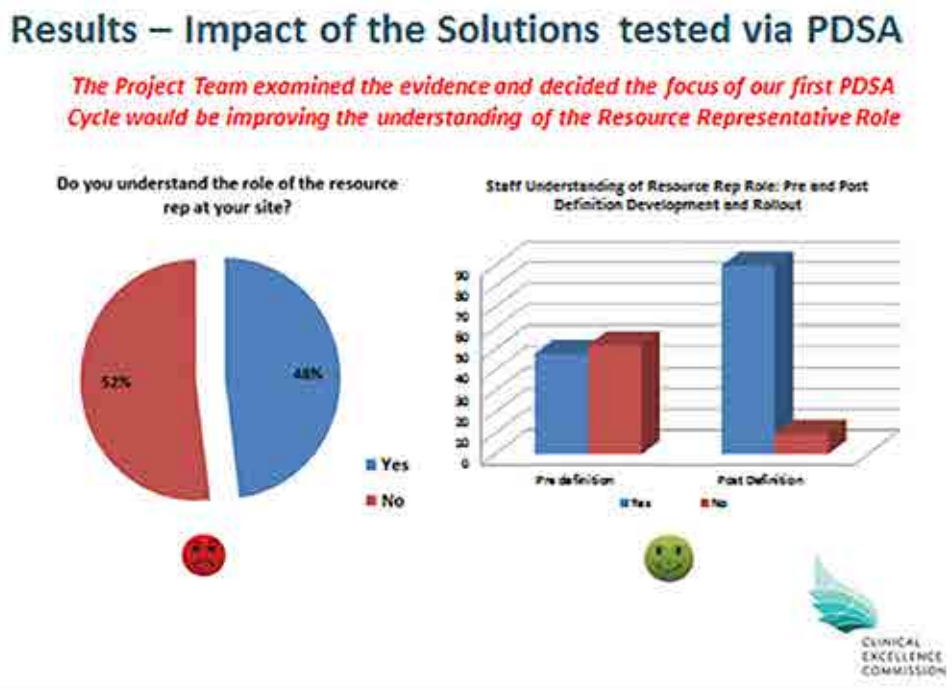
This project measures long term change, therefore, final results are unable to be measured until July 2017 when the implementation of the interventions have concluded:

- Committee Feedback / Action plan
- Resource Role Definition
- Review meeting frequency
- Mentoring Program for Resource Reps by CNCs
- Align Terms of Reference (TOR) with Definition of Resource Rep role
- Resource Committee Membership
- Poster Development Competition
- Training on how to run a meeting for Meeting Chairs.

Strategy: PDSA Cycles

Solution Priority	Name of Solution to test via a PDSA Cycle	Staff to co-ordinate PDSA	Measures: *How will you know that a change is an improvement?*
Priority 1	Development of the Resource Role Definition	Team Lead & Quality Lead	Post Implementation Survey Results – Resource Reps and Staff
Priority 2	Development of the Resource Committee Feedback Action Plan	CNCs / Meeting Chairs	Post Implementation Survey Results – Managers & Resource Reps
Priority 3	Reduce the frequency of the Resource Committee meetings	NSHNS/APAC Management Team & Meeting Chairs	Number of meetings held
Priority 4	Develop Mentoring Program CNCs Resource Reps	CNCs / Meeting Chairs	Post Implementation Survey Results – Meeting Chairs, Resource Reps, Managers and Staff

Results to Date



Next steps

- Repeat staff surveys and compare initial results.
- Measure waiting times for specialist consultation.
- Measure Resource Representative meeting attendance.
- Measure the number of meeting cancellations due to lack of attendance.
- Analyse results and report the final project evaluation to the Management Team for further action if necessary.
- Consider publishing or presenting this CPI at a relevant conference to communicate results to other community-based decentralised organisations.

Conclusions

This project will take time to complete, however initial results have demonstrated that by consulting and developing a definition for the Resource Representative role with all staff, there is increased engagement with the role and committees to date. Results from subsequent PDSA cycles will be monitored to ascertain how the redesign of the Resource Representative role will impact on the waiting times for specialist staff.

Improving Patient Wait Times

Mrs Claire Halle | National Quality Manager
Icon Cancer Care

Mrs Claire Halle

Background

When commencing or continuing a cancer treatment, it can be very distressing and frustrating for patients if they arrive on time for a scheduled appointment but then need to wait before treatment commences. Patients can be left feeling that their time is not important and that the health service providers have more important things to do than attend to their treatment, but often the patients feel powerless to comment in fear that their treatment and care will be compromised.

Minimising patient wait times is recorded in the literature and often distributed in different contexts. Various studies[1] report on the patient experience and expectations around waiting time where patients have been interviewed and results related to dissatisfaction and frustration reported. Other studies[2] explore the impact on wait times related to cancer diagnosis to first treatment where demographics, types or groups of cancers and treatment methods have been analysed to determine impact and outcome on wait times. Additional studies[3] also describe scheduling programs aimed to better manage wait times.

Aim

We have focused on the patient experience and operational elements within the day oncology treatment setting, with the aim to determine common themes and problems, implement simple methods of solution to address these themes and measure the outcomes.

Historically, patients attending the day oncology centre have had to endure varying degrees of wait times. The centre provides private patient care on an outpatient basis for the treatment of cancer care, which may include phlebotomy, pre-assessment, administration of chemotherapy or blood products and minor medical procedures. Patients have different acuity levels and require different nursing care dependent on the treatment protocols, patient health status, difficulty in vein access and side effects of the medications.

A scheduling system is used to allocate patient appointments on a daily basis, six days per week and the numbers of patients treated range from 70 to 80 per day. Nursing staff are assigned to care for a group of patients.

Patients have expressed dissatisfaction with wait times when attending treatments and it was noted that a higher portion of patients were describing a concern. Therefore, the aim of this project was to see a 25% reduction in patient waiting times in the day oncology treatment centre within six months.

Measurement Process

The team of seven staff from the day hospital analysed patient feedback received from the recent Patient Satisfaction Survey plus they interviewed a small group of current patients to determine feedback around waiting times. This information was then compared to the information that staff obtained from a brainstorming activity about the reason and cause of extended wait time. Common problems were listed together and categorised into a cause / effect diagram. A graphical display Pareto chart was then developed to determine the areas to commence our improvement efforts.

It was reassuring to learn that that the patient's feedback aligned with the key areas identified by staff. The main wait time issues were summarised into six main categories: inefficient booking system, waiting related to pathology and pharmacy, staff communication, staffing and procedure management.

Interventions

Firstly, we implemented a new electronic scheduling program that meant that patients were allocated to a chair at a specific time. Staff were integral to the design and allocation of times to

various procedures and chemotherapy protocols, as this was one of the identified reasons for backlog within the day hospital. We established set rules for patient allocations, 'add on' treatments and 'fast chair' procedures. The scheduler was visible on computer screens located in each clinical division.

Next it was then important to align the staff roster to the new scheduler to ensure that staff covered all areas at the relevant times. Staff were again engaged with this process to identify how many staff were needed at certain times of the day. Staffing levels were organised into teams to ensure that nurses were available to cover all areas. Staff were appointed to 'fast chair' procedures and to the 'add on' chair to ensure that any emergency procedures were covered without pulling staff from an already busy division.

A new Team Leader role was also introduced to nurture new leadership skills amongst staff. The role is central to care co-ordination, troubleshooting, supporting and teaching staff. The Team Leader was the communication link between all members of their team, the Clinical Nurse Consultant and the doctors discussing patient condition, workload issues and changes to patient allocations. New team 'huddles' became a regular twice daily event to ensure clear communications and planning were maintained.

To compliment the physical changes made to the operations within the day hospital, we also implemented a new education package on Patient Centred Care. This is completed by all staff and although for the majority it is a refresher, it reaffirms that patient needs are always put first and that the outcome of their experience depends on everyone's actions. The education also gave suggestions on how to tackle difficult conversations about extended wait times and how to resolve issues as they appeared.

Results

Wait times have reduced significantly. Over the period of six months, a 62% reduction has been calculated for the group of patients. The new scheduler has the capacity to generate monthly reports which can be trended and benchmarked across sites. The most recent report showed that the average wait time was 13 minutes.

Patient comments have described improved satisfaction with the reduction of wait times along with a noted difference to the work flow and environment. Patients have described the workplace as less chaotic or frenzied with smoother organisation. To compliment this staff are feeling more in control of the management of patient care in regards to ease of prioritising if adverse events occur. They state the workflow is more ordered and controlled. Clinical care support and communication have improved greatly with the introduction of the Team Leader role.

There is also an early cost saving trend evident in budget reports with less volumes of overtime being paid.

Conclusion

The reduction to wait times is evident. With equal importance, there is early evidence that patient and staff satisfaction levels have increased also. The advantage of this smaller scale, rapid cycle improvement is that it has quickly translated into tangible benefits for the patients and staff.

Due to its positive results it is expected to continue to monitor monthly reports and repeat staff and patient satisfaction surveys. The project team will continue to work with other sites to report outcomes and they have commenced work on an abstract submission.

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Improving availability of blood for planned transfusions

Mrs Bev McLaine | Manager - Quality, Experience and Safety
Kyabram District Health Service

Project Aim

Availability of blood is vital to the health, safety and wellbeing of patients presenting for planned transfusions. The project goal was to ensure timely transfusions as ordered through communication and consultation with all stakeholders following 7 incidents (10%) where blood was unavailable for the transfusion over a six month period.

Stored on site for emergencies, blood is ordered and delivered from the central Pathology Service, at a distance of approximately 100 kilometres.

There was the additional and more recent problem of patients who lived locally being sent to the Health Service for a transfusion prior to chemotherapy without adequate documentation or communication and with an assumption that blood would be available.

Kyabram District Health Service is a small rural health service with a 30 bed Acute Unit and Perioperative Services. Services also include Primary and Allied Health, Transition Care, Residential Aged Care and both an Oncology Day Unit and Renal Dialysis Unit supported by larger Regional and Metropolitan health services.

Radiology, Pathology and Pharmacy services are all contracted and the Pathology service provides blood from it's central location in Bendigo, a distance of approximately 100 kilometres.

It was apparent early in the project that consultation and participation was a critical area in the success of sustainable interventions due to the number and type of organisations and staff involved.

Measurement Process

The project team recognised that travel time was a factor and the impact on patients and the delay in treatment needed to be improved. Process mapping and affinity diagrams were used to identify areas for improvement and assisted in the development of interventions and testing through four PDSA cycles.

Changes were revised or implemented following data review and feedback from both staff and external project team members.

Intentions

Successful interventions included both new and revised documentation, improved communication systems between all stakeholders, the development of fax reminders to pathology, supporting staff education and involvement of a staff champion to assist in improved induction for new staff.

As a result of the interventions and communication with external stakeholders, run charts have continued to demonstrate the success of the interventions with availability increasing to 100% during the six month project period from 90% in the previous period. Compliance at 100% has continued to be maintained 12 months after the project began and is continually monitored by the Transfusion Nurse and Quality Manager.

There have also been noticeable improvements in patient experience and satisfaction with the transfusion process with no complaints or further concerns received from patients, carers or family members.

Process review and collaboration with all stakeholders was vital to the success of the project and improvements have facilitated improved delivery processes, an increased understanding by external agencies of a smaller rural health service's capacity and a safer care environment for patients.

Conclusions

While we were unable to find an organisation with similar concerns, we can share the benefits and positive outcomes for patient safety through collaboration and communication between health services and providers.

The organisation has commenced an improvement project focused on orthopaedic surgery and management and the demonstrated improvements of this project will continue to have an impact on successful interventions with the knowledge that blood supplies will be available as ordered.

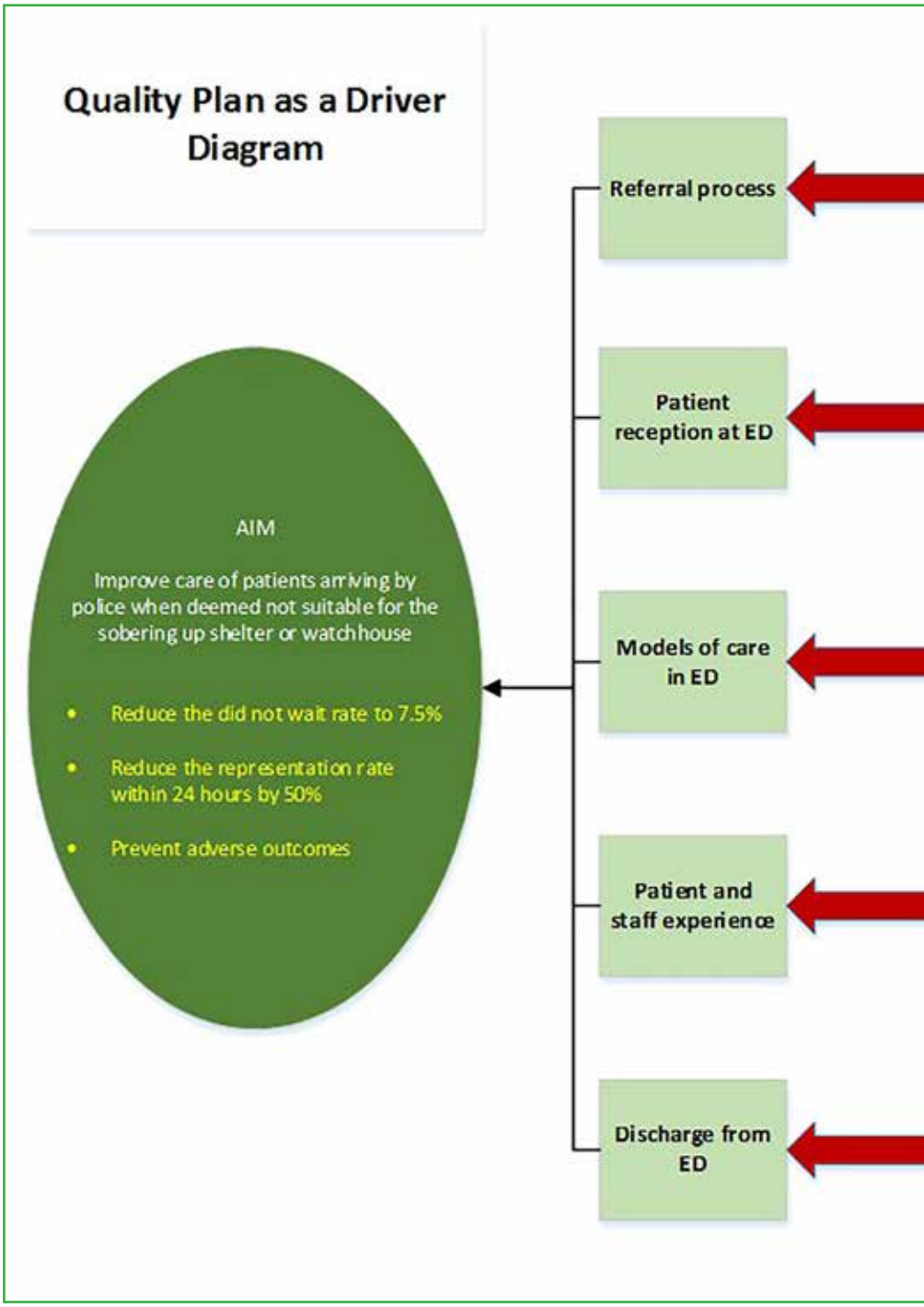
A diagnostic journey into the clinical risk for patients attending the Emergency Department at Royal Darwin Hospital when deemed not suitable to be taken to the Police Watch House or Sobering up Shelter

Dr Sandra Brownlea | Emergency Physician
Royal Darwin Hospital

Aim

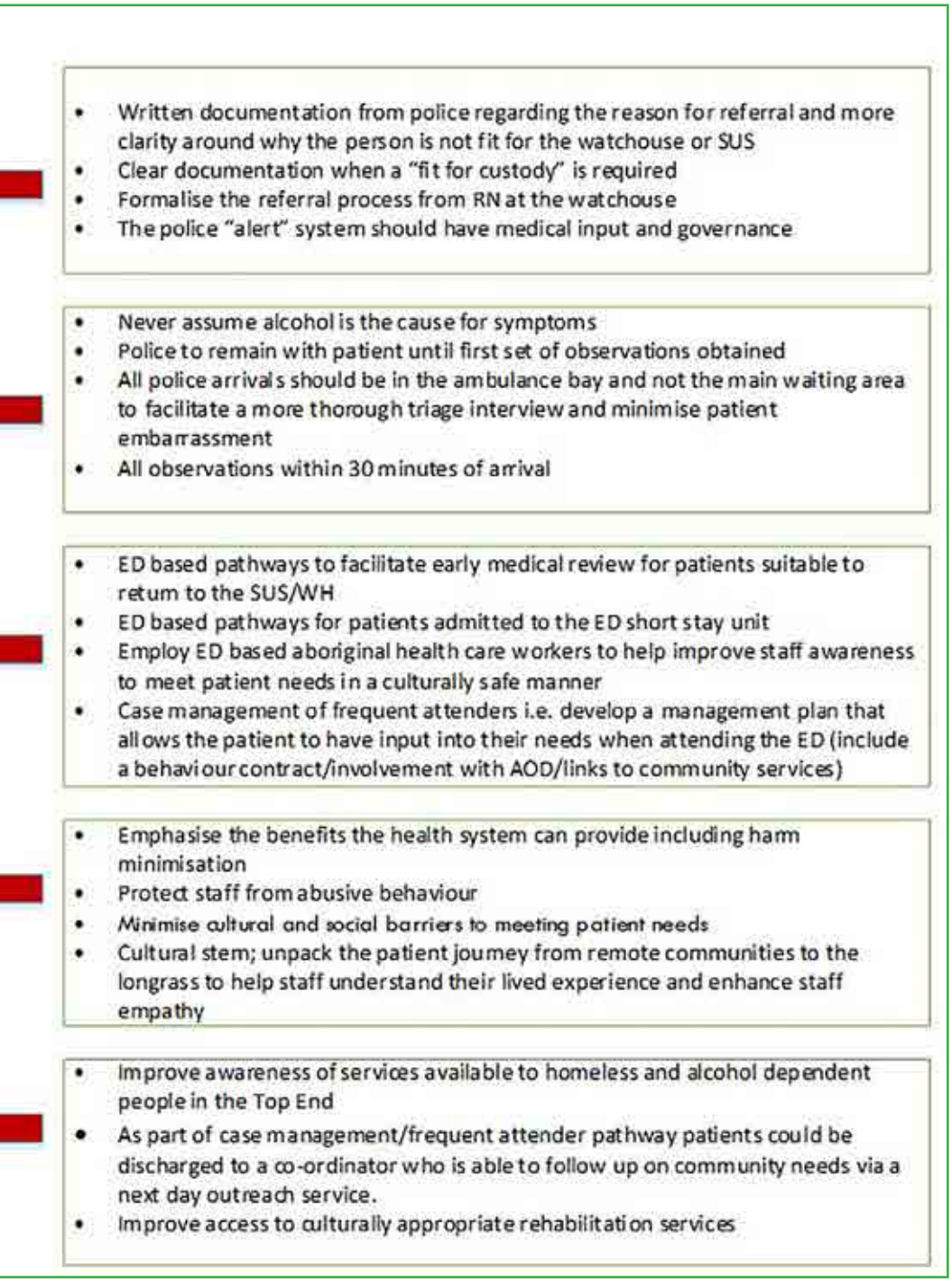
The aim of this study is to improve the care of patients who present to the Emergency Department (ED) at Royal Darwin Hospital with police when they are deemed not suitable to be taken to the Police Watch House (WH) or Sobering up Shelter (SUS) because of alcohol poisoning or a medical concern. Previous recommendations from two separate case reviews prompted the need to identify and quantify markers of clinical risk for this patient group.

The study was conducted in three stages (i) a retrospective case review of police arrivals during May, June, and July 2016 (ii) preparation of a process map charting the patient journey from the point of police apprehension to the SUS, WH, or ED and (iii) presentation of the results of the retrospective case review and process map to focus groups of ED physicians, senior ED nurses and addiction experts to brainstorm potential solutions to improve patient care. The ideas obtained from the brainstorming session were collated and multi-voting used to prioritise clinical improvement initiatives.



Measurement Process

The results of the retrospective case review found the ED has between 66-95 attendances per month of patients deemed not suitable to be taken to the WH or SUS because of a medical concern or alcohol



poisoning. The "did not wait/left at own risk" rate was much higher than the baseline departmental annual rate for 2016 (41-44% versus 7.5%) while hospital admission rates were low (2-7% versus 29%) (figure 1). The rate of unplanned return ED visits by any mode of arrival within 24 hours of the initial police arrival was 14-22%. There were two adverse events within the three-month study period.

This cohort was identified as high risk with 46% having three or more chronic diseases requiring active management, 66% were homeless, and 85% had issues with chronic alcohol dependence. This cohort attended the ED frequently by any mode of arrival (figure 2).

The brainstorming session identified five phases of patient care to target quality improvement initiatives (figure 3). These were; (i) transitioning of patient care from police to the ED (ii) patient reception at the ED (iii) development of culturally safe patient-centred models of care within the ED (iv) promotion of a positive patient-staff experience and (v) streamlining of discharge from the ED to community services.

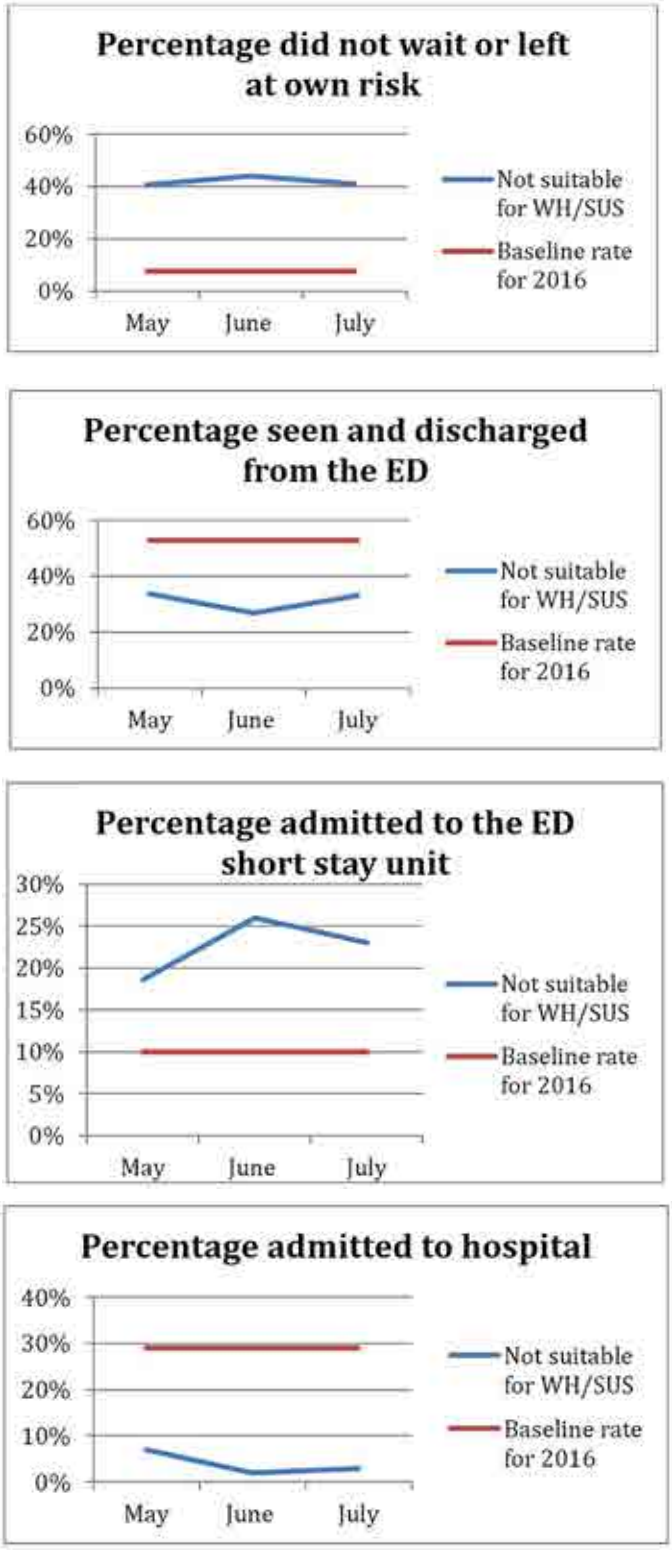


Figure 1: Outcome of ED attendance for patients arriving with police when deemed too unwell to be taken to the Sobering up Shelter or Police Watch House

Conclusion

In conclusion, this is a common ED presentation and thus needs to be considered part of core business. This cohort of vulnerable patients have high levels of medical co-morbidity, homelessness and alcohol dependence. Nearly half self–discharge prior to completing assessment and thus receive no intervention despite being deemed too unwell to be admitted to the WH or SUS. These patients frequently re-attend and enter the same cycle of non-intervention. Case management is required across the many services that this cohort of patients presently access to improve the chances that they receive medical, social and addiction interventions.

Next Steps

The next step of this quality improvement project will be to implement the key initiatives as outlined in the driver diagram (figure 3). Targets to measure improvements would be a “did not wait / left at own risk” rate equal to that of the baseline departmental rate, reducing the unplanned return rate within 24 hours by 50% and preventing all adverse events.

Acknowledgement: Justine Miller, Staff Specialist in Emergency Medicine, Emergency Department, Royal Darwin Hospital, and Jessica Meagher, Advanced trainee in Emergency Medicine, Emergency Department, Royal Darwin Hospital

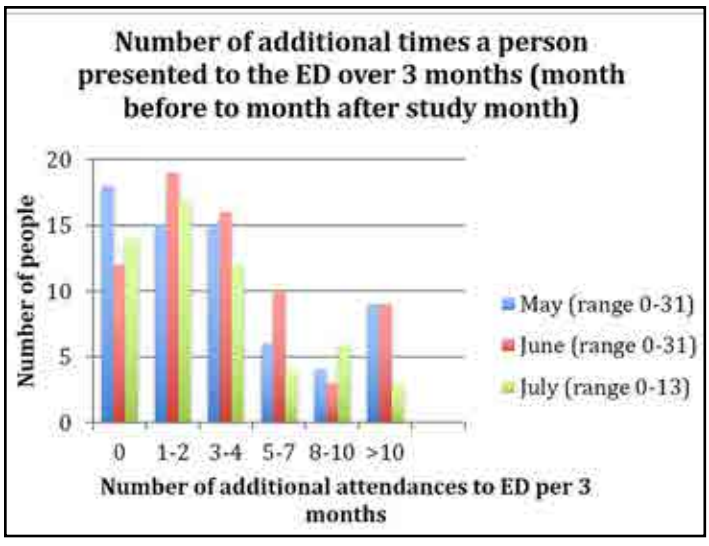


Figure 2: Frequency of ED attendance by any mode of arrival over three months

The Long Stay Project

Ms Therese Oates | A/Senior Director Business & Process Improvement
Children's Health Queensland

Aim

Improving the experience of long stay patients at the Lady Cilento Children's Hospital (LCCH).

The problem

There was no reliably applied process to predict and proactively manage long stay patients at LCCH, resulting in delays in discharge and a sub-optimal child and family experience.

The project aim:

By December 2017, 100% of patients admitted to LCCH will be identified on admission as likely to be long stay, so that mitigants can be enacted and monitored to optimise appropriate referral during the stay.

It is acknowledged that many patients require the need for ongoing tertiary and quaternary care. The intent of the project was not to challenge the quality of clinical decision-making for any patients.

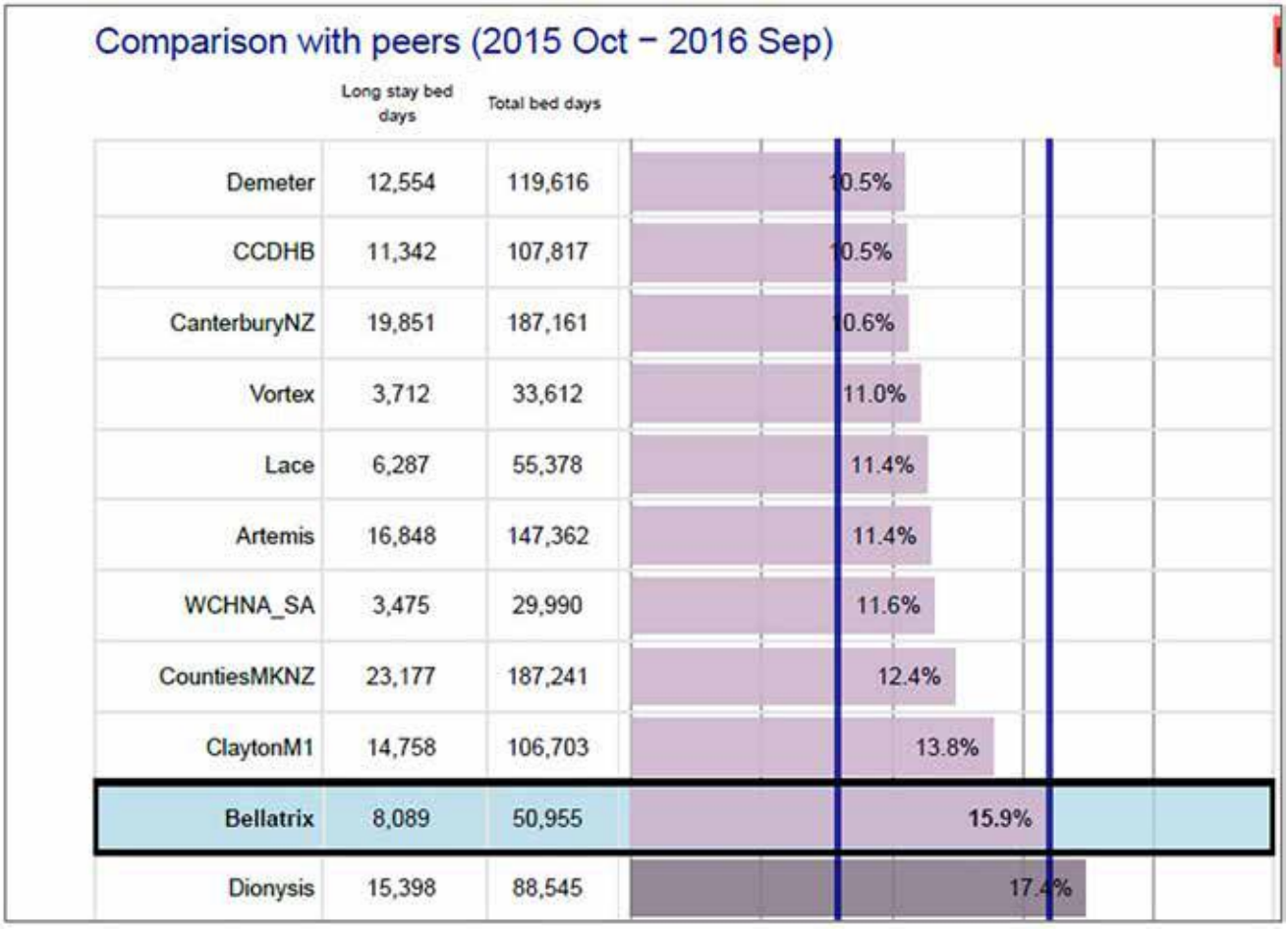
In May 2016, the Long Stay project commenced, using an improvement methodology of five phases, problem identification, diagnosis, solutions, implementation and sustainability.

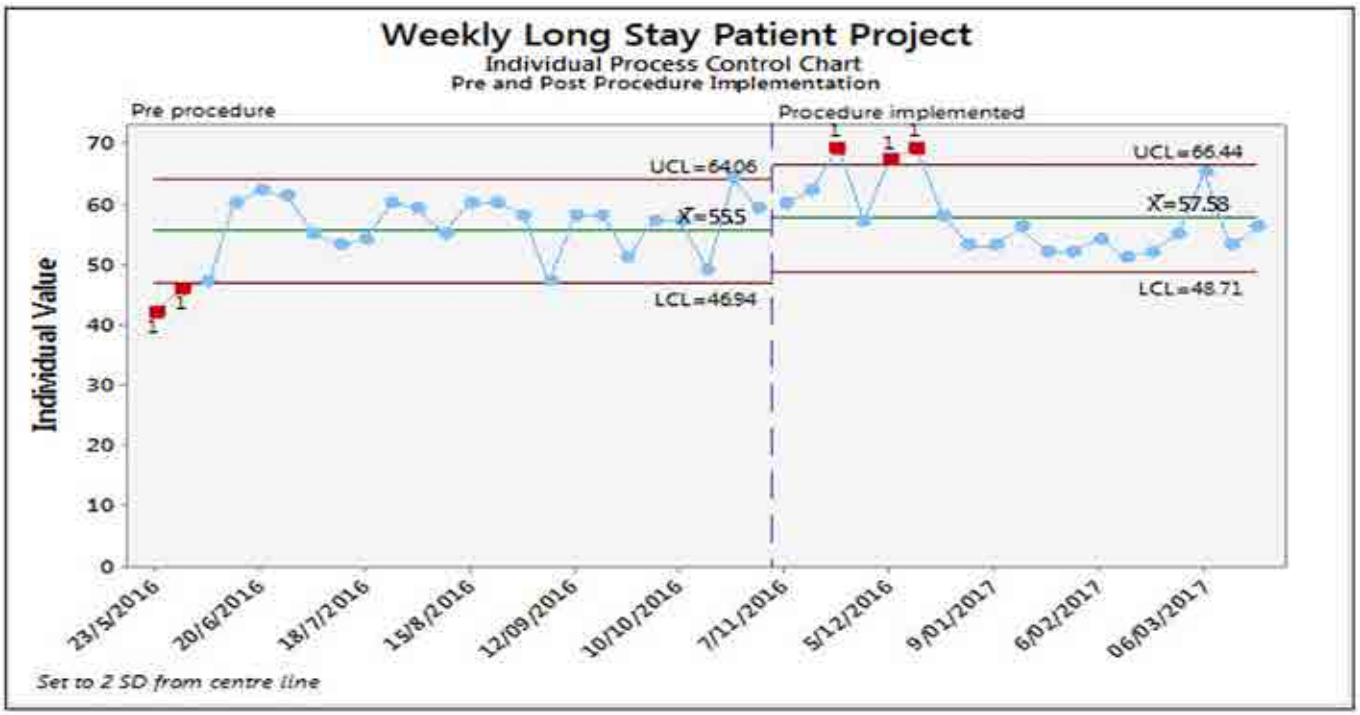
Measurement processes and outcomes

The quantitative data sets provided a snapshot of the current state. At the project commencement LCCH patients with a length of stay (LOS) greater than 14 days constituted 6% of the total hospital inpatient volume, with this same group consuming 41% of available overnight bed stock.

There were financial impacts to be consistent. For the time frame November 2014 to April 2015 patients with a LOS >14 days consumed 40,516 bed days

Using a unit level cost of $1056 per night, a conservative estimate of $42,784,896 was incurred for the > 14 day LOS group.





The issue at LCCH was particularly evident when comparing long stay with peer facilities. Long stay share of bed days is a percentage value of bed days in medical and surgical wards. This value was 15.9 % for LCCH, Bellatrix (October 2015- Sept 2016) Alternate paediatric tertiary facilities, RCH Melbourne (Lace), Princess Margaret Perth (Vortex) and the Women's & Children's South Australia ranged around 11% for the same types of patients for the same timeframe.

The collection of qualitative data occurred during workshops and consumer interviews.

Teams felt ill-equipped to progress specific patients they classified as 'stuck 'in the system. Discharge options for some paediatric patients appeared limited, and dependent on alternate partners.

Three interventions progressed to solutions. Intervention 1 was the improved governance of long stay patients.

The developed framework and procedure suite had articulated roles relative to the interdisciplinary team, with option triggers and associated escalation pathway. There was now mandated fortnightly family multi-disciplinary meetings, and all patients were to have an automatic psychosocial assessment on day seven of admission.

Design and strategies

Plan Do Study Act (PDSA) cycles were undertaken. SPC run charting occurred over a 10-month period, indicating little impact.

Intervention 2 related to data monitoring and identification of long stay patients. A weekly excel LS report was compiled and widely circulated with instructions to complete and progress issues. PDSA cycles implemented post go-live occurred by the auditing of 47 medical records of identified long stay patients over a 4 – 10 week period.

- 29% of patients audited had evidence of a family meeting in that timeframe, however there was no correlation between the report and the medical record as to whether the family meeting had occurred
- 36% had evidence of a MDT meeting
- There was no evidence of patients being considered to be SNAPped to a sub-acute model of care
- Compliance with monitoring the EDD ranged between 2 – 29%

We further examined long stay patients with the intent to improve clinician compliance.

We formed a partnership with the agile analytics firm Aginic. Aginic undertook a retrospective look at 42,000 historical inpatient records to compare and statistically correlate patient data pre and post coding to derive a model for predicting 'long stay' patients. The hypothesis being that a reasonable guess of patient coded DRG and LOS could occur based on pre-admission and admission data before coding.

Queensland Health information technology systems were sourced including HBCIS; ORMIS; ESIS; EDIS; QM; SATR; SABSI. We commissioned a group of paediatric subject matter experts to provide perspectives. We also amended the LOS definition, so that the LOS - >20% the average LOS for that DRG.

The predictability of the trigger variable was tested against a sub set of inputs, including postcode, number of specialities, ATSI, mode of arrival, mental health flags, polypharmacy, admission within the last 29 days and emergency presentation within the previous 48 hours. There were 100 variables in total identified, with the lag variables filtered out. The statistical model used identified the variables that had the greatest impact on LOS, returning 15 lead variables.

Predictive analytics will be used to spotlight requirements of the statistically 'at risk' group, potentiating impacts on LOS and experience The trial ward will go-live in April, with extension to all inpatient units July 2017.

The final intervention relates to the qualitative feedback collected from consumers. This intervention focuses on paediatric developmental enrichment and normalising routines.

Overwhelmingly families wanted as normal as possible environment for their children during long stays in hospital.

The primary drivers behind the solutions generated include ward culture, resources available, geography and variable processes.

Results

The solutions include developing a LCCH values document, articulating ward expectations re behavior, lights out, or quiet time. Normal family routines such as a meal together, having a bedside routine sheet to provide family motivated routines and ward play dates were other ideas collected. For this work, a consumer is the project lead, she is currently providing insight via her networks as to relevant 'push' text messages ("where is a washing machine?") to help long stay families adapt to the hospital environment.

Ms Therese Oates

Conclusions

The long stay project is a multipronged approach to optimising the length of stay for a vulnerable group. To date the project has achieved governance, has decreased variation, has provided data to monitor, measure and improve. The consumer experience will drive bedside change; the predictive analytics demonstrate innovation, pushing proactive rather than reactive management. While measured improvement is not yet evident, these combined interventions will positively affect the experience of long stay patients at LCCH.

Improving the Hand Hygiene Culture in an Emergency Department

Dr Yolande Weiner | Acting Director
Redland Hospital - Metro South Health

Dr Yolande Weiner

Background

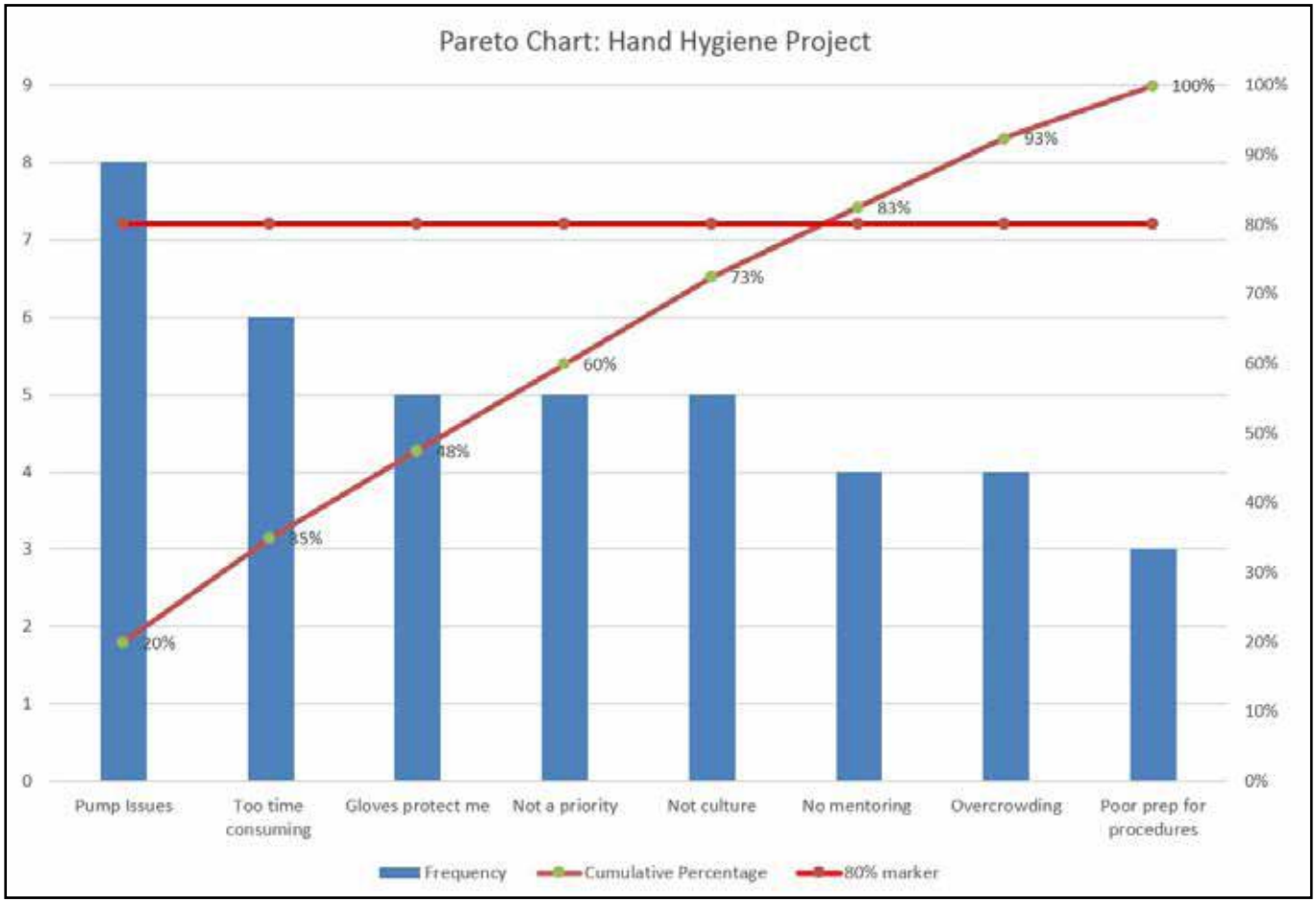
Healthcare associated infections (HAI) are the most common adverse event occurring in hospital settings, contributing to significant patient harm, increased length of stay and reduced access to available beds. Despite the worldwide recognition that hand hygiene (HH) is the single most effective intervention to improve HAI, compliance rates remain low. The Australian national benchmark for hand hygiene compliance (HHC) in 2016 was set at 70%. The national ED 2016 annual compliance rate for this period was 76.6% and the Metro South ED compliance rate for the same period 78.2%. In comparison, the 2016 annual hand hygiene compliance rate in the Logan Emergency Department was 56.7%.

Aim

To improve the overall hand hygiene compliance rate in Logan ED to 75% by July 2017.

Measurement process and outcome

Data was collected by direct observations of HCW by trained and validated observers using a standardised HH observation tool developed by Hand Hygiene Australia as part of the National Hand Hygiene Initiative. These observations are reported monthly and display overall compliance with HH, compliance by moment (5 moments of hand hygiene), by Ward and by Health Care worker.



Design

The project intended to identify and understand the barriers to Hand Hygiene Compliance (HHC) adherence in the ED and to look at strategies that can improve and sustain HHC rates, ultimately changing the culture around HHC and in the long term reduce the burden of HAI. The analysis performed identified several barriers and strategies of which four interventions were initially selected.

Strategy

The four selected initial interventions were tested using the PDSA process and are currently in the first test cycle.

Results

HHC rates improved to 81 and 82% respectively in the following two months after testing of the first four interventions. HHC rates decreased to 69% in the third month after testing but was still higher than the previous year.

Conclusion

Initial interventions were successful in improving the HHC rates beyond the initial target of 75% in the following two months. However, these interventions need some further studying to ensure these results are maintained.

Continuous Quality Improvement

Ms Rebecca Bond | Nurse Supervisor ANFPP / CQI Officer
Danila Dilba Health Service

Aim

Danila Dilba Health Service is committed to Improving rates of Rheumatic Heart Disease (RHD) Clients receiving secondary prophylaxis to 80% in six months at Knuckey St clinic – a systems approach. The trigger for this commitment is a change of structure of service to a model of clinics based where the population is, moving from a centralised model of care to smaller generalist clinics.

The aim of this project was to ensure systems were in place to improve service to clients and decreasing risk of a gap in service provision when transitioning to a new structure.

Background

Danila Dilba Health Service was established in 1991 as an Aboriginal Community Controlled Organisation. Our aim is to improve the physical, mental, spiritual, cultural and social well-being of Biluru (and Torres Strait Islander) people in the Yilli Rreung (greater Darwin) region.

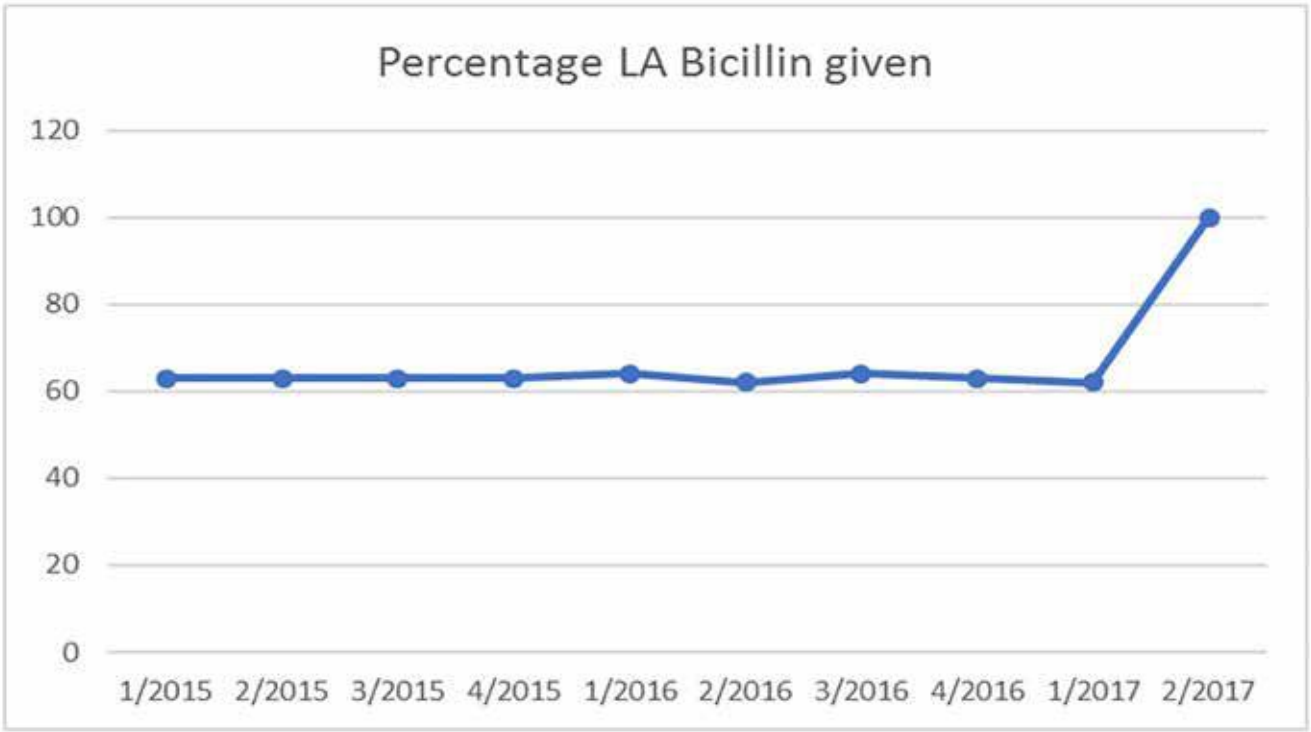
Danila Dilba is primarily funded by the Australian Government Department of Health.

We employ some 130 people and provide Primary Health Services from five locations, soon to be eight, in Darwin and Palmerston region.

We also have a Community programs division that includes: the Deadly Choices health promotion program, an alcohol and other drugs program, taking tobacco, social and emotional wellbeing and newly established Australian Nurse Family Partnership program.

More than 30% of the Northern Territory population identifies as Aboriginal and Torres Strait Islander and this includes around 16,000 people living in the Yilli Rreung region.

Danila Dilba services more than 60% of the Indigenous population of the region, with around 10,100 local people using our service in 2015-16. We also had nearly 1,600 visitors to the region using our services.



N=24 current clients – Knuckey St Clinic

In Australia, rheumatic fever and rheumatic heart disease are still common in many Aboriginal and Torres Strait Islander communities. To date, most of the published data in Australia has been provided by the Northern Territory.

Almost all cases of rheumatic fever recorded in the Northern Territory (NT) between 2005 and 2010 were for Aboriginal and Torres Strait Islander people (98%). Aboriginal people are 69 times more likely than non-Aboriginal people to develop rheumatic fever and 64 times more likely to have rheumatic heart disease. Overall 2% of NT Aboriginal people have rheumatic heart disease, including 3% of young adults. Between 2007 and 2009, 897 deaths were attributed to rheumatic heart disease.

LA Bicillin long acting intramuscular antibiotic injections or secondary prophylaxis are given to prevent further episodes of Acute Rheumatic Fever (ARF) in clients who have already experienced damage to their heart previously from ARF or are diagnosed with the disease.

Duration of secondary prophylaxis:

• All persons with ARF or RHD minimum 10 years after last episode of ARF or until 21 years of age, whichever is longer

• Moderate RHD priority 2 – Until 35 years

• Severe RHD – Priority 1- Until 40 years or longer

LA Bicillin is given:

• Between every 21-28 days

• Every day after 28 days is an “AT RISK” day for ARF recurrence

• Always give LA Bicillin early rather than late

• Reset recall for 21 days

Measurement Process

The project first mapped the previous process for follow up of client recalls to trigger reminders for secondary prophylaxis. This is an important measure in ensuring clients received their required needles on time which clients find helpful and staff report this process being effective.

Danila Dilba Health Service staff working closely with community: Darleen Appo – Nurse home visitor, Katarina Keeler – Nurse home visitor, Kay Gehan – Family outreach, Karen Geer – Family outreach, Linda Da Costa – Administration.

The project team then brainstormed ideas as to how the centralised position of recall monitoring could work for every clinic. Several topics were agreed upon and developed as PDSA cycles. These included managed recall lists for all clinics and staff allocated and educated, Policy and procedure to support, requirements of specialist clinics and Client engagement for each clinic.

Conclusions

Run charts demonstrate that since interventions have been implemented clients who received secondary prophylaxis for RHD has increased from 62% to 100% of primary current clients of Knuckey St clinic. The plan is currently being rolled out across all Danila Dilba clinics and will be monitored monthly.

Next Steps

Further action plans continue with a client engagement focus and rolling out managed recall policy and procedures across the service.

CHECK IN & CHECK OUT: Involving consumers in medication management and planning

Ms Jane Dowling | Director of Nursing
Abbotsford Private Hospital

Problem / Aims Statement

Consumers in mental health facilities are at risk of not being actively engaged in their care decisions, specifically in medication management.

A review of how consumers were included in managing their medications pre-admission and post discharge was conducted at Abbotsford Private Hospital, a private mental health facility specialising in substance use disorder and dual diagnosis and at Blackwood River Clinic, a private mental health day hospital, also specialising in substance use disorder, dual diagnosis and general psychiatry. Both settings were for voluntary admissions of persons over 18 years of age.

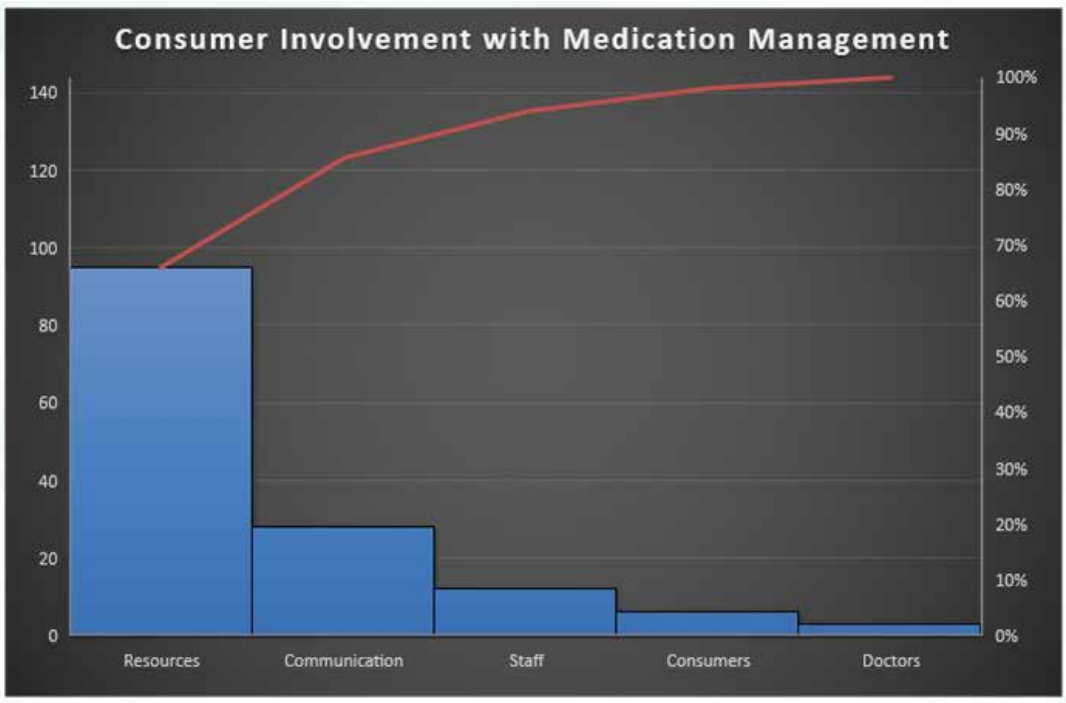
It was known from review of Abbotsford Private Hospital data that 62% of the population had a primary diagnosis of Substance Dependence Disorder. There were 23% of consumers with other mental health diagnoses also had substance use as a secondary diagnosis. Physical conditions are also assessed and managed and were inclusive of hepatic, respiratory, circulation, diabetes, and allergies as consumers often overlook puffers, creams, eye drops etc.

The demographics of the consumers demonstrate that there is a reported frequent and high occurrence of taking medications other than as prescribed (too much or not enough), resultant from many factors inclusive of financial stress, which affect their health and result in re-admission to the facility and to Emergency Departments.

Background

Review of consumers accessing the services highlights that consumers of the facility are accessing surplus medications (from family or street etc) to supplement doses or to access non-prescribed medications. High frequency medications accessed are Diazepam, Dexamphetamine, Quetiapine (Seroquel) and opioids.

Blackwood River Clinic do not administer medications to consumers however, it is situated in a rural setting where consumers are required to self-administer their medications, can still experience side effects, and medications may still be introduced, ceased or varied in dose. Consumers did not have access to information on the impact of these changes at point of discharge.



Decreased consumer engagement leads to safety risks for the consumer and facility (medication errors, near miss), potential to overlook medication conflicts, fails to address medication compliance, side effects and factors influencing consumer confidence in managing their medications, inclusive of the consumer's lived experience with their medications. Concurrently, it results

in lower standards of consumer-partnered care assessment/ care delivery and discharge planning.

There were 10% of randomly selected consumers (Abbotsford) who identified that they experienced difficulty managing their medications and understanding the doctor's instructions post-discharge. They had not previously been asked to identify their lived experience of medication management with particular focus on side effects.

It was noticed that consumer engagement and involvement was not evidenced or actively or routinely included in the processes of Medication Reconciliation, Best Possible Medication History and Medication Management Plans at the point of Admission or Discharge. Engagement & inclusion was mostly reflected by a signature that they received a discharge list of medications and pamphlets but not a record of their lived experience with their medications.

A previous accreditation survey of Blackwood River Clinic identified that although medications lists (discharge summaries/ transfer summaries from other facilities) were occasionally provided it was inconsistent and did not include Best Possible Medication Histories, Medication Management Plans, or consumer engagement. It was identified that the population attending that service, although ambulatory and self-managing the medications, were at risk by staff not having comprehensive and current information on medications being prescribed. This risk was further compounded for Visiting Medical Officers undertaking medication reviews.

The survey had recommended the site introduce a Medication Management system similar to the one utilised at Abbotsford Private Hospital. It was therefore decided to include that site in the project.

Trial Project

A trial project was scheduled to be undertaken to involve consumers, linked to two specific doctors, and evidence that involvement, in their medication management and planning. This would provide clearer insight in the types of medications consumers were taking, the frequency, their education level of the medication and its effects, and their lived experience of side effects was an issue. The gathered data was then included in care planning.

Documentation resources currently available, and in use, were reviewed for scope and potential for improvement. This led to the development of a new documentation resource, "Check In & Check It", based on a resource developed by University of WA, but enhanced to meet the needs of the consumers and facility. Key factors of the trial included creating dedicated time and space for the engagement to occur, utilising a document with enough space to capture all medications rather than 4-5 main medications, and establishing core review points of Admission and Discharge. The document is signed by the consumer and the nurse and utilised to inform and develop care planning.

A Consumer Medication Management plan encompassing a traffic light (Red, Amber, Green) system for identifying medication changes and tracking all medication changes throughout the therapy program was also developed and introduced to the Blackwood River Clinic site.

Results

By July 31 2017, 100% of consumers at the Blackwood River Clinic site had an active Consumer Medication Plan within their health record.

It is planned to achieve a 90% consumer engagement (Abbotsford) in medication management by March 30, 2018.

Improving lifestyle and weight management in general practice

Narelle Mills | Manager Quality and Pathways
Murrumbidgee Primary Health Network

Problem/Aim statement

The Murrumbidgee Primary Health Network (PHN) based in rural NSW is tasked with improving the health of its community through improving coordination of care and ensuring patients receive the right care in the right place at the right time with one of its key performance indicators being avoidable admission rates. Recent survey data shows that Murrumbidgee PHN have significantly more adults who are overweight or obese when compared to NSW (65.7%; NSW: 52.5%) and that the Murrumbidgee region has one of the highest rates of obesity and obesity related hospital admissions in NSW.[1]

In 2017 Murrumbidgee PHN commissioned for the co-design of a program to improve access to lifestyle and weight management support through general practice. Identifying patients who would benefit from lifestyle and weight management support is a necessary starting point to supporting patients in this journey. However, not all general practitioners routinely identify patients who are overweight or obese and evidence suggests that GPs may not always correctly identify those who are overweight or obese.

This quality improvement project forms part of the overarching program to develop and implement a lifestyle and weight management program in general practice and aims to achieve a 10% improvement in the recording of Body Mass Index (height and weight) and waist circumference in 11 general practices within MPHN catchment area by June 2018.

Background

Each year around 80% of Australians visit a general practice with 27% of people who present being obese (BMI > 30).[2] The National Health and Medical Research Council (NHMRC) Clinical Guidelines for the management of overweight and obesity in adults, adolescents and children in Australia, recommend that BMI be used to classify overweight or obesity in adults and that waist circumference, in addition

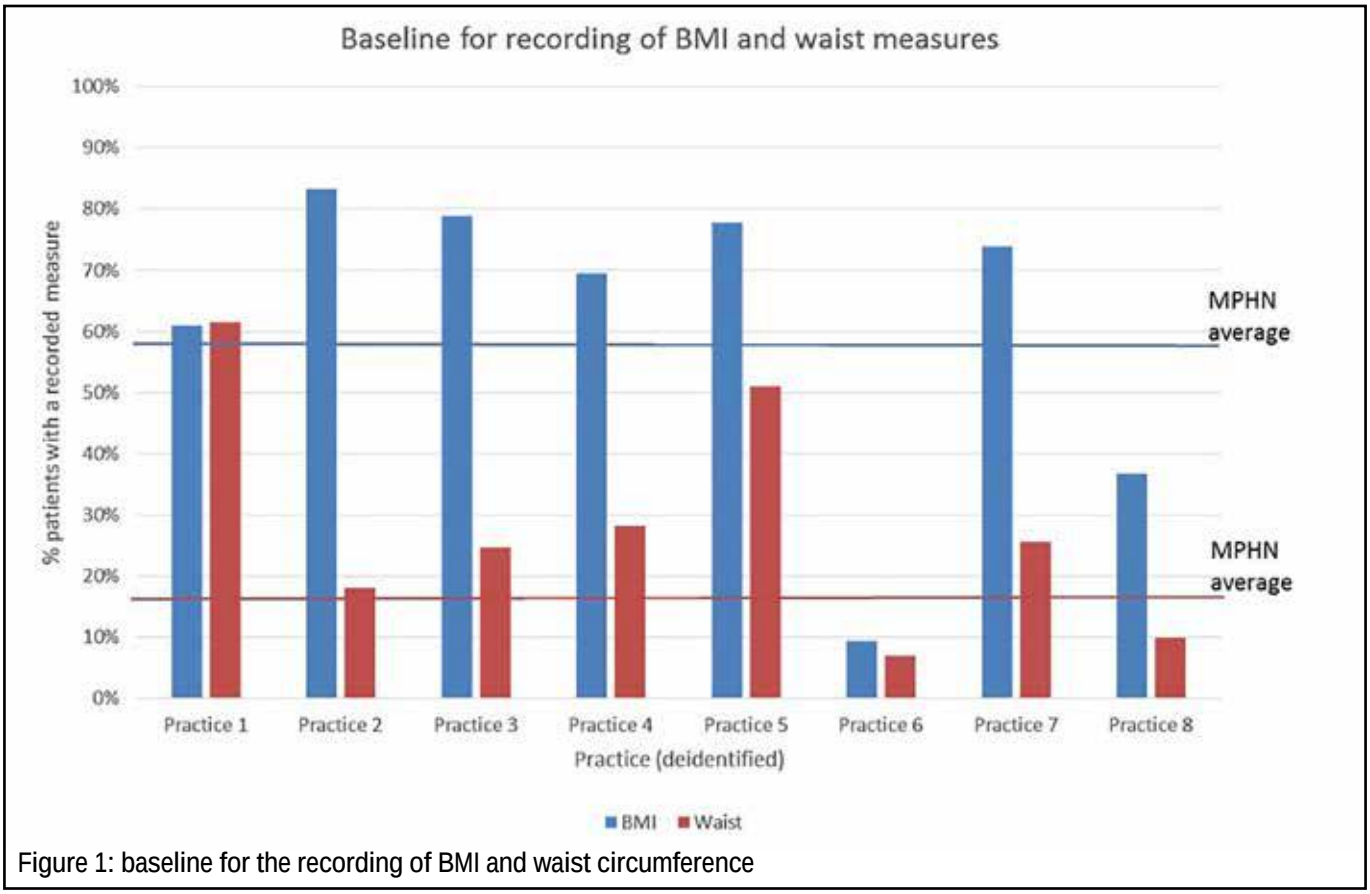


Figure 1: baseline for the recording of BMI and waist circumference

to BMI, be used to refine the assessment of risk for obesity-related comorbidities.[3] The RACGP also recommend that weight and nutrition are assessed every six months for those who are overweight or obese or have current chronic conditions.[4]

Documentation of obesity and provision of advice by primary care physicians are some of the strongest predictors of patients forming and following through on a weight management plan and attempting to change behaviour.[5] GPs accuracy in identifying patients as being overweight or obese has also been studied, with evidence pointing to the recording of BMI and waist circumference as the most accurate way to identify if people are overweight or obese. A study by Wong et al involving 204 GPs showed that GPs correctly identified 80% of the participating patients as overweight or obese, but underestimated 20% as normal or underweight.[6] In addition, patients themselves do not always correctly identify if they are overweight, with 43% of those who were overweight according to BMI considering themselves not overweight.

A recent study of 78 general practices and over 270,000 active patients in Melbourne showed that only 22.2% had a BMI and 4.3% a waist circumference, recorded in their medical records.[7]

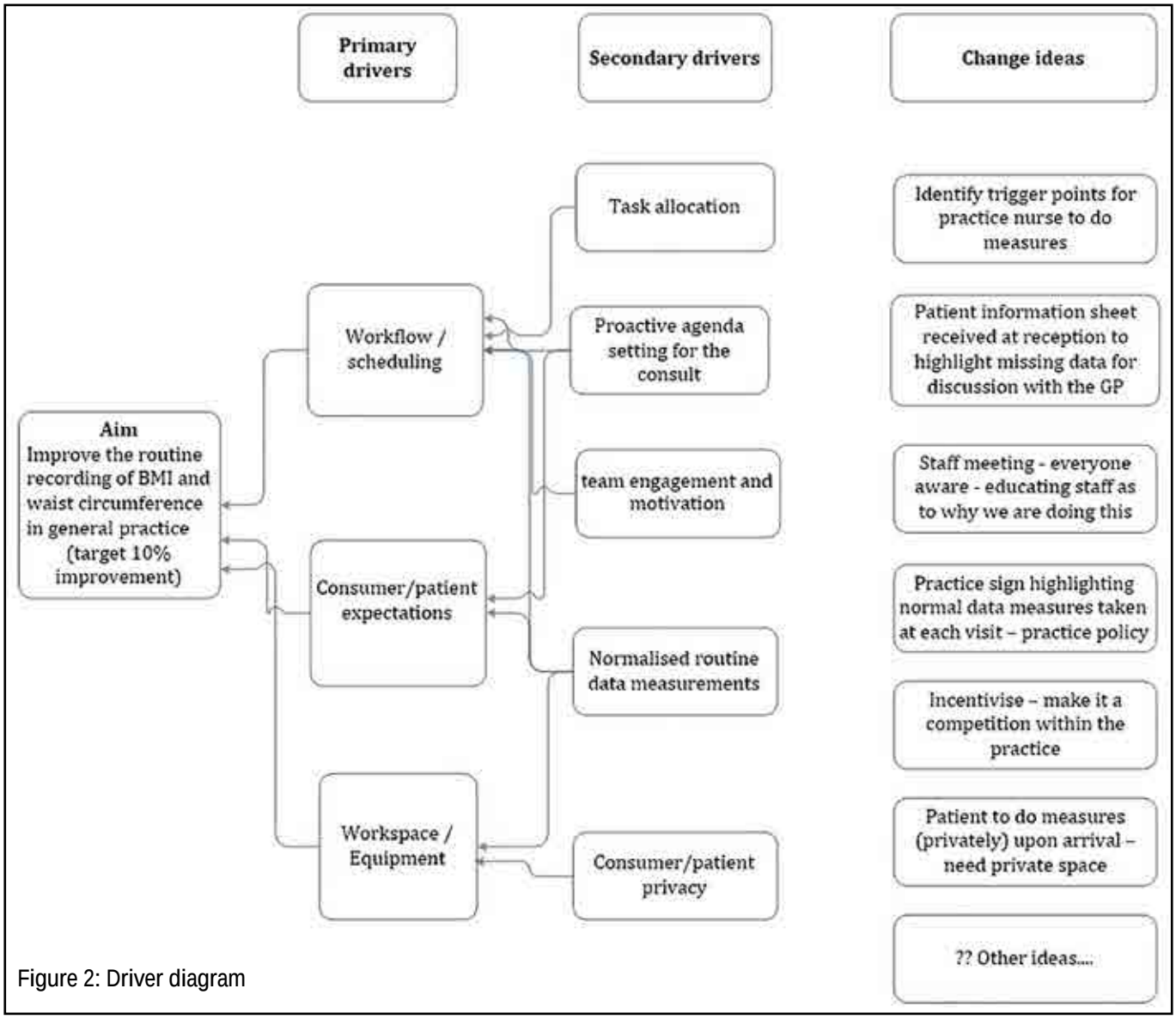


Figure 2: Driver diagram

Measurement process and outcome

Many of the general practices within Murrumbidgee PHN participate in ongoing quality improvement activities which are initiated through the review and benchmarking of practice level data extracted through the PenCat tool. Review of data submitted by MPHN practices shows that on average, 57% of active patients (those who have had three visits in two years) had a BMI recorded and less than 20% had their waist circumference recorded. For patients who have visited a general practice in the last 6 months, around 20% had a BMI recorded and less than 10% has a waist measure recorded. These rate of measures, while higher than those reported in the literature, are still well below the recommended clinical practice guidelines.

Eleven general practices are participating in the implementation of the Murrumbidgee Lifestyle and Weight Management program and are reporting practice data on recording of BMI and waist circumference measures. To date, eight of the 11 practices have provided baseline data from which to measure improvement. Figure 1 shows the percentage of patients from these eight practices who have a BMI recorded and waist circumference recorded. Most of these practices are currently sitting higher than MPHN average, however there is still significant room for improvement, particularly in waist measure recording. In order to measure regular review of BMI and waist circumference, data has also been provided from a number of practices on the number of patients who have visited the GP in the last six months and had their BMI and waist circumference recorded.

Design: interventions

The diagnostic phase of this project identified a number of issues with the regular recording of BMI and waist circumference along with a number of change strategies that could be implemented to support improvement. These are summarised in the Figure 2 below.

A number of participants during the diagnostic phase felt that patients would not like having their weight and waist circumference measured and that this often prevented them from doing the measures. A survey however distributed through general practice during the diagnostic phase found that 73% of patients would not find it a problem to have their weight and/or waist measured regularly, 21% felt reluctant but would still agree to have it done and only 6% stated that they would be embarrassed and would not agree to it.

Each of the participant 11 general practices will be implementing their own strategies and PDSA cycles to improve the recording of BMI and waist circumference measures. Each practice has provided a brief overview of what their improvement strategies will be. A number of practices will be trialling the implementation of a pre-consultation prevention summary sheet which will highlight missing data prior to seeing the GP or Practice Nurse. This has been successfully trailed in Australian general practices and is acceptable to both the GP and patient.

Next steps

The results and conclusion for this project are not yet available with the Murrumbidgee Lifestyle and Weight Management Program due for completion in June 2018. A formal evaluation is being conducted and will include improvements in the regular recording of BMI and waist circumference.

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