



Government of **Western Australia**
Department of **Health**
Institute for Health Leadership



2018 MSI Annual

Service improvement project summaries

21 December 2018

2018 Medical Service Improvement Program

The Medical Service Improvement Program, now in its sixth year, continues to engage enthusiastic, motivated junior doctors in service improvement across WA Health.

A total of 130 Resident Medical Officers and Registrars have now participated in the program since its commencement in 2012. The reputation of the program continues to grow locally within the junior doctor cohort, as well as nationally and internationally.

The 2018 program involved 22 junior doctor participants across a total of 9 participating hospitals, as listed below:

- Armadale
- Fiona Stanley
- Fremantle
- King Edward Memorial
- North Metropolitan Mental Health Service
- Princess Margaret
- Rockingham
- Royal Perth
- Sir Charles Gairdner

A list of the 2018 participants is provided overleaf.

Service improvement projects

Each junior doctor participant in the Medical Service Improvement Program undertakes a service improvement project at their hospital site supported by an Executive Sponsor, Clinical Supervisor and Service Improvement Supervisor/s. The Institute for Health Leadership and Clinical Support Directorate provide additional project support and also assistance with data analysis as required.

This document provides one-page summaries for the 23 service improvement projects completed during 2018. Each project summary outlines the project rationale and aim statement, as well as improvements made and outcomes to date. Recommendations for implementation and/or next steps are also included in the summaries as appropriate.

This document also includes a one-page Leadership Journey overview for each RMO who did the program in 2018. The MSI Program is an opportunity for the participants to develop their leadership skills while leading a service improvement project. These leadership skills are an essential part of being a clinician in healthcare today and therefore this program enables the RMO participants to develop and refine these skills right from an early stage in their medical careers.

Further information

Visit the Medical Service Improvement Program website:

http://ww2.health.wa.gov.au/Articles/J_M/Medical-Service-Improvement-Program

Contact the Institute for Health Leadership leadership@health.wa.gov.au; (08) 9222 6459.

2018 Program participants

Participant		Health Site	Hospital	Rotation No.	Service improvement project
Elizabeth	Armari	Women and Newborn Health Service	KEMH	2	LARC Out Loud: let's talk about long acting reversible contraceptives
Alarna	Thomas		KEMH	3 & 4	We Need to Talk: Debriefing JMOs at KEMH following stressful clinical incidents
Caitlin	Roche		KEMH	3	LARC Be A Lady; Empowering Women to Access Long Acting Reversible Contraceptives
Nathan	Yap	Child and Adolescent Health Service	CAHS	2	PACMAN – Post Appendectomy Criteria: Managing Antibiotics
Emma	Sweetman	East Metropolitan Health Service	AHS	2	Proactive After-Hours Care Escalation
Ian	Jacob		RPH	3	tiMe it Right: Improving MRI Efficiency at RPH
Michelle	Lim		RPH	3	Improving the Pre-Operative Pathway
Evelyn	Low		RPH	3	Beat the Beep Project
Jeannette	McGill		RPH	2	Acute Care Unit Transfers from ED
Vinh	Ngo		RPH	2	Bentley After-hours Team Project
James	Caudle		NMMHS	3	ComMent Project: Optimising Discharge Communication in Mental Health
Nick	Laidler	SCGH	4	TICK TOC: Improving Surgical Decisions in ED Timely Communication with Key-decision-makers and Take Over of Care	
Emily	Stern	North Metropolitan Health Service	NMMHS	2	The Make a Dent Project
Erin	Bock	SCGH	3	'Go Time – OT'. Getting on Track in Managing Emergency – Operating Theatre	
Piyush	Grover	SCGH	2	MOVES Initiative – Managing and Optimising Value and Efficiency of the Stranded Patient	
Dylan	Beinart	South Metropolitan Health Service	FSH	2	RACE 48 – Responding to Acute Cerebrovascular Events: The First 48 Hours
Joanna	Ho		FSH	4	HANGOUT: HANdovers in the Gynaecology & Obstetrics Unit
Michael	Kirk		FSH	2	Making an Outpatient IMPACT: Improving Paediatric Access to Clinics
David	Robertson		FSH	4	PERISCOPE – Perioperative Clinic Optimisation Project
Alayne	Bennett		FH	2	Quality service improvement of bowel preparation for endoscopy in an outpatient setting
William	Crohan		RGH	4	The "Trial Day Case Surgery" Project
Lachlan	O'Sullivan		RGH	2	AMEND Deprescribing: Addressing Medication Education Near Discharge
Jack	Hammond		St John of God	Midland	4



LARC Out Loud: Let's Talk About Long Acting Reversible Contraceptives

Dr Elizabeth Armari, King Edward Memorial Hospital WNHS

The improvement process

This Medical Service Improvement Project examined two distinct processes in postpartum contraception (PPC) delivery at King Edward Memorial Hospital (KEMH) using the DMAIC framework: the initial discussion and offer of PPC to women (*Process 1*) and the delivery of Long Acting Reversible Contraceptives (LARCs) once a patient chose this method of PPC (*Process 2*). Multidisciplinary stakeholders first participated in a process mapping session to understand current practices, which was followed by a root cause analysis and staff survey. Solutions were generated with continued stakeholder collaboration and aligned with outlined critical to quality requirements.

Project outcomes

- Review and revision of KEMH hospital wide “*Postpartum Contraception*” guidelines
- Revision and consolidation of available KEMH contraception education resources
- Follow-on Medical Service Improvement Project was conducted to examine and clarify referral pathways for delayed LARC insertion
- Integration of opportunistic PPC discussion within routine antenatal visits (at 20, 32 and 34 weeks)
- Contraceptive Implant trolley to be introduced to all postnatal wards in 2019 to ensure timely provision at time of discharge

Recommendations

Improving the discussion of PPC and delivery of LARCs at KEMH necessitates long term systemic changes including:

- Documentation of PPC discussion and patient choice on a standardised sticker which will be placed within the patient's medical record (Obstetric Record MR0004 form)
- Offer of intrauterine device (LNG-IUD) insertion at time of consent for elective lower uterine caesarean section
- Continued staff education on PPC education and delivery

Project Aim

To improve how and when postpartum contraception (PPC) is offered to and discussed with patients, and;
To improve the subsequent process involved in the provision of long acting reversible contraceptives (LARCs) once patient consent is obtained.

Rationale

In Australia, over 50% of women will have an unintended pregnancy in their lifetime¹ and of these, 10-44% occur within 12 months of previous birth². Discussion and delivery of PPC is historically initiated at the 6-week postnatal visit, despite knowledge that follow up rates are low. Short interpregnancy interval of less than 12 months is associated with significant maternal and neonatal morbidity and mortality³. Over 65% of postnatal women at KEMH are discharged without PPC discussion or delivery. LARCs are safe, highly effective and can be inserted immediately following childbirth³. Prompt delivery offers women immediate contraception and reduces the risk of unintended pregnancy. However, LARC uptake in Australia and New Zealand is surprisingly low⁴.

Improvement team members Supervisors:

Dr Louise Farrell
Dr Gordon Das
Dr Kym Jones
Ms Esther Dawkins
Dr Katrina Calvert

1. Marie Stopes International Australia (MSI). *Real Choices women: contraception and unplanned pregnancy*. Melbourne, 2008.

2. Mwalwanda CS, Black KI. *Immediate post-partum initiation of intrauterine contraception and implants: a review of the safety and guidelines for use*. *Aust N Z J Obstet Gynaecol*. 2013;53(4):331-7

3. The Faculty of Sexual & Reproductive Healthcare (FSRH). *FSRH Guideline: Contraception after pregnancy*. United Kingdom, 2017.

4. Richters J, Fitzadam S, Yeung A, Caruana T, Rissel C, Simpson JM, et al. *Contraceptive practices among women: the second Australian study of health and relationships*. *Contraception*. 2016;94(5):548-55



LARC Be A Lady; Empowering Women to Access Long Acting Reversible Contraceptives

Dr Caitlin Roche, King Edward Memorial Hospital, WNHS

The improvement process

A process mapping session was undertaken with stakeholders to evaluate the current patient journey from request for postpartum long acting reversible contraception (LARC), specifically the Mirena IUD, to insertion in the KEMH Procedural Gynaecology Outpatient Clinic. The three key issues identified were: (1) staff uncertainty regarding the current referral pathway (i.e. which clinic to refer to), (2) staff uncertainty regarding the logistics of the referral process (i.e. which paperwork to complete) and (3) a lack of clearly defined referral criteria. These were confirmed through data analysis. Subsequent root cause analysis revealed multiple underlying causes for these issues, most of which centred upon a lack of standardised processes and limited Junior Medical Officer knowledge on the topic of postpartum contraception. Solution generation with key stakeholders produced a number of potential solutions, which have created the Project Outcomes below.

Project outcomes

- Formal documentation and education regarding the correct referral pathway and referral criteria for the KEMH Procedural Gynaecology Outpatient Clinic.
- Formulation of a purpose-built referral form for postpartum Mirena insertion, to be included in a "Postpartum Mirena Referral Pack".
- Development of a formal Junior Medical Officer postpartum contraception tutorial, to be incorporated into the current KEMH Postgraduate Medical Education curriculum.

Recommendations

Ongoing monitoring and evaluation is required to ensure compliance with the proposed solutions, whilst also assessing the efficacy of the proposed changes to current clinical practice.

Project Aim

To improve patient uptake of postpartum long acting reversible contraception (LARC), specifically the Mirena IUD, through the King Edward Memorial Hospital (KEMH) Procedural Gynaecology Clinic.

Rationale

Recent research suggests that ~50% of Australian women will experience an unintended pregnancy in their lifetime. Postpartum women are at particularly high risk in the first 12 months following delivery, with up to 44% of pregnancies considered to be unintended during this time. Effective contraception in the postpartum period is crucial, not only to prevent consequences associated with unintended pregnancy, but also to lengthen the inter-pregnancy interval, thereby improving maternal and neonatal outcomes in subsequent pregnancies. International evidence supports the superior effectiveness of LARC and therefore this project aims to improve access to and uptake of these postpartum contraceptives at KEMH.

Improvement Team Supervisors:

Clinical Supervisor & Executive Sponsor: Dr Louise Farrell

Service improvement supervisors: Dr Katrina Calvert, Dr Kym Jones, Ms Esther Dawkins



Dr Caitlin Roche - My Leadership Journey

Personal leadership journey

As a Junior Doctor, I am committed to advocating for & helping to build a safe, efficient & sustainable healthcare system for all Western Australians, whilst also providing an exceptionally high level of care to the women & infant patient population of KEMH. I applied for the MSIP because I believed it would provide an invaluable opportunity to learn more about medical leadership & its role in the delivery of high quality healthcare. I also hoped that during the program, I would develop practical leadership skills, as such proficiencies are often not a focus of traditional medical teaching.

Following the completion of this program, I am delighted to report that the opportunities and teaching provided has far exceeded the learning goals that I initially set for myself. Throughout the program, I have developed the knowledge and skills necessary to help create meaningful, sustainable change within our healthcare system. I have also gained invaluable experience in medical leadership, which I feel confident in applying to my future practice.

Future career aspirations

I am currently looking forward to commencing my first year of specialty training in 2019 under the Royal Australian and New Zealand College of Obstetrics and Gynaecology. I plan to continue to use the knowledge and skills developed throughout this program, not only to assist in my personal career progression, but also to ensure that I am able to help provide a high level of care to future generations of Western Australians, through the development of a dynamic and sustainable healthcare system.

Hints and tips for future participants

Enjoy the program and everything it has to offer – it genuinely is a unique opportunity to gain world-class leadership skills, whilst also providing numerous professional development opportunities, which are second to none.



Contact details:

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We Need to Talk: Debriefing JMOs at KEMH following stressful clinical incidents

Dr Alarna Thomas, King Edward Memorial Hospital, WNHS

The improvement process

This project followed the DMAIC (Define, Measure, Analyse, Improve and Control) process. The voices of Organisation (Workforce Stream Implementation Plan recommendation), Patients (literature review) and Staff (Process Mapping Session, RMO Focus Group and Survey) were obtained. The data from the voice of the staff revealed that most JMOs felt unsupported following stressful clinical incidents, with the root cause analysis revealing five main reasons (including hospital culture, limited availability of Seniors and uncertainty about who/when/where/how to debrief). A Solutions Session was held with medical staff which resulted in the project's implemented solutions.

Project outcomes

The solutions implemented in this project are:

1. Access to senior staff for debriefing – debriefing “check in” (weekly for day teams, every morning for night teams), Supportive Seniors roster, Mentor Program, increased social events.
2. Education and Promotion – Education on solutions (posters, protected Friday teaching), improved knowledge of services (RMO Orientation, Debriefing Guide), debriefing training and promotion of a Wellbeing Officer.

Ultimately, this aims to improve JMO wellbeing, KEMH culture, patient-care and provide benefits to other hospitals and the wider health system.

Recommendations

The scope of this project focussed only on JMO's, however Senior medical staff at KEMH would also benefit from debriefing opportunities and increased support. This could potentially be a project for a future MSI participant.

Project Aim

To improve access to debriefing and support following stressful clinical incidents for JMOs at KEMH.

Rationale

The WNHS Workforce Stream Implementation Plan Recommendation 4E was for the “Provision of a support/pastoral care program for junior medical staff: Improve debriefing post adverse event”, which was supported by the AMA Hospital Health Check 2018 and consequent media reports. Data collated in the project revealed that 86% of JMOs had been involved in a stressful clinical incident, but 43% did not receive a debrief. 98% believed that improving access to debriefing would improve JMO wellbeing and patient-care.

Improvement team members

Supervisors:

Clinical supervisor: Dr Keith Allenby
Service improvement supervisor: Dr Katrina Calvert, Dr Louise Farrell

Supporters:

KEMH Medical Staff, PMCWA



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Dr Alarna Thomas - My Leadership Journey

Personal leadership journey

The Medical Service Improvement Program has been invaluable for developing leadership skills. The Professional Development courses have been incredibly useful for helping me to realise my strengths as a leader and implement these within my role as Project Manager. I have gained skills in communicating with stakeholders, particularly Executive staff and gained confidence in public speaking. These skills will be of most benefit in my future career as a Doctor.

Future career aspirations

I am very interested in Obstetrics and Gynaecology and would either like to become a GP-Obstetrician or specialist Obstetrician. The skills I have learnt in the program will be invaluable whichever career path I choose. The topic of my project has also supported my interest in doctor wellbeing, so I would be interested in future roles that are involved with Mentoring and support for doctors.

Hints and tips for future participants

It is an incredibly rewarding program seeing your project progress throughout the DMAIC journey, from an idea and data to implemented solutions. It is important to maintain the scope of your project, otherwise it can become unfeasible within the time frame to complete the project.

I have also thoroughly enjoyed all of the Professional Development courses as part of the program, so I would recommend attending all of these if possible.



Contact details:

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Proactive After-Hours Care Escalation

Dr Emma Sweetman, Armadale Health Service, EMHS

The improvement process

This project reviewed the quality of the care provided to inpatients in the after-hours period. Key stakeholders were engaged to identify the major issues, analyse the data collected and design solutions to improve the after-hours service. This was achieved through their attendance and involvement in a process mapping session to highlight the problems associated with the escalation of the care of a deteriorating patient, a root cause analysis session and a solution generation session. The concerns primarily fell to inadequacies in communication pathways between staff in the after-hours period, in particular, the transfer of information between the medical and nursing staff, and also in the communication between the day teams and the after-hours team. Through observational studies, this project assessed the quality of communication between staff via the paging system, the timely response to paging and the presence of clinical handover of identified patients of concern. These issues were analysed to identify the root cause that needed to be addressed. The stakeholders proposed ideas for improvement in the solution generation session, were then developed into concepts with plans for implementation.

Project outcomes

The major solution proposed was to clearly identify the after-hours team with the allocation of transparent roles and responsibilities and to provide structure to after-hours shifts. Incorporated into this was a robust handover pathway for highlighting patients at risk of deteriorating and clarification of the escalation pathways for sick patients. At the completion of the project this had not yet been implemented as it was awaiting the introduction of the surgical cover after-hours.

A quick win was to provide each ward with a personalised contact list for the after-hours nursing staff to contact the correct doctor with more ease.

Recommendations

To follow through with the implementation of the above solutions in order to improve collaboration between staff, nursing and medical, as well as after-hours team and day team staff. Further investigation into improved communication infrastructure is also required.

Project Aim

This project provided the opportunity to review and redefine the Armadale Health Service after-hour's model of care in a manner that focusses on patient safety.

Rationale

Clinical care within the hospital is a 24 hours a day, 7 days a week service, however the majority of the staff workforce are only present 30% of this time with the remainder considered to be 'after-hours' during which there are minimal staff and services available. 63% of Medical Emergency Team calls were made in this after-hour's period in 2017 and review of the clinical incidents logged 2016-2017 showed that on 7 occasions there was a breakdown in the after-hours processes. Concerns have been raised by staff regarding the safety of the after-hours model of care with a culture of pre-empting and preventing patient deterioration.

Improvement team members

Supervisors:

Dr Ranjit Paul

Dr Thomas Kurien

Jodi Collier





tiMe it Right: Improving MRI Efficiency at RPH

Dr Ian Jacob, Royal Perth Hospital, Health Service

The improvement process

Defining the problem:

Information was collected from staff, patients and the organisation to delineate where the critical issues lay within the RPH MRI workflow. This included a process mapping session involving staff, including ward clerks, nursing staff, ward doctors, medical imaging technicians, patient care assistants and radiologists. Issues generated from this session were

- Lack of information to patient regarding MRI scan
- Non MRI compatible/safe patients not identified early
- Non effective communication between radiology staff and wards
- Non effective use of inpatient MRI operational time

Measuring the problem:

Focussed data collection targeting these issues raised at the process mapping session showed

- Deficit in patients being informed of MRI scan, logistics and safety
- Incomplete MRI request forms with patient logistics, safety or other medical requirements poorly documented
- Significant proportion of patients not prepared for scan when being picked up from ward
- MRI non-compatible patients arriving to scanner despite safety documentation available to ward staff

Analysing the problem:

Further root cause analysis session determined

- cause for patients not being prepared for their scan included not enough notice being given by radiology to wards/time constraints; lack of MRI safety and logistics knowledge on ward by doctors and nursing staff
- cause for MRI non-compatible patients arriving to scanner included acceptance of incomplete forms; and lack of knowledge of MRI safety on the wards by doctors and nursing staff

Recommendations

- Specific MRI request form with mandatory logistics/safety information
- MRI information pamphlet located on wards next to request form to give to patients
- Junior doctor MRI/radiology tutorials to educate on safety and logistics
- MRI imaging assistant/ward scout to ensure patients are ready on ward prior to being called
- Future electronic request system with mandatory fields

Project Aim

To improve inpatient MRI workflow efficiency at Royal Perth Hospital

Rationale

Delays or cancellation in transporting patients to radiology can lead to

- missed diagnosis
- delayed institution of clinical management
- longer inpatient stay
- increased burden on outpatient waiting list

Anecdotal evidence collected from the top 5 referrers at RPH

- differing levels of perceived efficiencies ward to ward
- multiple issues including lack of communication between radiology and ward plus lack of MRI safety screen by wards
- No previous formal study/audit to evaluate exactly where problems lay in the workflow

Improvement team members/Supervisors

Dr Liz Wylie (Co-clinical)

Helen Parry (Co-clinical)

Katherine Birkett (Non clinical)



Improving the Pre-Operative Pathway

Dr Michelle Lim, Royal Perth Hospital, EMHS

The improvement process

The DMAIC process identified that 79% of all electives patients in 2017 got a surgical date prior to PAAS. There was a 20% increased risk of cancellation at PAAS when seen < 14 days pre-operatively. A RCA revealed no clear articulation of Patient Health Questionnaire (PHQ) distribution or a process to manage high risk patients. Earlier risk stratification enables early identification of complex and high risk patients and thus maximise time and opportunity for pre-operative assessment and preparation to ensure patients are fit for surgery.

Project outcomes

- Patient Health Questionnaires (PHQ) distributed at Surgical Outpatient Clinics (OPC) at the time of decision to treat.
- SMS reminder system set up to capture patients who were missed in OPC.
- Screening process revised for Surgery categories 2/3; risk stratification in place - calculated from surgery complexity and anaesthetic risk— low risk being provided telephone screening, high risk have an earlier appointment in Pre Admission Clinic. Screening team expanded to increase the preoperative optimisation prior to any PAAS appointment.
- An electronic PHQ currently under development.
- Engagement with Primary Care Providers in the preoperative assessment phase –standardised letter to GP's outlining waitlisting, estimated surgery timeframe and requesting assistance with optimisation with linkages to the RPH Screening team when results are available.

Recommendations

- Increase the number of patients offered telephone screening – aim to capture all ASA 1/2
- Restructure PAAS PM Clinics to review increased numbers of high risk patients – introduce Perioperative Fellow role to the screening team.
- Review of Electronic Booking System cancellation reasons
- Engaging with physicians for peri-operative care, not just pre-op
- Collaboration with other tertiary hospitals for standardised pre-op elective surgical pathway processes

Project Aim

To develop processes for timely risk assessment and optimisation of elective surgical patients pre-operatively.

Rationale

There have been multiple clinical redesign projects targeting the pre-op elective surgical pathway, however feedback from staff revealed ongoing issues with implementation of previous changes and inefficiencies. This has resulted in lost opportunities for risk assessment and patient optimisation pre-operatively. Earlier and better identification and optimisation of medically complex patients will result in increased elective surgical throughput efficiency and decreased theatre cancellations.

Improvement team members

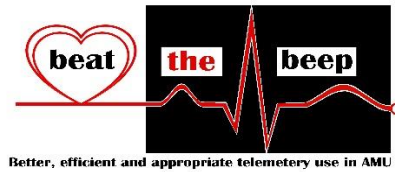
Supervisors:

Clinical supervisor: Helen Daly

Service improvement supervisor: Katherine Birkett

Supporters:

Sarah Ward, Donna Coutts-Smith, Kim Hill, Sumit Sinha-Roy



Beat the Beep Project

Dr Evelyn Low, Royal Perth Hospital, EMHS

The improvement process

The main issues raised during the process mapping session with staff from Acute Medical Unit (AMU) and Emergency Department (ED) to outline the patient journey from decision to admit to AMU with cardiac monitoring to the removal of cardiac monitors were communication, documentation, clinical reasoning for cardiac monitoring and alarm management. Data was gathered through file audit, questionnaire and general observation to measure the magnitude of these issues. The root causes were due to the lack of hospital guidelines and policies for cardiac monitoring, lack of education and awareness amongst staff, no clear process of communication and lack of senior review of cardiac monitoring status. Ideas to improve appropriate utilisation of cardiac monitoring and form a clear process of communication were generated from a session with staff from AMU and ED. Cardiology was also consulted for strategies to increase alarm awareness.

Project outcomes

- Development of hospital wide policy for cardiac monitoring including alarm management, roles and responsibilities and clinical guidelines for indication and duration of cardiac monitoring.
- Improved documentation of cardiac monitoring on the AMU admission proforma and Today's Plan ward round stickers.
- A flowchart outlining a clear process of communication for patients requiring cardiac monitoring on admission from ED to AMU.
- Reduction in alarm notifications by reconfiguration of monitors to have only life-threatening alarms and five other non-life-threatening alarms to sound.
- Contribution to cardiac monitoring education package for nursing staff.
- Twice daily review of patients on cardiac telemetry by Registrar to determine monitoring status of patient.

Recommendations

To align with the acute care model, there will be future discussions about reconfiguration of AMU to cohort an area of high acuity (including cardiac monitoring). AMU is also looking into further noise reduction or cancellation strategies.

Project Aim

To improve the efficiency of cardiac monitoring in AMU and to ensure appropriate and safe utilisation.

Rationale

Approximately 17% to 45% of patients admitted to AMU from ED received cardiac monitoring. Research indicates that cardiac telemetry is frequently overused, leading subsequent investigations or treatments that are unnecessary for patients.¹ With more than 80% of alarms attributable to artifacts, staff experience “alarm fatigue” which can desensitise them from patients that have real arrhythmias.² Two-thirds of AMU staff reported (n=19) that nuisance alarms occur frequently and disrupts their work in patient care. A recent audit (n=34) revealed that 47% of patients did not have documented indications for telemetry and was misused in approximately 9% of patients.

Improvement team members

Supervisors:

Dr Atul Sinha, Katherine Birkett

Supporters:

Service 1 co-directors, Katie Khoury, Jinesh Kunhangadan, Zahra Ali, Anthony Lock and AMU, Cardiology and ED staff involved in this project.



Acute Care Unit Transfers from ED

Dr Jeannette McGill, Royal Perth Hospital, EMHS

The improvement process

During the Define phase of this project we compiled information from the staff, patients and the organisation regarding which areas in the process of transfer of patients with ADDS \geq 5 from ED to ACU, issues were centred around. Voice of the staff was collected during a process mapping session with 15 stakeholders looking at the process from triage to 24 hours after arrival to ACU. The main issues were centred around:

- The ACU referral process
- Nursing handover from ED to ACU
- Re-review of new unwell admissions on ACU

This allowed focused data collection around these areas. Data showed prolonged bed-ready to leaving ED times, a lack of nursing handover from ED to ACU, poor goals of care (GOC) form completion rates and delays in re-reviewing new admissions after arrival to ward. Root cause analysis sessions in ED and ACU revealed that prolonged bed-ready to leaving ED times were due to a lack of nursing handover. At the root of delays in re-reviews of new patients on ACU was variation in communication methods used as well as an absence of agreed criteria for patient handover. And finally, poor completion rates of GOC forms was a complex issue but with some modifiable causes including variable form location and lack of prompting.

Project outcomes

- Agreement that ED pod-leader will provide handover for every admission with ADDS \geq 5 to AC flow co-ordinator and set information that should be included
- Provision of a ward registrar mobile telephone to improve communication between admitting and ward teams as well as between ward nurses and medical staff
- Criteria for patient handover between admitting and ward team as well as time for next medical review
- Creation of a 'Patients of Concern' List in ACU handover room
- Merging of admission pro-forma and GOC form

Recommendations

- Consideration of jobs list on the ward for night shifts

Project Aim

To improve the safety and efficiency of transfer of patients with ADDS \geq 5 from ED to ACU.

Rationale

Data collected in March 2018 showed the mean time from point of triage to leaving the ED was 6 hours and 21 minutes for a group of patients with ADDS \geq 5. We know that patient outcomes, in particular inpatient length of stay, are directly related to time spent in the emergency department. In addition delays to admission have been shown to be related to increased inpatient. Delays in transporting patients to the ward lead to overcrowding compromising patient safety. It is only when a patient arrives to the inpatient ward that progression of care can commence with input from the ACU multidisciplinary team members. Consequently the time of transfer of patients from ED to ACU impacts upon the flow of patients around the entire hospital system.

Improvement team members

Supervisors:

Dr Atul Sinha (Clinical)
Katherine Birkett (Non-clinical)

Supporters:

Katie Khoury (ACU NUM)
Jinesh Kunhangadan Kunhikannan (ACU acting NUM)
Heidi Wade (ED consultant)



Dr Jeannette McGill - My Leadership Journey

Personal leadership journey

I have gained a lot of knowledge around my personal leadership style during this project. Leading the root cause analysis sessions were my leadership highlights and really helped to refine my leadership skill set. I plan to apply these new skills to my everyday clinical practice in my future career.

Future career aspirations

I will be taking my Australian medical career across the country to Sydney to complete a further Resident Medical Officer year. I then plan to pursue a career in Radiology. While I have immensely enjoyed this term and all I have gained, it has confirmed that my passion lies with more clinical aspects of the Medical field and patient interaction.

Hints and tips for future participants

My top tip would be to set aside all preconceived notions of what the project will find as the issues and the solutions that will really make an impact!



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Bentley After-hours Team Project

Dr Vinh Ngo, Bentley Health Service, EMHS

The improvement process

Opinions of patients, staff, and members of the organisation were sought to identify key areas of improvement. Process mapping was conducted that mapped out key processes centred around recognition, escalation and management of the deteriorating patient. A number of issues raised during this session concentrated on Policies and Guidelines involved, escalation triggers, methods of communication, and management skills of both nursing and medical staff. Data was gathered regarding workload, admissions, and transfers out of BHS. Root cause analysis revealed that there were several unclear Policies. Policies were ineffectively disseminated, there was a lack of teamwork and leadership, and communication systems were poor.

Project outcomes

The following solutions have been proposed:

- A safety huddle with a structured handover whereby members of the after-hours team introduce themselves and handover "Patients of Concern";
- Revision of multiple Policies and Guidelines including "Patient of Concern", "Escalation to the Treating Consultant";
- Improvement of the communications system including consistency in messages sent through the SPOK paging system and usage of the after-hours mobile phone;
- A "Training Needs Analysis" for nurses and access to deterioration scenarios;

Recommendations

The above solutions are in various stages of implementation. An Action Plan has been developed that has allocated leads to each outcome and gives recommendations for review and feedback. At an organisational level, BHS needs to work towards a multidisciplinary after-hours team approach which is governed by clear Policies and Guidelines.

Project Aim

To develop an after-hours model that delivers campus-wide nursing and medical care which is safe and timely, with clear escalation guidelines in case of patient deterioration.

Rationale

BHS is a fully accredited public hospital providing 199 beds across multiple specialties. After-hours care was divided across the site between a locum medical service and Mental Health doctors employed by East Metro; both services operated independent of each-other.

Prior to this Project, there were several unclear Policies and Guidelines, mainly around interdisciplinary care and escalation in case of patient deterioration. This contributed to inefficient use of resources and transfers out of BHS that could have been avoided.

Improvement team members

Supervisors:

Supervisors: Dr R Stewart, Dr S Prosser, A Baker, K Birkett

Supporters:

Many thanks to L Bennett and E Dawkins



Dr Vinh Ngo - My Leadership Journey

Personal leadership journey

I have developed a passion for team management and leadership, mainly through entrepreneurial side hustles. I previously started up a tutoring company that employed 30 tutors servicing 100 clients by the end of one year, as well as a café that employs 7 full time staff. However, prior to MSI, my project management skills were somewhat scattered. MSI helped me develop a framework through which I now plan and execute much more effectively and efficiently.

Obviously, I also have a career in medicine! I enjoy the teamwork and leadership aspect of this career immensely. Doctors have to utilise these skills on a daily basis and develop on them as they progress through their careers, often without realising it; I believe they can become much better doctors once they hone in on those skills. Whether it is business or medicine, MSI has made me a much better leader and I will use the skills I have learned here for a long time to come.

Future career aspirations

At this stage in my career, I am still exploring both my passions fully. Business wise, I am working on expanding the café and looking to open an ice creamery where I can refine my process skills.

In medicine, I am working on a Masters of Traumatology and engaged in a few research projects, progressing towards a career in surgery.

At some point, something will give and I'll have to make a big decision as to which career I pursue. Or maybe I'll be able to marry the two. For the moment, I'm just doing what I love.

Hints and tips for future participants

MSI is a great learning experience and a needed break from the usual clinical work. I would thoroughly recommend it to any doctor looking to pick up some new skills. I'd recommend you pick a project that has outcomes which you can realistically achieve in the timeframe; the term finishes much sooner than you think!



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ComMent Project: Optimising Discharge Communication in Mental Health

Dr James Caudle, Graylands Hospital, NMMHS

The improvement process

Process mapping was undertaken with acute and Mental Health in the Home teams at Graylands Hospital capturing current barriers to summary compilation. Coupled with individual meetings we identified that medical staff were uncomfortable on the ward due to lack of dedicated medical workspace, interruptions from other staff, lack of time, competition for computers & workspaces and privacy concerns when documenting. Furthermore, Mental Health in the Home Case Managers were drafting the discharge summaries for the registrar with no experience, training or understanding of the requirements of a mental health discharge summary, which contributed to delays.

Quantitative data was analysed from a sample of approximately 1500 cases and qualitative data was collected through interviews with triangulation where possible. The root-cause analysis then further reinforced the above-identified issues.

Project outcomes

At the conclusion of the project...

- Average time to summary finalisation 2 days post discharge (previously 7 days)
- 41% of summaries completed within 24 hrs of discharge (previously 4%)
- 10% of summaries completed within 30 mins of discharge (previously 0.17%)

Recommendations

The outcomes include recommendations for clarification of discharge policies, development of guidelines & sample discharge summaries and educating case managers. Fundamentally, providing doctors a workspace on each of the four wards and ensuring protected time should alleviate many of the barriers facing junior doctors in timely completion of the summary.

Project Aim

To improve the number of discharge summaries finalised at the time of discharge.

Rationale

The discharge summary conveys pertinent clinical information in a standardised way between clinicians at discharge. Failure to provide timely mental health information via discharge summary has recently contributed to several sentinel events.

This project built on the opportunity to identify and eliminate barriers to accurate and timely summary completion with the broader aim of improving patient outcomes through timely discharge communication.

Improvement team members

Supervisors:

Dr Samir Heble, Clinical Supervisor

Dr Viki Pascu, Executive Supervisor

Ms Judy Wenban, Project Supervisor



Dr James Caudle - My Leadership Journey

Personal leadership journey

My leadership journey started in secondary school & continued through university. As my career progressed I found further leadership development in the state ambulance service where I completed frontline management training and enjoyed the ability to both exercise learnt leadership skills and hone my abilities whilst concurrently studying medicine. This experience sparked interest in me to further read and research about the differences between leaders and managers and develop a particular interest in military models of leadership.

The medical service improvement program has allowed me to learn skills in a non-critical corporate government environment which is different from my past experiences and thus affords an opportunity for further growth and learning. I will always continue to strive for leadership positions as besides providing immense enjoyment I believe they help me balance an often heavy, technically based clinical workload.

Future career aspirations

The next stage of my career will involve surgical training where I endeavour to further my leadership abilities through project & committee work. Upon completion of surgical training, I would like to study medical administration and possibly undertake further tertiary studies in medical law whilst maintaining a mix of clinical and non-clinical work.

The Medical Service Improvement program has provided me with an insight into the non-clinical areas of medicine that is rarely seen or discussed either in tertiary medical training or as a junior doctor. Given my interest in medical leadership & medical law, it has provided invaluable understanding into the operation of the public health service. Furthermore, not only has the Medical Service Improvement Program provided me with insight but I have also been able to enlighten other junior doctors as to the operation of the public health service.

Hints and tips for future participants

Spend the first two weeks clearly identifying the purpose of your project, its boundaries and your role within the organisation structure.



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TICK TOC: Improving Surgical Decisions in ED

Timely Communication with Key-decision-makers and Take Over of Care

Dr Nicholas Laidler, Sir Charles Gairdner Hospital, NMHS

The improvement process

The DMAIC methodology was utilised in the TICK TOC project starting with a process mapping session to understand the current process at SCGH. This was followed by data collection regarding the surgical patients' journey through the emergency department from two sources EDIS and RIS data servers and a manual time in motion audit of 30 patients. Issues identified from this process included the protracted time taken by a junior doctor to make a decision on a patients management and disposition and the difficulty experienced when contacting senior members of the consulting team. The root cause analysis revealed three issues;

- 1) The junior doctor reviewing surgical patients in ED rarely has the required knowledge to make decisions without first consulting a senior.
- 2) There is no clear process for contacting the key decision maker when a surgical decision is required.
- 3) There is no clear process for the frictionless transfer of medical patients who are wrongly admitted to a surgical service to be transferred to a medical service. This leads to excessive diagnostic investigations and liaison with consulting speciality teams because of the strong desire not to admit a medical patient.

Project outcomes

TICK Pathway: A standardised admission pathway centred on early consultant involvement for surgical patients who present to the ED was developed and will lead to improvements in both WEAT and clinical outcomes for patients.

TICK KPI: With increased support from team consultants, a 45 minute KPI for referral to decision was developed. This new KPI will be recorded in EDIS and monthly reports generated and reviewed.

TOC Pathway: The take-over of care pathway for medical patients admitted under a surgical team was developed in consultation with relevant key stakeholders. The pathway allows for a frictionless transfer for medical patients wrongly admitted under a surgical speciality.

Communication: All interventions highlight consultant review and high level communication within and between treating teams.

Recommendations

The above solutions will be piloted over the next three months within the general surgery and orthopaedic departments. This will allow for the intervention to be controlled whilst capturing 65% of emergency surgical presentations. Following the results of pilot project, the process can be implemented in all other surgical specialities.

Project Aim

The goal of the project was to reduce the time taken for a decision for surgery to be made once a patient had been admitted to the ED, without any compromise in the quality of patient care. We aimed to generate, recommend and implement solutions to improve performance against the Western Australia emergency access targets (WEAT), and ultimately improve the flow and outcomes of patients requiring emergency surgery.

Rationale

There is currently no standard process for patients arriving at SCGH emergency department (ED) who require surgical review which ensures timely imaging and surgical specialty review. The benefit of a timely phase 1 would further streamline the ESUC patient pathway and directly impact the SCGH Western Australia emergency access targets (WEAT) for this cohort of patients.

Improvement team members

Supervisors:

Dr Steven Watts
Peter McEwen
Russi Travlos

Supporters:

Dr Sumit Sinha-Roy
Innovation and Improvement Unit
SCGH
Medical Executives SCGH
Department of Health WA



Dr Nicholas Laidler - My Leadership Journey

Personal leadership journey

The Medical Service Improvement Program has been a rewarding opportunity to challenge current practice and enact positive change. The support and encouragement from the MSI team, as well as continuing leadership and professional development opportunities has been pivotal to the success of my project. Within the paradigm that is public health care, the process of service redesign has been a complex, challenging and sensational experience. I have learnt the importance of approaching a problem in a systematic way, and to let go of pre-conceived ideas or assumptions and to allow the process to be fully explored. I have learnt the value of constant communication with those who are invested in the project and believe that collaboration with all parties in our health system is required for the sustainable functioning of our service.

The scope of the TICK TOC project initially seemed very broad and at times I felt rudderless. I learnt to listen to my stakeholders and was consistently impressed with their understanding of the system in which they work, their ideas to improve their workplace and their passion and dedication to patient care.

I am excited at the prospect of continuing to develop and shape what our health system looks like in the future so that we can deliver the best possible care to our patients in a responsible way. I have learnt many skills through this rotation which I believe will help me achieve this, as well as aid in my daily clinical duties.

Future career aspirations

I am a current resident medical officer and wish to pursue dermatology as an area of specialist training in the future.

Hints and tips for future participants

- Define your project and scope early.
- Face to face meetings, even if brief, achieve more than email ever does.
- Implementation always takes the longest. Aim to do this as early as you can and expect it to take longer than you originally thought.
- Involve the people around you in your journey.
- The common thread among all is the desire for excellent patient care.



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The Make a Dent Project



Dr Emily Stern, Osborne Park Hospital, NMMHS Older Adult

The improvement process

Completion of an oral health survey of inpatients confirmed the need for improved oral care at the unit, with 86% of inpatients needing a dental review. In contrast, records showed that only 7% of patients received a dental review in the previous year. Process mapping sessions were held with individual stakeholders to outline the patient journey from admission to identification of an oral health issue and then to dental review. Key issues identified included absence of process, documentation, clinical skill, clinical safety and limitations of dental care options. Root cause analysis revealed that there is a discrepancy between organisational policies for oral health care, and a staff sense of responsibility for this aspect of care because of:

- Isolation of oral health from the public health system by the Medicare structure.
- Medical curriculum reinforcing the dichotomy of oral health versus general health.
- Culture of care siloing.
- Increasing demand on the mental health service without adequate funding or training.

Project outcomes

- Proposal for a revised state-wide Physical Examination form to help junior doctors identify those patients in need of dental review.
- Proposal for site-based oral health care policy. This has been placed alongside referral forms in the doctor's office to facilitate streamlined referrals to existing dental care providers.
- Increased awareness of importance of oral health through nursing and medical education, an oral health nurse champion position, and revised orientation materials.

Recommendations

The provision of adequate oral health care for mental health patients requires the development of accessible, integrated and specialised public oral health care services. Rather than expanding the duties of an already stretched mental health service, reconsideration of the existing model of care is required, as well as investment at the state level. This issue will be taken forward by the Chief Dental Officer of Western Australia, Dr Soniya Nanda.

Project Aim

To improve the identification and management of oral health problems in patients admitted to Osborne Park Older Adult Mental Health Unit.

Rationale

Western Australians who live with mental illness are more likely to develop and die from physical illnesses. One such preventable illness is oral disease. This issue affects the older adult mental health population in particular. They often have many risk factors that make it more likely to develop oral disease and less likely for them to access adequate care. For this population, oral disease can trigger a large number of acute issues, including infection, reduced oral intake, malnutrition, electrolyte disturbance, delirium and impaired speech and swallow. It is our duty to ensure this issue is addressed.

Improvement team members

Supervisors:

Clinical supervisor: Dr Caroline Luke

Service improvement supervisor: Kirsty Snelgrove

Supporters:

Amy Wallace, Sam Carrello.



Dr Emily Stern - My Leadership Journey

Personal leadership journey

This project has fostered skills that I had previously under-utilised in my work as a junior doctor; patient advocacy, collaborative network building, presentation skills, time and task management. I have experienced the satisfaction of taking a journey from goal setting to goal achievement. I have learned first-hand about the machinery behind service provision, and that I can be more than a cog in the wheel, but a leader in service improvement.

I am passionate about improving the physical health status of Western Australians who live with mental illness, especially those who live in rural and remote settings. I intend to continue work as a leader for change in this aspect of health service provision in the future.

Future career aspirations

I have applied to commence General Practice training next year, with a view to complete a Fellowship in Advanced Rural General Practice.

Hints and tips for future participants

This program is a fantastic opportunity to develop your skills and improve patient care, with the luxury of isolated time away from clinical duties. Make the most of it, abandon preconceptions, expect challenges, and be prepared to learn a lot about yourself.



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'Go Time – OT'

Getting on Track in Managing Emergency – Operating Theatre

Dr Erin Bock, Sir Charles Gairdner Hospital, NMHS

The improvement process

A process mapping session was conducted with participants from surgical teams, theatre, ED nursing and medical staff, patient flow, anaesthetics, and surgical wards. This mapped the patient journey from 'decision for surgery' to 'arrival in operating theatre'. The mapping process highlighted the lack of standardised operating procedure for patients booked for surgery whilst in ED. Root cause analysis, file reviews and a patient tag-on session enforced that a lack of standardisation, and systemic issues with communication relating to a patient's pre-operative status and appropriate post-ED destination, were contributing to 'Go Time' patients staying too long in ED and arriving late to theatre. Discussion around solutions generation therefore focused on how the theatre booking process for ED patients could be standardised, and what would be the best way to 'signal' to ED and other relevant parties (Bed Manager, surgical ward nurses) that a patient was booked for OT.

Project outcomes

Standard Operating Procedures (SOPs) were developed for <2hrs and <6hrs 'Go Time Patients.' The SOPs clarify communication responsibilities. Now, all patients booked for theatre from ED will have a bed sign displayed. All <2hr ESUC patients are now prepped for theatre in ED and transferred to Holding Bay when ready for care. Less urgent patients still have prep commenced in ED, and ED communicates with theatre before they are sent to a ward. The procedures are robust and designed to be adapted in anticipation of pending changes to ESUC targets later this year.

Recommendations

1. Transitioning from paper-based to electronic theatre booking system as soon as is feasible.
2. Electronic Pending Board for all relevant staff members to have access to list of pending emergency cases.
3. Improve orientation process for new doctors working on surgical teams.
4. Further service improvement of other aspects of the triage – theatre pathway.
5. Ongoing monitoring and hearty recognition of all key parties with progressive improvement in outcomes.

Project Aim

To streamline and standardise the pre-operative process for patients in ED requiring urgent surgery.

Rationale

Every patient presenting to SCGH ED in need of urgent surgery deserves access to excellent pre-operative preparation and efficient transfer from ED to the operating theatre through the coordinated efforts of a highly skilled and caring team. Currently at SCGH, 19.5% of patients booked for urgent <2hrs and <6hrs surgery from ED are late to theatre, and 39% of them stay in ED for longer than four hours.

Improvement team members

Supervisors:

Clinical supervisors:

Dr Stephen Watts

Peter McEwen

Service improvement supervisor:

Russi Travlos

Supporters:

Gaby Hutchinson

Caroline Fletcher

Fiona Bowden



Dr Erin Bock - My Leadership Journey

Personal leadership journey

According to a list generated at one of our health leadership training programs, two of my character strengths are 'service' and 'gratitude' – therefore it would be remiss of me not to express how grateful I am to have had the opportunity to be involved with medical service improvement during this term.

Helping with the 'Go Time – OT' project was an excellent way to learn new skills in the field of project management and clinical service design. It was fantastic to be able to meet with many engaging people with great insights and ideas from so many different areas of the hospital, including many departments about which I would not usually have the chance to learn.

Still being quite early on in terms of my medical career, I found it very uplifting to witness a general sense of determination and motivation to continue to improve and future-proof our health system, particularly when any problem was framed by "putting patients first."

Future career aspirations

I am interested in rural and remote health due to the unique opportunities this field offers in terms of continuity of care, clinical challenges and variety of experience. A further motivation is to help improve the poorer health outcomes of our rural population, and I also have an interest in global health. With this in mind, I am interested in maintaining a component of health leadership or policy alongside whichever specialty pathway I follow clinically. In the short-term, I am completing my Masters of Public Health and Tropical Medicine with JCU, and gaining solid experience with a diverse range of RMO terms. I have loved my Medical Service Improvement term.

Hints and tips for future participants

Enjoy the chance to meet and learn from as wide an array of people as possible.

Lock in key time points early to establish and maintain momentum.

Make the most of the great professional development opportunities offered during the term, they are interesting and fun.

Aim for outstanding patient care and everybody will win.



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MOVES Initiative – Managing and Optimising Value and Efficiency of the Stranded Patient

Dr Piyush Grover, Sir Charles Gairdner Hospital, NMHS

The improvement process

The DMAIC methodology was utilised in the MOVES project, starting with a Process Mapping session to understand the processes of the Long Stay Committee (LSC). This was followed by review of the data on patients who had a length of stay ≥ 21 days at SCGH in 2017 (n=738). Medical records were reviewed on a subset of these patients for a further analysis in order to understand factors and systems resulting in patients either having a long stay and/or becoming stranded. This identified three key findings

1. In 2017, 2.6% of patients occupied 17.3% of bed days at SCGH. The bed occupancy rate was higher than some other tertiary centres.
2. More than three-quarters of patients, whose records were reviewed, were deemed to be stranded during their hospital stay. There were multiple reasons for this.
3. The LSC could be more efficient and effective in its operation.

Project outcomes

- Development of a tool to identify patients who are stranded or at risk of becoming stranded.
- Development of an advocacy pathway for patients who are deemed to be stranded.
- Improved processes of the LSC (approval of terms of reference and establishment of the referral process).
- Development of an online patient list with multi-level filters that provides rapid access to information on patient flow.
- Identification of scope of partnership with key external service providers to prevent delays in patient care.
- Preliminary results from pilot on two high impact wards have suggested benefits on various performance indicators.

Recommendations

- Foster collaboration with the identified external service providers to provide appropriate and timely patient care.
- Evaluate the use of the identification tool, the advocacy pathway and the processes of the LSC in 3 months' time.
- Evaluate data on length of stay and bed occupancy on long stay patients.

Project Aim

- To identify 'stranded' patients and support their care.
- To make the processes of the Long Stay Committee effective and efficient.

Rationale

The long stay patient serves as a sentinel for patient risk, capacity, management and financial issues for the hospital. At any given time there are approximately 50 patients at Sir Charles Gairdner Hospital (SCGH) who have a length of stay greater than 21 days. Some of these patients may be considered to be 'stranded'. Whilst not every "long" stay patient is stranded and not every stranded patient has necessarily had a long stay; patients who have either had a long stay or are stranded are at a greater risk of hospital acquired complications.

Improvement team members

Supervisors:

Dr Nick Spendier - Clinical supervisor

Russi Travlos - Service improvement supervisor

Executive sponsors:

Amanda McKnight and Dr Sumit Sinha-Roy



Dr Piyush Grover - My Leadership Journey

Personal leadership journey

The Medical Service Improvement Program is a fantastic opportunity to challenge status-quo in a structured and supportive environment. Whilst I had some previous research experience, the process of service redesign in a complex hospital system was new, challenging and exciting for me. I have learnt that it is important to approach a problem in a systematic way and to keep asking questions. I believe that fruitful collaboration is critical to achieve meaningful outcomes for our patients and a sustainable health system.

The cross-divisional nature of the MOVES project meant that the scope of the project was broad and the likely impact was significant. For me it boiled down to advocating for appropriate and timely patient care. The service redesign workshops and leadership masterclasses were empowering and inspiring to create a sustainable change.

I am excited at the prospects of future service improvement opportunities. I believe the knowledge and skills from this program will put me in good stead.

Future career aspirations

I am a second year Basic Physician Trainee and am considering oncology for advanced training.

Hints and tips for future participants

- Define the project scope early and clearly.
- Frame the problems as opportunities and tie it back to patient care.
- The biggest wealth of resource is the people around you so involve them in your journey.



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RACE 48 – Responding to Acute Cerebrovascular Events: The First 48 Hours

Dr Dylan Beinart, Fiona Stanley Hospital, SMHS

The improvement process

We started the RACE-48 project by mapping the journey of a stroke patient from admission until 48 hours. From there we measured critical time-points and adherence to evidence-based best practice. The acute stroke unit provides an overall outstanding service but we were able to identify a few key areas for improvement. These areas included after-hours thrombolysis, documentation of stroke calls, timely initiation of secondary prevention and prompt allied health review. By conducting a root cause analysis we found that the problems could be traced back to a lack of junior doctor orientation resources and poor communication around transfer and referrals. This allowed us to institute solutions that addressed the core issues.

Project outcomes

- Junior Doctor Stroke Handbook
- Code Stroke Documentation Template
- Consolidation of Neurology department orientation materials
- Update to allied health referral guidelines
- Addition of allied health referrals to nurse coordinator shift schedules
- Establishing an acute stroke webpage to store critical documents, guidelines, links and resources in one central location
- Improved relationship between medical and nursing staff
- Contributing to a culture of excellence and continuous improvement

Recommendations

- Development of an acute stroke admission pro-forma
- Post-implementation audits at 3 month, 6 month and 12 month periods
- Practical training for neurology registrars in drug preparation and administration

Project Aim

Improve the management of patients presenting to Fiona Stanley Hospital with acute stroke within the first 48 hours

Rationale

Treatment of stroke is time critical. Immediate treatment of ischaemic stroke involves a combination of thrombolytic therapy aimed at dissolving the clot and endovascular clot retrieval. Once patients are admitted, early rehabilitation and prompt initiation of secondary prevention reduces short and long-term complication, morbidity and mortality.

Improvement team members

Supervisors:

Dr Darshan Ghia
Jonathan Oldham

Supporters:

Gill Edmonds
Esther Dawkins
Dr Rebecca Wood
Dr Rebecca Brereton



Dr Dylan Beinart - My Leadership Journey

Personal leadership journey

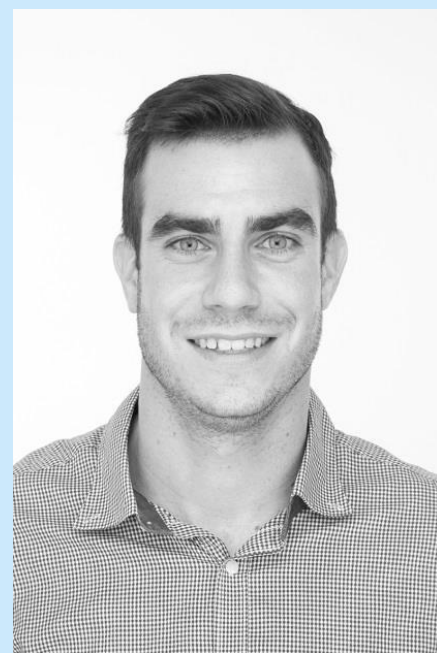
This term was a great chance for me to develop my leadership skills and improve my leadership style. You get the chance to learn and practice important skills like group facilitation, having difficult conversations and resolving conflict. Importantly, I have learned to recognise what makes a good leader. My leadership highlight was being able to bring an entire ward behind a central idea and help create a culture of improvement.

Future career aspirations

I hope to enter into the basic physician training program next year whilst staying involved in service improvement and health leadership. The goal of the MSI program is to give junior doctors the skills to empower further independent leadership and improvement. Now that I know what can be done with the right approach, I will always be looking for areas to improve and things to change.

Hints and tips for future participants

- Enjoy the experience
- Learn to stay within your scope
- Accept that there is never enough time
- Find your champions, these are the people who will make or break your project



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HANGOUT: HANdovers in the Gynaecology & Obstetrics UniT

Dr Joanna Ho, Fiona Stanley Hospital, SMHS

The improvement process

The HANGOUT project followed the DMAIC framework. A Process Mapping Session was conducted with 21 stakeholders to map the process of the current handover meeting process, from 15 minutes before the meeting to the completion of the meeting. Four cluster areas of issues were identified:

1. Preparation prior to handover meeting
2. Structure of handover meeting
3. Quality of content handed over
4. Handover documents used

The extent of these issues was measured using 2 main sources – time in motion studies of 10 handover meetings and staff satisfaction surveys. The data collected then guided focus areas for the Root Cause Analysis and Solution Generation Session.

Project outcomes

- Established improved handover structure which included
 - a. Reshuffling morning handover meeting into 3 parts, in the following order: Gynaecology handover, Obstetrics handover, 3C/3DO Journey Board Meeting
 - b. Rearranging order which patients are handed over
 - c. Reallocation of staff required to attend handover meetings
 - d. Changing layout of handover meeting room
 - e. Fixed seating plan for every handover meeting
 - f. Installing CTG viewing software into computer in handover meeting room to display CTGs during meeting
 - g. Fitting desktop computer and landline phone into handover meeting room
 - h. Laminated posters displayed to remind staff of handover structure
- Obtaining BOSSnet “Combined Obstetrics and Gynaecology” auto-generated list
- Obtaining printed BOSSnet handover document with pre-filled clinical information in ISOBAR format
- Staff education on improved handover structure and document

Recommendations

- Displaying the BOSSnet Medical Precis page during handover meetings as a visual tool
- Adopting a team-based structure in the department to improve the continuity of care a patient receives
- Hospital-wide uptake of new BOSSnet handover document with pre-filled clinical information
- Development of a standardised handover meeting audit tool which can be used for other departments

Project Aim

To achieve efficient and well-structured handover meetings in the O&G department which ensure safe patient care

Rationale

The handover meetings in the O&G department at Fiona Stanley Hospital were a very complex process, involving multiple stakeholders, with a wide variety of patients scattered across many areas of the hospital, and fraught with several IT issues. Both acute and sub-acute patients were discussed at these meetings, which were often protracted, taking multiple staff off the floor in a high acuity unit. In addition, a clinical incident occurred partially due to a patient being missed during a handover meeting. There was a clinical need to restructure the handover meetings into a more effective process that maintained a high level of patient safety.

Improvement team members

Supervisors:

Clinical Supervisors:

Prof GV Sunanda

Dr Rae Watson-Jones

Service Improvement Supervisors:

Ms Nerinda Bradshaw

Dr Katherine Hooper

Executive sponsor:

Dr Hannah Seymour



Dr Joanna Ho - My Leadership Journey

Personal leadership journey

The MSIP (despite the project being a massive one to undertake) has been one of the most enjoyable terms and a highlight in my leadership journey to date! I had an added advantage of a previously established rapport with stakeholders and understanding the unit's workflows from working in the department for 7 months. However, influencing people to change their daily practice is never easy. The biggest lesson I've learnt in change management is the importance of establishing a clear plan and communicating it effectively to all stakeholders. Stakeholder engagement is also critical to the success of the project. I spent a significant amount of time having face-to-face conversations with them – to show that their input was valued and convince them that change would not just benefit them, but ultimately improve the standard of care we deliver to patients.

I have learned a great deal about the intricate workings of a hospital and how simple solutions can bring about better healthcare. As junior doctors, we don't usually think that we can make a big impact in the hospital – this project has just proven the opposite! It has encouraged to me to build on my leadership skills and I will definitely be undertaking many more service redesign projects in the future. We all have the potential to positively influence the environment we work in and patients we care for.

Future career aspirations

I have a strong passion for Women's Health and am hoping to pursue a career in Obstetrics and Gynaecology. My dream is that one day, maternal mortality from preventable causes related to pregnancy and childbirth will be eradicated. This Service Improvement term has also sparked a keen interest in clinical redesign – I see this as a critical component in ensuring the highest standard of healthcare is delivered to patients!

Hints and tips for future participants

- Setting a well-defined and narrow scope early in the project is key to preventing it from increasing at an uncontrolled rate later on
- Identify key supporters within your stakeholders and engage with them frequently during the term – they will help push the project forward and ultimately, be champions for it in the long run.
- Be opportunistic, adaptable and ready to learn
- Seek out previous MSI participants, I have found that they have great advice to offer and are often more than happy to chat (me included)!



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Government of **Western Australia**
Department of **Health**
Institute for Health Leadership



Making an Outpatient IMPACT: *Improving Paediatric Access to Clinics*

Dr Michael Kirk, Fiona Stanley Hospital, SMHS

The improvement process

The IMPACT project began by assessing non-attendance. The patient journey from time of referral to time of first appointment was mapped. Gathered data determined that non-attendance was a symptom of long wait times and lack of clinic flexibility and thus the project morphed to assess the root causes of these factors. Deficiencies in the processes of triaging and waitlist management were explored and ideal states including a standardised triaging process and ensuring all patients are seen within four weeks of referral were agreed upon. Solutions to achieve these ideal states were generated and subsequently implemented with recommendations for ongoing improvement formed.

Project outcomes

- Improving the triaging process
 - Single generic triage and clinic list for all general paediatric patients to reduce inequality in appointment allocation
 - Utilisation of eReferral notifications to prompt clinicians to triage regularly
 - Changing clinic names to reflect current consultant availabilities
 - Refinement subspecialty referral criteria
- Managing the waitlist
 - Defined supply and demand of the paediatric clinic
 - Planned and organised new patient 'Blitz's' to reduce the current backlog of patients awaiting a first appointment
 - Construction of a supply and demand calculator to assist with review of clinic profiles

Recommendations

Key recommendations include reducing demand for follow up appointments by developing shared care pathways and pro-formas with GP's and facilitating patient choice in appointment time.

Project Aim

To improve paediatric access to the outpatient clinic by reducing wait time to first appointment and reducing non-attendance.

Rationale

Outpatient care is an increasingly important aspect of the health system to reduce inpatient demand and facilitate early specialist review. The paediatric clinic at Fiona Stanley Hospital has significant delays to first appointment resulting in high rates of non-attendance, decreased patient satisfaction and subsequent impacts on clinical outcomes. By improving the clinic processes the project aims to reduce wait list times and rates of non-attendance to ensure timely and appropriate access for children and families to specialist paediatricians.

Improvement team members

Supervisors:

Dr Frank Willis - Clinical supervisor

Kylie Reed and Dr Rebecca Brereton-Service improvement supervisors

Supporters:

Dr Janine Spencer –Paediatric HoD
FSH Paediatric Consultants

Karen Tasker –Outpatient manager

Leigh Ladhams –Outpatient clerical
Coordinator

Ruby Alvares –Outpatient Clerk



Dr Michael Kirk - My Leadership Journey

Personal leadership journey

My initial thought was that my leadership journey started as the 3rd XVIII football captain in year 12 and didn't begin again until my service improvement rotation. However, after a period of introspection I've determined that leadership isn't about a title and that there are opportunities to lead every day. I've learnt that leading is about bringing others with you and working towards a goal, be it timely discharge for a patient or redesigning an outpatient clinic. I've developed an understanding of the need to invest time in building relationships and I'm more aware of how I can use my interpersonal skills to engage and lead a team. I'm particularly interested in continuing to develop my leadership skills and use them on a daily basis as a junior doctor as well as how as a leader I can share the skills I've acquired to facilitate strong leadership in all levels of healthcare.

Future career aspirations

I'm keenly interested in pursuing a career in paediatric medicine for the opportunity it allows to integrate acute care with preventative interventions. With preventable health conditions expected to markedly increase in prevalence over the coming years I'm motivated to improve the health outcomes of the future adult population. I'm mindful of the changing landscape of medical careers and I'm interested in further developing my interests in service redesign and medical education with a view to create flexibility in my career and employment opportunities.

Hints and tips for future participants

Be bold and ambitious in your project. Be flexible in your approach to the project and get everyone on side early. Ultimately service improvement is an opportunity to challenge the norm and by doing so you can engage and inspire those working in the system to work towards sustainable change processes.



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PERISCOPE – Perioperative Clinic Optimisation Project

Dr David Robertson, Fiona Stanley Hospital, SMHS

The improvement process

Through the DMAIC process, PERISCOPE sought to identify inefficiencies within APOC while simultaneously improving the triage accuracy of the unit. The APOC is responsible for the triage, review and optimisation of patients prior to their elective surgical procedures. It is a key step in the elective surgical pathway and has flow-on effects to the rest of the patient's journey. Following extensive process mapping and baseline data collection, a number of issues were identified in three main areas: 1) referral process, 2) triage decision making and 3) duplication of workload. Root cause analysis and solution generation were conducted with a multi-disciplinary team including anaesthetists, nurses and clerical staff to produce the solutions outlined below.

Project outcomes

1) Referral Process

- Education material now in each outpatient surgical clinic as well as reminder posters in clinician's consult rooms
- New process implemented to improve percentage of patients who receive correct documentation
- Ongoing involvement in eConsent project to overhaul current outpatient consent process

2) Triage Decision Making

- New system developed which includes consultant-assisted triage for difficult cases
- Creation of BOSSnet shared consult list to facilitate triage queries (awaiting BOSSnet implementation)
- Dedicated anaesthetics time to assist in triage and complex case review

3) Duplication of workload

- Planned removal of redundant triage risk assessment paper form and replacement with electronic form (awaiting BOSSnet)
- Streamlining of duplicated questions on nursing admission forms
- Ongoing involvement with ERAS project to reduce duplication between nursing and allied health admission forms

Recommendations

- Consideration of further introduction of electronic systems, for example electronic patient health questionnaires, electronic triaging systems and electronic consent forms
- Review of triage nursing FTE in light of upcoming changes to APOC
- Investigation of ABF for the triage role performed at APOC
- Scope for further projects in this area, particularly looking at rural patients, telehealth, specific high-risk patient cohorts and the current telephone assessment of low-risk patients

Project Aim

To streamline the Fiona Stanley Hospital (FSH) Anaesthesia and Perioperative Clinic (APOC) triage process with the goal of increasing triage accuracy, optimising processes and ultimately improving FSH's elective services target performance.

Rationale

Access to timely elective surgery is an important part of our public hospital system. FSH's elective services target performance is significantly worse than the state average (19.3% vs 6.7% of patients are over-boundary). The FSH APOC is a key step in a patient's elective surgical journey and a number of issues with the process had been voiced by staff and patients, thus it became the focus of this project as a starting point to improving patient access to elective surgery.

Improvement team members

Supervisors:

Dr Michela Salvadore - Clinical supervisor
Jonathon Oldham and Dr Kate Hooper –
Service Improvement Supervisors
Dr Paul Mark – Executive Sponsor

Supporters:

Dawn Tanner – DOSA/APOC NUM
Sandra Matthews – Waitlist Clerical
Coordinator
Leigh Ladhams – Outpatient Clerical
Coordinator
Claire Ma – Outpatient Department NUM
Hazel Inglis – Senior Project Officer
APOC nursing staff
APOC clerical staff
APOC anaesthetists
Outpatient surgical clinic clerks



Dr David Robertson - My Leadership Journey

Personal leadership journey

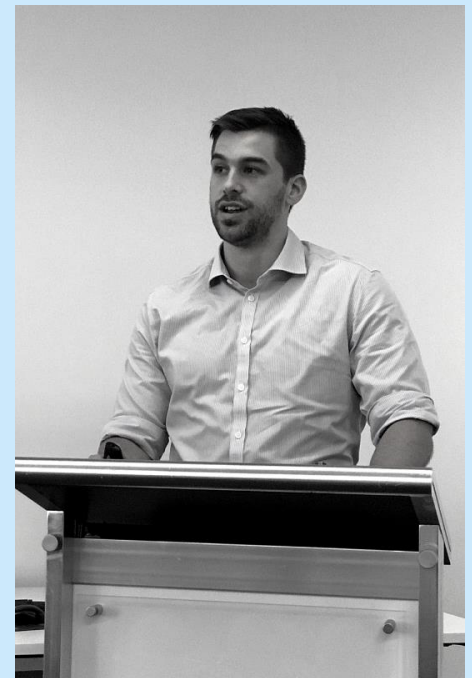
The strength of the Medical Service Improvement Program is that it effectively equips junior doctors with the leadership and change management skills to continue to create change within the health system long after the initial project has been completed. The program has enhanced my leadership skills through numerous workshops, process training and the regular feedback received. There were many opportunities to pitch my project which enabled me to practice and improve my communication and presentation skills. The responsibility of being the project lead and taking charge of your own project is the most beneficial part of the program. As a junior doctor, it's rare to have complete autonomy, so being able to proceed as the project lead allowed me to practice and develop the leadership skills I had been taught.

Future career aspirations

I have an interest in all aspects of critical care and plan on applying for the anaesthetics training program next year. This project has given me the opportunity to work closely with the FSH Anaesthetics Department and become involved with a number of ongoing projects which has been incredibly valuable.

Hints and tips for future participants

- Face-to-face meetings are important, particularly at the beginning of the project – it's much easier to get someone on board with your project if you've met them in person, even if it's just a five minute meeting to say hello, it's worth it!
- Take advantage of all the opportunities provided by the MSIP to learn as much as you can about service redesign, leadership and quality improvement.
- Don't be surprised if your project changes from what you originally envisioned, the trick is to roll with it and work with what you discover in your measure and analyse phases.
- Make the most of having every weekend and evening free for once in your career as a junior doctor!



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Quality service improvement of bowel preparation for endoscopy in an outpatient setting

Dr Alayne Bennett, Fremantle Hospital, SMHS

The improvement process

We tracked the patient journey from referral to day of colonoscopy, with a focus on waitlist and pre-admission processes. A total of 370 patients volunteered to participate in the project. We collected data on patient tolerability of the recommended bowel preparation, usual bowel habits, regular medications, lifestyle factors, and method of preadmission. Endoscopists, blinded to these factors, described the effectiveness of patients bowel cleansing using the Boston Bowel Preparation Scale.

Project outcomes

- Review of recommended bowel preparation solution
- Update of patient bowel preparation instructions
- Update of procedure and consent information sheets
- Short animated video explaining colonoscopy procedure and importance of bowel preparation.

Recommendations

- Recommend the use of a validated tool to monitor the effectiveness of patient bowel cleansing for colonoscopy. Concurrent audit of procedure reports underestimated the frequency of poor or inadequate bowel preparation.
- Right colon demonstrated the highest rate of inadequate or poor preparation. The practice of fleet enema given to patients without clear output on the day of colonoscopy is unlikely to significantly improve overall bowel preparation.
- For younger patients, clearer instructions regarding the need to complete the prescribed bowel preparation, and for some a lower volume combination preparation using both PEG and sodium picosulphate may be appropriate.

Project Aim

- Assess the rate of inadequate or poor bowel preparation for outpatient colonoscopy at Fremantle Hospital
- Identify patient and organisational factors influencing the quality of bowel preparation
- Implement service redesign to improve the quality of bowel preparation and patient satisfaction with the service.

Rationale

Colonoscopy is one of the most common procedures performed on adults in the public hospital system in Perth, WA. Poor bowel preparation reduces the detection of colonic lesions and increases the risk of complications due to the procedure. In recent years, the rate of poor bowel preparation has increased from 1 in 9, to 1 in 5 patients at Fremantle Hospital. Early repeat colonoscopy is then required which significantly impacts on waitlist, healthcare costs, delay to diagnosis and patient satisfaction.

Improvement team members

Supervisors:

Clinical supervisor –
Dr Koya Ayonrinde
Service improvement supervisor – Erin Furness

Supporters:

Dr Steve Wright
Dr Tim Mitchell
Judy Morrissey
Dr Rebecca Wood
Jason Janetzky



Dr Alayne Bennett - My Leadership Journey

Personal leadership journey

I haven't always thought of myself as a leader, and that is probably a reflection of the type of person I imagined a leader to be. The leadership and communication workshops that form part of the MSI program have provided an invaluable opportunity to reflect on my own innate skills, and identify leadership characteristics I would like to develop or refine. The MSI program has given me confidence in my ability to be a leader. I hope to be an effective but gentle leader, who brings out the best in my colleagues, and provide positive patient experiences.

Future career aspirations

I am keen to develop a clinical and research career in paediatric infectious disease. My MSI term has opened my eyes to opportunities for service improvement in subsequent clinical terms – once you start, you can't stop. I hope to use the skills I have developed in MSI to contribute to positive change in the delivery of health services in Western Australia.

Hints and tips for future participants

First tip is Apply, Apply, Apply. To anyone considering a Medical Service Improvement term, I simply cannot recommend this term enough. It is such a unique opportunity to broaden your project management, leadership and networking skills.

Second tip is don't think you can't apply because you haven't got a project in mind, or don't know what field of medicine you would like to work in, in the future. Some of the projects with the greatest impact and outcomes have come directly from needs identified by hospital executive. Apply first and project selection can come later.

Third tip is identify a project champion early. The last few weeks of solution generation and implementation go by rapidly. Your champion will see your project continue after the MSI term and into the future.



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The “Trial Day Case Surgery” Project

Dr William Crohan, Rockingham General Hospital, SMHS

The improvement process

The project began by establishing the process for Day Case Surgery at Rockingham with all relevant stakeholders, a pathway which had not significantly changed since the mid-90s and had previously proven resistant to change. Through subsequent auditing of this process and the collection of staff and patient feedback, several root causes were identified as significant obstacles to the success of Day Case Surgery, as envisaged by the Royal Australian College of Surgeons.

Subsequently, there has been comprehensive collaboration on the future of Day Case Surgery at Rockingham General, a particularly interesting point considering that the project aims to surpass what has been held as the standard of care in Western Australia.

Project outcomes

- Day Case Surgery Guidelines for General Surgery at Rockingham, with several clinical reference guides created to facilitate the use of these guidelines.
- Improved communication, bed-use efficiency, post-operative analgesia and discharge information for Day Case patients.
- Improved staff understanding of Day Case Surgery
- A statistically significant increase in the proportion of Day Case Surgery within the 10 weeks of the project.

Recommendations

Whilst the changes thus far have been both substantial and promising, the success of the project will ultimately be reflected in the permanency of these changes. As with all cultural changes, progress will likely be slow as people adjust to the new standard of practice.

Ultimately however, if changes are successful then the outcomes implemented may be reproducible at other hospitals, or perhaps even in other specialties. Importantly, the guidelines produced may potentially be adapted for use elsewhere.

Project Aim

To increase the proportion of Surgery procedures performed as a Day Case at Rockingham General Hospital

Rationale

The impetus behind this project was twofold:

The Royal Australian College of Surgeons (RACS) has recently committed to increasing the rate of Day Case Surgery performed in Australia. On this issue, Australia is behind other developed healthcare systems in the United Kingdom and United States.

Similarly, a recent report produced by Health Roundtable measured the rate of Day Case Surgery at 16 benchmarked hospitals. Rockingham General Hospital performed poorly, with 32% of all surgery performed as a day case, well below the moderate benchmark of 40-60% (Health Roundtable, 2018), and far below the goal of 70% set by RACS.

Improvement team members

Supervisors:

Mr Shelbin Neelankavil
Mr Andrew Thompson
Ms Kerri-Anne Martyn
Ms Emma Nolan



Dr William Crohan - My Leadership Journey

Personal leadership journey

It is always difficult to write objectively about yourself, but speaking as truthfully as possible, I've always found myself drawn to the humbling responsibility of leadership from a young age.

Far from the prodigal leaders of famous politicians or sports stars, I have always enjoyed promoting growth and fostering passions of others, whether it be through charity organisations, teaching, coaching or community involvement. The Medical Service Improvement Program has supported these qualities, allowing me to promote an enthusiasm for Day Case Surgery at Rockingham General Hospital that may potentially prove more constructive than any specific change to clinical practice.

I hope to continue my leadership journey within my medical career, and I would like to one day give back to the same healthcare system which has fostered these qualities in me.

Future career aspirations

With more than a stroke of luck, I plan to pursue my goal of becoming an Ear Nose and Throat Surgeon. Ultimately, I would like to produce meaningful change in Indigenous Ear Health in WA, Cochlear Implantation, and hopefully some contribution to WA Healthcare as a whole.

In the immediate future, I plan to continue to work as a Resident Medical Officer at Fiona Stanley Hospital whilst completing my Masters of Surgery at UWA, before hopefully starting work as a Service Registrar in ENT.

Hints and tips for future participants

Approach everything with an open mind, a friendly disposition and willingness to listen. You never know who will prove instrumental to your project, or come on board as a champion of change. Recognising these people and these opportunities will make your project much easier.



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AMEND Deprescribing: Addressing Medication Education Near Discharge

Dr Lachlan O’Sullivan, Rockingham Hospital, SMHS

The improvement process

A perception among medical teams at Rockingham General Hospital was of a low rate of identification and cessation of potentially inappropriate medications in elderly patients. This process is referred to as deprescribing and includes, for example, the cessation of opiates placing patients at risk of falls. In addition, Rockingham data indicated patients did not understand their medication regimen after discharge.

Our process mapping session revealed 42 issues and variations within the patient-medication journey from admission to discharge. To validate these issues, new audit data regarding the frequency and quality of deprescribing and medication education at Rockingham was collected, and relevant existing data was pooled. This informed a root cause analysis which leveraged the experience of over 30 clinical and non-clinical staff involved in the physical and system-based management of patients and their medications. Solution generation and sustainability planning sessions followed to ensure interventions were owned by the health service and aligned with NSQHS Standards.

Project outcomes

[^{TP} = Trial Phase]

1. Amendments to the patient discharge checklist to ensure physical medication review and education occurs prior to discharge.^{TP}
2. New pharmacy-driven medication review prompt to flag potentially inappropriate medications for review on the medical ward round.^{TP}
3. New pharmacy-driven junior doctor orientation package focussed on deprescribing, and ensuring patients receive medication education.
4. Amendments to the hospital’s Medication Management Policy to include the practice of deprescribing, and to mandate that patients’ physical medications are reviewed prior to discharge to reflect the discharge medication plan.
5. Mapping a referral pathway to the WA Primary Health Alliance (WAPHA) Aged Care Transition and Liaison Nurse (ACTaLN), enabling home education for high-risk patients.
6. Production of data collection tool to validate the impact of ACTaLN.

Recommendations

1. Hospital policy for centralised storage of patient’s own medications.
2. Medication safety week focus: deprescribing and medication education.

Project Aim

To increase the rate of identification and deprescription of potentially inappropriate medications in geriatric patients at Rockingham General Hospital, and to increase the effectiveness of medication education provided to these patients and their carers.

Rationale

6-30% of hospital admissions in the elderly are contributed to by adverse drug events (Ní Chróinín 2016, Chin 2001). Up to 75% of these admissions are considered preventable, and being prescribed a Potentially Inappropriate Medication (PIM) increases patients’ risk of an adverse drug event by 84% (Hamilton 2011).

This presents an opportunity for health services to reduce the burden of medication related harm on the community by reducing the prescription of PIMs, and by educating patients about their medications to ensure appropriate medication regimes are adhered to.

Improvement team members

Dr Helen Thomas	(RKGH)
Dr Angela Graves	(RKGH)
Emily Nolan	(RKGH)
Kerri-Anne Martyn	(RKGH)
Esther Dawkins	(IHL)
Dr Sumit Sinha Roy	(IHL)



Dr Lachlan O'Sullivan - My Leadership Journey

Personal leadership journey

My first run-in with a formal leadership role was unassuming but formative. I lead a brigade of my elder siblings and cousins in an emboldened raid of my maternal grandmothers shortbread tin with mixed results.

I quickly learned that managing people is a fundamental part of leading any team, and that achieving equal distribution of scarce resources is often more fraught than it seems. Also, I found that shortbread crumbs take a good deal of time to sweep up, particularly when your broom is taller than you.

This service improvement term has been a great opportunity to hone the leadership skills I've developed through varied exposures professionally, in my vocations, and in my personal life. Learning more about how to apply these skills in the field in which I intend to spend a fulfilling career has been invaluable. I have gained much from formal workshops, but even more from working with accomplished mentors and by being supported to learn by doing.

I hope to continue to be involved with the Institute for Health Leadership in the future, formally or informally. The ability to lead effectively, and to traverse the fluctuating health landscape in which we work is a critical skill for the modern health professional. It is encouraging to be involved in programs such as MSI, those that up-skill the workforce in such a way as to address this need.

Future career aspirations

I am passionate about geriatric medicine, particularly community-based models of care and the interface between health care and social aged care. Clinical medicine is the cornerstone of my interest in health, but I also look forward to undertaking further study in public health systems and health economics. I am eager to gain a broad base of acute care knowledge before entering formal training and have an interest in diagnostic and procedural ultrasound.

Hints and tips for future participants

Know your problem. Know how it affects people in your organisation, and they will help you solve it. Guide their expertise and their passion.



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A Review of the Adequacy and Adherence of Risk Assessment in Laparotomy patients at SJOG Midland

Dr Jack Hammond, SJOG Midland

The improvement process

During the 10 week placement 3 main changes have been introduced with the scope for further change in the future. Completion of the NELA risk assessment is now a mandatory part of booking patients for theatre, the NELA risk assessment calculator is now far more accessible hospital wide and education and awareness around the importance of the score has also been increased. Some areas for improvement identified by the project such as antibiotic administration was beyond the scope of the project however will certainly benefit from further work and interest and would be a recommendation for a further service improvement project.

The ongoing aim is completion of the NELA risk assessment and documentation of the score in the patient consent and notes in 100% of emergency laparotomy cases. Success of the changes implemented during this 10 week period will be re-audited 6 months after the implementation of the first changes and so will be completed in February 2019.

Project outcomes

Only 3.7% of patients who underwent an emergency laparotomy had a risk assessment completed showing a high degree of deficiency in meeting standards of care. Adherence to bundles of care were also analysed and discussed in the main report.

Recommendations

One of the main points taken from NELA was the importance of a documented pre-operative risk assessment. Evidence based bundles of care have also been created which can be used in conjunction with risk assessments to help guide care. Simply performing a preoperative risk assessment has been shown to lower mortality. It has no cost and should therefore be a mandatory part of assessing and managing patients undergoing an emergency laparotomy and supporting bundles of care to help improve survival.

Project Aim

This quality improvement project seeks to review the adequacy of adherence to these recommendations for emergency laparotomy at St. John of God Public and Private Hospital Midland. This project focussed primarily on risk assessment completion but also reviewed adherence to recommended bundles of care. Once identified, strategies to ensure high compliance in areas of deficiency will be created with the aim of reducing overall mortality.

Rationale

The high mortality associated with emergency surgery has been recognised for many years. More recently there has been an increased focus on the very high mortality associated with emergency laparotomies with mortality being reported to be between 12 – 15%. In 2011 the National Emergency Laparotomy Audit (NELA) was set up under the Royal College of Anaesthetists in the UK.



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