



International Forum on
QUALITY & SAFETY
in **HEALTHCARE**
MELBOURNE

Rapid Fire Presentations

Mike Roberts, Safer Care Victoria

Improving Partnerships with Aboriginal and Torres Strait Islander Consumers & Community

Western Health acknowledges the Traditional Custodians of the land on which our sites stand. The Wurundjeri Woiwurrung, Boon Wurrung and Bunurong peoples of the greater Kulin Nation. We pay respects to Elders past and Present.

We are committed to the healing of country, working towards equity in health outcomes, and the ongoing journey of reconciliation.

Western Health is committed to respectfully listening and learning from Aboriginal and Torres Strait Islander people and wholeheartedly supports their journey to self-determination.

Problem Statement:

Health services have not traditionally been places of healing or cultural safety for the Aboriginal or Torres Strait Islander community.

The physical environment is not always culturally appealing or inclusive.

Identification of Aboriginal & Torres Strait Islander people does not always occur, limiting access to services and advocacy.

Staff knowledge of how, when and why to ask & identify is potentially limited.

Awareness of and relationship with the Aboriginal Health Unit is limited.

Context:

The Western Health, Aboriginal Health Unit participating covers:

Western Health based on the site of the land of the Wurundjeri Woiwurrung, Boon Wurrung and Bunurong peoples of the greater Kulin Nation.

ZA is an Acute Adult Care Ward located on the Sunshine Campus of Western Health in Melbourne Victoria.

The pilot project is to run over March – June 2023 (period not yet concluded).

Project Sponsor – Jordan Casey Manager Aboriginal Health Unit Western Health
Secondary Sponsor – Aileen Wapenaar Nursing Unit Manager ZA Sunshine Hospital Western Health
Project Leads:
Jordan Casey Manager Aboriginal Health Unit Western Health
Korrie Garrett Acting Nurse Unit Manager ZA Western Health
Participants:
Western Health Aboriginal Health Unit Staff
Ward ZA Sunshine Hospital Western Health



Discussion:

The ward & the Aboriginal Health Unit agreed to collaborate in a pilot project. The purpose being to improve awareness & understanding, improve the physical environment, ensure patients were always asked if they identified as Aboriginal or Torres Strait Islander & build effective & sustainable relationships between the Aboriginal Health Unit & the ward.

The ward would be guided, outlined and led by the Aboriginal Health Unit, with all initiatives & strategies vetted as culturally safe prior to implementation. Equally the success of each intervention & the project would be determined by the Aboriginal Health Unit Manager, staff & Aboriginal & Torres Strait Islander Health Consumers & Community.

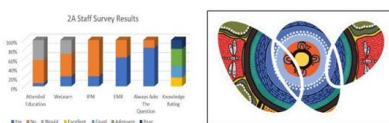
Methodology:

- Identify Stakeholders
- Define parameters & Scope
- Define Goals
- Define authority & Sponsorship
- Education
- Survey & Audit process
- Barrier identification
- Strategy development
- Resources
- Evaluation (ongoing)
- Environmental Changes
- Significant dates promotion
- External (ward) partial inclusion
- Aboriginal and/or Torres Strait Islander staff & consumer audit
- Exit survey (pending)

Surveys will/would provide self-assessment & self-reported compliance, perceptions, identification of barriers & concerns, willingness & motivation to participate. Education will promote change, build awareness & understanding. Resources will ensure staff have access to appropriate guidance & can provide these as requested or required.

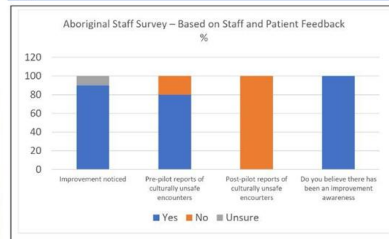
Environmental changes will promote inclusivity & cultural safety. Ongoing evaluation will ensure strategies are adapted or adjusted as required. Evaluation of the environment & experience by Aboriginal and/or Torres Strait Islander staff, health consumers & community will ensure a culturally safe environment is defined & followed by members of the Aboriginal and Torres Strait Islander community NOT the ward. Inclusion of other wards initiatives & provides a platform for future roll out by the Aboriginal Health Unit. Exit survey will identify gains, changes & improvements.

T-Shirt Launch Day



Graph 1 Discussion:

Ward based education, prepared & presented by the Aboriginal Health Unit Manager, was implemented prior to the surveys being rolled out. We primarily targeted ward staff who had not attended the education. We ascertained that most staff knew how & where to document if a patient identified as Aboriginal or Torres Strait Islander on DMR (Nursing) & all administrative staff knew how & when to document on PMA; this was reflective of where each discipline primarily operates electronically. We found that the majority of staff self-reported that they always ask the question 'Do you identify as Aboriginal or Torres Strait Islander?'. We provided space for staff who stated they did not always ask, why. We found that discomfort & a lack of awareness that it was mandatory were the predominant reasons offered. Not included in the graph but included in survey were questions related to wearing of culturally appropriate & inclusive clothing on a set day. Staff were motivated towards barriers related to not knowing what was appropriate & cost.



Outcome:

Staff were educated on appropriate clothing & provided with T Shirts. Ward staff have embraced the designated T-Shirt wearing day. Audits (wards) identified one occasion where regular staff did not ask an Aboriginal Health Consumer if they identified as Aboriginal & Torres Strait Islander; education was immediately provided. Ward staff have embraced significant dates acknowledgement. Ward staff have embraced & celebrated the artwork. The ward has developed not just improved relationships with the western Aboriginal Health Unit but also with external services such as the Department of Justice and (specific site). Ward staff have a growing confidence in partnering with Aboriginal & Torres Strait Islander patients, families & community to ensure general & end of life care is culturally safe.

Outcome:

Ward staff have an improved understanding of the purpose, significance & benefit of asking of patients if they identify as Aboriginal & Torres Strait Islander.

Moving Forward:

We plan on completing a wider rollout of this pilot, vary the T-shirt colours to suit the ward's theme but keeping the messaging consistent.

Our will provide a stepped process before the wards are given the 'Aboriginal and Torres Strait Islander Ally' t-shirts, this includes: Asking the Question training, in-service education completed by a member of the Aboriginal Health Team, then a general knowledge test, once these steps have been completed successfully the t-shirts will then be offered to those staff.

Our aim is to have wards across all of our campuses wearing these T-shirts throughout the week, raising awareness, conversation and respect for our Aboriginal and/or Torres Strait Islander Patients.

Improving Partnerships with Aboriginal and Torres Strait Islander Consumers & Community

Anne Jenkins

Reflective Practice: Humanising our experiences at work and connecting us as people.

Debbie Draybi, Clinical Communication Lead Clinical Excellence Commission, NSW, Australia

Reflective Practice is essential in integrating our human experience and transforming the way we deliver and receive care. Clinical Excellence Commission led a pilot study in the design of tailored reflective practice which provided insight into the value of Reflective Practice as an integral part of staff wellbeing and is foundational to processing the challenges and complex stressors associated with healthcare work.

Leading for reflective practice



"One thing I have learnt that has been liberating is that it is OK to be vulnerable. It is OK to say 'I don't have all the answers'. Coming to that profound realisation allows you to take that next step."


"I'm a better, stronger leader for allowing those conversations to take place"

Clinical Excellence Commission Chief Executive Adj Prof Michael Nicholl

Reflective Practise: Humanising our Experiences at Work and Connecting Us as People


Debbie Draybi and Sarah Fisher

Reflective Practice Experiences from workshop participants




Andrew Fisher
Practice Lead

"It has opened up a new world that is growing me as a person and practitioner."




Sarah Fisher
Director of Clinical Excellence

"Safety part of work involves being immersed constantly in the negative.... Reflective practice helps put perspective on those challenges and humanises our reactions"



Maria Uhl-Wagner
Nurse Unit Manager

The training taught us to not feel we have to have all the answers and that we can explore and ask questions and get a person to think through their own problem and we don't have to take on other's problems"



Medical Director

Reflective practice sessions provide a structured process where we can work through what happens in a way that is facilitated...takes away the shame factor....it is deeply humanising.

Next steps

Reflective practice is integrated

Reflective practice is built into our processes such as:

1. Induction to promote the value early
2. Role descriptions to show its importance
3. Principles and practices integrated into hosting meetings, reviews, debriefs, development discussions

Reflection humanises the work experience

- People will be sustained in their work and have improved commitment, performance and wellbeing through regular reflective practice
- People are calling for what safe reflective spaces provide



Leadership support is crucial

- Leaders need to champion reflective practice happening once a month
- Leaders need to engage in reflective practice themselves

Continue to build levels of capability

- Build a system that recognise three levels:
 1. Practitioner that integrates into the flow of work
 2. Peer skilled in supporting another's reflection
 3. Host skilled in facilitating clinical supervision sessions (1:1 or in groups)



More than mLs: Consumer engagement in the Postpartum Haemorrhage Collaborative

Alana Donaldson, Robert Forsythe, Ellie Goss, Shannon Lambert, Kaz Redmond* and Jo Szczepanska*

*Consumer Safety PPH Collaborative, Safer Care Victoria, Australia; *Institute for Healthcare Improvement, Boston, USA; *Safer Care Victoria, Australia

BACKGROUND

Postpartum haemorrhage (PPH) is severe bleeding after child birth. In the state of Victoria, Australia it was the main cause of all severe acute maternal morbidity in 2019. The PPH Collaborative was an improvement project involving 33 maternity services representing approximately 60,000 births per year. This poster seeks to describe the Collaborative approach to consumer engagement and the outcomes.

OBJECTIVES

Partner with consumers to reduce harm caused by primary PPH following vaginal birth in Victoria.

METHOD

Importantly, we listened to consumers talk about their experiences before planning changes. Consumers were on the project team and participated in all stages, including deciding the scope, aim and measurement strategy. Collaborative learning sessions began with audio stories produced with consumers to share their experiences and suggest areas for improvement.

Figure 1. Example of consumer audio story. These were in a slide deck format with illustrations, audio and subtitles.

Meet Anna

LIVED EXPERIENCE STORY

"we still have the chance to make things better..."

Illustration by Jo Szczepanska

The audio stories were highly effective tools. Clinicians valued the insights from consumer perspectives and shared them within their services. Consumers appreciated that others could learn from their experiences without having to repeat their stories or speak publicly.

Consumers also co-delivered Collaborative learning sessions and webinars. Services recruited consumers to their project team and sought consumer feedback when they tested changes. When services were planning every change, consumers were there to share what mattered to them.

Figure 2. Consumers were involved in improving every aspect of PPH care.



View a PPH Collaborative consumer story

*Consultative Council on Obstetric and Paediatric Mortality and Morbidity, Victorian's Mothers Babies and Children 2019 report, CCOPMM, State of Victoria, Australia, Safer Care Victoria

RESULTS

By listening to consumers, we learned that harm from PPH amounts to more than mLs of blood loss. They shared how frightening their experiences were and spoke about the about the lasting psychological impacts, which can lead to families being less likely to have another child.

This was incredibly impactful and motivated clinicians to generate change informed by lived experience.

Figure 3. Consumers Kristin Barles, Ellie Goss, Gemma Purdy and Allison Roberts at the 'Consumer wall' which exhibited changes implemented following their engagement.



The initial project aim was to reduce the incidence of PPH, but evolved to also improve care of families who experience it. Services took a patient-centred approach that prioritised communication and support. 85 improvements informed by lived experience were implemented.

Figure 4. Examples of change ideas implemented due to consumer engagement.



Consumers identified that clinical debrief and links to support services mattered to them, so this was included as a project measure. The proportion of women and birthing parents who experience PPH with evidence in their pregnancy care record of a clinical debrief, and provision of information on available support services improved from 15% to 61%.

CONCLUSION

Shifting Mindsets to Improve Outcomes

By moving away from the traditional model where clinicians dictate what constitutes a successful outcome, we can work collaboratively with consumers to achieve improvements that are meaningful to them.

Investing in lived experience

Embedding lived experience in project design takes time and planning. However, this led to tangible improvements in care and was rewarding for everyone involved.

Contact

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More than mL's: Consumer Engagement in the Postpartum Haemorrhage Collaborative

Kaz Redmond

Advancing antimicrobial stewardship in an electronic medical record era

Z RASHIDZADA¹, N TRUONG¹, R CHEAH¹, R JAMES¹, K THURSKY^{1,2,3}

¹Royal Melbourne Hospital Guidance Group / National Centre for Antimicrobial Stewardship, The Peter Doherty Institute for Infection and Immunity, ²Melbourne Medical School, University of Melbourne, ³Department of Infectious Diseases, Peter MacCallum Cancer Centre



"Integration between Guidance and the EMR allowed us to more accurately monitor compliance with our antimicrobial policy. We also pleasingly observed a significant rise in approvals."

"I particularly like that we can accurately record our AMS reviews and assess antimicrobial appropriateness, while recording our recommendations."

-AMS pharmacists at Royal Melbourne Hospital

Background

- Guidance is a web-based antimicrobial decision support program.
- Developed by clinicians to support Antimicrobial Stewardship (AMS) programs.
- Key features:
 - 1. Prescribing antimicrobial appropriateness
 - 2. AMS Review
 - 3. Antimicrobial Review
 - 4. AMS Team Review
 - 5. Open for Action

Evidence-based benefits:

- ↓ Broad-spectrum antimicrobial use¹
- ↓ Antimicrobial resistance rates²
- ↓ Antimicrobial costs³
- ↓ C. difficile infection rates³

Current EMR limitations

- AMS features are limited & require institution-specific programming, which is often prohibitive.
- Decision support is limited without third-party decision support systems.
- Utilising Guidance together with EMR provides exponential benefits.

Integrating Guidance with EMR to optimise AMS

- The new Guidance offers advanced EMR integration and significant AMS benefits.
- Re-developed based on clinician feedback to meet evolving digital needs.
- Meets regulatory requirements and Quality Management Systems (ISO 9001 certification).

- Expert developed algorithms
- Up-to-date content

Improved prescriber workflow

Clinical decision support

Standardised data

Interoperability

Improved AMS team workflow

Enhanced data & reporting

- Easy access to Guidance via alert & dynamic link
- Universal indications List (UIL)
- Easy data flow & integration
- EMR & pharmacy software compatible
- Interactive reports for actionable data
- Complete data capture
- Triage of high-priority patients

Discussion

- The new Guidance was successfully implemented at Royal Melbourne Hospital in 2022.
- Implementation is currently being expanded to other Australian hospitals.

Future directions

- EMR programs have limited ability to accept data from third-party programs at present.
- Currently, Guidance allows the following feedback to the EMR:
 - Approval codes and indications
 - AMS review notes
- Further enhancement is under way to allow complete two-way integration and seamless workflows.

References

1. Cairns et al. 2013. 'Prescribing trends before and after implementation of an antimicrobial stewardship program', *MJA* 198:262-266.
2. Yong et al. 2010. 'Improved susceptibility of Gram-negative bacteria in an intensive care unit following implementation of a computerized antibiotic decision support system', *JAC* 65(6):1002-6.
3. Bond et al. 2017. 'Outcomes of multi-site antimicrobial stewardship programme implementation with a shared clinical decision support system', *JAC* 72(7): 2110-2118.

Advancing Antimicrobial Stewardship in an Electronic Medical Record Era

Zohal Rashidzada



CREATING CAPACITY FOR CARE IN NEUROSURGERY OUTPATIENTS

Butzkueven, S.,¹ Hunn, M.,² Maciel, J.,³ Samers, J.,⁴ Blake, C.,¹ Bennett, L.,² Haley, C.³

Alfred Health. 1: Alfred Brain, 2: Neurosurgery Department, 3: Physiotherapy Department, 4: GP Liaison Service

PROBLEM

Demand for Neurosurgery outpatients was significantly greater than capacity, posing clinical risk to patients. Whilst urgent priority 1 new and urgent review patients were receiving timely care, waiting times for non-urgent new and review appointments were considerably longer than recommended. This posed clinical risks for patients whose conditions were not being appropriately monitored for deterioration, potentially leading to adverse outcomes and/or needing more complex treatments.



ASSESSMENT
DATA ANALYSIS
BENCHMARKING
STAKEHOLDER ENGAGEMENT
STEERING GROUP
PLANNING AND DESIGN

INTERVENTION

Expansion of previous Physiotherapy P3 screening clinics, to create Physio-led degenerative NEW SPINE clinics:

- ✓ Tripled capacity:
 - increased from one to two clinics per week.
 - Increased staffing per clinic.
 - Increased appointments per clinic.
- ✓ Dedicated neurosurgeon to consult with physios and follow up. Allows patients to be consented for surgery or discharged directly from NEW SPINE clinic without requiring additional appointment/s with consultant in surgical clinic.
- ✓ Physios working at higher end of their scope of practice to see Priority 2 patients, rather than primarily only P3.
- ✓ Improved efficiency of first appointment due to collection of comprehensive background information at the time of referral from both GP and patient.
- ✓ Physio-led triage for degenerative spine referrals using objective standardised criteria. Frees up neurosurgeons to see higher patient numbers.

Creation of two new neurosurgical surveillance clinics for specific cohorts of patients:

- ✓ Tumour surveillance
- ✓ Cerebro-Vascular surveillance

Tightened referral eligibility criteria.

Development of new discharge criteria including pathway for GP led clinical surveillance.

Creating Capacity for Care in Neurosurgery Outpatients

Chelsea Blake

EVALUATION

Results show pleasing improvements to date:

- ↑ number of new patients being booked and seen each month, most notably Priority 2 patients.
- Physios seeing a higher complexity of patients, shown by an increasing percentage of priority 2 neurosurgery referrals being directed to the physio NEW SPINE clinics.
- A reduction in triage time for P1 referrals.
- Higher percentage of incoming demand being met: comparison of incoming referral numbers vs new appointments booked per month.
- More patients being wait listed for surgery directly from physio NEW SPINE clinics without requiring further waiting time to see a surgeon in the neurosurgical outpatient clinic.

Further evaluation and refinement is occurring on an ongoing basis as the model continues to be implemented and to evolve.

Current focus is on:

- Establishment of Cerebro-Vascular surveillance clinic.
- Embedding processes for consistent application of discharge criteria.
- Continuing management of new and review demand backlog.
- Measuring satisfaction from a wide group of stakeholders including referrers, patients, physiotherapists and neurosurgeons.

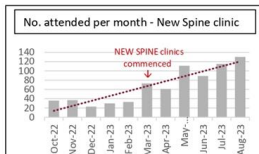
LESSONS LEARNT

Involve key stakeholders early and consult extensively. Include consumer and management representation.

Consider likely workflow changes as soon as possible to allow sufficient time for IT, digital and design changes to be made.

Importance of a dedicated team, led by a project manager to support and drive the change.

Expect that the optimal service will continue to evolve with time and ongoing evaluation.



	PRE	POST
% P2 referrals being seen in New Spine clinics	4%	43%
Days from registration to triage for P1 referrals	6	3
P2 bookings per month	18	41
P3 bookings per month	21	87
% new referral booked / accepted (demand)	61%	98%
Consented for surgery per month from NEW SPINE clinics	0	2.2
Discharged per month from New Spine	7	33

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³ SHPA Residency Training Program, Townsville, Australia

Background

VTE prophylaxis (VTEp) prescribing is important for patient care with known high rates of VTE development for inpatients at risk. Pharmacological and non-pharmacological options can be appropriately charted or withheld via a supportive Powerplan in ieMR. Even with this inbuilt support, VTEp prescribing practices were very poor leaving patients at risk.

Aims

The project aim was to develop an integrated dashboard with a whole of hospital view of VTEp prescribing and demonstrate its use as a clinical 'change of practice' tool.

Results

The dashboard was developed with the ability to see whole of hospital VTEp, along with the ability to drill down to individual wards, clinical teams and right down to specific individual patients. See figure 1 for example ward summary.



Figure 1: Example dashboard summary for ward demonstrating management of VTE pharmacological and mechanical prophylaxis

❖ The VTEp management can be seen in tabulated form below the summary details. This includes any anticoagulation charted or withheld as well as aspirin.

URN	Age	Ward	Team	Weight kg	Pharm Orders	Last aspirin dose	Pharm withheld	Mech Orders	VTE Alerts
013857	72	TRU G TMRH REH	94		heparin (5,000 uni/100 mg @ 28/9/23 -			Below the Knee:	0
017717	82	WB G TMRH GERC	75.3		heparin (5,000 uni/100 mg @ 28/9/23 -				0
020401	83	WB L1 TMRH IMD	124		heparin (5,000 uni/100 mg @ 28/9/23 -				0
032105	64	WB L1 TMRH NEP	83.8		enoxaparin	100 mg @ 20/9/23 -			18
036047	68	AB L1 TMRH VAS	103.65						17
083328	72	WB G TMRH HAE	115		**VTE Pharmacolc-			**VTE Pharmac-	0

Figure 2: Tabulated VTEp management details. (Redacted to exclude patient details)

Conclusions

❖ The VTEp dashboard, and associated interventions have seen an increase in VTEp management across the health service

❖ Over this timeframe the THHS has seen a decrease in hospital acquired VTE complications, with the rates falling over the last 2 reporting quarters, evidencing improved patient safety and success of the intervention

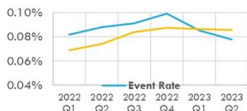


Figure 4: Event rates and expected rates for patient case mix for DVT/PE events per quarter

❖ The improvement in the rates of documented VTEp and the decrease of event rates demonstrates the success of this dashboard model

❖ To the authors knowledge the development of a whole of hospital VTEp dashboard used to improve clinical practice is an Australian first.

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Improving VTE Prophylaxis – The Clot Thickens

Kunwarjit Sangla

SIMULATION AS A QUALITY IMPROVEMENT TOOL FOR A MATERNITY MASSIVE TRANSFUSION PROTOCOL.

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BACKGROUND

In situ simulation is effective for identifying latent safety threats (LST), particularly in rare events. The Women's is the largest maternity hospital in Australia with approximately 14 massive transfusion (MT) events per annum primarily for postpartum haemorrhage (PPH). Simulation¹ and Failure Mode Effect Analysis (FMEA)² were used in an iterative cycle to identify LST and solutions in 2020-2022. Translational simulation³ was used as a quality improvement tool to diagnose LST, identify potential improvements and then test these prior to introducing and afterwards to test the effect of implementation of solutions in an iterative improvement cycle.



METHODS

We performed in situ simulations in the operating theatre examining management of an MT focusing on teamwork, communication, equipment and processes. An FMEA² analysis was performed to identify LST, and further simulations were performed to interrogate implementation of codesigned solutions for the operating theatre, blood bank and hospital wide processes.



In Situ Operating Theatre MTP Simulation May 2020

REFERENCES

1. Brad, V. Translational simulation: not 'where?' but 'why?' A functional view of in situ simulation. *Adv Simul* 2, 20 (2017). <https://doi.org/10.1186/s40792-017-0050-3>

2. <https://www.fmea.com.au/Tools/FMEAtools/FMEAtools.aspx?tab=tools>

3. Subissi, K., Andriotti, P., Gidycz, S., Babes, S. A Framework for Determining the Return on Investment of Simulation-Based Training in Health Care. *Inquiry* 2017 Jan;54:4489506687176. doi: 10.1177/0049124116687176. PMID: 28133988; PMCID: PMC5798742.

Acknowledgement to Dr Patrick Chee for his contribution to the MT simulation.

RESULTS

Challenges and opportunities were identified in each domain (Table 1). Further simulations identified LST resolution where implementation had occurred, and replicated LST where implementation was delayed. In our context, we found events occurred in simulation (e.g., printer poorly located, therefore MT request form not collected, resulting in delays) and calculated the likelihood that would happen in clinical practice, the outcome if they occurred (no harm, minor or major harm) and the efficacy of preventative strategies. Solutions were co-designed with clinicians and tested in further simulations. Further qualitative evaluation of the process identified improved communication, interprofessional understanding and better utilisation of hospital resources.

Table 1

Domain	Finding	Recommendation / Outcome
Equipment	Printer location contributed to delays	Moved printer
	Poor computer access	More computers
Electronic medical record (EMR)	Some staff unable to document MT	MT access broadened
Teamwork	Roles unclear	Visual aid to assist role allocation
	Constrained staffing after-hours	Mobilise additional staff
Communication	Hospital resources under-utilized	Hospital wide notification of MTP activation

"More staff confidence to speak up for safety."

"Better understanding about own and other team members roles."

CONCLUSION

This work has been part of the hospital's Safer Care Victoria (SCV) PPH Collaborative which saw a reduction in the incidence of massive PPH after vaginal birth. Return on investment³ has demonstrated quantitative benefits in simulation (reduced errors, faster procurement and documentation of MT) and qualitative benefits (improved teamwork). The FMEA tool is useful to detect LST and assess efficacy of solutions in simulation. Translational simulation may be used to diagnose and treat clinical challenges in a major maternity hospital where MT is required. Further work examining clinical outcomes is in process.

Simulation as Quality Improvement Tool for a Maternity Massive Transfusion Protocol

Kara Allen



From Garbage to Green: A Soft Plastic Recycling Initiative in one Canadian Anesthesia Department

The healthcare system produces 4.6% of carbon emissions in Canada.¹

Anesthesia related activities contribute up to 28% of all operating room waste.²

97.5% of Canadian anesthesiologists have a willingness to recycle but only 30.2% currently do so.³

Objective

The purpose of this anesthesia resident led quality improvement project was to develop a soft plastic recycling program within the anesthesia department at Royal Columbian Hospital in British Columbia, Canada, with the aim of increasing weekly soft plastic recycling to 2kg by May 15, 2023.

Intervention

Multiple PDCA (Plan-Do-Study-Act) cycles were undertaken. In collaboration with RCH Waste Management, a pathway for soft plastics recycling from the OR to collection was established. Starting with one operating room, the pathway was trialed from cart to collection bin. Success was measured by weighing the daily soft plastic output and assessing errors. Errors included the number of hard plastics, glass products, paper products, biohazardous or confidential material in the soft plastic waste. The program was then expanded to all operating rooms. Visual aides were disseminated to the anesthesia department, with opportunities for feedback and questions.

Results

Single OR recycling produced a mean of 194g of daily soft plastic waste. This increased to a daily soft plastic recycling mean of 1524g once the program was expanded to most operating rooms. There were a total of 80 erroneous objects placed incorrectly in the soft plastics recycling. The most common error was the inclusion of hard plastics, accounting for 76.2% of all errors. This was followed by glass and paper products accounting for 9.5% and 6.5% of errors, respectively. The remaining 4.9% of errors were biohazardous materials. However, 4 out of the 5 total materials identified as biohazardous were from a single day of measurements and improved after reinforcing education. Throughout our data collection no confidential material was found in the soft plastic recycling.

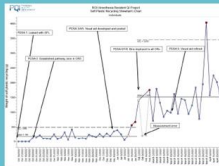


Figure 1: Shewart chart of weight of soft plastics recycling collected throughout the intervention.

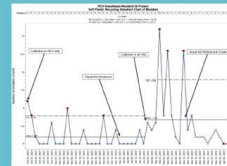


Figure 2: Shewart chart of number of mistakes found in the soft plastics recycling throughout intervention.

Key Messages

Quality improvement projects can improve patient care while promoting sustainability in healthcare. This project elucidated the need for continued reinforcement and education when attempting to change established practice patterns.



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Sustainability, Climate Change and Environmental Impact on Health

Claire Moura



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