

QUALITY INITIATIVES

The 26th Annual
ACHS Quality Improvement
Awards 2023



Quality Initiatives - Entries in the 26th Annual ACHS Quality Improvement Awards 2023.

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Introduction

The 26th Annual ACHS Quality Improvement Awards 2023

The annual ACHS Quality Improvement (QI) Awards were introduced in 1997 to acknowledge and encourage outstanding quality improvement activities, programs or strategies that have been implemented in healthcare organisations.

In 2023, the 26th Annual ACHS QI Awards were open to submissions from all domestic ACHS member organisations following the ACHS NSQHS (National Safety and Quality Health Service) Standards Program, EQulP6 (Evaluation and Quality Improvement Program 6th edition), Hospitals and Health Services Standards Program, EQulP6 Day Procedure Centres, EQulP6 Oral Health Services, EQulP6 Haemodialysis Centres, EQulP6 Aged Care Services, EQulP6 Healthcare Support Services, and the ACHS Clinical Indicator Program.

Judging was conducted externally with separate panels of three or four judges for each of the three QI Awards categories:

Clinical Excellence and Patient Safety:

This category recognises innovation and demonstrated quality improvement in the delivery of safe, effective patient care.

Non-Clinical Service Delivery:

This category acknowledges a demonstrated outcome of improvement and innovation in patient and/or consumer services and organisation-wide practice including services provided by community and allied health organisations.

Healthcare Measurement:

This category recognises organisations that have measured an aspect of clinical management and/or outcome of care, taken appropriate action in response to that measurement, and demonstrated improved patient care and organisational performance upon further measurement. Healthcare measurement can include data collected from the ACHS Clinical Indicator program or other methods of monitoring patient care processes or outcomes. Both quantitative and qualitative data can be used, however this category must describe the initial measurement, the analysis of that measurement, the action(s) implemented, and the improved measurement(s).

Each judging panel consisted of an ACHS Councillor, an ACHS Assessor, and a representative from an ACHS member organisation.

Submissions were required to meet specific criteria that were weighted equally:

- Judges assessed all eligible submissions on the five (5) ACHS principles of: consumer focus, effective leadership, continuous improvement, evidence of outcomes and best practice
- Judges assessed additional criteria: improvement in patient safety and care, measured outcomes, applicability in other settings, innovation in patient care and/or processes and relevance to the QI Awards category
- The submission MUST relate to a period of up to no more than two (2) years prior to the year of entry.

Each winning submission in the ACHS QI Awards receives a Certificate of Acknowledgement, a QI Awards trophy, and a cash prize provided by ACHS.

ACHS publishes submissions from all participating organisations to share and encourage exceptional quality improvement strategies amongst the ACHS member organisations.

The electronic version of this document will be published on the ACHS website (www.achs.org.au).



Winning Submissions by Category

The 26th Annual ACHS Quality Improvement Awards 2023

CLINICAL EXCELLENCE AND PATIENT SAFETY

Central Adelaide Local Health Network, SA

SA Prison Health Service

Hep C is Everyone's Business - An Approach for Virtual Elimination of Hepatitis C from South Australian Prisons

Adam Spicer and Andrew Wiley

Full submission page 5

NON-CLINICAL SERVICE DELIVERY

Northern Sydney Local Health District, NSW

NSLHD Executive Operations

From words to images: Implementing Video Interpreting

Bruno Villamea Santos, Cathy Butler and Tingting Chen

Full submission page 24

HEALTHCARE MEASUREMENT

Royal North Shore Hospital, NSW

Divisions of Medicine

Parkinson Inpatient Experience (PIE) Project

Sue Williams, Marissa Sakiris, Elizabeth Bryan, Helen Ganley and Kimberly Attenborough

Full submission page 47



Highly Commended Submissions by Category

The 26th Annual ACHS Quality Improvement Awards 2023

CLINICAL EXCELLENCE AND PATIENT SAFETY

Adventist Healthcare Limited, NSW

Radiology

Communicating for safety through radiographer commenting to improve patient outcomes and reduce error

Allie Tonks, Ingrid Klobasa and Caitlin Tu

Epworth HealthCare, VIC

Group Office

Voluntary Assisted Dying at Epworth - An end-of-life care option placing patients and families at the centre of decision making.

Suzie Hooper and Eliza Armstrong

Central Adelaide Local Health Network, SA

Surgery Program

My PreHab Program - A hospital-initiated, community-based digital prehabilitation program.

Ellie Bills, Anastasia Dimopoulos, Kathryn Collins, Anne Burke, Sharon Coles, Vicki Hume, Ecushla Linedale, Jackie Yeoh, Mandy Nolan and Jane Andrews



NON-CLINICAL SERVICE DELIVERY

Hunter New England Local Health District, NSW

HNELHD Mental Health Services

Mental Health First Responder - Virtual Care in Mental Health Emergencies across the LHD

Mandy Smith

North Metropolitan Health Service, WA

Sir Charles Gairdner Osborne Park Health Care Group

The NMHS JMO Manifesto

Dr Katie McLeod, Mary Sutton, Dr Deepan Krishnasivam and A/Prof George Eskander

Riverland Mallee Coorong Local Health Network, SA

Riverland Academy of Clinical Excellence

Transforming rural and remote healthcare: The success story of Riverland Academy of Clinical Excellence (RACE) in the Riverland Mallee Coorong Local Health Network.

Wayne Champion, Paul Worley, Amy Mendham, Caroline Phegan, Sharon Frahn, Hamish Eske and Anne McKinlay

HEALTHCARE MEASUREMENT

Royal North Shore Hospital, NSW

Spinal Plastics Service

Royal North Shore Hospital Spinal Plastics Service - Nothing About Us Without Us

Dr Priya Chari, Lucija Lavrencic, Helen Ganley, Lisa Benad, Dr Samuel Arthurs, Dr Jeon Cha, Dr Feng Liang, Andrew Thompson, Yvette Mair, Louise Naylor, Dr Rowan Gillies and Yamuna Limbu





CLINICAL EXCELLENCE AND PATIENT SAFETY

WINNER

Central Adelaide Local Health Network, SA

SA Prison Health Service

Hep C is Everyone's Business - An Approach for Virtual Elimination of Hepatitis C from South Australian Prisons

Adam Spicer and Andrew Wiley

AIM

We created the Hep C: Everyone's Business approach to reduce the burden of Hepatitis C in South Australian (SA) Prisons. The reduction of Hepatitis C disease burden has individual patient benefits as well as reducing the risk to others in terms of transmission. With the introduction of a new class of medications funded by the Commonwealth, SA Prison Health set about educating, training, testing, and treating Hepatitis C in the prison system.

SUMMARY ABSTRACT

Hepatitis C virus is a bloodborne virus, and most infections occur through exposure to blood from unsafe injection practices. The World Health Organisation estimates that approximately 290 000 people die globally from Hepatitis C each year, mostly from cirrhosis and hepatocellular carcinoma resulting from persistent, untreated infections.

Significant patient stigma and discrimination exist towards people who inject drugs and who are living with Hepatitis C infection. As a result, affected individuals are often reluctant to disclose, test and commence undertaking treatment. Our team set out to eliminate Hepatitis C from SA prisons through a multi-faceted collaborative model which facilitated effective coordination and allowed for continuity of care.

In March 2016, direct-acting antivirals (DAAs) for the treatment of hepatitis C (HCV) became universally available in Australia. This medication is widely reported as being able to cure more than 95% of people with Hepatitis C infection with minimal side effects. The Commonwealth availability of DAAs to treat Hepatitis C presented an opportunity in terms of ease and acceptance of treatment that had not been available before.

Partnering with the Communicable Disease Control Branch, South Australia's Local Health Network Viral Hepatitis teams, Hepatitis SA, and MOSAIC Blood Borne Support Services, we developed an approach including streamlined referral pathways for rapid testing and treatment, upskilling of the nursing and medical workforce, and engagement in national projects with the Kirby and Burnette Institutes. SA Prison Health developed a model we called Hep C: Everyone's Business, where testing, identification and treatment was "everyone's business".

This program boosted testing rates for blood borne viruses inside SA Prisons to record highs (still increasing) and lowered rates of untreated Hepatitis (lows of 130/month to 250/month at the peak).

Across the rest of the system, in total, 1,014 people in custody tested during point of care 'blitzes' between May and October 2022 and only 8 (0.8%) were RNA+ve (indicating active HCV infection).

We are on-target to declare SA prisons virtually Hepatitis C free by the end of 2023, the first in Australia. SA is playing its part towards Australia's target to eliminate Hepatitis C as a public health threat by 2030.



REPORT

APPLICATION OF ACHS PRINCIPLES

1. Consumer Focus

Untreated Hepatitis C infections often lead to chronic infection, liver disease, and possibly cancer and liver failure, resulting in significant morbidity and mortality in people who remain untreated over many years

Recent data collected across Australia suggest 5-15% of prisoners have untreated Hepatitis C infection.

South Australia has nine prison sites, eight of which are male prisons. There are seven public prisons and two private prisons. As of 4th September 2023, the total prisoner count across SA was 3057, with 241 being female and 2816 being male.

The South Australian Prison Health Service (SAPHS) delivers primary health care to all prisoners in the public facilities. This is performed through a variety of operational models, including centralised clinics, satellite clinics and a small proportion of care given "at the cell door" in the units. The workforce consists primarily of health staff employed by SAPHS, but there is also a compliment of contracted health workers including some GP services in the country and allied health providers. The SA Dental Service provides in-reach dental care to most of the state-run facilities.

The complex security needs of a prison are a key factor to be considered when planning for the delivery of a model to address the promoting, testing, treating, and reviewing of people with Hepatitis C in custody (or indeed for any health intervention). Developing a model to suit all security environments can be difficult, as we need to consider maximum security with difficult access, all the way down to open sites where the movement of the people in custody is relatively free. Along with the physical environment, security ratings and prisoner protection status also need to be carefully considered, especially when planning larger events that aggregate people in one place.

Despite these challenges, we implemented our Hep C: Everyone's Business reduction strategy across all SA's prison sites.

Prior to availability of Direct Acting Antivirals (DAAs), it is well understood that treatments for Hepatitis C were poorly tolerated and had a relatively low rate of successful clearance. Most patients would refuse or cease treatment mid therapy. The standard treatment was typically a molecule known as interferon, along with other antiviral medications. However, many people had a hard time with interferon's side effects, which include fatigue, fever, chills, anorexia and weight loss, and depression. Monotherapy with interferon had sustained response rates as low as 9%, and when combined with an antiviral was between 30% and 60%, depending on the genotype of Hepatitis C (Chen and Yu, 2010).

SA Prison Health noted that the high tolerability and ease of administration of the new DAA class represented a great opportunity to try and re-engage with this patient group in prison.

Previous approaches for identifying Hepatitis C infections in prisons resulted in missed opportunities for treatment due to release of prisoners or movement across the state. A person in custody tested and identified as having active Hepatitis C infection would then have been referred to a specialist clinic for review and initiation of treatment. In the timeframe for that person being seen, they may have been released or moved to another prison site (and typically with barriers for return, such as patient choice of not to move from a country site). Our Hep C: Everyone's Business approach provided a highly effective alternative and reduced missed opportunities.

Hepatitis C virus makes its own proteins to help it grow (through reproducing itself). DAAs stop these proteins from working so the virus cannot finish its life cycle and grow. These drugs have been adapted and improved through development to be able to specifically and more effectively target specific genotypes. The most prescribed DAA's now work on multiple genotypes, making prescribing easy without having to work out specifically which genotype someone has of the hepatitis C virus.



The new DAA medications are associated with average cure rates of over 90% (Khoo and Tse, 2016). DAAs are highly effective and well tolerated and have a short treatment duration, particularly when compared with the previous interferon-based regimens (Muller and Hasan, 2021).

Treatment not only benefits the individual patient but also reduces the pool of the disease in the intravenous drug using population, which has the flow on benefit of protecting others who may practice unsafe injecting habits at times.

People infected with Hepatitis C are a highly stigmatised group, and our focus at SA Prison Health is the consumer, their health and improved safety for those around them. There have been many studies completed that look at the effects of stigma when measured with social variables. One such study (Broady et al 2020) looked at the stigmatising attitudes towards people who inject drugs, and people living with blood borne viruses. It highlighted the differences between attitudes towards a stigmatised behaviour (i.e., injecting drug use) and stigmatised conditions (i.e., blood borne viruses and sexually transmissible infections).

When we increased testing for Hepatitis C in SA prisons, we made the process as available and easy as possible for the consumer. Patient education, messaging and offering testing at multiple stages of the incarceration journey improves identification. "Blitz" testing as part of state-arranged episodes as well as national research projects also created attention and interest in the process. These large blitzes out in the prison units and on mass made access to testing easy. Rapid testing also gave consumers the ability to have their results quickly, and often this opens up the ability to then prescribe treatment at the same time. This process would have previously been weeks, sometimes months. This new approach also had the added benefit of the consumer being able to stay at their site and not need to travel for outpatient appointments, which from a country prison site is not without complexity and inconvenience.

2. Effective Leadership

From conception, planning and implementation, senior leadership for our unique Hep C: Everyone's Business model for reducing Hepatitis C in SA prisons came from Director for the SA Prison Health Service Mr Andrew Wiley, and SA Prison Health Medical Director (currently Dr Tom Turnbull), both part of Central Adelaide Local Health Network (CALHN). This leadership also extended to collaboration between Prison Health, SA Health - Communicable Disease Control Branch (CDCB), Viral Hepatitis Nurses in metro Local Health Networks, Royal Adelaide Hospital Pharmacy, and non-government organisations (NGOs) including Hepatitis SA and MOSAIC (part of Relationships Australia).

The Hep C: Everyone's Business model involved all points of the patients' care journeys, which allowed improved planning not only for the testing and treating, but also to ensure continuity of care on release.

The patient journey starts with admission – and the first opportunity at engaging someone for testing. Then the process of promoting the new medications and the ability to cure with an oral medication in 8 -12 weeks takes place. This occurs through the contact with clinical staff on site, and promotion at health expos and the inclusion of health information from in-reaching NGO groups such as SHINE (Sexual Health Information Networking & Education) SA, MOSAIC services and Hepatitis SA. We include the opportunity to re-test in many of the incidental contacts we have with patients during their journey through the prison system. Having access to an upskilled workforce of medical practitioners who were then also able to review positive tests, and initiate treatment in a single consult meant that fewer patients were lost to treatment due to movement or discharge from the system.

We also ensured that a full course of medication was available at the prison site, which means that on discharge, mid treatment, someone can be discharged with the rest of the course of medications they need to be cured.

The establishment of the principle "testing and treating is everyone's business," meant that the workforce also needed upskilling and education. Adam Spicer and other nursing leaders looked at the issues and barriers in testing, and then built a new approach. This focussed on a state-wide approach to testing, a good understanding of treatments, resources and knowledge for patient education and pathways for referral for treatment.

The Medical Director ensured medical practitioners were able to be trained and confident in the assessment. This involved education about the DAA medications, the various genotypes of Hepatitis C virus and the appropriate



prescribed medications, as well as information on the interpretation of testing results and who needed to be referred to specialist services for review prior to the commencement of eradication therapy. This led to the treatment for people with Hepatitis C being prescribed by SA Prison Health Service medical practitioners – hence moving away from an acute referral to treat only model, which had previously been the norm. This approach has the support of viral hepatitis clinics, hepatologists and infectious disease specialists, as they recognise the benefits of maximising treatment and minimising missed opportunities.

Along the way, suggestions of more mass screenings were introduced, as well as our SA project linking to studies and programs like the national research projects with The Kirby Institute (UNSW) and Burnet Institute (Vic). This pulled in more resources without a significant increase in costs or personnel. As a result, we were able to test in a rapid way and get the RNA genotype result within an hour on site. Patients involved in the process commented on the fact they were able to see if they were positive to Hepatitis C virus almost instantly as a real driver for them to be tested and then treated.

This ability to flex into new areas by the leadership team continued to allow the programme to increase its momentum and continued interest along the way.

3. Continuous Improvement

Evidence of continual improvement is well demonstrated by the flexible and pivoting nature of the Hep C: Everyone's Business program. We adapted our processes to address blockages and problems as we encountered them.

Initially, testing and identification still involved prisoner blood samples being collected on site, and then sent to a pathology lab. This approach often meant many days passed before a result was returned, during which time many patients failed to continue with their healthcare. This can be due to factors such as no longer being in a prison and returning to homelessness in the community. It also meant there was another step in the process, in which the patient may lose interest in returning for review. There were several reports from patients during this time that almost instant blood tests results motivated them to want to be tested and then treated.

Prior to the application of our broad test and treat approach, prison site link nurses worked closely with Hepatitis C positive prisoners, doing the bulk of the workup, and conducting discussions in the lead up and for treatment delivery. It was soon evident that this resource would become overwhelmed if we applied it across all prisons, and so we adapted a different model. We built in increased involvement of other nursing staff and implemented upskilling of medical practitioners to assess and prescribe. We also increased practitioners coming in “behind the walls” of the prisons by groups including the Local Health Network Viral Hepatitis Nurses, Hepatitis SA and staff working as part of the national research projects with The Kirby Institute (UNSW) and Burnet Institute (Vic).

Previous testing involved taking several vials of venous blood and then sending those to a pathology laboratory for testing. The results often took in excess of one week to return. The introduction of the ability to do rapid testing for Hepatitis C Virus genetic material (RNA testing) using the GeneXpert technology meant that someone could be found positive during the interaction on a testing blitz day – and the path to prescription commenced without any further blood tests.

The GeneXpert device works by collecting a drop of blood via fingerstick, transferring the blood to a test cartridge, and running the test in the tabletop device. It is a flexible and portable system, which can give quantitative RNA Hepatitis C results in less than one hour at the point of care.

SA Prisons run health expos on site, where multiple health providers come into the prison and set up stalls in a central area for people in custody to visit. We used these times to offer testing opportunities for prisoners, which meant a large amount of foot traffic could pass by a testing station, increasing awareness and prompting those to be tested.

Before our state-wide focus on Hepatitis C infection being everyone's business, someone coming into custody may have been asked about blood borne virus testing on admission. If that opportunity was refused, then it was often left up to the person in custody to initiate at a later date. For our Hep C: Everyone's Business approach, all prisoner sites had their current population audited at a point in time to see if/when their last test for blood borne viruses



took place, and they were then able to be followed up and encouraged to test. Consumer feedback was positive in terms of the ability to have a sample of blood taken and know of a result in under an hour.

4. Evidence of Outcomes

This program boosted testing rates for blood borne viruses inside SA Prisons (lows of 130/month to 250/month at the peak) to record highs (still increasing) and lowered rates of untreated Hepatitis.

A 2022 Hepatitis C testing blitz screened 38% of people in custody across several prisons. Only 8 people were identified as having active Hepatitis C and untreated - they were subsequently treated. This correlates to 0.8% untreated Hepatitis C in this population.

The graph below (Figure 1) from mid-2022 demonstrates detected Hepatitis C virus RNA along with antibody rates in the three largest publicly run male prisons (Mobilong, Yatala and Port Augusta), along with SA's Women's Prison. While 19-33% of prisoners showed evidence of exposure to Hepatitis C during testing in 2018, in 2022 this figure had dropped to 11-19%, with 2% or less prisoners having Hepatitis C RNA at this time.

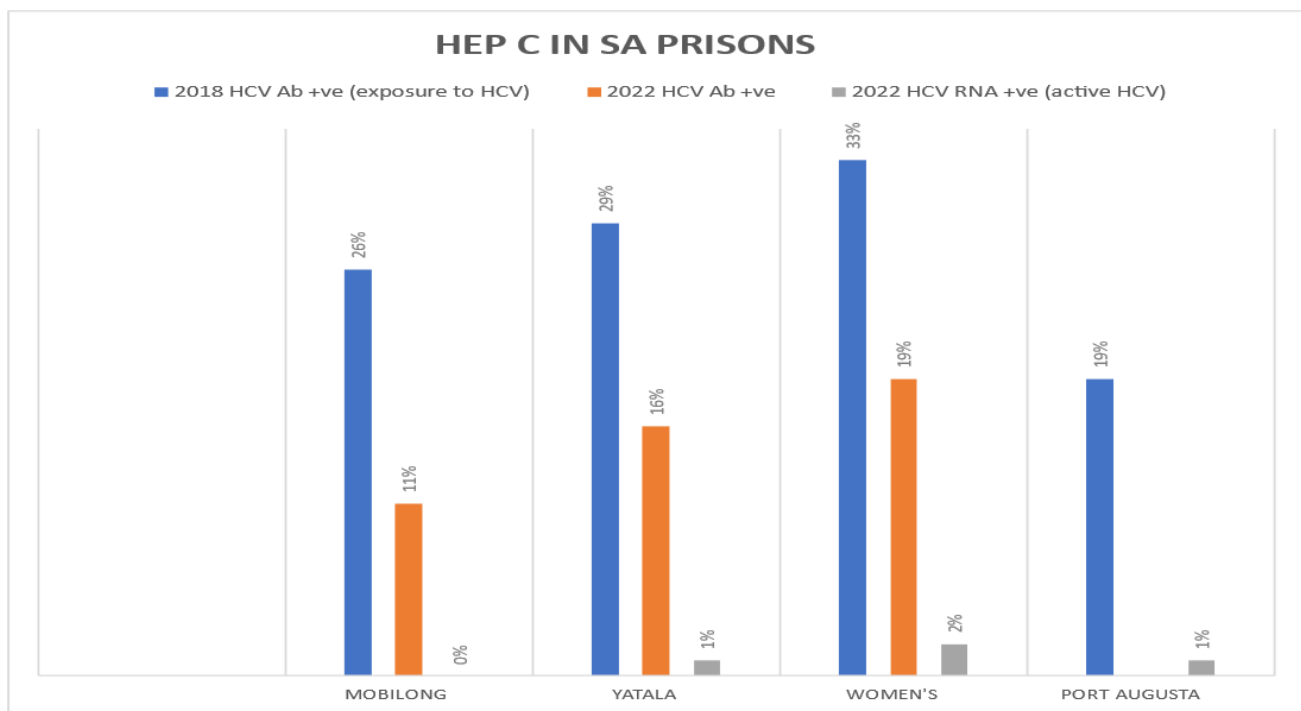


Figure 1. Proportion of patients in SA prisons positive for Hepatitis C-specific antibodies or RNA in 2018 and 2022.

Across the rest of the system, in total, 1,014 people in custody were tested during point of care blitzes between May and October 2022 and only 8 (0.8%) were RNA positive (evidence of active HCV infection). Recent single site testing in Port Augusta Prison failed to identify anyone with untreated Hepatitis C. SA Prison health has detected minimal reinfections post treatment since direct-acting antiviral medicines become available.

This data suggests SA is a leader nationally, with prisons in other jurisdictions showing between 5% and 15% untreated Hepatitis C infection. We are on-target to declare SA prisons virtually Hepatitis C free by the end of 2023, the first in Australia.

Care and treatment required for a person with chronic Hepatitis C infection and associated illnesses is costly. National data forecast disease and lost productivity burdens of nearly A\$30 billion over 2016-2030 using older models of Hepatitis C management. Reducing this burden offers a significant cost saving to the nation.



5. *Striving for Best Practice*

We are on target to declare SA prisons virtually free of Hepatitis C by the end of 2023, the first in Australia. SA is a leader nationally: data from our prisons suggest less than 0.8% of our prisoners have active Hepatitis C infection, whereas prisons in other jurisdictions have between 5% and 15% untreated prisoners.

Involvement in national research projects with The Kirby Institute (UNSW) and Burnet Institute (Vic) looking at testing with rapid antigen tests ensures best practice and a consistent national approach to testing.

Further, SA will also embark on blood spot antibody testing to enhance its ability to easily detect those who may need treatments for Hepatitis C - studies in this area are likely to start before the end of 2023.

INNOVATION IN PRACTICE AND PROCESS

There were many elements that led to the success in the uptake, consumer engagement, workforce engagement and the overall outcome of our Hep C: Everyone's Business approach for Hepatitis C minimisation in SA prisons. Our ability to partner with other agencies with expert knowledge and resources in Hepatitis C management led to a robust, collaborative model. SA was then able to link to the national programs and initiatives to support our work, which ensured we had the most up to date information and were able to be part of the solution by participating in national studies.

The use of point of care rapid Hepatitis C virus testing was new to this state and used not only in the prison system but by other organisation across SA with a shared consumer population. - namely those who inject drugs.

The availability of the new class of medication (DAAs) to treat Hepatitis C virus allowed us to flex to a new model where a simple course of oral treatment could be widely promoted, consumers could be educated and the result of almost no mid-treatment cessation. The position we are in now in terms of the low rate of Hepatitis C virus in SA prisons is certainly down to us being early adopters on a large scale in this case.

APPLICABILITY TO OTHER SETTINGS

This program reveals the effectiveness of a multi-agency, multi-discipline model for health and wellbeing.

A key success factor was the primary focus on all stakeholder responsibility for Hepatitis C virus testing, identification, and treatment. In-reach models where one organisation has responsibility for testing and treatment only have the amount of human resource that service can bring to the prison. In involving the entire service, multiple NGOs and the Local Health Network Viral Hepatitis networks and teams, SA was able to tap into a much larger pool of people, skills, knowledge and enthusiasm in the pursuit to make SA Prisons Hepatitis C free.

This program applies a streamlined pathway in which a person can commence treatment as soon they are identified as having Hepatitis C, which is practical and reduces missed opportunities for care. Upskilling and empowering the existing workforce to be involved and see the end goal as important also lead to a large and motivated workforce being available to assist.

Patient education, messaging and offering testing at multiple stages of the incarceration journey improves identification. Blitz testing as part of state arranged episodes as well as national research projects also created attention and interest in the process.

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APPENDIX

N/A



CLINICAL EXCELLENCE AND PATIENT SAFETY

HIGHLY COMMENDED

Adventist Healthcare Limited, NSW

Radiology

Communicating for safety through radiographer commenting to improve patient outcomes and reduce error

Allie Tonks, Ingrid Klobasa and Caitlin Tu

AIM

This project aimed to deliver transparent and reliable real-time communication of medical imaging findings that would improve patient outcomes by implementing a radiographer comment system. Two objectives were established to achieve this aim:

1. Implement an innovative and sustainable radiographer comment workflow and seek feedback for continuous improvement.
2. Determine the system's efficacy via outcome measures, including reduced turn-around time to urgent alerts, the accuracy of alerts, reduction of misreading errors, improved multidisciplinary teamwork, evidence of expedited management for acute conditions, and mitigation of high-risk scenarios.

SUMMARY ABSTRACT

Introduction: Handling abnormal medical imaging results is a critical patient care issue in our healthcare system. Misreading of radiographs by doctors other than radiologists has been reported as the leading cause of emergency clinical error, accounting for 78% of cases, and patient care is compromised by delayed or incorrect diagnosis. Emergency Care and Radiology therefore, identified a need for reliable and documented 'real-time' communication of medical imaging findings. Historically, radiographers have informally communicated significant appearances to referrers before a formal radiologist report is available. However, this is inconsistent, ambiguous, and untraceable with poor continuity of care. In 2019, the Medical Radiation Practice Board of Australia legally mandated the expectation for radiographers to convey medically significant findings to relevant clinical staff at the time of imaging. When this occurs in writing via a 'radiographer comment,' it improves communication, ensuring clear information is consistently and rapidly provided with a formal and auditable record that is critical for patient safety. The San Radiology and Nuclear Medicine (SRNM) Radiographer Comment System represents a collaborative development between Emergency Care, Information Services, and Radiology. It was the first site in New South Wales to utilise the expertise of radiographers to improve patient journeys through early detection and formal notification of abnormal imaging appearances. The Adventist Healthcare Limited (AHCL) Clinical Governance Committee endorsed the project and was executed in collaboration with the Agency for Clinical Innovation¹, contributing to multi-site research. The system also fulfils the National Safety and Quality Health Service Standards Standard 6 Communicating for Safety Action 6.09.

1. Medical Imaging Network
Radiographer Comment and Flag Steering Group.
Agency for Clinical Innovation
NSW Health



Methods: The SRNM Radiographer Commenting System was implemented in November 2021. A keyboard shortcut added to the Hospital Information System (SanCare) enabled radiographers to enter a comment into patients' electronic notes at the point of care immediately after imaging. This comment can then be 'acknowledged' with a click by the referrer, ensuring closed-loop communication. Referrers are alerted to new comments by a symbol in the ward overview patient list. Any results requiring immediate notification are still verbally relayed, and this communication is also documented in the comment. The system is monitored through regular, comprehensive audits using a tool developed rigorously in collaboration with the Agency for Clinical Innovation (ACI), resulting in continuous feedback and quality improvement.

Results: In the first year, 302 comments were made, with an overall Positive Predictive Value 0.96. A reduction in misreading medical errors was evident in 7.3% of cases. 18.5% of all comments represented clinically significant cases, including optimal management of high-risk scenarios, and expedited critical care. Comments were available on average 8 seconds after the study was finished and were therefore immediately useful to referring clinicians. On average, this was 9 hours and 53 minutes before the radiology report, demonstrating a clinically relevant timeframe for acute patient management and improved patient safety. 92% of general radiographers participated during this period. Data collection is now ongoing for the second year, and the system has been expanded (to outpatients, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) modalities) due to positive outcome measures and feedback.

Conclusion: The SRNM Radiographer Comment System is an innovative, industry-leading project that improves patient care and reduces medical errors. Data indicates that radiographers have accurately, consistently, and rapidly communicated significant findings, with many of these cases being high-risk scenarios and urgent conditions. Timely alerts by radiographer's support clinicians in delivering urgent care in clinically relevant timeframes, including liaising with radiologists. As a result, patients receive expedited treatment when acute pathology is present, improving their outcomes and reducing the risk of adverse events. In addition, radiographers reduce medical errors by highlighting pathology that was not otherwise documented and forming an essential part of the multidisciplinary team. The system has continued as a permanent innovation, garnering our radiologist team's enthusiastic support, and most recently expanded in July 2023 to encompass all presentations, including outpatients, CT, and MRI modalities.



CLINICAL EXCELLENCE AND PATIENT SAFETY

HIGHLY COMMENDED

Epworth HealthCare, VIC

Group Office

Voluntary Assisted Dying at Epworth - An end-of-life care option placing patients and families at the centre of decision making.

Suzie Hooper and Eliza Armstrong

AIM

The aim of this project was to develop, implement and record outcomes of a model of care to support the provision of patient-centred, end-of-life care for those who chose to access VAD at Epworth HealthCare following the commencement of the Victorian Voluntary Assisted Dying Act 2017 in 2019. This included:

1. defining the organisational governance structures, staff education and support services developed to support the introduction of the VAD legislation.
2. designing the model of care that was developed and implemented to support consumers (patients and their family/friends), clinicians and other health service staff when providing care.
3. evaluating uptake and patient outcomes following implementation of the VAD model of care at Epworth HealthCare.

SUMMARY ABSTRACT

Voluntary assisted dying is a process in which an individual who is at the end of their life, can choose the timing and manner of their death in accordance with the steps and processes set out in the Voluntary Assisted Dying Act 2017 (Government of the State of Victoria, 2017). On June 19th, 2019, Victoria became the first state in Australia to legalise Voluntary Assisted Dying (Government of the State of Victoria, 2017), subsequent to the passing of the Voluntary Assisted Dying Act by parliament in 2017. Voluntary Assisted Dying (VAD) is often termed with varying definitions in different countries including Medically Assistance in Dying in Canada (MAiD), assisted dying, euthanasia, and terminal sedation (Dignity, 2021). Irrespective of the terminology used, it has been the increasing expectation of the community for individual control over end-of-life care decisions that has led to the establishment of models of care to enable provision of Voluntary Assisted Dying (O'Connor and Philips, 2020).

Despite international trends demonstrating community support for Voluntary Assisted Dying legislation, many health professionals remain uncertain if they conscientiously object, conscientiously support or are conscientiously neutral in relation to voluntary assisted dying (Young, Franco, William & Poon 2018). International experience has identified that successful introduction of VAD legislation into health service models of care needs to be supported by robust clinical governance structures and expert clinical leadership. O'Connor and Phillips (2020) noted that it is vital for staff members to feel supported and for health service managers to show respectful understanding and compassion for all views on such legislation.

A VAD lead coordinator has been recognised as foundational to service provision when communicating eligibility and legislation information to patients, as well as assisting with coordination of patient review and assessments by medical practitioners (Wu, Pinilla, Watson, Verma & Olivotto, 2018). Experience in both Canadian and United States hospitals (O'Kane, 2018), along with Chambaere & Bernheim, (2015) found that a centralised service and multidisciplinary team with expert knowledge in both legislation and local processes was fundamental to the provision of person-centred care when working with those contemplating or requesting assisted dying. At the



University of Health Network in Toronto Canada, the nurse coordinator was noted to be a pivotal role in the request and referral process for patients, creating ease in navigating of legislation, providing necessary information and access to voluntary assisted dying medications (O’Kane, 2018).

In 2018, with two recently implemented acts of the Victorian Parliament (the Medical Treatment Planning and Decisions Act and the Voluntary Assisted Dying Act) - VAD, questions were posed by the Epworth Board, with regard to how care at the end-of-life would be provided at Epworth HealthCare sites. As a result, the Epworth Board requested establishment of an End-of-Life Working Group chaired by Professor John Catford supported by a senior nursing leader, Suzie Hooper, Director of Clinical Services, providing operational and clinical leadership throughout the process. This group considered all elements of end-of-life care, inclusive of palliative care and VAD. With the need to respond to the Voluntary Assisted Dying Act 2017, the working group focused on advising the Board and Executive on the recommended response to the legislation at Epworth HealthCare and subsequent development of a model of care to safely deliver VAD at Epworth HealthCare hospitals.

A rigorous process was undertaken to establish an appropriate clinical governance framework that aligned with Epworth’s vision and values, development of policies that outline individuals’ roles and responsibilities in the process and detailed protocols that outline how care should be provided at the end-of-life, has underpinned the successful provision of care for patients who choose to access VAD at Epworth.

Fundamental to the successful implementation of the VAD legislation at Epworth is the importance of respecting all staff and visiting medical practitioners’ values and perspectives on assisted dying. This included respecting the views of conscientious objectors, ensuring the ongoing provision of compassionate palliative care and clinical and psychosocial support to all staff providing patient care at of life.

The appointment of a designated VAD coordinator, who is supported by an expert multidisciplinary team, including committed physicians, has been crucial to the successful implementation of this legislation at Epworth. The value of the coordinator role is validated through the feedback we have received from consumers, staff, and doctors.

At Epworth we have shown that as a community, knowledge of the availability of VAD has increased over time, there has been an increase in people accessing VAD as an end-of-life care option in our health service. From July 1st, 2019, to June 30th, 2022, referrals for VAD have increased each quarter from eight in the first quarter of 2019/20 to thirty-five in the second quarter of 2022/23. Over three hundred people enquired about accessing VAD at our health service in the first four years.

This model of service provision is subjectively validated through consumer feedback. We have received a considerable amount of extremely positive feedback from both patients and family members both during and upon conclusion of the VAD process. There have been no clinical incidents recorded in relation to the provision of VAD at Epworth since commencement of this model of care.



CLINICAL EXCELLENCE AND PATIENT SAFETY

HIGHLY COMMENDED

Central Adelaide Local Health Network, SA

Surgery Program

My PreHab Program - A hospital-initiated, community-based digital prehabilitation program.

Ellie Bills, Anastasia Dimopoulos, Kathryn Collins, Anne Burke, Sharon Coles, Vicki Hume, Ecushla Linedale, Jackie Yeoh, Mandy Nolan and Jane Andrews

AIM

To design, implement and evaluate a digitally enabled hospital-initiated, community-based prehabilitation program to optimise modifiable risk factors well before surgery. By empowering consumers to regain control of their health outcomes, the Central Adelaide Local Health Network (CALHN) aims to reduce post-operative complications and, in some cases, prevent surgery all together, with flow-on benefits for the individual and the hospital system. The secondary aim is to determine if this world-first initiative is feasible, acceptable, and appropriate for consumers on elective and non-urgent surgical pathways.

SUMMARY ABSTRACT

Surgery is a key component of healthcare systems around the world, with 2.3 million elective surgery admissions in 2017/18 in Australia (Shrime et al., 2015; AIHW, 2019). With increasingly constrained resources, an ageing population and growing burden of chronic disease, there are challenges in providing accessible, affordable, and safe elective surgery. Long wait times for elective surgery are common, with patients referred to Australian public hospitals frequently experiencing significant periods of time on 'hidden' outpatient and surgical waitlists (McIntyre and Chow, 2020). In addition, for some cancer surgeries, there is a required delay to allow time for neoadjuvant therapies. This provides an opportunity to turn what is traditionally a 'passive' wait into one where patients are optimising their individual risk factors in preparation for surgery.

Post-operative complications following surgery are common (affecting 20% of procedures) and are a significant cause of morbidity and mortality (Story et al., 2010). The term 'hidden pandemic' has been used, with complications predicted to increase 10% annually if nothing is done (Ludbrook, 2018). Getting healthier prior to surgery by optimising modifiable risk factors prior to surgery may be one way to address this.

Prehabilitation (prehab) is an intervention delivered prior to surgery to enhance general health and/or wellbeing by addressing modifiable risk factors (Durrand, Singh, and Danjoux, 2019; Waterland et al., 2021). Evidence exists for individual prehab interventions provided close to scheduled surgery (e.g., smoking, anaemia, physical and mental health), but individual, in-person, prehab is costly and resource intensive. Digital technologies to remotely support home-based prehabilitation can be a cost-effective alternative and are feasible, effective, and highly acceptable to patients (de la Torre-Diez et al., 2015; Pedersen et al., 2023). A holistic, digital prehab program that commences well before the patient is considered for surgery, has potential to be scaled rapidly to improve patient outcomes, reduce post-operative complications, improve bed availability and in some cases, may prevent the need for surgery.

To proactively address post-operative complications, a hospital-initiated, community-based prehab program, 'My PreHab Program' was developed. The Program was co-designed with consumers, general practitioners (GPs) and a multi-disciplinary group of hospital-based staff including allied health (physiotherapy, exercise physiology,



occupational therapy, dietetics, and psychology), nurses, surgeons, and physicians. My PreHab Program includes hospital specific digital pathways (Appendix 1) and an open-access companion website www.calhn-prehab.sa.gov.au (Appendix 2). Prior to this initiative, no comprehensive and integrated intervention was provided to patients in preparation for surgery.

My PreHab Pathways are comprised of a digital health screen to identify modifiable risk factors and provide participants with targeted, practical resources, to empower self-management and/or facilitate support within primary care services. Participants are supported at all points of their surgical journey, receiving a summary report with tailored recommendations, progress check-ins and embedded feedback, facilitating continuous improvement. The Program was initially intended for high volume non-urgent elective surgery cohorts, but due to significant interest, was rolled out into lower volume specialty areas including cancer.

Consequently, digital pathways have been tailored for specific patient cohorts and to enable integration with usual workflows. Pathways include non-urgent surgeries (joint replacements, complex hernia repairs and bariatric), cancer pathways with neoadjuvant therapies prior to surgery (rectal, oesophageal and pancreas) and most recently, liver and pancreas resections. Consumers for non-urgent pathways are primarily invited to participate following the hospital receiving a referral from the GP, however, to improve access to the Program it has been extended to those on surgical waitlists. The cancer and resection pathways commence following confirmation of the consumer's treatment plan.

Since July 2022, the program has been implemented across two acute hospitals, in six specialty areas and accessed by over 900 consumers. Activation and engagement across all pathways have been high (79%). 12-month data from orthopaedics (N=689) demonstrates that access is not impeded by age, gender, socioeconomic status, or language, with a higher proportion of rural residents participating. My PreHab is feasible, acceptable, and appropriate, with participants reporting they have commenced or plan to address health issues with their GP. Consumer feedback highlights the value of early communication and transparent sharing of quality information:

"The main thing for me was to know that I'm in the system and have not been forgotten"

"Provided information to help me and my condition"

"It prepares you for surgery well in advance and you can be proactive instead of just waiting and waiting"

The My PreHab website publicly hosts evidence-based information and resources on surgery preparation for GPs and patients. It includes core information from the hospital specific pathways on quitting smoking, diabetes management, anaemia/low iron, emotional wellbeing, frailty, pain management, alcohol, drugs and medication management, activity and exercise, nutrition and weight optimisation and equipment and community services. Since the program went live, the website has been accessed by nearly 2000 unique visitors from every state and territory in Australia and world-wide, including the New Zealand, North America, Europe, and Asia.

There has been significant interest in the program, with hospitals and health services in every state seeking further information on implementing the program for their service. My PreHab Program's existing content and structure is scalable across all hospitals, with no requirement for additional staff, physical resources, and minimal clinician/admin time burden.

This program has the potential to not only help consumers prepare for surgery, but also to act as the catalyst for longer-term lifestyle changes with resultant health gains and to improve health literacy and community empowerment. The program has been running for just over a year and continues to be rolled out into other surgical areas within CALHN.



CLINICAL EXCELLENCE AND PATIENT SAFETY

TABLE OF SUBMISSIONS

Adventist Healthcare Limited, NSW

Communicating for safety through radiographer commenting to improve patient outcomes and reduce error

Allie Tonks, Ingrid Klobasa and Caitlin Tu

Armadale Health Service, WA

Armadale Health Service Surgical Optimisation Program

Allison Christou

Armadale Health Service, WA

Armadale Kalamunda Group Older Adult Liaison Service

Allison Christou

Armadale Health Service, WA

Kalamunda Hospital Day Hospice

Allison Christou

Armadale Health Service, WA

Boodjari Yorgas Midwifery Group Practice

Allison Christou

Armadale Health Service, WA

Armadale Health Service Dialysis Unit

Allison Christou

Austin Health, VIC

Clinical Communication Transformation: Co-design and Implementation of the Baret Role-based Communicator App

Nicole Hosking

Bairnsdale Regional Health Service, VIC

Implementation of Real-Time Feedback System

Kathy Kinrade



Bethesda Hospital, WA

Implementation of strategies to align current practices at Bethesda Hospital with the Opioid Stewardship in Acute Pain Clinical Care Standard to optimise patient outcomes

Marie Murphy and Jemma Sterrett

Central Adelaide Local Health Network, SA

My PreHab Program - A hospital-initiated, community-based digital prehabilitation program

Ellie Bills, Anastasia Dimopoulos, Kathryn Collins, Anne Burke, Sharon Coles, Vicki Hume, Ecushla Linedale, Jackie Yeoh, Mandy Nolan and Jane Andrews

Central Adelaide Local Health Network, SA

Hep C is Everyone's Business - An Approach for Virtual Elimination of Hepatitis C from South Australian Prisons

Adam Spicer and Andrew Wiley

East Grampians Health Service, VIC

Implementation of a Nurse Response Team in a Rural Health Service

Claire Sladdin

East Metropolitan Health Service, WA

Creating Smoke Free Environments at East Metropolitan Health Service (EMHS)

Karis Krop and Holly Scott

Epworth Foundation (trading as Epworth HealthCare), VIC

Practicalities of Introducing an Inpatient Sepsis Pathway into a Large Private Hospital

Deirdre McKaig and Dr Laven Padayachee

Epworth HealthCare, VIC

Voluntary Assisted Dying at Epworth - An end-of-life care option placing patients and families at the centre of decision making.

Suzie Hooper and Eliza Armstrong

EUC Services Pty Ltd, NSW

Telehealth's New Benchmark: Bridging Technology and Patient Safety

Sarah Fuller and Matthew Vickers



<p>GenesisCare, SA</p> <p><i>Implementation of a Systemic, Digital Oncology Workflow for Patient Distress Screening in a National, Multisite Radiotherapy Outpatient Setting</i></p> <p>Kieu Lai, Leanne Hoy, A/Prof Peter O'Brien, Dr Marie Burke OAM, Dr Marcus Dreosti, Karen Buckley and Tracy Clarke</p>
<p>Hunter New England Local Health District, NSW</p> <p><i>Tamworth Safe Haven - Co-designed Suicide Prevention in Practice</i></p> <p>Alexandra Potter, Daniel Creighton, Robert O'Connell, Gina Blyton, Ash Newcombe, Kelli Grace, Fred Graham, Jordan Cattana and Nick Ryan</p>
<p>Hunter New England Local Health District, NSW</p> <p><i>Taking Bladders Into Our Own Hands: A Pilot Rehabilitation-Led Paediatric Urodynamics Service</i></p> <p>Heather Burnett, Sharon Fenwick, Noelene Moore, Michelle Pietroboni and Jamila Bailey</p>
<p>Hunter New England Local Health District, NSW</p> <p><i>Hospital Health Pathways - supporting our clinicians</i></p> <p>Karen Chronister, Susan Diemar and Bianca Gray</p>
<p>Hunter New England Local Health District, NSW</p> <p><i>Curing Homesickness for Respiratory Kids</i></p> <p>Bianca Da Silva, Nicole Cook, Sinead Redman, Cathy Grahame, Kiera Wray, Jodi Hilton, Geshani Jayasuri, Linda Cheese, Michelle Cooper, Michelle Jenkins and Rosie Day</p>
<p>Illawarra Shoalhaven Local Health District, NSW</p> <p><i>Hospital care safely delivered to you at home!</i></p> <p>Kristi-Lee Muir, Dr Niladri Ghosh and Samantha Broyd</p>
<p>Logan Hospital, QLD</p> <p><i>Patient 'Special' Quality Improvement Project at Logan Hospital</i></p> <p>Mahmoud Nayfeh</p>
<p>Mackay Hospital and Health Service, QLD</p> <p><i>Intravascular lithotripsy catheter balloon for calcified coronary artery intervention at Mackay Base Hospital</i></p> <p>Dr Michael Zhang, Dr M Musameh, Dr S Vaidya, Dr C Broyd, A Townsend, Dr K Ball, K Oliver and Dr M Hiskens</p>



<p>Northern Sydney Local Health District Mental Health Drug and Alcohol, NSW</p> <p><i>Implementation of eMR Seclusion & Restraint Module</i></p> <p>Glen Bowcock</p>
<p>Palliative Care South East, VIC</p> <p><i>Report on the Capital Works Program at Palliative Care South East: A Biophilic and Consumer-Focused Approach</i></p> <p>Kelly Rogerson, Jodi Lynch and Chris Lean</p>
<p>Pop Up Health, SA</p> <p><i>Wear It Feel It Believe It</i></p> <p>Beth Freeman-Gray, Sandra Bradley, Scott Simpson, Tara Alfrey, Rajvinde Kaur, Sarah Gaertner, Celeste Bautista, Michelle Richards, Katharina Reiger, Beant Bar and Dawar Shefali</p>
<p>Robina Private Hospital, QLD</p> <p><i>Meeting a gap in the system of care for people with eating disorders and providing excellent evidence based therapeutic interventions at multiple levels of care</i></p> <p>Dr Kim Hurst and Dr Vinay Garbharran</p>
<p>Robina Private Hospital, QLD</p> <p><i>Meeting the Mental Health Needs of Older Adults in the UN's "Decade of Healthy Ageing"</i></p> <p>Dr Penny King, Heidi Smith and Karen Mitchell</p>
<p>Royal North Shore Hospital, NSW</p> <p><i>Parkinson Inpatient Experience (PIE) Project</i></p> <p>Sue Williams, Marissa Sakiris, Elizabeth Bryan, Helen Ganley and Kimberly Attenborough</p>
<p>Sonder, NSW</p> <p><i>MTS project: Improving the speed and accuracy of frontline triage</i></p> <p>Christopher Noema</p>
<p>St John of God Health Care, WA</p> <p><i>Medication Safety iPads Pilot Project</i></p> <p>Sylvia White</p>



<p>St John of God Murdoch Hospital, WA</p> <p><i>Bringing Best Practice Standards to Diabetes Education for Women with Gestational Diabetes Mellitus at St John of God Murdoch Hospital</i></p> <p>Shona Vigus, Kendra Nunweek-Hanlon, Preeti Chauhan, Liz Gomez and Ellen Feeney</p>
<p>The Royal Melbourne Hospital, VIC</p> <p><i>Multi-disciplinary Heart Failure Interventions to Reduce Unplanned Heart Failure Readmissions</i></p> <p>Nadia Jansons, Shareen Jaijee, Jessica Borcich, Joanna Young and Adelle Brown</p>
<p>Townsville Hospital and Health Service, QLD</p> <p><i>Mind Maze: Role-playing Resilience and Recognition</i></p> <p>Timothy O'Donnell and Brandon Vilaysack</p>
<p>WACHS Great Southern, WA</p> <p><i>Great Southern GP Psychiatry Phone Line</i></p> <p>Dr Kelly Ridley, Dr Mathew Coleman, Dr Layale Tayba, Dr Michael Taran, Dr Beatriz Cuesta-Braind and Dr Hanh Ngo</p>
<p>Western Health, VIC</p> <p><i>Western Health - Same Day Discharge Project</i></p> <p>Alaina Zorzi, Fred H Huynh, Meron Pitcher, Richard Grygiel and Richard Horton</p>
<p>Western Sydney LHD - Auburn Hospital, NSW</p> <p><i>ABCS of Mental Health</i></p> <p>Jefferson Deray, Samuel Liu and Matthew Dillon</p>
<p>Western Sydney LHD - Blacktown & Mount Druitt Hospitals, NSW</p> <p><i>OASIs Project</i></p> <p>Melissa Gallimore, Zhilei Zhang, Agatha Osifo and Allison Houze</p>
<p>Western Sydney LHD - Blacktown and Mount Druitt Hospitals, NSW</p> <p><i>Improving Access to Community Paediatrics for Families across WSLHD</i></p> <p>Dr Neha Sethi and Eva Litherland</p>
<p>Western Sydney LHD - Blacktown and Mount Druitt Hospitals, NSW</p> <p><i>Reducing Postpartum Haemorrhage</i></p> <p>Melissa Gallimore, Zhilei Zhang and Kellie Forrester</p>



<p>Western Sydney LHD - Blacktown and Mount Druitt Hospitals, NSW</p> <p><i>Educational Dementia Immersive Experience (EDIE™)</i></p> <p>Linda Uslu</p>
<p>Western Sydney LHD - Blacktown and Mount Druitt Hospitals, NSW</p> <p><i>inTouch Residential Aged Care Pathway</i></p> <p>Joanne Medlin</p>
<p>Western Sydney LHD - Westmead Hospital, NSW</p> <p><i>Preventing Fractures at Westmead Hospital: Putting Patients First</i></p> <p>A/Prof Christian Girgis, Minh Nguyen, Victoria Deacon, Nick Green, Faiza Wajaha, Prof Wah Cheung, Jenny Quach and Shejil Kumar</p>
<p>Western Sydney LHD - Westmead Hospital, NSW</p> <p><i>One Stop Shop Clinic</i></p> <p>Dr Rummana Afreen, Dr Peter Smith and Dr Joe Gurka</p>
<p>Western Sydney LHD - Westmead Hospital, NSW</p> <p><i>Pressure Injury Reduction Project in the HOPE/OPERA Unit, Westmead Hospital</i></p> <p>Thai Tran, Russell Roxburgh and Desireen Pamfilo</p>
<p>Women and Newborn Health Service, WA</p> <p><i>CARE-HG: Collaborative Approach to Reduce Emergency visits for Hyperemesis Gravidarum</i></p> <p>Phoebe Fitzgerald, Pushpa Sivakumar, Katie Lussenburg, Valda Duffield and Courtney Barnes</p>
<p>Women and Newborn Health Service, WA</p> <p><i>Obstetric 'Pharm-Assist' - Innovative workforce solution during surges in workforce demand</i></p> <p>Nabeelah Mukadam, Barbara Lourey, Marie Warrington, Robert Munns, Monica Ingram, Michell-Felicia Ferenti, Stephanie Teoh, Tamara Lebedevs, Marcus Femia and Courtney Barnes</p>





NON-CLINICAL SERVICE DELIVERY

WINNER

Northern Sydney Local Health District, NSW

NSLHD Executive Operations

From words to images: Implementing Video Interpreting

Bruno Villamea Santos, Cathy Butler and Tingting Chen

AIM

Empower Health Services to implement modern, timely, safe, and effective video interpreting services, with the goal to support our Culturally and Linguistically Diverse (CALD) community and consumers with hearing impairments to make informed decisions about their treatment and to actively participate in their care. By embracing Virtual Care technology, interpreters reduce their need to travel and increase service availability and readiness, while enhancing communication with video capability. This modern workflow removes known barriers that can cause misunderstandings and misdiagnoses and can ultimately lead to better clinical outcomes. This initiative now seeks to scale video interpreting across the Northern Sydney Local Health District (NSLHD) using a new governance resource: the NSLHD Video Interpreting Practical Implementation Guide.

SUMMARY ABSTRACT

Australia is one of the most culturally and linguistically diverse (CALD) countries in the world with 3 in 10 people born overseas. In the Northern Sydney Local Health District (NSLHD) 30 per cent of residents speak a language other than English at home of which 15 per cent report having limited or no proficiency in English (1- Northern Sydney Local Health District Strategic Plan 2022-2027, 2022). Consumers from CALD backgrounds experience a number of barriers to accessing health services including language barriers, lower health literacy, and unfamiliarity with the Australian healthcare system which can contribute to poorer health outcomes (2- Australian Institute of Health and Welfare 2023). Providing timely and effective interpreting services across the health ecosystem is essential to promote equity of care and ensure clear communication, ultimately contributing to improved patient outcomes. As the NSLHD covers 900 km², interpreters have to travel long distances to attend onsite appointments. Travelling time, increasing demand for interpreting services, and limited interpreter availability have been significant barriers to the provision of interpreting services.

In the NSLHD, the pandemic acted as a catalyst for Virtual Care technology and soon several clinical services introduced Telehealth and other modern modalities of care. For NSLHD, the technology adoption created new opportunities for quality improvements and service enhancements including the introduction of video interpreting. Although telephone interpreting was available long before COVID-19, telephone interpreters are unable to observe non-verbal cues that provide meaning and context to the communication. Video interpreting is more effective for lengthy or complex consultations and when visual aids are being utilized. It can also be more personal as it helps build rapport with the interpreter and clinician.

The NSLHD Video Interpreting Practical Implementation Guide (Appendix 1) is a practical document that outlines how healthcare services new to Virtual Care technologies and/or audio-visual calls can successfully implement video interpreting services. This governance resource also addresses the limited Telehealth support available for NSLHD since it empowers service leads and local services to build sustainable changes themselves. As NSLHD supports and promotes video interpreting across the district, we also seek to develop a skilled and capable workforce equipped to provide high-value and person-centred care in an increasingly digital healthcare environment.



Video interpreting provides clear benefits for consumers, interpreters, and NSLHD. It supports safe, effective, and clear communication between clinicians, consumers, and carers. It is also an initial step into Virtual Care technologies. Once services are comfortable with video calls, Telehealth consultations, online meetings, outreach services, and many more exciting opportunities become achievable. Additionally, COVID brought an exponential growth in Virtual activity, and the Ministry of Health has set clear Key Performance Indicators for Virtual Care. NSLHD goal is to provide 30% of all outpatient activity virtually, via telephone or Telehealth (video conferencing). Despite a natural trend to increase face-to-face appointments after the pandemic, Virtual Care is a district priority to expand patient choice on how and where they want to receive their care.

REPORT

APPLICATION OF ACHS PRINCIPLES

1. Consumer Focus

By promoting and supporting greater access to interpreter services, patients and carers are empowered to make informed decisions about their care, goals, and health outcomes - regardless of their language, culture, and background. The service contributes to equality of care, increased health literacy, accessibility of services, and increased patient experience. NSLHD offers video interpreting in 64 languages to support our vast CALD community - including AUSLAN which supports patients with hearing impairments. Implementing video interpreting services is a consumer-centred approach to provide safe, high-quality connected care.

2. Effective Leadership

Effective leadership and executive sponsorship have been essential to Implementing video interpreting. Their guidance and endorsement enabled the NSLHD Operations Team, the Multicultural Health Service Team, and the Health Care Interpreter Service to work together in a truly supportive initiative. The principles of Effective Leadership and Change Management are part of the video interpreting Implementation process. The resource developed - NSLHD Video Interpreting Practical Implementation Guide - empowers services to lead their own change process while developing local talents and leadership capabilities.

3. Continuous Improvement

Video interpreting enhances the traditional in-person model with a timely, cost-effective, and modern approach. It also triumphs over regular telephone interpreter calls by bringing the video component and all elements of body language. The Virtual Care technology used to enable video calls is itself transformative to many services. Dual screens, tablets, computers on wheels, and other devices, bring new opportunities to increase efficiency and even develop new models of care. Our data and feedback-driven approach also ensures we respond to our consumers' needs and expectations while promoting the culture of continuous improvement.

4. Evidence of Outcomes

The adoption of video interpreting has yielded tangible benefits for patients, interpreters, and NSLHD. Video interpreting reduces the need to travel making interpreters more readily available for our consumers. From the interpreters' perspective, it increases their efficiency and improves job satisfaction by enhancing the quality of calls by adding video capabilities. Additionally, both clinicians and consumers have reported satisfaction with video interpreting services.

For NSLHD, it contributes to reduced greenhouse gas emissions and, by reducing travel costs, it brings financial savings, while supporting policy compliance, increasing consumer satisfaction, and promoting the adoption of virtual care technologies. For the Financial Year (FY) 2022-2023, conducting video interpreting consultations resulted in cost-saving benefits of over 440 thousand dollars (the cost saving is calculated by total charges if all video sessions were conducted on site). Over 3,700 video sessions were conducted during the FY 2022-2023.

The NSLHD Video Interpreting Practical Implementation Guide (Appendix 1) further details the case for change, benefits, and project outcomes.



5. *Striving for Best Practice*

The NSLHD Video Interpreting Practical Implementation Guide aims to share a proven, clear, and achievable process to implement virtual care technology and video interpreting in a clinical setting. This virtual workflow can transform how interpreter services are offered to our consumers and when interpreters can support them. Even services that differ from the traditional outpatient clinic and consult room model can benefit from video interpreting. For instance, NSLHD Oral Health Service has implemented video interpreting via tablets in mobile stands, providing support to patients throughout their whole journey, from the initial administrative interaction to inside the consulting room. The NSLHD Breast Screening Unit has also reimagined its service by offering video interpreting during mammogram exams – a delicate and sensitive exam for our consumers.

INNOVATION IN PRACTICE AND PROCESS

The implementation of video interpreting services is a multidisciplinary approach. It also depends on how comfortable the service is with technology and if they have previous experience with Virtual Care workflows. However, the innovation and implementation process usually follows the steps below:

Step 1: Identify the main case for change.

Step 2: Present video interpreting to the local team and identify key stakeholders (including project sponsors and champions).

Step 3: Ensure the service has access to the right tool for the task (access to Telehealth technology).

Step 4: Develop the right skills for Virtual processes (offer Telehealth training and ensure all stakeholders and comfortable with the new technology).

Step 5: Establish a clear process to coordinate the online encounter between the local service and the Video Interpreting Service.

Step 6: Go Live with a limited number of video interpreting sessions (always with onsite support from the NS Telehealth Team or the Video Interpreting Lead).

Step 7: Collect patient and clinician feedback.

Step 8: Monitor and Evaluate the online experience.

Services that successfully implemented video interpreting do not need ongoing support. They are empowered to adapt and improve their local processes, and even how they engage with their consumer cohort. In some cases, simple changes in the established processes or hardware deployed can greatly support a specific cohort. For example, for hearing-impaired consumers, an external speaker is highly recommended.

APPLICABILITY TO OTHER SETTINGS

By using Virtual Care technology to enable video calls (video interpreting), services open their doors to modern and exciting opportunities. The same process used to book video interpreters can be easily adapted to book Telehealth appointments. The same process used to initiate video interpreting calls can be used to bring carers, and family members to a ward, thus supporting family virtual visits. Video calls and Telehealth also support Multidisciplinary consults, group sessions, outreach services, and even work-from-home opportunities for staff. Virtual Care technology has been expanding through the healthcare ecosystem and video interpreting deeply aligns with the concept.

The ease-of-use and seamless connection of the video interpreting services are also challenging the traditional concept of interpreting. Services proficient with video interpreting have already developed the idea to use mobile devices (like tablets and laptops) to accompany the consumer throughout their whole journey in the clinical



facility. From administrative interactions to clinical consultation and even billing discussions, video interpreting can add value to the patient experience in all steps of the consumer's journey.

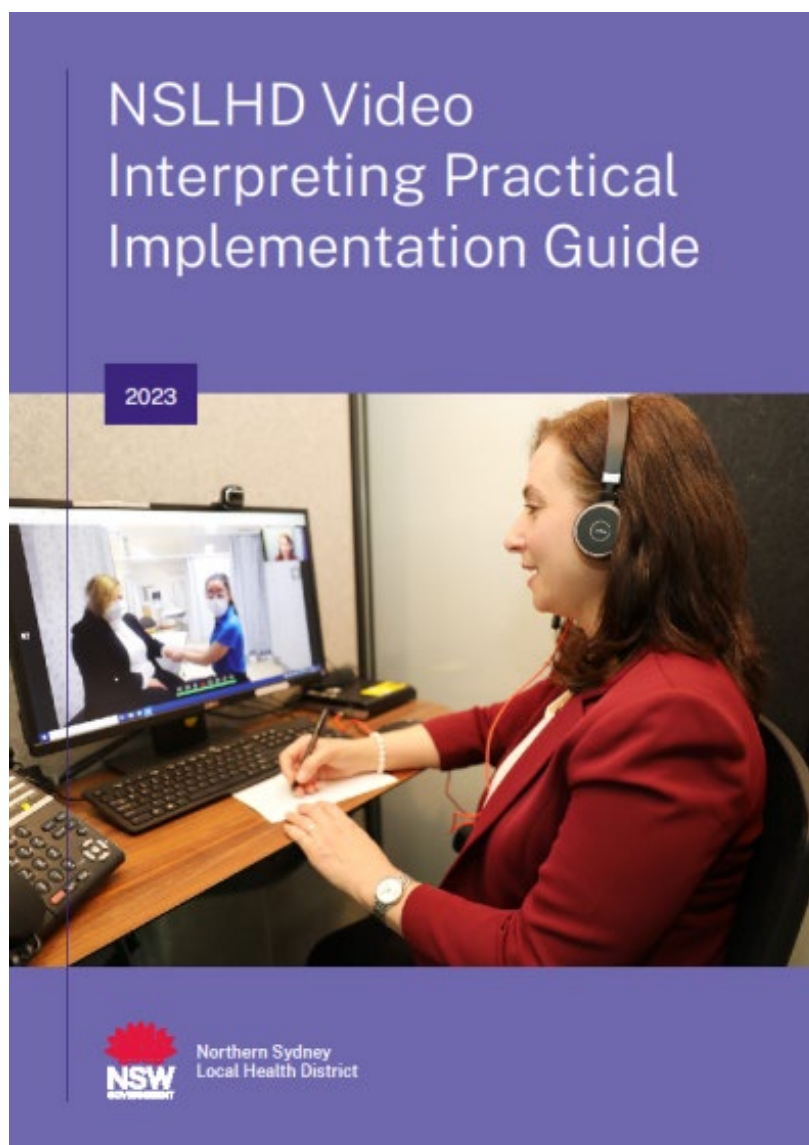
Finally, technology now offers functionalities that we have only started to explore - such as automatic transcriptions, virtual avatars, augmented reality, smart glasses, and much more. We embrace ideas from patients, carers, and staff to apply new concepts and provide high-quality care to our consumers. Video Interpreting provides an opportunity to include consumers with limited English proficiency or hearing impaired when exploring all these exciting technologies.

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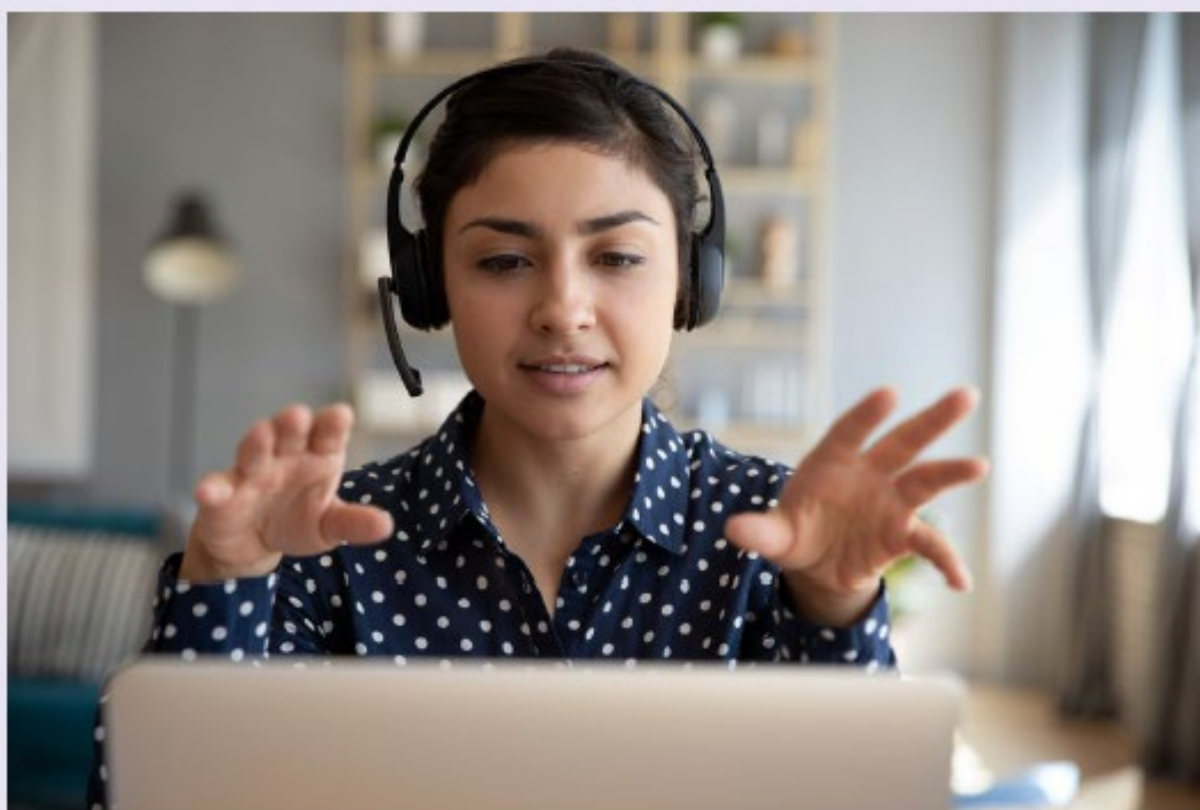
APPENDIX

Appendix 1



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Purpose

This document details the main steps when implementing Video Interpreter Service in clinical settings at Northern Sydney Local Health District (NSLHD). This is not a comprehensive technical document but a practical guide for healthcare services new to audio-visual calls and/or the Interpreter Service.

Introduction

Culturally and Linguistically Diverse (CALD) patients represent a significant part of the NSLHD population. According to the [NSLHD Strategic Plan 2022-2027](#), 30% of the area residents speak a language other than English at home, of which 15% report having limited or no proficiency in English.

Video interpreting removes known barriers that can lead to misunderstandings, misdiagnoses, and delayed treatments. It combines the cost-efficiency and agility of phone interpreting with the non-verbal cues of an in-person encounter. Additionally, it has been widely used across New South Wales (NSW) Health and has a proven record of success. Video Interpreting processes also promote Virtual Care adoption since they build technology capabilities and can be easily adapted to include carers, family members, and additional healthcare providers.

Video interpreting is closely linked with Telehealth (Virtual Care) arrangements. In fact, just as the COVID-19 pandemic acted as a catalyst for Virtual Care technology, telephone and video interpreting also experienced an exponential increase. NSLHD access to private and secure Telehealth platforms (e.g., PEXIP and MyVirtualCare), suitable hardware and network infrastructure, and staff educational and technical support, proved a fertile ground for Virtual Care.

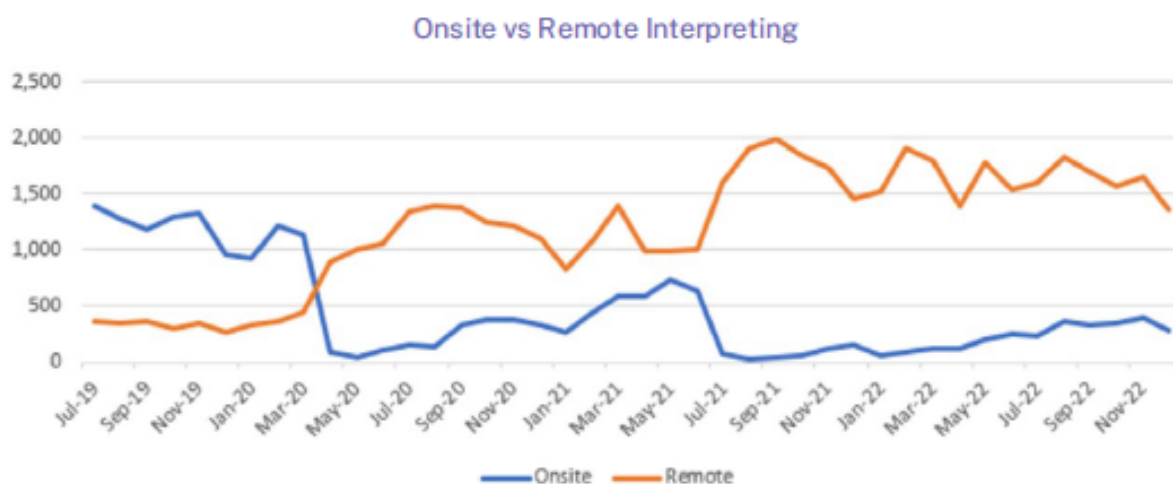


Image 01: Remote Modalities (Video + Telephone)

Additionally, Video Interpreting has already been implemented with success in several NSLHD services. It has a proven record of accomplishment and full support from the Interpreter Service Team. Their staff are proficient with video-call platforms so technical issues are minimal. With over 100 interpreters trained, the service offers video interpreting in 64 languages -including AUSLAN.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
HB	13	23	36	19	26	24	22	41	34	23	32	20	313
RY	6	12	1	1	0	1	2	0	1	2	2	0	28
MV	0	1	0	0	1	0	0	0	0	0	19	28	49
RNS	25	52	51	37	38	35	31	43	30	20	17	15	394
PACH	39	142	211	151	205	193	208	294	273	239	259	197	2411
MHDA	7	15	13	6	6	4	5	3	7	2	3	3	74
NSLHD	90	245	312	214	276	257	268	381	345	286	332	263	3269

Table 01: NSLHD Video Interpreting Occasions

Change Management

The *People, Process, Technology (PPT)* Framework is a well-known, simple, and effective framework used for managing change in organizations. It consists of aligning its three elements to generate synergy and realise benefits. While the People element is focused on the individuals who will be affected by the change (including staff, patients, carers, interpreters, and other stakeholders), the Process element will explore the administrative workflow to ensure a smooth operation and remove any roadblocks. Finally, the Technology branch will focus on the tools needed to implement the change (including hardware, software, and network).


However, before beginning any change process, it is important to be aware of the current state and the resources already available to support your team. Video Interpreting has been widely available, and many services invested time and energy in developing tailored resources to support clinical workflows. The table below summarises the existing NSLHD resources.

Telehealth Resources	Video Interpreter Resources
<ul style="list-style-type: none"> • eHealth endorsed Telehealth platforms • Telehealth user training programs • User guides and 'cheat sheets' • SWSD (State-wide Service Desk) technical support • Hardware and infrastructure 	<ul style="list-style-type: none"> • In-service training • Practice sessions • Sample workflows • Video Interpreter Intranet page • Ongoing relationship and support from the interpreter service

Table 02: Existing NSLHD resources

TIP

For additional information, consult the chapter 'Support available & useful links' or contact the [NSLHD Telehealth Team](#).





PRACTICAL GUIDELINES

STEP 1: Present video interpreting service to your team

Clinicians, patients, carers, and family members might not be aware that video interpreting is an option. In fact, it is not rare that patients bring a support person just to assist them with communication. On top of raising awareness, introducing video interpreting to your team is a fantastic opportunity to discuss the case for change and the expected benefits/outcomes. Services have had success discussing video interpreting during their team meetings, but it is also valid to consider online communication, visual cues (posters), and patient-facing resources (brochures and pamphlets).

To support the introduction of the concept of video interpreting to your team, you need to promote the case for change and present the main benefits and outcomes of video interpreting.

I. Case for change

Support for administrative processes	challenges collecting and verifying patient data during admission and administrative processes highlight the need for support for CALD patients. It also supports collecting Informed Financial Consent.
Support informed decisions about healthcare and patient-centred care	lack of clear communication can lead to misinterpretation, low compliance, and uninformed decisions about healthcare. Including support to multidisciplinary routines during pre-admission and peri-ops
Support Informed Consent	video interpreting enhances the ability of clinicians to obtain informed consent for surgery or a medical procedure when time does not permit an onsite interpreter to be booked for patients who are not fluent in English.
COVID and other visit restrictions	patients in isolation and restrictions to visitors must not prevent equitable access to care
Waiting time for interpreter support	excessive waiting time and availability of in-person interpreters require practical and efficient alternatives
Lack of non-verbal communication	Although body language can represent up to 55% of communication, phone (audio only) interpreting removes non-verbal cues from the conversation. Video interpreters can ensure a high-quality interpreting outcome
Policy Compliance	existing policies, such as PD2017_044 , detail standard procedures for working with healthcare interpreters
Consumer feedback	clients, carers, and family members reported an enhanced positive experience with video interpreters



II. Benefits

Reduced need for transport/travel	video calls remove the need for travel and associated costs
Financial savings	by reducing travel costs for interpreter service, a 2021 pilot at Hornsby Ku-Ring-Gai Hospital's Day Surgery Unit saw an increase in the total number of interpreting appointments (238 video interpreting sessions in total) while simultaneously saving \$26,000 in 12 months.
Enhanced communication with video capabilities	improved non-verbal communication and support for disabilities – including AUSLAN
Flexibility and improved access to multilingual support	eliminating travel time, interpreters are more readily available, while also increasing the service's reach
Improved patient outcomes	video interpreters can increase communication accuracy and improve compliance leading to improved patient outcomes.

Change can be challenging for some – especially when involving technology. Whilst this document focuses on Implementation, NSW Health has several resources to support Change Management. Visit My Health Learning to learn more about Redesign, Change Management, and AIM (Accelerating Implementation Methodology).

TIP



STEP 2: Ensure you have the right tools for the task

Technology: the right tool to support our people and processes

As a rule of thumb, video interpreters connect using Telehealth technology. Since it is vital to establish video and audio connection for a successful session, staff must have access to the minimum equipment standard below:

- Access to a power source
- PC (Personal Computers) or Laptop
- Stable Internet Connection
- Access to Telehealth platform (PEXIP or MyVirtualCare)
- Webcam (or inbuilt camera)
- Speaker and microphone

Depending on the facility infrastructure and clinical requirements, the experience could be enhanced with dual screens, high-definition cameras, external speakerphones, and more. The Agency for Clinical Innovation (ACI) expanded on the multiple Telehealth equipment available on the Guidance for Virtual Care Hardware. Alternatively, the NSLHD Telehealth team is available to discuss your hardware requirements and provide guidance during procurement processes.



I. Select the appropriate Telehealth platform

Technology also encompasses the Telehealth platform selected to host the online conference. Currently, the eHealth endorsed Telehealth platforms that are supported by the interpreter service are PEXIP and MyVirtualCare. You can find additional details on these platforms at the intranet [Telehealth Hub](#). The NSLHD Telehealth Team can also provide a demo session and support you decide on the appropriate platform for your service.

Have you considered using mobile devices? Computers on wheels, laptops, and tablets could also be used for video interpreting. This usually results in better camera mobility and the flexibility to support clients during their whole patient journey –including during admission and administrative processes. Reach out to the [NSLHD Telehealth team](#) to know if this is a good option for your service.

TIP



STEP 3: Develop the right skills for Telehealth

People: the right people with the right skill and knowledge

Using Telehealth (video conferencing platforms) can be as easy and natural as using the telephone. However, it is vital that clinicians and administrative staff are proficient with the endorsed Telehealth platforms. NSLHD staff must not only attend the online consultation but be able to support external clients and troubleshoot minor technical issues. Fortunately, video interpreters are already proficient and technical issues from their end are rare.

The [NSLHD Telehealth Hub](#) is our main channel for all things Telehealth. There you will find information on the training available, patient and clinician resources, instructions for connecting with interpreters, and much more. If needed, after completing the basic training on [My Health Learning](#), the [NSLHD Telehealth Team](#) is also available for mock sessions and departmental training.

Have you completed the basic Telehealth training? The [NSLHD Telehealth team](#) can support your service develop its own training program. It is also possible to request in-service sessions with the video interpreting team.

TIP



STEP 4: Coordinate the online encounter

Process: the right actions in the right order to be productive and effective

Online meetings and Telehealth sessions require coordination and planning. For most services, this step is conducted by the administrative team. However, it is important that all staff work together and understand the interpreting process –including how to identify the need for an interpreter. The [Policy Directive PD2017_044](#) (Standard Procedures for Working with Health Care Interpreters) establishes the parameters to ensure equitable social and health care outcomes for CALD and/or patients with disabilities.

When implementing video interpreting consider the steps below.

- ❑ Identify the need for an interpreter
- ❑ Provide the appointment details to the Interpreter Service
 - Date, time, and language
 - Patient's details
 - Telehealth details (platform and consult link)
- ❑ Log in at the agreed date/time for the virtual session
- ❑ Brief the interpreter before and after the video interpreting session

What if the technology fails? Having a contingency plan/process can support your CALD patients and significantly decrease wait time. A simple alternative could be connecting from a different device. If time is of essence, it is also possible to connect using audio-only. However, if establishing visual is clinically vital, it is possible to reschedule the session or move to a different Telehealth platform—although this last option is time consuming and often not practical in busy outpatient clinics.

TIP



STEP 5: Monitor and Evaluate your experience

Just like all processes, it is recommended to monitor and evaluate your experience online with Video Interpreters. There might be opportunities to enhance your workflows, implement additional changes, and promote continuous improvement. Providing high-quality care is an ongoing effort and requires open stakeholder communication. Therefore, to ensure success:

- i. Collect staff feedback
- ii. Address barriers and suggestion for improvement

As staff grow more comfortable with Virtual Care technology, user experience tends to increase. In fact, the main goal is to make video interpreting an integral BAU part of healthcare.



What does Business as Usual (BAU) looks like?

Video interpreters are promoted through many internal channels. However, being a change process, it is important to engage our team members and generate buy-in. One way this can be achieved is by sharing success stories.

Oral Health Services

The Telehealth program introduced during the initial stages of the COVID-19 pandemic has continued to replace in-person attendance by interpreters -who would sometimes be delayed due to the volume of appointments and travel times. In fact, the HCIS (Health Care Interpreter Service) covers 3 districts and removing the extensive travel time can lead to increased availability and faster access to interpreters.

The number of video interpreting sessions in NSLHD increased from 199 in 2020 to 1,070 in 2021. In 2022, NS Oral Health had more than 2,000 video sessions.



Image 02: NSLHD Oral Health

Oral Health also innovated offering iPads on a mobile stand to enable video interpreting sessions. This solution removes any language barriers during administrative processes and continues to support the patients during their consultations. Communication was made easier and more efficient for both the healthcare providers and patients during the whole service.

NSHLHD Oral health

Month	Onsite	Phone	Video	Video %	Total
Jan '22		53	19	26	72
Feb '22	6	105	110	50	221
Mar '22		78	181	70	259
Apr '22	2	51	134	72	187
May '22	2	92	191	67	285
Jun '22	2	46	178	79	226
Jul '22	2	50	186	78	238
Aug '22	6	44	261	84	311
Sep '22	6	38	242	85	286
Oct '22	7	36	216	83	259
Nov '22	3	25	230	89	258
Dec '22	2	12	169	92	183
Total	38	630	2117	76	2785



Final considerations

Implementing video interpreting does not need to be an arduous process. Built on existing Telehealth technology and with resources already developed, connecting to a video call can be as easy as using the telephone. Even better, video can also bring non-verbal cues to the conversation and improve the interpreting quality. Additionally, the online process also brings efficiency and savings for the system.

This document outlined the main points when implementing video interpreting and Appendix 1 presents a clear roadmap for success. However, we understand that each team, cohort, and service is unique.

When implementing video interpreters, consider:

- **Generating sponsorship from your team leader:** support from a Nurse Unit Manager (NUM) can increase your chances of success. A leader sponsorship can validate the change process.
- **Displaying visual cues:** posters and pamphlets are a great reminders of the many services NSLHD has available.
- **Forming partnerships:** social workers, carer services, and other teams support CALD patients in a regular basis. They can assist raising video interpreting awareness.
- **Sharing your experience with video interpreters:** services can promote their own services and ongoing project in the NSLHD weekly bulletin, newsletters, and social media.
- **Seeking support:** the NSLHD Telehealth and the Health Care Interpreter Service are available to support your team during the implementation process.

Support available & useful links

Main links:

- [Healthcare Interpreter Service \(Intranet\)](#)
- [ABCD of Interpreters \(Intranet\)](#)
- [NSLHD Telehealth Hub \(Intranet\)](#)
- [NSLHD Telehealth – Video Interpreting \(Intranet\)](#)
- Policy Directive – [Interpreters Standard Procedures](#)
- [My Health Learning](#)

Phone Numbers

- State-Wide Service Desk (SWSD) 1300 28 55 33
- Health Care Interpreting Services 99 12 38 00

Emails

- For interpreting bookings: WSLHD-HCIS-InterpreterBookings@health.nsw.gov.au
- For interpreting queries: WSLHD-HealthCareInterpreterService@health.nsw.gov.au
- For Telehealth Support: NSLHD-Tehealth@health.nsw.gov.au



Appendix 1: Roadmap for success – Checklist for Implementation

STEP 1: Present video interpreting services to your team

- Introduce video interpreting to your team
- Promote the case for change
- Present the main benefits and outcomes of video interpreting

STEP 2: Ensure you have the right tool for the task

- Access to a power source
- PC (Personal Computers) or Laptop
- Stable Internet Connection
- Webcam (or inbuilt camera)
- Speaker and microphone
- Access to preferred Telehealth platform (PEXIP or MyVirtualCare)

STEP 3: Develop the right skills for Telehealth

- Ensure your team is proficient with the selected Telehealth platforms
- Ensure access to support channels, user guides, and troubleshooting cheat sheets

STEP 4: Coordinate the online encounter

- Identify the need for an interpreter
- Provide the appointment details to the Interpreter Service
 - a. Date, time, and language
 - b. Patient's details
 - c. Telehealth details (platform and consult link)
- Log in at the agreed date/time for the virtual session
- Brief the interpreter before and after the video interpreting session

STEP 5: Monitor and Evaluate your experience

- Collect staff feedback
- Address barriers and suggestion for improvement



NON-CLINICAL SERVICE DELIVERY

HIGHLY COMMENDED

Hunter New England Local Health District, NSW

HNELHD Mental Health Services

Mental Health First Responder – Virtual Care in Mental Health Emergencies across the LHD

Mandy Smith

AIM

The aim of the Mental Health First Responder (MHFR) service is to create a digitally enabled, fully integrated referral pathway that links mental health (MH) services with Police and Ambulance partners to reduce preventable presentations to ED by providing early mental health clinical support for people with mental health concerns in contact with emergency services across the entire Hunter New England Local Health District (HNELHD). In doing so MHFR seeks to improve individual health outcomes by delivering timely, person-centred care close to home where possible, reduce pressures on emergency services created by unnecessary transports and reduce demand pressures on ED posed by preventable presentations. This timely service can be effective in providing appropriate care that makes a costly, time consuming and potentially traumatising presentation to an ED unnecessary.

SUMMARY ABSTRACT

Mental Health First Responder: A Digitally Enabled Referral Pathway Revolutionising Mental Health Care in Emergency Services.

Introduction:

Mental health concerns have become a growing challenge, with emergency services witnessing a significant increase in cases involving individuals in crisis. In response to this pressing issue, the innovative MHFR model was established, leveraging the foundations of the "Police and Ambulance Early Access to Mental Health Assessment via Telehealth" (PAEAMHATH) model for delivery at scale. MHFR represents a groundbreaking partnership between NSW Police, NSW Ambulance, and HNELHD MH Services in New South Wales, Australia. This digitally enabled, fully integrated referral pathway aims to transform the way mental health care is delivered, ensuring improved health outcomes and personalised care experiences for individuals in contact with emergency services anywhere in HNELHD and relieving pressure on emergency services and Emergency Departments associated with preventable admissions.

Enhancing Health Outcomes Through Appropriate Care Options:

One of the primary objectives of MHFR is to reduce unnecessary mental health presentations to Emergency Departments. The traditional approach of transporting individuals in mental health crises to emergency departments is not always the most appropriate, trauma informed or person-centred solution (Integrated Trauma Informed Care Framework, NSW Health 2022, p 14). MHFR recognises the need for more specialised and tailored care options for individuals in contact with NSW Police or NSW Ambulance. By creating a dedicated care pathway that links mental health services with Police and Ambulance partners, MHFR enables real-time access to mental health professionals who can provide timely intervention and support, resulting in more positive outcomes at lower cost and with less inconvenience.



Delivering Timely and Localised Care:

A critical aspect of MHFR's success lies in its commitment to delivering patient-centred care that is timely and close to home. Traditional emergency department visits for mental health concerns can lead to delays in receiving appropriate care and support. Through the utilisation of telehealth technologies, MHFR ensures that Police and Ambulance personnel across the LHD have instant access to mental health professionals, regardless of their location within HNELHD. This not only minimises delays but also allows individuals to receive care in familiar and comfortable surroundings, and minimising travel time for consumers and emergency services (Appendix 1).

Promoting Equitable Accessibility:

One of the key challenges in healthcare delivery is ensuring equitable access to services, particularly in rural and remote areas. MHFR is designed to address this issue by breaking down geographical barriers through wide scale deployment of telehealth-enabled services to Police and Ambulance across more than 123,000 square kms of the LHD. Eligible individuals in contact with emergency services in remote locations can now access specialised mental health care without the need for extensive travel. As a part of a broad scale staged roll out, currently more than 69.7% of Police stations and 80% of Ambulance stations across the district have access to the MHFR referral pathway (Appendix 1). This aspect of MHFR aligns with the broader vision of NSW Health in creating a healthcare system that prioritises accessibility and inclusivity for all (NSW Health Future Strategic Framework 2022).

Efficiency and Cost-Effectiveness:

In addition to improving health outcomes, MHFR also aims to optimise the use of resources and be highly cost-effective. Initial costs for the service are limited to the purchase and management of equipment (iPads), staff training and a single full-time project manager. MHFR is a clinical service fully incorporated into the local mental health service network and existing related services, requiring minimal ongoing resources after initial project outlays, and with the capacity to scale human resourcing as demand increases within existing resource capacity. By reducing unnecessary transport and presentation to Emergency Departments for mental health concerns, MHFR ensures that valuable emergency resources are utilised more productively. This streamlined approach not only benefits emergency services but also translates to cost savings for the healthcare system. (Appendix 1, Appendix 2).

Customised Care Plans for Improved Outcomes:

Recognising that mental health concerns are diverse and unique to each individual, MHFR offers personalised care plans. These customised plans consider the specific needs of consumers with mental health concerns, ensuring that they receive appropriate and targeted support. Through telehealth consultations, mental health professionals can conduct triages and develop care plans that align with the individual's circumstances and preferences, fostering a sense of empowerment and control over their care journey. Emergency services staff report feeling supported in decision making about care for the individual that the service is of benefit to the individual and them in their professional role. (Appendix 2, Appendix 3).

Digital Enablement: The Foundation of MHFR:

At the core of MHFR's success is its digital enablement. Through the operational integration of existing cutting-edge telehealth technologies, the model ensures a seamless and efficient flow of information and communication between emergency services and mental health providers. This digital integration not only facilitates immediate access to care but also enables real-time access to all program resources, leading to more informed decision-making, and improving consistency and continuity of care (Appendix 4). This approach is in keeping with the NSW Health Future Health Strategic plan (2022) and the NSW Health Virtual Care Strategy 2021.

Conclusion:

The MHFR model stands as a shining example of collaboration and innovation in the healthcare sector. By linking mental health services with Police and Ambulance partners, MHFR has transformed the way mental health care is



delivered to individuals in contact with emergency services across HNELHD with more than 85% of people referred to the program able to remain in the community (Appendix 5). Through its commitment to improving health outcomes, delivering timely and localised care, promoting equitable accessibility, and embracing digital enablement, MHFR epitomises the vision of a sustainable health system that places patient needs at its centre. The success of MHFR demonstrates the potential of integrated, technology-driven solutions in revolutionising mental health care and serves as a model for other regions seeking to enhance their emergency mental health services.



NON-CLINICAL SERVICE DELIVERY

HIGHLY COMMENDED

North Metropolitan Health Service, WA

Sir Charles Gairdner Osborne Park Health Care Group

The NMHS JMO Manifesto

Dr Katie McLeod, Mary Sutton, Dr Deepan Krishnasivam and A/Prof George Eskander

AIM

The challenges facing the healthcare workforces globally are well documented, with unprecedented rates of vacancies, attrition, absenteeism, and burnout, from which Western Australia has not been spared. As of March 2022, exacerbated by the COVID-19 pandemic, the rate of vacancies across the Sir Charles Gairdner Health Care Group was 92 full-time equivalent positions, with a reliance on a locum workforce and an expenditure of \$4.8 million per annum. Additionally, junior doctors reported multiple concerns with low morale, difficulties in claiming overtime and in securing annual and professional development leave. The JMO Manifesto is an innovative initiative, designed to holistically address these key workforce issues impacting junior doctors and support doctor recruitment and retention.

SUMMARY ABSTRACT

The NMHS JMO Manifesto showcases an innovative strategic approach to the attraction, recruitment, and retention of Junior Medical Officers (JMOs) within the Sir Charles Gairdner Osborne Park Health Care Group (SCGOPHCG), a leading quaternary health service provider within the North Metropolitan Health Service (NMHS) in Western Australia (WA).

The SCGOPHCG, like numerous organisations nationally grappling with the aftermath of COVID-19, faced unprecedented vacancies, increased absenteeism, and burnout amongst all staff. With all hospital sites in WA failing to meet the basic workplace entitlements, such as accessing leave and claiming overtime, and evidence of an endemic bullying culture (AMA WA 2022), JMOs were in dire need for drastic change at an organisational level. The SCGOPHCG Executive Leadership Team, Medical Workforce, Clinical Staff Association, and the Charlies Resident Medical Officer Society (CRMOS) recognised this need, and in collaboration with JMOs, an ambitious and targeted initiative known as the 'JMO Manifesto' was developed, to support their wellbeing.

The JMO Manifesto centred upon the following strategic imperatives:

1. Embracing and celebrating **part-time** opportunities
2. Enshrining a culture of psychological safety through optimising **overtime processes**
3. Embedding **leave** at the heart of our business for JMOs
4. Implementing a **Medical Workforce On-Call** model to support JMOs 24/7
5. Creation of a below-the-line behaviour reporting pathway

From January 2023, the JMO Manifesto was successfully integrated into standard hospital operations by the concerted efforts of the Medical Workforce, Medical Education Unit, and departments hospital wide, who all embraced the shared vision of revolutionising historical practices to achieve the desired outcomes. These outcomes included:

- The creation of 35 new part-time positions which were recruited to capacity.



- An improvement in vacancy rates from a 92 full-time equivalent (FTE) shortage to nil vacancies across the Group from February 2023 onwards and with 100% retention as of June 2023.
- Strongly reported satisfaction measures pertaining to the streamlined overtime process, with minimal increased overtime costs incurred by the Group which has subsequently fallen.
- Greater than 92% of annual leave requests approved within 5 business days, compared to 45% in previous years.
- Increased retention rate of JMOs, with 94% of interns accepting a renewed contract to stay within the Group.
- Dramatic improvements in the JMO experience working within the NMHS, reflected by the 2023 Hospital Health Check results compared to previous years (AMA WA 2022; AMA WA 2023; see Appendix 1). This includes:
 - o A substantial cultural shift, with 82% of JMOs commending the workplace culture and morale, and the NMHS becoming the highest ranked public health service in this regard for 2023.
 - o Improved psychological safety for JMOs, demonstrated by:
 - Improved ratings of employer support (58% to 76%) and access to clinical debriefing (59% to 71%).
 - Most JMOs feeling that they can raise workplace issues without fear (82%), and that workplace safety is a priority of the NMHS (90%).
 - o Lower rates of JMO burnout compared to 2022 (20%), and the lowest rate of burnout (15%) in WA for 2023.
 - o Improved accessibility of formal and informal teaching opportunities (73% and 67% respectively).
 - o The NMHS being the absolute employer of choice by JMO recommendation, and the best ranking public health service in WA.

The lessons learned and achievements of the JMO Manifesto were recently recognised at the Health Round Table innovation awards and have been shared at multiple conferences with other healthcare leaders to collectively pave the way for a safer and better healthcare experience for staff and patients.

Leading these initiatives to fruition was not without its challenges. Resistance to change in medicine is often perpetuated by tightly held beliefs, including the idea that parts of medicine's culture cannot be changed, and continuing ineffective processes because it's the way it's always been done. The latter sparked some reluctance from departments to embrace part-time working, due to preconceived notions and fears. These attitudes undermine the importance of continuous improvement in healthcare, and result in a self-fulfilling cycle of a stagnant, rigid, and broken system. The perpetuated bullying culture in medicine is an example, with 34% of JMOs across Australia witnessing or experiencing bullying, harassment, discrimination, or racism at work (Medical Board of Australia 2022). Locally these percentages are no better (AMA WA 2023), and the SCGOPHCG's leadership are pushing heavily for cultural change by acknowledging and bringing visibility to the bullying culture, being vocal in renouncing its place within the organisation, and maintaining leadership presence and engagement in their efforts to eradicate it.

The cultural journey of the JMO Manifesto is just beginning, as it continues to evolve to target new areas for improvement and be applied across the NMHS to improve the JMO experience. After all, wellness is not an E-learning module, a mindfulness or yoga class, or a speech on resilience. It is an investment in strong leadership, in establishing trust and cultural change, and in protecting the most valuable resource to any health organisation - their team. Nine months in, the JMO Manifesto continues to excel as a sustainable JMO recruitment and retention strategy. With nil JMO vacancies and staff retention en masse, and minimal need for a locum workforce, the NMHS continues to see returns on investing in doctor wellbeing.

In large, complex, and diverse organisations, it is easy to lose sight of the basic things that drive workplace culture, safety, and job satisfaction, and subsequently affect productivity, staff recruitment and retention, and service delivery. The JMO Manifesto demonstrates that simple and clearly defined strategies can lead to sustainable gains when it comes to these issues. As the JMO Manifesto continues to grow and drive change at the NMHS, JMO wellbeing will remain a priority as the SCGOPHCG continues to find new ways to improve health care delivery within WA.



NON-CLINICAL SERVICE DELIVERY

HIGHLY COMMENDED

Riverland Mallee Coorong Local Health Network, SA

Riverland Academy of Clinical Excellence

Transforming rural and remote healthcare: The success story of Riverland Academy of Clinical Excellence (RACE) in the Riverland Mallee Coorong Local Health Network.

Wayne Champion, Paul Worley, Amy Mendham, Caroline Phegan, Sharon Frahn, Hamish Eske and Anne McKinlay

AIM

Rural and remote communities continue to struggle with medical workforce shortages and decreasing enrolment in general practice training. The Riverland Mallee Coorong Local Health Network (RMCLHN) Board and Executive decided that to continue doing the same things would likely continue the crises. Instead, they aimed to transform the LHN into a centre of excellence in rural health and, rather than outsourcing to urban tertiary centres, to take responsibility for creating their own medical workforce. The vehicle for this transformation is the Riverland Academy of Clinical Excellence (RACE).

SUMMARY ABSTRACT

The Riverland region of South Australia, with 12 public health sites and associated private general practices serves approximately 65,000 people. For over 25 years, Australian rural communities have faced challenges with medical workforce shortages. The Riverland was not immune to these challenges, with a gradual disengagement with the hospital system of its overburdened general practitioners.

The Commonwealth Government had recently released a comprehensive proposal by the National Rural Health Commissioner to create a National Rural Generalist Pathway (National Rural Health Commission., 2018). The recommendations required a radical rethink of the role of local health services in the training and support of their medical workforce. The CEO and Board of the RMCLHN saw these national recommendations and decided to have the courage to implement them locally, despite not having any additional funds to do so. The alternative of continuing down the expensive locum pathway was likely to worsen the crises and put further strain on the health care team and negatively impact patient care.

The first step was to recruit a local champion to work with the Board and CEO to implement the transformation. They recruited a Rural Generalist with extensive local practicing experience as their Executive Director of Medical Services, and they recruited the person who developed the national policy, the former National Rural Health Commissioner, who also had decades of experience working in this region, into a new position as Executive Director of Clinical Innovation. The Executive Director of Medical Services would work in the business, while the Executive Director of Clinical Innovation would work on the business, synergistically transforming the system together. Despite no budget there was a real commitment from the top for change.

Critically, the CEO had seen the positive impact of a similar transformation occur in a previous health service role in New Zealand, and the Chair of the Local Health Network (LHN) Board was a Rural Generalist who understood the transformational power of a training organisation. The workforce transformation was framed within a larger ambition to become a Centre of Excellence in rural health. The vehicle for this was the Riverland Academy of Clinical Excellence (RACE), created in 2021. RACE is a multidisciplinary division within RMCLHN, created to deliver



on the commitment to training our own clinical workforce, create and improve relevant evidence bases for clinical practice through local research, and bringing the benefits of integrated teaching, research and clinical care to our communities and region. Rather than just accepting whoever was prepared to come and work in the region, with the advent of RACE, the LHN sent the message that you would only be accepted if you were good enough to be part of a centre of excellence. This has proven to be an attractive message.

Within the space of two years, RACE has recruited 30 new Australian trained medical doctors to the region, has re-connected with the local General Practitioners (GPs), and has partnered with local Universities in five successful Medical Research Future Fund grants to pilot innovative care practices in the region. It has brought a sense of hope to the staff where once there was resignation and despair and has done this despite the strain of a global pandemic.

Transforming a large complex system is difficult. The initial impact point chosen was to take responsibility for our medical workforce supply chain, rather than outsourcing this to city tertiary centres. Like many rural regions with predominately small MM5 towns most postgraduate training was undertaken outside the region (Versace, Skinner, Bourke, et al., 2021). A reducing number of GP registrars rotated through the region, and medical students used the region for part of their training. Neither group produced significant return on investment for the region as their home base was somewhere else.

RACE decided to put in place the required training elements, from Internship through to Fellowship. It also decided to follow the national recommendation to implement a single-employer model for these trainees by providing a five-year contract from Internship through to completion of their Fellowship. RACE also committed to all training rotations integrating Hospital and General Practice experiences, thus grounding the entire training program in the principles and practice of rural generalism. RACE re-engaged with the local Rural Generalists based on this vision to improve their workforce simultaneously with hospital's workforce. Many of these Rural Generalists took up part-time salaried positions in the hospitals as consultants. RACE attracted and retained new other Specialists to work alongside the Rural Generalists and provide the required training capacity for Internship and Advanced Skills Training components required to reach Fellowship (e.g., Anaesthetics, Obstetrics, Internal Medicine, Emergency Medicine, Surgery). The ambition for a centre of excellence, and a real commitment to providing non-clinical time within their rostered hours to undertake research and teaching, assisted in attracting high quality people to these roles.

The transformation of the medical training pathway, and the subsequent increase in the region's overall medical workforce by over 20%, has enabled new models of care to be envisioned and implemented. Trainee medical officers are now reaching students in primary schools. Dedicated nursing home teaching rounds are improving aged care. Lived experience peer workers in mental health are being introduced to a local general practice. Diabetes remission programs, co-designed with Aboriginal people, are being developed in collaboration with our GPs and the local ACCHO. Employment of Aboriginal staff is increasing as grants for allied health education, diabetes remission and augmented reality ulcer care bring funding for new roles for local Aboriginal people. New doctors have brought additional skills, including in public health. A RACE Public Health Unit has been formed, leading our response to Covid and Japanese Encephalitis Virus, developing a value-based care population health framework for the region, and building understanding through a public health journal club.

The Board and CEO commenced this transformation without any additional funds. Within two years, the locum budget is down to 1/3 of its previous level, enabling a balanced budget and the courage to commit to research translation has proven to be a social and economic transformation.



NON-CLINICAL SERVICE DELIVERY

TABLE OF SUBMISSIONS

BlueCare, QLD

Improving access to in-home respite for people living with dementia

Megan Lunney and Georgina Casey

Central Adelaide Local Health Network (CALHN), SA

Enhancing Healthcare Services through Innovative Consumer Partnering and Community Engagement

Georgina Pearce

Hunter New England Local Health District, NSW

'Crossing the Border collaborating to close the gap'

Angela Morrish, Alexandra Leeson, Amanda North, Faith Missen and Lee Chissold

Hunter New England Local Health District, NSW

Mental Health First Responder - Virtual Care in Mental Health Emergencies across the LHD

Mandy Smith

North Metropolitan Health Service, WA

The NMHS JMO Manifesto

Dr Katie McLeod, Mary Sutton, Dr Deepan Krishnasivam and A/Prof George Eskander

Northern Sydney Local Health District, NSW

From words to images: Implementing Video Interpreting

Bruno Villamea Santos, Cathy Butler and Tingting Chen

Norwest Private Hospital, NSW

Utilising different mediums to increase engagement with quality education

Rebekah Duxbury, Louise Heavy, Michael Tran and Tamara Akkermans

Riverland Mallee Coorong Local Health Network, SA

Transforming rural and remote healthcare: The success story of Riverland Academy of Clinical Excellence (RACE) in the Riverland Mallee Coorong Local Health Network

Wayne Champion, Paul Worley, Amy Mendham, Caroline Phegan, Sharon Frahn, Hamish Eske and Anne McKinlay



<p>South Metropolitan Health Service, WA</p> <p><i>SMHS Clinical Quality Registries (CQR) - Improvement Project</i></p> <p>Russell Tonkin</p>
<p>St John of God Healthcare, WA</p> <p><i>Technology and Process Standardisation across all outpatient rehabilitation sites at St John of God Healthcare (SJGHC)</i></p> <p>Kera Fulurija, Sangeeta Rathi, Alisha Shariballi and Tracey Gibson</p>
<p>West Gippsland Healthcare Group, VIC</p> <p><i>Partnering with the local Aboriginal and Torres Strait Islander community to provide better healthcare</i></p> <p>Meredith Davey</p>
<p>Western Sydney LHD - Auburn Hospital, NSW</p> <p><i>Risky Business of Falls</i></p> <p>Jawaher Masri, Cassandra Chan, Brian Julien, Matthew Fa and Carlos Chavez</p>
<p>Western Sydney LHD - Westmead Hospital, NSW</p> <p><i>Keeping Baby Home</i></p> <p>Michelle Simmons, Rachel Jones, Kelly Donnoley, Samantha Cox, Vicki Wilde-Shooter, Kate Gillis, Sarah Melov, Jessica Vertley, Jeannette Skelton and Marriann Hennessey</p>
<p>Zonta House Refuge Association, WA</p> <p><i>Zonta House Recovery Support Program</i></p> <p>Natalie Walchshofer</p>





HEALTHCARE MEASUREMENT

WINNER

Royal North Shore Hospital, NSW

Divisions of Medicine

Parkinson Inpatient Experience (PIE) Project

Sue Williams, Marissa Sakiris, Elizabeth Bryan, Helen Ganley and Kimberly Attenborough

AIM

The Parkinson Inpatient Experience (PIE) Redesign Project was established to enhance the experience and health outcomes for patients with Parkinson Disease (PD) admitted to Royal North Shore Hospital (RNSH). With a commitment to transforming the way we care for PD patients; the PIE Project addresses inefficiencies in-patient identification and timely medication administration by driving excellence in inpatient medication management. The PIE project also improves the experiences of staff who care for PD patients through a focus on capacity-building activities. The PIE Project aims to optimise efficiency, patient experience, and health outcomes for PD patients by reducing their length of stay, improving identification processes, timely medication reconciliation and administration, and reduced medication prescribing errors.

SUMMARY ABSTRACT

PD is a neurological disorder that requires complex medication regimens for symptom control (Kalia and Lang 2015) this requires high quality care to ensure a positive patient experience (Carroll, Deutschmann & Andrews 2020). Medications should be administered at patient-specific times as administration as little as 15 minutes late can severely worsen symptoms (Clinical Excellence Commission 2020). PD management in hospital is poor, causing frequent untimely administration and prescribing errors (Lubomski, Rushworth and Tisch 2015). With the increased risk of medication mismanagement, patients with PD are exposed to avoidable complications and worse clinical symptoms (Sumida, et al 2021) .

PD medication management in hospital contributes to 1.5 times longer length of stay (LOS) than non-PD patients (Lance 2020). Both global literature and RNSH data demonstrated that only half of PD medication doses were administered on time (Oguh 2012). At RNSH, 45% of pharmacist medication reviews identified a PD prescribing error and there was no systematic means of identifying PD patients. Unless early identification of PD patients and inpatient PD medication management are made effective and efficient, patients' PD symptoms intensify, worsening their hospital experience, health outcomes, and LOS (Oguh 2012; Kalia and Lang 2015). Additionally, without improvement, the staff experience of managing PD patients would remain poor with only half of RNSH staff being satisfied with the care they provide to patients.

On average, 44 patients with PD are admitted to Royal North Shore Hospital (RNSH) per month. Through a comprehensive diagnostic approach involving the analysis of quantitative data reports and extensive consultation with key stakeholders via surveys and focus groups, critical factors contributing to the poor quality of medication management for PD patients were identified. As a result, the PIE Project was established in the Emergency Care, Neurology and Aged Care departments at RNSH to address poor patient identification, untimely pharmacy reviews, prescribing errors, and untimely administration of levodopa doses, to improve medication management for patients with PD when admitted to RNSH.

The PIE Project implemented original interventions across the Emergency Department, Neurology ward and aged care ward at RNSH over 2021 and 2022, which have not been previously reported on in the literature, offering new knowledge that challenges existing practice. Original interventions included: 1) an electronic alert prompting doctors to prescribe PD medications at patient-specific administration times, 2) electronic prompts for nurses on



the medication chart to administer PD medications on time, and 3) a prompt for nurses to administer PD medications on time built into the pharmacy dispensing software, which is automatically printed on PD medication labels. Additionally, the PIE Project saw the implementation of interventions which creatively built on previously reported solutions. These included:

- an educational program for staff (Amzi 2019; Carroll et al 2020; Corrado et al 2020; Lance et al 2021; whilst education is a well-documented solution, our program was specifically tailored to RNSH,
- formalisation of an electronic alert to promote clear identifications of PD patients in the ED. A pre-existing alert which was being used sub optimally, was formalised into standard care (Harris and Fry 2017), and
- increased availability of ward stock PD medications (Azmi 2019; Carroll et al 2020; (Nance et al 2020) the PIE Project was achieved through automated dispensing machines specific to RNSH, and posters highlighting available stock specific to the ward.

With a focus on capacity-building, including staff education and the redesign of digital platforms, the PIE Project transformed the experiences of staff caring for PD patients. Extensive staff training accompanied each solution and has been integrated into ongoing staff orientations and in-services, ensuring sustainability and continuous improvement. To ensure the behaviour change and empowerment of staff to provide high-quality care, the solutions were accompanied by focus groups and education sessions.

The PIE Project's performance measures were tracked monthly for one-year post-implementation and grouped into the following two categories: Post-implementation (June 2022 to December 2022) and Sustainability (January 2022 to June 2023). Improvements have been demonstrated in all areas and have been sustained through 2023. For instance, the proportion of PD patients flagged in the Emergency Department (ED) with a 'PD icon alert' has improved (see Table 1 on page 8). Additionally, the proportion of PD patients who received a medication reconciliation within 48 hours of admission has doubled, enabling potential errors to be identified and corrected by prescribers. Doctors report greater confidence in prescribing PD medications, which has translated into a reduction in prescribing errors, and nurses administer medications within 15 minutes of the prescribed time. Hospital-wide metrics show that benefits of the education and eMR alerts have improved performance across the hospital beyond the three wards in focus.

The redesign of medication management at RNSH requires work to continually educate new staff on the importance of accurate prescribing, timely administration of medications and timely pharmacist reviews. Additionally, continuous work is required to maintain robust feedback loops with all stakeholders and executive sponsors to ensure solutions are modified to the changing needs of staff and consumers. (Azmi et al 2019; Corrado et al 2020; Lance et al 2021).

Contrary to findings in the literature, the PIE Project has not reduced length of stay or readmission rates of PD patients (Carroll et al 2020; Azmi et al 2020; Bramble et al 2021; Lance et al 2021; Lovegrove and Marsden 2020; Moore et al 2022). This has inspired a further redesign project to investigate the length of stay and high readmission rates experienced by PD patients admitted to RNSH. A grant has been secured to support further diagnostic work and the implementation of targeted solutions in 2024.

REPORT

APPLICATION OF ACHS PRINCIPLES

1. Consumer Focus

The PIE Project demonstrates a strong commitment to incorporating consumer perspectives in its design and implementation. A pivotal aspect of the project's consumer-centric approach is the steering committee, which features consumer representation that is instrumental in shaping the project. A steering committee comprised of empowered consumers were encouraged to engage with senior health professionals, facilitated by a consumer orientation program. The PIE Project Team met with consumers prior to the first steering committee to provide them with project information in consumer-friendly language. This proactive approach empowered consumers to contribute their thoughts on project solutions by creating open feedback loops with the project team, ensuring their satisfaction and motivation is sustained. Collaborative partnerships between staff and consumers were also



fostered through patient and carer representation within the steering committee. This dynamic allowed for the consumer voice to resonate, shaping solutions that considered not only staff, but were also patient-centred and prioritised the safety and experience of patients (Corrado et al 2020).

Solutions were designed and implemented in collaboration with staff and consumers via focus groups and interviews (Figure 1). This inclusive approach enabled the identification of specific challenges. For instance, consumers told us that their medications were not given on time, but they were not aware of how frequently medications were given late. One carer expressed frustration with staff calling her to confirm medication regimes when she had given a medication list to the paramedics. This consumer-focused approach ensured that the solutions developed address the real needs and concerns of both staff and consumers, leading to more effective and patient-centred outcomes.



Project Activities

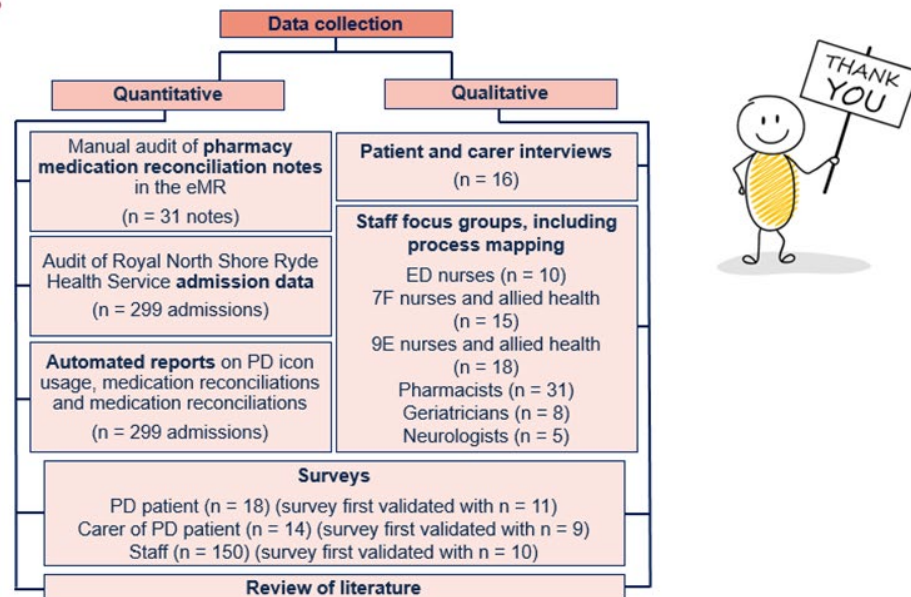


Figure 1: Project activities

2. Effective Leadership

Adhering to a redesign model to ensure successful implementation, a steering committee was assembled with clearly defined roles, tasked with ensuring the seamless integration and sustainability of solutions, complemented by a well-structured communication plan (Amzi et al 2019; Carroll et al 2020). Members met monthly and include senior medical staff, nursing staff from three specialty departments - Emergency, Neurology and Aged Care- alongside allied health and pharmacy professionals. The multi-disciplinary collaboration united a range of professions to generate innovative solutions and orchestrate their appropriate implementation. Additionally, a patient with PD and a caregiver was involved in the steering committee. Involving consumers on the steering committee captures their experience to ensure interventions are effective in addressing their needs (Carroll et al 2020; Corrado et al 2020; Lovegrove and Marsden 2020). In addition to the steering committee, fortnightly sponsor meetings and daily team member communication pathways were established to provide further structure to the project.

Appointing senior and clinical leaders, as sponsors, provides authority and ownership over solutions to ensure their seamless integration into daily workflow. Consistent with other healthcare redesign projects in the literature, this multi-disciplinary leadership team extended improvements beyond the wards of focus to benefit the broader



hospital. Assembling stakeholders under a shared objective and robust governance bridged traditional barriers that often segregate departments and professionals, for a unified leadership approach (Azmi et al 2019; Moore et al 2022; Nance et al 2020).

Obtaining ethics approval established a framework of governance for the project, ensuring the adherence to ethical standards. Similarly, this created transparency around the project's objectives among the staff, patients and carers who participated in surveys, focus groups and interviews.

3. Continuous Improvement

Electronic reporting was developed to identify patients and measure outcomes for ongoing data review (Azmi et al 2019; Carroll et al 2020; Bramble et al 2021; Moore et al 2022). Following up these reports with key stakeholders, including RNSH executives and nurse managers, provided the opportunity to develop further actions to address underperforming measures, non-compliance, and patient and carer complaints (Azmi et al 2019; Carroll et al 2020; Corrado et al 2020; Moore et al 2022) until the changes become embedded into core business (Carroll et al 2020).

Monthly outcome monitoring has been adopted by the Movement Disorder Clinical Nurse Consultant (CNC) to ensure the continuity of the PIE Project activities as part of business as usual. Outcome metrics are reported monthly using readily available organisational data reports. Achievements and gaps in services are fed back to ward managers and heads of department for evaluation and to celebrate areas of improved performance and address any gaps promptly. Managers provided feedback to staff at the front line through departmental newsletters, emails, staff 'WhatsApp' groups and ward meetings. New starters receive education that includes information regarding best practice expectations and performance reports, to raise awareness that PD medication management is a priority for each department. Additionally, ongoing focus groups with staff prioritise continued staff satisfaction.

The literature demonstrates that improving medication management for PD patients reduces LOS (Carroll et al 2020; Azmi et al 2019; Bramble 2021; Lance et al 2021; Lovegrove and Marsden 2020; Moore et al 2022), however this has not been the case at RNSH. Consequently, a grant has been secured to fund further redesign work to investigate why, identify the root causes and reengage stakeholders to develop solutions to address LOS. By securing a grant to support additional redesign efforts, the PIE Project demonstrates a commitment to ongoing enhancement. The focus on investigating the reasons behind certain issues, identifying their core causes, and reengaging stakeholders reflects a proactive approach to consistently refine and optimise processes for patients with PD as well as staff.



4. Evidence of Outcomes

The patient-first approach of the PIE Project yielded improvements to patient safety determined from auditing PD admissions pre (January-May 2022) and post (June-December 2022) implementation of solutions, and extends to demonstrate sustainability (Jan - June 2023):

1. Proportion of PD patients clearly identified in the ED by being flagged with a 'PD icon':
 - Clear identification of PD patients by staff is critical to ensure timely and safe medication prescribing, review, and administration
 - This project results in a clear improvement in identification of PD patients (Figure 2)

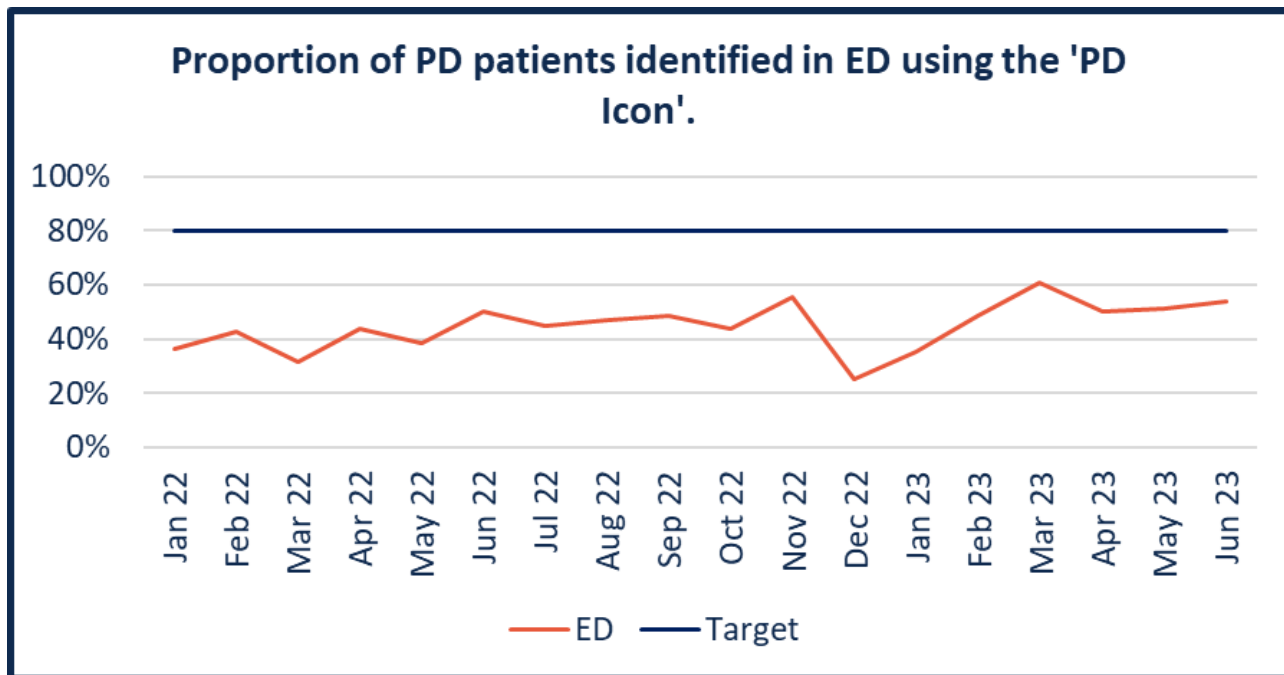


Figure 2: Proportion of PD patients identified in ED using the 'PD Icon'.

The proportion of PD patients identified in ED using the PD Icon on the FirstNet tracking board has steadily improved, from 39% (n= 69) pre intervention to 45% (n=114) post intervention. This modest improvement has been maintained with 49% (n=90) continuing to be identified using the 'PD Icon' in ED.



2. Proportion of PD patients who received a pharmacist 'medication reconciliation' review prior to discharge:

- Timely pharmacist review results in timely correction of prescribing errors, and optimisation of therapy
- Feedback of error rated to prescribers has improved performance
- Strong improvement was demonstrated in all target areas (Figure 3)

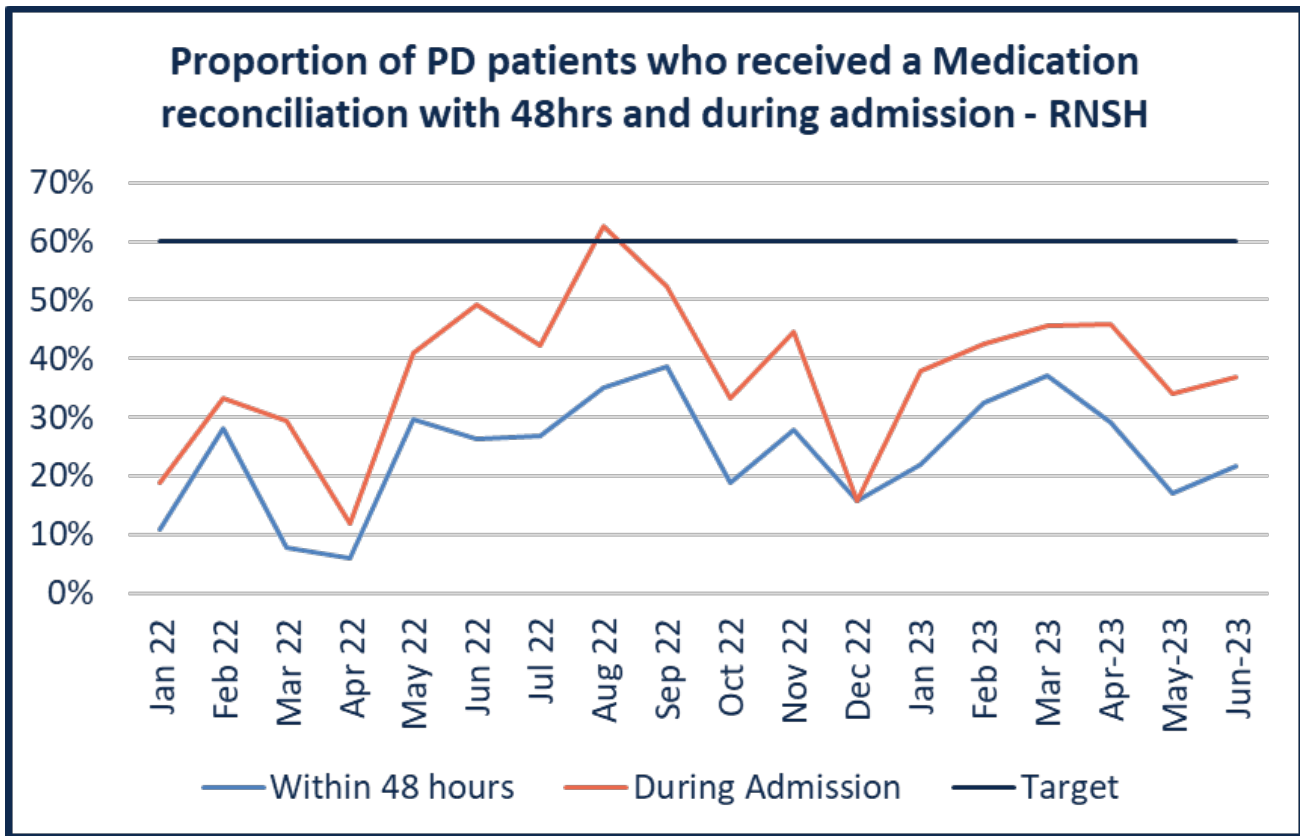


Figure 3: Proportion of PD patients who received a medication reconciliation within 48hrs and during admission

Pharmacists have sustained improvements made in 2022, and initiated work on the Short Stay Medical Assessment Unit to further improve.



3. Proportion of doctors, pharmacists and nurses who know administration of Levodopa on time means within 15 minutes
 - Strong improvement in the proportion of staff who knew this was demonstrated (Figure 4 and Figure 5)

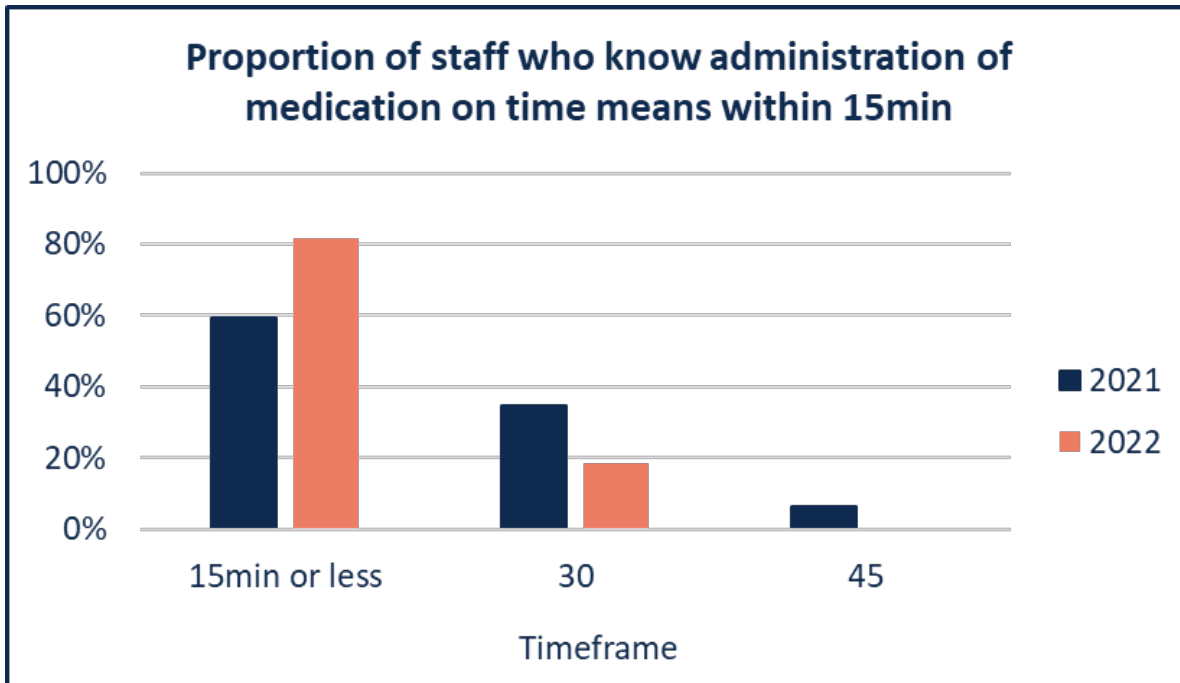


Figure 4: Proportion of staff who know administration of medication on time means within 15 minutes

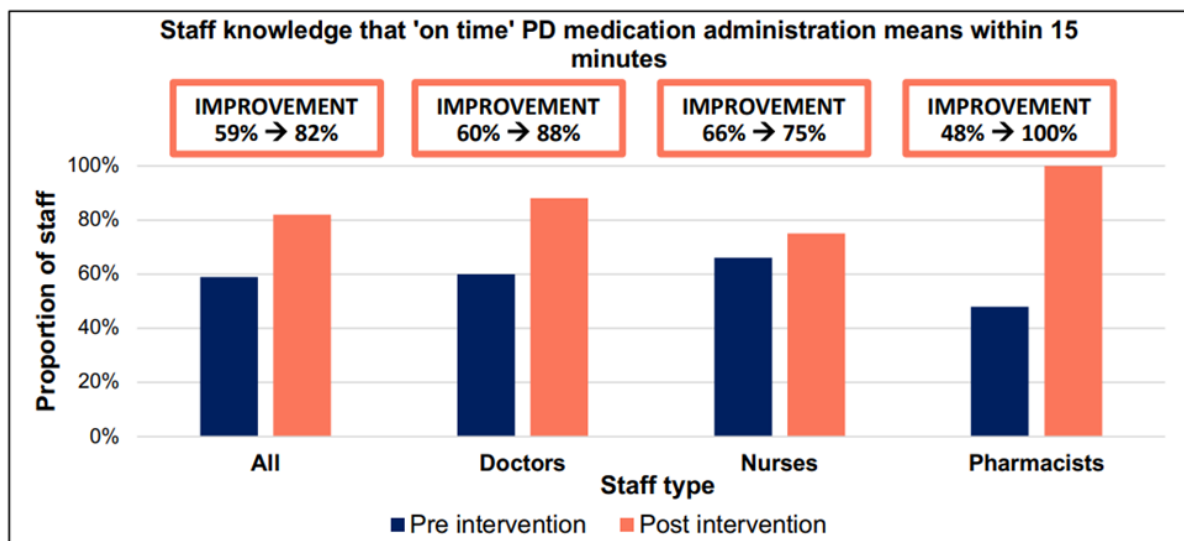


Figure 5: Knowledge of staff by type on what constitutes for 'on time' PD medication administration

The graph demonstrates improvement in the proportion of staff who answers correctly to being asked within what time frame constitutes 'on time' for PD medication administration. For all staff, n=81 (pre), n= 77 (post). For doctors, n=25 (pre), n=25 (post). For nurses, n=35 (pre), n= 40 (post). For pharmacists, n=21 (pre), n=6 (post). Improved staff knowledge in this area indicates a safer PD medication management approach for patients.

Education for doctors will be repeated at the start of each year hospital-wide, and with each new rotation to the Neurology and Aged Care wards. Education for nurses will continue throughout the year. Pharmacists will receive at least one in-service per year.



4. Proportion of Levodopa doses administered on time:

- Levodopa is the most common, time-critical medication used to manage PD and should be administered within 15 minutes
- Strong improvement was seen in all target areas (Figure 6).

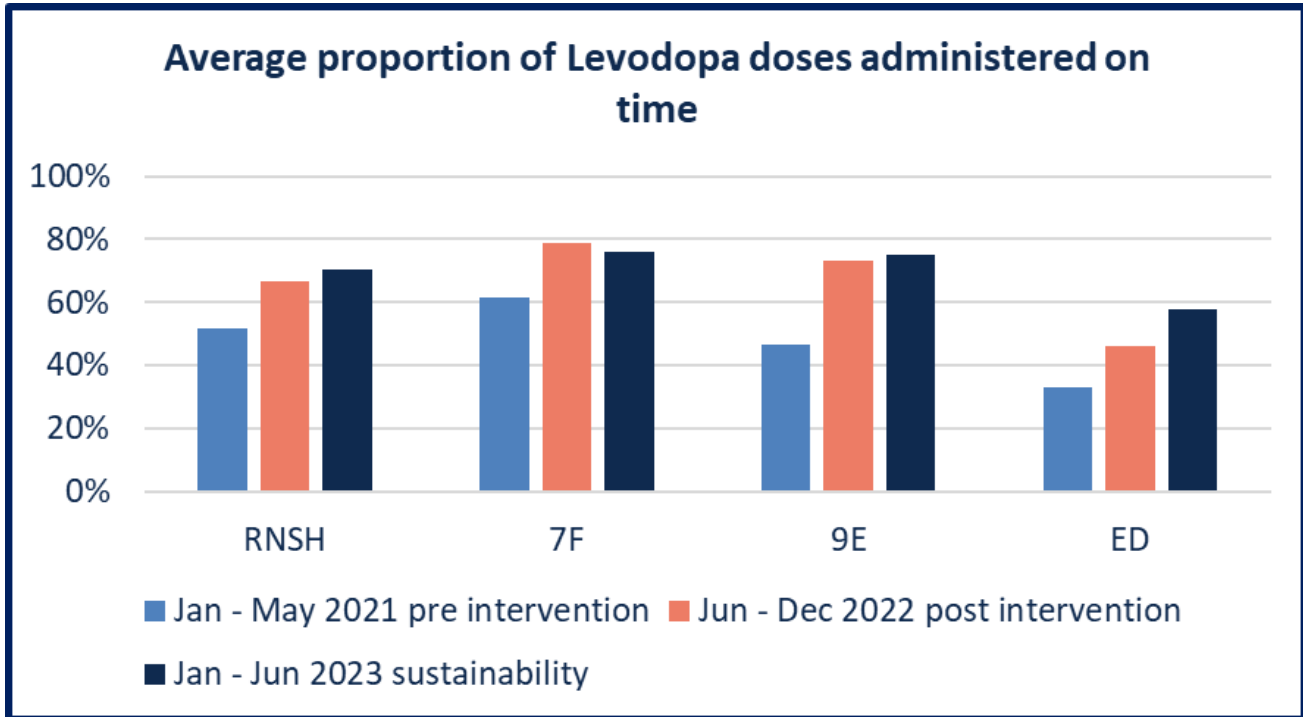


Figure 6: Average proportion of Levodopa doses administered on time

The monthly results are shared with NUMs of targeted wards to promote ongoing efforts.



5. Proportion of pharmacist 'medication reconciliations' free of prescribing error:

- Pharmacists identify PD medication prescribing errors through their patient reviews
- A clear decrease in prescribing errors was achieved (Figure 7).

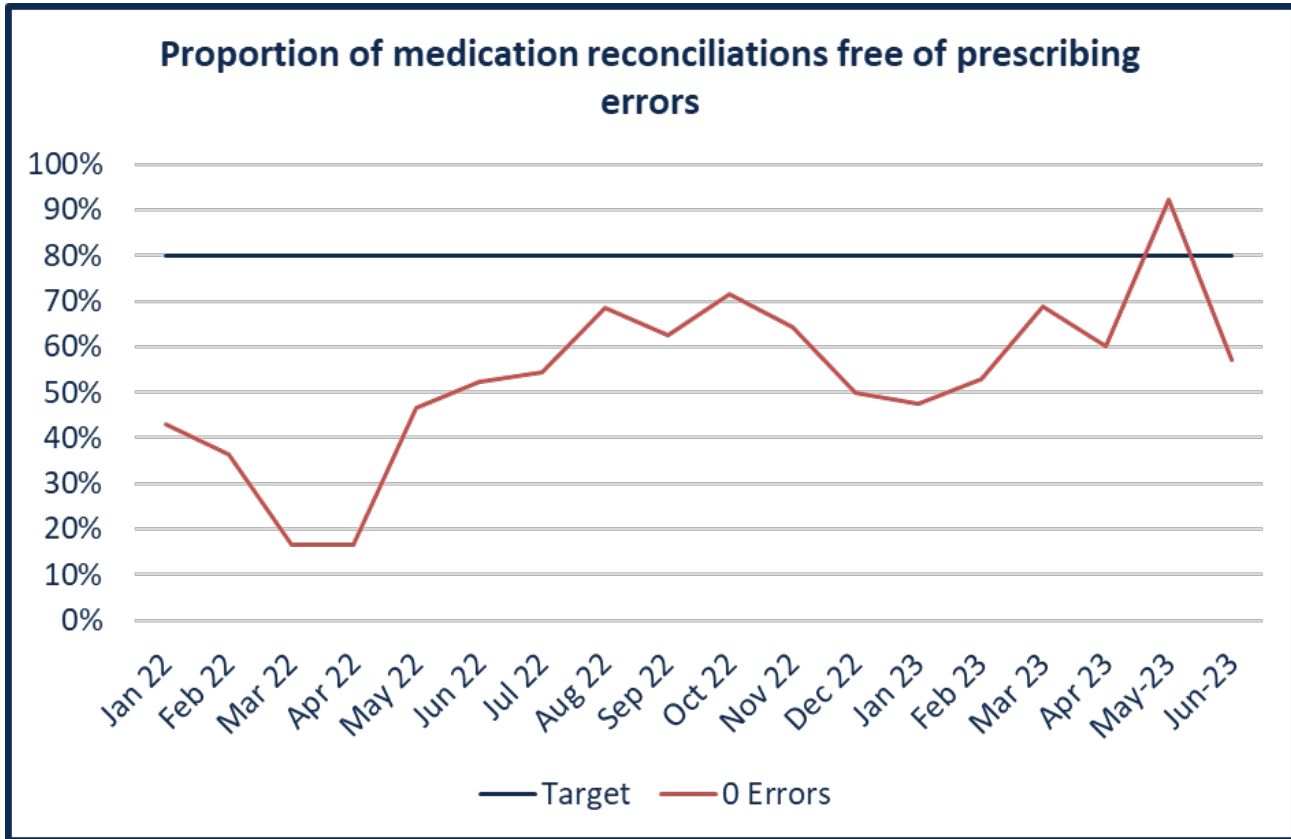


Figure 7: Proportion of medication reconciliations free of prescribing errors of PD medications at RNSH

Figure 7 captures data from all wards across the hospital. There has been a modest improvement towards the target for this objective of 80% of medications reconciliations free of prescribing errors. The education provided to Junior Medical Officers (JMOs) when they commence each rotation in 2023 has contributed to sustained improvement. Medication reconciliations free of prescribing errors from February 2022 to April 2022 is 38% and from February 2022 to April 2023 is 61%.



6. Proportion of medication reconciliations that detect one or more prescribing errors

- A clear improvement in prescriber accuracy with a reduction in the number of errors detected for each patient's medication chart by the pharmacist medication reconciliation was achieved (Figure 8)

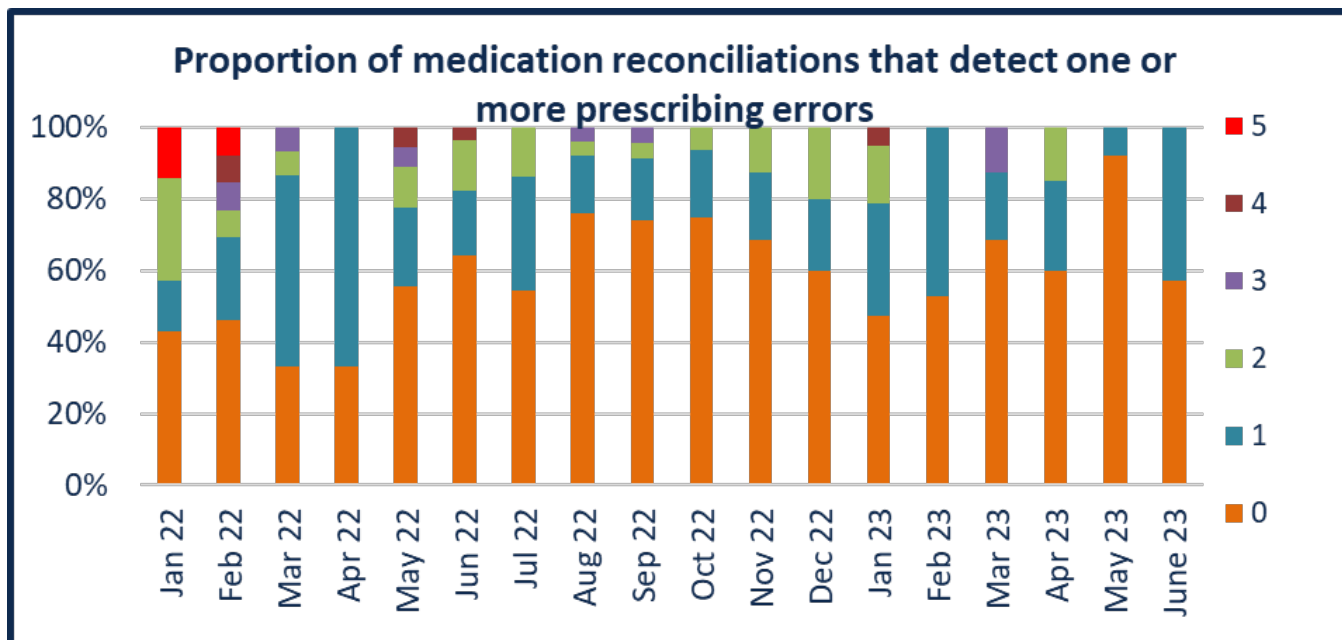


Figure 8: Proportion of medication reconciliations that detect one or more prescribing errors.

Improvement in the number of multiple prescribing errors was detected in each pharmacist medication reconciliation, particularly when comparing January 2022 to May 22 with January 2023 to May 23.

There are several examples of how the PIE Project has demonstrated productivity by increasing awareness about PD medication management:

- Oral presentation (won 'Best Overall Oral Presentation') at the Society of Hospital Pharmacists Australia annual Medicines Management Conference 2022;
- Oral presentation at the Royal North Shore Ryde Health Service Annual Allied Health Symposium 2022;
- Oral and poster presentation at the annual Australasian Neuroscience Nurses Association Conference 2022;
- Article published in the NSLHD News June 2022;
- Articles published in the 'Monthly Dose' NSLHD publication May 2022 and January 2023.
- Poster presentations (Appendix 1) accepted by:
 - ACI Healthcare Redesign Symposium September 2023
 - NSLHD Consumer Showcase October 2023



Table 1: Overview of PIE Project outcomes

Outcome measure	Jan - May 2021 % (n) pre-intervention	June - Dec 2022 % (n) post intervention	Jan - Jun 2023 % (n) sustainability
Number of admissions to RNSH	n=222	n= 309	n= 266
Number of admissions through ED	n= 179	n= 251	n= 255
Proportion of patients clearly identified in ED with the PD icon	38% (n=9)	45% (n=144)	50% (n=110)
Proportion of PD patients who received a pharmacist medication reconciliation within 48hrs	16% (n=35)	27% (n=84)	29% (n=69)
Proportion of PD patients who received a pharmacist medication reconciliation during admission	27% (n= 59)	45% (n=140)	40% (n=107)
Proportion of medication reconciliations free of prescribing errors	42%	67%	63%

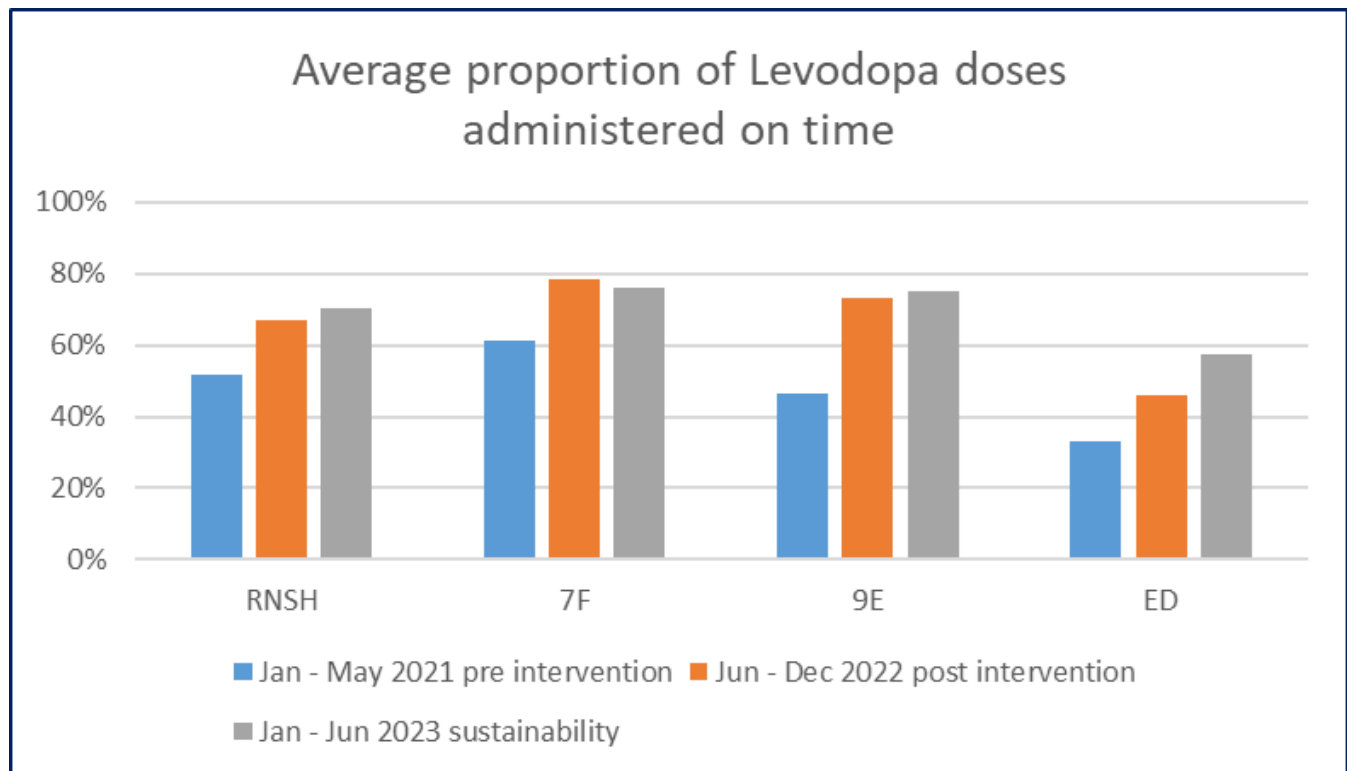


Figure 9: Change in proportion of Levodopa doses administered on time due to the PIE Project



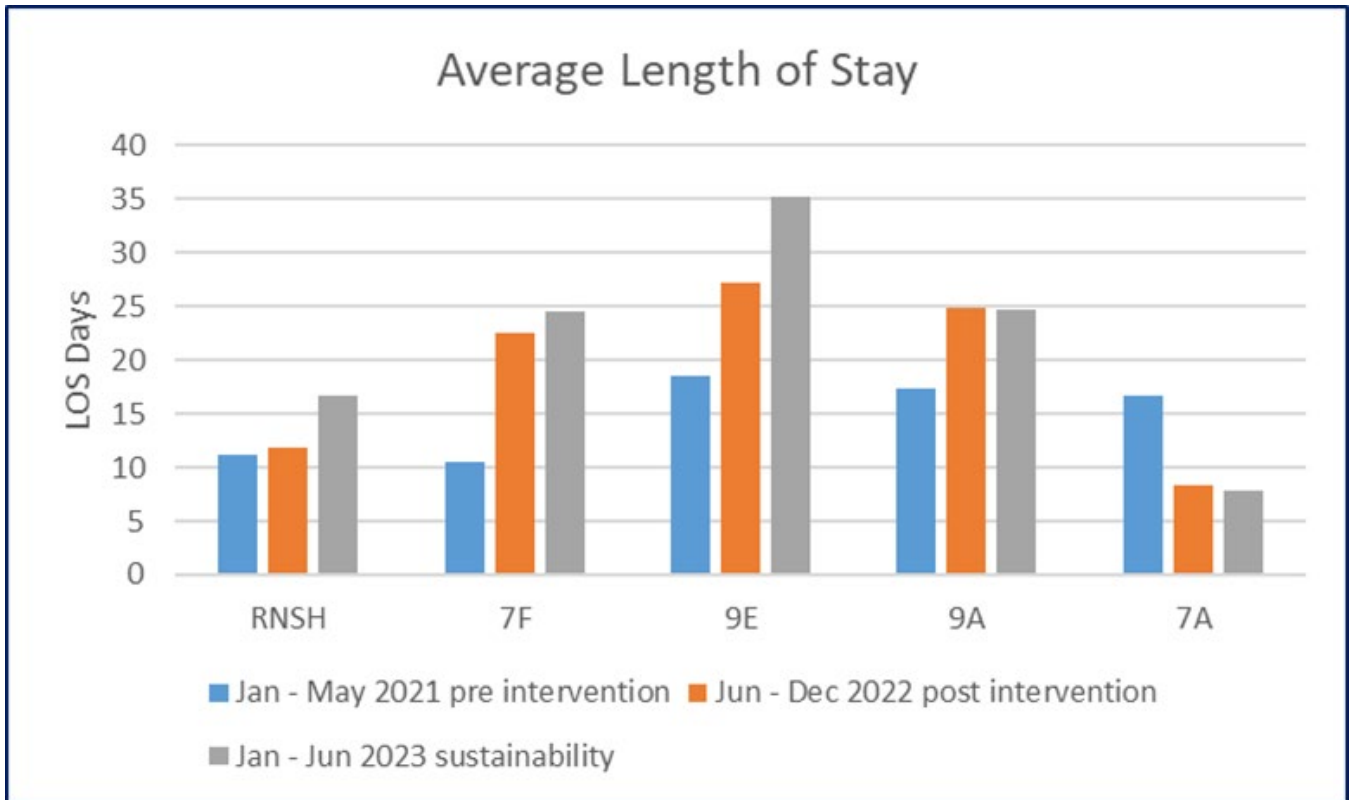


Figure 10: Change in average length of stay of PD patients due to the PIE Project

5. *Striving for Best Practice*

The PIE Project's redesign methodology provided a robust framework to successfully identify and address five issues that contributed to poor medication management of patients with PD. This process encompassed several phases: inception (involving stakeholders and planning), diagnostics (gathering and analysing data), solutions (formulating interventions), and the subsequent implementation and sustainability stages (ACI 2023). Essential stakeholders actively participated in the process of designing solutions, resulting in a deep understanding of the challenges faced by both patients and staff. Comprehensive solutions addressed the root causes of each of these issues, which has resulted in a reduction in medication errors, timely administration of PD medications and improvements in the timeliness of pharmacy reviews. Consequently, patients encounter optimised symptom control for PD during their hospitalisation.

Comprehensive multi-site and District-wide collaboration was facilitated through collaboration with health professionals from other hospitals, supporting the design and implementation of changes to the eMR. This interconnected method not only drew upon a wider pool of expertise but also harnessed the collective insights of a range of professionals to ensure that best practice was being achieved.


INNOVATION IN PRACTICE AND PROCESS

The PIE Project has innovatively united a multidisciplinary team of nurses, doctors, and pharmacists, from various departments within RNSH. Through the implementation of unique solutions, some of which are unexplored in existing literature and others newly introduced to the hospital setting, this project has driven innovative transformation (Figure 11).



Solution: Formalise routine patient identification

Emergency Department: PD
 patients who have the PD problem code 81717001 entered can be identified within ED by the Green PD icon **PD** on the FirstNet board in ED.



Neurology and Aged Care Wards: PD patients are highlighted on the nursing handover.

Neurology Ward: PD patients are included in the safety huddle identifying issues and risks for patients on each shift.

Behavioural component

- Training nurses in ED to check for and enter the code at triage and the bedside nursing assessment.
- Training pharmacists to scan the FirstNet and Patient Flow Portal to identify PD patients so they can prioritise the medication reconciliation into their workload.
- Ongoing education sessions, quick reference instructions, and emails for nurses and pharmacists, raise awareness of the solution, the benefits to the patient, and the need to prioritise the solution.
- An open feedback loop for staff to provide feedback on the solution to the project team.

Solution: Staff Education

Face-to-face/virtual educational sessions

1. PD medication overview and why they are time critical for symptom control
2. Importance of routine identification of PD patients within the hospital
3. All sessions are tailored to the address the knowledge gaps of the target group

Posters
 Displayed in the ED, 7F, 9E and in the Pharmacy Department, to reinforce the learnings from the educational sessions.

Emails
 Educational emails are also sent out to nurses, pharmacists and doctors to reinforce the learnings from the educational sessions.


Educational packages
 Educational packages are available for 7F, 9E and nurses in the ED.

Quick reference instructions
 Provide staff easy access reminders of how to enter the PD 'problem' into FirstNet and PowerChart.

Additional means of behaviour change
 An open feedback loop for staff to provide feedback on the solution to the team, as well as monitoring via monthly audits to track the measurable benefits.

Solution: Automated prescriber alert in EMR

Electronic component
 Prescriber alert pops up in the medication administration record (MAR) when any levodopa medication or entacapone is prescribed, reminding the prescriber that the medication is time critical, and how to chart specific times.

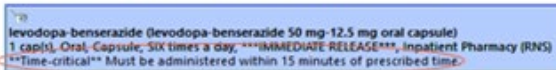


Behavioural component


- Educate doctors on the need to prioritise the correct prescribing of PD medications
- Posters and emails outlining the solution
- Quick reference instruction cards for ID tags
- Open feedback loop between staff and the project team to encourage suggestions for improvement

Solution: Systematic prompts for nurses

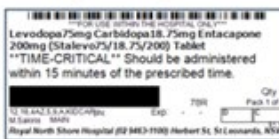
EMR Electronic component 1 New 'Order Comment' for all levodopa- and/or entacapone-containing medications.



EMR Electronic component 2
 Tile turns red after 15 minutes (other medications - 1 hour) for all levodopa- and/or entacapone-containing medications.



Pharmacy Electronic component 3 and Physical component
 Time critical prompt added to the medication administration record in the eMR, and automatically generated for the label machine in the dispensary in pharmacy.



Behavioural component

- Ongoing education provided to nurses and pharmacists on the need to prioritise the timely administration of PD medications
- Posters and emails outlining the solutions
- Open feedback loop between staff and the project team to encourage suggestions for improvement

Solution: Review and amend ward imprest stock

Physical component
 Review and amendment of ward medication stock available on 7F, 9E and ED occurred in consultation with Nursing Unit Managers (NUMs) and Senior Pharmacists improved access to PD medications on the wards.

Behavioural component

- Ongoing education to nurses and pharmacists on what changes are made to imprest supply and why timely administration benefits the patient
- Posters and emails outlining the solution
- Communication feedback loops between staff and the project team

Figure 11: PIE Project solutions

New process changes that change the everyday workflow for pharmacists, doctors, and nurses. Pharmacists, for instance, now have the capability to promptly identify patients with PD in the Emergency Department and effectively prioritise their workload to ensure timely medication reviews. Similarly, prior to the implementation of the PIE Project, doctors regularly communicated that the main barrier to charting patient specific medication times was difficulty using the eMR system. The new pop-up alert in eMR and education provided at the start of each



rotation for new staff teaches them how to chart customised medication times. Analysis of survey results demonstrate this approach has significantly improved the prescriber’s confidence (Table 2).

Table 2: Levels of prescriber confidence pre- and post-intervention

Prescriber confidence	Pre-intervention	Post-intervention	Survey only done pre- and post- intervention, not again in 2023.
Proportion of doctors confident that PD medications are prescribed accurately RNSH (agree + strongly agree) %(n)	13% (3)	38% (18)	20%

Additionally, because of the PIE Project, nurses now have access to medications on their wards, minimising the need to order PD medications from pharmacy. Medication order statements and alerts are also built into EMR and act as a self-sustaining feedback loop to administer levodopa medication as a time critical medication within 15min of the prescribed time. This new feature is embedded into the daily practice of medication administration for PD patients to empower nursing staff to prioritise their workload to provide safe and high-quality care (Figure 12). Evidently, the PIE Project has implemented improvements that have increased the satisfaction of staff regarding the quality of care they provide to patients with PD (Figure 13).

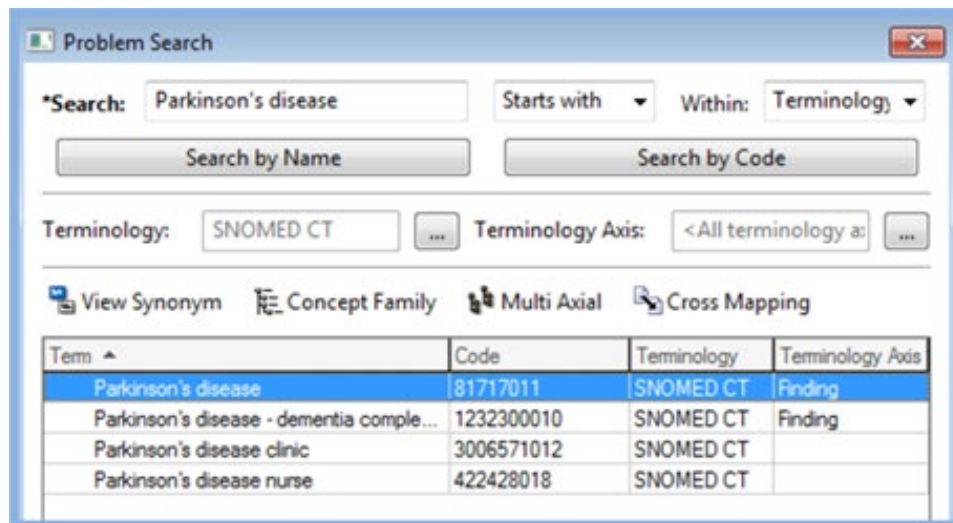
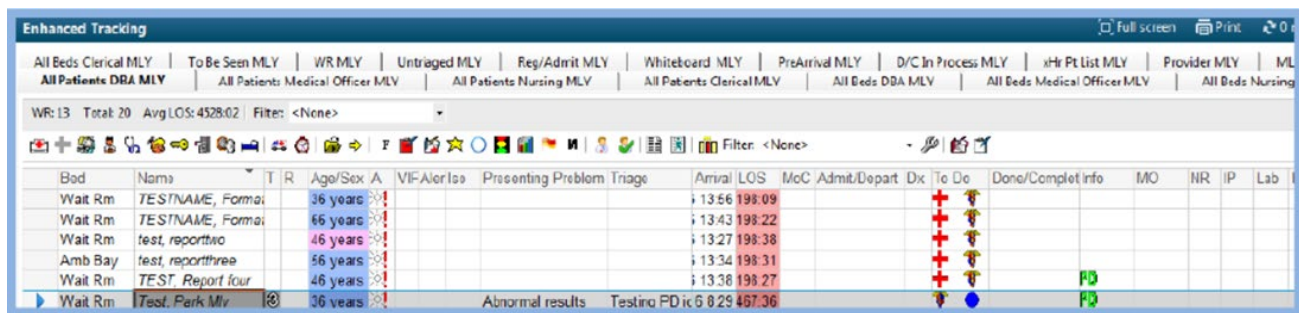


Figure 12: eMR enhancements



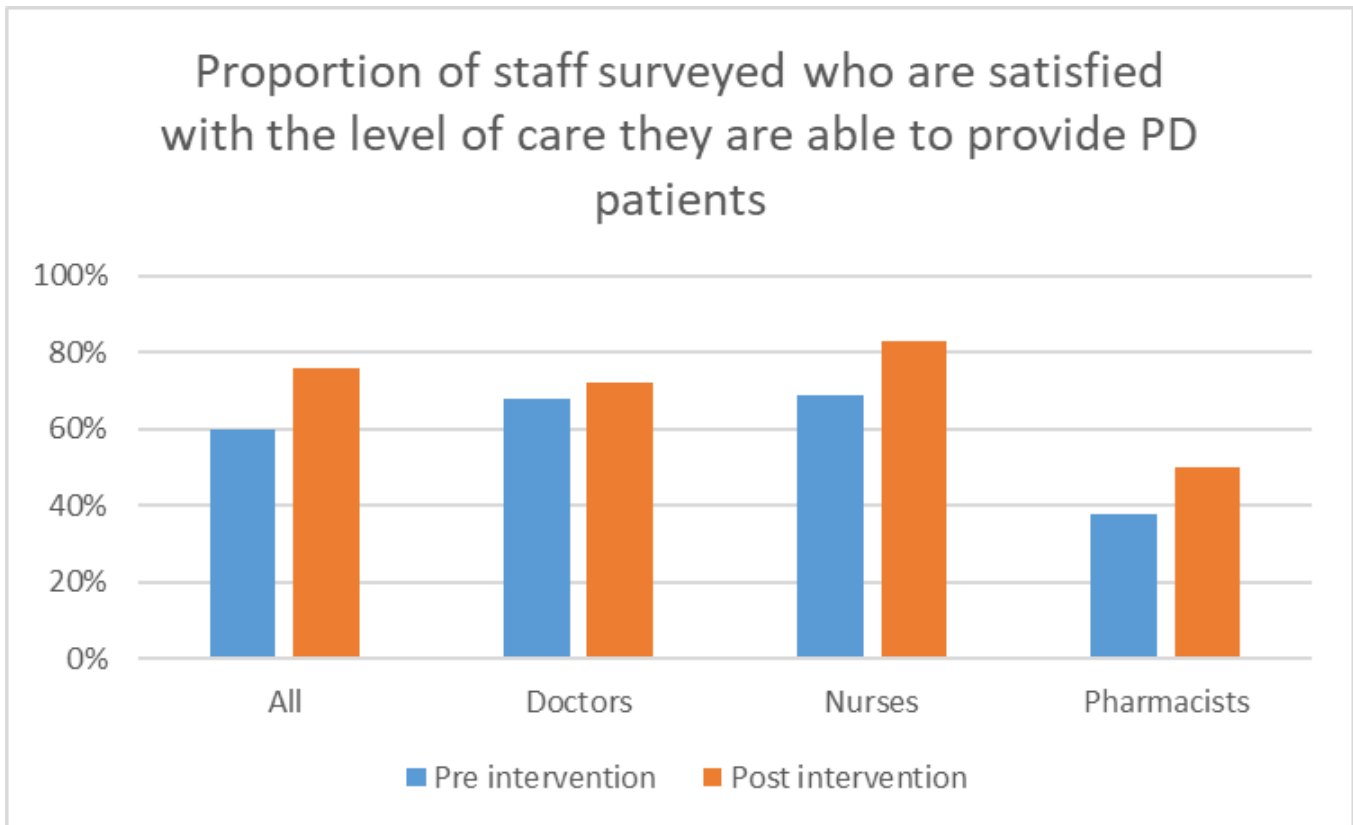


Figure 13: Staff satisfaction with the level of care they can provide to PD patients.

The PIE Project's collaborative effort not only introduces innovative solutions but also redefines established workflows, ultimately revolutionising the care experience for patients with PD at RNSH. The collection of EMR improvements are sustained long-term due to the enduring nature of their design, they continue to work with no further resources to support them (Nance et al 2020).

APPLICABILITY TO OTHER SETTINGS

The success of the project has led to its widespread adoption. Education materials including PowerPoint slides, posters and documents providing details of each solution to improve the inpatient experience of PD patients have been constructed to make solutions adaptable to other patients and projects. Additionally, electronic prompts have been implemented in all RNSH wards, other hospitals across NSLHD, including Ryde Hospital, facilities at Central Coast Local Health District (CCLHD) and Peninsula Health in Victoria. Once these changes are developed and implemented into eMR, no further work is required to sustain the benefits. There is also a valuable opportunity to adapt the solutions derived from the PIE Project to assist with the management of other time-critical medications.

The simplicity of the interventions means that they are highly replicable across different settings within the hospital and even in other services and facilities (Corrado et al 2020; Azmi et al 2020; Bramble 2021). The quantitative data reports are available to any healthcare organisation that uses Discern Analytics for their eMR data, or who are equipped with an Informatic Unit capable of designing local data extraction reports. All the PIE Project solutions are replicable elsewhere, including changes in eMR, imprest stock management and the use of staff educational content.

Ultimately, the PIE Project presents the opportunity to enhance the inpatient experience of patients with PD who are admitted to any hospital by creating processes for robust medication management.



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APPENDIX

Appendix 1: Parkinson Inpatient Experience Redesign Project Poster (1/2)



Parkinson Inpatient Experience Redesign Project

Susan Williams
Movement Disorder Clinical Nurse Consultant,
Department of Neurology, Royal North Shore Hospital

Case for change

Parkinson disease (PD) is a chronic neurodegenerative disorder.¹ Critical to PD management is the administration of medications at specific times.¹ PD medication management in hospital is poor, contributing a 1.5 times longer length of stay (LOS) than non-PD patients.² Both global literature and local Royal North Shore (RNSH) data demonstrated that only half of PD medication doses were administered on time.¹ At RNSH, 45% of pharmacist medication reviews identified a PD prescribing error and there was no systematic means of identifying PD patients. Unless early identification of PD patients and inpatient PD medication management are made effective and efficient, patients' PD symptoms would intensify, which worsens their hospital experience, health outcomes, and LOS.^{1,3} Additionally, without improvement, the staff experience of managing PD patients would remain poor, with only half of RNSH staff being satisfied with the care they provide to patients.

Goal and objectives

Goal: To achieve better health outcomes, experience of care, and service efficiency, through excellent inpatient medication management for PD patients admitted to the Emergency Department (ED), Neurology (7F) and Aged Care (9E) wards at Royal North Shore Hospital (RNSH) by June 2022.

Objectives

1. Improve service efficiency, experience of care, and health outcomes for PD patients by reducing their LOS in 7F (13 days) and 9E (9 days) by 10%
2. Increase the proportion of PD patients in the Emergency Department (ED) flagged with a 'PD icon alert' in the eMR from 31% to 80%
3. Increase the proportion of PD patients who receive a pharmacist medication reconciliation within 48 hours of admission, from 7F (25%), 9E (30%), ED (11%) to 60%
4. Increase the proportion of levodopa doses administered within 15 minutes of the prescribed time, from 7F (62%), 9E (48%), ED (35%) to 80%
5. Reduce the proportion of pharmacist medication reconciliations which report a PD medication prescribing error, from 7F (31%), 9E (38%), ED (54%) to 20%

Method

The project team followed the principles of clinical redesign methodology. Key issues that contribute to the poor quality of medication management for PD patients admitted to RNSH were identified through a thorough diagnostic process, accessing quantitative data reports combined with extensive consultation with stakeholders through survey and focus groups. This resulted in a deep understanding of the issues experienced by the patients and staff. Key stakeholders were engaged in solution design processes to address the root cause of issues. Accelerated implementation methodology was used to embed and sustain practice change. Process measures and outcomes are monitored regularly by the team and governance group to evaluate success.

5 Key Issues identified during diagnostics

Admission data

- From 1 January 2021 to 30 June 2021, there were 264 PD admissions in ED, 36 in 7F and 30 in 9E
- The median LOS was 4 days across all wards (13 days in 7F and 9 days in 9E)

1. PD patients are not readily identifiable to hospital staff

- Only 31% (n = 264) of PD patients admitted via the ED had an 'icon alert' generated in ED electronic medical record (eMR)
- There is no PD alert in the eMR on the ward
- Only 14% (n = 21) of pharmacists agreed that people with PD are readily identifiable to them

2. Pharmacist reviews are not conducted in a timely fashion

- Only 30% (n = 264) of PD patients received a pharmacist medication reconciliation in the ED
- 22% (n = 36) of PD patients on 7F
- 10% (n = 30) of PD patients on 9E

3. Staff lack knowledge about PD Medications

63% (n = 150) of staff did **not** know that administration of PD medications 'on time' means within 15 minutes

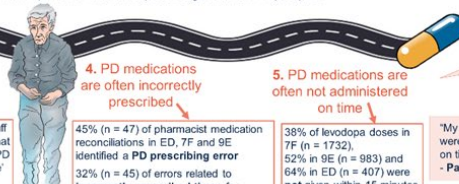
4. PD medications are often incorrectly prescribed

45% (n = 47) of pharmacist medication reconciliations in ED, 7F and 9E identified a **PD prescribing error**

32% (n = 45) of errors related to **incorrectly prescribed times** for medications to be taken

5. PD medications are often not administered on time

38% of levodopa doses in 7F (n = 1732), 52% in 9E (n = 983) and 64% in ED (n = 407) were **not** given within 15 minutes of the prescribed time




"There is a PD medication literacy problem"
- Neurologist

"My medications were not given on time"
- Patient

"The medications were later than we would have liked"
- Patient

Solution: Formalise routine patient identification

Emergency Department: PD patients who have the PD problem code 81717001 entered can be identified within ED by the Green PD icon  on the FirstNet board in ED.

Neurology and Aged Care Wards: PD patients are highlighted on the nursing handover.

Neurology Ward: PD patients are included in the safety huddle identifying issues and risks for patients on each shift.

Behavioural component

- Training nurses in ED to check for and enter the code at triage and the bedside nursing assessment.
- Training pharmacists to scan the FirstNet and Patient Flow Portal to identify PD patients so they can prioritise the medication reconciliation into their workload.
- Ongoing education sessions, quick reference instructions, and emails for nurses and pharmacists, raise awareness of the solution, the benefits to the patient, and the need to prioritise the solution.
- An open feedback loop for staff to provide feedback on the solution to the project team.

Solution: Staff Education

Face-to-face/virtual educational sessions

1. PD medication overview and why they are time critical for symptom control
2. Importance of routine identification of PD patients within the hospital
3. All sessions are tailored to the address the knowledge gaps of the target group

Posters

Displayed in the ED, 7F, 9E and in the Pharmacy Department, to reinforce the learnings from the educational sessions.

Emails

Educational emails are also sent out to nurses, pharmacists and doctors to reinforce the learnings from the educational sessions.

Educational packages

Educational packages are available for 7F, 9E and nurses in the ED.

Quick reference instructions

Provide staff easy access reminders of how to enter the PD 'problem' into FirstNet and PowerChart.

Additional means of behaviour change

An open feedback loop for staff to provide feedback on the solution to the team, as well as monitoring via monthly audits to track the measurable benefits.

Solution: Automated prescriber alert in EMR

Electronic component

Prescriber alert pops up in the medication administration record (MAR) when any levodopa medication or entacapone is prescribed, reminding the prescriber that the medication is time critical, and how to chart specific times.

Behavioural component

- Educate doctors on the need to prioritise the correct prescribing of PD medications
- Posters and emails outlining the solution
- Quick reference instruction cards for ID tags
- Open feedback loop between staff and the project team to encourage suggestions for improvement

Solution: Review and amend ward imprest stock

Physical component

Review and amendment of ward medication stock available on 7F, 9E and ED occurred in consultation with Nursing Unit Managers (NUMs) and Senior Pharmacists improved access to PD medications on the wards.

Behavioural component

- Ongoing education to nurses and pharmacists on what changes are made to imprest supply and why timely administration benefits the patient
- Posters and emails outlining the solution
- Communication feedback loops between staff and the project team

Solution: Systematic prompts for nurses

EMR Electronic component 1 New 'Order Comment' for all levodopa- and/or entacapone-containing medications.

EMR Electronic component 2 The turns red after 15 minutes (other medications - 1 hour) for all levodopa- and/or entacapone-containing medications.

Pharmacy Electronic component 3 and Physical component

Time critical prompt added to the medication administration record in the eMR, and automatically generated for the label machine in the dispensary in pharmacy.

Behavioural component

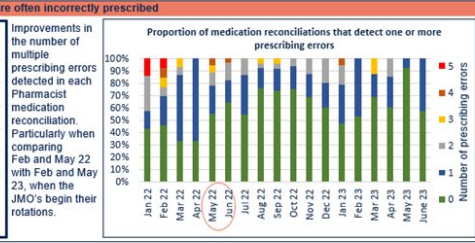
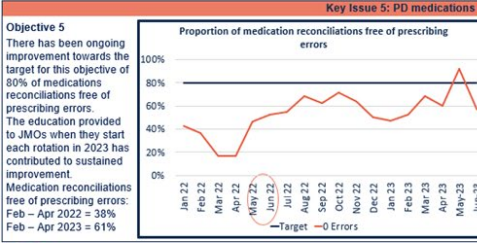
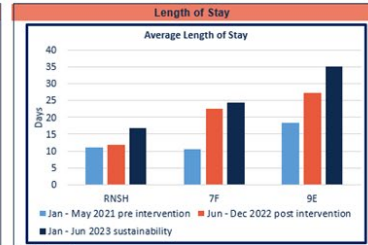
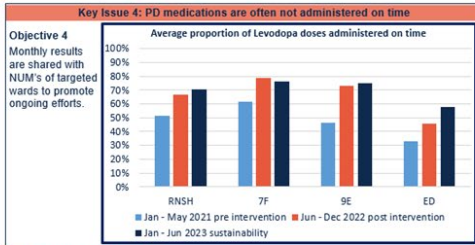
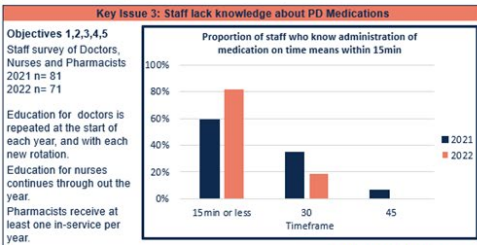
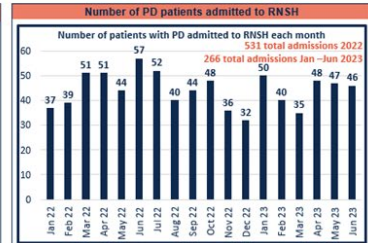
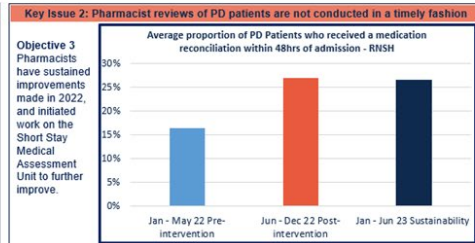
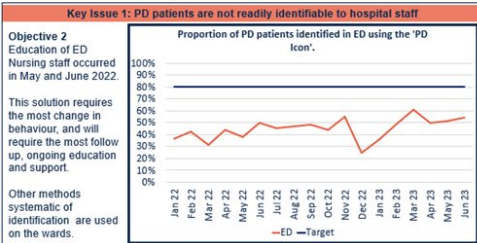
- Ongoing education provided to nurses and pharmacists on the need to prioritise the timely administration of PD medications
- Posters and emails outlining the solutions
- Open feedback loop between staff and the project team to encourage suggestions for improvement

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Appendix 1: Parkinson Inpatient Experience Redesign Project Poster (2/2)

Results and sustainability

Nurse prompts and the prescriber alert went live in EMR on 31 May 2022. Education was provided throughout May and June. The changes to imprest stock were completed on 26 May 2022. Sustainability is tracked by monthly audits of the data to track progress, and feedback is given to the managers of each Department to feedback to their staff. Education will be ongoing.



Objective 1
It has been difficult to compare LOS post-intervention due to a number of admissions with an extended LOS. These extended stays were not related to medication management. A grant has been awarded to investigate the reasons for the occasions of longer length of stay and reasons for readmission to hospital.

Acknowledgments

- RNSH Division of Medicine Nurse Manager Project Sponsor for her support and leadership
- The Heads of Department and clinical leadership team of ED, 7F and 9E, and RNSH Pharmacy Department
- NSW Agency for Clinical Innovation's Centre for Healthcare Redesign team
- Our patients and their carers for helping us to better understand

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Conclusion

Ongoing work needs to be done to continually educate new staff on the importance of accurate prescribing, timely administration of medications and timely pharmacist reviews. The qualitative data reports are available to any Local Health District that uses Discern Analytics for their eMR data.

All solutions are replicable in other Local Health Districts including changes in eMR, imprest stock and education content. Overall people living with PD who are admitted to hospitals can experience good medication management and improved symptom control which will improve their experience of being an inpatient.

This work has inspired a further redesign project to investigate the length of stay and high readmission rates experienced by PD patients admitted to RNSH. A grant has been secured to support the implementation of solutions in 2024.



HEALTHCARE MEASUREMENT

HIGHLY COMMENDED

Royal North Shore Hospital, NSW

Spinal Plastics Service

Royal North Shore Hospital Spinal Plastics Service - Nothing About Us Without Us

Dr Priya Chari, Lucija Lavrencic, Helen Ganley, Lisa Benad, Dr Samuel Arthurs, Dr Jeon Cha, Dr Feng Liang, Andrew Thompson, Yvette Mair, Louise Naylor, Dr Rowan Gillies and Yamuna Limbu.

AIM

The aim was to better integrate care between community and acute services so that spinal injury patients live their best life, out of hospital. As most repeat referrals to the Spinal Plastic Service are related to extremely serious community-acquired pressure injuries, success would be evidenced by hospital avoidance.

This will be demonstrated by a reduction in community referrals for pressure injury debridement and or reconstruction from as high as 65% to as low as reasonably possible.

SUMMARY ABSTRACT

Introduction

The cost of pressure injuries in 2020 was \$3.71 billion (Nghiem 2022), identifying the magnitude of the problem. Most pressure injury projects focus on inpatients. This project aims to prevent or manage medically significant community-acquired pressure injuries which require inpatient debridement and reconstruction at Royal North Shore Hospital. The Spinal Plastics Service is part of the state-wide initiative of the State Spinal Cord Injury Service with an estimated New South Wales population of ~3700. The Service is unique in NSW for managing highly complex spinal injury related soft tissue injury and its complications. Our patients come from a vast geographical state-wide catchment (Appendix-figure1).

Patients have lifelong disability, either acquired as trauma related or congenital spinal cord injury. Both result in paraplegia or quadriplegia and concomitant morbidity. Treatment of complex pressure injury is prolonged over years, sometimes repeated, usually needing 24-hour carers to relieve pressure. Surgical patients have stage 4 pressure injury, defined as full thickness tissue loss with exposed bone, tendon, or muscle (EPUAP 2014).

Pressure injury seriously impacts any person. Spinal cord injury patients are devoid of sensation and movement which adds another level of risk. Although mostly preventable, pressure ulcers frequently disrupt rehabilitation, educational and vocational pursuit and community reintegration following spinal cord injury. Patients describe pain including discomfort, distress, and agony; those with cognitive impairment or expressive dysfunction may be unable to communicate their pain (ACI 2017). Multiple, lengthy, and difficult debridement and reconstruction surgery can result in a length of stay of 120 days.

2017 was a highpoint of 65% of spinal cord injury patients having repeat referral to the Spinal Plastics Service, being an additional referral after their index admission for spinal cord injury. Despite efforts, there had been no statistically significant reduction in this ratio. In 2021, following problem analysis, changes began including the outpatient Spinal Plastics Clinic model of care, introduction of combined acute/community Integrated Care Conferences and development or enhancement of tools and technology.



Interventions

Spinal Plastics Clinic: The focus of the Spinal Plastics Clinic is to identify and then manage 'at risk' patients, enabling them to stay in the community following discharge from acute injury. The Clinical Nurse Consultant case manager manages all patients and phones or interviews every patient/carer discussing Patient Reported Outcome Measures before and after Spinal Plastics Clinics and prior to and post every inpatient admission. Patient objectives are key to planning and achieving successful patient outcomes as not everyone has the will to participate in pressure injury prevention, either at all, or fully.

The problem was that multiple clinician assessments were shared in the same one-hour time slot per patient. The clinic comprises around ten clinicians including Rehabilitation Specialist, Surgeon, Physiotherapist, Social Worker, Occupational Therapist, Dietician, Seating Therapist, and Nursing. Previously, patients were seen by the whole team, meeting every patient simultaneously. This resulted in clinicians being present for some or many assessments for which their input was not needed. Now, patients see only the right clinicians at the right time.

Post clinic, all disciplines come together to confirm co-produced plans. A report of collated recommendations, which the patient has agreed to, is sent to the patient, general practitioners and appropriate community services involved in wound management. This report then becomes the input to the Integrated Care Conferences, a new systematic case-management intervention, ensuring that no patients get lost in the system.

Surgical Risk Calculator: A high incidence of post-operative complications prompted the introduction of a pre-operative Surgical Risk Calculator (American College Surgeons 1996) modified especially for spinal patients needing plastic reconstruction surgery (Appendix-figure2).

The output of the Spinal Plastics Clinic is either a recommendation for surgery or oversight by the Integrated Care Conference process with patients remaining in the community managed by local health teams with the assistance of the acute care team.

Integrated Care Conferences: The Integrated Care Conferences for District patients, led by RNSH, involve senior acute and community nursing professionals with invitations to patients and local healthcare teams as needed. The focus then is on community care to keep patients well, at home. Being agile, Integrated Care Conferences are effective in responding to urgent and complex patient and community variables. These relate to equipment issues, inadequate services and supports, inappropriate wound management, untreated infections, sub-optimal control of comorbidities and patients not implementing recommendations. These conferences are formalisation and enhancement of previously weak, ad hoc linkages, into dedicated meetings which:

- Identify the risk of repeat referrals;
- Mitigate identified risks with community provider referrals/engagement;
- Plan readmission avoidance;
- Review patient feedback on health outcomes and experience.

Telehealth: This was implemented in 2016, for rural and remote patients (Appendix-figure3). With enhancements made for COVID19, the technology was immediately deployed to all metropolitan patients without delay, a blessing for severely disabled patients and families. This occurred 2 years before NSW Health developed the myVirtual Care technology in 2021.

Wound Photography: First in NSW, the Spinal Plastics Service is trialling new wound photographic technology involving tissue analytics, a cloud-based solution for sequential wound assessment and monitoring for clinics and the community. It is invaluable for patient engagement in pressure injury management and prevention.

Capacity Building: For General Practitioner and community staff with limited capacity and or expertise, two-day conferences (20+ speakers) ensure carer/provider knowledge to implement evidence-based community care. Participants are from public and private organisations, both rural and metropolitan. The Service co-developed a Pressure Injury Prevention course which is available online to all clinicians (NSWHealth 2023).



Outcomes

- There has been a statistically significant reduction in repeat referrals from 65% to 18%, sustained at 25%;
- 100% clinic patients agreed they received sufficient help needed;
- Inpatients stated care was very good (80%); good (20%);
- Staff and community caregiver satisfaction;
- Costs have reduced from \$8009 to \$6764 for DRG J08A;
- Length of stay significantly reduced, benefitting patients and RNSH.

Aim achieved.

Conclusion

Key to success is integration of care between the acute and community sectors ensuring all stakeholders have the capacity and skill to prevent or manage pressure injuries and keep patients well in their community.



HEALTHCARE MEASUREMENT

TABLE OF SUBMISSIONS

Hunter New England Local Health District, NSW

Implementing a Suicide Prevention Care Pathway in Hunter New England Mental Health Service

Katie McGill, Alexandra Potter, Kylie Redman, Kylie Atkinson, Jane Brogan, Sally-Anne Bingham, Ketrina Sly, Elizabeth Newton and Jocelyn Karsten

Royal North Shore Hospital, NSW

Parkinson Inpatient Experience (PIE) Project

Kate Curtis, Belinda Munroe, Margaret Fry, Margaret Murphy, Julie Considine, Ramon Shaban, Hatem Alkhouri and Prabhu Sivabalan

Royal North Shore Hospital, NSW

Royal North Shore Hospital Spinal Plastics Service - Nothing About Us Without Us

Dr Priya Chari, Lucija Lavrencic, Helen Ganley, Lisa Benad, Dr Samuel Arthurs, Dr Jeon Cha, Dr Feng Liang, Andrew Thompson, Yvette Mair, Louise Naylor, Dr Rowan Gillies and Yamuna Limbu

Royal Perth Bentley Group, WA

Technology to improve pressure injury prevention

Annette Baker, Vicki Patton and Melissa Bryant

Silverchain Group, WA

Community Burns Management Quality Improvement Project

Gordana Petkovska, Cate Maguire, Patricia McEvoy and Keryln Carville

Townsville Hospital and Health Service, QLD

Preventing Harm - an integrated approach to Standard 5 compliance monitoring

Julie Archer, Jody Gallagher, Dave Hunter and Natalie Shiells.

Western Sydney LHD - Auburn Hospital, NSW

Triage and Treat

Keti Ristevska, Dr Khanh Nguyen, James Elhindi and Melihsa Atilla



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