QUALITY INITIATIVES

The 25th Annual
ACHS Quality Improvement
Awards 2022

Quality Initiatives – Entries in the 25th Annual ACHS Quality Improvement Awards 2022.

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4th Edition 2001	16th Edition 2013
5th Edition 2002	17th Edition 2014
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INTRODUCTION

The 25th Annual ACHS Quality Improvement Awards 2022

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 2022, the 25th 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, EQuIP6 (Evaluation and Quality Improvement Program 6th edition), Hospitals and Health Services Standards Program, EQuIP6 Day Procedure Centres, EQuIP6 Oral Health Services, EQuIP6 Haemodialysis Centres, EQuIP6 Aged Care Services, EQuIP6 Healthcare Support Services, and the ACHS Clinical Indicator Program.

Judging was conducted externally with separate panels of three 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).

WINNER SUBMISSIONS BY CATEGORY

The 25th Annual ACHS Quality Improvement Awards 2022

CLINICAL EXCELLENCE AND PATIENT SAFETY

Hunter New England Local Health District, NSW

Chronic Disease Network/Palliative and End of Life Care Stream

Supportive Care: what matters most?

Associate Professor Katie Wynne, Laureate Professor John Attia, Jane Kerr, Sarah Pullen, Mary-Anne Dieckmann, Sarah Russo, Dr Sharon Ryan, Dr Steven Bollipo

Full submission page 5

Wandi Nerida, QLD

Service Wide

Wandi Nerida: A new residential model of care to treat eating disorders in Australia

Jodie Ashworth, Danielle Dougherty, Dr Catherine Houlihan, Belinda Scott

Full submission page 17

NON-CLINICAL SERVICE DELIVERY

Gold Coast Hospital and Health Service, QLD

Strategy, Transformation and Major Capital Division

Embedding a culture of transformation at Gold Coast Health

Sandip Kumar, Tracey Brook, Alana Myers, Jonathan Carver, Adelaide Michael

Full submission page 44

HEALTHCARE MEASUREMENT

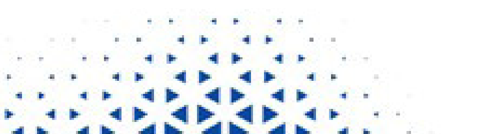
Hunter New England Local Health District, NSW

Mater Mental Health Pharmacy

Virtual Clinical Pharmacy Service Project – Mental Health

Rosa Baleato, Cecilia Bjorksten, Rory Curtis, Leana Wong

Full submission page 76



HIGHLY COMMENDED SUBMISSIONS BY CATEGORY

The 25th Annual ACHS Quality Improvement Awards 2022

CLINICAL EXCELLENCE AND PATIENT SAFETY

Northern Health, VIC
Respiratory
Northern Health - Pleural Medicine Unit
Sanjeevan Muruganandan, Katharine See, Kirstin Tirant

Sunshine Coast Hospital and Health Service, QLD
Department of Anaesthesia and Perioperative Medicine
A quality improvement project to limit unnecessary preoperative pathology at the Sunshine Coast University Hospital (SCUH)
Dr Holly Theile, Dr Anna Pietzsch, Dr Lana Vestarkis

WA Country Health Service, WA
Outpatient Reform & Access
Improving access to high quality stroke rehabilitation in country WA through telehealth
Kate Hawkings, Nicole Jeffree, Ruth Warr

NON-CLINICAL SERVICE DELIVERY

Hunter New England Local Health District, NSW
Integrated Care and Partnerships
Collaborative Care for Vulnerable Patients
Todd Tobin, Karen Harrison, Simone Dagg, Dr Lee Fong, Phillip Walker

Royal Perth Bentley Group, WA
Centre for Wellbeing and Sustainable Practice
A Wellbeing Revolution: Humanity at the Heart of Healthcare
Andrew Del Marco, Richard Read, Nicola Frew, Michael Hertz

Surgical, Treatment and Rehabilitation Service (STARS), QLD
Dietetics and Food Services, Allied Health
Collaborative and Person-Centred Hospital Food Services
Jennifer Ellick

HIGHLY COMMENDED SUBMISSIONS BY CATEGORY

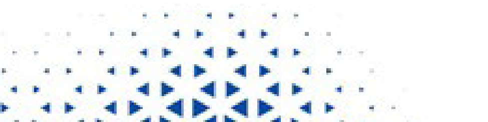
The 25th Annual ACHS Quality Improvement Awards 2022

HEALTHCARE MEASUREMENT

Cabrini Health, VIC
Clinical Governance / Health Informatics
Reducing Hospital Acquired Complications (HACS) through data insights
Dr David Rankin, Jodie Dooley

Liverpool Hospital, NSW
Emergency Department
Improving the Identification of and Support for Aboriginal Patients in the Emergency Department
Daniel Van Vorst

Royal North Shore Hospital, Northern Sydney Local Health District, NSW
Department of Anaesthesia, Pain, and Perioperative Medicine
Anaesthetic Greenhouse Gas Reductions
Dr Arpit Srivastava, Dr Maximillian Benness, Dr Matthew Doane, Dr Adam Rehak



CLINICAL EXCELLENCE AND PATIENT SAFETY

WINNER

Hunter New England Local Health District, NSW

Chronic Disease Network/Palliative and End of Life Care Stream

Supportive Care: what matters most?

Associate Professor Katie Wynne, Laureate Professor John Attia, Jane Kerr, Sarah Pullen, Mary-Anne Dieckmann, Sarah Russo, Dr Sharon Ryan, Dr Steven Bollipo

AIM

The *Liver Life* randomized controlled trial (RCT) aimed to examine how a transdisciplinary supportive approach to care, embedded within standard care, and guided by patient and carer expressed needs, could optimise health service performance and health outcomes for patients and carers living with advanced liver disease (ALD), as compared to standard care alone. The intervention used PROMs/PREMs to guide clinic visits and trigger protocolised care plans in collaboration with the patient. This redesign aimed to improve both the experience of giving (clinician experience) and receiving care (patients and carer experience) with the intention of easing the significant economic burden to the health system associated with high rates of unplanned clinical contact (emergency department (ED) presentations and hospital admissions) experienced by people living with ALD.

SUMMARY ABSTRACT

Advanced liver disease (ALD) is an increasingly prevalent worldwide public health problem. Within Hunter New England Local Health District (HNELHD) (2012-2020), there were 4655 admitted episodes of care for patients with ALD (ICD-10 code K70.4 or K72 as principal diagnosis). In just one year (2019/20), there were 1226 acute separations for people with ALD across HNELHD costing the health service $2.08 million. This cost can be extrapolated to $15.62 million p.a. across NSW.

Our scoping literature review (2020-2021) highlighted the unmet needs of patients with ALD. Patients suffer a debilitating symptom burden, high disease-related distress, and frequent unplanned hospitalisations, associated with decompensated cirrhosis which carries a median survival rate less than two years (Naik *et al*, 2020). Despite treatment advances including liver transplantation, up to 50% of ALD patients assessed for liver transplantation are ineligible because of comorbidities, psychosocial issues, and progressive hepatic cancer (Mazzarelli *et al* 2018). However, only 20% of these patients delisted from liver transplantation receive palliative care input and this usually takes place in hospital within 72 hours of death (Verma *et al* 2020). A key theme throughout the literature is that advanced care planning is inadequate or not attended at all prior to death (Plunkett, Mortimore & Good, 2019). US guidelines recommend moving towards the early introduction of palliative care to patients with ALD (Kanwal *et al*, 2022)

Early supportive care intervention focuses on complex symptom management; education for patients and carers; psychosocial care; emotional and spiritual care; functional care; connecting and coordinating care services; and advance care planning, offered alongside ongoing medical therapy (Woodland *et al*, 2020). The successful implementation of Renal and Cancer Supportive Care across NSW demonstrated that supportive care does address patient-identified needs and gaps in clinical practice (Sirwardana *et al*, 2020). To date, there is a lack of national and international RCT evidence for people living with ALD. The *Liver Life* RCT is the first of its kind to demonstrate the clear benefit of a transdisciplinary supportive approach to care for ALD patients.

The *Liver Life* RCT (John Hunter and Tamworth Hospitals, February-June 2021) examined the effectiveness of a Supportive Care Bundle (SCB) integrated with standard care, compared to standard care alone for patients with ALD and their carers. The intervention used PROMs/PREMs (Appendix 1) to guide clinic visits and trigger protocolised care plans using locally available resources in collaboration with the patient (Figure 3). A novel data management system embedded into REDCap provided PROMs/PREMs scores to clinicians in real-time. Patient participants (+/- carers) were randomized to either standard care alone, or standard care and SCB. In addition to standard care appointments, intervention participants attended five supportive care outpatient clinic visits (Visit 1: patient and carer; Visit 2: patient only; Visit 3: carer only; Visit 4: patient only; Visit 5: patient and carer) either virtually or in-person, monthly across the twelve-week intervention period. Visits consisted of a nurse-led MDT with the current gastroenterology clinicians: hepatology **nurse**, **dietitian**, **social worker**, the **patient** and/or **carer** together in a physical room or virtual space, with palliative care clinician support. Protocolised triggers for intervention (Appendix 2) were based on PROMs/PREMs outcomes and concerns of patients and carers during supportive care consultations guided shared decision-making and development of an individualised Supportive Care Management Plan (SCMP). The SCMP applies palliative care principles in chronic disease management by managing physical and psychological symptoms; addressing spiritual and emotional distress; optimising nutrition; assisting with system navigation (e.g. Centrelink, NDIS); addressing functional care needs (e.g. mobility aids); facilitating advance care planning; and connecting patients and carers to locally available resources to optimise care delivery. Application of a transdisciplinary approach during the intervention facilitates experiential learning with the aim of broadening skills of current gastroenterology clinicians so that the model was sustainable once support from the palliative care clinicians had ended. The primary outcome was measurement of health service utilisation (ED presentations, unplanned admissions, and days alive and out of hospital). Secondary outcome measures included symptom burden, quality of life, carer burden, evidence of advance care planning, and an economic (cost-utility) analysis. Qualitative analysis assessed the acceptability and feasibility of the intervention.

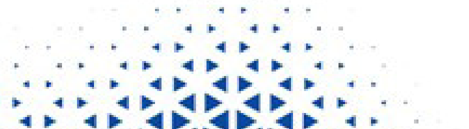
Over the 90-day intervention, there was a 66% reduction in ED presentations (any cause) (incident rate ratio 0.34 [0.13-0.80]) and 64% reduction in hospital admissions (any cause) (incident rate ratio 0.36 [0.12-0.98]) in the intervention versus control groups. Intervention patients were five times more likely to have more days 'alive and out of hospital' than the control group (odds ratio 5.34 [1.43-22.1]). Unplanned clinical contacts (ED presentations and inpatient admissions) were avoided in the intervention group at the expense of five additional planned supportive care outpatient contacts per patient during the trial period. Accounting for this, the predicted cost saving to HNELHD totaled $1.05million p.a. Due to the small sample size (patient n = 32, carer n = 14), there was no statistical changes in subjective symptom burden, quality of life measures, or self-reported carer burden between the intervention and control groups. Therefore, although the patient participants were still unwell, the care delivery from the health service pre-empted emergency presentations.

"They talk to me in a way I understand. It has completely changed how things were before" [Liver Life patient participant]

"We have a plan. We have a sense of control about what is going on" [Liver Life carer participant]

"We communicate better now, there's better understanding of each clinician's role. Rather than working in silos, we're working together, tailoring plans to what the patient wants" [Liver Life clinician]

The supportive care intervention was added to standard practice without enhancement to existing resources. Since completion of the trial, **enhanced funding** has been delivered (NSW Ministry of Health: *Enhancing community care for people with late-stage degenerative and chronic conditions and disability*). The recognition that the patient and carer disease-related burden is similar across



advanced chronic disease states will enable the translation of supportive care, based on *Liver Life*, to commence in **heart failure**, **movement disorders**, and **Integrated Chronic Care for Aboriginal People** services as part of standard practice throughout HNELHD.

REPORT

APPLICATION OF ACHS PRINCIPLES

1. Consumer Focus

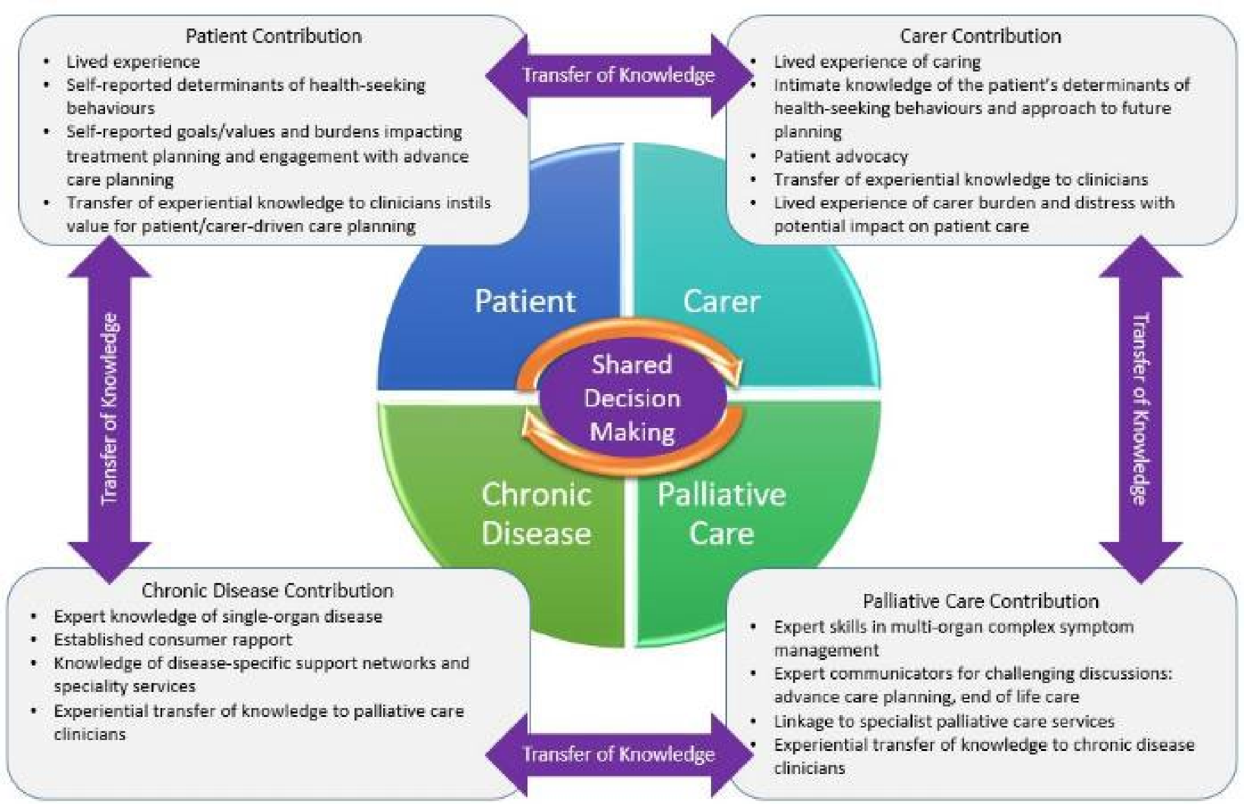
Consumers have been instrumental in the five-year project development. Following the successful implementation of Renal Supportive Care in HNELHD, physicians recognised the importance of supportive care for patients with life-limiting chronic disease. **Patients and carers shared their experiences** with clinicians during three in-person fora 2018-2020 (Appendix 3). These powerful accounts, both positive and negative, gave impetus to instigating change. Common themes identified by consumers, chronic disease and palliative care clinicians, were integrated to develop an online evidence-based supportive care framework for clinicians: the Supportive Care information Portal. The Portal encompasses the principles, goals, and opportunities to embed supportive care into chronic disease clinical practice and is accessible state-wide to clinicians via the NSW Health intranet. The information is scaffolded using clickable icons (Appendix 4) that link to information directly addressing issues that patients, carers and clinicians identified as fundamental to supportive care. This information includes evidence, tools and a broad array of existing internal and external resources that help chronic disease clinicians to deliver care, including symptom management, for a diverse range of conditions, 'end of life' related symptoms, advance care planning, and spiritual wellbeing.

Consumer interviews in the complex liver clinics of John Hunter and Tamworth Hospitals were undertaken in 2021. The supportive care research team partnered with hepatology clinicians to undertake a gap analysis of local service provision using the outcomes of these interviews. These consultations identified the factors impacting disease management for ALD patients and their carers, and the clinicians providing care. The research team, gastroenterology clinical experts, and Hunter Medical Research Institute (HMRI) colleagues collaborated to inform the design, methodology, implementation, and evaluation of the Liver Life RCT.

Consumer consultation was embedded within project development to ensure alignment with patient, carer and clinician needs. Pre, mid and end-of-trial semi structured interviews with patient, carer and clinician participants during Liver Life provided opportunities for the research team to understand the real-time lived experience of both advanced chronic disease and supportive care to ensure project implementation continually pivoted towards consumer-expressed needs. At trial completion, patient (Ms Kristy Davidson) and carer (Ms Linda Broad) joined the research steering committee as associate investigators to examine how supportive care could be more widely implemented across local health districts (HNELHD, Sydney LHD & Western Sydney LHD, 2021). Consumer membership on the steering committee ensured acceptability and value within the research process.

Patient (and carer)-reported outcome and experience measures (PROMs/PREMs) were used to capture changing patient (and carer)-expressed needs, ensuring alignment with individual priorities and values. At each scheduled contact, PROMs/PREMs screening tools were completed (Appendix 2) and the outcomes guided care planning and delivery. The shared decision-making model adopted in Liver Life (Figure 2) explicitly values the contribution of patients and carers in working towards goals of care.

Figure 1. Shared decision making in the *Liver Life* RCT



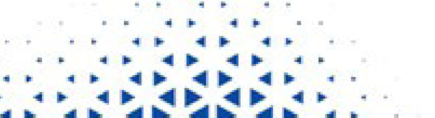
2. Effective Leadership

The HNELHD Operational Plan 2018-2019 included an operational initiative to 'co-design a "supportive care" model for patients with selected end stage, non-malignant diseases (heart failure, COPD, liver disease, motor neurone disease)'. Guidance by Executive Sponsors led to a partnership between the HNELHD Chronic Disease Network and Palliative and End of Life Care Stream who then collaboratively led the supportive care initiative.

Co-executive sponsorship (Professor Trish Davidson, Executive Director of Medical Services HNELHD and Ms Susan Heyman, Executive Director, Rural and Regional Health Services HNELHD) provided governance and leadership to the project development and ensured close alignment with district priorities. Executive sponsors received regular progress updates via presentation and written report at regular scheduled meetings.

Consultation with chronic disease clinicians delivered strong engagement and a deeper understanding of the gaps in clinical practice. A working group built upon the concept of supportive care and how it could best provide value for consumers. The working group held broad clinical expertise across chronic disease specialities and palliative care. Key members of the HNELHD Aboriginal Health Unit guided the group with regards to cultural safety. The working group met monthly to translate the principles of supportive care into an accessible and practical framework – the Supportive Care Information Portal.

The Research Implementation Group (RIG) was formed from the working group in 2020, tasked with translating the supportive care framework into clinical practice through service improvement using research evaluation. Members of the RIG held expertise in chronic disease management, palliative care, quantitative and qualitative research methodology, statistical and economic analysis, and Aboriginal and Torres Strait Islander members guided the group with regards to cultural safety and competency. The monthly meetings of the RIG was led by Co-Chief Investigators



(A/Professor Katie Wynne and Laureate Professor John Attia). On completion of the *Liver Life* RCT, the RIG was responsible for disseminating trial outcomes to research participants, executive sponsors, steering committee and working group members by written report and presentation at HNELHD Chronic Disease Network and Palliative and End of Life Care Stream meetings and additional local and national forums (e.g. John Hunter Hospital Grand Rounds, 2021; HNELHD Nurse Practitioner Forum, 2021; 5th Australian Nursing and Midwifery Conference, 2021; Australian Hepatology Association Biennial Conference, 2021; NSW Allied Health Research Showcase, 2022). Final preparation of papers for journal publication is currently underway to disseminate *Liver Life* outcomes to a national and international audience.

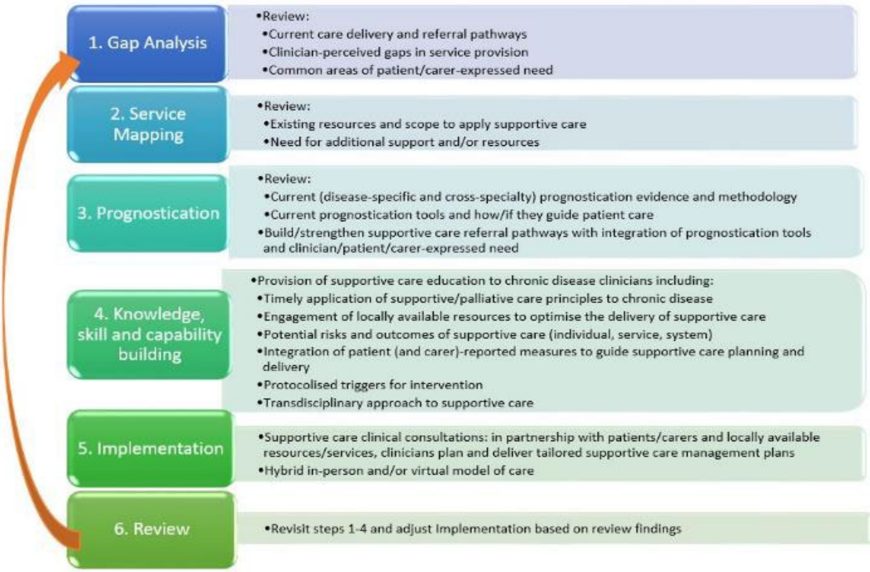
3. Continuous Improvement

Experiential **cross-discipline learning** of clinicians within the transdisciplinary model was a critical component of continuous improvement in the *Liver Life* trial. As a consequence of working together, the existing multidisciplinary team evolved to a better understanding of the contribution and approach to care of each team member. The experiential knowledge transfer enabled each clinician to build a more complex skill set measured by positive patient outcomes. As clinician capability developed, the need for direct support from palliative care clinicians diminished. This implementation strategy delivered sustainability for supportive care to continue within standard resources after project completion.

The Supportive Care Development Pathway (Figure 2) outlines the processes required to support the implementation and sustainability of supportive care within a chronic disease context. It is a **six-step process of continuous quality improvement** to ensure alignment with individual (clinician, patient, carer), system and service priorities. This Development pathway is being used to translate the process for other contexts.

During *Liver Life*, project implementation officers partnered with hepatology clinicians to complete the Supportive Care Development Pathway. At trial end, the completion of the review process (Step 6.) facilitated transition of the supportive care approach from the research context into current standard care. With the cross-disciplinary experiential learning gained during the *Liver Life* trial, hepatology clinicians now **independently** plan and deliver supportive care without extension of their existing resources. Importantly, the Supportive Care Development Pathway provides a framework that hepatology clinicians will revisit as priorities evolve to ensure supportive care remains relevant, effective, and efficient for patients, carers and clinicians.

Figure 2. The Supportive Care Development Pathway



4. Evidence of Outcomes

Primary Outcome: Health Service Utilisation and Days Alive and Out of Hospital

The *Liver Life* intervention (Figure 3) used PROMs/PREMs to guide clinic visits and trigger protocolised care plans (Appendix 2) in collaboration with the patient. Over the 90-day intervention, there was a **66% reduction in emergency department (ED) presentations** (any cause) (incident rate ratio 0.34 [0.13-0.80]) and **64% reduction in hospital admissions** (any cause) (incident rate ratio 0.36 [0.12-0.98]) in the intervention versus control groups. This was achieved at the expense of 5 additional planned supportive care nurse-led MDT outpatient visits per patient. Intervention patients were **five times more likely to have more days 'alive and out of hospital'** than the control group (odds ratio 5.34 [1.43-22.1]).

Figure 3: The Supportive Care Bundle in action

1. Determine patient/carer-expressed needs
Capture changing patient-carer needs
Disease specific vs. Generic; Evidence-based
Shared decision making, individualised treatment planning
Prioritise 'what matters most'
2. Plan care/service delivery elements
Care Coordination & System Navigation
Complex Symptom Management
Nutritional Management
Psychosocial Care
Palliative Care
Functional Care
Spiritual Wellbeing
Cultural Safety
Health Literacy
Bereavement Care
PROM/PREM
Triggers
Supportive Care Management Plan
Core Components
Locally Available Resources
3. Identify locally available resources and services
Supportive Care Information Portal
Community based Services
Non-Govt. Organisations
Speciality Services
General Practitioner
4. Engage care providers
Providers of Locally Available Resources
Chronic Disease Clinical Teams
Improved health service utilisation

Secondary Outcomes:

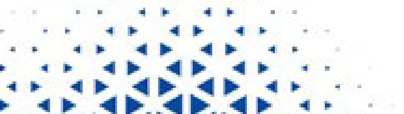
Advance Care Planning Practices

Analysis of patient, carer and clinician end of trial interviews demonstrates that after the intervention patients and carers had improved readiness to undertake advance care planning activities such as completion of NSW Ambulance care plans, resuscitation orders, advance care plans and directives and there was improved patient/carer understanding of the importance and purpose of advance care planning. Clinicians involved in the trial reported greater confidence in undertaking end-of-life discussions with patients and carers and a readiness to integrate these skills into standard care.

Qualitative analysis

Patient and Carer Experience:

Semi-structured end-of-trial interviews were conducted with patient, carer and clinician participants either individually or in small focus groups. Content was transcribed (Adroit Transcription) and analysed using NVivo software by two independent clinicians. Patient and carer participants reported that they felt "heard" and that what really mattered most to them was prioritised during supportive care consultations. Information was provided in a timely manner and tailored to individual health literacy levels. They reported improved confidence in the health system; improved patient/carer understanding of the health condition; stronger engagement in treatment



planning; improved wellbeing; and improved access to services. Patients felt more motivated to achieve their health goals and felt like they had greater control over their treatment planning. This was further supported by clinicians who reported that intervention patients had improved attendance rates at both supportive care and standard care appointments.

Figure 4. *Liver Life* patient and carer experiences

"It wasn't until supportive care that someone looked at the real issues. Now I feel like I'm in control and I know where to go for help. Things are still really hard, but there is some kind of future for me now." Liver Life patient participant

"I'm so happy with how things are now. I want to make sure that other people like me who have a daughter or son in the same situation, can get the same level of support as what we are getting now" Liver Life carer participant

"I've got the support that I need. I'm starting to eat a lot better. I can actually play with my child. It's so good to have the support there and know that I've got the back up to help with my feeding. I'm not so depressed anymore. I honestly think I would've been dead if it wasn't for supportive care" Liver Life patient participant

Key implementation themes emerging from the quantitative analysis included:

1. <u>Transdisciplinary approach to supportive care</u> **improved rapport**
2. <u>Patient/carer-expressed needs guided care</u>: **delivered person-centred care**
3. <u>Competing needs were prioritised</u>: **to focus on patient/carer priorities**

Qualitative analysis highlighted the incongruence between clinician-perceived and patient/carer-expressed needs. Prior to the intervention, clinicians perceived that patient need was primarily focused on areas of complex symptom management (e.g., pain). Although this was a common area of need, patients/carers emphasised their **psychosocial issues** (e.g., spiritual and existential distress, accommodation security, and family welfare), **information needs** (e.g., disease progression/prognostication, advance care planning, care at the end-of-life, and desire for **bereavement support** for families/carers).

<u>Clinician Experience:</u>

Clinicians identified that the transdisciplinary supportive care approach fostered greater understanding of allied clinical roles and promoted a more collaborative approach to care planning. Experiential cross-disciplinary learning instilled confidence to engage with more challenging topics (e.g., advance care planning and end-of-life conversations) and improved self-reported clinician knowledge of local support services and resources. Clinicians valued the opportunity to shift the focus of care to the area of most need as identified by the consumer. The use of PROMs/PREMs and protocolised triggers for intervention was identified by clinicians as an essential strategy in ensuring management plans were enacted according to patient (and carer) priorities.

Figure 5. *Liver Life* clinician experiences

"We're giving patients permission to bring things to the table. But the things that we thought were their biggest issues aren't coming up"

"Things that we would've probably left a bit longer, we're now addressing earlier. We're not waiting for patients to get really sick at the end. We're addressing what they want the end to look like"

Liver Life clinicians

<u>Economic analysis</u>
Preliminary economic analysis demonstrates a two-thirds reduction in unplanned clinical contact with implementation of a SCB, conferring a significant impact on health care utilisation. For HNELHD, this would translate to a reduction of 885 inpatient bed-days and associated cost reduction of $1.38 million p.a. (HNELHD 2019/20 data), achieved at the expense of five additional outpatient contacts for each patient at $229 per visit, or an extra $330,000. This equates to a p.a. net cost saving of $1.05 million for the district.

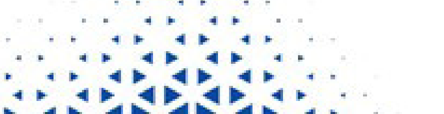
5. Striving for Best Practice

The successful state-wide implementation of Renal Supportive Care (RSC) demonstrated that supportive care is scalable and can address patient-identified needs and gaps in clinical practice (Siriwardana *et al,* 2020). Acknowledging the disease-specificity of the RSC model and striving for best practice across chronic disease groups, *Liver Life* aimed to examine how the underpinning principles of RSC could be transferred to the ALD setting with consumer-identified needs guiding clinical practice. There was limited evidence of supportive care in ALD prior to this study: (a) Initial exploratory studies had suggested that integration of palliative aspects of care into chronic disease management would enhance consumer-driven care planning to achieve health outcomes that align with individual values and goals (Low *et al*, 2016; Naik *et al* 2020; Plunkett, Mortimore & Good, 2019; Valery *et al*, 2017)); (b) a small feasibility trial in the UK by Kimbell (2018) introduced a supportive care nurse to improve care coordination, advance care planning, and quality of life for patients with ALD and their carers; outcomes of the study support the potential for a supportive care approach to reduce unplanned hospital admissions and outpatient non-attendance, and improve quality of life. *Liver Life* is the first RCT to demonstrate the benefit of a transdisciplinary approach to supportive care in ALD either nationally or internationally. Qualitative analysis of *Liver Life* supports the value added to consumers. Further, the preliminary economic analysis reflects net cost saving at a systems level. This approach is recommended in newly updated US guidelines. Enhanced funding (NSW Ministry of Health) has recently provided the opportunity translate the *Liver Life* model to other chronic disease states as best practice.

INNOVATION IN PRACTICE AND PROCESS

The *Liver Life* model is a novel, feasible and effective approach to embedding supportive chronic disease management into standard care. The SCB was co-designed by chronic disease clinicians in partnership with consumers. The Supportive Care Development Pathway provides structure and guidance to ensure ongoing alignment with individual (patient, carer, clinician), service and system priorities. There are several innovative features:

1. Using PROMs/PREMs to activate **protocolised triggers for intervention** (Appendix 2) is a technology-enabled concept aimed at negating the impact of **clinician bias** and overcoming **clinical inertia** in care planning and delivery, and ensures care is tailored to the expressed-needs of patients and their carers. In *Liver Life,* PROMs/PREMs outcomes are entered directly by the patient and carers onto a hand-held electronic advice; the REDCap data management system then provides an automated summary report of patient/carer-identified needs for the clinician, which guides the consultation. For example, anxiety has been identified by *Liver Life* participants as a distressing symptom which is often overlooked or unaddressed. When asked the question: "*Have you been feeling anxious or worried about your illness or treatment?*" in the PROM/PREM survey tool, an answer of '*sometimes/most of the time/always*' would autofill and prompt the MDT clinicians to take direct action for review of anxiety/wellbeing/depression management.
2. The flexible virtual mode of delivery of the *Liver Life* model improves access to specialist allied health, palliative care and chronic disease services otherwise unavailable to those in **rural or remote areas**, or those with high symptom burden, restricted mobility or limited transport



options. Approximately 30% of *Liver Life* intervention participants attended the majority of consultations via telehealth. *Liver Life* showed that delivery was equally effective in virtual or in-person, for complex symptom management, quality of life care, and advance care planning. Additionally, there was no significant difference in health service utilisation for those who attended consultations via telehealth, versus those who attended in-person. Participants valued the opportunity to attend via telehealth as this provided flexibility and lessened the burden of hospital visits.

APPLICABILITY TO OTHER SETTINGS

The themes of supportive care are similar across chronic disease groups. Symptom burden, emotional and psychosocial concerns, carer strain and the need for either equipment or additional community resources, amongst others, are common issues expressed by patients and carers over the last 2 years of life, regardless of the type of chronic condition(s) contributing to their deterioration. Consequently, the **transferability of the SCB to other chronic diseases** was a key consideration in the design of the *Liver Life* intervention. The SCB comprises both core and tailored components (Figure 6). The **core components** of the SCB are:

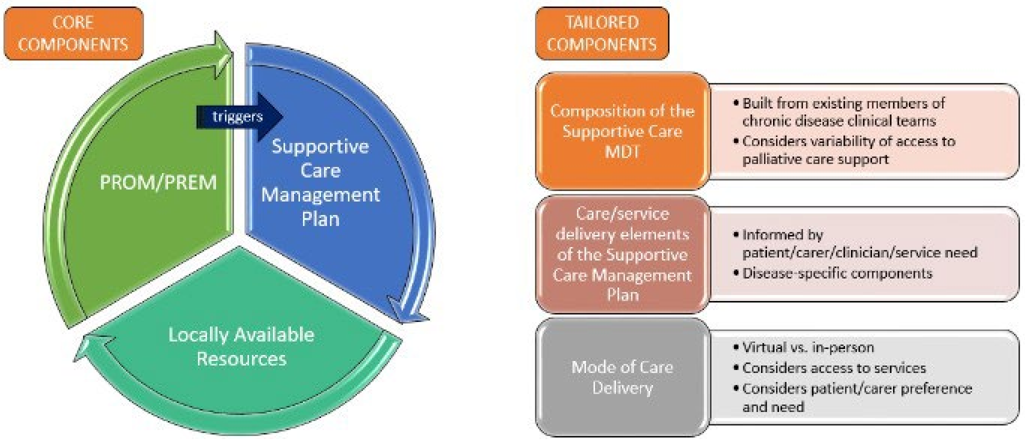
a) PROMs/PREMs to capture patient and carer-expressed needs
b) Individualised supportive care management plan
c) Optimal engagement with locally available resources

Tailored components of the SCB include:

a) Composition of the supportive care MDT
b) Disease-specific clinical components of the supportive care management plan
c) Mode of care delivery (virtual or in-person)

Flexibility is embedded within both the core and tailored components of the SCB to enhance transferability across chronic disease clinical teams and disease states. For example, the six-step **Supportive Care Development Pathway** allows individual chronic disease clinical teams to identify PROMs/PREMs applicable to the disease-specific areas. The composition of the supportive care MDT is built from existing members of chronic disease clinical teams with palliative care support, as available; composition of this team is flexible according to staffing and resources available. Care or service delivery elements of the Supportive Care Management Plan (SCMP) are informed by the unique needs of consumers, clinicians, and chronic disease services. Importantly, the care/service delivery elements are flexible and will evolve over time to meet the changing needs of patients, carers, clinicians, and chronic disease services. The mode of care delivery during supportive care consultations is also flexible, considers access to services, and is guided by patient and carer preference and need.

Figure 6. Core and tailored components of the Supportive Care Bundle



The Supportive Care Development Pathway can be utilised by chronic disease clinical teams in any disease setting to identify the core and tailored components of the SCB. Enhanced funding by the NSW Ministry of Health ***'Enhancing community care for people with late-stage degenerative and chronic conditions and disability'*** *(2022)* will enable our team to translate supportive care with a transdisciplinary approach across diverse chronic disease specialty groups. A collaborative service redesign is currently underway with advanced liver disease services, and also with the **Virtual Heart Failure Service**, **Movement Disorders** and **Integrated Chronic Care for Aboriginal People Program** (ICCAPP). Steps 1 to 4 of the Supportive Care Development Pathway have been completed to varying degrees with the identified clinical teams to identify the Core and Tailored components of the SCB, specific to each clinical team. Tailored components of the SCB provide flexibility within program design for each of the unique specialty teams to best target patient/carer-expressed need. For example, the ICCAP team plan and deliver care for Aboriginal people with diverse and often co-morbid chronic diseases. Therefore disease-specificity is not a key consideration in this context, however cultural safety and capability is critical. SCB *Tailored Component 1: Composition of the supportive care MDT* (Figure 6) ensures that supportive care is planned by the ICCAPP team who hold existing therapeutic patient-carer-clinician relationships, in partnership with Aboriginal people to ensure care is culturally safe and aligned with individual values and needs. Similarly, SCB Tailored Components will allow the Virtual Heart Failure Team to plan and deliver supportive care in partnership with consumers in a virtual space as was identified by consumers as the preferred *Mode of Care Delivery* during completion of the Supportive Care Development Pathway. The established collaborations with these clinical teams and consumer partners have demonstrated the value of this intervention in integrating supportive care into standard care pathways across chronic disease groups.

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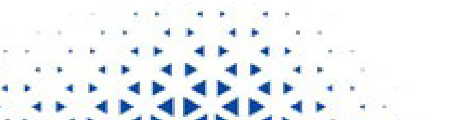

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APPENDIX

Appendix 1. Schedule of Measures – intervention and control groups

Visit Number	1	2	3	4	5
Time	Week 0	Week 4	Week 6	Week 8	Week 12
PROM/PREM					
Integrated Palliative Outcomes Scale (IPOS)	X	X		X	X
Euroqol (EQ)-5D-5L	X	X		X	X
Malnutrition Screening Tool & Subjective Global Assessment	X				X
Carer Experience Scale (CES)	X		X		X
Carer Support Needs Assessment Tool (CSNAT)	X		X		X

Patient participants to complete	(green)
Carer participants to complete	(pink)

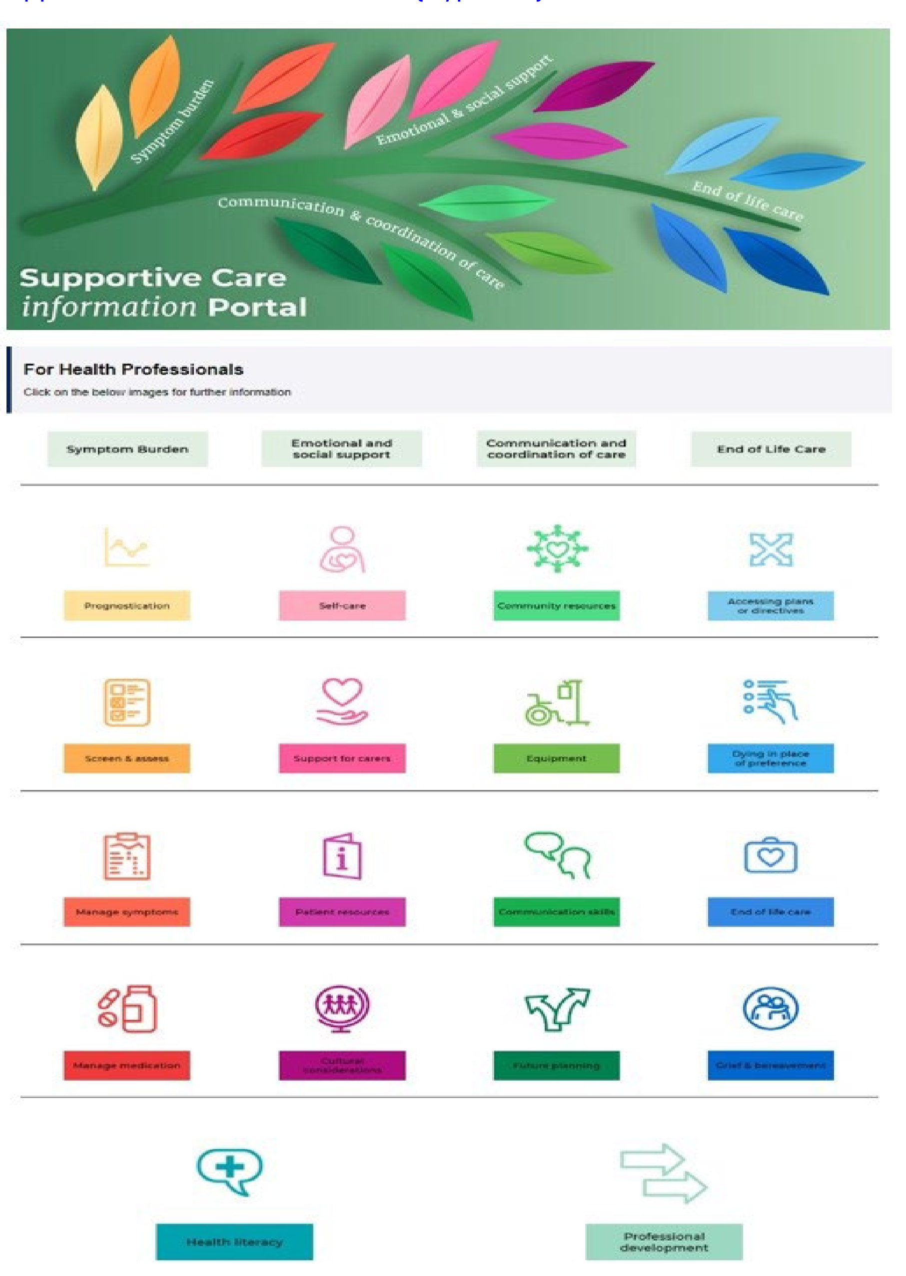
Appendix 2: Protocolised triggers for intervention

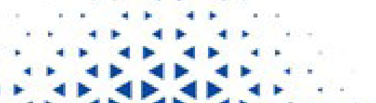
Triggers for Intervention (Intervention participants only)
(**Note:** if participants/carers in control arm have positive scores as listed below, refer via standard care pathways for assessment and intervention as per usual processes)

PROM/PREM	Item	Score	Action
Integrated Palliative Outcomes Scale (IPOS)	Q1	Any	clinician reviewing survey to refer to appropriate clinician for intervention
	Q2	>2	refer for nurse or medical review for symptom management.
	Q3-8	>2	refer for social work, nurse or medical review for anxiety/depression/wellbeing management
	Q9	>2	refer for social work or nurse review for psychosocial/wellbeing management
EuroQol (EQ)-5D-5L	Any item	Moderate/severe/unable	refer for medical review +/- allied health assessment
		No problem/slight	continue to monitor and consider escalation for medical review or allied health assessment as appropriate.
Malnutrition Screening Tool (MST)	Total score	>2	refer to dietitian for nutritional assessment/intervention
Carer Experience Scale (CES)	Any item	>2	refer for social work and/or nursing review for wellbeing management and care coordination
Carer Support Needs Assessment Tool (CSNAT)	Any item	a little more/quite a bit more/very much more	refer for social work and/or nursing review for care coordination

Appendix 3: What does supportive care mean to you?

Appendix 4: The Supportive Care Information Portal {Hyperlink}: clickable icons





CLINICAL EXCELLENCE AND PATIENT SAFETY

WINNER

Wandi Nerida, QLD

Service Wide

Wandi Nerida: A new residential model of care to treat eating disorders in Australia

Jodie Ashworth, Danielle Dougherty, Dr Catherine Houlihan, Belinda Scott

AIM

To establish and operate an innovative residential model of care for Australian's affected by an eating disorder. Wandi Nerida also aims to be a "proof of concept "for all other states and territories by providing learnings and a robust clinical and economic evaluation to inform the development of residential facilities around the country. For those participants and families affected by an eating disorder, we aim to help make recovery a reality.

SUMMARY ABSTRACT

Eating disorders are a group of mental health conditions associated with high levels of psychological distress and significant physical health complications. Over one million Australians are affected by an eating disorder and almost two thirds of those are female (Butterfly Foundation, 2022). In 2022, the social and economic cost of eating disorders in Australia is estimated at 80.1 billion (Paxton et al, 2012). The estimated cost of eating disorders (in terms of disability-adjusted life years) is higher than that of depression and anxiety combined (Paxton et al, 2012).

Less than one in four people (23.2 percent) with eating disorders seek professional help (Hay et al, 2015). Stigma and shame are the most frequently identified barriers for accessing treatment. This has been compounded by the impact of covid-19. In one study, the number of annual eating disorder presentations among children and adolescents increased by 62 percent in 2020 compared to the two years prior (Chesney et al, 2014).

Eating disorders are complex yet treatable illnesses. Person centered care, tailored to suit the person's illness, situation and needs, is the most effective way to treat someone with an eating disorder (Hay et al, 2014).

On July 16th, 2021, with the support of the federal government, the Butterfly Foundation commenced operation of Australia's first residential treatment Centre for people affected by eating disorders. Early consultation with the local first nation elders offered insight into the indigenous culture and spirit of the 25 acres of Gubbi Gubbi country the health service operates on. Consequently, the name ***Wandi Nerida***, was gifted, which means to "*gather together to blossom*".

Wandi Nerida is a purpose built, multidisciplinary staffed residence that presents as a home like facility. In addition to providing a safe and healing environment for those in need of physical and psychological care, it is an important pilot project for future eating disorder treatment models in Australia. The new innovative model of care, B-FREEDT MoC© provides a phased treatment structure to address not only symptoms and behaviors but the underlying perpetuating psychological factors. It is a treatment model that is unique not only to Australia, but internationally as well.

The key features of the model include:

- Eating disorders are psychological disorders with medical consequences
- Holistic evidence-based treatment model in a natural Australian bushland setting
- High staff -participant ratio to maximize support, and a program that runs 7 days a week from 8-8pm.
- The importance of the social milieu and lived experience
- Focus on developing increased autonomy with objective measures of progress that is participant centered
- A home like setting that has hands on food preparation experience
- The importance of choice (motivation) around food and eating.

Wandi Nerida's Strategic Plan 2020-2025 was published and was made available online after extensive community and lived experience consultation. To date, targets are on track. The vision, "to help make recovery a reality" is embedded into staff culture and clinical practice. This has been supported by qualitative data from participants and a staff culture survey.

To date there have been sixty individual admissions to Wandi Nerida for treatment, some with re-admissions as they had medical or psychiatric instability that required a higher level of care for short periods. Every state and territory have been represented in participant admissions (excluding the NT). International interest in the project and treatment model is growing and consequently Wandi Nerida also currently has participants from New Zealand and Singapore. Most admissions have been overwhelmingly female however male and non-binary admissions have also been supported. The average length of stay is 84 days.

The model of care is under a clinical and economic evaluation by external evaluators in addition to robust internal clinical data review against the model of care key deliverables. The service has achieved both private licensing in the state of Queensland and interim accreditation against the NSQHS standards with no recommendations. In the last 12 months the model has been evaluated and undergone a continuous improvement cycle and had international external review. The learnings are informing the development of new residentials in all states and territories of Australia, (excluding the NT). Preliminary findings from the evaluation are encouraging and qualitative consumer feedback on the new pilot model of care have been exceptional.

REPORT

APPLICATION OF ACHS PRINCIPLES

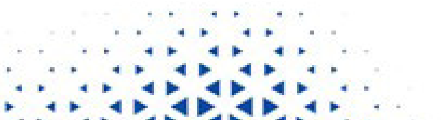
1. Consumer Focus

Wandi Nerida demonstrates a commitment to being consumer focused through various methods of consumer engagement and robust feedback mechanisms.

The B-FREEDT MoC© highlighted an individualised patient centred approach at the core of its development. Consequently, even prior to opening there was extensive lived experience consumer involvement in the co -design. Over 50 lived experience consumers from around the country gave feedback on a range of domains including:

1. Strategy: Inclusive of the model of care, the purpose and vision and the strategic plan.
2. The Build and facility: Inclusive of building design, furnishing, paint colour choices, signage.

The local community were involved in the facility prior to opening with the Rotary Club volunteering time and labour to assist in facility preparation and several local businesses volunteering time to attend working bees to prepare the grounds and residence for opening.



Early consultation and engagement of the local indigenous community has seen the development of strong relationships on Gubbi Gubbi country and local elders are still involved in running groups and yarning circles with participants.

When Wandi Nerida opened the pinnacle of this work shifted to governance under the sub board Partnering with Consumer Advisory Committee (PCAC). Consumers in this group include a Lived Experience Representative, Carer Representative, Community Representative, local eating disorder networks and a volunteer. This provides a structured partnership between Participants, their families, the community and the Wandi Nerida team and advocates directly to the Butterfly Residential Care (BRC) Board. The express purpose of this committee is to improve the safety and quality of care delivered improving Participant, Carer and Community Members' satisfaction with all aspects of Wandi Nerida service.

In the pilot model, the current Participant group also form an integral part of the consumer feedback process through a formal and informal method of gathering data and feedback on a continuous basis. Weekly milieu meetings are also held with all current Participants and staff to create an open forum for suggestions and requests that assist the day to day running of the service. In addition, there is a monthly meeting with Wandi Nerida Executive team to provide direct feedback in an open and safe forum. This is utilised to make continuous quality improvements to the delivery of the model of care and to improve the clinical program. (Appendix 1: Participant Feedback)

Alumni feedback and post-discharge follow up surveys have been developed not only inform the clinical evaluation but also get valuable data from Participants who have completed their treatment at Wandi Nerida. This form of de-identified data allows for honest feedback to be given following completion of the program and allows for reflections integral to continuous improvement.

The recent Alumni day (An annual event where all past participants are invited to return to Wandi Nerida) also allowed for past-Participants to come together to discuss their journey at Wandi Nerida and gave invaluable insights into what they found helpful and what they would recommend to improve the service for current and future milieu. Wandi Nerida ensures connection with past participants through an Alumni Facebook page. This social media platform is used to encourage education and connection with group and provide a medium for online support.

Our team ensures a participant focussed culture resonates through every level of organisations operations, planning and service development. This is achieved by keeping the Participant at the centre of every meeting, training session, gathering or event. Examples of this are the acknowledgment the importance of the lived experience at the opening, and the undertaking a consumer reflection at the close of every event. The formal reflection at meetings of every level of governance include:

- Did this meeting make decisions which will impact the Quality and Safety of Participants?
- Did this meeting consider the views of Participants when making decisions?
- Was the Participant voice heard during the meeting?

Continuous consumer feedback evaluation is also collected through compliments and complaints. This through the is achieved through various mechanisms including verbally the compliment/complaints portal on our website and compliment/complaints forms available throughout the facility (with an anonymous box for posting) completed compliments/complaints forms. This gives both current and past-Participants, Carers and Community Members an opportunity to give open and honest feedback in the form that they find most convenient and comfortable. (Appendix 1: Participant Feedback)

2. Effective Leadership

The Butterfly Foundation is the leading body for advocacy of eating disorders in Australia. Evidenced based data indicated that there were gaps in the Australian system of care and that residential treatment models may improve outcomes for those affected by eating disorders. (Brewerton and Costin, 2011)

As part of a long-term strategic plan, Butterfly Foundation has collaborated with, and been supported by the federal government, to build and operate Wandi Nerida. It was intended that the model of care would be comprehensively evaluated as proof of concept and consequently inform the 62-million-dollar bipartisan commitment to build a residential facility in all states and territories of Australia (Commonwealth of Australia, 2019).

Due to the lack of expertise and residential eating disorder models in Australia, Butterfly Foundation engaged Carolyn Costin, who is a world-renowned expert in the field to provide advice and governance on the model development.

The Wandi Nerida board was recruited being mindful to ensure its appointments would create a balance of clinical expertise, financial knowledge, and operational health service experience. Strategically it was recognised that the board would need to be able to balance its appetite for innovation for a new treatment approach with maintaining safety and quality and compliance requirements. It was recognised that the new model of care and facility would still need to comply with the National Safety and Quality Health Service (NSQHS) Standards, and it was no co-incidence that three of the members appointed to WN board were ACHS assessors.

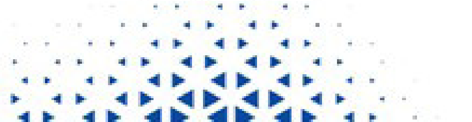
Prior to the opening of Wandi Nerida, residential options were only available to Australians that could afford to travel to the United States or Europe to self-pay for care. Wandi Nerida intended to provide equity to all Australians. With the support of the federal government and philanthropists, the Butterfly Foundation set up a Bursary program that allowed people that were socio-economically disadvantaged to apply for support to cover the private hospital costs at Wandi Nerida. To date 51 out of 60 admissions have received support.

Wandi Nerida implemented a values-based recruitment process for all staff and training on the model of care was over six weeks to ensure understanding and alignment with the new pilot model. Robust governance structures were put in place to ensure the consistency and information about the model flowed in a systematic manner throughout the organisation). Best Practice Australia were engaged to undertake a climate survey and the engagement rate from employees was 92%, well above the expected return average of 60 % (Appendix 2: BPA Report)

Since opening the leadership team have faced significant challenges including with the covid pandemic and the floods in Southeast Queensland. The floods led to an evacuation of Wandi Nerida for two nights to ensure participant safety as it became impossible access the facility safely with flooded roads. This tested business continuity plans and executive leadership through crisis. Neither challenge resulted in any staff or participant incident and business continuity plans were reviewed post events for learnings.

3. Continuous Improvement

Wandi Nerida developed its model to have continuous improvement at the heart of the service. The clinical governance framework is built on the principles of governance excellence and accountability (Figure 1) which is operationalised by our team implementing care by the Triangle of Trust & Care model (Figure 2).



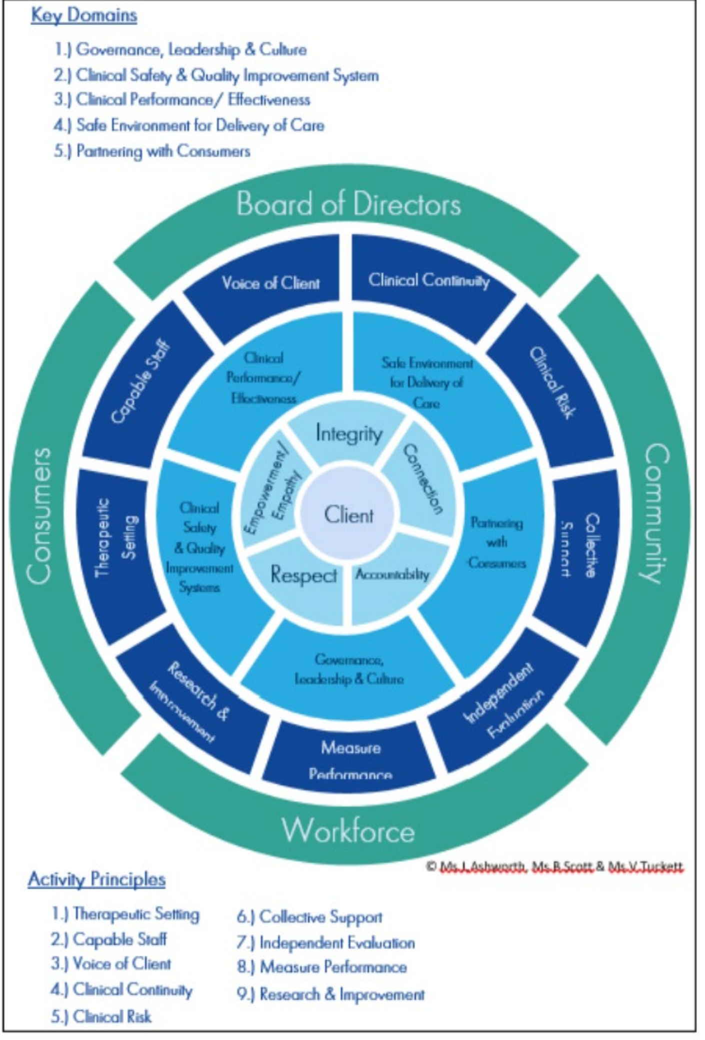


Figure 1

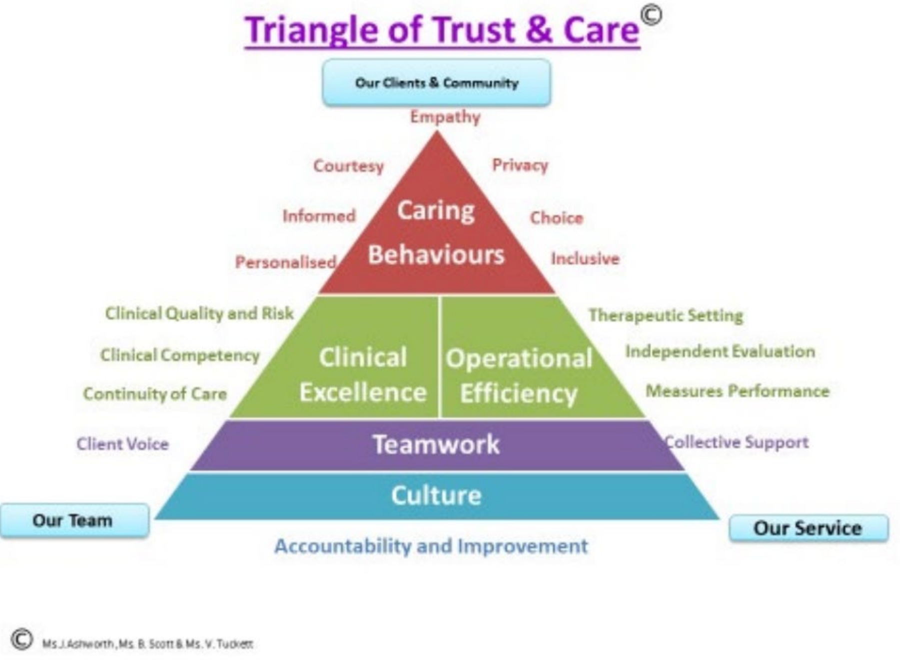


Figure 2

The organisational culture emphasises continuous quality improvement as a shared value central to our service provision and is an enabler that underlies all aspects of Wandi Nerida. Our focus is on a culture where every staff member provides person centred safe, high-quality care for every person every time. During the last 12 months the timetable for participant programme has been evaluated and revised three times using staff and participant feedback as well as evidence-based literature and our participant outcome data. Our safety culture ensures that all continuous improvement activities are supported by staff freely communicating about the improvements, identifying any risks, or if uncovering an error and there are clear mechanisms to escalate concerns appropriately. We have, in 12 months, built this culture through leadership role modelling at Board and Executive level, recruitment to our values and acting when issues arise to address the error or risk and provide feedback. There is always a thank you to the staff member or participant for raising an issue or contributing to the continuous improvement of services.

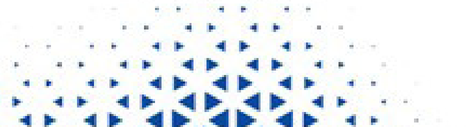
Participant safety and quality improvement systems have been implemented so that safety and quality systems are integrated with governance processes to actively manage and improve the safety and quality of care. A good example of this is the development and improvement of the service quality data/ scorecard. We started with a basic table to share with staff however as part of a PDSA cycle staff had input into the format and inclusion of a new scorecard (Appendix 3: Quality Scorecard).

Our ongoing evaluation is multifactorial and incorporates the knowledge and clinical supervision of Carolyn Costin (Brewerton and Costin, 2011) and Leif Hallberg (Hallberg,2017) and their evidenced based work that has been implemented successfully around the world. This is coupled with the university partnerships for continuous external evaluation from both Western Sydney and Monash University. Carolyn Costin regularly provides supervision from the United States to the staff of Wandi Nerida and most recently visited to review the implementation of the model of care and provided a report to the Wandi Nerida Board on areas of excellence and opportunities for improvement.

The clinical performance and effectiveness domains exist to ensure that there are capable staff that have the right qualifications, skills and supervision to deliver safe and high-quality care. High level clinical performance and effectiveness is achieved through robust supervision and training. As the model of care is a new innovative approach, staff needed more than benchmarked training and supervision. Supervision was compromised early in the start-up, but it was quickly recognised that clinical supervision of all staff needed to provide the consistency that the model of care requires for success. This was corrected and implemented through improvement processes. Currently the organisation has four external clinical supervisors contracted to support staff for different aspects of model development.

The participant outcome data is extracted from EMR, the clinical indicators reporting is monitored by the Board and Executive. Trended data is used to improve the quality of care through our continuous improvement model, the Triangle of Trust & Care.

Figure 3 provides an overview of the elements of each of the components that together form the Triangle of Trust & Care. The visual demonstration that each of these elements are interdependent on each other to provide a whole framework just as our staff and participants are interdependent on each other to achieve clinical excellence.



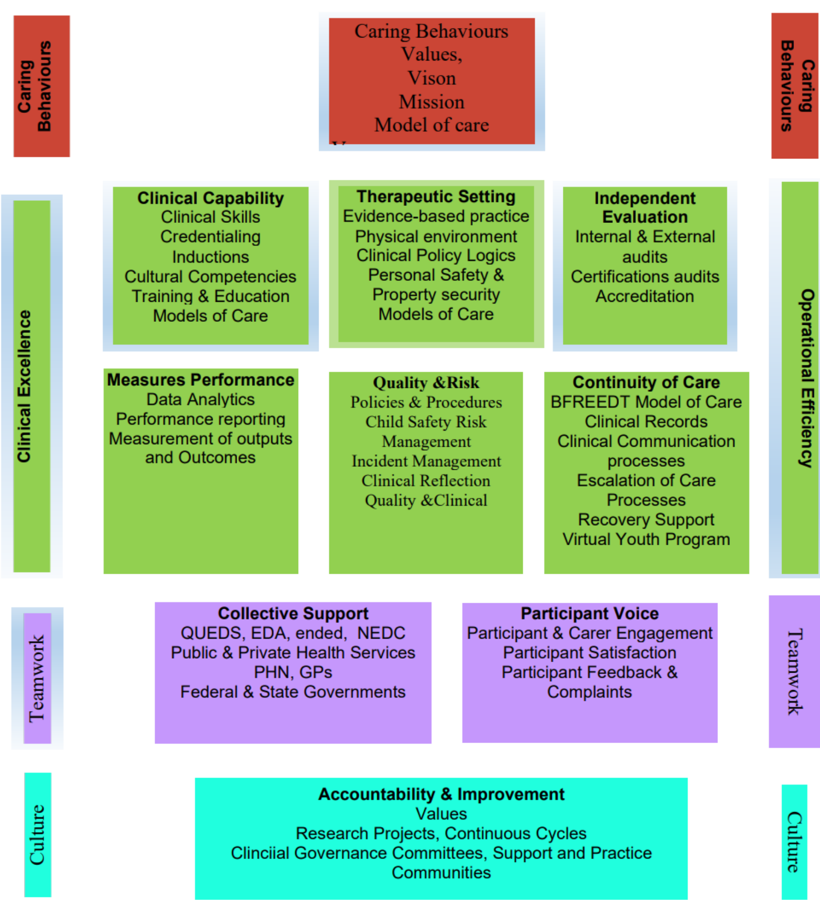


Figure 3

4. Evidence of Outcomes

Following a competitive tender process, Butterfly Foundation awarded a contract to the School of Medicine, Western Sydney University for clinical evaluation of the model. The clinical evaluation team is being led by Professor Phillipa Hay who is an internationally recognised expert the field of eating disorders treatment and research.

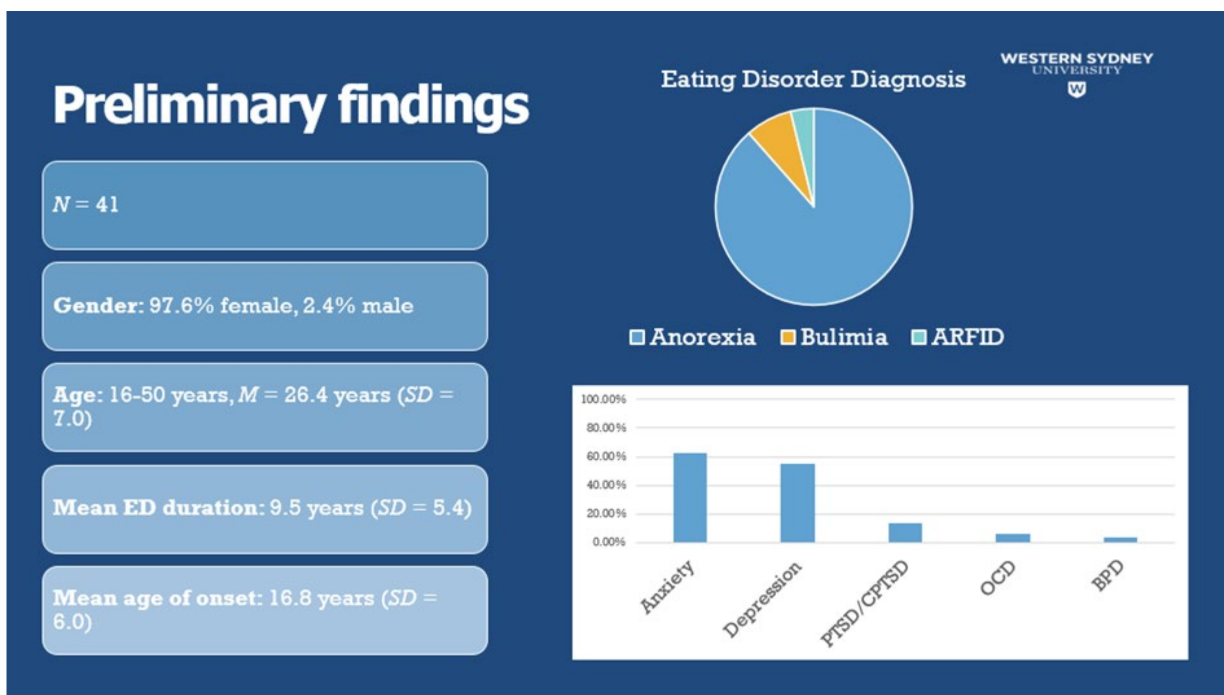
The clinical evaluation for Wandi Nerida forms part of a larger multi-site study called TrEAT, a clinical database of people attending treatment services for an eating disorder. As part of this study, the clinical effectiveness trial of WN compares the experience and outcomes of people who complete the WN program to i) people who complete a parallel day patient program and ii) people who were assessed as eligible but who did not engage with/complete the WN program and had treatment as usual.

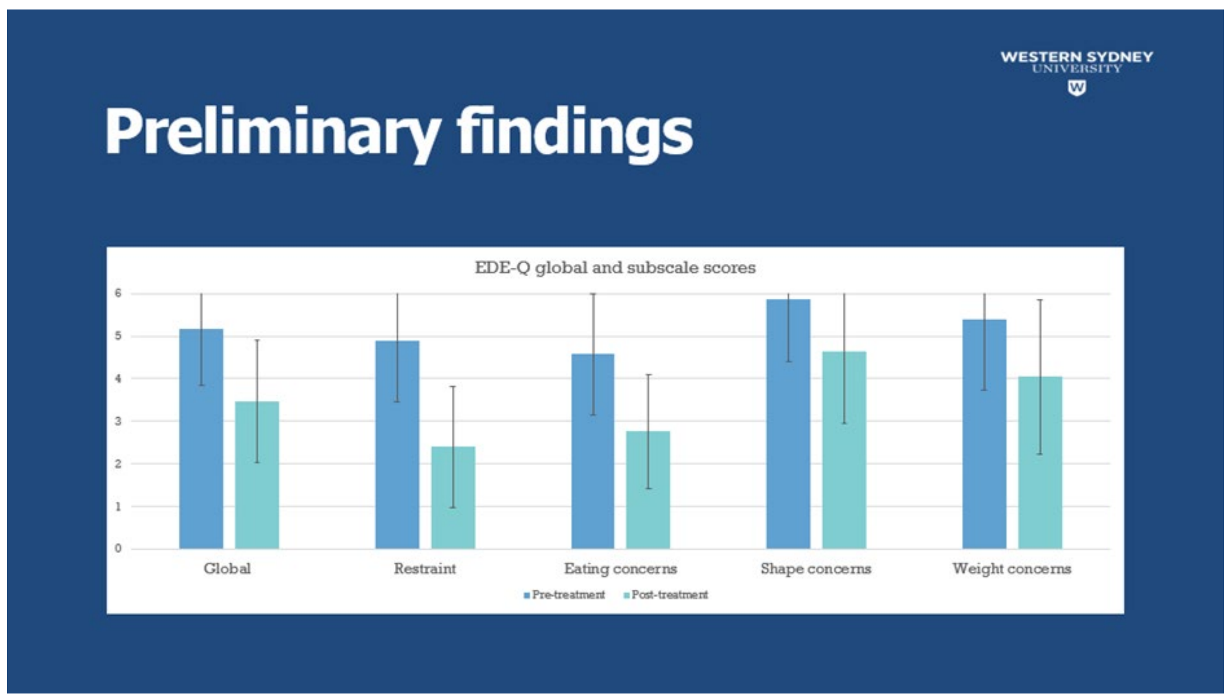
1.1.1. In addition to the minimum data set prescribed by the Federal Technical Advisory Group (primary outcome data), the clinical evaluation will collect secondary outcome data to: Compare clinical outcomes between Wandi Nerida Residential care and the Queensland Eating Disorders Service (QUEDS) day program and treatment as usual (TAU);

1.1.1.1. Understand lived experience (LE) health care providers' experiences, perception, and satisfaction with care as the use of LE practitioners in the treatment of eating disorders and other mental illness is a relatively new and under-researched area.

1.1.2. Understand the treatment experience journey of Aboriginal and Torres Strait Islander Peoples. It is now recognised that eating disorders are experienced by First Australians but very little is understood about their experience of treatment which is an important first step in developing culturally informed care.

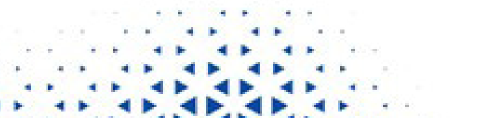
Below is a summary of analysis of data from July 2021 - July 2022





The EDE-Q is a reliable and valid eating disorder questionnaire used in the current literature. Each eating disorder subscale is scored 1-6, with 6 being the highest score indicative of a problem in that area.

The above graph shows a trend towards improvement in all eating disorder subscales as well as a global score after following treatment at Wandi Nerida.



WESTERN SYDNEY UNIVERSITY

Preliminary findings

	Range	Pre-treatment (n = 41)	Post-treatment (n = 19)
Binge eating frequency		3.61 (7.19)	0.16 (0.50)
Purging frequency		3.88 (7.61)	1.31 (3.86)
Depression (PHQ-9 total)	0-27	18.15 (6.90)	10.58 (7.20)
Anxiety (GAD-7 total)	0-21	15.63 (5.30)	10.58 (6.74)

The above graph shows improvement in binge eating and purging behaviours, and reduction in depression and anxiety scores during admission.

Economic evaluation

A tender process was undertaken in September-December 2020, and a contract has since been issued to Monash University. A brief protocol to collect health services data for use in a trial-based evaluation has been approved. In addition, a detailed economic evaluation protocol has been developed. Preliminary data is currently under analysis.

Other Outcome Indictors

Wandi Nerida benchmark through ACHS indictor reporting and to date have gold stars for both vaccination status and discharge summary completion in 24 hours. Wandi Nerida submits benchmarking data to Queensland Health; these data are displayed through the Inform My Care platform to allow consumers to review the facility and compare to other like organisations when making decisions about treatment options. The data set is within best practice domains.

Clinical KPI's are presented to Board monthly. As part of ongoing improvement, a review of the model of care clinical indicators was conducted after one year of operation. Changes were made to the indicator set to ensure they are best aligned to evaluating success. (Appendix 4 - Clinical Indicator Report)

5. Striving for Best Practice

Evidence for best-practice approaches to residential treatment for people affected by eating disorders is limited in Australia and worldwide. Carolyn Costin is currently the world-leading expert on residential treatment for eating disorders after founding and operating 14 facilities in America. A 10-year outcome study showed this model was successful in helping majority of the participants recover (Brewerton and Costin, 2011).

Wandi Nerida's Butterfly Foundation Eating Disorders Residential Treatment Model of Care (B-FREEDT©) is based largely on the philosophy and work of Carolyn Costin. Carolyn was integral to the start-up of the service, providing training and supervision to the team in the first year of

operating. Wandi Nerida has developed the B-FREEDT MoC© in line with Carolyn's feedback and continues to receive regular training from her.

The BFREEDT MoC© is being evaluated externally by the University of Western Sydney. Clinical outcome reports on eating disorder and other mental health symptoms are reviewed regularly at Wandi Nerida and are used to inform practice. For example, high rates of self-reported trauma in participants at admission led to increased staff training on trauma-informed care. Future projects will also focus on this as well as other areas identified through clinical outcome reports.

Clinical performance indicators are also collected regularly on key aspects of the B-FREEDT MoC© and are informed by best-practice approaches to eating disorder treatment. These are BMI change for participants who require weight restoration as part of their recovery, supportive meal therapy, involvement of carers and loved ones in treatment, and lived experience involvement in care.

Wandi Nerida is leading the way for residential models of care in Australia with regards to lived experience involvement in treatment as this is currently a nation and world-wide development in the field of eating disorders. Currently a project exists at Wandi Nerida to co-ordinate and support lived experience staff to foster hope and positive recovery outcomes for participants. This project is designed to ensure alignment with best-practice standards for lived experience (e.g., National Eating Disorder Collaboration guidelines).

INNOVATION IN PRACTICE AND PROCESS

Wandi Nerida will remain the only residential treatment centre delivering an innovative pilot model of care in Australia until mid-2023/early 2024. It continues to be the learning base for continuous improvement not only for itself but all the other residentials in development around the country. Some of the innovation in practice with the model is highlighted below:

Alumni and graduation

As part of the model of care and progression through phased treatment discharging participants undergo a graduation ceremony. The graduate reads a letter of hope to all staff, family, and participants and then everyone is invited to comment on the individual's journey. Post discharge participants are invited to stay connected through a private social media page and return to Wandi Nerida annually to celebrate and renew recovery.

Recovery navigators & Use of lived experience

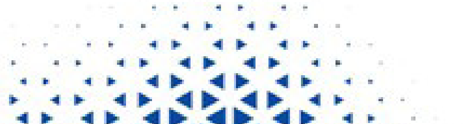
The Recovery navigator role is a new position in eating disorder services in Australia. They are staff with lived experience working alongside participants to support not only clinical care but also help participants through challenging daily activities like meals or group attendance. The role is like peer mentorship roles seen in other mental health services, but the scope is not the same.

The BFREEDT model of care values the power of lived experience. Currently 35% of staff employed across the health service have lived experience. This has helped establish an empathic workforce.

Holistic evidence-based treatment model in a natural Australian bushland setting

The program and facility have been designed to promote connection with the environment and nature.

Therefore, in addition to evidence-based treatments such as CBT, treatment will focus on developing social connection, along with connection with country and nature (wider systemic context). This will be facilitated by being a natural bushland setting and incorporating complementary treatment modalities that have shown some evidence to be effective, specifically Permaculture (Ecopsychology), Yoga and Equine-Assisted Psychotherapy.



Equine and nature-based therapy are offered weekly. The 25 acres the model operates on allows for a permaculture program. There is a residential therapy dog onsite, guinea pigs, chickens and the horses who all require care from the participants (Appendix – Participant Program)

<u>Bursary</u>
Equity to attend Wandi Nerida has been covered in previous sections. To date, Wandi Nerida is the only private hospital offering individual bursary support to participants to attend

<u>Power of the social milieu.</u>
As the dynamic of the social milieu is viewed a powerful agent for change, group therapy is the main vehicle of the treatment program. This allows for peer feedback/reflection, validation, accountability, and support.

<u>Home-like environment with hands-on food preparation experience</u>
The goal is to model a home-like environment so that clients can envision recovery when they are back in their own homes. This environment allows them an opportunity for hands-on experiences such as portioning food and preparing meals as well as sitting at a family table.

In addition to practice variation Wandi Nerida has also introduced processes that strive towards innovation and best practice.

Examples of this are:

<u>Streamlining referral and admission processes with consumer involvement</u>
The Electronic Medical Record (EMR) commences on referral with the referral process undertaken in a secure online platform.

On submission, the team process the referral and commence the intake assessment process all within the EMR. Each step of the intake process involves the participant gaining understanding of the program, the requirements to be successful and engages them in planning their care. Participants and their families interact with Wandi Nerida using the online platform to submit the participant agreement, a self-assessment of their current health, both physical and mental health, bursary application and medical reviews. The medical record is the source of truth for the staff when providing care and measuring improvements in participant recovery.

<u>Preparing for short notice NHQS assessment</u>
Despite Wandi Nerida practicing continuous improvement, evidence collection and reporting for Accreditation audits needs a focused approach to accommodate short notice surveys. One Vault have been contracted so reports can be generated by any mix, number and type of standard. An accreditation module enables staff to:

- Add evidence and identify gaps again each standard.
- Allocate actions required.
- Alerts and notification functions
- Provide a comprehensive link/ report to all training, policies, audits

This provides a process that is incorporated into daily business and available for perusal in a structured fashion on a day-to-day basis. As it is a web-based system staff and approved external foot stakeholders can access the system from home or remotely.

APPLICABILITY TO OTHER SETTINGS

Wandi Nerida has a core purpose and aim to establish an evidence base for the implementation of residential eating disorder treatment facilities in other states of Australia. To date the following states and territories have visited Wandi Nerida and remain involved in ongoing consultation.

- NSW project team for the new service being built in Newcastle. (Expected opening Mid 2023)
- Victorian project team for the new residential CBD service. (Expected opening 2024)
- ACT project team and ACT Minister for Mental Health, residential facility expected opening 2024.
- SA project team for residential facility (expected opening TBA)
- Tasmanian project team for Hobart facility (expected opening 2024)

In addition, Federal Ministers have visited Wandi Nerida and WA remain in consultation.

In September 2022, all the above teams were invited to participate in training and supervision onsite by Carolyn Costin who travelled from the United States to deliver training. The states and territories attended, and a network has been developed to share information and resources.

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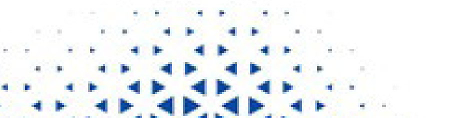


APPENDIX

Appendix 1. Participant Feedback

'I've never been in an environment that offers and is filled with constant (relentless) empathy, care, support, acknowledgement and validation that's truly genuine.'

'I really do think that my journey starts today. I have realized that I am sick enough and I do deserve help and I do deserve recovery. I am both hopeful and terrified of what the rest of my stay at Wandi will look like, but the goal is recovery and I believe that I can do that. I know that it will be hard, and I will acknowledge the struggles and celebrate the wins no matter how small. Every day is a new day and I can't keep letting my yesterday influence my tomorrow.'

'I still battle with my depression and eating disorder every day. But I am stronger because of what I have been through here at Wandi. I have discovered more about myself and challenged myself in ways I never thought possible.'

*'The person sitting here talking to you today is a whole new person. I have a new-found confidence, I've learnt to trust my decisions, I laugh, I smile, I find small things throughout my day that bring me joy, I even sing and **mindfully** dance while packing the dishwasher.'*

'This admission has not only physically saved my life but has brought back a version of myself that my family and friends haven't seen in years.'

'I have never felt more supported or understood than I do now being here at Wandi. You can tell that every member of the Wandi family is here for the right reasons, and I am so, so grateful to be part of this incredible (challenging) experience.'

'I don't think words can describe what this journey has been like. It has been the hardest, most painful thing I have ever done, but also the most freeing. As I prepare to leave today, I have the one thing that I didn't believe possible to have- hope.'

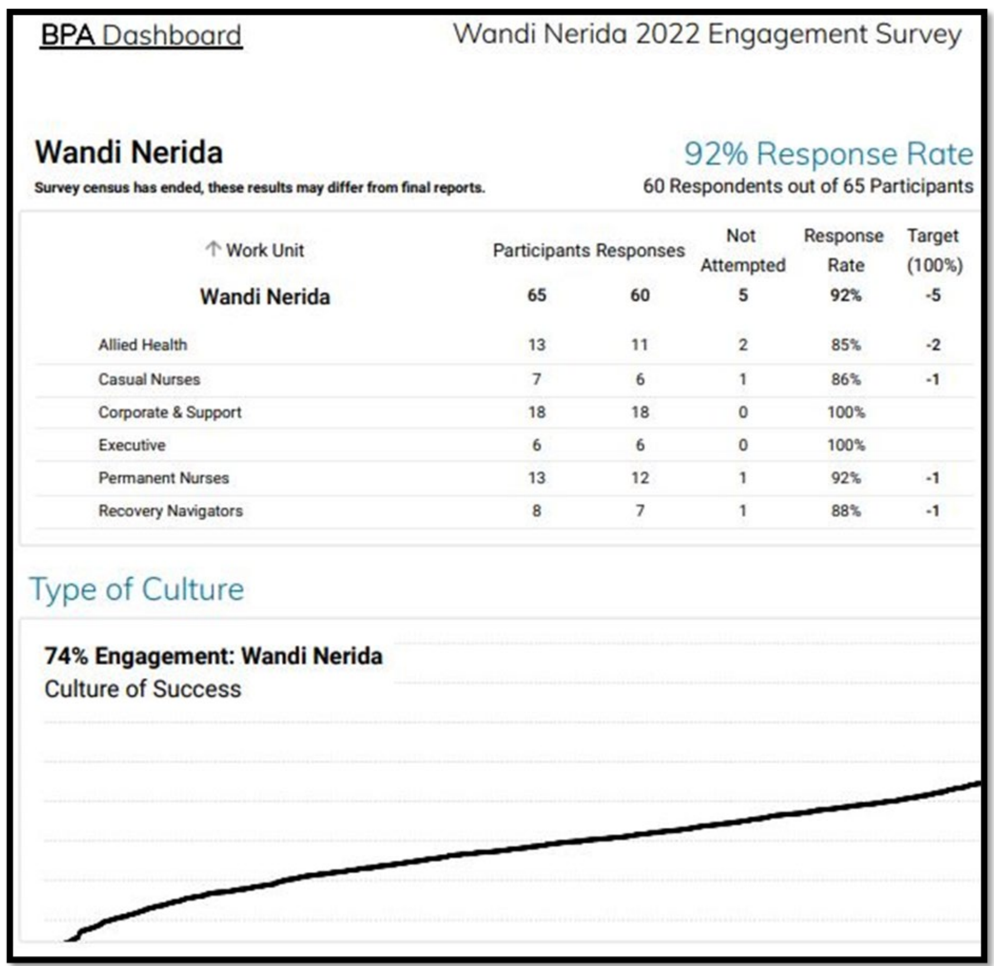
'Wandi Nerida provided for me a place that for the first time in my life felt like a home. It gave me a place that I felt safe, cared for and like no matter the difficulty and struggles in my day that I was a person who deserved kindness and love and nothing but that. Something that the team at Wandi Nerida and the Butterfly Foundation must be extremely proud of is the culture of being met with kindness in all circumstances and the opportunity to learn, grow and reflect on decisions made in a moment.'

'The lived experience aspect and the Recovery Navigators I believe are what are the heart and soul of Wandi Nerida. Not only are they inspiring people in themselves, but they are so caring and compassionate and have fended and ear to listen or a shoulder to cry on. They validated all emotions feelings and experiences, and you knew when they spoke to you it was coming from a place of understanding and knowing what you are going through. A connection and experience like no other I have had before.'

'The team at Wandi Nerida have been beyond supportive of my recovery journey and have given me my life back. I have made not just friends but family that I will have forever and hold dearly in both staff and participants. Something that my life has lacked for the last 26 years.'

'My journey in recovery is certainly not over, and I am continuing to work on it every day. But thanks to Wandi Nerida, I wake up every day with a confidence in myself and my ability to face any challenge that comes my way.'

Appendix 2. BPA Report



BPA Dashboard

Wandi Nerida 2022 Engagement Survey

Wandi Nerida

Survey census has ended, these results may differ from final reports.

92% Response Rate

60 Respondents out of 65 Participants

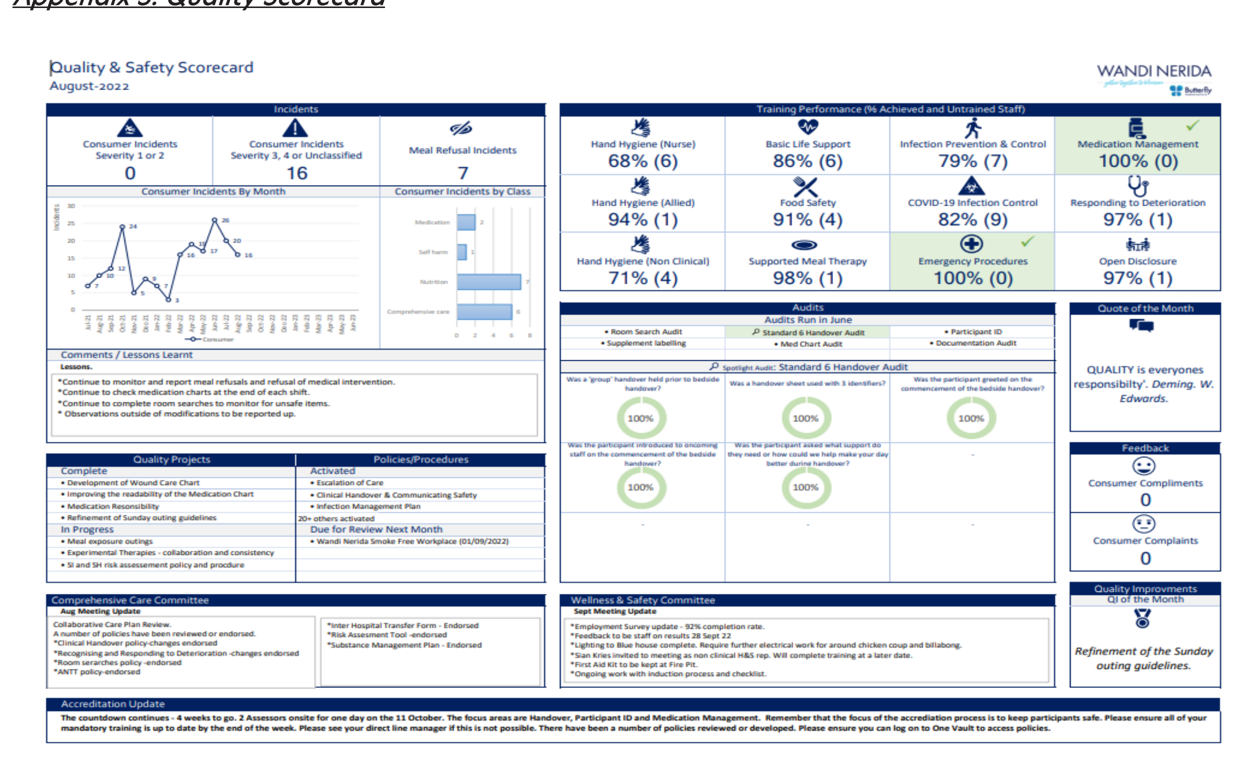
Work Unit	Participants	Responses	Not Attempted	Response Rate	Target (100%)
Wandi Nerida	**65**	**60**	**5**	**92%**	**-5**
Allied Health	13	11	2	85%	-2
Casual Nurses	7	6	1	86%	-1
Corporate & Support	18	18	0	100%	
Executive	6	6	0	100%	
Permanent Nurses	13	12	1	92%	-1
Recovery Navigators	8	7	1	88%	-1

Type of Culture

74% Engagement: Wandi Nerida

Culture of Success

Appendix 3. Quality Scorecard



Appendix 4. Clinical Indicator Report

Clinical Indicator Report

Clinical Indicator	KPI since October 2021	New KPI
BMI change	95% pts show monthly BMI increase	95% of pts with "restore" nutritional goal show monthly BMI increase
Progress through phases	90% pts progress through the phases each month	Remove KPI and progress graph from scorecard Continue to report current participant phase status Continue to report average time in phases on scorecard
CGI-I	95% completion of clinician-reported CGI-I	No change
HONOS	Not previously a KPI	95% completion of clinician reported discharge HONOS
Loved one support	Net promoter score - not launched	95% weekly carers skills groups facilitated + 95% monthly family and friends' day facilitated
Lived experience support	Net promotor score	95% 3x weekly peer support groups facilitated
Supportive Meal Therapy	Net promoter score	<5 meal refusals per week (i.e., 90% meals being fully completed)
Assignment (8 keys) completion	Not previously a KPI	90% assignment completion

Background:

BMI change Led by the Dietitians, the Wandi Nerida clinical team have developed robust clinical indicators for setting nutrition goals of either "restore" or "maintain" for participants. These indicators are attached to this paper and are based on evidence-based and best-practice approaches to the treatment of eating disorders.

Increase in BMI is considered standard practice and is expected for all participants with a "restore" nutrition goal.

Participants on a "maintain" nutrition goal may show an increasing, decreasing, or stable BMI. There is no current evidence to show that BMI increase for participants who are fully health restored is beneficial to long-term recovery outcomes.

Therefore, a change to the current KPI for BMI is proposed in which a monthly BMI increase for 95% of participants will be evident for participants on a "restore" goal only.

A report will also be provided showing the percentage of participants on restore and maintain nutrition goals.

Progress through the phases

The B-FREEDT Model of Care© (MoC) posits that progress through the phases of care at Wandi Nerida is highly individualised and is based on the underlying treatment philosophy that participants present with both a "healthy self" and an "eating disorder self" (see Costin & Grabb, 2011).

Progress through the phases is based on the strength of the "healthy self" and is an important clinical outcome and strong indicator of progression towards recovery. Due to the individualised nature of treatment the pace of progression is not considered as positively associated with clinical outcomes.

As the model is the first of its kind in Australia, limited evidence exists for other treatment models using phased systems of care. No external benchmarks exist that will successfully measure clinical KPIs against progression through phases in a way that is meaningful to our service, as per the ACHS guidelines for clinical indicators.

Therefore, removal of the KPI for progression through the phases is proposed.

Data on participant phase status and average length of time in phases will remain as useful descriptive information as agreed in the May 2022 BRC Board meeting.

Clinical Global Impression Scale – Improvement (CGI-I)

No issues have been identified with the CGI-I and therefore no change is recommended.

Health of the Nation Outcome Scales (HoNOS)

The HoNOS is a 12-scale clinician-rated measure developed by the Royal College of Psychiatrists to guide everyday clinical practice and measure health and social care outcomes in secondary care mental health services for working-age adults (18–65 years. See www.ncbi.nlm.nih.gov). It is routinely collected at Wandi Nerida and results reported to Queensland Health.

Therefore, **the addition of HONOS completion at discharge is proposed** with the KPI target being 95% completion for discharged participants in-line with CGI-I reporting.

Loved one engagement

Support for loved ones is an integral part of the B-FREEDT MoC©.

A net promotor score was previously identified as a way of capturing loved one perspectives on their involvement in treatment. This has not been launched to date.

Carer perspectives are subjective and are captured robustly in the external clinical evaluation as a measure of clinical outcome. These are provided in a separate report and include the following measures at admission, discharge, and 3-month follow-up:

- Caregiver Burden Inventory
- Accommodation and Enabling Scale for Eating Disorders
- Kessler Distress Index (K10)
- EQ-5D-5L
- Modified Carer Experience of Service (CES) survey
- Resource Use Questionnaire

Therefore, removal of the net promoter score as the KPI is proposed and the addition of a new, objective KPI as measure of success against the B-FREEDT MoC© is proposed:

- Weekly carer skills groups facilitated by Wandi Nerida clinicians
- Monthly family and friends' day facilitated by Wandi Nerida clinicians
- KPI of 95% to allow for staff absence

The title of the clinical indicator will be changed to "loved one support" and will be included under a new heading on the balanced scorecard to reflect model of care alignment.

Live Experience Involvement

Lived experience (LE) support is integral to the B-FREEDT MoC© and is promoted through the recruitment of staff with a LE of recovery from an eating disorder or caring for someone with an eating disorder (minimum 2 years' recovered).

A net promotor score was previously launched as a way of capturing participant perspectives on lived experience involvement in their treatment and a clinical KPI developed for this.

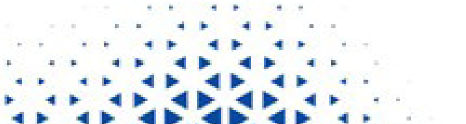
Participant perspectives are subjective and there is no current evidence to benchmark the link on participant perspectives on LE involvement to positive recovery outcomes.

Therefore, removal of the net promoter score as the KPI is proposed and the addition of a new, objective KPI as measure of success against the B-FREEDT MoC© is recommended:

- 3x weekly Peer support groups, facilitated by LE staff at Wandi Nerida
- KPI of 95% to allow for staff absence

The percentage of staff with a declared LE can also be captured in standard HR reporting and serve as useful descriptive data.

The title of the clinical indicator will be changed to "lived experience support" and will be included under a new heading on the balanced scorecard to reflect model of care alignment.



Supportive Meal Therapy (SMT)

SMT is integral to the B-FREEDT MoC© and is a cornerstone of the clinical program. SMT is provided to participants at every meal with the aim of supporting participants to complete the required nutrition for recovery.

A net promoter score was previously used to capture participant perspectives on SMT and a clinical KPI developed for this.

As with LE support, participant perspectives are subjective and there is no current evidence to benchmark the link on participants perspectives on SMT within a residential program to positive recovery outcomes.

Therefore, removal of the net promoter score as the KPI is proposed and the addition of a new, objective KPI as measure of success against the B-FREEDT MoC© is proposed:

- Less than 5 meal refusals per week

This has been calculated by the number of meals supported by staff each week (42) and setting the KPI as 90% of these being fully completed (more than 37.8 meals).

The decision was made to include total meals (42) rather than meals per participant (13x42 = 546) due to the complexity of this and that SMT is designed to be delivered in a group setting utilising a whole-milieu support approach.

The SMT clinical indicator will be included under a new heading on the balanced scorecard to reflect model of care alignment.

Assignments (8 keys) completion

The B-FREEDT MoC© is based heavily on Carolyn Costin's treatment philosophy which is described in the book "8 keys to recovery from an eating disorder" (Costin & Grabb, 2011). The 8 keys book and accompanying workbook include recovery-focused assignments and are provided to all participants as part of their therapeutic work at Wandi Nerida.

Assignment completion and review is a core part of therapy at Wandi Nerida and progression through the phases is dependent on high levels of participant engagement with this.

Therefore, the addition of assignment (8 keys) completion is proposed as a clinical indicator to measure success against the B-FREEDT MoC©, with the KPI being 90% assignment completion to allow for variations in assignment writing dependent on clinical need.

The assignments (8 keys) clinical indicator will be included under a new heading on the balanced scorecard to reflect model of care alignment.

Appendix 5. Version 3 Participant Program

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
7:45 - 8:45	Breakfast (8:15)	Breakfast (8:15am)	08:15 - 10:15 Breakfast outing	Breakfast (8:15am)	Breakfast (8:15am)	Breakfast (8:15am)	Breakfast (8:15am)
09:00 -10:00	Core Process	Assignment writing/journalling MDT		Yoga	Core Process	Yoga	09:00 - 11:45 Social Outing
10 - 10:30	Morning Tea (10.15am)	Morning Tea (10.15am)	10:30 - 11:00 Morning Tea (10:45am)	Morning Tea (10.15am)	Morning Tea (10.15am)	Morning Tea (10.15am)	
10:30 - 11:30	10:45 - 11:30 Milieu Meeting/Graduation ceremonies	Nature-based learning		11:00 - 12:15 Equine Life admin/ assignments/ journalling	11:00 - 12:15 Equine Life admin/ assignments/ journalling	Social outing snack pack (ph 1&2) 10:45 - 12:15 Supermarket shop (ph 3&4)	
11:30 - 12:30	Assignment writing/journalling (ph 1&2) Cooking Group (ph 3&4)	11:45 - 12:30 Assignment writing/journalling	11:15 - 12:15 Core Process			Milieu Activity (ph 1&2)	
12:30 - 13:30	Lunch (1pm)	Lunch (1pm)	Lunch (1pm)	Lunch (1pm)	Lunch (1pm)	Lunch (1pm)	11:45 - 13:00 Milieu Activity Lunch (1pm) (portioned by staff)
13:45 - 14:45	Peer Support Group	Exercise Physiology Group	13:45 - 14:15 Mindfulness Practice 14:15 - 14:45 plan for Sunday outing	Drama Group	Art Therapy	1st, 3rd, 4th Saturday Psychology Group 2nd Saturday of the month Family & Friends Group	Family visits/ connection House clean Milieu Activity
15:00 - 15:30	Afternoon Tea (3.15pm)	Afternoon Tea (3.15pm)	Afternoon Tea (3.15pm)	Afternoon Tea (3.15pm)	Afternoon Tea (3.15pm)	Afternoon Tea (3.15pm)	Afternoon Tea (3.15pm)
15:45 - 16:45	Psychology Group	Nutrition Group	Psychology Group	Psychology Group	Assignment writing/journalling	Family visits/connection until 5pm Milieu Activity	Family visits/connection until 5pm House clean Milieu Activity
16:45 - 17:45	17:00 - 17:45 Commitment planning	17:00 - 17:45 Commitment review & intention setting	Family connection	17:00 - 17:30 Nature walk	Milieu Activity 16:30 - 19:00 Dinner outing (ph 3&4)		
17:45 - 18:45	Dinner (6.15pm)	Dinner (6.15pm)	Dinner (6.15pm)	Dinner (6.15pm)	Dinner (6.15pm) - ph1&2	Dinner (6.15pm)	Dinner (6.15pm)
19:00 - 20:00	Family connection	Family connection	Peer Support Group 18:30 - 19:30 Family education (families only)	Milieu Activity - led by ph 3&4	Family connection	Movie Night	Peer Support Group
20:00 - 20:30	Supper (8.15pm)	Supper (8.15pm)	Supper (8.15pm)	Supper (8.15pm)	Supper (8.15pm)	Supper (8.15pm)	Supper (8.15pm)
20:30 - 21:00	Evening Mindfulness (10m)	Evening Mindfulness (10m)	Evening Mindfulness (10m)	Evening Mindfulness (10m)	Evening Mindfulness (10m)	Movie Night cont.	Evening Mindfulness (10m)
21:00 - 21:30	Self-care	Self-care	Self-care	Self-care	Self-care	Self-care	Self-care
21:30 - 22:00	Lights Out	Lights Out	Lights Out	Lights Out	Lights Out	Lights Out	Lights Out

CLINICAL EXCELLENCE AND PATIENT SAFETY

HIGHLY COMMENDED

Northern Health, VIC

Respiratory

Northern Health - Pleural Medicine Unit

Sanjeevan Muruganandan, Katharine See, Kirstin Tirant

AIM

The establishment of the Pleural Medicine Unit (PMU) aimed to deploy evidence-based practice more consistently and reduce unwarranted variations in care. This was intended to improve quality and safety for people with pleural disorders presenting to Northern Health (NH).

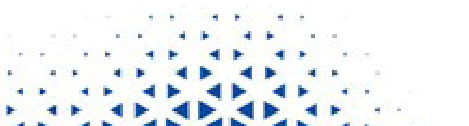
SUMMARY ABSTRACT

Pleural disease represents a heterogenous group of conditions (Feller-Kopman & Light 2018; Maskell. 2010) and is estimated to affect 60,000 Australians annually (Lee 2022). The most common include congestive cardiac failure, pleural infection, and malignant pleural effusion (Feller-Kopman & Light 2018). As the burden of pleural disease rises and advances are made in their investigation and management, there is a need to develop dedicated services to ensure translation of this evidence and to ensure standards of care are increased (Bhatnagar & Maskell 2013).

The catchment serviced by Northern Health (NH) experiences a high burden of pleural diseases and care has previously been fragmented due to a lack of expertise and difficulty accessing thoracic surgical services. There was a large variability in terms of admitting units, subsequent management, length of stay and outcomes as well as inconsistencies in the pathology tests ordered on pleural fluid samples. Furthermore, pleural procedures were performed by a junior medical staff remotely on the ward following the marking of a site in the Radiology Department using thoracic ultrasound. This resulted in a cluster of adverse events at NH, and thus the management of pleural disorders was identified as a clinical risk for the organisation.

To mitigate this identified risk, and with the support of published evidence for a dedicated service, the Pleural Medicine Unit (PMU) was established in 2019 at NH, a first dedicated specialist unit of its kind in Victoria. The aims of PMU are to provide high-quality, evidence based, patient-centred and streamlined services for patients with pleural diseases. This in turn improves patient safety, reduces length of stay and offers training opportunities to trainees and junior medical personnel. Key to this model of care is the development of a specialised pleural nurse. This has led to a reduction in the workload of the Radiology Department and ward-based medical staff, with enhanced safety of pleural interventions and standardisation of care. Capabilities of the unit include advanced thoracic ultrasound, real time ultrasound-guided diagnostic and therapeutic procedures, intrapleural therapy and ambulatory management of pleural disorders.

Performing pleural procedures safely in line with international guideline (Havelock et al. 2010) is a key priority for the PMU at NH. The use of ultrasound guidance during procedures is imperative in reducing risk for all pleural procedural interventions (Havelock et al. 2010). A study of thoracentesis involving >500 patients reported an incidence of pneumothorax requiring chest tube insertion in ~5% of patients (Boland et al. 1998). The implementation of the PMU has resulted in more consistent use of ultrasound for pleural procedures, an increase from 57.3% to 85.7% $p<0.001$ (**see Appendix, Abstract 1**) which has been shown to reduce the risk of pneumothorax and organ injury. This is in



line with the development of policies and formal pathways by PMU for supervision and credentialling to perform procedures.

Metastatic cancer can often involve the pleura and frequently causes significant symptoms, such as breathlessness which impacts quality of life (Feller-Kopman et al. 2018). The aim of management is to reduce the burden of both symptoms and healthcare interventions (Feller-Kopman et al. 2018). Efficient and effective malignant pleural effusion (MPE) management is imperative. Definitive management options for MPE have transitioned from exclusive in-hospital surgical management to an ambulatory (and patient-centred) management, for which there is established evidence (Feller-Kopman et al 2018). Translating such evidence into practice is a key priority for the PMU at NH (Health Victoria article 2020). The extensive use of such definitive management options within the unit, has led to the development of an innovative and novel, nurse-led models of care, which has been the recipient of a large grant ($296,000) to extensively explore its feasibility (**see appendix Abstract 2**).

Pleural infection is common with 80,000 cases each year (Davies HE et al 2010), and estimated hospital costs of over USD$500 million (Lisboa, Waterer & Lee 2011). The median duration of hospital stay is 15 days and 25% will stay in hospital for over a month (Davies et al 1999). More concerning is, 15% of those with pleural infections will die during hospitalisation and up to 45.5% will die within 12-months (Brims 2019). It has long been suggested that delays in care impact on the outcomes of people with pleural infection, suggesting that the sun should never set on a parapneumonic effusion" (Sahn & Light 1989). Postponing an invasive procedure to manage pleural infection is associated with prolonged hospital stay, additional cost and complicated surgical management (Lardinois et al. 2005; Thourani et al. 1998). However, judging which interventions are needed to optimally manage an individual patient is complex requiring integration of multiple variables such as, patient related, pleural space characteristics and availability of expertise and resources (Semekovich et al 2018).

Since the introduction of the PMU, initial assessment and management occur quickly with early administration of intravenous antibiotics and chest tube drainage. Clinical status is reviewed daily, and a bedside ultrasound is performed to determine if there are any residual pleural collections. If there is ongoing sepsis (based on the presence of fevers or elevated inflammatory markers) and inadequate clearance of the pleural space, intrapleural therapy is started for a maximum of 3 days. Failing this (evidence of ongoing sepsis) or if there are any contraindications to intrapleural therapy, a referral for surgical intervention is made. Upon discharge, patients are followed-up for 12-months. The PMU has successfully shifted the management of pleural infections away from a 'surgery only' approach to increased use of intrapleural fibrinolysis. Data from the PMU demonstrates reduction in median length of stay from 16.5 to 8.4 days, p<0.001 (unadjusted for severity) for those with complex pleural infections avoiding surgery (**see Appendix Abstract 3**). This has improved thoracic surgery capacity, through redirection of resources to lung cancer surgery and other higher value surgical interventions.

We believe the overall aims of a dedicated pleural service have been successfully translated into practice at the NH. While also demonstrating a commitment to ongoing education for both nursing and medical clinicians, and a contributing to ongoing research in this specialty area.

CLINICAL EXCELLENCE AND PATIENT SAFETY

HIGHLY COMMENDED

Sunshine Coast Hospital and Health Service, QLD

Department of Anaesthesia and Perioperative Medicine

A quality improvement project to limit unnecessary preoperative pathology at the Sunshine Coast University Hospital (SCUH)

Dr Holly Theile, Dr Anna Pietzsch, Dr Lana Vestarkis

AIM

Preoperative pathology is an important component of the assessment of patients prior to elective surgery. The aim of this project was to evaluate current local practice for preoperative pathology at the Pre-Anaesthetic Evaluation Unit (PAEU) at the Sunshine Coast University Hospital (SCUH). The priority for improving patient care was to ensure local practice was in line with evidence-based guidelines, was sustainable and patient focused.

SUMMARY ABSTRACT

Introduction

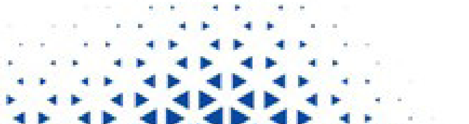
Ordering routine preoperative pathology is listed by bodies including the Australian and New Zealand College of Anaesthetists (ANZCA) and Choosing Wisely Australia as one of the top five practices anaesthetists should avoid (Choosing Wisely Australia 2017). In order to rationalise the preoperative pathology performed at the Pre-Anaesthesia Evaluation Unit (PAEU) at Sunshine Coast University Hospital (SCUH), an audit of current practice as compared to evidence-based guidelines was carried out.

Methods

Ethics exemption was obtained (EX/2021/QRBW/77010) to carry out a retrospective audit of preoperative pathology performed over a one-month period. This encompassed 527 patients having elective surgery across all surgical specialties at SCUH. The tests performed were correlated to surgical specialty, procedure type and ASA status of the patient (American Society of Anesthesiologists 2020). This was then compared to local surgeon specific guidelines and state-wide evidence-based guidelines for preoperative pathology ordering (Queensland Health 2017). A one-month re-audit of patients having urological surgery was carried out after the implementation of an updated evidence-based protocol. A second re-audit was performed the following year of patients undergoing Urological, Orthopaedic and General Surgery following further optimisation of new protocols and education amongst perioperative staff.

Results

Of the 527 patients included in this audit, 219 (41%) had incorrect pathology ordered in comparison to state-wide evidence-based guidelines (Queensland Health 2017). Practice was also found to deviate from local protocols in 236 patients (45%). In the vast majority of cases, this was due to overordering of pathology. The most commonly over ordered test was blood group and antibody screen (88), followed by full blood count (85) and coagulation studies (65). By specialty, there were four departments that overordered pathology for more than 50% of patients (Urology, Vascular Surgery, General Surgery and Gynaecology). Of note, 77% of Urology patients received blood tests that were not required. The objective outcomes of abnormal pathology were difficult to quantify; of the 527 patients there was one iron infusion ordered due to anaemia, and six other interventions



ranging from repeat blood tests to notification of the patient's General Practitioner. After implementation of updated protocols, the rate of overordering dropped from 77% to 9.8% for Urology patients. The Orthopaedic department reduced their overordering from 31.5% to 13.9%, and General Surgery overordering reduced from 28% to 12.7%. Re-auditing ensured there were no instances of patient harm, surgical delays or cancellations following implementation of the new protocols. Following the change in protocols for Urology, Orthopaedics and General Surgery, the yearly cost saving due to reduced preoperative pathology ordering was calculated to be $57,000.

Discussion

This audit highlighted the substantial over-ordering of preoperative blood tests at SCUH. The local protocols being used to guide decisions were outdated, lacked departmental ownership and deviated significantly from Queensland state-wide guidelines (Queensland Health 2017). The justification for excessive pathology testing between departments varied; surgeons were motivated to avoid delays and cancellations; anaesthetists were worried about poor patient outcomes and nursing staff were most concerned about penalty. The impact of these unnecessary tests extends beyond the dollar value, estimated to be $88,000 over a 12-month period. Other impacts include time lost by patients, the distress of blood collection and the workforce required to order, perform, and follow up pathology results. As a department with a strong sustainability focus, carbon dioxide emissions generated from unnecessary blood tests is also an important consideration and driver for change (McAlister 2020). To initiate modification of practice, formal education was provided to all stakeholders and evidence-based, mutually agreeable protocols were released and implemented. This resulted in an increase of compliance with evidence-based guidelines for patients undergoing Urological, Orthopaedic and General Surgery, with no recorded theatre delays, cancellations or patient harm. The ongoing deviation from this protocol by staff highlights the need for continuous education and review. Ultimately, we aim to update all pathology protocols in the preoperative space.

Conclusion

The need to avoid unnecessary patient interventions and low value healthcare has become even more important during the Covid-19 pandemic as we strive to reduce unnecessary face to face interventions and reduce unnecessary waste. This project has highlighted the importance of regular review of protocols to ensure they are both evidence-based and locally appropriate.

CLINICAL EXCELLENCE AND PATIENT SAFETY

HIGHLY COMMENDED

WA Country Health Service, WA

Outpatient Reform & Access

Improving access to high quality stroke rehabilitation in country WA through telehealth

Kate Hawkings, Nicole Jeffree, Ruth Warr

AIM

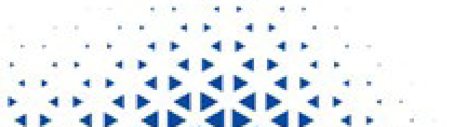
The Admitted Stroke Telerehabilitation project ("the project") is a service innovation partnership project between WA Country Health Service (WACHS) and North Metropolitan Health Service (NMHS), aiming to demonstrate quality improvement through improved access to safe and effective patient-focused specialist stroke rehabilitation closer to home for patients living in the Midwest region of Western Australia. The project objectives were to (i) develop, trial, and evaluate a stroke telerehabilitation service model to provide safe and effective consumer-focused care to patients admitted at Geraldton Hospital (phase 1) and (ii) identify mechanisms for sustainable delivery of specialist stroke rehabilitation via telehealth to patients admitted at Geraldton Hospital with scalability to other WACHS sites (phase 2).

SUMMARY ABSTRACT

It is estimated 550 people living in rural WA suffer a stroke every year, with regional Australians 19% more likely to suffer a stroke than those living in the city2 . This health inequity is further exacerbated by limited timely access to specialist stroke assessment and treatment for rural patients, resulting in poorer survival rates and outcomes for stroke survivors. The Australian Stroke Foundation clinical guidelines recommend stroke patients be admitted to a specialist stroke unit for access to treatment and rehabilitation by an interdisciplinary team4 with clear evidence this access significantly improves outcomes for stroke survivors. However, with small numbers of patients treated for stroke regionally, most rural hospitals do not have the specialised stroke units or specialist workforce to deliver this best practice care. Consequently, regional stroke patients are required to travel hundreds of kilometers to access metropolitan based specialist acute stroke and rehabilitation care. In 2016/17, 30% of patients with stroke presenting to Geraldton Hospital in the Midwest region required transfer to a metropolitan stroke unit to receive specialist stroke rehabilitation, removing patients from their local community and social support networks.

The Admitted Stroke Telerehabilitation project ("the Project") is a service innovation partnership between WACHS and NMHS, that has demonstrated quality improvement through the delivery of safe and effective patient-focused care for enrolled patients in the Midwest region by linking patients and clinicians at Geraldton Hospital to metropolitan Osborne Park Hospital (OPH) specialist stroke unit for clinical handover and treatment sessions, multidisciplinary team meetings and regional workforce stroke education via telehealth.

The project has been successful in meeting key objectives as outlined below and detailed further in this submission, to: (i) develop, trial and evaluate a stroke telerehabilitation service model to provide safe and effective consumer-focused care to patients admitted at Geraldton Hospital (phase 1); and (ii) identify mechanisms for sustainable delivery of specialist stroke rehabilitation via telehealth to patients admitted at Geraldton Hospital with potential scalability to other WACHS sites (phase 2).



During phase 1 of the Project (April 2018 – June 2021) 219 clinical consultations were delivered from the OPH stroke rehabilitation unit to 67 patients admitted at Geraldton Hospital and 130 multidisciplinary team meetings completed between OPH stroke rehabilitation unit and Geraldton Hospital clinicians. Evaluation of the Project demonstrated improved access, experience and clinical health outcomes for enrolled patients together with increase health service efficiency at Geraldton Hospital. Collaboration between internal WACHS units on the development of a bespoke dashboard enabled reliable pre and post implementation comparison of patient outcomes between a control and study group demonstrating continuous improvement and performance against best practice and key Stroke Foundation National Stroke Rehabilitation Audit KPIs. Key outcomes demonstrated during phase 1 of the Project at Geraldton Hospital included: (1) improved quality of admitted stroke rehabilitation8 ; (2) 19% increase in patients receiving stroke rehabilitation being discharged directly home – indicating improved functional recovery; (3) 22% reduction in length of stay for stroke rehabilitation; (4) very high levels of patient and clinician satisfaction; and (5) objective demonstration of cost avoidance attributable to the service model based on improved service efficiencies.

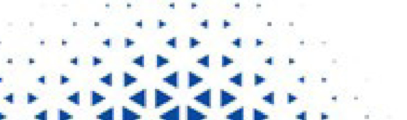
Following successful implementation of the admitted stroke telerehabilitation model of care at Geraldton Hospital and demonstration of service efficiencies and cost avoidance, transition from seed to regional hospital operational funding occurred in July 2021 providing a practical framework and precedence for broader organisation-wide service expansion to other regions.

The Project design and methodology, informed by key organisational values of equity and quality, sought to enable regional patient access to timely high-quality specialist care, in line with metropolitan consumer access. Delivering care via telehealth enabled enrolled patients to stay closer to home maintaining their social support network. This was supported by dedicated specialist clinicians from NMHS - OPH, to provide specialist stroke service delivery via telehealth to patients admitted at Geraldton Hospital, 450km north of Perth. The project was led by the WACHS Clinical Telehealth Development Program. Clinical and project resourcing was provided by the WACHS Country Health Innovation – Digital Innovation, Transport and Access to Care (CHI-DITAC) program.

Detail of how the Project aligns to the ACHS principles of consumer focus, striving for best practice, continuous improvement, effective leadership, and evidence of outcomes is further outlined within the Report section of the submission.

CLINICAL EXCELLENCE AND PATIENT SAFETY

TABLE OF SUBMISSIONS
Advance Care Planning Australia Advance Care Planning Improvement Toolkit *Linda Nolte, Casey Haining, Xanthe Sansome*
Austin Health, Delirium & Cognitive Care Committee, VIC Delirium Prevention, Identification and Management at Austin Health *Emma Wadeson, Tegan Howard*
Austin Health, Radiology Department, VIC ETMS: Austin's Electronic Solution for AS4187 High Level Disinfection Documentation *Michael Huynh*
Calvary Medibank JV Pty Ltd, SA Partnering with consumers and health service providers to support COVID-19 positive clients at home with safe, high-quality, holistic care *John Merchant*
Echuca Regional Health, Acute, VIC BUILDS (Bridging the Urban and regional Divide in Stroke care): a pilot Telestroke Unit service *Ms Lauren Arthurson, Dr Philip Choi, Dr Felix Ng*
GenesisCare CancerCare, Radiation Oncology, QLD Adapting the well-known concept of Hospital Leadership Rounding to embed a strong safety culture in an outpatient treatment facility *Julie Ward, Julie Hickey*
Gold Coast Hospital and Health Service, Patient Access and Flow Unit, QLD Demand Management and Escalation Strategy *Michelle Havell, Andrew Fisher, Sharon McDowell Skaines, Paula Duffy*
Healthscope Pty Ltd, Office of the Chief Medical Officer - Clinical Governance Creating an 'Always Ready' approach to Accreditation *Ann Knight, Melissa Clune, Damien Lloyd, Deanne Warwick*
Hunter New England Local Health District, Allied Health Department, NSW Keeping patients with food allergies safe *Cassandra Knight, Amber Thoroughgood, Kim Nguyen, Clare Daley, Ian Schumacher, Rani Bhatia, Jodie O'Donnell, Shane Reardon*
Hunter New England Local Health District, Chronic Disease Network/Palliative and End of Life Care Stream, NSW Supportive Care: what matters most? *A/Professor Katie Wynne, Laureate Prof John Attia, Jane Kerr, Sarah Pullen, Mary-Anne Dieckmann, Sarah Russo, Dr Sharon Ryan, Dr Steven Bollipo*
Illawarra Shoalhaven Local Health District, Nutrition and Dietetics Department, NSW Reducing Hospital Acquired Malnutrition *Elise Gruber, Michelle Hudoba*
King Edward Memorial Hospital, Obstetric and Gynaecology Directorate, Women and Newborn Health Service, WA Perceptions and Intentions of Pregnant Women toward COVID 19 Vaccinations; Reasons for Vaccine Hesitancy *Caoimhe Ward*



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King Edward Memorial Hospital, Pharmacy Department, Women and Newborn Health Service, WA
Pharmacist Medication Charting - Implementation of a successful charting model
Michael Petrovski, Stephanie Teoh, Nabeelah Mukadam, Tamara Lebedevs, Claire Kendrick, Leah James, Deborah Gordon

King Edward Memorial Hospital, Women's Health, Genetics and Mental Health Directorate, Women and Newborn Health Service, WA
Responding to Chief Psychiatrist Review to enhance patient care at Women and Newborn Health Service
Gillian Ennis, Kara Hart, Brendon Jansen, Chinar Goel, Tony Kalathil Jose, Lorraine Kidd, Fiona Stevenson

Liverpool Hospital, Liver Clinic, Department of Gastroenterology and Hepatology, NSW
Roaming Liver Clinic for Liverpool Mental Health Inpatients
Sicha Manandhar, Melissa Bagatella, Dr Scott Davison, Dr Matthew Thomas

Liverpool Hospital, Orthogeriatrics, Department of Geriatric Medicine, NSW
Enhanced Weekend Physiotherapy for Patients with Hip Fracture
Ram Ghimire, Lynette McEvoy, Elise Tcharkhedian, Jonathan Boey, Anubhav Katyal, Danial Mahmood, David Lieu, Danielle Ní Chróinín

Maryvale Private Hospital, Quality & Risk, VIC
The role of music medicine to enhance perioperative patient experience
Linda Hillman, Angelina Draper

Northern Adelaide Local Health Network, SA Health, Palliative Care, SA
Palliative Care Link Nurse Program
Kerri Grant

Northern Health, Respiratory Department, VIC
Northern Health - Pleural Medicine Unit
Sanjeevan Muruganandan, Katharine See, Kirstin Tirant

Northern Sydney Local Health District, Mental Health Drug and Alcohol (MHDA), NSW
Enhancing Clinical Handover in Mental Health Drug and Alcohol (MHDA) Settings through ISBAR Video educational resources
Suzanne Glover, Diane Paul, Alice Lance

Northern Sydney Local Health District, Northern Sydney Cancer Centre (based at Royal North Shore Hospital), NSW
The role of the Cancer Helpline during the COVID-19 pandemic
Rebecca Needham, Kate Lyons, Meredith Oatley

Perth Clinic, Clinical Improvement Team, WA
Perth Clinic Self Harm Prediction
Lynne Walker, Geoff Hooke, Andrew Page

Royal North Shore Hospital, Northern Sydney Local Health District, Department of Intensive Care, NSW
Developing a novel ICU follow-up service for our sickest patients
Wade Stedman, Lachlan Donaldson, Tessa Garside, Naomi Hammond, Helen Ganley

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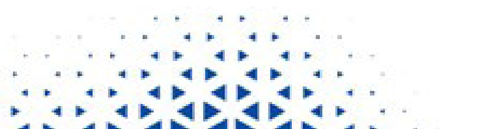
St John of God Mt Lawley Hospital, Specialist Rehabilitation Service, WA A journey to align with best practice rehabilitation guidelines to improve the patient experience and clinical outcomes *Rita McIlduff*
St John of God Ballarat Hospital, Wound Care Department, VIC Implementation of an Air Cell Mattress Consignment Program to reduce Hospital Acquired Pressure Injuries *Carolyn Mornane, Joanne Carta*
Sunshine Coast Hospital and Health Service, Medical Services Directorate, QLD Rapid Access to Planning, Intervention and Decision-making (RAPID) Service, Sunshine Coast University Hospital Pilot Program *Jane Neill, Deborah Murray, Khalid Ali, Shiv Erigadoo, Wesley Shann*
Sunshine Coast Hospital and Health Service Queensland Health, Department of Anaesthesia and Perioperative Medicine, A quality improvement project to limit unnecessary preoperative pathology at the Sunshine Coast University Hospital (SCUH) *Dr Holly Theile, Dr Anna Pietzsch, Dr Lana Vestarkis*
Surgical, Treatment and Rehabilitation Service (STARS), Metro North Hospital and Health Service, QLD Orthoptic streamlined workflow processes within ophthalmology outpatients *Breanna Ban, Kellie Stockton*
Surgical, Treatment and Rehabilitation Services (STARS), Safety and Quality, QLD Using a Care Continuum Roadmap model to drive quality improvement information from Ward to Board *Vikki Goldup, Dale Dally Watkins, Ella van Raders*
Sydney Adventist Hospital, Prostate Centre of Excellence, NSW Patient Safety, Tolerability and Feasability using Transperineal Biopsy under Local Anaesthesia *Anika Jain, Anthony-Joe Nassour, Hadia Khannani, Levina Saad, Henry Woo*
Sydney Local Health District, Oral Health Services, NSW Monitoring Assessing Dental (MAD) Project *Prof. M. Ali Darendeliler, Dr Hui Theng Chong, Dr Oyku Dalci , Dr Geetika Sachdeva,Dr Mary Hatem, Dr Trupta Desai, Dr Jason Cheng, Prof Sameer Bhole*
Sydney Local Health District, Paediatric Dentistry Oral Health, Sydney Dental Hospital Oral Health Services, NSW Making the impossible VIRTUALLY possible - remote paediatric dental care provision *Dr Harleen Kumar, Dr Jason Cheng, Dr Lloyd Hurrell, Lara Mayze, Trolisa Knudsen, Angela Rankin, Neville Heer*
The Kilmore & District Hospital, Theatre, VIC Eliminating surgical plume from our theatres for the safety of staff, doctors and community. *Anne Holt, David Clark*
Townsville Hospital and Health Service, Healthcare Standards Unit, QLD Implementation of an organisational wide physical restraint triage and review process *Ross Nicholls*



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Townsville Hospital and Health Service, Rural Health Service Group, QLD
Partnering with Palm Island First Nations community to deliver COVID-19 care on country
Danielle Causer, Judy Morton

WA Country Health Service, Outpatient Reform & Access, WA
Improving access to high quality stroke rehabilitation in country WA through telehealth
Kate Hawkings, Nicole Jeffree, Ruth Warr

WA Country Health Service South West, Busselton Health Campus, WA
Reducing length of stay while improving satisfaction
Dr Luke Kain, Mr Allen Chong, Natasha O'Neill, Riza Gultekin, Gemma Moyes, Kristy Walker, Piari Skeers

Wandi Nerida, Service Wide, QLD
Wandi Nerida: A new residential model of care to treat eating disorders in Australia
Jodie Ashworth, Danielle Dougherty, Dr Catherine Houlihan, Belinda Scott

Western Sydney Local Health District, Blacktown Hospital Physiotherapy Department, NSW
BOOST: Boosting Inpatient Exercise after Hip Fracture Using an Alternative Workforce: An Implementation Evaluation
Ms Marie March, Ms Sarah Caruana, Dr Stephanie Polley, Associate Professor Sarah Dennis, Associate Professor Allison Harmer, Mr Ian Starkey, Dr Bijoy Thomas

Western Sydney Local Health District, Cardiology Department: Heart Failure Service, NSW
Improving Patient Outcomes Through a Multidisciplinary Care for Heart Failure
Elizabeth Goode, Dr Gary Gan, Dr David Burgess

Western Sydney Local Health District, Infection Prevention and Control Department, NSW
HIRAID-AgedCare: Improving Quality and Safety of RACFs
Prof Ramon Shaban, Prof Kate Curtis, Prof Margaret Fry, Prof Brendan McCormack, Prof Deborah Parker, Ms Margherita Murgo, Dr Mary Lam, Prof Lee-Fay Low

Western Sydney Local Health District, Qudos Bank Arena Mass Vaccination Centre, NSW
WSLHD COVID-19 Vaccination Program
Emma McCahon, Amanda Green, Megan Byrne, Leanne Watson, Peter Hockey, Shah Huda, Christina Igasto, Matt Sydenham

Western Sydney Local Health District, Surgery Department, Westmead Hospital, NSW
Westmead Enhanced Recovery After Surgery
A/Prof James Wei Tatt Toh

NON-CLINICAL SERVICE DELIVERY

WINNER

Gold Coast Hospital and Health Service, QLD

Strategy, Transformation and Major Capital division

Embedding a culture of transformation at Gold Coast Health

Sandip Kumar, Tracey Brook, Alana Myers, Jonathan Carver, Adelaide Michael

AIM

With the aim of embedding a sustainable, continuous improvement culture, Gold Coast Health has set about aligning strategy, design, and execution of major change through the establishment of the Future Focus Transformation Program.

With supporting problem-solving, program and project management functions to build capacity and capability in healthcare transformation, the Future Focus Transformation Program was established with the goals of a sustainable, value-focused, integrated and digitally enabled Health Service front of mind.

The Strategy, Transformation and Major Capital (STMC) division has been able to apply a consistent methodology to the program, establish governance with Executive-level and Board visibility, support, and leadership, introduce program cadence and standards, and build the capability of clinical and non-clinical staff through relevant training programs.

In addition, the application of additional rigour through assurance mechanisms including a Rigour Test and Benefits Advisory Panel prior to approval and Sustainability Test prior to closure have ensured initiatives within the program are set up for successful delivery and sustainable transition to business as usual.

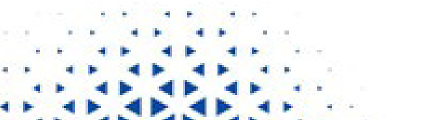
SUMMARY ABSTRACT

Public health systems world-wide are facing increasing cost pressures due to many issues (Biase et al., 2022). These include pandemics, ageing populations, increasing patient complexity and the rising demand for our services. Recognising that it is simply not sustainable to deliver health care in the same way we have been delivering it, STMC leads Gold Coast Health in defining, designing, and enhancing delivery and sustainability of our most significant service improvement, clinical redesign, and digital transformation opportunities.

Through its Transformation Advisory and Delivery functions supported by an experienced Portfolio Management Office (PMO), the Future Focus Transformation Program is driven by four core ambitions:

1. Best in Class clinical demand management
2. Clinical teaming and innovation
3. Value-adding corporate functions
4. A digitally enabled health service.

Transformation Advisory (TA) is responsible for driving continuous improvement through leading teams in complex problem solving and solution design. The aim is to achieve sustainable outcomes for our patients, service and system. The team play a key role in identifying future delivery opportunities and offers teams across the Health Service a chance to build capacity and capability



through skill development, coaching and mentoring on complex problem solving and access to support for innovation, technology, and research.

Driving future-focused change, the Transformation Delivery team advise and oversee the design, delivery, transition and sustainability of transformational activities aligned to these key ambitions. This is done through:

- Application of Rigorous Program Management (RPM): a methodology focused on consistent application, visibility, and early warnings to Leaders.
- Management of the Transformation Oversight Committee (TOC): an executive committee attended by 11 voting members made up of the Executive Leadership Team and subject matter experts.
- Training and education: building capability through training on program/project/change methodologies.
- Program support: cadence and strategic advice on transformation and change, and advice to Executive Sponsors.
- Assurance: mechanisms including a Rigour Test, Benefits Advisory Panel and Sustainability Test.

In addition, the allocation of skilled professionals in program management, project management, business analysis, change, and technical experts directly support the delivery of major business change and contribute to embedding a culture of transformation at Gold Coast Health.

RPM

Rigorous Program Management (RPM, Appendix 1) is an approach that uses a set of specific, objective tools to wrap robust planning and rigour around high-value projects that involve significant change. RPM was developed by Boston Consulting Group[1] (BCG) to support organisational change. It is an evidence-based approach, founded on BCG's study of c2000 initiatives across 10 major change programs that represented US$4B in impact bearing milestones (Tollman et al., 2017). About 70 per cent of all transformation efforts fail to reach the intended result (Tollman et al., 2017), with over 50 per cent of the reasons behind this attributed to ill-defined or unachievable milestones and objectives to measure progress, lack of commitment by Senior Management and employee resistance. The application of RPM is being used to ensure successful change at Gold Coast Health. It is facilitated by the PMO, ensuring that every major initiative commenced at Gold Coast Health is developed, monitored, and assessed the same way. Each initiative has an Initiative Owner and Executive Sponsor allocated to play a leadership role in the RPM process.

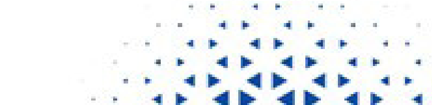
Program governance

The Future Focus Transformation Program is governed by the Transformation Oversight Committee (TOC). The role of TOC is to advise the Executive Management Team regarding the Transformation Program, facilitate the successful delivery of the objectives of the Transformation Program and support decision making by the Health Service Chief Executive (per Committee Terms of Reference). TOC meets monthly for 1.5 hours, providing program oversight. The Committee supports key decisions and alleviates any barriers to initiative delivery through monitoring and guidance.

Program support

Transformation initiatives are supported by a monthly cadence which is focused on ensuring that initiatives, and those delivering them, are supported, and are closely monitored to ensure ongoing success. Weekly Initiative Owner Stand Up and Program Drop-In sessions, a monthly Initiative Owner Forum and monthly reporting cycle is in place to provide regular guidance, assurance, and

[1] Boston Consulting Group is a global consulting firm: https://www.bcg.com/



problem-solving support. The Monthly Forum is a Community of Practice for Initiative Owners and Project Managers to share knowledge, subject matter expertise and lessons.

Capability building

To ensure capacity and capability in healthcare transformation, a significant amount of effort has been expended to establish a local standard for Practical Project Delivery (Appendix 2). Co-design and delivery of Project Management and Change Management training in partnership with University of Queensland and Queensland Treasury Corporation has also been a key piece in building capability. 304 participants have attended 1-hour Practical Project Delivery training sessions delivered by the PMO since August 2021, with tools and resources accessible on the intranet. Seven cohorts (totaling 140 participants) of Project and Change Management workshops delivered over two full days have been presented since August 2021, with positive feedback received. Training sessions for Practical Project Delivery remain ongoing and plans to adapt Project and Change Management training are currently underway due to significant demand.

Assurance

Pre- and post-implementation testing is a significant element of the Future Focus Transformation Program enabling and ensuring sustainable change. Initiative Roadmaps identify key benefits to be measured, which are reviewed by subject matter experts in the Benefits Advisory Panel to ensure that benefits are SMART (Bjerke and Renger, 2017). A Rigour Test is completed in conjunction with the Executive Sponsor and Initiative Owner to test that they are on the same page, are comfortable with the Roadmap, and are committed to the Initiative. Finally, a sustainability test is conducted to inform transition to business as usual, confirming the level of confidence in the sustainability of change delivered by a transformation initiative. Sustainability is achieved when new ways of working and improved outcomes become business as usual (NHS Modernisation Agency, 2004).

The combined application of these elements in executing the Future Focus Transformation Program is providing a platform for Gold Coast Health to become leaders in healthcare transformation, building capacity and capability in our HHS.

REPORT

APPLICATION OF ACHS PRINCIPLES

The Future Focus Transformation Program has supported 26 initiatives since program inception. By ambition, this equates to:

1. **Best-in-class clinical demand management**:
   a. Leading the way in customising and integrating our service delivery to the unique needs of our patients and community
   b. 10 initiatives
2. **Clinical teaming and innovation**:
   a. Delivering the best value health care through innovative care models and new ways of teaming
   b. Three initiatives
3. **Value-adding corporate functions:**
   a. Re-positioning our corporate functions as 'value-adding' services
   b. Five initiatives.
4. **A digitally enabled health service:**
   a. Leveraging digital and data to transform the way we work
   b. Eight initiatives.

The Program can demonstrate outcomes in improvement and innovation to patient / consumer services and organisation-wide practice, which is detailed under each of the ACHS principles below.

1. Consumer Focus

The Future Focus Transformation Program through the application of the RPM methodology is focused on wide stakeholder input, particularly from staff, patients, and consumers. When initiatives are in the design phase, benefits are detailed and agreed based on the *Quadruple Aim*, which is focused on patient, system, staff, and financial impacts (Bachynsky, 2020).

Consumer representatives are embedded on Initiative Steering Committees, contributing feedback and advice to provide first-hand influence to improving health service delivery. An example of this is Community Services Redesign, a program of work focused on standardising processes, providing access to specialist advice for general practitioners (GPs) and contributing to reduced hospital admissions. In partnership with the Health Service's Consumer Advisory Group (CAG), a representative was invited to become a voting member on the Steering Committee. The outcomes of this work are outlined in Table 1, under *4. Evidence of outcomes*. Through defining benefits and measures upfront against the *Quadruple Aim*, the initiative was delivered within six months, significantly improving access and management of this patient cohort.

Patient surveys are a good way to understand patient experience and outcomes (Schöpf et al., 2019). The Emergency Department Load Share (EDLS) initiative is an example of how patient surveys were used to assist in evaluation. Gold Coast Health Emergency Departments (EDs) are among the busiest in Australia. Increased hospital presentations related to population growth, ED and inpatient bed capacity constraints, and delays to ambulance offloading place increased stress and strain on clinical teams. This results in potential impacts to patient safety and patient experience. Gold Coast Health needed to find ways to manage patient demand that were immediate. Partnering with other local health services to utilise their available capacity has enabled the HHS to address this. ED Load Share:

- has provided an immediate increase in Gold Coast Health capacity to accommodate 10 ED presentations and 23 inpatient beds per day.
- has resulted in more privately insured patients self-electing to have their treatment at private hospitals.
- has a patient satisfaction rate of more than 70%, following patient experience surveys.

This initiative and its co-design processes have enabled system-wide conversations, new communication channels and additional collaborations under a public-private partnership model.

2. Effective Leadership

The Future Focus Transformation Program demonstrates effective leadership through Executive membership of the Transformation Oversight Committee (TOC) and Executive Sponsorship of each initiative that is delivered under the program. In addition, Future Focus Showcases are used to engage and inspire the workforce through the opportunity to comment on initiatives, submit new ideas and talk to Executive Sponsors, Initiative Owners, and delivery teams responsible for implementation.

Transformation Oversight Committee

In the Gold Coast Health Committee structure, TOC reports directly to the Executive Management Team (EMT), which is responsible to the Gold Coast Hospital and Health (GCHH) Board. TOC's membership comprises the Executive Leadership Team (ELT, 10 people) and clinical and non-clinical subject matter experts are regularly invited to provide technical advice. TOC meets monthly, with a low meeting cancellation rate since inception in March 2020.

To ensure readiness and capability of the ELT to take carriage of a Transformation Program, they undertook a three-day bootcamp in Rigorous Program Management (RPM) methodology training with an external facilitator. This training was essential in building a shared understanding of the

approach for the implementation of Transformation, and their roles as part of the governance of individual initiatives and of the program. Intent on providing an appropriate platform for Transformation, the GCHH Board receives update presentations and briefings on a regular basis, attends Showcases and receives a formal Portfolio Report on a quarterly basis to its Finance and Performance Sub-committee. This foundation and continued enthusiasm from the Board and ELT has enabled leader-led ownership of the program and built the understanding of reporting by exception to solve risks and issues.

Future Focus Showcases

Since the inception of the Future Focus Transformation Program, a total of six Showcases have been held at the major facilities of Gold Coast Health - Gold Coast University Hospital and Robina Hospital - with a seventh event due in October 2022.

Showcases provide the opportunity for clinicians and change leaders across the organisation to gather feedback and inform the design and delivery of initiatives. Each initiative is showcased on a deck of slides, sharing specific data, trends, and information about the program initiatives. Questions are posed to staff members to elicit input. The Showcase is presented by each Executive Sponsor and Initiative Owner with the support of the Portfolio Management Office, Transformation Advisory and Transformation Delivery teams to ensure wide stakeholder engagement with those who attend.

These governance and engagement elements of the Future Focus Transformation Program have set the platform for the direction of transformation for Gold Coast Health, enabling clinical and non-clinical staff to contribute, develop and learn through open engagement opportunities. With strong evidence of business, user and consumer engagement and participation across all program initiatives, it also demonstrates a human-centred approach used by Transformation Advisory and Transformation Delivery to implement change (Giacomin, 2014).

3. Continuous Improvement

Lessons learned practices, program support mechanisms, and structured reporting processes enable a culture of continuous improvement to ensure quality outcomes.

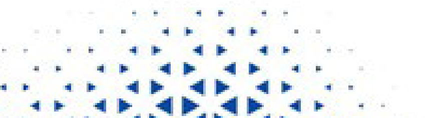
Lessons learned

A key element for continuous improvement, lessons learned are reviewed during initiative discovery processes to ensure that knowledge from previous experience is shared, analysed and applied to problem-solving activities conducted by Transformation Advisory. Equally, lessons learned registers are used as a management product and established early in project delivery by initiative teams. Recording lessons is embedded in the standard for Practical Project Delivery, under the element of Reflection. The PMO supports lessons learned through facilitation of Lessons Learned workshops following initiative implementation to ensure lessons can be shared across the Program and with the Transformation Oversight Committee.

Program support

Weekly Initiative Owner Stand Up and Program Drop-In sessions enable Initiative Owners and Project Managers to provide an initiative update using an agile stand-up approach. These sessions enable the PMO to assess risks and issues, identify and review trends and common themes, and monitor interdependencies between initiatives. For Initiative Owners and Project Managers, these regular sessions provide an opportunity for collaboration, peer support and shared learnings.

The Monthly Initiative Owner Forum provides Initiative Owners and Project Managers with the opportunity to learn concepts, provide update presentations on their initiatives, and generally share experiences. Over the course of 2022, the PMO has provided a monthly 'fire-side chat' of contemporary change management practice. These sessions have enabled a comparison of approaches from ADKAR to Kotter's 8 Step Process for Leading Change, to McKinsey and Company's



7-S Framework and Nudge Theory. These forums provide a dedicated space to workshop ways to apply theory into practice.

Program reporting

A monthly reporting cycle against milestones and impacts (benefits) is in place to provide TOC with oversight of each individual initiative, as well as program-level achievements and challenges. Reporting is completed by the Initiative Owner and provided to the PMO. The PMO reviews the report and discusses its content directly with the Executive Sponsor prior to collation of the monthly program report. This enables a 'no surprises' approach, allowing Executive Leaders to access expert advice from the PMO, and to enact any interventions prior to the committee meeting.

Program support mechanisms are consistent, providing regular guidance, assurance, and problem-solving support for Initiative Teams. The PMO provides a feedback loop to Initiative Owners following discussion with their Executive Sponsor. This provides the opportunity for Initiative Owners in continuous improvement in writing reports by exception, building capability in problem solving and change leadership.

4. Evidence of Outcomes

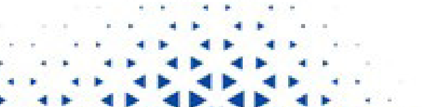
The application of RPM to all Transformation Initiatives provides the basis for evidence of outcomes across initiatives. Initiative Roadmaps are designed with the end in mind and include a benefits profile to ensure that outcomes are measurable, and that value has been created by the implementation of change (Keenan et al., 2017).

Using the *Quadruple Aim* and reflecting staff, patient, system and financial impacts, each Initiative defines benefits and reports against these throughout their delivery via a monthly (by exception) reporting cycle. Prior to initiative implementation, benefits are tested through the Benefits Advisory Panel. The purpose of the Benefits Advisory Panel is to review and advise on the proposed benefits outlined in an Initiative Roadmap. Panels are typically made up of experts from Finance, Performance and Reporting, Clinical Governance, and other experienced subject matter experts in benefits planning. The Benefits Advisory Panel makes recommendations to the Transformation Oversight Committee, via the Senior Director, Transformation Delivery. Examples of planning benefits and outcomes achieved from Future Focus Initiatives in the period from January 2022 to present is captured below:

Table 1: Future Focus Transformation Program Outcomes

Initiative	Overview	Outcomes
Primary Contact Hand Therapy	Primary Contact Hand Therapy (PCHT) has been developed in response to increasing demand in Orthopaedics. The aim of the initiative is to reduce the elective waitlist by trialling conservative management by Allied Health Primary Contact Hand Therapists instead of an Orthopaedic surgeon where clinically appropriate. Three opportunities were identified as part of this initiative: 1. Expand the primary contact hand therapy model to more diagnostic groups (e.g. finger osteoarthritis). 2. Commence a post-operative substitution model whereby hand therapist management of appropriate patient groups postoperatively (e.g. simple tendon repairs).	The key outcomes of this initiative include: ✓ 52% reduction in long waits for hand and upper limb conditions ✓ 32% of patients seen have been discharged to their General Practitioner (GP) without requiring Orthopaedic input. ✓ 54 additional new Orthopaedic occasions of service per month have been created with the implementation of the Post-Operative and Fracture Clinic streams of PCHT. Patient recorded experience measures (PREMs) have recognised a high satisfaction rate (100%) among patients in both therapists' knowledge and

Initiative	Overview	Outcomes
	3. Commence management of patients in fracture clinic in lieu of doctors (e.g. finger and hand fracture).	treatment by therapists rather than a doctor.
Community Services Redesign #1: Single Point of Entry Community Intake Unit	This initiative was aimed at streamlining the patient journey by consolidating six referral access points into one for in-scope community programs. The initiative commenced delivery in August 2021 with integral links with the Rigorous Referral Management initiative. Smart Referrals went live for in-scope community services in October 2021.	The key outcomes of this initiative include: ✓ Single point of entry for seven community programs. ✓ A 10% reduction of declined referrals to community services through implementing a standardised template. ✓ Improved communication with GPs through a simplified pathway.
Community Services Redesign #2: Hospital Avoidance and Discharge Support	The aim of this initiative was to define a standardised process for discharge planning from Gold Coast Health facilities and to prevent avoidable readmissions to the hospital. A comprehensive model of care for discharge support services has been completed, with the team awarded recurrent funding from Queensland Health's Health Improvement Unit to implement the Multi-disciplinary Avoidance and Post-acute Services (MAPS) program. The seven-day service discharge support model of care commenced in October 2021.	The key outcomes for this initiative include: ✓ Seven-day Rapid Response Discharge Support Service (MAPS) launched in September 2021, realising approximately $943K in avoided costs in the first three months of operation. Coordinated discharge planning is in place for patients with chronic / complex problems, including ED management plans and discharge needs identified within 72 hours of admission.
Community Services Redesign #3: Standardised Models of Care in Chronic disease and Post-Acute Programs	The aim of this initiative was to increase the capacity and throughput of community services by implementing standardised and time defined packages of care across seven community programs. The implementation of interventional frameworks includes increased use of Telehealth and every client commencing their program with an expected date of discharge.	The key outcomes of this initiative include: ✓ 32% of occasions of service being delivered via virtual technology (video and telephone). ✓ Seven interventional frameworks are now in place (time defined care), and 100% of clients have an estimated discharge date documents at their first appointment. ✓ The service continues to monitor throughput to ensure the delivery of 25 additional packages of care per month across the program.
Community Services Redesign #4: GP Advice Function	The aim of this initiative was to provide responsive advice to GPs on the management of complex and chronic conditions, to reduce avoidable presentations to ED and avoid unnecessary outpatient referrals. During the three-month pilot, there were 64 calls made to the GP Advice Line, and 33 of these enquiries would likely have	The key outcomes of this initiative include: ✓ 100% of GP calls are responded to within 48 hours. ✓ 85% of GPs were satisfied or very satisfied with the service, and equally, 86% of consultants were satisfied or very satisfied.



Initiative	Overview	Outcomes
	resulted in an ED presentation or outpatient referral if not addressed by the GP Advice line.	✓ Hospital avoidance following accessing a GP. The initiative has also avoided costs related to ED presentations and outpatient referrals.
Mental Health Crisis Stabilisation	Gold Coast Health has been improving coordination and integration of mental health services across a range of providers. This has included the upgrade of the short stay Waratah Unit, expansion of the mental health call centre and the creation of a new facility known as the Crisis Stabilisation Unit (CSU), which is located at Robina Hospital. The new CSU opened in August 2021. The model has demonstrated a reduction in the number of patients with mental health issues presenting to the ED and a reduction in the length of time they are staying in the ED.	In the first 100 days of operation, key outcomes included: ✓ 521 mental health consumers presented to the CSU instead of ED. This equates to 26.3% of consumers who would normally present. ✓ The average amount of time mental health consumers spent in the ED was reduced to 11 hours, compared to 15.8 hours previously. ✓ There were no recorded incidents using seclusion or restraint. In addition, there has been positive feedback from consumers through Patient Reported Experience Measures (PREMs) and improved outcomes through Patient Reported Outcome Measures (PROMs) of mental health consumers in crisis.
Rigorous referral management	This initiative was focussed on optimising referral management between primary health providers and Gold Coast Health specialist services. It aimed to improve the quality of referrals, increase referral transparency, streamline access to services and reshape the service demand profile within 18 months. The initiative has introduced a single point of information online for describing Gold Coast Health outpatient services called 'Refer Your Patient'. It incorporates standardised definitions using three key elements: Clinical Prioritisation Criteria (CPC), Smart Referrals and HealthPathways. The consistent management of outpatient referrals (internally and externally) is already improving categorisation compliance and reducing the number of systems that can impact referral flow and patient safety.	The key outcomes of this initiative include: ✓ 174 (88%) of GP practices onboarded to GP Smart Referrals (target 197 practices) ✓ 75% compliance with CPC ✓ 11.8% reduction in non-accepted referrals (target 11%) A sustainability test has been completed and several recommendations have been made to increase the likelihood of sustainable change, including continued, consistent engagement with key stakeholders.

In addition to formal initiatives, discovery and minor improvement work undertaken by the Transformation Advisory team demonstrate a commitment to maintaining quality and striving for ongoing improvement. Examples include:

- Telehealth Expansion (business practice improvements and revenue optimisation): An expansion of Telehealth has gained approximately 200 Queensland Weighted Activity Units

(QWAU) from January to March 2022 as a direct result of utilising video consultations over phone consultations in outpatients.

- General Medicine Discharge Projects (business practice improvements): The impact of discharge initiatives in General Medicine has resulted in a reduced length of stay of 4% and increased patient throughput of 2%, saving an estimated 142 bed days. In addition, the initiatives have resulted in a reduced non-admitted emergency length of stay by 5%, saving an estimated 12 minutes per presentation.
- Remote Monitoring for Cardiac Devices (innovative technology): The Clinical Measurements Unit was able to identify a patient with an eight-second pause in heart rhythm. The patient was brought in for an earlier appointment to address the cardiac concern and fitted with a pacemaker, potentially avoiding a future life-threatening cardiac event.

As Drucker is quoted, "if you can't measure it, you can't improve it" (Lavinsky, 2022). Future Focus Transformation Program initiatives are built on evidence, influenced by innovation and best practice, and linked to staff, patient, system, and financial impacts. The Program is cultivating an approach of creating value and outcomes through upfront planning and design based on evidence and firm benefits.

5. Striving for Best Practice

The combined efforts in problem solving, solution design and implementation by the Transformation Advisory and Transformation Delivery teams are driven by the ability of the teams to identify and implement value for the business. The teams are striving to demonstrate and create 'next practice' for clinical and non-clinical clients across the HHS (Bate, 2015, Hobcraft, 2016) . Three examples, described below, are resulting in improved collaboration for delivery, and better ability to transition major change initiatives into sustainable, business as usual activities.

Rigorous Program Management

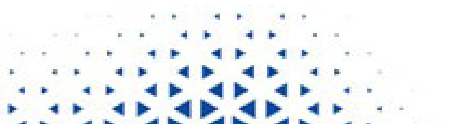
The RPM methodology, as described throughout this submission, is being used to ensure successful change at Gold Coast Health. The methodology's focus on strong governance and leadership, rigour, open and transparent reporting and objective tools and engagement opportunities like Showcases provide consistency in the way Transformation Program initiatives are designed and delivered.

Practical Project Delivery standard

A presentation on Agile in Practice at an Initiative Owner Monthly Forum in early 2021 prompted the opportunity to provide practice guidance to deliver projects and initiatives, tailored to the Gold Coast Health environment. In consultation with stakeholders, a set of 10 elements was identified and documented as a minimum viable expectation or approach to structure an initiative or project for success at Gold Coast Health. The Standard complements any project methodology and Rigorous Program Management (RPM). The Standard addresses inconsistencies in project delivery, ensuring roles and responsibilities of delivery team members, sponsors and stakeholders are transparent, and that the right cyclic structures (meetings, reporting) are in place to support successful project delivery. The Practical Project Delivery Checklist (Appendix 3) can be used to assist project managers to implement the standard.

Project and Change Management capability uplift

Delivery of seven tailored Project and Change Management training sessions in conjunction with the University of Queensland and Queensland Treasury Corporation has contributed to a capability uplift and knowledge of best practice project and change management. Sessions were co-designed and tailored to the Gold Coast Health environment, which demonstrates the commitment to best practice, to enable the building of next practice.



INNOVATION IN PRACTICE AND PROCESS

The Future Focus Transformation Program enables provides visibility and support to innovation in practice and is now applying its own innovation in process to support sustained change.

Innovation in practice

Many initiatives are delivering innovation in practice. As an example, the Primary Contact Hand Therapy initiative (described in Section 3) have realised an opportunity to extend their scope of practice. The opportunity has changed the way that hand therapists provide care to Orthopaedic patients. With support from Orthopaedic Medical teams, Hand Therapists now:

- Independently assess and manage patients referred to Orthopaedics for a broad range of chronic and subacute hand and wrist conditions
- Order radiography to enhance clinical decision making and streamline the patient journey
- Assess and manage selected acute hand/wrist/elbow injuries in both paediatric and adult populations in fracture clinic with oversight from the PHO.

This innovative model of care enables Orthopaedic Surgeons to focus on more complex patients.

Innovation in process

Described in section 2, pre-implementation assurance processes as part of the application of RPM provide rigour to set all Transformation Program initiatives up for success.

An example of innovation in process is the post-implementation sustainability test. All initiatives within the Transformation Program undergo a Sustainability Test as they are nearing completion and transition to business as usual. The purpose of this test is to confirm the level of confidence in the sustainability of change before an initiative closes. Sustainability is achieved when new ways of working and improved outcomes become the norm (Tollman et al., 2017). The new way of working has become integrated, mainstream 'BAU' and the impacts continue. Sustainability measures include:

- Continued buy in for the change
- Continuity of measurement and delivery of initial benefits
- Continued engagement of stakeholders
- Continuous improvement through analysis and lessons learned
- Continued support of teams involved.

The assessment, which is conducted by the PMO, is guided by an impartial scoring tool, and involves informal interviews with affected and impacted stakeholders. Where appropriate, changed systems and/or processes are observed in practice. The results of the sustainability test are discussed with the Initiative Owner and Executive Sponsor to confirm the readiness for closure of an initiative. The Initiative team receive feedback in terms of observations related to transition and sustainability, and recommendations (suggested improvements or essential activities prior to closure of the initiative). Also called out are dependencies that are critical to the success, sustained rigour, and continuous improvement to delivered initiative products.

APPLICABILITY TO OTHER SETTINGS

The combined application of RPM, strong governance, program cadence and support and education and training to provide an uplift in capability and a platform for Gold Coast Health to lead healthcare transformation. Equally, these practices can be used in any healthcare setting (public or private) aspiring to transform and change.

Leader-led change makers

Gold Coast Health leads the way in transformation delivery across Queensland, which is evidenced by the support that Transformation Advisory, Transformation Delivery and the PMO is providing to other Hospital and Health Services in Queensland. Most recently, Gold Coast Health hosted Torres and Cape Hospital and Health Service (HHS) at our facilities, sharing knowledge, advice, and practice to enable the Torres and Cape HHS achieve synergies in delivery of major change and infrastructure projects.

Gold Coast Health is becoming a trusted advisor for other HHS across the state and is currently coordinating a PMO Community of Practice within Queensland Health to share and support other health services to achieve the same outcomes being produced by the Future Focus Transformation Program. Meeting on a bi-monthly basis, with update presentations and opportunities to solve system-wide issues, this community forum is essential to collectively improving outputs and collaboration for PMO teams supporting major change in a healthcare setting.

As evidenced throughout the submission, the application of the RPM methodology and the Practical Project Delivery standard are complementary to any project management methodology, providing oversight for major change programs, and practical application of project structures to contribute to a successful delivery team environment.

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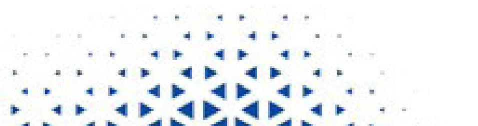


APPENDIX

Appendix 1. Rigorous Program Management information sheet

Strategy, Transformation and Major Capital

Rigorous Program Management (RPM)

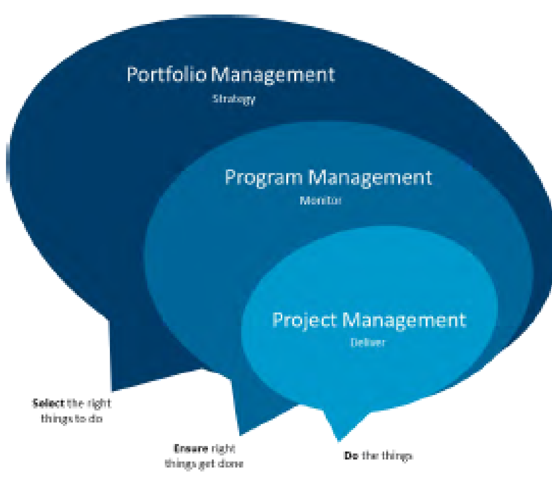
Information Sheet

This information sheet explains Rigorous Program Management, the methodology applied to Gold Coast Health's Future Focus Transformation Program.

What is Program Management?

Program management is the process of managing programs mapped to business objectives that improve organisational performance[1].

Program management sits 'above' the various project management methods used to deliver initiatives and projects, it does not replace them. It is important to note that applying *project management* methodology and tools is essential to successful program management and initiative delivery.



Rigorous Program Management (RPM)

At Gold Coast Health, Rigorous Program Management (RPM) is the chosen program management methodology for initiatives and projects being delivered as part of the Future Focus Transformation Program.

RPM is an approach to program management that uses a set of specific, objective tools to wrap rigour and robust planning around high-value projects that involve significant change.

Background

RPM was originally developed by the Boston Consulting Group (BCG) to support organisational change. It is an evidence-based approach, founded on BCG's study of c2000 initiatives across 10 major change programs that represented US$4B in impact bearing milestones.

RPM is used to create confidence for Executive Leaders. It enables management of initiatives by providing consistency, visibility and early warnings to Gold Coast Health's Executives who make up the membership of the Transformation Oversight Committee (TOC).

Once an initiative commences delivery, monthly reporting to TOC promotes discussion and informs decision making, and intervention when required.

Stages of RPM

RPM is front-loaded with meaningful planning and testing to ensure the initiative or project is ready for successful implementation. It uses a staged approach to set up an initiative for implementation. The four stages are:

— Initiative design
— Pre-implementation testing
— Delivery
— Sustainability testing and closure.

[1] *Source: Atlassian. https://www.atlassian.com/agile/project-management/program-management. Accessed 11 October 2021.*

Created and published by Transformation Delivery, V1.2 May 2022

RPM ensures that every major initiative or project initiated at Gold Coast Health is developed, monitored, and assessed the same way. Each initiative will have an **Initiative Owner** and **Executive Sponsor** allocated to play a leadership role in the RPM process.

Before moving into initiative design, potential initiatives are presented to TOC for approval to commence detailed initiative design.

Stage 1 – Initiative Design

During design a **Roadmap** is developed – this includes a **Charter**, a **DICE** score and key **milestones and impacts** (like a critical path) which will be reported against during implementation.

Project level artefacts, such as a **project delivery plan** and **schedule**, should be documented during design as they are significant contributors to the Roadmap.

A **Financial Proposal** and **Benefits Profile** also form part of the Roadmap.

Stage 2 – Pre-implementation Testing

Following Roadmap development, the initiative is tested using subject matter experts on a **Benefits Advisory Panel.**

A **rigour test** is also conducted as the last step before approval by TOC for delivery.

The rigour test involves a series of questions for the Executive Sponsor and Initiative Owner to answer and essentially agree that they are committed and ready to deliver the initiative as a team.

Following a successful rigour test, **the Roadmap is locked in** and tabled at TOC for approval to commence delivery.

Stage 3 – Delivery

The next stage of RPM is delivery – where the **initiative is implemented** against the agreed milestones.

Monthly reporting provides visibility to TOC on the progress of the initiative. Any **change requests to the Charter, milestones or impacts must be approved by TOC**. It is TOC's role to support the successful delivery of initiatives through these monitoring mechanisms.

Stage 4 – Sustainability testing and closure

The final stage is about **sustainable transition to 'business as usual'** and formal initiative closure.

A **sustainability test** is completed by the Transformation Delivery Portfolio Management Office (PMO) to ensure that key tasks for successful transition have been completed. A **closure report** is documented, providing a summary of the performance of the initiative, including whether it has delivered the agreed benefits. Lessons learned, are also documented in the closure report to ensure knowledge is shared and learned from for future initiatives.

Work with the PMO

RPM processes are facilitated by the PMO. Clinics and training on each element of the process are convened at the outset of an initiative, as well as weekly stand up meetings for Initiative Owners and monthly Initiative Owner forums.

Executive Sponsors, Initiative Owners and stakeholders are also encouraged to participate in broader planning and engagement activities such as Future Focus Showcases to foster strong commitment for each initiative.

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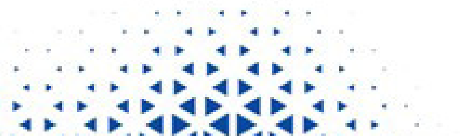
Information Sheet – Rigorous Program Management 2



Initiative Owner Checklist

- ☐ I understand RPM and how it is used at Gold Coast Health.
- ☐ I have identified key initiative stakeholders and invited their participation in RPM processes.
- ☐ I have attended RPM training.
- ☐ Each team member has read this information sheet and participated in RPM training.
- ☐ All initiative stakeholders have endorsed the Initiative Roadmap documentation.

Help

For assistance and advice, please contact the Portfolio Management Office via email on GCHFutureFocus@health.qld.gov.au

Find additional information sheets and reference guides on the Gold Coast Health intranet.

Appendix 2. Practical Project Delivery standard

Practical Project Delivery

Gold Coast Health Standard

Purpose

This document sets the delivery elements that should be standard to structure an initiative or project for success at Gold Coast Health. These standards complement any project methodology and Rigorous Program Management (RPM).

Gold Coast Health always care

<table>
<tr><th colspan="2">#1 Put a plan in place: Document</th></tr>
<tr><td colspan="2">Standard
Documentation will be fit for purpose, based on the size and type of initiative or project being delivered.
As a minimum, a Charter or Project Plan will be developed to set the project's expectations and critical path (key milestones).</td></tr>
<tr><td>Intention
Approved, documented plans and supplementary plans and materials support scope management, task delivery and scheduling, change, measures of success and transition.</td><td>Practical implementation tips
Commit time to understanding the problem and how the solution should be delivered.
Remember, there is a set of mandatory documentation required if your project is a Transformation Initiative or includes a digital component. All projects should be documented in line with QH policy.
Templated, generic project documentation is available via the Transformation Delivery Portfolio Management Office (PMO).</td></tr>
<tr><th colspan="2">#2 Assign responsibilities: Structure</th></tr>
<tr><td colspan="2">Standard
Each team member has agreed objectives and deliverables as part of the overall initiative or project.
Individual responsibilities are known to the team, enabling understanding, responsibility and accountability for specific tasks that contribute to successful initiative or project delivery.
Project governance is suitable to the size and scope of the project, with relevant subject matter expert involvement. New governance structures will not replicate existing committees.</td></tr>
<tr><td>Intention
Individual team members should have a clear understanding of their objectives and responsibilities within the broader context of the project; a framework for decision making supports the team to deliver on project objectives.</td><td>Practical implementation tips
When writing your Charter (or plan on a page), think about each of the activities and deliverables that will contribute to the success of the project. This will enable you to assign tasks with specific objectives and deliverables to individuals and self-forming teams within your delivery team.
Use a mind-map or process map to logically map linear or concurrent tasks to enable you to assign tasks to individual team members.
Understand existing committee structures and the purpose of each committee so you don't duplicate effort.
Discuss project governance requirements with your Executive Sponsor early on to agree an approach. If you are setting up a steering committee or project control group the membership should include key stakeholders who will have accountability for managing issues and monitoring risks, quality, and project timelines.
Use a RASCI to assign roles and responsibilities.</td></tr>
<tr><th colspan="2">#3 Agree team norms: Form</th></tr>
<tr><td colspan="2">Standard
Delivery teams will agree team norms at the outset of the initiative/project, ensuring delivery team members are clear on their role and responsibility, including:
- daily work hours and working after hours
- on and off-site days
- leave planning and
- appropriate contact with Leads and key stakeholders.</td></tr>
<tr><td>Intention
Team effectiveness is enhanced when team members are transparent about the way they work and personal goals; understanding causes for changes in the team's behaviours to help the team maximise its processes and productivity.</td><td>Practical implementation tips
Get to know your team members well, their working arrangements and what they'd like to achieve in contributing to the project at hand.
Conduct a short survey of your team to get to know them – google "cool employee 'get to know you' form".
Set expectations (in line with policy) for team members early, to ensure everyone is clear on what is expected.</td></tr>
</table>

#4 Configure spaces for teamwork: Collaborate

Standard

Delivery teams will **manage content, artifacts, and team communication in central repositories**. This could include:

- A Microsoft Teams site dedicated to the project.
- Related SharePoint site.

A team member must be delegated responsibility to configure and manage central records.

Intention	Practical implementation tips
Collaboration within and between teams ensures that information, time, and other resources are shared for the benefit of everyone involved. Teams work better when information is logically accessible and available, and when content is structured and managed centrally.	Discuss how the team will enable collaboration at the outset of your project. This will involve online spaces that everyone can access – i.e. Microsoft Teams, SharePoint – and a shared calendar so that any days off or annual leave are visible to all team members. Establish a champion to configure these spaces and invite all team members to participate. Collaboration should be reinforced through active involvement in online structures. Documented rules of engagement are encouraged to ensure team members understand expectations in relation to team collaboration.

#5 Establish a team rhythm

Standard

The delivery team will **meet regularly as a group at least twice a week** for maximum 30 minutes each time.

'Check in' meetings on Monday and **'Check out' meetings on Thursdays** weekly are mandatory for all projects. Daily stand ups are optional.

A **monthly, hour-long Team Meeting is mandatory** for longer term initiatives to review progress of the initiative in more detail with the Executive Sponsor. This should involve the whole team.

Intention	Practical implementation tips
A suitable delivery team 'rhythm' is set, in which team members establish collaboration mechanisms to participate, update, problem solve and deliver together, as a repeated process.	A fast-paced project may require additional daily 'scrums' or 'stand ups' to ensure tasks are distributed evenly, and workload pressures can be addressed in a timely manner. Ensure meetings are 'time-boxed', that is, set for a specific timeframe and keep the meeting inside the timeframe. The purpose of the team's rhythm is to ensure the team understands the tasks, that the work is getting done on-time and in the right sequence, and that the team is receiving the right information at the right time from the Initiative Owner and/or Project Manager.

#6 Meet with your Executive Sponsor regularly: Support

Standard

The Initiative Owner and/or Project Manager requires as a minimum a weekly meeting in place with their Executive Sponsor for at least 30 minutes. This should be twice a week for rapid implementations.

A summary report via email should be sent each week to the Executive Sponsor.

Intention	Practical implementation tips
Access to the Executive Sponsor is regular and consistent to receive direction, update them on progress and problem solve challenges.	Get to know your Executive Sponsor and work out how best you will work together. Where a project is fast-paced and requires prompt decision making, Executive Sponsor meetings could be shorter in time and more frequent, for example, 15 minutes twice weekly.

#7 Inform and immerse your stakeholders: Engage

Standard

Stakeholders must be **engaged consistently** throughout delivery considering right time, right message, right format, right impact. Stakeholder engagement is the responsibility of all team members including the Executive Sponsor.

Intention	Practical implementation tips
Communicate relevant information regularly to stakeholders, taking formal and informal approaches to information sharing and engagement to ensure transparency.	Communicating with stakeholders can be achieved through a variety of mechanisms to ensure they are kept up to date about what is happening and when. Write a communication plan. Ask stakeholders what information they want to receive, and how best you can share it with them. Find time to meet with stakeholders' face to face, in their business or clinical area – the value of face to face communication cannot be underestimated. Make sure the Executive Sponsor has time set aside to 'round' on stakeholders. Remember, your initiative or project may not be your stakeholder's top priority – it is important to acknowledge this and tailor communication to their needs where possible.

#8 Visualise deliverables: Monitor	
Standard Make **tasks or deliverables visible to all delivery team members and the Executive Sponsor**, in one place, either digitally or physically to assist task monitoring and distribution.	
Intention Clearly articulate tasks or deliverables visually in one place to ensure clarity and understanding for all involved.	**Practical implementation tips** Use visual digital tools like Microsoft Planner or commandeer a blank wall in an area relevant to the delivery team and key stakeholders to establish a Kanban Board or 'buckets' of related deliverables to enable transparency in tasks and team discussions.
#9 Do your DICE: Review	
Standard Review the current conditions of the initiative/project by **completing the DICE score on a weekly basis.**	
Intention Assess likely success through a repeated, short, qualitative test called DICE. DICE scores are based on objectively scoring the domains of project duration, integrity, commitment, and effort.	**Practical implementation tips** The DICE score acts as an objective measure that integrates the people and operational components of a project, helping to identify behavioural issues during delivery. It will help to bring risks to light to enable you to resolve them before they create an issue for delivering the project. Go with your gut – if you feel like there's something not going quite right, do your DICE. Early red flags enable the team to have a conversation with the Executive Sponsor so they can be empowered to get in front of problems before they are reported further up the chain.
#10 Acknowledge small wins and lessons: Reflect	
Standard **Set time aside each week** to acknowledge small 'wins' and lessons learned. 'Wins' can be delivered tasks or positive feedback from stakeholders or colleagues. Lessons should be documented and shared for learning purposes.	
Intention Openly and actively practice acknowledgement of success as a group to facilitate collaboration and reaffirm that delivery is tracking on target.	**Practical implementation tips** Take 5 minutes from one of your weekly 'stand ups' or 'scrums' to stocktake the week in terms of achievements and successful delivery of tasks and discuss them as a team. The practice of 'what went well' and 'even better if' can assist in articulating lessons learned and reaffirm to the delivery team that they are closer to the end goal. Celebrating success can be opportunity to express gratitude towards the team. Go around in a circle and ask everyone to articulate 'something that made them proud this week' or 'pick one thing to express thanks for this week'. Keep your lessons learned log live and up to date.

Appendix 3. Practical Project Delivery checklist

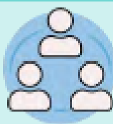
Practical Project Delivery

Checklist

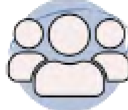
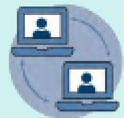
Purpose

This checklist will support you to set up the ten Practical Project Delivery elements of your project. It is best used in the planning stage of your project. Find relevant templates and tools on the Gold Coast Health Intranet.

#1 Put a plan in place: Document	
	Standard Documentation will be fit for purpose, based on the size and type of the initiative or project being delivered. As a minimum, a Charter or Project Plan will be developed to set the project's expectations and critical path (key milestones).
☐	Source available Transformation Program and project delivery templates from the GCH intranet.
☐	Seek advice from the Transformation Office PMO and/or your Executive Sponsor regarding the level of documentation required for the initiative or project if unsure or unclear.
☐	Document a Charter and/or Project Delivery Plan including key milestones and a schedule of key activities.
☐	Determine other project and/or Transformation Program documentation requirements and prepare. For example, stakeholder register, risk register, lessons learned.
☐	Engage key stakeholders to refine the Charter and/or Project Delivery Plan to ensure the project scope and deliverables are SMART[1] and agreed. All documentation must be approved by the Executive Sponsor.

#2 Assign responsibilities: Structure	
	**Standard** Each team member has agreed objectives and deliverables as part of the overall initiative or project. Individual responsibilities are known to the team, enabling understanding, responsibility and accountability for specific tasks that contribute to successful initiative or project delivery. Project governance is suitable to the size and scope of the project, with relevant subject matter expert involvement. New governance structures will not replicate existing committees.
☐	Meet with individual team members to determine their role and objectives as part of the initiative or project.
☐	Assign tasks and responsibilities based on knowledge, skills, and abilities.
☐	Document a resource plan and/or RASCI[2] to create a shared understanding of team roles / responsibilities, including expectations of the Executive Sponsor.
☐	Discuss project governance requirements with your Executive Sponsor and determine requirement for a project-specific steering committee or control group.
☐	Document relevant governance committees as part of your Charter and/or Project Delivery Plan.

[1] *SMART deliverables are Specific, Measurable, Achievable, Relevant and Time-bound, and are used to ensure tasks are attainable.*
[2] *RASCI is the acronym for outlining roles and responsibilities for specific tasks. Who is Responsible, Accountable, Supporting, Consulted, and Informed for each task?*

#3 Agree team norms: Form	
	**Standard** Project delivery teams will agree team norms at the outset of the initiative/project, ensuring team members are clear on their role and responsibilities, including: - daily work hours and working after hours - on and off-site days - leave planning and - appropriate contact with Leads and key stakeholders.
☐	Set expectations for Employee Code of Conduct, Professional Development Planning, Leave and other policy / entitlements with all team members to ensure shared understanding of related responsibilities.
☐	Ensure all team members have appropriate agreements in place to work remotely.
☐	Write and document 'team norms' together, establishing a shared value base for your initiative or project.
#4 Configure spaces for teamwork: Collaborate	
	**Standard** Project delivery teams will manage content, artefacts, and team communication in central repositories. This could include: - Microsoft Teams site dedicated to the project. - related SharePoint site. A team member must be delegated responsibility to configure and manage central records.
☐	Set up a Microsoft Teams site for your initiative or project, ensuring all team members, relevant key stakeholders and the Executive Sponsor can access it.
☐	Configure (and document configuration management) of SharePoint site for saving initiative or project documentation and artefacts. Project documentation should not be saved on personal OneDrives.
☐	Establish a responsible officer for maintaining the integrity of collaboration platforms as part of the resource plan/RASCI.
☐	Document collaboration 'rules of engagement' to ensure expectations in relation to team collaboration are understood.
#5 Establish a team rhythm: Cadence	
	Standard The project delivery team will meet regularly as a group at least twice a week for a maximum of 30 minutes each time. 'Check in' meetings on Monday and 'Check out' meetings on Thursdays each week are mandatory for all projects. Daily stand ups are optional. A monthly, hour-long Team Meeting is mandatory for longer term initiatives to review progress of the initiative in more detail with the Executive Sponsor. This should involve the whole team.
☐	Agree team rhythm with all members of the project delivery team.
☐	Document the team's rhythm including meeting name, timing, duration, purpose, and ensure with team members are aware.
☐	Set and send diary appointments for team meetings in advance.
☐	Set up monthly Team Meeting inclusive of the Executive Sponsor.
☐	At a minimum, keep records of actions and decisions from meetings in an Action and Decision Register.
☐	Where agendas and minutes are required, discuss requirements and templates, and assign responsibility as required to team members.

#6 Meet with your Executive Sponsor regularly: Support

Standard

The Initiative Owner and/or Project Manager requires (as a minimum) a weekly meeting in place with their Executive Sponsor for at least 30 minutes. This should be twice a week for rapid implementations.

A summary report via email should be sent each week to the Executive Sponsor.

- ☐ Set up introductory meeting with Executive Sponsor and project delivery team.
- ☐ Set up weekly meeting with Executive Sponsor and diarise.
- ☐ Establish a Weekly Sponsor Status Report, agreeing the level of detail with your Sponsor and roles and responsibilities among the team on how they can input into it.
- ☐ Agree communication style with Executive Sponsor, including escalation processes and when to call, email, text or other.
- ☐ Discuss the resource plan and/or RASCI to create a shared understanding of team roles / responsibilities, including expectations of the Executive Sponsor.

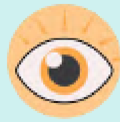
#7 Inform and immerse your stakeholders: Engage

Standard

Stakeholders must be engaged consistently throughout delivery considering right time, right message, right format, right impact. Stakeholder engagement is the responsibility of all team members including the Executive Sponsor.

- ☐ Write a project communication plan.
- ☐ Engage Strategic Communication and Engagement for advice and quality assurance of communication materials / mechanisms.
- ☐ Ask your Executive Sponsor to regularly 'round[3]' on stakeholders – set aside diary time for this task and assign this as a responsibility in the RASCI.
- ☐ Each project delivery team member should also set time to 'round' on stakeholders to hear firsthand about the change impact.
- ☐ Consider setting up a generic email account to support communications to stakeholders.
- ☐ Consider existing meetings, forums, and methods that could be used to engage stakeholders and deliver messages.

#8 Visualise deliverables: Monitor



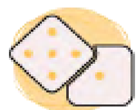
Standard

Make tasks or deliverables visible to project team members and the Executive Sponsor, in one place, either digitally or physically to assist task monitoring and distribution.

- ☐ Determine how you will visually manage tasks and deliverables.
- ☐ Assign responsibility for updating the visual task board to ensure tasks are always up to date.

[3] Rounding is a practice in which leaders and subject matter experts set aside dedicated time to talk with team members and stakeholders about elements of the initiative or project. The goal of rounding is to provide leadership and to get a better understanding of how implementation of the project is going.

#9 Do your DICE: Review

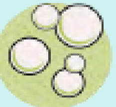


Standard

Review the current conditions of the initiative/project by completing the DICE score on a weekly basis.

- ☐ Complete DICE training or refresher training to ensure understanding of DICE and when/how to use it.
- ☐ Incorporate DICE score into your Weekly Sponsor Status Report.
- ☐ Use the agreed escalation pathway when DICE score is unfavourable.

#10 Acknowledge small wins and lessons: Reflect

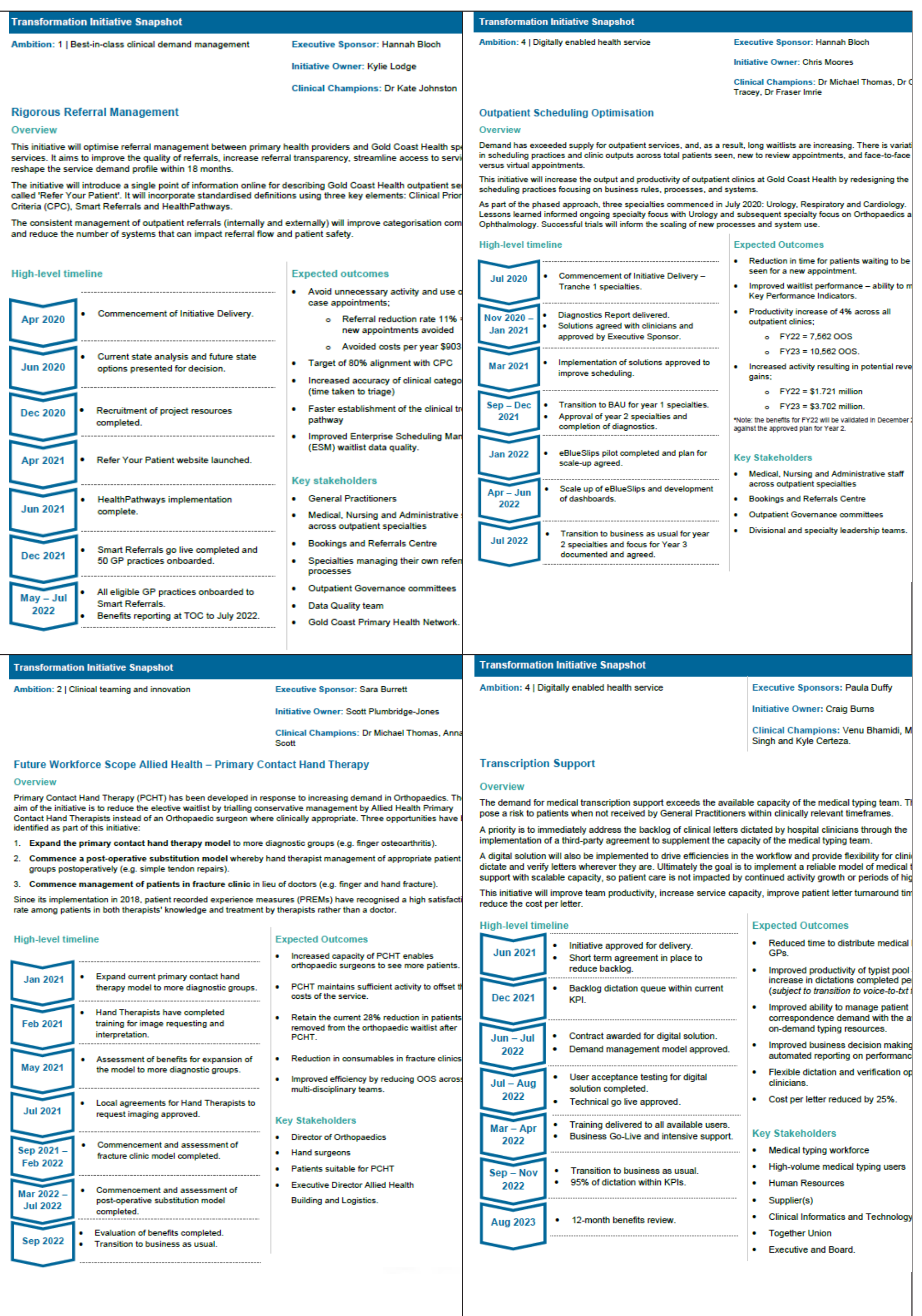


Standard

Set time aside each week to acknowledge small 'wins' and lessons learned. 'Wins' can be delivered tasks or positive feedback from stakeholders or colleagues. Lessons should be documented and shared for learning purposes.

- ☐ Include reflection or lessons as an agenda item on one of your weekly meetings.
- ☐ Document lessons on the Lessons Learned sheet of the Combined Project Registers.
- ☐ Set up a process to ensure lessons learned are shared with the Transformation Office PMO.
- ☐ Express gratitude for completed tasks through small celebrations, public acknowledgement, or news story items.
- ☐ Consider surveying stakeholders to capture lessons learned at appropriate points during delivery (i.e. Not just at the end of the initiative or project).

Appendix 4. Initiative profiles



Transformation Initiative Snapshot

Ambition: 1 | Best-in-class clinical demand management

Executive Sponsor: Hannah Bloch

Initiative Owner: Kylie Lodge

Clinical Champions: Dr Kate Johnston

Rigorous Referral Management

Overview

This initiative will optimise referral management between primary health providers and Gold Coast Health sp services. It aims to improve the quality of referrals, increase referral transparency, streamline access to servi reshape the service demand profile within 18 months.

The initiative will introduce a single point of information online for describing Gold Coast Health outpatient se called 'Refer Your Patient'. It will incorporate standardised definitions using three key elements: Clinical Prior Criteria (CPC), Smart Referrals and HealthPathways.

The consistent management of outpatient referrals (internally and externally) will improve categorisation com and reduce the number of systems that can impact referral flow and patient safety.

High-level timeline

Date	Milestone
Apr 2020	• Commencement of Initiative Delivery.
Jun 2020	• Current state analysis and future state options presented for decision.
Dec 2020	• Recruitment of project resources completed.
Apr 2021	• Refer Your Patient website launched.
Jun 2021	• HealthPathways implementation complete.
Dec 2021	• Smart Referrals go live completed and 50 GP practices onboarded.
May – Jul 2022	• All eligible GP practices onboarded to Smart Referrals. • Benefits reporting at TOC to July 2022.

Expected outcomes

- Avoid unnecessary activity and use c case appointments;
  - Referral reduction rate 11% new appointments avoided
  - Avoided costs per year $903
- Target of 80% alignment with CPC
- Increased accuracy of clinical catego (time taken to triage)
- Faster establishment of the clinical tr pathway
- Improved Enterprise Scheduling Man (ESM) waitlist data quality.

Key stakeholders

- General Practitioners
- Medical, Nursing and Administrative across outpatient specialties
- Bookings and Referrals Centre
- Specialties managing their own refer processes
- Outpatient Governance committees
- Data Quality team
- Gold Coast Primary Health Network.

Transformation Initiative Snapshot

Ambition: 4 | Digitally enabled health service

Executive Sponsor: Hannah Bloch

Initiative Owner: Chris Moores

Clinical Champions: Dr Michael Thomas, Dr C Tracey, Dr Fraser Imrie

Outpatient Scheduling Optimisation

Overview

Demand has exceeded supply for outpatient services, and, as a result, long waitlists are increasing. There is variat in scheduling practices and clinic outputs across total patients seen, new to review appointments, and face-to-face versus virtual appointments.

This initiative will increase the output and productivity of outpatient clinics at Gold Coast Health by redesigning the scheduling practices focusing on business rules, processes, and systems.

As part of the phased approach, three specialties commenced in July 2020: Urology, Respiratory and Cardiology. Lessons learned informed ongoing specialty focus with Urology and subsequent specialty focus on Orthopaedics a Ophthalmology. Successful trials will inform the scaling of new processes and system use.

High-level timeline

Date	Milestone
Jul 2020	• Commencement of Initiative Delivery – Tranche 1 specialties.
Nov 2020 – Jan 2021	• Diagnostics Report delivered. • Solutions agreed with clinicians and approved by Executive Sponsor.
Mar 2021	• Implementation of solutions approved to improve scheduling.
Sep – Dec 2021	• Transition to BAU for year 1 specialties. • Approval of year 2 specialties and completion of diagnostics.
Jan 2022	• eBlueSlips pilot completed and plan for scale-up agreed.
Apr – Jun 2022	• Scale up of eBlueSlips and development of dashboards.
Jul 2022	• Transition to business as usual for year 2 specialties and focus for Year 3 documented and agreed.

Expected Outcomes

- Reduction in time for patients waiting to be seen for a new appointment.
- Improved waitlist performance – ability to m Key Performance Indicators.
- Productivity increase of 4% across all outpatient clinics;
  - FY22 = 7,562 OOS
  - FY23 = 10,562 OOS.
- Increased activity resulting in potential reve gains;
  - FY22 = $1.721 million
  - FY23 = $3.702 million.

*Note: the benefits for FY22 will be validated in December against the approved plan for Year 2.

Key Stakeholders

- Medical, Nursing and Administrative staff across outpatient specialties
- Bookings and Referrals Centre
- Outpatient Governance committees
- Divisional and specialty leadership teams.

Transformation Initiative Snapshot

Ambition: 2 | Clinical teaming and innovation

Executive Sponsor: Sara Burrett

Initiative Owner: Scott Plumbridge-Jones

Clinical Champions: Dr Michael Thomas, Anna Scott

Future Workforce Scope Allied Health – Primary Contact Hand Therapy

Overview

Primary Contact Hand Therapy (PCHT) has been developed in response to increasing demand in Orthopaedics. Th aim of the initiative is to reduce the elective waitlist by trialling conservative management by Allied Health Primary Contact Hand Therapists instead of an Orthopaedic surgeon where clinically appropriate. Three opportunities have identified as part of this initiative:

1. **Expand the primary contact hand therapy model** to more diagnostic groups (e.g. finger osteoarthritis).
2. **Commence a post-operative substitution model** whereby hand therapist management of appropriate patient groups postoperatively (e.g. simple tendon repairs).
3. **Commence management of patients in fracture clinic** in lieu of doctors (e.g. finger and hand fracture).

Since its implementation in 2018, patient recorded experience measures (PREMs) have recognised a high satisfacti rate among patients in both therapists' knowledge and treatment by therapists rather than a doctor.

High-level timeline

Date	Milestone
Jan 2021	• Expand current primary contact hand therapy model to more diagnostic groups.
Feb 2021	• Hand Therapists have completed training for image requesting and interpretation.
May 2021	• Assessment of benefits for expansion of the model to more diagnostic groups.
Jul 2021	• Local agreements for Hand Therapists to request imaging approved.
Sep 2021 – Feb 2022	• Commencement and assessment of fracture clinic model completed.
Mar 2022 – Jul 2022	• Commencement and assessment of post-operative substitution model completed.
Sep 2022	• Evaluation of benefits completed. • Transition to business as usual.

Expected Outcomes

- Increased capacity of PCHT enables orthopaedic surgeons to see more patients.
- PCHT maintains sufficient activity to offset th costs of the service.
- Retain the current 28% reduction in patients removed from the orthopaedic waitlist after PCHT.
- Reduction in consumables in fracture clinics
- Improved efficiency by reducing OOS across multi-disciplinary teams.

Key Stakeholders

- Director of Orthopaedics
- Hand surgeons
- Patients suitable for PCHT
- Executive Director Allied Health Building and Logistics.

Transformation Initiative Snapshot

Ambition: 4 | Digitally enabled health service

Executive Sponsors: Paula Duffy

Initiative Owner: Craig Burns

Clinical Champions: Venu Bhamidi, M Singh and Kyle Certeza.

Transcription Support

Overview

The demand for medical transcription support exceeds the available capacity of the medical typing team. Th pose a risk to patients when not received by General Practitioners within clinically relevant timeframes.

A priority is to immediately address the backlog of clinical letters dictated by hospital clinicians through the implementation of a third-party agreement to supplement the capacity of the medical typing team.

A digital solution will also be implemented to drive efficiencies in the workflow and provide flexibility for clini dictate and verify letters wherever they are. Ultimately the goal is to implement a reliable model of medical t support with scalable capacity, so patient care is not impacted by continued activity growth or periods of hig

This initiative will improve team productivity, increase service capacity, improve patient letter turnaround tim reduce the cost per letter.

High-level timeline

Date	Milestone
Jun 2021	• Initiative approved for delivery. • Short term agreement in place to reduce backlog.
Dec 2021	• Backlog dictation queue within current KPI.
Jun – Jul 2022	• Contract awarded for digital solution. • Demand management model approved.
Jul – Aug 2022	• User acceptance testing for digital solution completed. • Technical go live approved.
Mar – Apr 2022	• Training delivered to all available users. • Business Go-Live and intensive support.
Sep – Nov 2022	• Transition to business as usual. • 95% of dictation within KPIs.
Aug 2023	• 12-month benefits review.

Expected Outcomes

- Reduced time to distribute medical GPs.
- Improved productivity of typist pool increase in dictations completed pe (*subject to transition to voice-to-txt*
- Improved ability to manage patient correspondence demand with the a on-demand typing resources.
- Improved business decision making automated reporting on performanc
- Flexible dictation and verification op clinicians.
- Cost per letter reduced by 25%.

Key Stakeholders

- Medical typing workforce
- High-volume medical typing users
- Human Resources
- Supplier(s)
- Clinical Informatics and Technology
- Together Union
- Executive and Board.

Transformation Initiative Snapshot

Ambition: 3 | Value-adding corporate functions

Executive Sponsor: Jeremy Wellwood

Initiative Owner: Aimee Ballantine

Clinical Champions: N/A

Revenue Optimisation: Bulk Billing

Overview

This initiative aims to increase Own Source Revenue (OSR) earned by Gold Coast Health from the Medicare Ben Scheme (MBS). It also aims to address compliance in matching the billing status of associated diagnostic service meet clause G20 of the National Health Reform Agreement (NHRA).

Bulk billing at Gold Coast Health is significantly lower (1-2%) compared to peer hospital and health services (>20 major decline in OSR from MBS funding occurred between FY 16/17 and FY 19/20, totalling a loss of approximate million.

Adopting new operational bulk billing processes in a phased approach will help address poor data quality practice increase compliance with the NHRA and the Specialist Outpatient Services Implementation Standard (SOSIS), in conjunction with other Transformation Initiatives, including Outpatient Scheduling Optimisation and Rigorous Refe Management.

A target of 30% bulk billed appointments has been set. The potential value of this initiative is $1.8 million in FY21/ and $4.2 million in FY22/23.

High-level timeline

Date	Milestones
Aug 2021	• Trial commenced with agreed specialties. • Bulk billing dashboard established with support from Health Analytics.
Sep 2021	• Review of processes following trial. • Assessment of bulk billing opportunities for scale up completed.
Oct 2021	• Bulk billing process implementation completed, Robina Outpatients. • Commencement of bulk billing process implementation at GCUH Outpatients.
Nov 2021	• Transition to business as usual completed for Robina Outpatients.
Nov 2021 – Mar 2022	• Continued roll-out of bulk billing processes across GCUH specialties including services outside of Adult Outpatients.
Apr 2022	• Benefits monitoring commences.
Sep 2022	• Benefits monitoring completed and initiative approved for closure.

Expected Outcomes

- Improved bulk billing rates and alignment peers – target of 30%.
- Retention of Radiology consultants.
- Improved data quality activities and streamlined/automated bulk billing practic limit administration burden.
- Improved bulk billing processes and busin intelligence tools to monitor success.
- Increased compliance to confirm billing st of diagnostic service matches consultant episodes.

Key Stakeholders

- Consultant and Specialist Medical Officers
- Outpatients Leadership group and Govern Committee
- Private Practice
- Diagnostic Services: Radiology / Patholog
- Clinical Informatics and Technology Servi
- Executive and Board.

Transformation Initiative Snapshot

Ambition: 4 | Digitally enabled health service

Executive Sponsor: Hannah Bloch

Initiative Owner: Andrew Fisher

Clinical Champions: N/A

Rostering Excellence: IWFM electronic rostering (nursing and midwifery)

Overview

Rostering practices across Gold Coast Health are highly fragmented, require significant manual input, and lac on efficiency. This results in high variability of workforce supply compared to patient demand and increased unnecessary expenditure. To enable rostering excellence, Gold Coast Health will be amongst the first hospita health services to implement the Integrated Workforce Management (IWFM) enterprise workforce manageme rostering solution.

The first phase of this initiative will implement IWFM electronic rostering solution for the frontline nursing and r cohort. The IWFM Program is a key strategic initiative for Queensland Health and seeks to enhance the roste process and deliver positive outcomes to support enhanced workforce management. The solution includes im tools, processes and access to workforce decision-support information where and when it is needed.

High-level timeline

Date	Milestones
Jan 2022	• Recruitment and onboarding of Roster Support Officers and HR Advisors.
Mar 2022	• Agreement in relation to go-live of solution for nursing and midwifery cohort.
May 2022	• Education and training processes underway. • Go-Live decision point.
Jun 2022	• Business go-live of solution. • At the elbow change support in place.
Sep 2022	• Review of performance to address operational issues following Go Live undertaken by local project team.
Oct 2022	• Project Closure report tabled at Transformation Oversight Committee.
Dec 2022	• Benefits review post 6 months completed.

Expected Outcomes

- Improved accuracy in rostering practic on terms of employment.
- Reduction in unplanned overtime and
- Improved staff satisfaction in rostering payroll processes.

Key Stakeholders

- Nursing and midwifery professionals
- Staff who undertake rostering activitie
- Nursing and Midwifery Executive and Leaders.

Transformation Initiative Snapshot

Ambition: 4 | Digital enabled health service

Executive Sponsor: Sandip Kumar

Initiative Owner: Kirsten Hinze

Clinical Champions: TBC

Data and Development Program: Digital Integration Hub

Overview

The Digital Integration Hub is the first initiative of the Data and Development program aimed at establishing lo integration capability, thereby reducing Gold Coast Health's reliance on eHealth Queensland for integration su

Integration between systems generates efficiency by reducing the need for duplication across two or more sys Local integration capability will enable Gold Coast Health to be self-sufficient and provide agility in delivering in in alignment with the priorities of our health service. This further drives Gold Coast Health towards world-class healthcare and enhances the near real-time health system. It aligns with the Digital Foundations strategic focu the Digital Strategy (D24).

High-level timeline

Date	Milestones
Mar 2022	• First integration use case go-live completed successfully for MFM Viewpoint (HBCIS data). • Adult Outpatients stakeholders engaged.
Apr 2022	• Business case for third use case, Single Pane View updated and approved by Executive Sponsor.
Jun 2022	• Interfaces for second integration use case (ieMR data) completed by the Integration vendor.
Aug 2022	• Second use case go-live completed successfully.
Oct – Nov 2022	• Single Pane View application development and testing completed. • Single Pane View go live completed successfully.
Dec 2022	• Business transition of Single Pane View to Adult Outpatients. • Project closure report tabled at TOC.
Jun 2023	• Benefits monitoring completed and initiative approved for closure.

Expected Outcomes

- Established foundations to provide a c view of patient and operational data ac GCHHS systems.
- Established, flexible and consistent ap system integration that reduces relianc single integrations built by eHealth Qld
- Established foundation for near real-tin to enterprise system data enabling qui delivery of GCHHS digital initiatives.
- A value case that leverages the DIH pl Single Pane View that will generate eff outpatient bookings.

Key Stakeholders

- Chief Digital Officer
- Executive Director Strategy, Transform and Major Capital
- Delivery partners – Digital Sourcing, C Security Group, eHealth
- Digital governance – Digital Design Au Change Advisory Board
- Maternal Fetal Medicine service
- Bookings and Referrals Centre (BARC
- Adult Outpatients Department.

Transformation Initiative Snapshot

Ambition: 2 | Clinical teaming and innovation

Executive Sponsor: Patrick Turner

Initiative Owner: Claire Oliver

Clinical Champions: TBC

Care of the Deceased redesign

Overview

In 2020/21, more than 1,300 patients passed away at a Gold Coast Health facility. In the same timeframe, there were several serious incidents and procedural errors* related to care of the deceased processes that triggered an examination of the current state workflows and support in place for staff/families. The analysis highlighted several challenges, including a lack of awareness of ward staff regarding processes following a death on a ward, inaccurate ward-based Black Boxes** and extensive manual workflows of related components that are reliant on individuals, not business processes. It also highlighted a lack of established governance to enable monitoring of processes and performance.

This initiative will ensure business continuity and access to accurate information. This will be delivered through education and training for inpatient unit staff on care of the deceased processes, revised black boxes and online resources for both staff and families. In addition, an end-to-end digital solution will be designed and implemented to support the deceased patients' journey from ward to release to the funeral home.

*RiskMan: 41 operational issues in 12 months and three serious family/carer service complaints logged within a three-month period.
**Black Box: Physical information pack containing staff and family/carer information about processes following death on a ward through to release to a funeral home; also, key Business Continuity tool.

High-level timeline

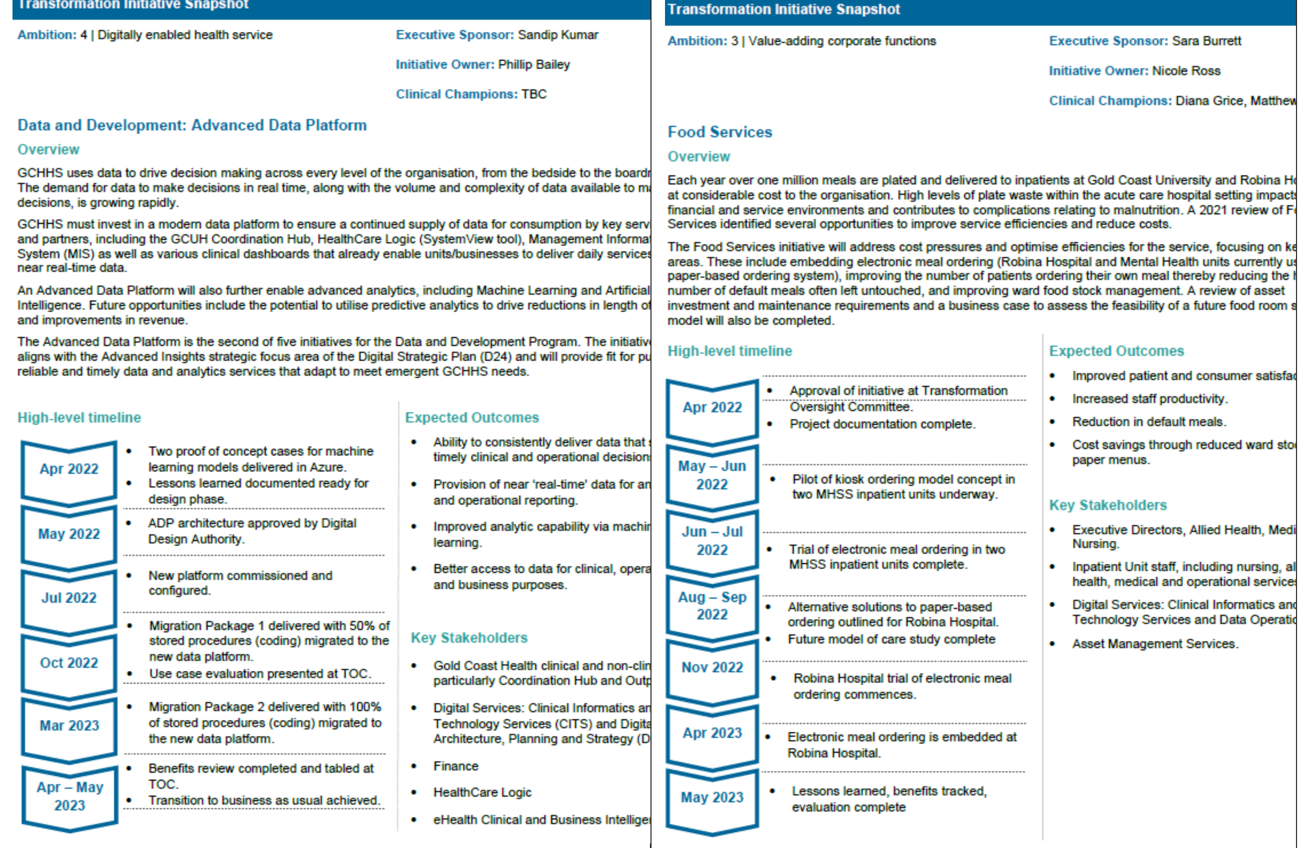
Date	Milestones
Apr 2022	• Black Box content updated, and revised black boxes delivered to all inpatient units across GCHHS facilities.
May 2022	• Digital toolkit published and communications and training deployed to all impacted staff.
Jun – Jul 2022	• Business requirements for workflow solution agreed. • Impacted stakeholders engaged.
Dec 2022 – Feb 2023	• Workflow solution developed and tested. • Technical go-live approved by Change Advisory Board.
Feb 2023	• Business go-live of digital workflow solution.
May 2023	• Project Closure report tabled at Transformation Oversight Committee.
Nov 2023	• Benefits review post 6 months completed.

Expected Outcomes

- Improved family/carer experience, mitigating reputational risk.
- Improved staff experience and capacity to always care through knowledge and improved workflows.
- Future productivity and efficiency gains through digitalising manual processes.

Key Stakeholders

- Medical Officers, Nurse Unit Managers
- Mortuary Investigating Officers (MIOs)
- Division of Medicine
- Clinical Governance
- Queensland Pathology
- Clinical Informatics and Technology services.



Transformation Initiative Snapshot

Ambition: 4 | Digitally enabled health service

Executive Sponsor: Sandip Kumar

Initiative Owner: Phillip Bailey

Clinical Champions: TBC

Data and Development: Advanced Data Platform

Overview

GCHHS uses data to drive decision making across every level of the organisation, from the bedside to the boardr The demand for data to make decisions in real time, along with the volume and complexity of data available to m decisions, is growing rapidly.

GCHHS must invest in a modern data platform to ensure a continued supply of data for consumption by key serv and partners, including the GCUH Coordination Hub, HealthCare Logic (SystemView tool), Management Informa System (MIS) as well as various clinical dashboards that already enable units/businesses to deliver daily services near real-time data.

An Advanced Data Platform will also further enable advanced analytics, including Machine Learning and Artificial Intelligence. Future opportunities include the potential to utilise predictive analytics to drive reductions in length of and improvements in revenue.

The Advanced Data Platform is the second of five initiatives for the Data and Development Program. The initiativ aligns with the Advanced Insights strategic focus area of the Digital Strategic Plan (D24) and will provide fit for pu reliable and timely data and analytics services that adapt to meet emergent GCHHS needs.

High-level timeline

- Apr 2022
  - Two proof of concept cases for machine learning models delivered in Azure.
  - Lessons learned documented ready for design phase.
- May 2022
  - ADP architecture approved by Digital Design Authority.
- Jul 2022
  - New platform commissioned and configured.
- Oct 2022
  - Migration Package 1 delivered with 50% of stored procedures (coding) migrated to the new data platform.
  - Use case evaluation presented at TOC.
- Mar 2023
  - Migration Package 2 delivered with 100% of stored procedures (coding) migrated to the new data platform.
- Apr – May 2023
  - Benefits review completed and tabled at TOC.
  - Transition to business as usual achieved.

Expected Outcomes

- Ability to consistently deliver data that timely clinical and operational decision
- Provision of near 'real-time' data for an and operational reporting.
- Improved analytic capability via machi learning.
- Better access to data for clinical, opera and business purposes.

Key Stakeholders

- Gold Coast Health clinical and non-clin particularly Coordination Hub and Outp
- Digital Services: Clinical Informatics an Technology Services (CITS) and Digita Architecture, Planning and Strategy (D
- Finance
- HealthCare Logic
- eHealth Clinical and Business Intellige

Transformation Initiative Snapshot

Ambition: 3 | Value-adding corporate functions

Executive Sponsor: Sara Burrett

Initiative Owner: Nicole Ross

Clinical Champions: Diana Grice, Matthew

Food Services

Overview

Each year over one million meals are plated and delivered to inpatients at Gold Coast University and Robina H at considerable cost to the organisation. High levels of plate waste within the acute care hospital setting impact financial and service environments and contributes to complications relating to malnutrition. A 2021 review of F Services identified several opportunities to improve service efficiencies and reduce costs.

The Food Services initiative will address cost pressures and optimise efficiencies for the service, focusing on k areas. These include embedding electronic meal ordering (Robina Hospital and Mental Health units currently u paper-based ordering system), improving the number of patients ordering their own meal thereby reducing the number of default meals often left untouched, and improving ward food stock management. A review of asset investment and maintenance requirements and a business case to assess the feasibility of a future food room model will also be completed.

High-level timeline

- Apr 2022
  - Approval of initiative at Transformation Oversight Committee.
  - Project documentation complete.
- May – Jun 2022
  - Pilot of kiosk ordering model concept in two MHSS inpatient units underway.
- Jun – Jul 2022
  - Trial of electronic meal ordering in two MHSS inpatient units complete.
- Aug – Sep 2022
  - Alternative solutions to paper-based ordering outlined for Robina Hospital.
  - Future model of care study complete
- Nov 2022
  - Robina Hospital trial of electronic meal ordering commences.
- Apr 2023
  - Electronic meal ordering is embedded at Robina Hospital.
- May 2023
  - Lessons learned, benefits tracked, evaluation complete

Expected Outcomes

- Improved patient and consumer satisfa
- Increased staff productivity.
- Reduction in default meals.
- Cost savings through reduced ward sto paper menus.

Key Stakeholders

- Executive Directors, Allied Health, Medi Nursing.
- Inpatient Unit staff, including nursing, al health, medical and operational service
- Digital Services: Clinical Informatics and Technology Services and Data Operati
- Asset Management Services.

Appendix 5. Gold Coast Health and Hospital Service news articles:

a. Showcasing our brightest transformation ideas

b. Tailored workshops to boost know-how

c. More support for patients returning to community

Showcasing our brightest transformation ideas

Print

Published in Top News

Our staff had the opportunity to see truly transformative ideas up close at the fifth Future Focus Transformation Showcases at Gold Coast University and Robina hospitals last week.

It was a well-attended and informative event, according to Strategic Communication and Engagement Senior Director Amanda Noonan.

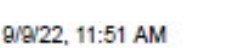
"We had a steady flow of visitors, asking questions of the Initiative owners and providing welcome feedback," Amanda said.

Featured initiatives included Rigorous Referral Management, Outpatient Scheduling Optimisation, Medical Transcription, Crisis Stabilisation in Mental Health and Community Services Redesign.

The D24 (Digital Strategy), Coomera Hospital and Health Service Design, Environmental Sustainability (Health Service Planning) and Transformation Advisory attracted plenty of interest, while the Gold Coast Health Improvement System and the Innovation Portal were also on display.

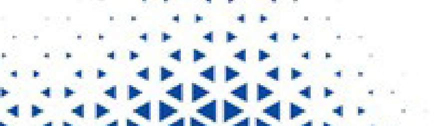
"The response to these showcases has been positive, with a good mix of engaged stakeholders who are curious about what is being done to improve our health service," Amanda said.

For more information on the showcase, please visit the Future Focus page. You can still provide feedback by emailing gchfuturefocus@health.qld.gov.au.



9/9/22, 11:51 AM Showcasing our brightest transformation ideas

Also published in Transformation and Digital News Medical Transcription Service



NON-CLINICAL SERVICE DELIVERY

HIGHLY COMMENDED

Hunter New England Local Health District, NSW

Integrated Care and Partnerships

Collaborative Care for Vulnerable Patients

Todd Tobin, Karen Harrison, Simone Dagg, Dr Lee Fong, Phillip Walker

AIM

The aim of the model of care is based on identifying unmet patient needs and working with the whole care team to address those needs in the community, close to the patient's home.

Collaborative Care aims to demonstrate, effectiveness and efficiency of care for vulnerable patients who receive interventions with a reduction in unplanned Emergency Care and increase planned care coordination in the community enabling health outcomes that mater to patients.

SUMMARY ABSTRACT

Hunter New England Local Health District (HNELHD) Emergency Department to Community (EDC) initiative is an integrated model of care for patients at risk of emergency department (ED) presentation which was implemented in 2021.

The model of care relies on new and innovative partnerships across the public and private health and social care systems. The use of single care plans creates stronger connections across the patient and the care team. These connections support seamless transitions between hospital, primary and community setting.

The EDC initiative identifies patients with greater than 10 ED presentations in 12 months. Health and social services utilisation across acute, community and primary care are reviewed identifying unmet needs of each patient. Following identification of a complex patient with unmet needs, a Virtual Multi-Disciplinary Team (VMDT) or multiagency case conference is held. These teams involve health and social care providers from within and external to HNELHD who collaboratively develop community-based solutions of care for the patient reducing the need for acute care presentation.

116 randomly selected enrolled patients who received the EDC interventions were compared to a control group of 116 patients who had usual care and met the same enrolment criteria for EDC (Appendix 1: Table 1). The following findings were identified;

- Intervention group 46.83% reduction in ED utilisation
- Control group 19.71% increase in ED utilisation

The initiative is aligned with Direction Two of the NSW Health strategic planning framework as it aims to move beyond the Emergency Department to create a better-connected health system.

The EDC initiative has three innovative approaches which when used together have led to improved health outcomes that matter to patients and improved experience of providing and receiving care for clinicians and patients. The three approaches include the use of the NSW Health Patient Flow Portal (PFP) for patient identification, undertaking digital deep dives of patient's records to understand their needs and collaborative teams develop holistic community care pathways.

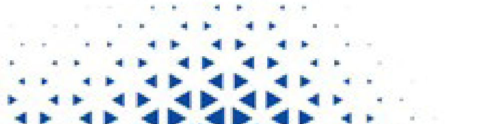
Firstly, the team analyse ED presentation data utilising the PFP. The PFP Integrated Care Module provides districts with real-time data for patients with 10 or more ED presentations in a 12-month period. Utilisation of this data allows efficient identification of patients for program enrolment.

Once patients are identified a digital comprehensive review is undertaken to understand the patients' health and social care utilization and to identify any unmet needs. The digital review includes HNELHD and NSW Ambulance clinical systems, HealtheNet and My Health Record. My Health Record provides primary care contacts, medication and prescribing history. The digital review seeks to map the patient's current health and social care team, their "Web of Care".

The "Web of Care" and unmet needs analysis determines the composition of the multi-agency or multidisciplinary members required to best support the patient. The team works collaboratively to develop community-based solutions of care for the patient with the General Practitioner.

Hunter New England Local Health District maintain systems to ensure that vulnerable patients who are identified as being at Risk of Emergency Department presentation are provided with a consistent level of care that is effective, evidence based and minimises risk. ED Management Plans are one mechanism used to support better patient outcomes for vulnerable patients.

Once a patient is identified as requiring a management plan, the clinical teamwork up a draft plan using the standard template that was developed. The patient, carer and member of their "Web of Care" are consulted in the plan development. Once Management plan has been approved by all required stakeholders, including the General Practitioner, the plan is then sent to the Clinical Director for Approval and loaded into the Clinical Application Portal for access across the whole local health district. The plan is required to be to be reviewed every 12 months OR unless there has been changes to the patient's goals of care within that timeframe, in which the plan will need to be update and then communicated with all identified stakeholders for approval. To support gold standard and consistent development process, is support by HNE LHD Clinical Policy Guideline.



NON-CLINICAL SERVICE DELIVERY

HIGHLY COMMENDED

Royal Perth Bentley Group, WA

Centre for Wellbeing and Sustainable Practice

A Wellbeing Revolution: Humanity at the Heart of Healthcare

Andrew Del Marco, Richard Read, Nicola Frew, Michael Hertz

AIM

The Royal Perth Bentley Group's Centre for Wellbeing and Sustainable Practice (CWSP) provides compassionate and spiritually informed care for our patients and their loved ones, empowering and engaging support for our employees and the teams in which they work, and experiential and transformative education across the organisation and in the community. As expressed simply and powerfully in our tagline, we affirm and tend to the "humanity at the heart of healthcare." The CWSP has developed bespoke educational and training materials to help patients, their loved ones and staff better understand and connect with their own wellbeing and spirituality, and to recognise and attend to the same in those around them. The CWSP is driving organisational cultural change through a revolutionary approach to attending to the emotional and spiritual needs of all hospital patients and staff regardless of age, religion, culture, ethnicity, race, sexual, gender or bodily diversity or disability, simply recognising the sense of shared humanity that lies at the heart of healthcare.

SUMMARY ABSTRACT

A Wellbeing Revolution: Humanity at the Heart of Healthcare

Since February 2019, the Royal Perth Bentley Group's Centre for Wellbeing and Sustainable Practice (CWSP) has developed an integrated holistic Wellbeing and Spiritual Care program for all people across the organisation recognising that our consumers are comprised of our patients, their loved ones, and our staff. The program takes a contemporary, inclusive approach to spiritual care, tending to deep human needs and recognising the shared humanity of all people across the organisation. The CWSP provides over 12,000 hours of direct emotional and spiritual support to patients and their loved ones each year and has delivered wellbeing education to almost 800 staff. Growing demand for our services indicates that staff feel increasingly supported and recognise the value of what we offer not only for their patients but also for themselves.

The CWSP offers inclusive wellbeing care for all patients and their loved ones; *Bonstato* staff wellbeing education; confidential and compassionate wellbeing support for individual employees; wellbeing gatherings for teams following critical incidents or stressful experiences; a Junior Doctors' Wellbeing Program offering intern peer groups and individual coffee catch ups for all Junior Medical Officers (JMOs) and a Clinical Pastoral Education (CPE) program providing education for emerging and experienced Wellbeing and Spiritual Care professionals.

The CWSP team includes Wellbeing Chaplains (primarily supporting patients but also available to staff), Staff Wellbeing Officers (focused on staff support), Wellbeing/Pastoral Educators, Volunteers, and a Research Team (evaluating the impact of our services); all of whom are professionally trained and directly employed by RPBG. All CWSP services are delivered across both Royal Perth and Bentley campuses, with a combined capacity of 649 beds and 6470 staff.

Since its launch, the CWSP has had strong support from the RPBG Executive Leadership Team. The Executive team use of CWSP services, both individually and as a group, and the doubling of the CWSP budget to $1.2 million over the past four years are testaments to their support and confidence

in the value which the CWSP provides to the organisation. The CWSP evolved from RPBG's existing pastoral care services and represents an expansion of focus to embrace the intrinsic, universal human needs - emotional, relational and spiritual - of all patients, loved ones and staff. The work of the CWSP has been guided by a Strategic Plan since 2019, updated in 2021 for 2022-2024. (Appendix 5: Strategic and Operational Plan)

Indicators of Distress

One of the key components of the CWSP's methodology is a simple yet innovative model of describing and classifying emotional and spiritual distress, *Indicators of Distress* (Appendix 1: Indicators of Distress). In this model, distress is framed as a normal, healthy, human response to an abnormal situation. The CWSP takes a strengths-based approach to distress which is quite different from the more medical paradigm of treating distress as a problem in need of psychological, psychiatric or pharmacological intervention. The former affirms the human experience while the latter takes a more pathologising and dehumanising approach.

The Indicators of Distress describe five observable signs that may be seen in both patients and staff; intense emotions expressed; unexpected life change; withdrawn/disconnected; spiritual/religious issues and long stay (greater than 5 days) (Appendix 1) all of which are enabling the CWSP to better target and focus their resources in providing care.

Direct Patient Care

The Centre has introduced several other improvements in the delivery of patient care, building on the successful rollout of the *Indicators of Distress* and *Bonstato* wellbeing education. A standardised method of recording patient encounters has been implemented (Appendix 2) and a purpose-built *Patient Care Tracker* system established for receiving, managing and tracking patient referrals and follow-ups.

Bonstato Staff Wellbeing Education Program

Bonstato, developed by the CWSP in 2019, is an experiential, engaging education program delivered in small groups with modules in Individual Wellbeing (Level 1) and Team Wellbeing (Level 2). These courses have raised employees' understanding of their own and others' individual and group dynamics and promoted a greater understanding of foundational wellbeing concepts. A third and more intensive module, Wellbeing Leadership (Level 3), developed in 2021 is targeted toward staff who wish to further develop their wellbeing leadership skills (Appendix 3).

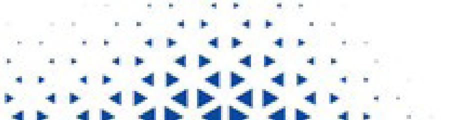
During 2021-22, Bonstato has now been delivered to almost 800 employees across various departments, wards, and staff roles.

Staff Wellbeing Support

Individual staff wellbeing is delivered by dedicated Staff Wellbeing Officers, usually following direct contact by a staff member or referral by a colleague/team leader. These sessions are confidential with any follow-up actions agreed to between the parties and complement the support available through the RPBG Employee Assistance Program.

Wellbeing chaplains who undertake patient visits also provide direct staff support as part of their role in addition to everyday multidisciplinary interactions with medical, nursing and allied health staff.

CWSP-facilitated Wellbeing Gatherings are becoming embedded in the organisation's culture, offering teams the opportunity to listen to one another, especially after significant incidents or high intensity work periods. Offering these sessions during the pandemic has been well-received given elevated and prolonged periods of staff distress; some teams are now making wellbeing gatherings a regular event



Referrals for individual staff care have grown steadily to average 75 per month and CWSP staff now facilitate an average of 10-12 wellbeing gatherings per month. Examples of staff testimonials and feedback is included in Appendix 4.

Holistic Wellbeing and Spiritual Care Services

The innovations introduced across RPBG by the CWSP over the past three years have the potential to revolutionise the delivery of wellbeing and spiritual care in Australian hospitals. This will involve cultural change driven by a shift in understanding distress and taking a deep holistic, human-centred approach to wellbeing, and an inclusive, equal access approach to spiritual care.

NON-CLINICAL SERVICE DELIVERY

HIGHLY COMMENDED

Surgical, Treatment and Rehabilitation Service (STARS), QLD

Dietetics and Food Services, Allied Health

Collaborative and Person-Centred Hospital Food Services

Jennifer Ellick

AIM

Our aim to is to deliver collaborative and person-centred hospital Food Services to achieve positive experiences and outcomes for our consumers.

Opening a brand-new hospital was an exciting opportunity that enabled us to rethink traditional hospital food services, and build a service from the ground up, to better meets the needs and expectations of our consumers and partners. Drawing from experts around the state and feedback from thousands of Metro North Health consumers, we have implemented an evidence based, patient-centred model of care, and we are committed to ensuring exceptional consumer experiences and continual improvement of outcomes.

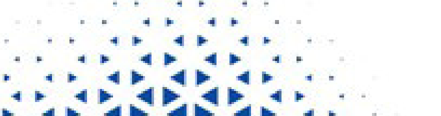
SUMMARY ABSTRACT

With the aim to deliver collaborative and person-centred hospital Food Services to achieve positive experiences and outcomes for our consumers, STARS Dietetics and Food Services drew from best evidence, experts around the state and feedback from thousands of Metro North Health consumers. The result of this, combined with a culture of high performance and continuous improvement, is an innovative, mixed model food services system that has the agility to meet broad stakeholder needs.

Short stay surgical patients have regular diet changes making traditional model of pre ordered meals challenging. Our room service, meals on-demand model empowers patients to order food and drinks, suitable to their stage of recovery, whenever they need it via their bedside patient engagement system. By implementing user friendly systems and large screen patient engagement systems (PES) at the bedside, STARS has been the first hospital in Australia to achieve 100% uptake of self-ordering, providing patients with the highest level of autonomy.

Longer stay rehab Patients have usually been in hospital for weeks already and are at higher risk of malnutrition than other patient groups. Nutrition is therapy for rehab patients and therefore meals in the dining room is a priority. At Lunch and Dinner time, Patients can choose their meal options in the dining room via face-to-face order with a food service officer or they can pre order via the PES at the bedside. The entire multidisciplinary team are incredibly proud of the dining room model and support a culture of 'nutrition is everybody's business' and 'mealtimes are therapy for rehab patients. Success is enabled by digital systems and innovative processes, including on-demand meals management technology and Food Service Officers working to full scope: taking meal orders; tracking patients' intake at all meals and snacks and providing exceptional customer service. The Dining Room model promotes patient autonomy and independence as well as recognising that evidence and our local audits suggest patients who eat in a communal dining room eat more energy and protein and waste less food.

Outpatients and day patients need timely access to food to keep them moving. At STARS provide bulk pantry stores and pre prepared light snacks for distribution by unit staff as required. We implemented a digital ordering system where our customers can access a bespoke list of items for online ordering today and delivery tomorrow. Outcomes of this system are greater flexibility for



consumers to adjust orders to meet needs and have greater visibility of costs, while we have 100% traceability and cost recovery to enable and support the responsible use of public funds.

Continuous quality monitoring and improvement projects have enabled the implementation of:

- Efficient waste management strategies, reinvesting savings into better quality food and high value care
- Innovative models of care – on demand snacks in a rehab setting
- Real-time patient feedback to improve patient satisfaction

The Innovative processes we have used to achieve this are:

- On demand technology to support safe and efficient dining room services
- On demand technology to support 'snacks on demand' in a rehabilitation setting
- Digital ordering of bulk food supplies via customisable 'shopping lists' for day stay consumers, allowing traceability and cost recovery.
- Real time patient meal experience feedback via QR codes on meal trays
- 100% intake tracking by food service officers – which enables our systematised and delegated malnutrition prevention model of care.

The food service system we have implemented at STARS allows flexibility to meet the specific needs of 3 distinct patient cohorts (day stay, long stay and short stay) with 3 different, bespoke food service models, which is innovation in practice. It is through this unique mixed model approach that we have been able to deliver collaborative and person-centred hospital Food Services that achieve positive experiences and outcomes for our consumers.

Outcomes we have achieved include:

- Hospital wide malnutrition prevalence of 13.7% (well below rates in the literature of 25-50%) and no Hospital Acquired Malnutrition (HAM) since opening.
- Culture of Success amongst team (69% engaged) - with an 81% response rate in the 2021 BPA survey
- Food service satisfaction score of 4.39/5 (State-wide Food Services KPI is 4.2).
- 100% organic waste recycling – reducing carbon footprint.
- Numerous state and national awards from the Institute of Hospitality in Healthcare.

NON-CLINICAL SERVICE DELIVERY

TABLE OF SUBMISSIONS
Austin Health, Department of Radiology, VIC iHUB: Austin Radiology's Booking and Feedback App *Mark Plummer, Jeff Feldman, Nicole Hosking, Trish McMillan, Stephanie Mok, Blake Patterson, Tamara Oliver, Beth McCubbin*
Gold Coast Hospital and Health Service, Strategy, Transformation and Major Capital Division, QLD Embedding a culture of transformation at Gold Coast Health *Sandip Kumar, Tracey Brook, Alana Myers, Jonathan Carver, Adelaide Michael*
Grampians Health Stawell, Performance Improvement Unit, VIC Paramedic workforce model in the Urgent Care Centre - Grampians Health Stawell *Greg Hallam, Denise Fitzpatrick*
Hunter New England Local Health District, Integrated Care and Partnerships, NSW Collaborative Care for Vulnerable Patients *Todd Tobin, Karen Harrison, Simone Dagg, Dr Lee Fong, Phillip Walker*
Mercy Health, Mercy Hospital for Women Physiotherapy Department, VIC Mercy Hospital for Women maternity and postnatal physiotherapy education videos *Rebecca Maguire, Angela Ravi, Melissa Bowkett-Hall*
Northern Adelaide Local Health Network, Aboriginal Health, SA NALHN Aboriginal Health Initiatives and Aboriginal Specific Indicators *Kurt Towers, Toni Shearing*
Northern Adelaide Local Health Network, South Australian Intellectual Disability Health Service, SA SA Intellectual Disability Health Service Website Co-Design *Emily Lines, Chris Nelson*
Norwest Private Hospital, Support Services, NSW Wards person shift to consumer focused *Tutakaori Dowestt Moeahu, Rebekah Duxbury*
Royal North Shore Hospital, Executive Unit, NSW Postcards from St. Leonards. Wish you were here. *Helen Ganley, Alison Zecchin, Philip Hoyle, Valerie Elsmore, Sibusisiwe Maturure*
Royal Perth Bentley Group, Centre for Wellbeing and Sustainable Practice, WA A Wellbeing Revolution: Humanity at the Heart of Healthcare *Andrew Del Marco, Richard Read, Nicola Frew, Michael Hertz*
Royal Prince Alfred Hospital, Capital Infrastructure and Engineering /Biomedical Engineering, NSW Renal RO Reject Water Harvesting Project *Anne-Louise Georgas, Rodney Staughton, Shane Oakes, Chin Voon, Kesh Chand, Meenal Sharma*
St Andrew's Hospital, Nursing, QLD Food is only nutritious if it can be accessed *Tamara Page, Tina Donaldson, Kellie Cheer, Adrian Saunders, Paul Smith*

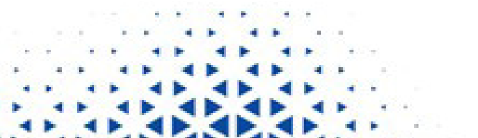


TABLE OF SUBMISSIONS

St John of God Murdoch Hospital, Allied Health, WA
The Art of Caring
Liz Gomez, Emily Lees, Iris Whitelock, Giuseppe Reina, Holly Bartley, Sarah-Jayne Powell, Ben Edwards

St John of God Health Care – National Office, Patient Experience Team,
The 3Cs - Communication, Connection and Compassion: St John of God Health Care's Person-Centred Care Program
Caroline Zani, Melissa McFarlane, Maya Drum, Dani Meinema

South Western Sydney Local Health District, People and Culture, NSW
People and Culture
Rebecca Leon, Larissa Selch, Leanne Ludgate

Surgical, Treatment and Rehabilitation Services (STARS), Dietetics and Food Services, Allied Health, QLD
Collaborative and Person-Centred Hospital Food Services
Jennifer Ellick

Western Sydney Local Health District, Corporate Services, Westmead Hospital, NSW
Red Bus Service
Renata Melan

HEALTHCARE MEASUREMENT

WINNER

Hunter New England Local Health District, NSW

Mater Mental Health Pharmacy

Virtual Clinical Pharmacy Service Project - Mental Health

Rosa Baleato, Cecilia Bjorksten, Rory Curtis, Leana Wong

AIM

The Mental Health (MH) Virtual Clinical Pharmacy Service (VCPS) project was set up in July 2021 to address significant gaps in medication management practices at three remote MH units without onsite specialist MH clinical pharmacy services. The three MH units are located at Tamworth, Manning and Maitland Hospitals (servicing 70 acute psychiatric beds). The aim of this project was to embed pharmacists within MH multidisciplinary teams (MDTs) via a virtual care model to optimise prescribing and monitoring of medications and minimise errors and adverse effects through prevention and early intervention.

SUMMARY ABSTRACT

The use of medicines in Australian hospitals is the most common therapeutic intervention and one of the most complex. Medicines are associated with a higher incidence of errors and adverse events than other health care interventions (CEC, 2022). Hospital pharmacists are an essential part of the multidisciplinary team to ensure safe and appropriate medication use, and aim to reduce medication misadventure in the following ways;

i) documenting a patient's best possible medication history and reconciling medications at admission
ii) adverse drug reaction history and allergy documentation
iii) dose and therapeutic drug monitoring and optimisation
iv) drug interaction checking
v) antimicrobial stewardship
vi) medication supply
vii) education and provision of drug information for clinical staff
viii) patient medication counselling and education
ix) review and completion of medication management plans and discharge summaries
x) ensuring continuity of medication management during transitions of care

The NSW Strategic Framework and Workforce Plan for Mental Health 2018-22 outlines that consumers need access to allied health professionals, including pharmacists, to improve functional recovery and physical health. Transitions of care and discharge have been highlighted as a time of increased risk of medication errors and readmission due to medication issues. Pharmacists play a crucial role in managing coordination of medication in transitions of care with appropriate follow-up to assist in streamlining the medication discharge process. Studies have consistently demonstrated that involvement of clinical pharmacists in these steps significantly reduces medication error or risk of error, which can consequently reduce the number of ED presentations and hospital readmissions (Duguid, 2012; Mekonnen et al, 2016; Pronovost et al, 2003; Ravn-Nielsen et al, 2018; Tong et al, 2017).

In addition to Mental Health units based at Newcastle, Morisset and Armidale, the Hunter New England Mental Health Service (HNE MHS) includes three regional Mental Health units based at

Tamworth, Taree, and Maitland Hospitals, which house around 70 adult acute psychiatric beds in total. The onsite hospital pharmacies at these three sites fulfil a medication supply function only for MH inpatients.

The lack of clinical pharmacy services at these three remote MH units has been highlighted in HNE MHS National Safety and Quality Health Service (NSQHS) Standard 4 (Medication Safety) gap analysis reports for many years, and also in feedback provided to HNE MHS from ACHS accreditation surveyors.

<u>Virtual Clinical Pharmacy Service (VCPS)</u>

In July 2021, the HNE Mater MH Pharmacy service was provided with 0.4 FTE pharmacist funding to set up a novel Virtual Clinical Pharmacy Service (VCPS) for the three regional MH units at Tamworth, Taree and Maitland. The model of care for the VCPS project was devised by the HNE Mater MH Pharmacy team in consultation with key stakeholders, including MH Clinical Directors, to provide high quality, accessible and sustainable virtual pharmacy services in rural and remote communities. Given the extensive geographical area covered by HNE LHD, this project presented a valuable option for ensuring pharmacist service delivery to remote sites without specialist MH pharmacist teams.

Virtual attendance by MH pharmacists in multi-disciplinary team (MDT) meetings allowed cover of the three remote sites by the same three experienced MH pharmacists, with oversight by the MH Director of Pharmacy, ensuring continuity of care and governance. The remote service delivery model reduced interruption of MH pharmacist duties at the Mater MH pharmacy and was incorporated into the existing workload of the clinical pharmacists involved in the project.

MH pharmacists were tasked with obtaining best possible patient medication histories, reconciling medications on admission, allergy and adverse drug reaction documentation, regular MDT ward round virtual attendance, provision of medicines information and prescribing guidance, dosing and administration advice, medication reviews, patient counselling, and discharge medication reconciliation (Appendix 1: Figure 1 – Inpatient medication cycle showing service enhancements). During or following MDT meetings pharmacists provided clinical advice with clear actions for doctors to follow (e.g., prescribing guidance, therapeutic drug monitoring, side effect management), often resulting in immediate actions that are trackable and measurable in CAP, MedChart, and treatment summaries. The number, type, uptake and acceptance rate of interventions made by MH pharmacists were recorded, and pharmacists were able to follow up and check recommendations via email, telephone and annotation in MedChart.

Pharmacists attended over 300 MDT meetings in the first 12 months of the VCPS project, reviewed 367 medication charts, performed 239 medication history checks, and made 1285 interventions for 677 patients (an average of 1.5 interventions per hour of pharmacist time), amongst other occasions of service. Appendix 2: Figure 2 provides collated data measuring some of the types of interventions made in the first 12 months. A 95% acceptance rate for clinical pharmacy interventions made by pharmacists demonstrated the positive impact of the "virtual" clinical pharmacist. Appendix 4: Table 1 shows summarised examples of typical clinical interventions made by the pharmacist team.

Feedback was sought mid-project via a REDCap survey from all staff involved in MDT meetings, including, doctors, nurses, and allied health. Survey results were overwhelmingly positive, with patient medication review, drug information and discharge planning ranked as the most beneficial interventions for improving patient care. Over 75% of staff surveyed indicated that having a MH pharmacist on the team was viewed as being 'very valuable' for optimal patient outcomes, while 76% reported that their knowledge of medications had improved since commencement of the VCPS (Appendix 3: Figures 3a and 3b).

Utilisation of a virtual care model demonstrates the MH Pharmacy Service's ability to adapt and change in response to service needs and growth, as well as the volume and complexity of care

required for mental health patients. Specialist clinical pharmacist interventions facilitate patient-centered medicine optimisation and improve patient care and wellbeing by ensuring best practice, rationalisation and quality use of medicines. The service demonstrates how embedding pharmacists within multidisciplinary teams (MDTs) via a virtual care model can optimise prescribing and monitoring of medications, minimise errors and promote adverse effect prevention and early intervention.

REPORT

APPLICATION OF ACHS PRINCIPLES

1. Consumer Focus

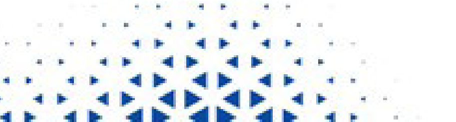
Use of medicines in Australian hospitals is the most common therapeutic intervention. Due to their complexity, medicines are associated with a higher incidence of errors and adverse events than other health care interventions. 250,000 hospital admissions annually are a result of medication-related problems. The annual costs for Australia are $1.4 billion (Lim et al, 2022). In the context of mental health, this is further complicated by psychotropic medications commonly having ill-defined indications/clinical parameters guiding their use, coupled to an often-complex clinical picture (physical and mental) of mental health patients, who may be overlooked as "too complicated", "irrational" or difficult to deal with due to their mental illness and the associated stigma. Access to MH clinical pharmacy services leads to improved identification of patients on high-risk medications or combinations, previous treatment failure, polypharmacy, or medications requiring active monitoring or with serious adverse effects, enabling increased detection of preventable medication-related harm.

The involvement of MH pharmacists at ward rounds/MDT meetings also helps ensure medication prescribing decisions are safe, appropriate and consider the long term needs of mental health clients and promote the quality use of medicines. Appendix 4 Table 1 provides examples of patient-focused clinical interventions made by pharmacists during MDT meetings. The outcomes of these examples were corrected prescribing errors, improved patient monitoring, patient education and counselling, involvement of patients in clinical decisions, appropriate prescribing through consideration of medication effects on co-morbidities, and monitoring for medication side effects which in turn improves management of side effects and minimises their progression to potentially serious sequelae. Side effect monitoring recommendations, which assist to minimise medication adverse effects on patients' quality of life and improve patient mental and physical health, constituted 8% of the diverse pharmacist interventions made.

The MH VCPS has enabled improved access to pharmacy services for rural, regional and priority populations, including the Indigenous populations serviced through Tamworth and Taree Mental Health Units. The MDT meetings attended by VCPS pharmacists involve active patient participation and interaction with the pharmacist. This improves the patient's ability to be involved in decision making and medication choice, with the pharmacist available to provide reassurance and medication counselling to patients. The improved access to medication information is driving greater health literacy for patients.

2. Effective Leadership

The VCPS project was an initiative of the HNE MHS General Manager, who provides Executive support. Leadership and day to day support of the VCPS project team is provided by the HNE MH Director of Pharmacy, who has utilised a collaborative approach to engage with key stakeholders, including relevant MH Clinical Directors and Pharmacy team members. It was agreed, early on, that pharmacist attendance at weekly MDT ward rounds, would maximise service impact with limited pharmacist resources using the virtual platform. Initial planning meetings were held between MH Pharmacy and senior management to develop the virtual model of care, covering governance,



workforce, recruitment and equipment needs, telehealth and technology requirements, discussion of outcome measures and methods for service evaluation.

The utilisation of existing specialist MH pharmacists based at Mater MH enabled implementation of the VCPS project within a short two-week timeframe. The MH pharmacists also conducted an initial assessment of current practices and procedures at each site which helped them to adopt a creative and dynamic approach in their virtual interactions with staff and patients to build relationships virtually.

The MH Director of Pharmacy adopted a hands-on approach, working side by side with the specialist MH pharmacists, to undertake clinical activities via telehealth. This role modelling of best practice was an ideal way to inspire and motivate team members, to encourage them to contribute, develop and learn. Staff backfill for the MH telehealth pharmacy services was also provided by the Director of Pharmacy to ensure service consistency during unexpected pandemic-related pharmacy staff absences over the 12 month VCPS pilot project period.

Active participation of the VCPS team leader in virtual clinical pharmacy activities has improved awareness of the potential benefits of the virtual care pharmacy model, including improved efficiencies through working smarter not harder, e.g. by conjointly reviewing current medication charts and pathology results in real time, on two screens, at the point of medication decision-making during MDT team meetings, to ensure clinical management plans reflect the clients' needs. Through virtual attendance at MDT ward rounds, the VCPS team leader has gained a greater understanding of current clinical practices, potential barriers to undertaking a virtual role in Mental Health and has been able to problem solve on the spot to assist in risk mitigation.

The virtual clinical pharmacists consulted the MH Quality Assurance Audit Risk and Compliance (QAARC) team and the MH Research Analysis Evaluation and Dissemination (MH-READ) teams to create innovative tools in REDCap to record clinical pharmacist intervention data and measure outcomes, e.g., uptake of advice. Using the new tools and through direct feedback with clinicians onsite, the VCPS project is constantly reviewed internally by the MH Pharmacists involved in the virtual pilot project.

The MH QAARC and MH-READ team leaders were also consulted to create a mid-project VCPS survey in REDcap to assess stakeholder opinion and gauge progress, perceived utility and suggested improvements to the service, within resource limitations.

Effective leadership of the VCPS project has provided opportunities for collaboration and sharing of ideas and decision-making around patient medication management. The mere presence of a pharmacist at weekly ward rounds has opened the dialogue around medications, improved medication safety surveillance and has raised awareness of important points for patient medication counselling.

Ongoing effective stakeholder engagement has led to an improved understanding of who the key stakeholders are, which has helped in setting up effective communication pathways to improve outcomes for patients. For example, MedChart surveillance reports were set up by the MH Director of Pharmacy to detect and perform daily checks for patients receiving clozapine at one of the MH Units and these are now being sent to other key stakeholders in the relevant MH clozapine network on a daily basis, including the Clozapine Coordinator, the onsite Pharmacy Department and a local Psychiatry Registrar, as part of a broader QI project to reduce medication errors with clozapine, (see Section 3: Continuous Improvement, below).

3. Continuous Improvement

Through the innovative use of digital technologies for data collection we have been able to track interventions made by the VCPS team for project design, performance feedback, auditing, and quality control purposes. This has enabled us to track productivity and optimise time management,

in order to improve our provision of the virtual service. The use of data collection protocols and communication and assessment of the service with clinical teams has highlighted the utility of these practices within the Mater MH Pharmacy service, and aspects of this (e.g., intervention recording through REDCap, consumer and stakeholder surveys, research project design) will be incorporated into routine practice as a quality improvement measure.

The VCPS project has also led to the instigation and development of a quality improvement project on clozapine prescribing. Clozapine, classified as a high-risk medicine, is an antipsychotic used for the management of treatment-resistant schizophrenia, and requires adherence to various legal and clinical prescribing guidelines due to risk of serious potential adverse effects (Appendix 5). Clinical pharmacist involvement via the VCPS unearthed ongoing and repeated issues with clozapine patient management such as prescribing, medication administration, patient monitoring and supply of clozapine at one of the remote sites. These issues were attributed to a combination of lack of knowledge regarding clinical and legal issues with clozapine prescribing in non-MH wards with admitted clozapine patients, and lack of education of onsite staff on local clozapine prescribing and administration procedures. In accordance with National Safety and Quality Health Service (NSQHS) Standard 4.2 'Applying Quality Improvement Systems', and NSQHS Standard 4.15 'High Risk Medicines', a quality improvement process has commenced, and guidelines have been developed and ratified in collaboration with the MH Director of Pharmacy, the onsite Director of Pharmacy of the remote hospital, and the MH Clinical Director of the remote site. This quality control procedure will be implemented at other HNE LHD remote MH sites to ensure best practice and optimum quality of care for clozapine patients.

The VCPS is now leading to other QI projects. For example, the new collaborative partnerships established between MH pharmacy and on-site pharmacy, nursing and medical teams at one of the remote sites has led to an invitation for MH pharmacy input into the organisation of a new medication room at the remote MH unit. Involvement of the specialist MH pharmacy team will help to ensure that nursing staff have timely access to medications that are tailored to the needs of the MH patients.

4. Evidence of Outcomes

As part of the VCPS service key performance indicators (KPIs), the number and type of clinical interventions made by Mater MH Pharmacists at the remote sites are recorded weekly. This provides useful data for analysis of service utility, tracking of clinical outcomes, staff education, and clinical handover between Mater MH Pharmacy team members, to ensure continuity of patient care.

Appendix 2; Figure 2 summarises the general types of interventions made by VCPS through pharmacist attendance at over 300 MDT meetings during the project, combined with 'behind the scenes' medication reconciliation, research, drug information searches/enquiries, and monitoring. The last 12 months of records show 1285 medication recommendations were made for up to 677 patients admitted to the three remote sites. These interventions included 367 medication chart reviews, with 239 best possible medication histories (BPMH) /admission medication reconciliations performed. This equates to an average of 1.5 interventions made per hour of VCPS pharmacist time (0.4 FTE). HNE Reporting Access Portal (RAP) reports indicate that since its implementation, the VCPS has resulted in a three-fold increase in documentation of BPMH and a four-fold increase in documentation of admission medication reconciliation in MedChart for patients at the remote MH units. Pharmacist review of individual medications charted in MedChart provides an opportunity to double-check medication doses, dose frequency, administration instructions, and potential drug interactions. Monthly data via MedChart Pharmacy Review RAP reports shows the VCPS has also resulted in a ten-fold increase in the number of individual medications reviewed by a pharmacist, for the three remote MH units.

Examples of pharmacist-led interventions with potential for significant health improvement outcomes include, but are not limited to, 46 depot injection errors (e.g. incorrect doses charted,

incorrect dose scheduling), the identification of 41 medication omissions (i.e. prescribed medications unintentionally omitted at the time of admission), 33 drug interactions identified (medications that when co-prescribed can affect each other, such as inhibition of the metabolism/clearance of one medication by another, potentially leading to toxicity; or increased clearance of one medication by the other, thereby reducing efficacy), and 105 recommendations for side effect monitoring (which can affect patient outcomes such as health status and compliance). Further, 45 drug information requests were fielded by VCPS pharmacists from clinicians. These interventions demonstrate improved patient outcomes through improved medication management and reduction of medication errors.

The high acceptance rate (95%) of these interventions and recommendations by onsite clinical teams speaks to the utility of having a specialist MH clinical pharmacist service available at these sites. Numerous interventions suggested by MH clinical pharmacists were adopted on a larger scale across the MH ward to benefit patients. Examples include an influenza vaccination drive for patients as a result of pharmacist advice for high-risk patients and dissemination of up-to-date monitoring advice to guide management of all COVID-positive clozapine patients, as well as early intervention through pathology review, monitoring and therapy change recommendations, to minimise effects of antipsychotics on patients' reproductive health and cardio-metabolic health, including weight and glucose metabolism.

Six-month survey data (50% response rate) of clinical and allied health teams at the remote sites clearly demonstrates perceived value and appreciation of a MH clinical pharmacy service by teams at these sites (Appendix 3: Figures 3a and 3b). 92% of VCPS survey respondents (Clinical and allied health staff participating in multidisciplinary team meetings) would like this virtual service continued in the future. MH Medical Officers were the most represented category of clinical staff in the survey. Survey respondents overwhelmingly indicated that the information received by the VCPS was easy to understand, pharmacists were convenient to access (via virtual meetings, telephone, and email), and that the service had improved their knowledge of medications. Survey respondents felt the VCPS service had resulted in significant improvements in rates of patient medication review (80% of respondents), medication history reconciliation (60%), patient education (32% of respondents), medication error reduction (56%), and discharge planning (68%). 77% of survey respondents also rated availability of medication information to patients and staff as improved since service implementation.

The following comments sum up the significant positive impact of the VCPS for Mental Health patients and staff:

i) *"I believe this service is extremely valuable for the care of our consumers. It enables us to ensure that the gold standard and evidence-based medication is being prescribed during admission and that discharge medication issues are considered and resolved prior to discharge ensuring the best possible outcome for our consumers returning home"*- Survey respondent.

ii) *"We didn't know the value of clinical pharmacists until we started working with them and now we can't do without them"* – MH Clinical Director, via a MH Clinical Advisory Council meeting, June 2022.

5. Striving for Best Practice

This project has enabled us to build high level functional links with a range of rural and regional Mental Health teams within HNE LHD, opening relationships between teams and patients. Building trust and engaging with clinical staff ensured that staff viewed the MH clinical pharmacists as a resource to assist with the achievement of safe and effective use of medicines. As discussed above, 76% of survey respondents reported an increase in medication knowledge after instigation of the

VCPS, which in turn empowers local teams to improve medication management for patients. Having MH pharmacists available to consult with patients also enhanced patient understanding of their medications and of potential side effects. Improved health literacy has been shown to help minimise medication misadventure and improve overall health outcomes (Cho et al, 2008; Davis et al, 2007; Nutbeam et al, 2017; Nash and Arora, 2021; Rheault et al, 2019; Kutcher et al, 2016; Keleher and Haggar, 2007). Having a pharmacist present in MDT meetings and/or available to patients provides reassurance to patients about prescribing decisions, as well as providing education to patients on medication management.

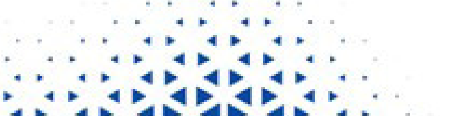
MH pharmacist coverage of rural sites is also enabling seamless transitions of clinical care when patients move between MH units. Utilisation of the expertise of the HNE Mater MH pharmacists at all of the sites has led to the improvement of handover between sites when patients are transferred within HNE LHD facilities, and improved continuity of care.

The VCPS has expanded on the use of telehealth services and information technology in the clinical setting, raising new possibilities in communication between geographically distanced sites across HNE LHD. For example, MH Pharmacists regularly provide professional education sessions/in-services and lectures to nursing and medical staff located at the Mater campus. In future we intend to expand these education sessions (via live stream) to include clinical and nursing staff at the remote sites, a move facilitated by these newly opened lines of communication and professional relationships as a result of the VCPS. This will expand on the services provided by MH Pharmacy to the remote sites, which will improve and standardise medication education and medication management standards throughout HNE MH services.

Aligning medication management with the NSQHS Medication Safety Standards (ACSQHC, accessed August 2022) is best practice, ensuring safe and optimal use of medicines and subsequently facilitates optimal patient outcomes. The VCPS allows for improved compliance and implementation of these Safety Standard Actions. Action 4.1 – Integrating Clinical Governance is addressed with improved pharmacy oversight, which leads to a detection of potential or real prescribing errors, improved patient monitoring for medication effect and adverse effects, and best practice prescribing guidance. The VCPS has involved integration of quality improvement (Action 4.2) in the context of medication oversight, prescribing advice and monitoring (Appendix 1: Figure 1), as well as in the development of a quality improvement project for clozapine prescribing (Appendix 5). Patient access to specialist MH pharmacists improves patient health literacy and involves and empowers patients to participate in informed and shared decision making (Action 4.3). VCPS activities (e.g., collation of best possible medication history, drug information and interaction checks, provision of prescribing guidance, medication counselling, etc.) are within the scope of practice of a clinical pharmacist, and provide support to clinicians and nursing staff, improving their efficiency by allowing them to focus on clinical duties on-site (Action 4:4). Medication reconciliation, documentation of allergies and previous medication intolerances, and reporting of adverse effects are also performed by the VCPS pharmacist (Actions 4.5 to 4.9), where previously these actions were inconsistently recorded or incomplete due to lack of resources. Medication reviews are conducted as part of the MDT review process (Action 4.10) and when specifically requested by clinical staff. Pharmacists also provide clinical support for prescribing decisions, through accessing relevant up-to-date evidence-based clinical advice, as well as supporting and assisting clinical staff with patient education and counselling (Actions 4.11 and 4.13).

INNOVATION IN PRACTICE AND PROCESS

The telehealth model of care utilises existing skills and electronic resources that are part of standard clinical pharmacy practice and enables dissemination of knowledge and expertise in a manner which, up until the previous 2-3 years, was unconventional for pharmacy practice and was not



previously used within HNELHD pharmacy services. Through innovative use of technology and within a limited budget, the VCPS service delivery model has allowed for provision of specialist MH clinical pharmacist services. Prior to the VCPS project commencement, the MH units based at Mater MH, James Fletcher and Morisset campuses had a team of 5.1 FTE MH pharmacists working across these sites, including the MH Directory of Pharmacy. In contrast, the three MH sites participating in the VCPS did not have prior access to on-site MH clinical pharmacy services, due to lack of resources.

Due to resources made available in June 2021 and the vast geographical distribution of the three remote sites, the virtual clinical pharmacy model was developed and implemented within a short timeframe of approximately two weeks. This allowed for immediate contact between experienced MH pharmacists and clinical teams at the sites, to establish effective collaborative relationships between the MH pharmacy service and on-site teams. The virtual model also allows for integration into the existing workflow of the MH participating pharmacists, facilitating a more efficient service provision model for the MH pharmacy. Further, the VCPS pharmacists are easing the workload of on-site clinical teams and helping to empower medical officers to use online resources such as My Health Record, the Choice and Medication website and Safescript through improved awareness and education.

A similar VCPS has been set up by Western NSW Local Health District (WNSWLHD). WNSWLHD services 4% of the state's population (309,100 people) across 55% of the state's geographic area (433,379 square kilometres), which incorporates many rural and remote populations (Chambers et al, 2022). The VCPS trial was commenced in 2020 to address the paucity of clinical pharmacy services in rural and remote western NSW (Allan et al, 2020). Results from this trial have since been published and demonstrate the efficacy and utility of a VCPS in the absence of onsite clinical pharmacy services (Allan et al, 2021; Chambers et al, 2022). These publications further support the use of virtual clinical pharmacy services in rural and remote situations and in communities which traditionally have limited resources.

APPLICABILITY TO OTHER SETTINGS

A virtual clinical pharmacy model has obvious advantages for service delivery over vast geographical areas, when services are limited due to limited existing resources. Whilst an onsite clinical pharmacy model is ideal, a virtual service presents a valuable option for clinical input and support when in-person clinical staff are not available. Through innovative use of existing technology, the VCPS service delivery model can be expanded to sites otherwise not receiving MH clinical pharmacy (or other specialty) support, ensuring service delivery into the future. Further, this model of service delivery is both scalable and translatable to other allied health teams. Within HNE LHD, MDT meetings are now attended by other allied health teams virtually. The HNE MH Dietetics group have sought consultation with the MH Director of Pharmacy to discuss our virtual model, for expansion of dietetics services to rural and remote MH sites within HNE LHD.

Data recording used in this VCPS project also can be expanded within existing MH Pharmacy practice, to help monitor and measure KPIs, identify patterns/ medication errors, develop QI projects, etc. Traditionally interventions are not routinely recorded in clinical pharmacy practice, but use of simplified methods e.g., REDCap may provide a valuable tool to do this. Further, data and intervention recording is beneficial for the publication of models of care and knowledge sharing between districts, and subsequent career development of the team members involved in the virtual care model.

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APPENDIX

Appendix 1 – Diagram Service enhancements – VCPS

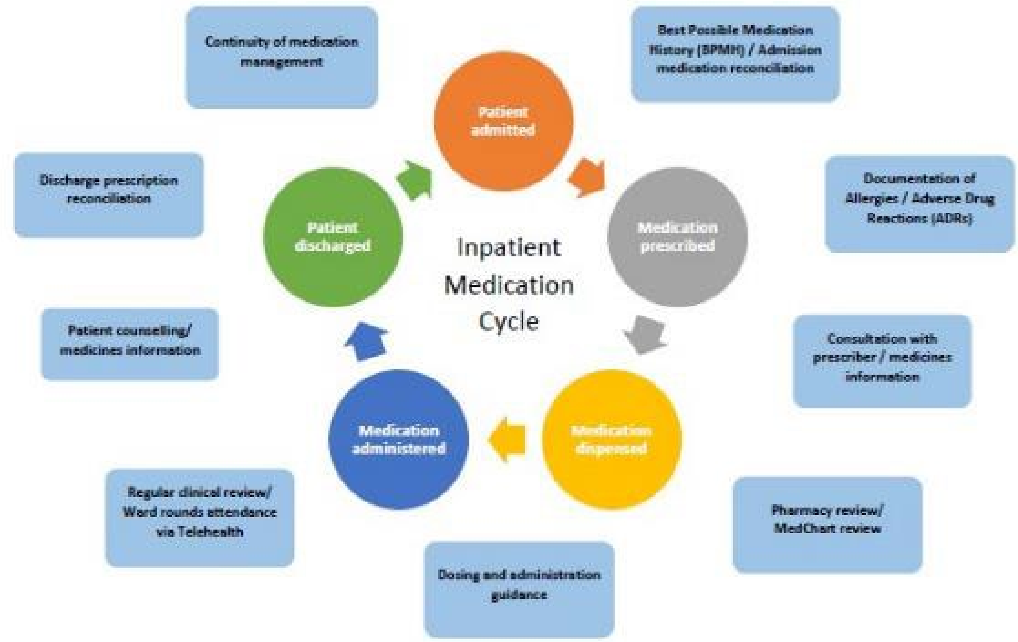
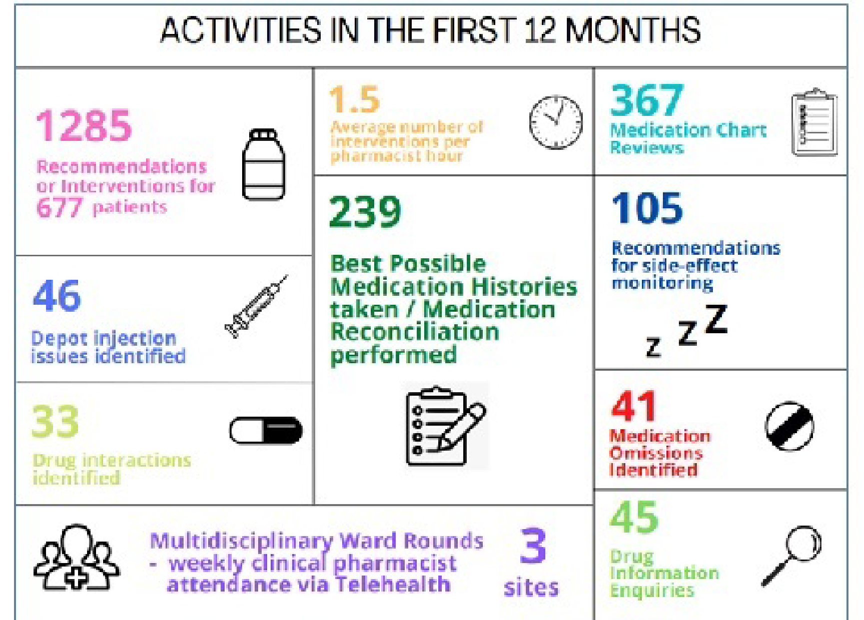


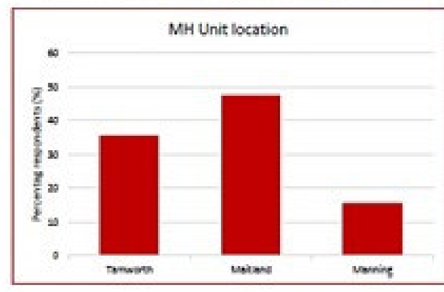
Figure 1 – Virtual Clinical Pharmacy Service interventions. Clinical pharmacy service enhancements through the virtual program are shown in outer blue boxes ( ). Pharmacist interventions were aimed at improving outcomes for mental health patients, alleviating pressure on clinical staff and facilitating appropriate and quality use of medicines.

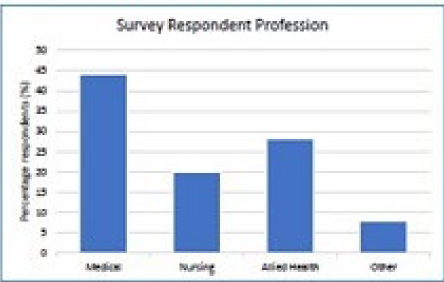
Appendix 2 – Activities in the first 12 months

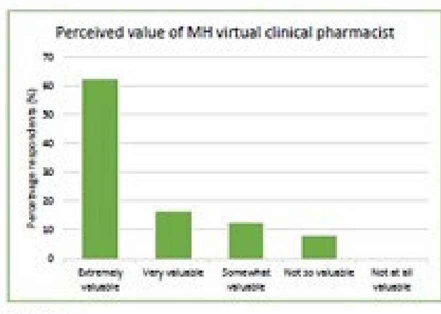


Appendix 3 - Stakeholder Survey Data

Remote Mental Health Sites: VCPS Mid-project survey feedback







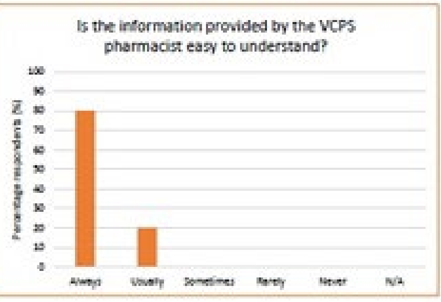
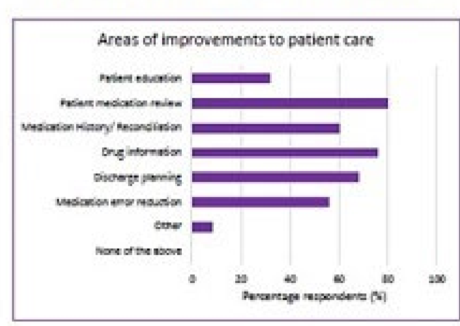
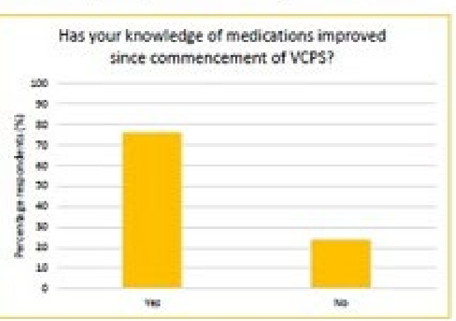
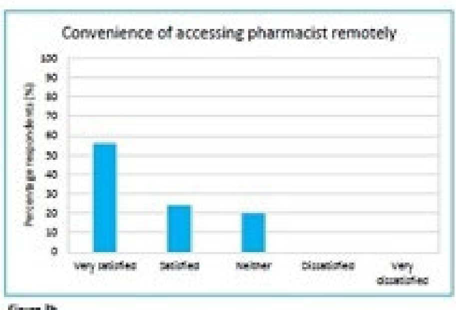


Figure 3a

Remote Mental Health Sites: VCPS Mid-project survey feedback







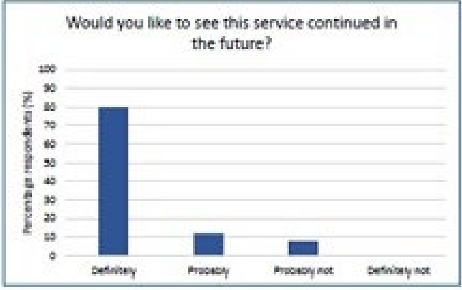
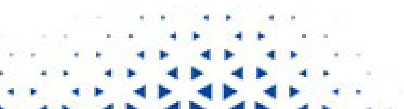


Figure 3b

Appendix 4 - Examples of typical pharmacist interventions

Issue	Intervention
Improved prevention and early intervention	
• Long-acting depot antipsychotic injections (e.g. fortnightly, monthly) are often used in MH to improve patient compliance, to simplify complicated medication dosing regimens, and to stabilise severely unwell patients experiencing psychosis • Depot antipsychotic medications are considered high risk medicines • Depot injections have a prolonged duration of action, and the medication can persist in the body for weeks or months, depending on the medication and formulation • Peak effect of depot injections is not often realised until after patients are discharged from acute MH units • Inaccurate dosing can lead to overdose and adverse effects if given early, or relapse of psychosis if given too late	• MH pharmacists (0.4 full time equivalents) have identified over 46 depot errors (including dose errors, dose time/frequency errors, etc.) across 70 inpatient beds at the three rural sites • Clinical teams advised of dosing errors, and corrections made when/where possible to improve patient outcomes
• Elderly patient with new diagnosis of atrial fibrillation (AF). • Anticoagulants are indicated in AF for stroke prevention	• Anticoagulant therapy suggested to team by pharmacist • Information provided to team regarding interactions with patient's psychotropic medications • Telehealth counselling provided to patient
• Patient with ongoing psychosis and acquired brain injury newly prescribed anti-seizure medication (levetiracetam) after seizure on ward	• Pharmacist advised team of significant increased risk of behavioural adverse effects of levetiracetam (depression, emotional lability, hostility, aggression, agitation, anxiety and nervousness) when prescribed for patients with learning disabilities or history of psychiatric problems • Guidelines recommend caution if prescribing for such patients • Advised to monitor for deterioration of mental state, and consider change to alternative anti-seizure medication if noted
• 84 year old female patient prescribed olanzapine (antipsychotic) for psychosis • Olanzapine can be constipating. Elderly people are at significantly higher risk of this • Once medication-induced constipation occurs, it can be difficult to treat	• Pharmacist recommended monitoring bowels on ward, and charting of aperients (laxatives) to maintain bowel function
Promotion of positive mental health and wellbeing through consumer participation	
• Patient with alcohol use disorder unable to make choice between two medications suggested by team to treat condition • Indecision delaying discharge	• Pharmacist provided counselling and education to patient via telehealth, discussed pros and cons of each option • Patient was then able to decide which medication best suited them • Patient was discharged same day
Promotion of best practice	
• Clozapine is an antipsychotic used to treat treatment-resistant schizophrenia • Close monitoring required to detect potential serious side effects, including heart problems and death • COVID can increase clozapine levels and side effects (emerging evidence) • 2 clozapine patients diagnosed with COVID on ward	• Our pharmacists provided up-to-date advice to team on recommended monitoring for COVID-positive clozapine patients ○ Recommended clozapine serum level testing, liver function, heart rhythm, ECG, inflammatory markers, oxygen saturation levels, venous thromboembolism (VTE) prophylaxis • Pharmacist recommended charting of inhaled corticosteroid for both patients, as per current guidelines

Issue	Intervention
	• All medications accepted by treating team • Advice then disseminated to all MH doctors at this site to guide future management of COVID-positive patients
• 40 year old male patient who, in the process of various transitions between community and hospital care, had been administered two doses of an antipsychotic depot without the appropriate dosage interval (10 days apart instead of 28 days apart), as well as an oral antipsychotic	• Pharmacist discovered overprescribing of medication, and calculated the total antipsychotic dose was 266% of the recommended maximum antipsychotic daily dose (per the Antipsychotic Daily Dosing Calculator at tddcalculator.com) • Doctors notified of error • Advice on monitoring for adverse effects was provided to the treating team
• ECT involves a brief, carefully controlled electrical stimulation of the brain while the patient is under anaesthesia, which affects the brain's activity and aims to relieve severe depressive and psychotic symptoms • Standard practice is to withhold antiepileptic medication the night before ECT • Failure to withhold these medications can interfere with electrical stimulation of the brain and prevent ECT from working • 41 year old male patient admitted for electroconvulsive therapy (ECT) for treatment resistant bipolar disorder. Patient was taking lamotrigine, an antiepileptic medication often used as a mood stabiliser	• Lamotrigine had not been withheld the night prior to patient's first ECT procedure • MH pharmacist noted this, informed doctors, and lamotrigine was recharted to be withheld prior to ECT, as per current best practice guidelines
Consumer-focused service	
• Young male patient with schizophrenia, non-compliant with medication due to adverse effect of erectile dysfunction • Subsequent relapse of psychosis	• Our pharmacists prepared detailed information regarding relative risk of erectile dysfunction and sexual adverse effects of various antipsychotic medications to help guide medication choice
• Elderly female patient admitted with possible dementia and psychosis, depression, along with disordered eating • Patient's family reported psychosis/dementia symptoms were not usual for patient, and expressed concern about sudden onset • Kept as an inpatient on an acute ward for several weeks, with addition of various medications including antipsychotics and antidepressants • Bowel obstruction suspected due to faecal overflow diarrhoea • Single aperient (stool softener) charted at regular maintenance dose	• Team advised by MH pharmacist that charted aperient was not recommended treatment for suspected bowel obstruction • Recommended change to alternative agent with correct dosing for bowel obstruction (which differs from dosage for regular constipation management). Enemas also recommended per current best practice guidelines. Medications were recharted as per recommendations made • Patient transferred from remote MH unit to Mater MH Older Person's Unit at Waratah. Handover between MH pharmacists and continuity of care retained due to VCPS and onsite clinical pharmacy service provision • Patient treated for bowel obstruction, and psychosis/dementia symptoms resolved. Patient subsequently discharged
• Female ATSI patient who had missed her dose of her fortnightly rheumatoid arthritis injection due to her ongoing mental illness • Risk of deterioration of rheumatoid arthritis management, further complicating the patient's clinical state	• Doctors asked MH pharmacist for advice on whether to chart a make-up dose for the missed injection, or whether to skip the dose. Prescribing guidance was provided with the recommendation that a new dose be prescribed the following day, with adjustment of future doses to take into account the new dosing time



Appendix 5 - Clozapine QI report

DEPT/SERVICE:
[redacted]

DATE:
1/8/21

TITLE OF PROJECT:
Improving clozapine systems and safeguards at XXX Hospital

KEY CONTACTS
The acute hospital's Director of Pharmacy, Mental Health Director of Pharmacy and local MH Clinical Director

Linkages with National Standards / NSW Policy / Procedures:

NSQHS Std 4.2 Applying Quality Improvement Systems
Intent: Quality improvement systems are used to support effective medication management and reduce medicine-related risks.

- Review, measure, and assess the effectiveness and performance of medication management strategies and practices.
- Implement quality improvement strategies for medication management based on the outcomes of monitoring activities

NSQHS Std 4.15 High Risk Medicines
Intent: Medicine-related risks are minimised by identifying and safely managing processes relating to high-risk medicines.

- Regularly assess the use and misuse of high-risk medicines, relating to storage, prescribing, dispensing and administration.

Develop and implement evidence-based risk reduction strategies for high-risk medicines.

Relevant HNELHD Clozapine documents:

- HNELHD CG 19_41 Clozapine Initiation, Monitoring, Management and Cessation
- MHQUMC: Clozapine Fact Sheet for Clinicians in the EMERGENCY DEPARTMENT

ACHS RECOMMENDATION:
Yes ☐ *No* ☒

PROBLEM/ISSUE IDENTIFIED:
Clozapine is an atypical antipsychotic used for treatment-resistant schizophrenia. It is a highly specialised, high risk drug that requires close monitoring and is associated with potentially fatal adverse effects, including neutropenia, agranulocytosis, myocarditis, severe gastrointestinal hypomotility/ intestinal obstruction and an increased risk of pneumonia. Mistakes with clozapine can have dire consequences. There is often a lack of awareness that Psychiatry input is needed before prescribing clozapine for hospital inpatients, but particularly for newly admitted patients, due to multiple factors that can significantly increase risks for patients, including:

- Missed doses - increase patient's risk of relapse / psychosis. A patient who misses their clozapine dose for > 48 hours also requires re-titration of clozapine treatment and more frequent monitoring. An example of a recent missed dose, identified by a pharmacist, was for a medical ward patient, NW, on 1/4/22 (Friday evening), where his clozapine 8pm dose was marked 'N' on the chart, due to clozapine not being ordered from pharmacy and patient's own supply or a routine after hours supply was not available.

- Delays of > 48 hrs in receiving clozapine levels from Pathology may also increase the risk of missed doses if an interim dose is not charted by Psychiatry/recommended for treating team to chart while awaiting results.
- Toxicity – can arise due to issues such as double dosing, e.g. where an accurate medication history/ last dose details are not sourced at admission, as reported via IMS and occurred with a MH patient who had already taken their clozapine evening dose 23/3/22, but had it re-prescribed by an ED doctor.
- A toxic level of clozapine occurred in a medical patient on clozapine with a lung abscess around 21/3/22. Multiple likely causes included a drug interaction and respiratory infection and continuation of the patient's usual prescribed dose of clozapine, sourced from their own supply, without psychiatry or pharmacy input.

Other local clozapine prescribing and dispensing issues:

In February 2022, the Mental Health (MH) Clinical Director identified that the prescribing process for clozapine at the remote Hospital involved multiple paper forms, which were not in use at other HNE hospitals and that this was potentially impacting on the care of inpatients who were on clozapine. The onsite Director of Pharmacy confirmed that separate clozapine prescriptions and blood count forms for inpatients had been a long-standing local pharmacy requirement, so pharmacists could verify that patients' current blood results had been viewed by Psychiatry and that clozapine was prescribed by the Psychiatry team, before it was dispensed by pharmacy.

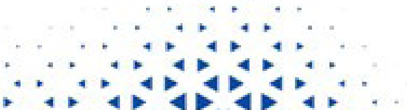
- A hospital pharmacy dispensing error was also reported via IMS on 29/4/22, where one month worth of clozapine was inadvertently dispensed to an outpatient, instead of one week.

AIM / OBJECTIVE:

To improve local clozapine systems, by reviewing current systems and safeguards, including clozapine prescribing and dispensing practices at XXX Hospital.

METHOD:

- An initial meeting was convened by the MH Clinical Director to discuss a Clozapine QI initiative. Key stakeholders in attendance included the MH Clinical Director, the onsite and Mental Health Directors of Pharmacy, the hospital's inpatient and outpatient psychiatry team medical officers and nursing staff. Clozapine prescribing processes were reviewed for the hospital's mental health and acute hospital inpatients, along with four recent clozapine incidents of concern. Strategies to improve outcomes and reduce risks were also discussed, including education, charting recommendations, reports and audits.
- A local procedure and guideline for clozapine prescribing and dispensing was drafted by the onsite Hospital Director of Pharmacy, in consultation with the MH Director of Pharmacy and incorporated new processes for the following items that were discussed at the March Clozapine QI meeting:
    - The need for psychiatry input for charting clozapine for acute hospital inpatients, including in ED
    - Streamlined clozapine inpatient prescribing and dispensing processes, in line with other HNE hospitals
    - A process for obtaining clozapine from the hospital's MH Unit outside of normal business hours
- The draft ***"Prescribing, Dispensing and Emergency After Hours Supply of Clozapine for Inpatients at XXX Hospital"*** local guideline was reviewed at a follow up meeting between Pharmacy and MH stakeholders 1/7/22 and updated. The updated version was forwarded for further endorsement by the local Drug and Therapeutics committee (DTC) and the MH Quality Use of Medicines (QUM) committee in July 2022.
- A daily MedChart report listing all of the hospital's inpatients who have been prescribed clozapine was set up for distribution via email to the local MH Clozapine Coordinator, MH Registrar, onsite hospital Pharmacy team and the MH Director of Pharmacy, to improve surveillance of clozapine inpatients and help facilitate timely review of new clozapine inpatients by the psychiatry and pharmacy teams.



OUTCOME & EVALUATION:

- The draft local guideline for ***Prescribing, Dispensing and Emergency After Hours Supply of Clozapine for Inpatients at XXX Hospital*** has been reviewed and approved by the onsite Hospital Pharmacy and Mental Health teams and has been approved by the local & Mental Health DTC/ QUM committees. The implementation of this guideline will:
    - Emphasise the need for treating teams to contact Psychiatry for review/ charting of clozapine
    - Remove the need for separate prescriptions for clozapine inpatients, by utilising MedChart as the electronic prescription
    - Remove the need for blood count forms for clozapine inpatients and ensure more timely access to pathology results for inpatient dispensing
    - Ensure support is provided by Mater MH Pharmacy and local/ district Clozapine Coordinators for entry of blood results into ClopineCentral™
    - Reduce clozapine prescribing, dispensing and administration errors, including missed doses by removing forms and streamlining processes, including for ordering and for after-hours access
    - Enable nurses to order clozapine in MedChart via the same method used for other medications.
- The 4 local clozapine incidents (discussed at March meeting) were reviewed and followed up appropriately by the psychiatry and pharmacy teams, as required, to avoid or minimise adverse patient outcomes.
- The MedChart "Prescribing Detail for Current Clozapine Inpatients" report has been checked daily by at least one pharmacist and psychiatry registrar, since implementation 3 months ago and no further clozapine prescribing or dispensing errors have been detected for hospital inpatients.
- Education on the new requirements for prescribing clozapine for inpatients and processes for accessing clozapine after hours will be organised for the acute Hospital and MH teams by a MH Registrar, in consultation with the organiser of the hospital's JMO & ED doctors training.

Issues outside the scope of the above new local guideline and still to be resolved, include:

- Initial identification of patients who are on clozapine if the patient doesn't disclose this information.
- Linking of outpatient prescribing of clozapine with the inpatient (MedChart) prescribing system. [A state-wide solution is being investigated for this issue].
- Delays of > 48 hours in receiving results from Pathology for clozapine levels, are a barrier to determining & charting appropriate doses to cover the interim period while awaiting results.

Project completed: *Yes* ☐ *No* ☒ *If no, next review/ audit date: October 2022*

SUSTAINABILITY & ONGOING REVIEW:

It is expected that the improved (daily) surveillance of clozapine inpatients using the MedChart prescribing report will reduce clozapine dosing and charting errors, reduce missed doses and improve patient outcomes.

Monitoring of clozapine medication incidents through the local Psychiatry team, DTC and MH QUMC will continue.

Feedback from local and MH medical officers, pharmacy and nursing staff on the new guideline and prescribing/ dispensing/ afterhours processes will be regularly sought and acted upon, as required.

FUTURE RECOMMENDATIONS & NEXT STEPS:

A follow up meeting of Pharmacy and Mental Health teams will be scheduled within the next month or two, once the approved local clozapine guideline is available on the HNE intranet, to roll out necessary education.

The issue of unacceptable delays in receiving pathology results for clozapine levels for hospital patients will be referred to MH QUMC for appropriate follow up with the local Pathology provider.

HEALTHCARE MEASUREMENT

HIGHLY COMMENDED

Cabrini Health, VIC

Clinical Governance / Health Informatics

Reducing Hospital Acquired Complications (HACS) through data insights

Dr David Rankin, Jodie Dooley

AIM

Under the leadership of the Director of Clinical Governance and Informatics, the organisation aimed to reduce the incidence of hospital acquired complications through the provision of personalized data insights to clinical staff, namely Medical and Nursing staff who deliver direct patient care.

SUMMARY ABSTRACT

Cabrini Health is a Catholic, not-for-profit, private acute healthcare organisation in Melbourne Victoria. Cabrini comprises a Palliative Care service located in Prahran offering both home care services and inpatient care; a Women's mental health service located in Elsternwick; and two acute sites located in Malvern and Brighton.

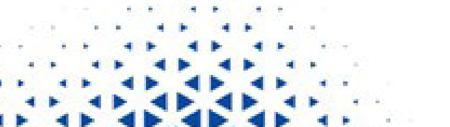
Our acute sites consist of approximately 646 beds (508 at Malvern and 138 at Brighton) and our services extend to ICU, ED, Maternity, Paediatrics, Surgical, and Rehabilitation. With over 80,000 separations per year and 25,000 ED attendances Cabrini partners with more than 860 specialists including 560 credentialed visiting medical officers to deliver high quality, safe patient care.

In 2012, the Australian Commission for Safety and Quality in Health Care (ACSQHC) commenced a joint working party with the Independent Hospital Pricing Authority to consider options for safety and quality pricing in public hospitals across the nation; and determine how clinical data might be used to advance improvement in quality and safety. In the four years that followed a comprehensive review of international literature was completed; hospital incident reports were analysed; multi-disciplinary clinicians were engaged; and a proof-of-concept study was undertaken with both public and private health care services. Consequently, in August 2016 the first national set of Hospital Acquired Complications (HACs) was published by the ACSQHC. The list incorporates 16 patient complications to be monitored by health care services utilizing coded data from patient administration systems, therefore.

In 2019 Cabrini commenced work to determine the data needs and interests of staff within the organisation and to generate data insights tailored to these needs with a focus on improving patient outcomes through measurement.

Staff were segregated into four key audiences based on their roles in patient safety and quality, their involvement in direct care delivery, their available time to review and use data, their patterns of work and their ability to act as a change agent.

1. The Board and the Executive Team
   - concerned with ensuring there is a culture of safety and quality improvement
   - control risk
   - understand strategy and data
   - cannot deliver change in patientcare



2. Management
    - focused on quality, financial and activity performance
    - concerned with organisational reputation
    - only become aware of the exceptional patient
    - do not deliver care or directly change outcomes
3. Nursing (and Allied Health)
    - aware of, and concerned about individual patients
    - actively involved in the delivery of care and patient outcomes
    - often overwhelmed with paperwork and process
    - team oriented with formal leadership and accountability
    - can be defensive of practice
4. Visiting Medical Officers (craft groups and VMOs)
    - Admit, operate, and discharge patients to a private hospital
    - Critical in changing patient outcomes
    - Busy, hard to engage
    - Patient (not data) focused

The informatics team worked closely with Health Information Services to ensure appropriate methods of review were in place to deliver accurate, trustworthy data. Once these review processes were matured and there was increased confidence in the accuracy and completeness of the data sets reports were developed utilizing data from the Patient Administration System (PAS) and the hospital's clinical incident management system (RiskMan).

Reports were generated focusing on the four key audiences identified

Monthly performance report to management
- Provided to health operations committee (executive lead) and the Board
- View of numbers for each HAC for the month, and comparison of same period in previous two years
- Outline of actions that were being taken to reduce complications

Weekly and monthly reporting to Nursing
- Automated reporting developed utilizing NPrinting functionality
- Reports are tailored to the unit (i.e. number of events, patient demographics)

Quarterly reporting to medical staff
- Reports to individuals demonstrating comparison with peers
- Summary reports to craft groups

The availability of accurate and service relevant data presented in a meaningful way has achieved a significant decrease in the overall HAC rate in the organisation which has reduced from >2.0% in 2019 to 0.8% in 2022.

Data reports to specialists and nursing teams has enabled clear focused responses to key HACs, including urinary tract infections (elderly female orthopaedic patients, pneumonia (abdominal surgery), malnutrition (colorectal surgery), delirium (elderly patients receiving opioid pain relief). Our quality and safety committees monitor the data through monthly performance reports and can target quality improvement activities to drive improvements in certain HACs when required. Recent activities undertaken including the 'Happy Heels' initiative designed to reduce the incidence of heel pressure injuries in patients with neck of femur fractures through the adoption of heel wedges at time of admission.

HEALTHCARE MEASUREMENT

HIGHLY COMMENDED

Liverpool Hospital, NSW

Emergency Department

Improving the Identification of and Support for Aboriginal Patients in the Emergency Department

Daniel Van Vorst

AIM

The aim of Liverpool Emergency Department's project was to improve the identification of Aboriginal patients in ED and reduce the rates of Discharge Against Medical Advice (DAMA) and Did Not Waits (DNW) by 20% in a six-month period.

SUMMARY ABSTRACT

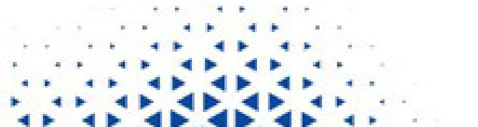
Liverpool Hospital's Emergency Department (ED) noticed an increased rate of Aboriginal identified patients Discharging Against Medical Advice (DAMA) and leaving prior to being seen – Did Not Wait (DNW). This was found to be higher than the general population which is of concern due to their high risk of health concerns.

DAMA and DNW can lead to increased morbidity and mortality, re-admission and increased healthcare expenditure. Liverpool ED created and implemented an icon that appears on Firstnet to alert staff of presenting patients who identify as Aboriginal or Torres Strait Islander. The icon design is of the Aboriginal and Torres Strait Islander flags (Appendix 1).

The icon was taken to South Western Sydney Local Health District (SWSLHD) Emergency Department Collaborative meeting where discussion and broad approval was sought from all departmental leaders/managers. The icon was then sent to Sydney Local Health District for approval as their Firstnet build is linked to SWSLHD. The icon was also discussed at Liverpool Hospital's Aboriginal Health committee meeting as an initiative that could assist in earlier identification of our Aboriginal and Torres Strait Islander patients, in turn improving individualised care for our indigenous patients.

The icon enables staff to better respond to the cultural needs and safety of our Indigenous patients and facilitates early referral to Aboriginal Liaison Officers (ALOs). ALOs were granted access to Firstnet to case find and conduct early interactions with this patient group.

During and after implementation of this icon, an increase in the identification and awareness of Aboriginal patients was observed evidenced by ALOs reporting they were being referred to more often. An overall reduction in DAMA and DNW of 53% was achieved, which in turn should result in improved outcomes for Aboriginal patients presenting to Liverpool ED.



HEALTHCARE MEASUREMENT

HIGHLY COMMENDED

Royal North Shore Hospital, Northern Sydney Local Health District, NSW

Department of Anaesthesia, Pain, and Perioperative Medicine

Anaesthetic Greenhouse Gas Reductions

Dr Arpit Srivastava, Dr Maximillian Benness, Dr Matthew Doane, Dr Adam Rehak

AIM

To educate, enable, empower, and enact practice changes in the perioperative space that maintain standards of care while reducing our carbon footprint.

SUMMARY ABSTRACT

Currently 7% of Australia's carbon emissions are attributed to healthcare, within the perioperative space, a large amount of energy and disposables contribute to the waste that is generated, but some of these products are more environmentally detrimental than others (1,2). In one year, from 2018-2019, over 2.3 million elective operations happened across Australia's hospitals. At Royal North Shore Hospital (RNSH), over 23,000 patients annually present to this faciality for a perioperative intervention (an operation or procedure). The waste generated is enormous, with some aspects being more detrimental than others. The gases commonly used for anaesthesia are estimated to comprise ≥5% of our healthcare carbon footprint. As a major teaching hospital in Sydney, RNSH has over 20 operating theatres in use, each with machines that deliver anaesthetic gases. These gases are known to have a high impact on global warming, with one of these in particular (Desflurane) calculated to have a global warming potential (GWP) almost 7,000 times greater than carbon dioxide (CO2). The use of these agents, while common within the clinical anaesthesia, have alternatives that are readily available, considered clinically equivalent, yet have a significantly lower carbon footprint. An internal audit determined that current patterns of anaesthetic gas usage generated an equivalent of over 1,000 tonnes of CO2 each year from RNSH alone. This baseline audit revealed that Desflurane accounted for over 80% of the carbon footprint from anaesthetic gases. In addition to its increased GWP, Desflurane is also eight times more expensive than the next anaesthetic gas. Considered clinically equivalent, this revealed an opportunity to significantly reduce both carbon emissions and expenditure via more conscious consideration of Desflurane use.

In the end, what this project was working to achieve wasn't a change in clinical practice, but a different pathway for accomplishing the same care. We were using the same treatments but adding another layer of consideration to what was being chosen. The result was to emphasise the existing routes of delivering care to our patients which minimised their secondary harm from unnecessary carbon impacts.

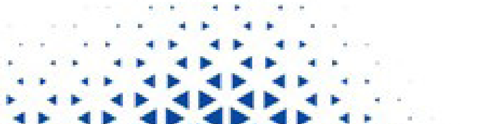
Focusing on a broad swath of clinical choices that could be made at the bedside, an educational campaign began, highlighting the environmental impact of common items utilised in daily practice, with more environmentally conscious alternatives that were available for selection. Recycling of high-quality plastics, selection of compostable consumables, reduction in unused materials, and selection of less environmentally detrimental clinical agents were all promoted. From a viewpoint of environmental return on investment, a change in anaesthetic gas use was considered the most impactful.

We designed a simple, staged, multimodal educational intervention with the aim of promoting service delivery change over a 6-month intervention period in the 2020/2021 clinical year at RNSH. This program comprised departmental presentations, promotion of practice changes via newsletters and educational posters in targeted areas of the operating theatre complex, and continuous feedback of program progress and success. All interventions were geared at staff education and encouraged more rationalised use of Desflurane, combined with practice changes that would minimise excess waste of all anaesthetic gases. Follow-up audits generated a month-on-month comparison against a baseline value over the previous three years (additional calculations adjusted for variation due to the ongoing COVID19 pandemic).

Following the implementation of this intervention, our department's change in service delivery resulted in a >85% reduction in Desflurane use in the 2021/2022 clinical year. This equated to a >900 tonne reduction in CO_2 equivalent emissions (>75% reduction) as well as >$94,000 reduction in expenditure on volatile anaesthetic gases (>45% reduction) over 12 months compared to our previous baseline values.

In terms of health economics, this translates into a reduced global social cost of $375,700.00. The social cost of carbon is a measure of the economic harm from those impacts, expressed as the dollar value of the total damages from emitting one tonne of CO_2 into the atmosphere (3).

The success of this project highlights two important findings. The first is a significant reduction in greenhouse gas emissions without changing clinical practice but instead, refining it, without a need for infrastructure change. The second is the willingness and enthusiasm for staff to incorporate point of care considerations that are environmentally focused. This project has reduced carbon emissions more than equivalent projects with an implementation cost in the millions but has done so while also saving money at the same time.



HEALTHCARE MEASUREMENT

TABLE OF SUBMISSIONS

Cabrini Health, Clinical Governance / Health Informatics, VIC
Reducing Hospital Acquired Complications (HACS) through data insights
Dr David Rankin, Jodie Dooley

Dental Health Services Victoria, Health Informatics, VIC
Improving the Quality of Restorative Treatment in Victorian Public Dental Services
Martin Whelan, Martin Hall, Shalika Hegde

Hunter New England Local Health District, Mater Mental Health Pharmacy, NSW
Virtual Clinical Pharmacy Service Project - Mental Health
Rosa Baleato, Cecilia Bjorksten, Rory Curtis, Leana Wong

Hunter New England Local Health District, John Hunter Children's Hospital, NSW
'Safe Communication for Kids'
Helen Baines, Ellen Mills, Brittany Charters

Liverpool Hospital, Emergency Department, NSW
Improving the Identification of and Support for Aboriginal Patients in the Emergency Department
Daniel Van Vorst

Royal North Shore Hospital, Department of Anaesthesia, Pain, and Perioperative Medicine, Northern Sydney Local Health District, NSW
Anaesthetic Greenhouse Gas Reductions
Dr Arpit Srivastava, Dr Maximillian Benness, Dr Matthew Doane, Dr Adam Rehak

Western Sydney Local Health District, Diabetes & Endocrinology, Blacktown and Mount Druitt Hospitals, NSW
Improving Review Time for all Inpatients Experiencing Diabetes
Associate Professor Tien-Ming Hng, David Pryce, Dr Joshua Ryan, Michael Earl

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