HNE Health Grant and Awards Platform (2022)

Excellence in the Provision of Mental Health Services Award (Program: HNE Research Office Grants and Awards)

Virtual Pharmacy



Entry details Mental Health Virtual Clinical Pharmacy Project Team / project name Rosa Baleato **Team Contact Name Contact Position Title** Clinical pharmacist Contact Phone Number Alternative Contact Number Facility / Dept/ Service unit: HNE Mental Health Pharmacy Facility / Dept/ Service unit address Edit St, Waratah 2298 **Contact Email Address** rosa.baleato@health.nsw.gov.au Number of people in entry team **Team Members** Rory Curtis, Clinical pharmacist Leana Wong, Clinical Pharmacist Cecilia Bjorksten, Director of Pharmacy Rosa Baleato, Clinical Pharmacist Is footage available of this project? No

Entry Title

Mental Health Virtual Clinical Pharmacy Project

Abstract

Aim: This pilot project involved providing clinical pharmacy services virtually for 70 beds in three remote Mental Health (MH) units without onsite MH clinical pharmacy services at Tamworth, Manning, and Maitland Hospitals. Medicines carry a higher incidence of errors and adverse events than any other health care intervention. 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.

Method: MH pharmacists were tasked with obtaining best possible patient medication histories, reconciling medications on admission, allergy and adverse drug reaction documentation, regular multi-disciplinary (MDT) ward round virtual attendance, provision of medicines information and prescribing guidance, dosing and administration advice, medication reviews, patient counselling, and discharge medication reconciliation.

Results: Feedback from a mid-project staff survey was overwhelmingly positive, with patient medication review, drug information and

discharge planning ranked as the most beneficial interventions for improving patient care.

Conclusion: This project acknowledged the crucial role of pharmacists in ensuring best practice in medication management to reduce risks of medication misadventure for MH consumers. The innovative telehealth model has enabled sustainable and accessible virtual clinical pharmacy services to these sites, to facilitate better patient outcomes.

Innovation and originality - *Maximum Score* = 5

The MH Crisis Response Program (MHCRP) is an example of an established use of telehealth services available to consumers. However the virtual clinical pharmacy project is unique in that it links MH pharmacists directly into MDT meetings and with patients in the rural MH units. Pharmacists also have the ability to follow up and check recommendations are actioned in MedChart.

Through consultation with stakeholders, a model of care was developed. The virtual platform uses technology and innovation to allow pharmacists to contribute to shared decision making to optimise medication choice and promote side effect monitoring, to improve patient adherence and outcomes. This is especially pertinent in mental health where psychotropic medications often have ill-defined indications/clinical parameters guiding their use, coupled with the complex clinical picture (physical and mental) of the mental health patient.

The omission of clinical pharmacy services has regularly been highlighted on local risk registers. This pilot project was implemented within a two-week timeframe, using existing specialist MH pharmacists, after receipt of a funding offer for 0.4 FTE pharmacists.

Innovative survey and data collection tools were created in REDCap to record clinical intervention data and measure outcomes. This data collection procedure has not been used in pharmacy before, and is a valuable tool for recording interventions made by pharmacists for assessing service metrics and record keeping.

MH Pharmacists have adopted a creative and dynamic approach in their virtual interactions with staff and patients to build strong therapeutic relationships and enhance care.

Sustainable - *Maximum Score* = 5

The success and utility of the virtual clinical pharmacy project, as well as the overwhelmingly positive feedback received from the onsite clinical teams, have resulted in the funding from this project being extended to a permanent Grade 2 (0.4 FTE) pharmacist position.

This enables embedding of pharmacy services to MH units previously not resourced. The virtual pharmacy service model facilitates connection and collaboration with MDT stakeholders and clinicians in a method not previously utilised in HNE LHD and can be used to sustain MH pharmacy services into the future. Further, the data collection and survey tools developed through REDCap will be used more widely by the MH pharmacy due to their proven utility to demonstrate outcome measures.

Scalable - *Maximum Score* = 5

The vast geographical area of NSW presents significant challenges to health service provision. Virtual platforms to rural and remote health service sites provide opportunities for expansion of clinical services. This platform presents a cost-effective mode of service provision in the absence of on-site specialist teams. MH Pharmacy has paved the way for other HNE allied health services to adopt a similar method of linking directly into MDT teams at remote sites.

Following a recent presentation (17/05/2022) to the CEC Virtual Clinical Roadshow, stakeholders commented on the future scalability of this model within both pharmacy and other allied health disciplines across NSW.

Our newly developed intervention recording system presents an innovative valuable tool for measurement of outcomes and clinical intervention tracking within district pharmacy services.

Better patient outcomes - *Maximum Score* = 5

In the first 7 months, this project has achieved:

- Implementation of evidence-based practice, as well as promoting quality use of medicines
- Has occasioned over 750 virtual clinical interventions, equating to 1.5 interventions per hour of pharmacist service, directly impacting clients' wellbeing.
- Side effect monitoring recommendations, to minimise impact on clients' physical health and quality of life, constituted 9% of diverse pharmacist interventions made.

- The completion of 121 accurate medication histories and reconciliation in MedChart has reassured patients that teams have an accurate record of their medications.
- The treating teams' uptake of pharmacist advice remained high at 95%.
- Feedback from the staff survey was overwhelmingly positive, with patient medication review, drug information and discharge planning ranked as the most beneficial for improving patient care. The role of pharmacists in coordination and follow up of medication issues at transitions of care was acknowledged.
- Specific examples of benefits to patients include:
- Identifying a drug interaction between verapamil and clozapine that had caused severe constipation.
- Provision of a thorough medication history reduced distress for a client on benzodiazepines and stimulants.
- Identifying that carbamazepine could reduce a client's quetiapine levels by over 80%, resulting in a neurology consult and weaning off carbamazepine.

Productivity and value for money - *Maximum Score* = 5

Using the allocated funding, the team have managed to virtually embed experienced MH pharmacists to achieve improved medication management outcomes. Feedback from clinical teams has been overwhelmingly favourable. This represents an effective use of finite resources to optimise patient outcomes. Attachment 1, Figure 1 demonstrates the services provided by the 0.4 FTE equivalent staffing levels. Figure 2 shows measurable parameters of clinical interventions made by pharmacists in the first 7 months. Figure 3 (a and b) shows graphical representations of survey data obtained from MDT clinical teams (50% survey response rate) evaluating utility of the virtual clinical pharmacy service.

Teamwork / Partnerships and CORE Values - *Maximum Score* = 5

a) CORE values:

Collaboration: The goal of the project is to provide 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. Mid-project survey results indicated that clinical staff at the 3 remote sites have an 80% satisfaction level with convenience of access to MH pharmacists virtually.

Openness: The project utilised a 7 month quality improvement and feedback survey (Figure 3) with multiple choice and open discussion questions. The survey was distributed to over 50 clinical staff members at the remote sites (doctors, nurses, occupational therapists, psychologists, social workers, etc) and we obtained a 50% response rate. Valuable feedback was obtained regarding the survey, which was used to plan further development of the project to meet future service needs.

Respect: The premise of the project is centred on respect for the wellbeing of mental health patients, who are often overlooked as 'too complicated,' 'irrational,' 'unstable' or difficult to deal with due to their mental illness and the associated stigma. As with other specialties, psychotropic medications are complicated and require specialist mental health pharmacist input to support clinical decision making to ensure best patient outcomes.

Empowerment: As well as empowering mental health staff and patients to participate in shared decision-making around medications, MH pharmacists have empowered other clinical staff to improve their knowledge of medications and adverse effects. 76% of survey respondents acknowledged that their own medication knowledge has improved during the project.

The project has enabled the MH pharmacists to diversify their practice and expand their skillset. Achievements are celebrated and the pharmacists regularly reflect on areas for potential improvement. This creates a positive environment where staff are encouraged to grow, develop, and succeed.

b)

Project development and implementation required extensive collaboration with and feedback from MH managers and clinicians.

The following are examples of feedback received from stakeholders:

"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."

"Please don't take [the MH pharmacist] away from us as she is fabulous." "Please don't take [the MH pharmacist] away from us as she is fabulous."

Link to NSW Health Strategic

Priority(s) Please tick each appropriate priority your project is linked to:

- ✓ Keep People Healthy
- ✓ Provide world class clinical care where Patient Safety is First
- ✓ Integrate systems to deliver truly connected care
- ✓ Develop and support our people and culture
- Enable eHealth, health information and data analytics

Facility / Dept / Service Manager Name

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Facility / Dept / Service Manager Position Title

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Facility / Dept / Service Manager Email Address

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Reference List if applicable



Team Photo

Service enhancements Virtual Clinical Pharmacy Service (VCPS) Project

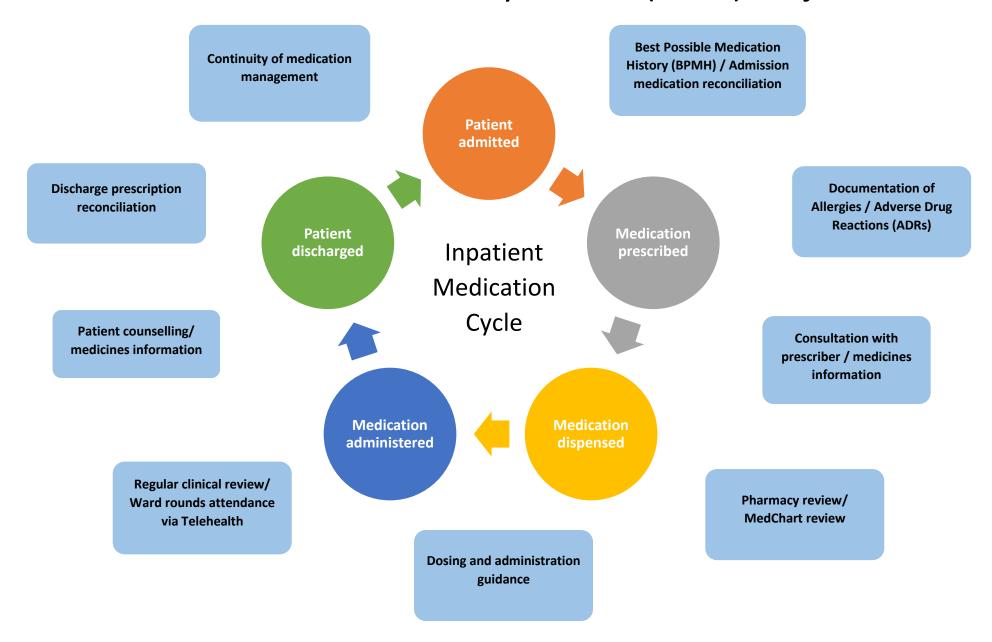


Figure 1 – Virtual Clinical Pharmacy Service interventions. Clinical pharmacy service enhancements through the virtual program are shown in outer blue boxes ().

Pharmacist Interventions were aimed at improving outcomes for mental health patients, alleviating pressure on clinical staff and facilitating appropriate and quality use of medicines.

ACTIVITIES IN THE FIRST 7 MONTHS

750

Recommendations or Interventions for 342 patients



interventions per pharmacist hour



259

Medication Chart Reviews



121

Best Possible Medication Histories taken / Medication Reconciliation performed



Recommendations for side-effect monitoring

identified

Depot injection issues identified

Drug interactions





Medication **Omissions** Identified



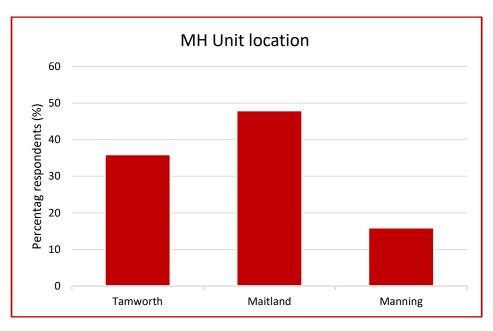
Multidisciplinary Ward Rounds
- weekly clinical pharmacist
attendance via Telehealth

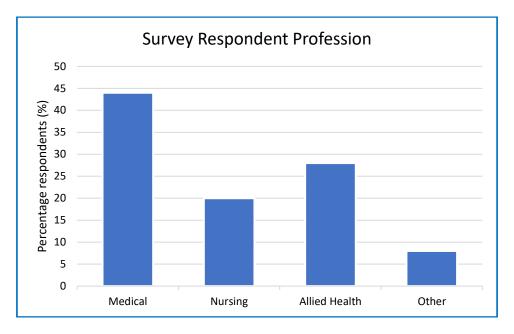
sites

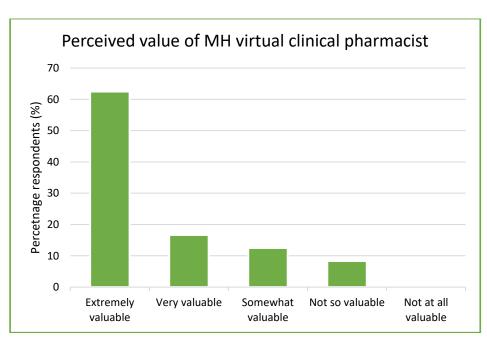
Drug Information **Enquiries**



Remote Mental Health Sites: VCPS Mid-project survey feedback







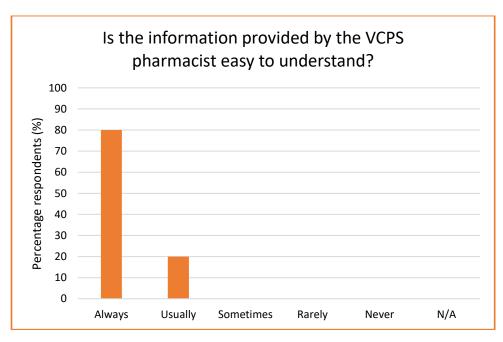
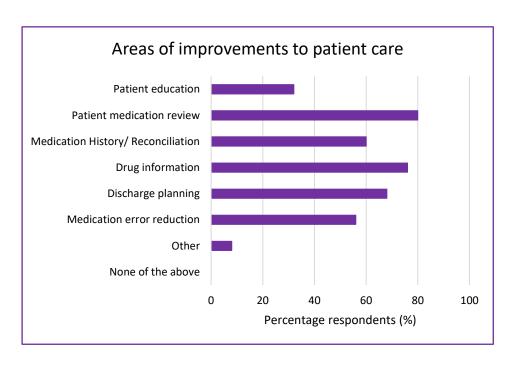
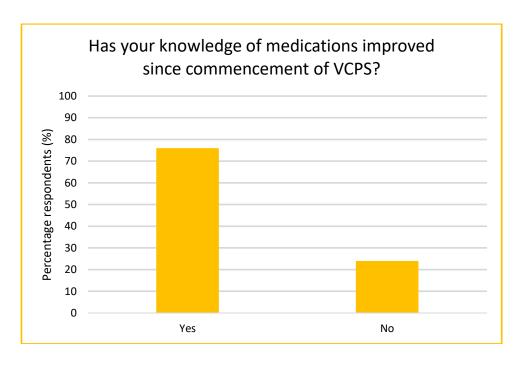
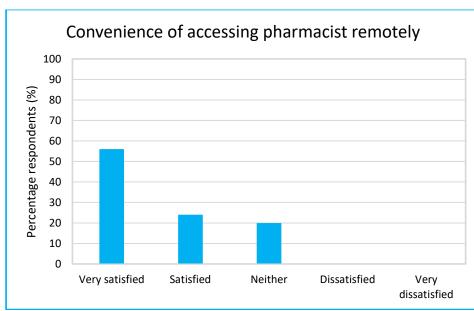


Figure 3a

Remote Mental Health Sites: VCPS Mid-project survey feedback







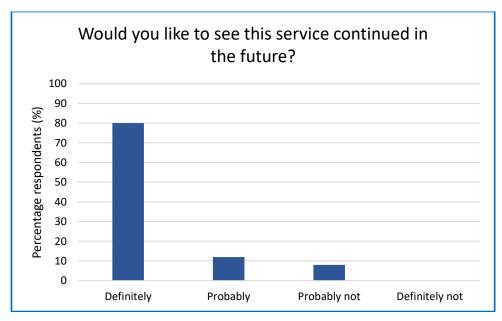


Figure 3b