NSW GOVERNMENT | AGENCY FOR CLINICAL INNOVATION

Spotlight on virtual care: Virtual Clinical Pharmacy Service

Western New South Wales Local Health District (WNSWLHD)

MAY 2022

A collaboration between local health districts, speciality health networks, ACI and eHealth NSW.

The 'Spotlight on Virtual Care' reports showcase innovation and leadership in virtual health care delivery across NSW. The series aims to support sharing of learnings across the health system and outlines the key considerations for implementation as identified by local teams.

Each initiative within the series was selected and reviewed through a peer-based process. While many of the initiatives have not undergone a full health and economic evaluation process, they provide models that others may wish to consider and learn from.

These reports have been documented by the Virtual Care Accelerator (VCA). The VCA is a multi-agency, clinically focused unit established as a key partnership between eHealth NSW and the ACI to accelerate and optimise the use of virtual care across NSW Health as a result of COVID-19. The Virtual Care Accelerator works closely with Local Health Districts (LHDs) and Specialty Health Networks (SHNs), other Pillars and the Ministry of Health.

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Further copies of this publication can be obtained from the Agency for Clinical Innovation website at **www.aci.health.nsw.gov.au**

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Contents

Introduction

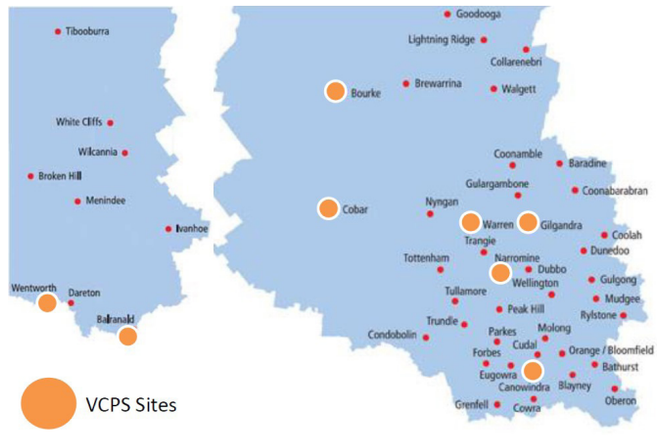
The Virtual Clinical Pharmacy Service (VCPS) provides health facilities in Western NSW and Far West Local Health Districts with clinical pharmacy services where there is no onsite access. Virtual clinical pharmacists provide safe and high-quality medication management, regardless of where a patient is admitted.

Western New South Wales Local Health District (WNSWLHD) and Far West Local Health District (FWLHD) comprise some of the most remote regions in NSW. Between them, they cover almost 450,000km^2, with a population of more than 300,000 people. These rural Local Health Districts (LHDs) serve their populations through rural hospitals, multipurpose facilities (MPS), and nurse-only remote clinics. Most small hospitals in WNSWLHD and FWLHDs are geographically isolated and dispersed, without sufficient patient volumes to sustain an onsite pharmacy service.

The use of medications in healthcare contributes to Australians' quality of life. Medications can significantly improve life expectancy by "curing or delaying the onset of diseases, relieving symptoms and preventing health complications".[*] However, medication can also cause harm when not correctly prescribed or taken, and is associated with more errors and adverse events than any other form of healthcare. A 2016 review of studies assessing medication errors in Australian hospital admissions suggest a rate of two errors for every three patients at the time of admission.[†‡]

Most harm resulting from medicine use is preventable, and integration of clinical pharmacy in acute hospital settings is a key strategy in reducing medication harm.

Figure 1: VCPS sites across Western NSW and Far West LHD



The Virtual Clinical Pharmacy Service (VCPS) provides access to clinical pharmacy in rural and remote facilities and addresses medication safety issues. The VCPS aims to reduce medication-related harm, improve communication at transfer of care, empower patients and improve medication compliance.

The VCPS was established through a NSW Ministry of Health Translational Research Grant to demonstrate the use of virtual clinical pharmacy to improve the delivery of safe and high-quality healthcare regardless of patient location. The research project evaluated the acceptability, effectiveness and scalability of a service such as this in rural and remote NSW Health facilities.[§] This report shares the insights gained through the successful implementation of the VCPS.

[*] https://www.aihw.gov.au/getmedia/0a72d3ba-8b33-4f03-9813-a626b27c96f0/aihw-aus-221-chapter-7-6.pdf.aspx

[†] https://www.medicalresearch.nsw.gov.au/virtual-pharmacy-trial-to-reduce-medication-errors-in-rural-remote-areas/

[‡] https://journals.lww.com/ijebh/Fulltext/2016/09000/The_extent_of_medication_errors_and_adverse_drug.3.aspx

[§] See Virtual Clinical Pharmacy Service Research Study Protocol

Reported benefits of the model

Patient benefits

- Equitable access to clinical pharmacy services in facilities across Western NSW and Far West LHDs
- Improves medication safety and efficacy by providing patients with comprehensive medicines assessment
- Improves care planning and outcomes with multidisciplinary input
- Better patient engagement, leading to an increase in their involvement and understanding of their medications
- Overall improvement in patient, family and carer experience
- Supports virtual experience, removing the need for patients to navigate the use of technology on their own
- Better continuity of care by providing patients and clinicians with up-to-date medication information when care is transferred

Clinician benefits

- Increases capability, skills and knowledge of medication use through multidisciplinary involvement
- Extends service provision to support holistic patient management
- Enhances relationships and trust between pharmacists and clinicians
- Empowers clinicians who are capable of making key decisions regarding medications
- Improves coordination of care through frequent interactions between pharmacists and other clinicians
- Efficient referral processes
- Positive engagement with patients and their carers
- Reduces travel time, supporting more efficient use of workforce resources, by allowing pharmacists to maximise their clinical time in a virtual capacity

Service benefits

- Collaboration between VCPS, patients, prescribers and nursing staff increases detection of preventable medication issues and reduces medication-related harm
- Complements existing medication management in rural and remote facilities, with few additional resources required by site staff
- Reduces inpatient clinical pharmacy workload for pharmacy services at neighbouring district or referral hospitals
- Cost effective at a district level through equitable distribution of pharmacy services across the LHD
- Provides a more person-centred, timely and responsive service
- Improves compliance with National Safety and Quality Health Service (NSQHS) Standard 4 – Medication Safety.

Overview of the model

Key elements of the model

Element	Detail
Patient population/ service users	• Inpatients (all ages) • Emergency presentations • Hospital in The Home (HiTH) patients at selected facilities • Rural and remote health services
Referral pathway	• Proactive review by virtual pharmacists using eMR Pharmacy Care Organiser (e.g. reviewing new admissions for risk of medication-related harm) • Electronic medical record (eMR) referral (pharmacy consult) by local clinicians • Telephone for urgent referrals via single point of contact
Healthcare team	Healthcare team: • Designated virtual pharmacists Wider team: • Medical, nursing, and allied health staff provide support at the patient end • District director of pharmacy • Health service manager/nurse manager • Director medical services
Technology	At the pharmacist's end: • Either a videoconferencing machine (Cisco DX 80) or laptop/desktop computer with webcam and speakers to access the Pexip videoconferencing platform • eMR (FirstNet, PowerChart, eMeds) • Patient flow portal (PFP) • Access to networked printers At the patient's end: • Mobile videoconferencing units (Wallie) with two-way audio and video (pan, tilt and zoom) • Network printer for medication information and lists

Services

- The VCPS integrates virtual pharmacists into the healthcare team and complements existing medication management activities. Its objective is to minimise medication risk and increase patient safety at all steps on the medication management pathway (see Figure 2).
- VCPS pharmacists virtually undertake clinical pharmacy activities consistent with the Society of Hospital Pharmacists of Australia (SHPA) *Standards of Practice for Hospital Pharmacy* including:
  - patient prioritisation and recognition of patients at high risk of medication-related harm
  - best possible medication history (BPMH) and medication reconciliation at transitions of care
  - assessment of a patient's medications and clinical review
  - documentation of a patient-specific medication management plan (MMP) which includes documentation of medication-related issues or recommendations.

Best possible medication history (BPMH)

A best possible medication history (BPMH) is an accurate list of all regular medications (prescribed and non-prescribed) that a patient is currently taking. A BPMH is the first step of medication reconciliation and should be completed as early as possible following patient admission.

- VCPS also provide:
  - antimicrobial stewardship review
  - medication lists and patient education
  - smoking cessation brief intervention and nicotine replacement therapy
  - staff education on a monthly basis, or ad hoc as needed
  - therapeutic drug monitoring
  - venous thromboembolism (VTE) stewardship.

Services not provided

- Medication supply
- Outpatient medication review
- Afterhours or on-call support (service operates Monday–Friday 8am–4.30pm)

- VCPS pharmacists participate in multidisciplinary team (MDT) rounds. This occurs via videoconference at several facilities. Virtual MDT ward rounds are patient-centred, with local nursing or medical staff leading and supporting patients to participate in their health care.

Staff education includes:

- providing staff with key information on the VCPS and their role in supporting the service, including how to identify high-risk patients and how to refer them to the VCPS via the eMR pharmacy consult
- targeted medication education in response to incidents or near misses
- education on best practice medication management including high-risk medications.

Referral process

- The VCPS is a proactive service where virtual pharmacists actively identify and prioritise patients (see Figure 3). The pharmacy care organiser in the eMR or PFP supports this process.
- Patients perceived as being at risk of medication-related harm (see box right) are referred to the VCPS by onsite staff via the eMR pharmacy consult request. Urgent requests are accompanied by a phone call.
- Patients who are at the highest risk of medication-related harm will be prioritised for review.

A physiotherapist joins a virtual pharmacist for a multidisciplinary ward round at a rural MPS.

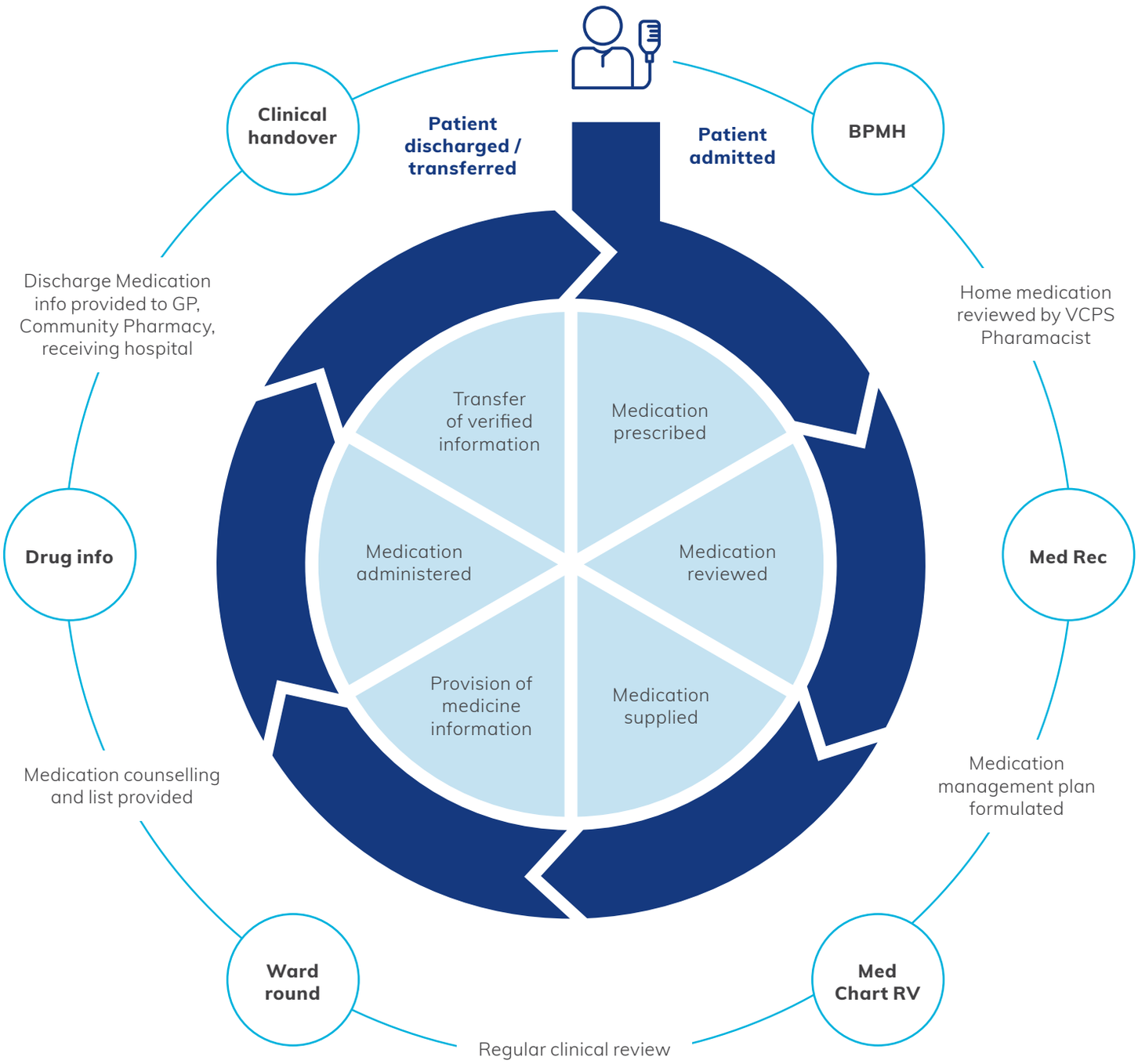
Risk factors for medication-related harm

- Those aged 65 or more
- Those currently taking five or more regular medications
- Those taking more than twelve doses of medication per day
- Significant changes made to medication treatment regimen in the last three months
- Medication with a narrow therapeutic index or medications requiring therapeutic monitoring
- Sub-optimal response to treatment with medicines
- Suspected non-compliance or inability to manage medication-related therapeutic devices
- Patients having difficulty managing their own medicines because of literacy or language difficulties, dexterity problems or impaired sight, confusion/dementia or other cognitive difficulties
- Patients seeing multiple doctors, both general practitioners and specialists
- Recent discharge from a facility/hospital (in the last four weeks)*

* Risk factors taken from NSQHS Standards

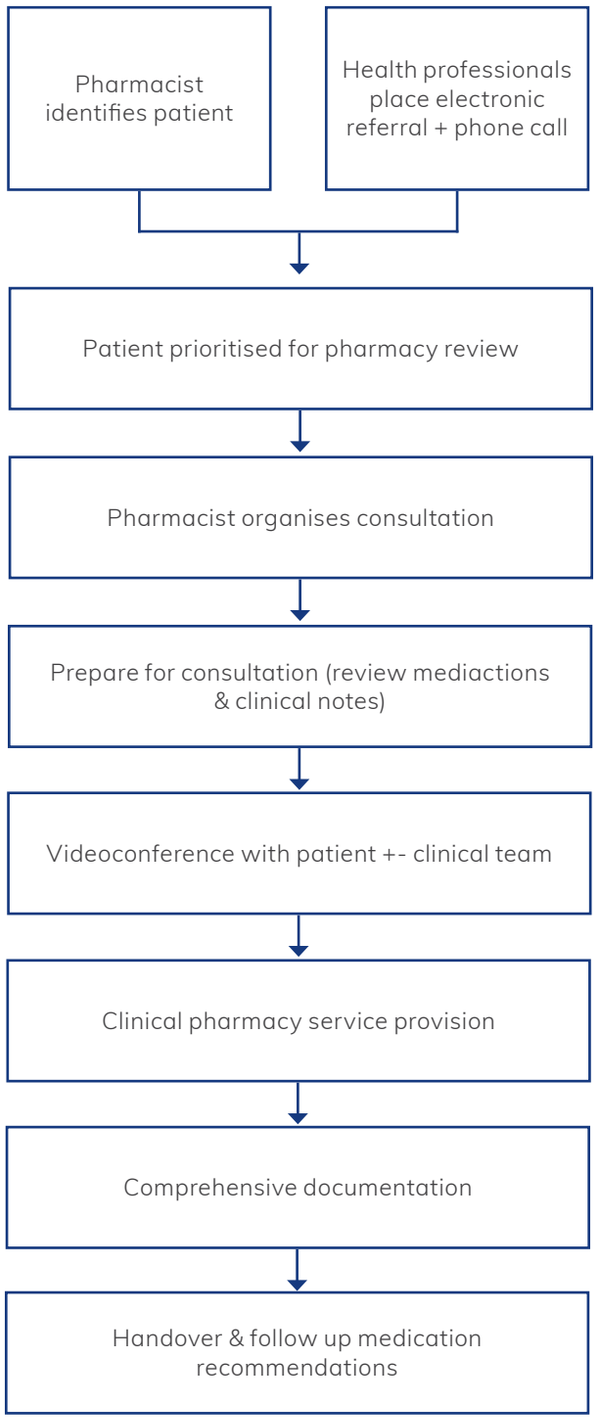
Workflow diagrams

Figure 2: Virtual pharmacy medication management pathway and clinical activities.



BPMH = best possible medication history
Med Rec = medication reconciliation
Med Chart RV = medication chart review
Drug info = drug information enquiries

Figure 3: VCPS activities and the patient journey through the service.



Case study*

Jerry presented to the emergency department (ED) at a rural MPS, reporting symptoms of pleuritic chest pain and shortness of breath. His observations showed tachypnoea and decreased oxygen saturation. He was reviewed by the on-call medical officer who made a differential diagnosis of community-acquired pneumonia and ordered a chest X-ray. The medical officer charted benzylpenicillin and doxycycline as per the therapeutic guidelines.

While in the ED, the nurse requested an eMR pharmacy consult from the VCPS. In the referral, the nurse documented that Jerry has Parkinson's disease and regularly takes more than five medications. He was prioritised for review and the pharmacist used secure videoconferencing to speak with Jerry and his wife. The pharmacist found they appeared to be struggling to manage Jerry's medication at home and suggested the use of a dose administration aid i.e. Webster pack from the local community pharmacy to help Jerry manage his medications. Jerry also reported a penicillin allergy which had not been previously recorded in the eMR. At the time of review his regular medications had not been charted.

The pharmacist documented the patient's BPMH in eMeds and formulated a MMP. Jerry's penicillin allergy was recorded and the pharmacist requested that benzylpenicillin be withheld until the allergy could be discussed with the medical officer.

The pharmacist spoke to the medical officer and recommended alternate antimicrobial therapy for the treatment of Jerry's pneumonia. They also discussed Jerry's regular medications and, as his medication history had now been entered into the eMR, the medical officer could easily reconcile and chart Jerry's regular medications. The MMP recommended assessing the VTE risk and the medical officer charted VTE prophylaxis.

The following day, the pharmacist attended the ward round via videoconference. Jerry had improved and it was collectively decided that he could be discharged if he continued to improve and remained well for another 24 hours. The pharmacist recommended appropriate oral antibiotics for post-discharge care.

After 24 hours Jerry was safe for discharge. The pharmacist conducted a medication reconciliation on discharge, produced a medication list and met with Jerry and his wife via videoconference to discuss discharge medications and provide support around medication changes. During the consultation the pharmacist revisited the benefits of a dose administration aid and Jerry agreed the extra support would be helpful. Once the discharge plan was finalised, the pharmacist handed over to the local community pharmacist who agreed to arrange a Webster pack.

Jerry was happy with his experience and provided feedback regarding VCPS via a short patient reported experience measures (PREMS) survey.

'The pharmacist took her time with me to go through all my medications and answer all my questions. I was very happy with the experience.'

** Story provided by the VCPS team*

Making it happen

This section outlines the key enablers and challenges identified by those involved in implementing this virtual care initiative. Addressing these factors effectively has been critical to successful implementation and the learnings can be used by other health services in the development of local models. The resources listed in the supporting documents section at the end of the report also supplement the learnings and have been identified throughout the following sections.

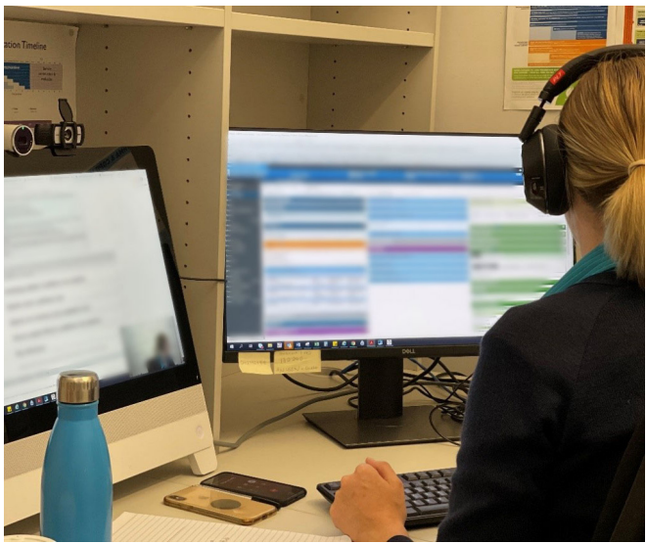
Local planning, service design and governance

Service design

- WNSWLHD recognised a significant gap in clinical pharmacy services at rural and remote hospitals and investigated innovative ways to provide equitable access to services.
- Clinical leaders within the organisation were engaged and consulted early in the project design. A VCPS governance committee was established consisting of an executive sponsor, key operational directors, clinical lead, telehealth manager, Aboriginal health representatives, pharmacy subject matter experts, finance manager, and representatives from NSW Health pillar organisations the Clinical Excellence Commission, the Agency for Clinical Innovation and eHealth.
- The VCPS model was developed in consultation with the above stakeholders, health researchers, information communication technology (ICT) teams and pharmacists. The result was a patient-centred model that meets the needs of both the patient and health service.
- A structured approach to workflow design and systems evaluation was used to develop standardised processes. This maximised efficiencies and created simple processes particularly for clinical communication and the capture of key performance indicators (KPIs).
- Contingencies for downtime and processes for communication were discussed and agreed with stakeholders during the planning and implementation stages.

Service model

- The VCPS is a designated virtual service for rural and remote sites without an onsite hospital pharmacist.
- The VCPS provides all clinical pharmacy services; medication supply occurs through existing supply chains.
- There is a single point of referral into the service through the eMR, with a centralised phone number provided for urgent referrals or general inquiries.
- Clinical activities are undertaken by pharmacists using the eMR, eMeds, phone and video conferencing. For example:
  - One-on-one pharmacist-patient video consultations, where possible including the patient's carers or family (particularly if the patient has hearing or visual impairment)
  - Using the phone to contact a community pharmacy
  - Viewing medication packaging or lists via videoconference, if they are unavailable in a digital format.
- Local staff facilitate and support patients and families with videoconferencing, and review and act upon medication recommendations.
- A short, daily team huddle allows the VCPS team to prioritise, actively manage clinical workloads and receive updates on operational matters.



A WNSWLHD virtual clinical pharmacist providing clinical support to a remote health facility involved in the VCPS

Comprehensive clinical documentation

- Comprehensive clinical documentation is essential for effectively communicating virtual patient care across the healthcare team. A documentation workflow was developed to support a standardised approach (see Figure 4). This process allows the VCPS to provide patient care with minimal handover.
- Virtual pharmacists utilise four standardised templates in the eMR (see Figure 4):
  - Medication management plan on admission
  - Medication review notes for subsequent medication or clinical reviews
  - Discharge medication review note for discharge reconciliation and documenting discharge counselling
  - Patient discharge medication list when providing a patient-friendly medication list.
- The eMR clinical intervention PowerForm was used to document and track outstanding medication recommendations within the VCPS team.

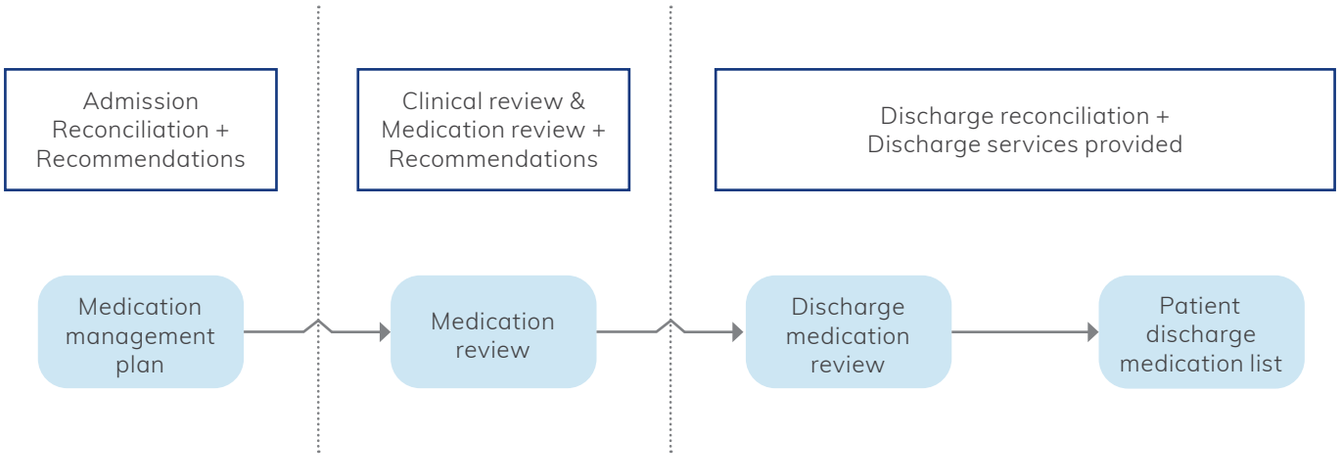
Local clinical governance

- The VCPS operates as an independent virtual pharmacy department within existing pharmacy and medication governance structures.
- There are escalation pathways for clinical issues, which align to the supporting structures already in place in the smaller rural hospitals.
- If clinical incidents occur, VCPS report these through ims+.
- Monthly service rounding supports medication governance by providing a forum for the identification and management of medication risks and incident management.
- The service contributes to broader organisational priorities, including accreditation, medication safety and the antimicrobial stewardship.

Considerations for implementation

- In-person visits to participating hospitals help to orientate service providers to hospitals and build rapport with local staff.
- Staff education on the role of a clinical pharmacist, as many may not have worked with a clinical pharmacist.
- Involvement of clinicians in the development of the model helps to ensure ongoing buy-in.
- Use simple processes and provide training on new workflows and technology.
- Maximise the use of systems to enable the passive collection of KPIs.
- There is an increased requirement for documentation with a VCPS.
- Engage local ICT teams.

Figure 4: Clinical pharmacy documentation process



A WNSWLHD virtual clinical pharmacist providing clinical support to a patient at a remote health facility involved in the VCPS

Building engagement

Key partners and stakeholders

- The successful delivery of VCPS is based on relationships with local managers, medical, nursing and allied health teams. This includes coordination of patient care with other virtual services.
- Local community pharmacists were consulted prior to the service being implemented in their communities. This gave local pharmacists the opportunity to understand the role of VCPS and discuss opportunities to collaborate to improve medication management.
- Virtual pharmacists are allocated to specific facilities, which provides the opportunity to build rapport with local staff and patients.
- The VCPS has built strong relationships with staff through effective communication. Examples include:
  - clear and respectful dialogue between pharmacists and nursing staff, managers and doctors, as part of day-to-day clinical activities
  - monthly reporting of pharmacy activities are provided as evidence for accreditation processes
  - monthly service rounding to maintain a site focus, using a structured feedback template
  - monthly newsletters
  - monthly staff education on medications
  - focus group feedback sessions held three months after the commencement of the service.

Engaging patients

- The VCPS engages directly with patients about medication management, which also helps to improve medication compliance.
- The VCPS pharmacists use strong and adaptable communication and information technology skills to provide an exceptional patient experience via virtual care. 'Screen side' etiquette is required when using videoconferencing including:
  - professional presentation of staff – a health uniform to look the part
  - physical LHD-branded backdrops to minimise background distractions
  - good lighting
  - eye contact – looking at the camera
  - technology trouble shooting – especially a sound check prior to starting consultation.
- The virtual pharmacist provides information on medication directly to patients and their carers to encourage safe and appropriate use of medications. This includes a patient-friendly medication list.
- Patients are given opportunities to ask questions about their medications with the pharmacist when they are admitted to a service and upon discharge.
- Patients can provide feedback via PREM surveys.

'Now we can have pharmacy services at all of our sites, that's what's significant.'

RICHARD CHENEY, EXECUTIVE SPONSOR

Workforce and resourcing

Appropriate technology

Provider end

- Laptop computer with two monitors
- Mobile phones to follow up enquiries
- Active noise-cancelling headphones to improve audio quality and allow staff to work in shared office spaces
- Webcam and videoconferencing platform (Pexip) for patient consultations
- PFP to assist in patient prioritisation
- eMR (FirstNet, PowerChart, eMeds) to document the pharmacist care plan or recommendations
- Technology failure is mitigated by downtime processes which use telephone, fax and an eMR downtime procedure[**]

Patient end

- A mobile videoconferencing machine (Wallie)
- Networked printers in the local facility to print patient-friendly medication lists or medicines information for patients

Staffing model

- Workforce requirements were guided by the SHPA Standards of Practice for Clinical Pharmacy Services[††]
- The pharmacist staffing ratio for rural and remote hospitals is based on face-to-face ratios at neighboring hospitals.
- Due to the lower occupancy rates in the rural and remote facilities, other markers of patient activity are important to determine staffing. This includes average daily bed occupancy and number of stays of greater than 24 hours per month.
- The model also considers workforce capacity at the receiving site to support virtual care interventions. This included administrative and nursing time to set up virtual consultations.

Training and development

- Standardised processes are used, and virtual pharmacists are provided with comprehensive orientation and training for the use of technology, systems and processes.
- Where possible, face-to-face training on the role of the VCPS and workflow was provided to local facility nursing and medical staff.
- To complement training, a user guide was provided to sites which contains essential information on communication and referral processes.
- Targeted medication education was provided to build knowledge and capacity for clinical staff at receiving hospitals.

Considerations for sustainability and funding

- Implementation and evaluation of VCPS was funded through a NSW Ministry of Health Translational Research Grant.
- VCPS has gained widespread organisational support, and WNSWLHD has committed to expanding the service ongoing for all rural and remote facilities.
- Use of existing resources and infrastructure, such as information technology platforms reduced overall implementation costs.
- An economic analysis will be conducted as part of the service evaluation.

'Makes [the patients] feel they're getting the same treatment at the rural sites that they would get in Dubbo.'

NURSE AT GILGANDRA

[**] See eMR downtime procedures

[††] See SHPA standards

Benefits of the model

Patient benefits

- Improved overall experience of care through involvement in medication management and shared decision making.
- Improved medication knowledge through counselling and patient-friendly medication lists.
- Prevention of medication-related harm through comprehensive medication review.

Service benefits

- On-site care staff are supported by a virtual pharmacist as a part of the care team. Pharmacists support medical officers and nurses to make informed medication-related decisions.
- Improved care coordination through multidisciplinary patient rounds.
- The VCPS ensure continuity of medication management by liaising with primary health care providers, such as community pharmacists and general practitioners, to ensure medication-related issues and changes are clearly communicated at transitions of care.
- VCPS reduces the need for pharmacy support from neighbouring district and base hospitals.

Benefits

Improved facility compliance with NSQHS Standard 4 - Medication Safety.

Improved antimicrobial stewardship in the facilities.

Increased continuity of care for patients between the community and hospitals.

Increased shared decision making related to medications between pharmacists and patients.

Increased continuity of medication management by partnering with local clinicians and medical staff.

Monitoring and evaluation

- VCPS monitors KPIs that are aligned with relevant national healthcare and pharmacy standards. The KPIs are used to monitor activity, service uptake and guide quality improvement (see Figure 5). Many of the measures form part of the NSQHS Standards for medication safety and are fed back to VCPS sites as a monthly scorecard.
- Activity measures indicate the VCPS has significant service uptake at all hospitals.
- PREM surveys are collected from patients prior to discharge[#]. The PREM results have been very positive indicating patients have a high degree of satisfaction with communication and their overall experience.
- Staff feedback from focus group have been positive with staff reporting few barriers to implementation. Some of the reported benefits include improved access to specialist medication advice; responsiveness; increased safety and confidence with medications; improved compliance with antimicrobial stewardship and NSQHS Standards.
- The efficacy and cost effectiveness of the VCPS will be evaluated as part of the research evaluation.

Activity measures	Quality measures
Patient-friendly medication list	Medication reconciliation rates
Medication management plans	Identification of medication-related issues
Medication reviews	PREM
Discharge medication reviews	Antimicrobial usage rates
Antimicrobial stewardship reviews	
Referrals	
Video consultations	
Staff attendance medication education sessions	

Figure 5. Examples of VCPS KPIs

[#] See VCPS PREM surveys

Opportunities

- The VCPS research evaluation is expected to provide evidence of the effectiveness and acceptability of virtual pharmacy services. This will provide policymakers, health service planners and practitioners with evidence to support the case for change in other rural and remote areas without pharmacy services.
- The VCPS model has demonstrated scalability across smaller rural and remote hospitals. It is readily transferable to other LHDs with a similar geography and demography.
- The VCPS model may be relevant for consideration in larger rural referral hospitals or in the metropolitan hospital environment, including to support clinical review of medications for supply by on-site pharmacy services. It may also provide a mechanism to efficiently increase after-hours clinical service provision.
- The VCPS could be implemented through a hybrid model where resourcing dictates if services are provided face to face or virtually. This approach would support sole clinicians or cover short-term leave relief arrangements.
- The VCPS model supports a skilled and sustainable workforce. Recruitment to virtual positions is easier than recruiting in remote locations. It also provides opportunities for staff to develop virtual skills and could be operationalised as a component of a rotating roster in larger hospital pharmacy departments.
- The VCPS model could be used to provide locum relief through access to highly-skilled pharmacists within the LHD.
- Centralised remote clinical pharmacy services offer a mechanism to support infection prevention and control practices in hospitals. Application could potentially include areas such as intensive care, oncology and haematology, where patients are particularly vulnerable, or infectious diseases wards where there is the potential to expose clinicians to pathogens.

'I now have a better understanding of what each medication is and what it is for.'

PATIENT FEEDBACK FROM PREM SURVEY

References and links

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Supporting documents

- VCPS Study Protocol - Allan J, Nott S, Chambers B, et al. A stepped wedge trial of efficacy and scalability of a virtual clinical pharmacy service (VCPS) in rural and remote NSW health facilities. BMC Health Serv Res. 2020;20(1):373. Published 2020 May 4. doi:10.1186/s12913-020-05229-y https://doi.org/10.1186/s12913-020-05229-y
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- VCPS Staff focus group findings - Allan J, Webster E, Chambers B, Nott S. "This is streets ahead of what we used to do": staff perceptions of virtual clinical pharmacy services in rural and remote Australian hospitals. BMC Health Serv Res. 2021;21(1):1306. Published 2021 Dec 4. doi:10.1186/s12913-021-07328-w https://doi.org/10.1186/s12913-021-07328-w
- eMR downtime procedures
- VCPS User Guide
- VCPS training slides

Acknowledgements

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We specifically would like to thank

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Anna Packer	Virtual Clinical Pharmacist, VCPS, WNSWLHD
Ged Hawthorn	Senior Clinical Pharmacist/ Pharmacy Educator, Orange Health Service, WNSWLHD
The staff at Gilgandra MPS	

We would also like to thank the clinicians, consumers and virtual care experts involved in reviewing this report.

Glossary and definitions

BPMH	best possible medication history
Cisco DX80	desktop videoconferencing machine
eMR	electronic medical record
eMeds	electronic medication management
ims+	state-wide incident management system
LHD	Local Health District
KPI	key performance indicator
MDT	multidisciplinary team
MMP	medication management plan
MPS	Multipurpose Service
NSQHS	National Safety and Quality Health Service Standards
PFP	patient flow portal
PREMS	patient reported experience measures survey
Rural Health Facility	smaller rural and remote sites at the receiving end of the virtual services
SHPA	Society of Hospital Pharmacists of Australia
VCPS	Virtual Clinical Pharmacy Services
Wallie	portable videoconferencing machine

The Agency for Clinical Innovation (ACI) is the lead agency for innovation in clinical care.

We bring consumers, clinicians and healthcare managers together to support the design, assessment and implementation of clinical innovations across the NSW public health system to change the way that care is delivered.

The ACI's clinical networks, institutes and taskforces are chaired by senior clinicians and consumers who have a keen interest and track record in innovative clinical care.

We also work closely with the Ministry of Health and the four other pillars of NSW Health to pilot, scale and spread solutions to healthcare system-wide challenges. We seek to improve the care and outcomes for patients by re-designing and transforming the NSW public health system.

Our innovations are:

- person-centred
- clinically-led
- evidence-based
- value-driven.

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NSW GOVERNMENT

AGENCY FOR CLINICAL INNOVATION

Our vision is to create the future of healthcare, and healthier futures for the people of NSW.