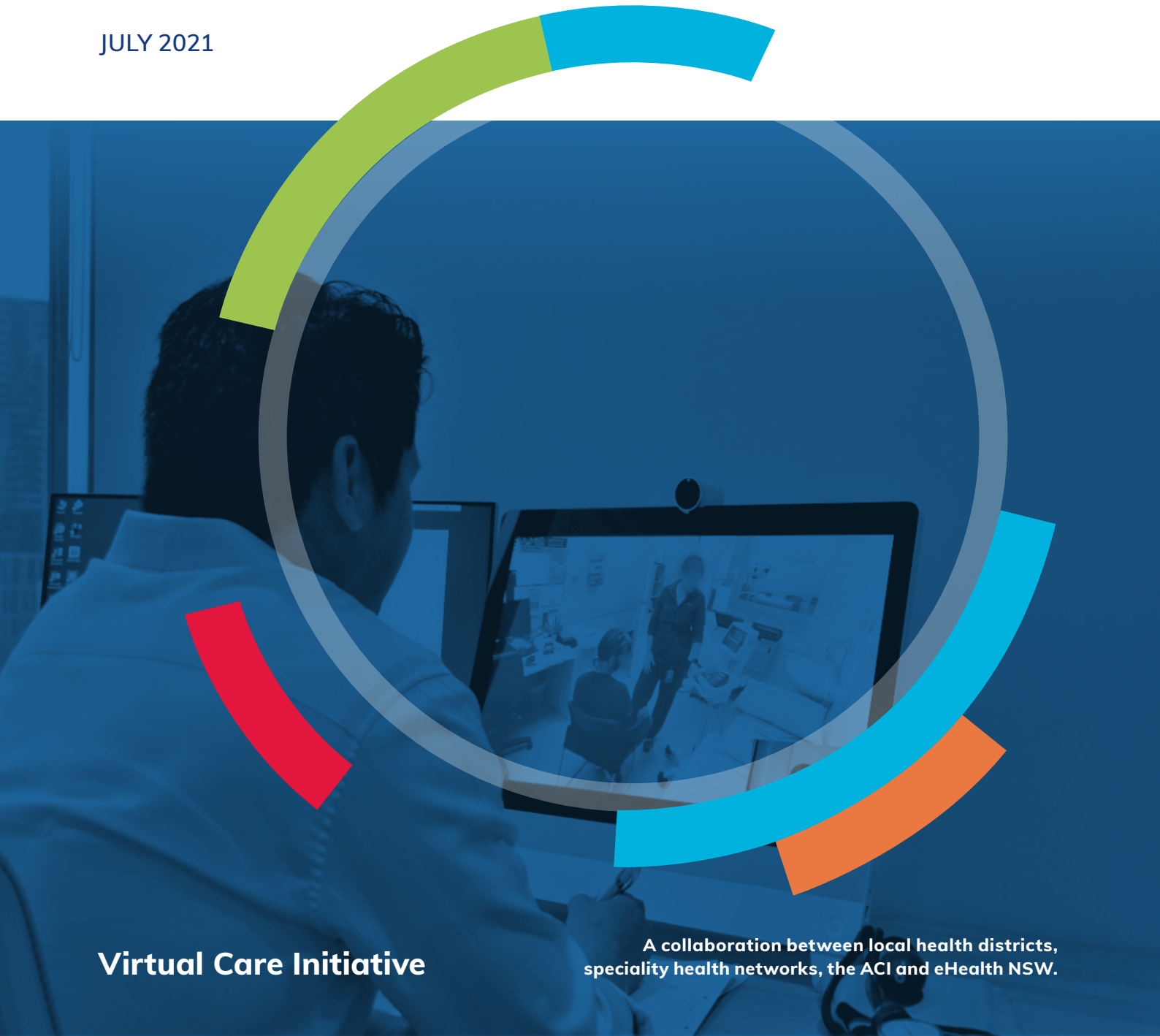
NSW GOVERNMENT

AGENCY FOR CLINICAL INNOVATION

Spotlight on virtual care: Justice Health and Forensic Mental Health Network Virtual Services

Justice Health and Forensic Mental Health Network

JULY 2021



Virtual Care Initiative

A collaboration between local health districts, speciality health networks, the 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.

Agency for Clinical Innovation

1 Reserve Road St Leonards NSW 2065
Locked Bag 2030, St Leonards NSW 1590

T +61 2 9464 4666 E aci-info@health.nsw.gov.au
www.aci.health.nsw.gov.au

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

Preferred citation: NSW Agency for Clinical Innovation. Virtual Care: Virtual Allied Health Service – Western LHD. Sydney: ACI; 2021.

ISBN: 978-1-76081-841-8 (print)

978-1-76081-842-5 (online)

SHPN: (ACI) 210621
TRIM: ACI/D21/1448

Contents

Introduction

Justice Health and Forensic Mental Health Network (the Network) healthcare services are delivered in custodial and forensic settings that are geographically dispersed across NSW. The Network operates out of 37 correctional centres and six youth justice centres, two hospitals, police cells, local and children's courts and various other community locations. The Network provides primary care, mental health, population health, drug and alcohol, adolescent health and Aboriginal health clinical services to meet the chronic and complex healthcare needs of the Network's adult, adolescent and forensic patient cohorts.

The provision of virtual care within the Network's diverse health settings is an integral component of efficient and comprehensive delivery of clinical services to patients. The Network supports a highly vulnerable population who have many complex health needs. A range of clinical services are delivered virtually to respond to the health needs of these individuals, who commonly have only had minimal contact with mainstream health services in the community.*

The Network cares for over 30,000 patients annually across more than 100 community, inpatient and custodial settings in metropolitan, regional and rural locations across New South Wales** (see Network health care locations).

Since 2016, the Network has transitioned to a shared care model which uses consultation and collaboration. Primary care nurses (PCNs) in health centres (which are located within correctional and youth justice centres), can access specialised nursing and medical staff that are centrally based within the Network. This makes up the largest proportion of virtual care service provision for the Network.

Health centres access specialised services in the following ways dependent on the need:

- Phone consultation, clinician to clinician
- Phone consultation with the patient present
- Video consultation with the patient present
- In-person on site with the patient and the clinician present.

The Network's use of virtual care also includes external specialist consultations delivered by Hunter New England Local Health District (HNELHD) to custodial patients in the district's catchment area. Virtual cardiology services are currently in the development phase with Prince of Wales Hospital (POWH). Expansion of virtual care into other LHDs across NSW is being explored by the Network to facilitate more equitable, timely and efficient provision of clinical services to its patient population.

*NSW Justice Health and Forensic Mental Health Network. Vision values [Internet]. Sydney: NSW Health [cited 14 July 2021]. Available from: https://www.justicehealth.nsw.gov.au/about-us/vision-values

**NSW Justice Health and Forensic Mental Health Network. About us [Internet]. Sydney: NSW Health [cited 14 July 2021]. Available from: https://www.justicehealth.nsw.gov.au/about-us

Network health care locations

Figure 1: Regional and rural sites

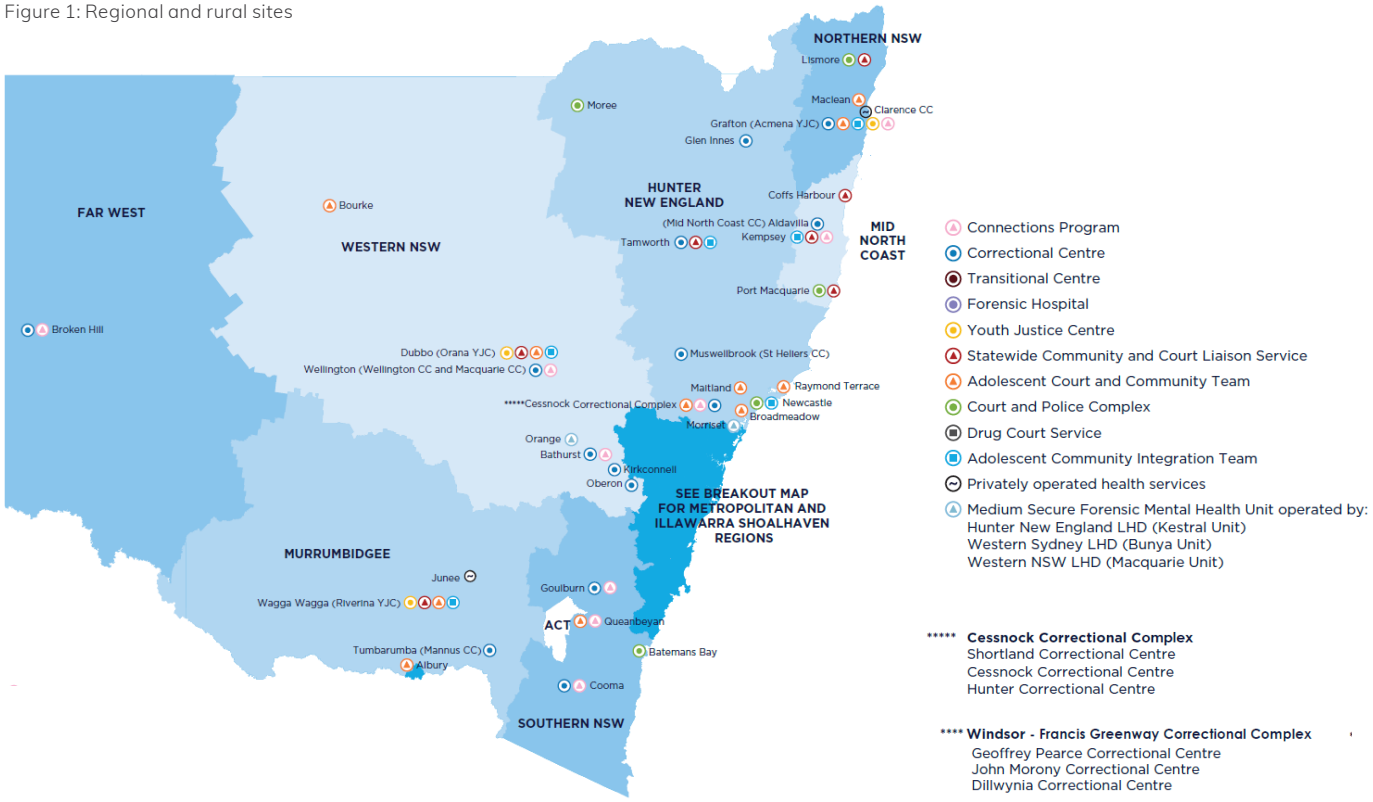
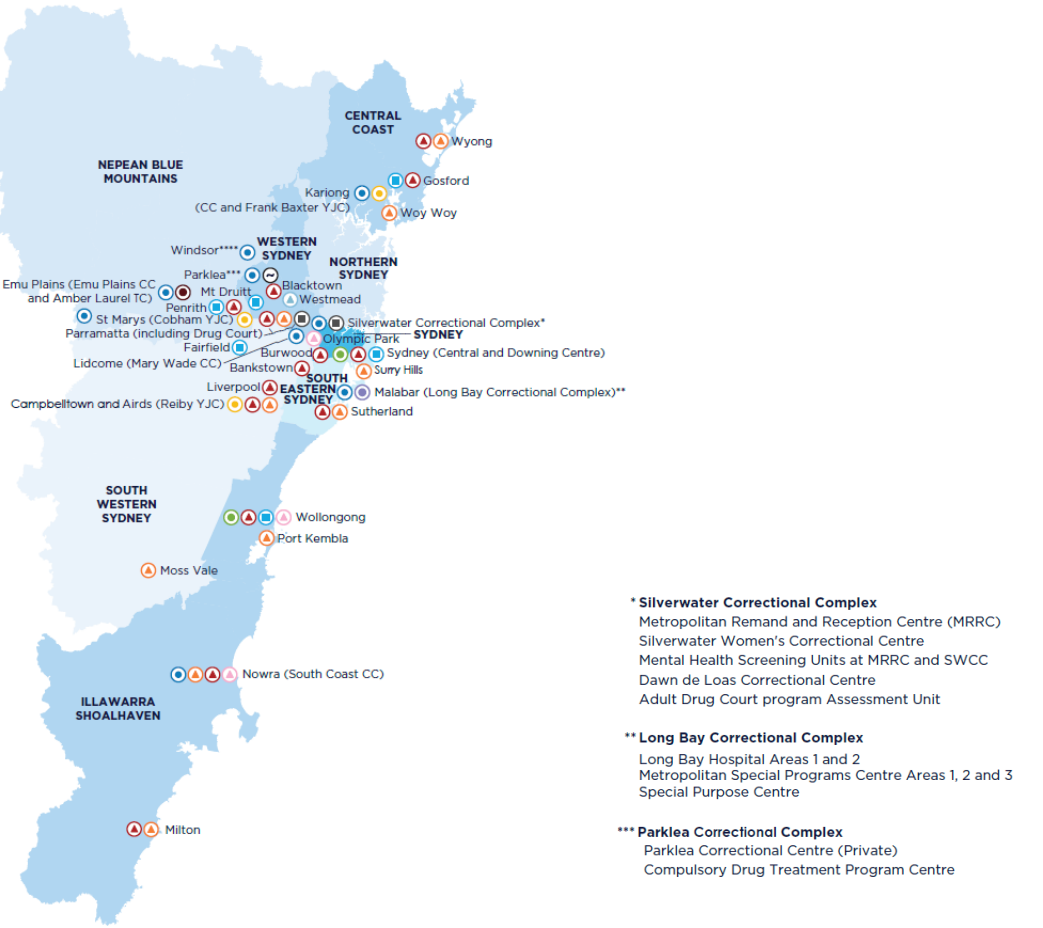


Figure 2: Metropolitan sites



Reported benefits of the model

Patient benefits

- Improved access to specialist care
- Where possible, it provides an option for Aboriginal patients to remain on country and stay connected to their support networks
- Increased patient satisfaction as there is minimal disruption to the patient's environment, which leads to greater stability for the patient. Transfers can often result in missing family/friend visits and cell changes, which can impact on relationships with other cellmates
- Improvement of overall physical and mental health as patients are more likely to accept care in a familiar environment
- Ensures continuity of care as the patient remains with the same specialist throughout their treatment plan
- Improved identification of patients with more serious mental health issues who are referred to psychiatry services in a timelier manner
- Provides more flexibility for the patient as they can choose to discontinue the virtual appointment more easily than in-person appointments.

Clinician benefits

- Reduced travel time between correction facilities has enabled clinicians to maximise their clinical time in a virtual capacity
- PCNs in health centres have access to centrally based specialist nursing and medical staff, which increases their capability, skills and knowledge
- Clinicians have flexibility to provide services from various locations, e.g. at home or the Network's administration offices
- Builds confidence for clinicians who are providing treatment in a very challenging environment.

Service benefits

- Greater efficiencies for the system. Virtual care reduces the high resource requirements of patient transportation between correctional facilities
- Less disruption within correctional centres associated with different security levels. NSW corrective services officers will often need to transfer a patient to a more appropriate facility if the security level of the other patients on site is not the same
- Provides flexibility for the Network's services, enabling them to reschedule clinics more easily should they be cancelled at short notice due to unforeseen circumstances, e.g. security breaches where patients are 'locked in' and unable to be escorted to the health centre
- Reduces patient complaints, as clinicians can schedule an ad-hoc review with the patient via videoconferencing before an issue escalates
- Improved efficiency of the Network's workforce, addressing recruitment difficulties in rural and remote locations and can provide annual leave cover
- The role of specialist nursing staff providing virtual care has resulted in more targeted referrals which has contributed to a reduction in the waitlist times for patients with complex care needing to see medical staff.

Overview of the model

Key elements of the model

Element	Detail
Patient population/ Service users	• Adults and adolescents in custodial and forensic settings
Referral pathway	Referrals to services are initiated via the following mechanisms: • Self-referral • Onward referral from other Network services • Hospital discharge • Transfer to a new facility • Reception (initial) screening when admitted into custody
Healthcare team	Generalist and specialist staff that are based centrally and locally across the Network (see Services section for specific examples): • Clinical nurse consultant (e.g. mental health consultant liaison nurse) • Nurse practitioners (NPs) • Nurse unit managers (NUMs) • Registered nurses (e.g. PCNs) • Enrolled nurses • Medical specialists • Career medical officers • Registrars • General practitioners (GPs) • Physiotherapists • Dental officers • Dental assistants
Technology	• Pexip videoconferencing platform • Cisco DX80 videoconferencing machines • Wall mounted TVs with 12x zoom camera (Cisco SX10/SX20) • Laptops and desktop computers with a camera • Visionflex ProEX portable videoconferencing unit • Patient Administration System (PAS) • Justice Health Electronic Health System (JHeHS)

Services

The Network's in-house virtual services are primarily provided from two main administration centres located at Malabar and Olympic Park. This centrally based workforce is comprised of a broad range of clinical specialities who deliver care to patients in metropolitan and rural custodial settings in NSW. They consist of specialised nursing and medical staff who provide advice and support to dependant centres as required. Healthcare interpreters are used to support the services via telephone at the patient end, facilitated by the onsite clinician.

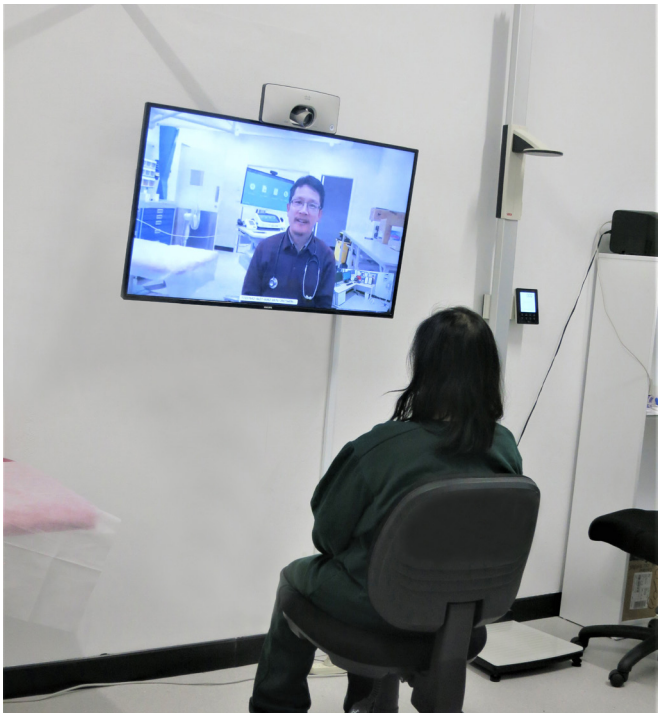
There are 37 health centres located in correctional centres that are geographically dispersed across NSW. The health centres are managed by a NUM and supported by PCNs and administration staff, who provide in-person care to the patient. Access to in-house specialist services is also available but will vary according to the centre's location. The clinicians at the receiving end are typically PCNs who will be present with the patient at their virtual assessment with the treating clinician.

The Network's virtual services include but are not limited to: remote offsite afterhours medical services (ROAMS), primary care, custodial mental health, drug and alcohol (D&A) and population health. These are summarised below.

Remote offsite afterhours medical services (ROAMS)

The ROAMS use telephone and, in some cases, videoconferencing to provide specialist advice and support to health centres that require off-site and after-hours care. ROAMS is available for health centres that do not have on-site specialist support (medical officer or nurse practitioner) and/or require support in between scheduled virtual appointments which may occur after business hours. ROAMS is not an emergency service. In the event of an emergency, the health centre will transfer patients to the nearest emergency department at a local hospital.

The ROAMS has a single point of access telephone number for health centres to contact and be directed to the appropriate service. The services available through ROAMS are:



Patient at a local health centre joining a video consultation with a specialist

- after-hours nurse manager (AHNM): Provides after-hours operational management of custodial and adolescent health streams, including monitoring and matching staffing levels and skill mix to service need, bed demand management, liaising with NUMs on operational issues and assisting the Network on-call Executive with managing significant after-hours events.
- psychiatry
- primary care
- population health (including a COVID-19 information and triage line)
- drug and alcohol.

The services each have their own protocol that applies to offsite support between assessing nurses (PCNs) and remote medical officers/NPs.

Primary Care

Virtual primary care is comprised of oral health, mental health (clinical level A patients), primary care general practice (MOs and NPs) and physiotherapy services.

Oral health

Adult patients can access dental services through the Corrective Services NSW (CSNSW) Offender Telephone System. This 'dental hotline' is a self-referral system, where patients are triaged according to their symptoms and placed onto the relevant waiting list.

In some regional locations (within driving distance from metropolitan Sydney), mobile dental units are organised as part of in-person care and treatment. Suitable patients are provided with a virtual assessment prior to the in-person appointment. A dental officer completes a virtual assessment of the patient using videoconference technology and an intra-oral camera linked to the ProEx Telehealth Hub, to send real time images. A dental assistant is present onsite with the patient to assist with the physical examination.

Virtual dental services are also utilised to consult difficult to access patients, such as those in high security locations, or to provide timely examination for centres where patient numbers and wait times are high, organise referrals and to provide preventive or pharmacological measures whilst waiting for treatment.

Mental health – clinical level A patients

The mental health consultant liaison nurse (MHCLN) provides care, assessment, and follow up virtually to patients in custody who have been placed on the GP waitlist and are presenting with non-complex mental health concerns. Clinical level A patients are defined as patients with a stable or non-acute deterioration in their mental health.

If a GP identifies the management of a patient with mental illness to be more complex, the patient is referred onto custodial mental health.

The MHCLN works in liaison with the GP to initiate and/or adjust psychotropic medication. The GP (as the registered prescriber) will approve the MHCLN to issue an auxiliary medication chart to the local health centre as required.

All patients are initially assessed by the PCN or custodial mental health nurse (at selected locations) before a patient is added to the GP waitlist.

New patients for the MHCLN are identified from the GP waitlist and are allocated an appointment by the administration officer.

Primary Care General Practice

Virtual primary care general practice is provided by medical officers (MO) with experience in primary health (GPs and career medical officers) and NPs. The service is provided to rural centres and areas that do not receive regular GP hours and compliments on-site in-person clinics.

Medical care includes prevention, diagnosis, treatment and case management of acute and chronic conditions and palliative care. The virtual MO/NP can request pathology and additional investigations, refer to specialist services and prescribe medications. Patients are routinely seen via virtual care to manage pain, medication reviews, sleep issues, return from hospital reviews, mental health concerns and request for information reviews.

Physiotherapy

The Network physiotherapy service provides telehealth to patients in rural centres or those who are unable to transfer to metropolitan centres for treatment. This includes providing care for patients with various musculoskeletal, orthopaedic, neurological or cardiorespiratory conditions.

Virtual physiotherapists provide assessment and treatment to patients, including in-depth education on anatomy and their condition, the treatment plan, prognosis, exercise programs and self-management approaches. These sessions are greatly enhanced by the presence of nursing staff who can assist with the remote clinics and enable a multidisciplinary approach to care. Patient equipment needs can also be assessed and referrals to imaging or specialists can be made. For assessments that require more-in depth analysis, transfer to the physiotherapy department at Long Bay Hospital is always available.

Physiotherapists conducting virtual assessments also have remote access to state-wide radiology results and can review scans of patients taken prior to their incarceration.

Custodial mental health – clinical level B patients

The Custodial Mental Health (CMH) Outreach virtual service provides an off-site mental health service to 14 locations that do not have access to an onsite mental health service. The target population are patients with serious and enduring mental illness who require intervention from specialist mental health services. They are also known as clinical level B patients.

The CMH virtual service includes:

- clinical review by a mental health nurse/NP and psychiatrist
- recharting medications
- reviewing pathology results for metabolic monitoring
- release planning.

The PCNs based at the health centre are responsible for completing an initial triage of the referral which determines whether the patient is allocated to a level A or level B waitlist. The outreach mental health nurse will then complete a virtual consultation to further assess the patient and determine whether they are allocated to the mental health nurse waitlist or psychiatry waitlist.

If a patient presents after hours with acute symptoms at a location without onsite mental health services, the ROAMS psychiatrist is contacted for clinical advice to determine if the patient can be safely managed at the location or whether transfer is required to another location with on-site specialist mental health services. During business hours, the outreach virtual service is contacted to arrange for the patient to be assessed as soon as possible.

Psychiatrists can issue prescriptions for patients who require complex psychotropic medications. An auxiliary medication chart is completed by the psychiatrist and sent electronically to the local health centre for dispensing. The PCN will add the interim chart to the patient's record. The original prescription is later sent via mail to the local health centre.

Drug and alcohol (D&A)

D&A ROAMS telephone service is available to support PCNs regarding management of any clinical concern. If the patient requires a virtual consultation, this can be arranged as a booking for the next routine clinic or immediately via daytime ROAMS depending on the clinical situation.

The D&A nurses work collaboratively with the D&A specialists to support PCNs with D&A health concerns such as:

- release planning
- assessment related to a request to commence on an opioid substitute treatment (OST) program pre-release
- follow up review of any patient considered to be complex or high risk
- facilitating virtual assessment for the provision of D&A medical services as required.

Population Health

The population health service includes hepatology, sexual health and HIV screening services.

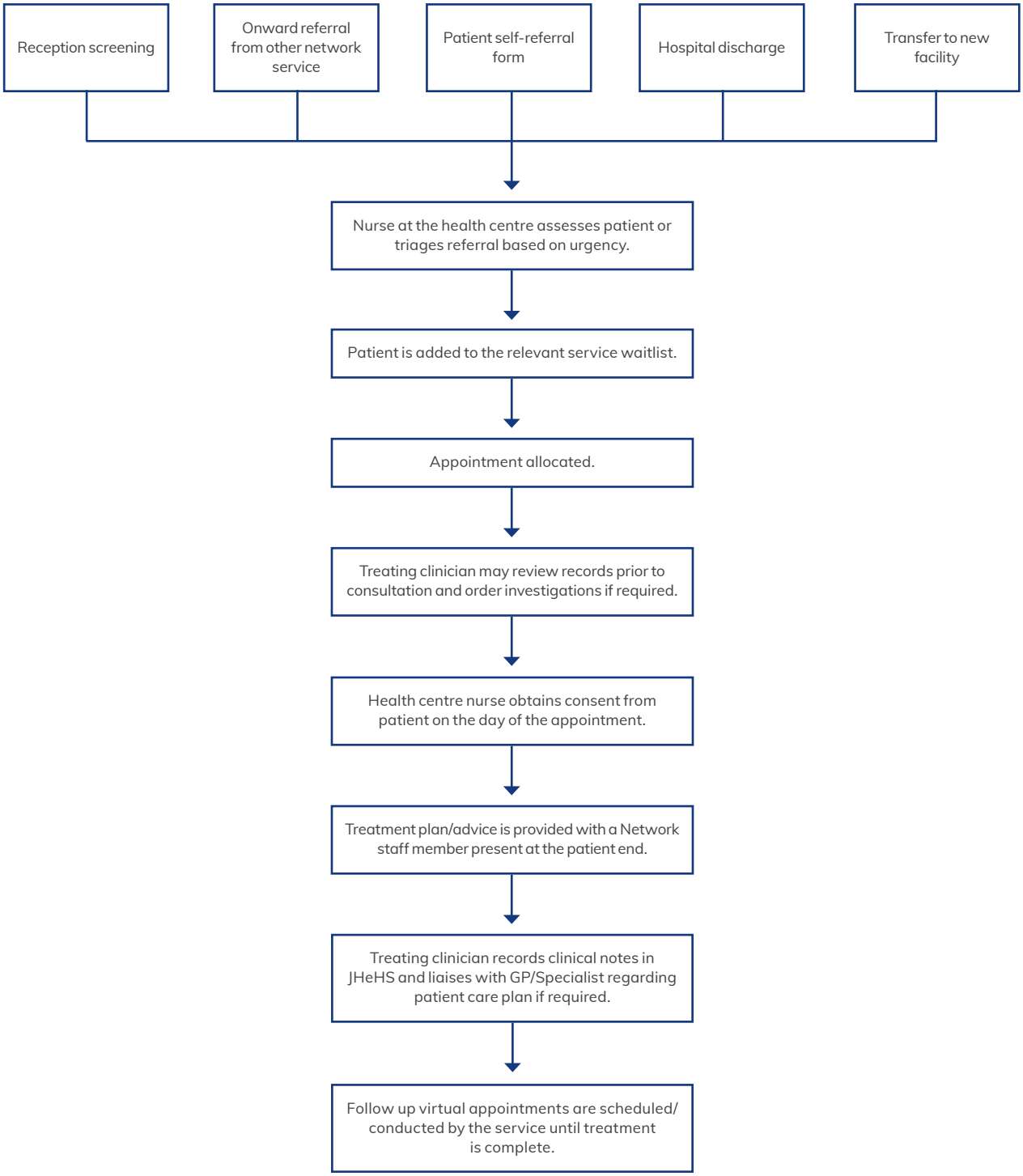
Population health use virtual consultations on a regular basis as an alternative for patients travelling to the outpatient department at the Long Bay Complex for management and treatment of viral hepatitis, liver disease, HIV and infectious diseases.

The population health registered nurse (PopHRN) co-ordinating hepatitis or immunology clinics will liaise with the public sexual health nurse (PSHN) (and the NUM)) for ID patients) at the patient's gaol to arrange a suitable time for the virtual consultation.

If a virtually enabled room is unavailable, the PSHN will have a speaker phone available to hear the consultation and support the patient.

Workflow diagram

Generic referral pathway of the Network's in-house virtual services. There are slight variations for each service which are described in further detail in the services section.



External specialist consultations are also provided virtually by LHDs to the Network's patient population. The referral pathway varies depending on the location of the correctional centre and hospital.

Patient Case Study

Johnny comes into custody to a metropolitan reception gaol. His family live in a rural area and cannot afford to travel to visit often. This is a maximum security gaol where he will stay until he is sentenced. It has a lot of lock down time, his cell mate changes frequently and he is very bored.

Several months later, after being sentenced, Johnny is transferred to a rural facility. He is near his family for visits, he has a job in the bakery and he has a regular cellmate who he has a good relationship with. Johnny is much more settled and content.

Johnny sees the GP about recent chest pain and has some ECG changes on review. He is referred to see a cardiologist at Princes of Wales Hospital (POWH).

Without the option of virtual care

To attend his appointment Johnny has to be transferred to a metropolitan maximum security gaol Rather than miss family visits, potentially lose his job and regular cellmate, Johnny decides to cancel his cardiology appointment.

With the option of virtual care

Johnny has all preparations for his cardiology appointment completed locally.

Johnny attends a virtual consultation with a cardiologist and receives treatment in consultation with the Network staff at his jail.

Communication between POWH, the Network and Johnny is direct, efficient and safe. Johnny receives his treatment and his follow up in his gaol of classification. This means he can continue his family visits, maintain his job and keep his regular cellmate. This results in overall better health and wellbeing outcomes for Johnny.

'The Justice Health and Forensic Mental Health Network was an early adopter of virtual care, embracing the opportunity to bridge the gap between specialist clinicians and our patient population, across the state of NSW. Many of our services have implemented successful care models that utilise video and telephone conferencing to supplement face to face consultations, offering significant benefits to patients and staff.

As advancements in digital health technologies emerge and patient expectations for care change, so must our approach to providing patient centred care, at the right place and the right time, to the safety and quality standards expected by our staff and patients. That is why the Network is committed to embedding sustainable, patient-centred virtually enabled models of care to continue to deliver world leading health care in secure settings and returning healthier patients to their communities.'

GARY FORREST, CHIEF EXECUTIVE, THE NETWORK

Making it happen

This section outlines the key enablers and challenges identified by those involved in implementing this model. Addressing these factors effectively has been critical to successful implementation and these learnings can be used by other health services in the development of local models.

Local planning, service design and governance

Processes and clinical protocol

- The Network is committed to safeguarding the privacy of patient information. Staff are bound by the NSW Health code of conduct and privacy legislation to maintain confidentiality of information accessed in the course of their duties.
- During a virtual assessment, the PCNs at the health centre are present with the patient to support the specialist who joins virtually.
  - In some locations a specialist nurse may be present e.g. mental health nurse or D&A nurse and will support their relevant clinic.
  - On occasion, a non-clinical Network staff member will support the virtual assessment by organising access to a corrective services videoconference link (Just Connect) on behalf of the clinician. This may be applicable to level A mental health patients.
- Corrective services officers are responsible for arranging the patient's attendance at clinical sessions and guarding the patient while there. The officers are required to remain in sight and sound of the patient to ensure the safety of staff and other patients. The escorting officer then arranges patient transfer to and from the clinic when the virtual consultation is completed.
- The clinical needs of patients and their day to day care continue to be the responsibility of the PCNs, with support from the appropriate specialised staff who may be positioned within the service or located offsite.
- For services that require prescribing, an auxiliary medication chart is completed by the registered prescriber (NP, GP or medical specialist) and sent electronically to the local health centre. The auxiliary medication chart acts as an interim chart to enable dispensing of medication to the patient as required. The original prescription is sent via mail to the health centre for record keeping.
- For patients requiring external specialist input from LHD partners, a referral is emailed or faxed to the LHD. An appointment date and time is then determined by the LHD specialist medical service and is sent to the medical appointments unit who forward to the relevant NUM of the health centre. Once the virtual consultation has occurred, relevant clinical documentation is emailed across to the Network to upload onto the patient's records.

Local clinical governance

- A Network wide policy requires that each clinical service operates its own clinical governance meetings. Issues are escalated as required to quality and safety meetings led by the Executive Director, Clinical Operations who has overall accountability for the Network's clinical services.
- In the event of a clinical incident, the nursing staff at the local health centres are responsible for reporting and escalating using the incident management system (ims+).
- All incidents are themed with trends monitored, reviewed and addressed by the relevant streams through the Network Clinical Governance Committee.

Service model and design

- Custodial health services in health centres, staffed by PCNs are delivered using a shared care model. This consists of centrally based specialised nursing and medical staff providing advice and support to health centres that do not have access to an onsite service either full-time or at all. Through a collaborative model the centralised site and dependent health centres work together to develop a treatment plan for the patient. This can be a combination of telephone, video conference and/or in-person care.
- Virtual care is used to supplement the limited in-person specialist care that is available to health centres across the state. Where in-person care is deemed more appropriate due to urgency or acuity, transfers will be arranged to the nearest hospital or a larger Network health centre that has an onsite service.
- Each service stream has identified care that is appropriate for virtual delivery. A model of care with clinical protocols and guidelines has been developed for each service to include the appropriate modalities for providing virtual care, eligibility criteria and referral processes.
- The Network has virtual access to external specialists through a memorandum of understanding (MOU) arrangement with HNELHD. This arrangement applies only to patients in custodial settings in the LHD's catchment area. An MOU also exists with POWH, however at present this is for in-person care only (see opportunities section).
- Informal arrangements are in place with the other LHDs; however, this is not standardised and care provision varies in each location. The Network's executive team is currently exploring how this can be addressed through the development of service level agreements with the respective LHDs.

A video consultation with a specialist and the patient and PCN present at the local health centre

- The Network operates on a block funding arrangement and is currently unable to claim incentive payments associated with virtual care. LHDs that provide specialist treatment and advice virtually are remunerated for their activity under existing contractual arrangements.

'I would just like to thank you for the help and support you have given and shown me over the past year. I am forever grateful for your kindness and I believe without your support I may not have continued to 'get up' and keep going.'

PATIENT FEEDBACK LETTER TO MENTAL HEALTH CONSULTANT LIAISON NURSE

Building engagement

Key partners and stakeholders

- Partnerships with LHDs are critical for the Network's patient population to access emergency and specialist care. Existing relationships with HNELHD and POWH have demonstrated the value in securing formal agreements for virtual and in-person care provision. The Network is working to secure similar relationships with the remaining LHDs.
- The NUMs at health centres play a critical role in promoting awareness and facilitating buy-in from their staff and patients to maximise referrals to virtual services. NUMs are important clinical champions of virtual care.
- Corrective service staff such as the Governors of each facility are important stakeholders. Governors are responsible for managing the premises, overseeing safety and organising patient transfers to and from the health centres. The NUMs at the health centres are reliant on their relationship with the Governors to support any safety concerns or patient transfer queries.
- The Network collaborates with its partners within NSW Health to support its operations, such as the Ministry of Health for funding support, eHealth to support with the technology component of its virtual services, the Clinical Excellence Commission (CEC) for clinical governance, and the Agency for Clinical Innovation (ACI) for development of virtual care guidelines and redesign capability.

'I don't think it makes much difference if you see a doctor using video conference, it is good that they have time for you. I found it to be very professional. You don't need to see someone in person to get the same treatment.'

PATIENT, DILYWYNIA CORRECTIONAL CENTRE, BERKSHIRE PARK

Staff engagement and ownership

- Medical leadership is required to embed virtual care into daily clinical practices of the workforce. The Executive Medical Director holds the position as the Network's Chief Clinical Information Officer (CXIO). The CXIO is a member of internal Information and Communications Technology (ICT) steering committees and chairs the Clinical Applications Advisory Group (CAAG) to support integration of technology and care provision.
- The use of virtual care was trialled in selected clinics in the Network before it was gradually expanded to the broader clinical services. Clinical champions of services have helped promote the benefits of virtual care in addition to the PCNs at local health centres sharing their experiences with each other.
- Establishing trust and credibility between the specialist staff at the provider end and the PCNs at the receiving end is a key enabler for successful delivery of virtual services.
- Regional nurse managers play a pivotal role in establishing relationships with LHDs. Regular meetings occur between the LHD's director of nursing and the Network's regional nurse manager, visiting medical officer (VMO) and a corrective service representative to discuss care provision for patients in custodial settings.
- Primary care services provide virtual education sessions on triaging and referrals to the PCNs and enrolled nurses at the health centres. Targeted education has built relationships, increased referrals, and improved understanding of the requirements of staff at both ends of the service.

Patient engagement

- Verbal consent is required from patients before their initial assessment with the virtual specialist. This is documented on JHeHS.
- The virtual physiotherapy service has developed a script to deliver to patients at the start of each initial assessment. This script defines virtual care, the process involved in the consult and its limitations. Setting expectations with patients from the start of the initial assessment allows the patient a choice as to whether they feel that a virtual consult will benefit them.
- The MHCLN discusses the benefits and risk of medication as a treatment plan and provides 'patients medicine information' to support patient education and awareness. This approach has had a positive impact resulting in patients becoming more receptive to future appointments with the service.
- Services offer continuity of care by providing patients with access to the same specialist nursing or medical staff member throughout their treatment. This has led to patients continuing to engage with the services.
- The availability of virtual care in custodial settings has generally led to increased willingness of patients to be more engaged and proactive with their health concerns. By reducing the need of transfers, patients can have access to care in a familiar environment without being removed from their networks of support.

'The main benefit for me is that I see them [a specialist] quicker through telehealth [virtual care], and you get the same result if you saw someone face to face.'

PATIENT, CESSNOCK CORRECTIONAL FACILITY

A visionflex proEX portable machine used at receiving end to examine a patient during a virtual assessment

Workforce and resourcing

Appropriate technology

- The Network uses PAS to schedule appointments and manage waitlists for all virtual clinical services. Electronic progress (e-progress) notes are used by Network clinicians at both treating and receiving ends to capture and record clinical entries into the patient's electronic medical record via the JHeHS. At present, external providers do not have access to the Network's clinical systems.
- The Pexip videoconferencing platform is used to connect local health centres to the specialist nursing and medical staff.
- Cisco DX80s are used by the specialists and either a Cisco DX80, wall mounted TV with a camera or laptop/PC with a camera is used by the health centres at the receiving end.
- Telephone is an integral component of the ROAMS, mental health and D&A service. It is also used by the health centre staff to access ad hoc support relating to all services and as a contingency as appropriate should the videoconferencing technology fail.

Training and development

- eLearning modules and tip sheets on bookings and the use of virtual care equipment were developed and uploaded onto the Network's intranet to support staff training.
- Separate business processes and workflows have been developed for treating clinicians providing care, and receiving clinicians supporting care in virtual clinics.
- Documented models of care include relevant guidelines and protocols for each clinical service. This information is provided to staff as part of their onboarding and orientation training.

Staffing model

- A range of specialist nursing and medical staff across all clinical services are centrally based to provide advice and support virtually to custodial health services in local health centres (page 5).
- All services have a medical clinical director who is accountable for clinical safety and management of the service. The clinical director positions report to the Clinical Co-Directors, Services & Programs and Forensic Mental Health.
- Most provider services have dedicated administration staff responsible for booking clinics, liaising with health centres, and in some cases facilitating the triage of waitlists.
- All local health centres have a clinical support officer (administrative), NUM, and PCN. Specialist staff are also based at local health centres however the level of service provision will vary depending on factors like the level of clinical need, and the size and location of the centre.
- Specialist staff or PCNs based at the local health centres are generally present with the patient during a virtual assessment.

Considerations for sustainability

- To enable care provision by external providers to operate more effectively, remote access to the patient's electronic medical record is required. The Network is currently testing how this can be implemented through the setup of the virtual cardiology service with POWH.
- The availability of clinical rooms in local health centres continues to be a challenge for the Network. There is a need for additional rooms that are technologically enabled to reduce waiting times and increase utilisation of virtual care. The digital transformation team is reviewing appointment utilisation to consider how rooms are allocated appropriately for virtual assessments.
- With the introduction of new technology such as the Visionflex proEX, more tailored and targeted training is required to ensure the clinical teams in local health centres are utilising the devices to facilitate physical examinations during a virtual assessment.

Benefits of the model

Results

The number of patients seen statewide virtually for GP services has increased from 39 in October 2017 to 440 in July 2020, a 1,028% increase in virtual consults per month.

The mean days waiting for GP services has reduced by 38% (from 39 in Oct 2017 to 24 in Aug 2020).

In April 2021, a total of 3,382 virtual consultations occurred across all specialities which was comprised of 43% video conference and 57% telephone.

Implementation of a virtual oral health service has had a significant impact on the numbers of patients waiting for care as well as average waiting times.

One correctional centre has had a 42% decrease in numbers of patients waiting to be assessed.

96% patients rated the Telesmiles service either good or very good.

D&A and primary care are the highest in-house service providers of virtual care to the Network's patients.

Since the introduction of virtual physiotherapy in April 2020, patient wait times for an initial physiotherapy consult have decreased by 77%.

The primary health stream has won two in-house quality awards for their virtual services:

- Primary care solution for mental health patients – delivering integrated care category
- Bridging the gap GP telehealth service – patients and partners category.

Benefits

1. Increased patient satisfaction, engagement with services and improved health outcomes as a result of the reduced need to travel and be transferred.
2. Increased and more timely access to specialised nursing and medical input.
3. Greater flexibility with scheduling appointments and providing specialist input.
4. Increasing efficiency in the broader system, including the Network, NSW Corrective Services and LHDs.
5. Establishment of more robust partnerships with LHDs across NSW to provide efficient and timely care to a vulnerable patient population.

Monitoring and evaluation

- In 2018, the primary care team undertook a redesign project through the ACI Graduate Certificiate in Clinical Redesign to improve access to GP services in custodial settings. Significant improvements were achieved by the project which addressed long standing issues raised by clinicians and patients. The project identified and implemented key solutions including:
  - expansion of GP virtual care: development of a robust GP virtual care framework to improve access for patients across the state
  - introduction of a mental health consultation liaison nurse: to provide an interface between the GP service and the custodial mental health service by managing patients on the GP wait list that have been referred for mental health presentations
  - centralisation of GP waitlist management: centralised waiting list management by an administrative team.
- The results from the redesign project are being constantly monitored and continue to improve services as they become business as usual.
- A virtual care report is tabled at each monthly Digital Health Steering Committee summarising virtual occasions of service by speciality, location and provider.
- Virtual occasions of service are reported by each service at their respective clinical governance meetings.

Opportunities

- The Network is currently undertaking a redesign of their cardiology patient pathway that is linked to POWH. This project will review how elements of service provision can be provided virtually to create a more seamless pathway for the patient. This model could be expanded across multiple specialities and all LHDs.
- The Network is also working with POWH to explore how emergency departments can use videoconferencing for assessment to determine whether immediate transfer to a local hospital is required. Remote access to the patient's electronic medical record is a key enabler and will be required to support implementation of the virtual service.
- The virtual component of the oral health service could be implemented by other rural health facilities that have limited access to specialist dental services. A dental assistant examines the patient at the local facility while being supported virtually by the dentist or dental specialist. During the virtual assessment a decision is made whether in-person care is required.
- Other future opportunities for the Network to consider exploring include:
  - virtual handover of Network inpatients in LHD wards
  - remote monitoring of cardiac/sleep apnoea patients in gaol
  - remote monitoring of forensic patients
  - store and forward of digital oral health assessments (intra/extra oral photos and digital x-rays).

Acknowledgements

We would like to acknowledge the Network's team for their involvement in documenting this virtual care initiative, along with all past and present staff who have been involved in its development and ongoing care delivery.

Thank you to:

Samantha Helais	Director Digital Transformation, the Network
Rose Lougheed	Service Director Primary Care, the Network
Mitchell Bourke	Operations Director, the Network
Min Jiang	Custodial Mental Health Nurse, the Network
Nina Johnson	Physiotherapist, the Network
Kiran Nair	Advanced Trainee Registrar, Psychiatry, the Network
Mena Twomey	Mental Health Consultation Liaison Nurse, the Network
Lindy Fenton	Primary Health Nurse Practitioner, the Network
Wendy Hoey	Executive Director, Clinical Operations, the Network
Dr Stephen Hampton	Executive Medical Director, the Network
Terri Sheehan	Deputy Director of Nursing and Midwifery, the Network
Dr Sue Morgans	Staff Specialist, Psychiatry, the Network
Michael Paul	Custodial Mental Health Nurse, the Network
Sarah Wood	Nursing Unit Manager, John Morony Correctional Facility, the Network
Mel Bevan	Clinical Support Officer, John Morony Correctional Facility, the Network
Kathryn Man	Senior Dental Assistant, the Network
Tracey Jones	Hepatology Nurse Practitioner, the Network

Patients who shared their stories with the ACI team

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

Glossary and definitions

Assessing nurse	AN	The registered nurse or enrolled nurse, assessing the patient and requiring a consultation with a specialist.
Clinical Applications Advisory Group	CAAG	The CAAG is responsible for sanctioning changes to the Network's clinical application systems. The clinical application systems primarily are PAS, CHIME, and JHeHS but are not limited. The CAAG will oversee the system(s) build, design, test and implementation of any changes to ensure alignment with clinical business requirements, policy and procedures.
Reception screening		An initial health check/assessment completed by the assessing nurse of a patient that has just been received into custody.
Visionflex ProEX		A lightweight, compact and portable video conferencing unit. It includes: • an integrated 10.1" touch screen LCD • inbuilt webcam and microphone • interchangeable medical probes for flexibility of use • storage of patient data using solid state drive (SDD).
JUST Connect		JUST Connect is the web-based collaborative software system used by CSNSW for videoconferencing. It allows community and government agencies as well as approved external stakeholders to book video and telephone calls including meetings, professional interviews and court appearances. JUST Connect also provides notifications and reminders about upcoming appointments.

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.

www.aci.health.nsw.gov.au

NSW GOVERNMENT

AGENCY FOR CLINICAL INNOVATION

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