



AGENCY FOR
**CLINICAL
INNOVATION**

Spotlight on virtual care: vCare

Western NSW Local Health District

MAY 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 multiagency, 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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Preferred citation: *NSW Agency for Clinical Innovation. Virtual care: vCare – Western NSW LHD. Sydney: ACI; 2021.*

SHPN: (ACI) 210095

ISBN: 978-1-76081-605-6 (print)

978-1-76081-606-3 (online)

TRIM: ACI/D21/160

Version: V1; ACI_1343 [02/21]

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Introduction

vCare is a designated virtual unit that provides specialty-level advice, critical care expertise, transport, logistics, and coordination support across Western New South Wales Local Health District (WNSWLHD). vCare provides high level care close to a person's home.

WNSWLHD is geographically the largest local health district (LHD) in NSW. At 246,676 square kilometres, it covers 31% of NSW and provides healthcare to a population of over 278,759. WNSWLHD has 38 inpatient facilities including:

- three major rural referral hospitals
- four procedural hospitals
- six community hospitals
- 25 Multipurpose Services (MPS).

WNSWLHD patients generally have poorer health outcomes due to a range of factors including the scale and diversity of the district creating logistical challenges for the movement of patients and staff.



vCare works to address these factors by ensuring people in rural and remote hospitals receive high quality specialist care close to home.

Since its establishment in 2006, the vCare service has continually evolved to meet the needs of rural and remote communities through improving access to services and delivering better health outcomes for residents. Today, vCare operates as a 24/7 service using a single point of access (a 1800 number).

Advanced virtual care systems to provide:

- rural doctors and nurses with consultant-level advice on immediate life threatening or time critical conditions
- coordination of inter-facility transfers of acute patients requiring specialist and post-specialist care, including logistics planning and tasking
- remote monitoring of patients in rural facilities to support early recognition of clinical deterioration and appropriate escalation.

Clinical responsibility for patients remains with the bedside clinical team (this may include other virtual clinicians).

vCare is focused on delivering the right care, at the right time, in the right place, all of the time. Empowerment and capability building of rural clinicians is also central to enabling person centred management of patients in their own community.*

* See vCare information flyer and vCare unit brochure in Supporting documents section

Reported benefits of the model

Patient benefits:

- Timely access to specialist clinical advice and care coordination
- Care can be provided close to home, minimising unnecessary transfers and delay to treatment, and helping patients remain with their families or carers
- Decreased length of stay
- When care can be provided close to home it can be less disruptive in time, expenses and income lost for individuals and their families
- Improved access to quality, person-centred care
- Ability to seek a second opinion in event of patient or family concern
- Early detection and timely intervention to avoid deterioration through virtual support
- Care close to home and 'on country'.

Clinician benefits:

- Improved logistics support to manage patient transfers and coordinate specialist advice
- Strengthened trust and relationships between clinicians in rural facilities and the person receiving care
- Strengthened clinician-to-clinician relationships through co-managed care
- Clinician feedback is implemented to redesign and continually improve the model
- Supports one-way referral and conference calls to confirm a person's disposition
- Clinicians feel supported knowing they can call and receive advice in critical care situations
- Opportunity to retain workforce and support professional development
- Engage other virtual services to minimise travel.

Service benefits:

- Better coordinated care and improved access to care as part of local clinical emergency response systems
- Inpatients are moved using the most appropriate form of transport
- Improved emergency department (ED) and inpatient bed demand and capacity
- Improved continuity of care and reduced unwarranted clinical variation
- Prioritised movement based on clinical need
- Enhanced clinical support to medical and nursing staff. Ongoing back up for staff at rural sites so they feel supported.
- Improved safety and quality of care.

'The 38 hospitals in our district would not be able to operate without vCare.'

MARK SPITTAL, ACTING CHIEF EXECUTIVE, WNSWLHD

Patient Story

A 44-year-old male presented to a rural ED with chest pain. An electrocardiogram (ECG) was performed and the results were transmitted to the WNSWLHD virtual STEMI Service. A cardiologist in Orange reviewed the ECG and made a referral to vCare to coordinate specialist advice and a treatment plan. vCare organised a teleconference between Orange cardiology, the rural ED and vCare to discuss a recommended treatment plan within five minutes of the patient presenting to the rural ED.

Within eight minutes of presentation, the patient was prescribed and administered clot busting medication and an aeromedical resource was booked to Orange Hospital (which has a Cardiac Catheterisation Laboratory on site). The air transfer was booked within 13 minutes of presenting to the rural ED.

Whilst awaiting transport, which had an ETA of 90 minutes, vCare remained online to provide ongoing clinical and personal support to the nurse at the rural ED. The patient arrived in Orange within four hours of presenting to the rural ED.

The patient was discharged home within two days. Due to the timeliness of care coordinated by vCare, long term health implications were avoided resulting in enhanced outcomes for the patient.

The patient who received this care commented:

'I live about 140km from a main hospital, it's important for me and my family that we live in the country. It was a new experience for me accessing care with the doctor not in the same room as me, however as far as I was concerned, I received the best care.'

'I felt involved the entire time. I knew from the absolute get go that doctors in Orange were helping with my care. The staff in the helicopter were happy with the treatment I got in Orange and my cardiologist even said because of how quickly I was treated in the emergency department I have minimal long-term damage.'

'My friends and family are amazed when I tell them about my experience, they couldn't believe I had a heart attack a week ago.'

'Overall, I received excellent care which I am very grateful for. I think it's important that people aren't frightened to turn up to the hospital when they need to.'

Overview of the model

Key elements of the model

Central intake number

- WNSWLHD clinicians refer to vCare through a single access point (1800 phone number)
- A registered nurse with critical care experience answers and prioritises all calls
- Depending on clinical urgency calls will be transferred or placed in a queue for call back.

Element	Detail
Patient population/service users	<ul style="list-style-type: none"> • vCare provide specialist care coordination and critical care advice to all WNSWLHD EDs and facilities.
Referral pathways	<p>Pathways</p> <ul style="list-style-type: none"> • A clinician at any WNSWLHD hospital can make a referral • vCare facilitates a conference call between the hospital and vCare Visiting Medical Officer (VMO) and specialists • Patients and families call to access REACH (the 1800 phone line is advertised in all rural hospitals - see breakout box page 6) • vCare provides advice to facilities using enabling tools (e.g. LifePak ECGs, Philips eCare Monitors) and clinical handover • For sites with Virtual Support (intelligent monitoring of clinical deterioration - see page 7) patient biometrics can be remotely monitored for signs of clinical deterioration, sepsis or patient need for venous thromboembolism (VTE) prophylaxis.
vCare clinical team	<ul style="list-style-type: none"> • Nursing staff with critical care experience • Designated VMOs in emergency medicine and Rural Generalist doctors • Dispatch coordinators • Patient transport nurses and officers • Managerial and administrative staff.
Technology	<ul style="list-style-type: none"> • Teleconferencing with headsets and phone recording capability • Videoconferencing • Lifepak ECGs • Fixed ceiling cameras with pan, tilt and zoom • Mobile videoconferencing units with two way video, pan, tilt and zoom • Clinical applications e.g. electronic medical record (eMR)/eMeds, Patient Flow Portal .
Funding	<ul style="list-style-type: none"> • Recurrent funding with a yearly budget allocation.

Services

vCare provides a dedicated 1800 number for all referrals. Staff are prompted to make a selection based on the purpose of their call.

- An access nurse (registered nurse (RN) with critical care experience) answers all calls, and then transfers them to an appropriate staff member. vCare provide the following services across the LHD:
 - critical care advice*
 - patient flow (including tracking patients who are being transferred within or out of area or returning to the area)
 - patient transport - coordination of emergency and non-emergency transport
 - virtual support (refer to breakout box on page 7)
 - REACH for rural sites allowing a point of contact for patients and family members to escalate concerns**.
- vCare nurse coordinators are physically located in purpose-built offices in Dubbo and Orange. They maintain constant communication via real-time videoconferencing, phone calls and email.
 - Staff follow scripting with standard prompts to ensure consistency/reliability.
 - Callers are directed to a nurse coordinator who will remain on the call for the duration of the conference to manage elements of care coordination.
 - The nurse coordinator will bring in any additional clinicians as required, including the vCare medical officer, a specialist consultant or Aeromedical Control Centre (ACC) or Newborn and paediatric Emergency Transport Service (NETS) as appropriate.
 - vCare clinicians complete documentation using a predetermined template directly into the eMR to ensure transparency and safety.
 - Mobile videoconferencing or fixed ceiling mounted cameras are used at referral sites, depending on the clinical situation and most appropriate method of communication with patients, family, carers and bedside clinicians.

REACH - Recognise, Engage, Act, Call, Help is on its way

REACH is a system that helps patients, their family and carer(s) to escalate worrying changes in a patient's condition to healthcare staff. REACH was developed by the Clinical Excellence Commission (CEC) in collaboration with LHDs and consumers.

The vCare model provides an opportunity to connect patients to the REACH program in a centralised way.

For rural facilities, the REACH phone number diverts to vCare. vCare will then coordinate a response. This has facilitated easy access to REACH in a streamlined way.

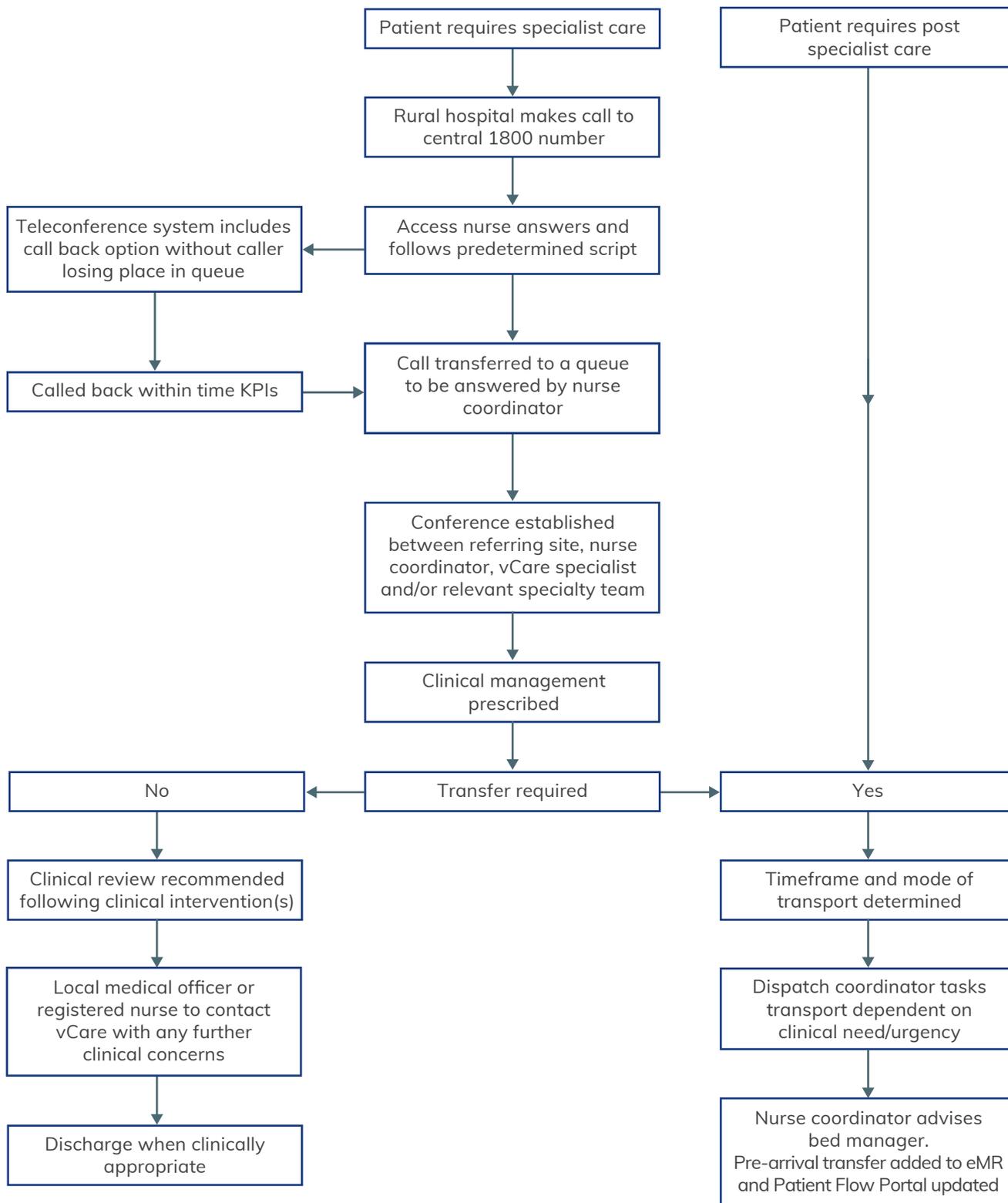
* See vCare priority A poster in Supporting documents section

** See Incoming Classification Matrix in Supporting documents section

Virtual support (intelligent monitoring of clinical deterioration)

- In August 2019 a virtual support pilot was activated via a partnership with vCare and Philips to support the early detection of deteriorating patients in rural facilities. Software utilises already captured patient data in the eMR. This is the first service of its kind in Australia.
- By the end of 2021, all rural WNSWLHD facilities will be engaged with virtual support. Business rules include defined inclusion and exclusion criteria and operating principles to ensure all team interactions are bi-directionally supportive and focused on patient outcomes.
- Virtual support utilises a combination of continuous monitoring (one bed per facility) and spot checks for every other bed space in the ED/inpatient area.
- The virtual support technology is integrated with the eMR. Advanced algorithms track and trigger trajectory of a patient's risk of deterioration, including sepsis and microbiology alerts. All data is shown on a dashboard for the virtual support nurse.
- Virtual support can intervene for:
 - VTE prophylaxis
 - critical pathology results
 - yellow and red zone vital signs
 - incomplete or missing sets vital signs
 - sepsis
 - clinical deterioration.
- Virtual support is an extension of the bedside clinical team and supports shared responsibility and decision making to ensure patient safety, irrespective of patient location. There has been significant engagement with rural hospitals to ensure that the support offered by vCare strengthens working relationships and rural staff experiences.
- Virtual support processes are guided by the NSW Health 2020 Policy: [Recognition and management of patients who are deteriorating.](#)

Workflow diagram - critical care and transfer



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. The resources listed in the supporting documents section at the end of this report also supplement these learnings and have been identified throughout the following sections.

Local planning, service design and governance

Service design

- vCare has designated clinical staff supporting the service.
- vCare provides a single point of access for a streamlined service.
- Patients remain the responsibility of bedside teams. vCare provides care coordination and clinical advice, ensuring continuity of care and solid engagement between vCare and bedside teams.
- Consultant delivered service supports collaboration and empowerment of rural clinicians and buy-in from emergency department directors.
- All nursing staff have critical care and Advanced Life Support (ALS) experience and an understanding of referral services.
- vCare requires a multidisciplinary clinical team with strong communication skills and core values to align objectives and build rapport with all partners.
- vCare provide virtual clinical support for the entire district as a 'business as usual' process.

Defined service model

- To ensure safety and quality, the service model is clearly defined and integrated with clinical systems, processes and technology.
- Scripts and prioritisation matrixes are used to support the appropriate management of incoming calls. This ensures a consistent approach and that risks are actively managed.
- Clinician pathways are used to connect and coordinate standardised care, leveraging agreed care pathways (e.g. trauma, acute coronary syndrome).
- Engagement of key stakeholders in escalation processes ensures a collaborative decision-making approach (e.g. health service managers, sector general managers).

Strong local clinical governance mechanisms

- vCare sits in the WNSWLHD Operations Directorate. The District Manager vCare reports to the Executive Director Operations.
- A local clinical governance framework exists. This is aligned with the National Safety and Quality Health Service (NSQHS) standards.
- vCare has a monthly clinical advisory committee. A risk register is maintained and reported on.
- Robust escalation planning uses 'between the flags' to ensure timely and appropriate Clinical Emergency Response System (CERS) responses. A nearby NSW ambulance crew may be dispatched to a rural hospital to assist with a clinical situation (CERS assist).
- Monthly morbidity and mortality meetings are held. These are an open forum for all staff across the LHD to discuss what worked well, and opportunities for system and process improvement.
- A clinical and operational risk management approach has been established using induction of senior critical care RNs, and Fellows of the Australasian College for Emergency Medicine (FACEM). This includes knowledge of the referral process, clinicians and services available, and knowledge of the local area, transport system and resources available.
- All LHD staff are encouraged to speak up when they have a concern as part of the Speaking up for Safety program.
- Daily safety huddles are held with all staff to identify what worked well in the previous 24 hours, what could be improved, and to update operational matters and service reliability. Staff are encouraged to recognise colleagues who have gone above and beyond in care delivery.

Strong alignment with LHD priorities

- Virtual care is a priority for WNSWLHD and is referenced in the [District's Strategic Plan](#). This integration helps to ensure the ongoing sustainability of vCare.
- vCare is aligned to (WNSWLHD's) philosophy of Living Well Together, the vision of consistency, accountability and sustainability in service delivery and patient care across the LHD.

Executive support

- vCare is supported by strong district and facility executive buy-in across multiple tiers of management. Continued executive support has enabled vCare to expand its scope.
- The LHD Executive recognised the need to invest in the infrastructure required to establish the service, including seed funding for initial set-up costs.
- There will be a delay in realisation of benefits following the implementation of the model. Executives play an important role in communicating this message.

Considerations for implementation

- This model continues to evolve. Since its inception in 2006, it has transitioned from a focus on patient flow and transport to the extensive vCare model outlined in this document.
- Involvement of clinicians in the development of the model helps to ensure ongoing buy-in.
- Involvement of experienced consumers in the development of the model helps avoid unnecessary patient barriers. It also contributes to services designed to be sensitive to individual patient needs.
- Virtual care hardware must meet the needs of the service, such as over bed cameras with two-way audio, portable videoconferencing machines, teleconferencing, and other enabling software systems.

- Integration of data enables the ongoing monitoring of the service from clinical, safety and quality, and financial perspectives.
- Patients and family members should be informed of the need to use cameras during the consultation wherever possible.*
- Patients and family members should be involved in discussions about their care, with consideration for both virtual and face-to-face modalities.
- Development of business continuity processes is essential for ensuring the service continues during outages.
- Development of partnerships with a focus on service objectives instead of the digital tools helps to create buy-in.
- Formalise referral pathways and align these with state-wide policy directives and LHD service patterns.
- The physical location for the central service should support confidentiality and privacy during videoconferencing (for example private rooms, use of headsets).

'I have had situations where I needed to give a medication I had not given before. The vCare consultant said to me "it's ok, I will guide you through it".'

RN, RURAL MPS, WNSWLHD

* See vCare camera assisted consultation in Supporting documents section

Building engagement

Strong service relationships between all partners

- High level service coordination is provided across multiple providers over large distances. Strong relationships are required between EDs, bed managers and critical care units across the LHD hospitals.
- As patients remain the responsibility of bedside teams, this supports strong and collaborative team relationships.
- The process for referral (single point of access 1800 number) ensures a simple and timely process for referrers.
- For virtual support (breakout box page 7), vCare monitors and provides an opportunity for the rural site to address a clinical issue before intervening. This supports sites to continue clinical responsibility.
- When communicating with sites, the vCare team ensures that conversations are bundled as appropriate, rather than multiple vCare clinicians calling multiple times.
- Key partners and stakeholders for vCare include:
 - rural hospitals/clinicians
 - tertiary referral hospitals/patient flow units
 - NETS
 - Virtual Rural Generalist Service (VRGS)
 - Royal Flying Doctors Service (RFDS)
 - private facilities and providers (for example private hospitals, general practitioners (GPs), outpatient imaging/radiology, residential aged care)
 - ACC
 - Western NSW Primary Health Network (PHN)
 - ACI
 - CEC
 - NSW Ambulance
 - University of Sydney
 - NSW Rural Patient Flow Units.

Clinician to clinician engagement

- Clinical champions promote awareness and uptake of the service across the LHD.
- Build strong clinician relationships across community, referral and peripheral hospitals through:
 - clear, collaborative and respectful communication between vCare and service users
 - active networking with all service users and key partners
 - a focus on customer service
 - follow-up with rural clinician following critical events
 - partnership on monthly morbidity and mortality meetings.
- Provide clear feedback mechanisms to inform practice change via:
 - a 24 hour follow up/feedback call for all priority A events
 - providing timely feedback as required.
- Preserve and develop skills and experience of local clinicians
- Use direct entry into the eMR to ensure continuity of care and a well-documented care plan.

Community and consumer engagement

- The vCare service has been established for 14 years and has evolved over this time. While clinicians are very familiar with the service and benefits it brings, awareness and understanding are still developing in the community.
- Community members recognise virtual care as an important service when it is used appropriately. However, more consultation and education will help build understanding and increase the acceptance of virtual care as a mode of service delivery. This will be a focus in 2021.
- A key lesson learned is the need to involve consumers and community members in service design from the start.

Considerations for implementation

- A stakeholder engagement and communication strategy can help to build ongoing awareness and confidence in the service.
- Undertake specific engagement with sites who will be receiving care to identify the best way that vCare can support them.
- Be willing to change processes based on stakeholder feedback. For example, moving to a single point of contact (the 1800 phone number) simplified and streamlined referral access to vCare and supported the ability to distribute workload to the team according to priority.
- Utilising lessons learned has assisted with service changes and expansion, and has enabled vCare to continue to evolve and further strengthen their approach.

'I feel like vCare is always there for me and it's a breakthrough for our LHD. It's not here to replace doctors but to complement our services.'

RN, RURAL MPS WNSWLHD

Staff at the vCare office in Dubbo



Workforce, technology and resourcing

Appropriate technology

- The service uses a range of technology options which are selected based on clinical need, following an initial phone call. These include:
 - teleconferencing - including conference calls which are recorded to assist governance processes
 - videoconferencing/fixed ceiling camera - used when appropriate to assist consultation
 - clinical application enablers - used for virtual support focussing on the early detection of people who are deteriorating.
- Clinicians sit in a purpose-built facility with six to eight screens (dependent on their role) and dashboards throughout the room. These provide 'at a glance' real-time information on capacity and flow throughout the LHD.
- Cisco DX80s on all desks allow communication between team members when shifts are located between the Dubbo and Orange vCare offices.
- Lifepak machines are used for ECG transmission.
- The use of systems allows data capture and the seamless communication of patient notes between clinicians:
 - An integrated database links with the phone system for optimised clinical documentation. Entry into the eMR is in real time.
 - The service's phone system captures measurable data, so notes taken by the access nurse can be viewed by the nurse coordinator.

Planning for technology implementation

- Consultation with clinicians must be undertaken to inform both procurement and introduction of technology to ensure it is clinically appropriate and fit for purpose.
- Technical support is available 24/7 and provided via the State Wide Service Desk (SWSD) and Search And Request Anything (SARA).
- To understand and minimise the impact of technology on clinical workflows and to support ease of use in clinical settings, mapping and planning is undertaken prior to technology roll-out.
- Clinicians are trained in the use of technology to support the cultural and behavioural changes required for the workflow. This also minimises troubleshooting as clinicians are confident in the use of technology.
- There is opportunity for clinicians to work remotely utilising remote access to eMR, fixed ceiling cameras and other essential applications.
- Robust business continuity plans and training.

Staffing model aligned to scope of service

- The model is staffed by both nursing and medical staff 24/7.
- 15 patient transport vehicles (double crewed with RN/EN and patient transport officers), are strategically located throughout the district.
- A successful service requires an efficient staffing model to ensure sustainably. This includes utilising the most appropriate clinical staff for the service. Roles are graded to ensure close alignment to the duties being performed.
- The service requires a technical and administrative support team who understand the clinical need for service reliability.

vCare staffing model

Weekdays

- AM shift: four RNs, (one on access, two nurse coordinators, one on virtual support) two dispatch coordinators, one critical care VMO
- PM shift: four RNs, (one on access, two on patient flow, 1 on virtual support) one dispatch coordinator, one critical care VMO
- Night shift: one RN overnight, one Virtual Rural Generalist Service (VRGS) consultant with a critical care VMO on call.

Weekends:

- 9:30am-6:00pm: one dispatch coordinator
- Morning: four RNs, (one on access, two nurse coordinators, one on virtual support), one critical care VMO
- PM: three RNs, (one on access, one nurse coordinator, one on virtual support), one critical care VMO
- Night: one RN overnight, one VRGS consultant with a critical care VMO on call.

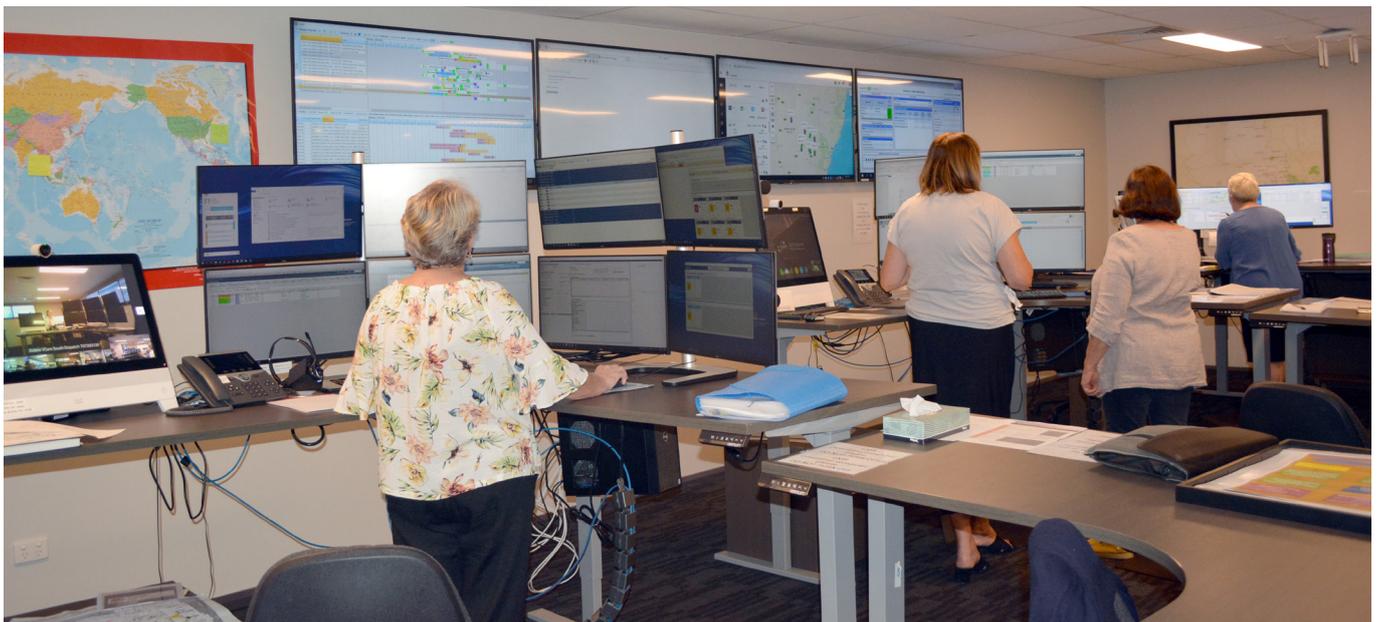
Data

- In order to capture all data required, vCare maintains an additional database with necessary information to report on outcomes and performance.
- vCare clinicians collect data based on the nature of the call, outcome and technology used.

Considerations for implementation

- A well-designed training program for vCare and rural sites assists the service to run smoothly. It also supports clinicians to be confident accessing vCare and using technology when managing a critically ill person.
- Ensure the workforce are appropriately graded based on their responsibilities and how they meet the service needs.
- Ensure technology supports two-way communication (audio and visual).

Staff at the vCare office in Dubbo



Benefits of the model

Results

In an **average month** for vCare:

- there are **4,145 calls** through the central 1800 number
- there are **1,575 events related to patient flow**
- nurse coordinators **organise advice for 290 WNSWLHD patients**. 193 of these events utilise a fixed ceiling or videoconference technology as an adjunct.



On an **average day** at vCare:

- the service **supports 35 patients** transferring to a facility **to receive higher level care**
- the patient **transport fleet moves people 1,863km**.



In the 2019-20 financial year, **1,198 patients were moved by air**.



100% of calls to the 1800 number where callers selected **'life threatening situation'** were **answered immediately** by vCare.



The service **received a Premier's Award in 2017** and staff have been nominated for leadership awards within the LHD.

Staff at referring sites report the following benefits:

- **Staff feel supported and confident knowing vCare are just a phone call away.**
- vCare is seen as a service that can **assist with referral and coordination to tertiary level services, or provide support when additional clinical input as required.**
- **Nursing staff feel empowered to refer directly** to vCare where they determine it is clinically appropriate.



Benefits

- 1. Provides a single point of access** for best practice care, escalation and clinical deterioration.
- 2. Improves a person's experience** and delivers care close to their home.
- 3. Centralised approach to providing expert clinical support** reduces practice variation risks, improves quality and safety, and builds capacity of rural clinicians.
- 4. Enhances partnerships** with key stakeholders across the LHD.
- 5. Increased continuity of care for people and their families** by having local clinicians provide treatment in a person's community, and ensuring a plan is in place before people are moved.

'I received excellent care – which I am very grateful for. I have been told by my specialist that the timeliness of this care prevented further damage.'

VCARE PATIENT

'I can't fault it. Never had any issues, they've always been good.'

RN, RURAL MPS, WNSWLHD

Monitoring and evaluation

All sites who refer a priority A (critically ill or life threatened) event are followed up within 24 hours to check on the patient's condition, gather feedback and to identify any learnings which can be shared for quality improvement.

In order to ensure vCare delivers the right care in the right place at the right time, several key performance indicators* are in place:

- All calls are answered by the access nurse and prioritised within 45 seconds.
- Priority B calls are answered by nurse coordinator for conferencing with vCare VMO or re-prioritised within 10 minutes.
- Priority C calls are answered by nurse coordinator for conferencing with vCare VMO within 30 minutes.
- Optimise non-urgent patient transport allocation practices by vCare rather than outsourced to a private provider.
- Selected specialty Royal Prince Alfred Hospital returns to WNSWLHD confirmed within six hours; aim to transfer the patient home within 24 hours.
- No referrals seeking specialist advice are abandoned.

vCare regularly engage with stakeholders to seek feedback and improve the service. This includes patient experience surveys completed on smart phones for all patients being transported by district non-emergency transport.

* See Key performance measures in supporting documents section.

Opportunities

This model is targeted at a dispersed population, and in its entirety would not be appropriate to be transferred to a metropolitan LHD. However, there are aspects of vCare that would be useful in metropolitan facilities, for example between smaller and larger metropolitan hospitals where clinicians may require specialist advice. The preference is always to support patients close to home where it is safe to do so.

Many lessons learned from vCare can support other LHDs to develop their models of care, particularly in relation to patient outcomes. These lessons could help guide delivery of care and management of patients in smaller peripheral sites, rather than transferring patients to major rural or tertiary facilities.

The model has been implemented in another rural LHD and could be adopted by others. In a future workflow, this model also has broader transferability as a state-wide service or through providing care into other rural and remote LHDs. Further system opportunities include partnership with NSW Ambulance, Hospital in the Home services and residential aged care facilities.

References and links

[vCare Support Services – Western NSW Local Health District](#): An information video about the services offered by vCare and the population served.

[Alex's story: rural patient experience of trauma recovery](#): The story of a rural trauma patient who spent time in a metropolitan hospital. Their return home was coordinated by vCare.

Supporting documents

[Incoming classification matrix](#): The prioritisation matrix used by vCare for all incoming calls.

[Key performance measures](#): The measures used to track the performance of vCare.

[vCare camera assisted consultation](#): A patient information sheet provided to patients regarding the use of virtual care.

[vCare information flyer](#): Information regarding vCare for WNSWLHD facilities, including the single point of access contact number.

[vCare priority A poster](#): Information for referring clinicians on support for critically unwell patients (priority A).

[vCare unit brochure](#): Outlines the services offered by vCare and which staff and services are accessible.

Acknowledgements

We would like to acknowledge the current WNSWLHD vCare team and district remote sites for their involvement in documenting this model of care, along with all past and present staff who have been involved in its development and ongoing care delivery.

Thank you to:

Anne Taylor	District Manager vCare
Amanda Hunter	Rural Virtual Care CNC vCare
Dr James Parks	Clinical Director vCare
Sandra Guilfoyle	Operations Manager vCare
Mark Spittal	Acting Chief Executive WNSWLHD
Sharon McKay	Director Rural Health Services WNSWLHD
Jill Canuto	Registered Nurse WNSWLHD
Rylstone Health Service	
Narromine Health Service	
vCare Dubbo Team	
vCare Orange Team	

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

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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