

Using virtual care to support high risk foot services

Providing care for people with diabetes-related foot complications

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Introduction

All people with a diabetes-related foot ulcer or Charcot neuroarthropathy should have access to a multidisciplinary High Risk Foot Service (HRFS). This document provides an overview of how virtual care can support access to and delivery of HRFS care. It should be used alongside the Standards for High Risk Foot Services in NSW (the HRFS Standards).

Virtual care, also known as telehealth, is an interaction between patients and/or members of their care team occurring remotely, using any form of communication or information technologies with the aim of facilitating or maximising the quality and effectiveness of patient care. It is the modality that connects clinicians to a patient, carer/s or any person(s) responsible for providing care to the patient, for the purposes of assessment, intervention, consultation, education and/or supervision.

When clinically appropriate, virtual care presents significant opportunities to support HRFS access. In addition to helping to break down the barrier of distance (promoting more equitable service delivery), virtual care facilitates the HRFS multidisciplinary team approach by helping to:

- connect relevant medical and allied health specialties, including providing instruction to a clinician at the patient end
- link well-established services to newly established services, including training to staff at other sites to develop capability
- facilitate early identification of referrals required to transfer patients to services earlier
- promote knowledge, education and capability building amongst HRFS clinicians.

- This document is not a comprehensive guide to virtual care – it focuses on supporting the HRFS. The Agency for Clinical Innovation's [Virtual Care in Practice guide](#) provides NSW Health employees with more information about integrating virtual care into their practice. This document includes further detail on the modalities, technology, and documentation that enable virtual care. Clinical teams are encouraged to refer to Virtual Care in Practice and use it in conjunction with national, state or locally developed clinical standards, protocols, policies and procedures for the provision of care.

HRFS virtual modalities

- There are a several modalities used to support virtual care.
- The modalities most commonly used in HRFS include telephone, videoconferencing and store and forward, however this varies across services. The HRFS will need to determine the most appropriate modality to support the clinical requirements of each individual patient, and their access to technology.
- When incorporating virtual care into a HRFS, the local health district (LHD) or specialty health network (SHN) telehealth/virtual care manager or lead should be contacted for support and advice. The district contacts can be accessed on the [Virtual Care Central SharePoint site](#).
- Table 1 provides examples of how common virtual modalities can be used to support HRFS activities.

Table 1:

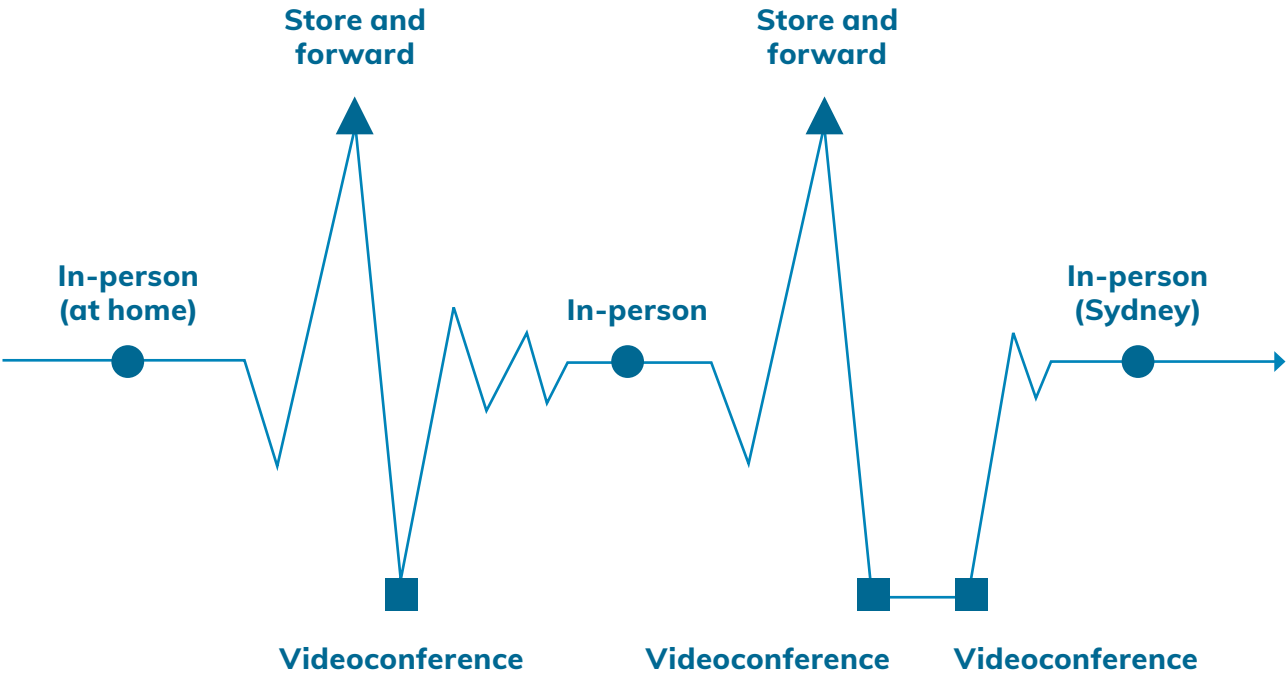
Modality	Technology	Examples
Telephone	<ul style="list-style-type: none"> • A phone at both ends 	<ul style="list-style-type: none"> • Provide results to patients or share between clinicians • Discuss a treatment plan between specialist end and patient end • Follow up with patient's care provider following discharge from the HRFS • Team meetings • Case conferencing between clinicians across different sites
Videoconferencing A real-time audio and video interactive link between multiple participants across multiple locations.	At the patient/clinician end: <ul style="list-style-type: none"> • Access to videoconferencing software and/or equipment according to local LHD approach The patient must have access to a portable camera (to allow visualising the entire foot)	<ul style="list-style-type: none"> • Case conferencing between clinicians across different sites • Networking, training and knowledge sharing • Monitor patient progress between HRFS appointments • Undertake patient handover upon HRFS discharge • Outreach from the HRFS to remote sites • Provide timely review and specialist opinion when there is change in a patient's condition or concern
Store and forward* An electronic communication method of acquiring and storing of clinical information (including data, standardised wound** images, sound and video). The information is forwarded to, or retrieved by, another clinician for the purposes of clinical review for intervention, management or advice.	<ul style="list-style-type: none"> • Appropriate quality digital camera (to allow close-up wound view) 	<ul style="list-style-type: none"> • Forward clinical information, test results or standardised wound images to clinician/s at another site to discuss a patient case • Send standardised wound images with referral to HRFS to help determine eligibility and/or urgency

*When using store and forward, privacy, confidentiality and security of patient information are important to consider. Refer to your local policies and guidelines for requirements and any restrictions that may apply when using this modality.

**Standardised wound images to allow specialist end to make an informed decision are an important aspect of the store and forward modality.

Workflow diagram

A combination of modalities can be used across the patient journey depending on need and appropriateness, for example:



Considerations for virtual care in HRFS

Regardless of the virtual modality used, the clinical care provided should meet the minimum standards outlined in the HRFS Standards.

The following key considerations for including virtual modalities in HRFS have been categorised according to the HRFS Standards (as applicable). They reflect how virtual care can support care delivery and ensure the Standards are met.

Initial considerations for using Virtual Care

It is essential to identify:

- the aim of virtual care – Is a specific clinician needed to create a multidisciplinary team? Is specialist advice required? Are there barriers for patients accessing the HRFS, such as distance, mobility, caring duties or financial considerations?
- the specialists/services needed to fill current gaps in the services provided by the HRFS
- who can fill the existing gaps – A clinician from another health service within the district or network, in another district or outside of NSW Health?
- when to use a virtual consultation – virtual consultations may be used for early intervention, to monitor progress, or gain access to a specialist unavailable locally or a senior mentor
- which virtual modality is most appropriate to meet the needs of the patient and the HRFS team?
- how virtual services will be scheduled to help effectively manage clinician and administration resources (scheduling dedicated times for virtual patient consults may be appropriate).

Documentation

It is a requirement that all clinical activity is documented in the patient's medical record, regardless of the modality of care. If a patient attends a NSW Health facility for their virtual consultation, documentation in the patient's medical record should be completed by all clinicians involved (this includes both ends of the consultation).

For patient consultations, activity recording to capture the occasion of service/activity must also be completed at both ends of the consultation.

Administration and coordination

Using virtual modalities may add additional complexity to the HRFS coordinator's role (e.g. coordination of clinical care across multiple sites). However, once virtual services are established, they will likely save clinician time and resources (e.g. reduced need to travel between sites).

Virtual care may require additional organisation and administration compared to in-person consultations. Administration requirements should be considered when establishing virtual services in a HRFS (e.g. scheduling appointments, use of interpreter services).

Adherence to evidence-based clinical treatment guidelines

- Each HRFS will have clinical treatment guidelines/protocols in place. These may vary between districts or networks and should be taken into consideration when providing virtual care across districts or networks.
- Clinical treatment guidelines/protocols and expectations around treatment need to be clearly communicated, defined, and agreed to between all treating clinicians (e.g. when working with an external clinician who is not part of the HRFS).
- When working across different districts or networks, clinical teams should work with telehealth/virtual care managers or leads to ensure local clinical treatment guidelines and governance standards are met. For some districts or networks, a memorandum of understanding may be required.

Referral and intake

- The HRFS eligibility criteria, referral processes and options for virtual care should be communicated to patients and referrers (e.g. general practice, community nursing, podiatry services, aged care and other hospital services).
- In some services, it may be relevant to allow and/or encourage the inclusion of standardised wound images with a referral. This may be helpful in determining eligibility and/or urgency.
- A HRFS can use virtual care to provide outreach services to people living in remote, rural and regional areas.
- A HRFS can use virtual care to provide services for specific population groups, including the vulnerable, aged, homeless, and people living with a disability.

Equipment

- The technology and equipment required for virtual care at each end of the consultation will depend on the modalities used.
- When conducting virtual consults between the HRFS and a patient at another site, it is important to consider in advance which clinical instruments and equipment will be required at the patient end.
- The equipment/instruments required will depend on the role of the clinician at the patient end and the purpose of the consultation. For example:
 - When a podiatrist is at the patient end:
 - all instruments and equipment will be required as outlined in Standard 8
 - full assessments can be completed, and treatment provided once discussion with the HRFS has taken place to identify the best management plan.
 - When a community nurse is at the patient end:
 - the full list of podiatry specific instruments and equipment is not required
 - tools such as a monofilament are required for the basic patient assessment

- any clinical chair is suitable as a mobile camera can be moved around the foot
- or provision of basic offloading, semi-compressed felt and/or wound shoes are required.

Pressure offloading and wound care

- To improve access to specialised care in areas without a HRFS (and/or in-house orthotic services), an established HRFS can support access to wound care and pressure offloading at remote sites.
- When providing instruction, training or referral services for wound care virtually, the patient end of the consultation must have access to consumable wound care products as outlined in Standard 10.
- When providing instruction, training or referral services for basic pressure offloading virtually, the patient end of the consultation must have access to semi-compressed felt and/or wound shoes.

Continuity of care

- Virtual care can enable and simplify clinical handover to ensure continuity of care when patients move from one care setting to another (e.g. for inpatients, care between HRFS appointments, and upon discharge from the HRFS).
- Virtual care improves the exchange of information and involvement in care between clinicians, patients, family and carers, ensuring accurate clinical handover and decreasing the risk of suboptimal patient outcomes.
- A video handover can be particularly beneficial when transferring patients with multiple care needs. It can improve teamwork and partnerships between clinicians and treating facilities both between HRFS appointments and following discharge.

HRFS virtual scenarios

These example scenarios demonstrate how virtual care may be applied in HRFS. When transferring these examples into practice, the most appropriate virtual modality should be chosen. These scenarios have been aligned to the HRFS Standards.

Scenario 1 - The multidisciplinary HRFS uses virtual care to connect the patient and podiatrist or general practitioner (GP) at another site

- A rural provider connects with a metro HRFS to consult about a patient.
- Store and forward is used to provide clinical information and standardised images of the wound.
- Teleconference or videoconference is then used to assess the patient situation, discuss and put a plan in place. During this teleconference/videoconference a GP and a wound care nurse are at the rural site with the patient and a HRFS coordinator and endocrinologist attend from the metropolitan site.
- Following the virtual care appointment, follow-up plans are made, include bookings for a subsequent virtual consultation (if required).
- A summary letter is generated by each health service participating in the virtual consultation to document the assessment and agreed processes for patient management.

Scenario 2 – The HRFS accesses a specialist at another facility

- A podiatrist reviews a patient in a HRFS. Assessment identifies that the patient would benefit from vascular review. There is no vascular surgeon employed on site, however a vascular surgeon visits monthly.
- The patient is advised of the management plan and that further consultation and follow up will occur.
- The HRFS podiatrist contacts the vascular surgeon via email and/or telephone. Store and forward is used to send clinical information and standardised images of the wound.
- If further tests are recommended prior to the vascular consult, the vascular surgeon provides

advice and the GP working within the HRFS provides referrals for these tests.

- The podiatrist contacts the patient regarding the assessment required, organises the booking and advises the patient to pick up the referral from HRFS prior to the tests.
- Once test results are obtained, vascular surgeon review with the patient takes place when the specialist next attends the HRFS or, depending on urgency, virtually with the podiatrist and patient.

Scenario 3 – The HRFS uses virtual care to connect the same specialist across two services on the same day

- A central/base HRFS with a multidisciplinary team conducts a clinic while another clinic within the same LHD runs simultaneously at a different location. Clinicians from the two sites use virtual modalities to connect.
- A senior podiatrist is present at each site. An endocrinologist and an infectious disease physician (or other specialists as relevant) consult and treat patients at one location in-person and at the other location virtually.
- Appointments are scheduled to allow time for the treating podiatrist and other clinicians to carry out their work (e.g. the podiatrist sees patients on the hour and the other clinicians see patients on the half hour).
- Appointments are staggered at each site to reduce risk of appointments clashing (e.g. appointments at the base HRFS commence 15 minutes earlier than those to be conducted virtually at the external site).
- Administration is conducted from the central point, with bookings reflected at each site.

Scenario 4 – Virtual modalities to support inpatient care

- A patient is admitted to hospital within the LHD. The hospital does not have a multidisciplinary HRFS.
- The patient is reviewed by the onsite podiatrist (e.g. via inpatient referral or dashboard screening), who identifies that input is required by the multidisciplinary HRFS team.
- It is identified if the reason for admission is directly related to high risk foot condition.
- The HRFS coordinator works closely with the podiatrist and inpatient diabetes team at the other site within the LHD.
- A virtual consultation is organised and store and forward is used to share clinical information and standardised images of the wound. The consult is carried out prior to discharge to ensure a management plan is in place.
- Clear follow-up plans are put in place and a discharge note is provided to the patient's GP.
- If required, a follow-up appointment is made with the HRFS or outpatient podiatry service as clinically appropriate.

Scenario 5 – Virtual Care to support community care between HRFS appointments

- A patient has attended a HRFS that is a long distance from home to receive treatment for an active foot ulcer.
- Following the initial appointment, the podiatrist is satisfied one month is appropriate for the follow-up appointment, on the provision that the patient attend the local health facility for twice weekly wound redressing.
- At a wound redressing appointment prior to HRFS review, the community nurse is concerned that the wound has deteriorated.
- The community nurse contacts the podiatrist from the HRFS for advice using the most suitable/accessible virtual modality.

- The podiatrist advises on the most appropriate management plan depending on the presentation/situation.

Scenario 6 – Virtual handover back to GP following HRFS discharge

- A patient has been referred to the HRFS for wound care advice for an active foot ulcer.
- A HRFS appointment is arranged during patient admission. An offloading shoe is issued to assist pressure relief while transferring in hospital and to allow for safe mobilisation upon discharge.
- The patient will be discharged and will require ongoing wound care by their GP.
- A virtual appointment is arranged between the GP, patient and podiatrist to confirm the current wound care regimen and any other recommendations for post discharge, for example continuation of oral antibiotics.
- The virtual appointment allows the patient to contribute to their management plan.
- The virtual appointment allows the GP to see the wound and assess current healing.
- The GP is provided with contact details for the HRFS, in case further advice or an urgent review is required prior to the next scheduled HRFS appointment.

Scenario 7 –Outreach from the HRFS to other sites

- A rural HRFS sets up an outreach model to reach patients who do not have easy access to a HRFS. This may include Aboriginal patients who live in remote NSW.
- The areas where outreach services are most needed are identified, engagement occurs with clinic coordinator to determine interest, and executive sponsorship is obtained at each site.
- The HRFS coordinator works closely with Aboriginal Health, ambulatory care, administration staff and wound care nurses to develop a model for the outreach service.

- The equipment requirements for remote sites are assessed, including identifying required virtual care and HRF equipment (e.g. wound care dressing provided to the remote sites). Staff training occurs as needed.
 - In the model, a HRFS senior podiatrist conducts in-person outreach services monthly. Dates and times of outreach services are flexible based on needs of the HRFS and the remote sites.
 - When engaging with Aboriginal communities, the HRFS senior podiatrist works alongside the Aboriginal Health workforce (such as an Aboriginal Health Worker, Aboriginal Health Practitioner or Allied Health Assistant).
 - Following initial in-person consults, follow-up is conducted via videoconference between the HRFS and a patient with a wound care nurse and, where appropriate, an Aboriginal Health Worker at the remote end.
 - Administration from the outreach site coordinates appointments and liaises with HRFS administration.
 - The multidisciplinary team at the HRFS is available for additional virtual support as required (e.g. store and forward). The outreach service is promoted and communicated to local GPs to build support.
 - The senior podiatrist provides a written summary of the patient's recent visit to the HRFS (including assessments and treatment plan) to the local treating facility. The podiatrist then follows this up with a telephone call to the nurse to ensure they have access to recommended dressing products and to discuss any concerns prior to the patient attending the appointment. Both the podiatrist and nurse document the conversation within the patient's notes.
 - The following week the patient attends the appointment with a nurse at the local facility, a 30-minute drive from home.
 - During this appointment, a podiatrist from the HRFS joins via videoconference. A portable camera is used by the nurse to ensure the podiatrist can assess that healing of the wound is progressing. Both clinicians discuss how to best treat the specific wound and address any ongoing concerns or questions from the patient. Both the podiatrist and the nurse document the outcomes of the videoconference.
 - As healing is progressing well, over the next two weeks the nurse administers wound care individually with the patient.
 - The patient then has the HRFS follow-up appointment after the third week. The nurse contacts the podiatrist via telephone to discuss the progress of the wound over the previous two weeks and provide appropriate clinical handover.
- Watch a video on the Dubbo HRFS Outreach Service link [here](#)

Scenario 8 – Wound care for patients between visits to the HRFS

- A patient has attended a HRFS that is a four-hour return drive from home to receive treatment for an active foot ulcer.
- Following the initial appointment, the senior podiatrist is satisfied that the patient can wait one month for a follow up appointment, on the provision that they attend the local health facility for weekly wound care with a nurse.

Resources

HRFS Virtual Patient Consultation Checklist

This checklist has been designed to summarise the key components and practical steps required to conduct successful High Risk Foot Service (HRFS) virtual care consultations with patients. The table below is broken into steps for the HRFS end and patient end. In many instances, these steps are the same.

In this checklist, it is assumed that a clinician will be present at the patient end.

For further information, please refer to the Agency for Clinical Innovation HRFS Standards and the Virtual Care in Practice guide.

Stage	Staff at the HRFS end	Staff at the patient end
Before the appointment	Determine if the patient wants to participate in a virtual consultation	Provide an overview of virtual modalities to the patient (consider providing the HRFS patient information flyer)
		Determine if the patient wants to participate in a virtual consultation
	Liaise with clinician at the patient end to schedule the virtual appointment	Liaise with the HRFS end and the patient to schedule the virtual appointment
	Book a private and quiet room with good lighting	Book a private and quiet room with good lighting
	Put in place processes to prevent interruptions (e.g. from other staff or patients)	Put in place processes to prevent interruptions (e.g. from other staff or patients)
	Confirm necessary patient history and any relevant test results/scans/images have been received	Provide overview of reason for consultation, patient history and any relevant test results/scans/images

HRFS Virtual Patient Consultation Checklist (continued)

Stage	Staff at the HRFS end	Staff at the patient end
Day of appointment	Ensure virtual equipment has been set up and tested prior to consultation If there are any issues, contact Conferencing Support at 1300 679 727	Ensure virtual equipment has been set up and tested prior to consultation If there are any issues, contact Conferencing Support at 1300 679 727
	Ensure mobile phone is switched to silent	Collect the patient from the physical waiting room
	Introduce all attendees (specialty and role in the HRFS appointment)	Ensure mobile phones are switched to silent
	Introduce the purpose of the HRFS appointment	Introduce all attendees (specialty and role in the HRFS appointment)
	Invite questions from the patient	Invite questions from the patient
	Summarise the HRFS consult and all follow-up actions for the clinician and patient at other end of consult	
After the appointment	If there were any connection issues, inform your telehealth/ virtual care manager or lead or local IT contact as soon as possible	If there were any connection issues, inform your telehealth/ virtual care manager or lead or local IT contact as soon as possible
	In line with regular workflows and your local health district (LHD)/specialty health network (SHN) requirements: Complete consultation notes for patient's medical record	In line with regular workflows and your LHD/SHN requirements: Complete consultation notes for patient's medical record
	Record capture occasion of service/activity	Record occasion of service / activity
	Liaise with patient end clinician to schedule follow-up HRFS appointment (if required)	Liaise with patient end clinician to schedule follow-up HRFS appointment (if required)
		Refer to other care providers (e.g. primary care) as needed

Further information

For more information, see:

[ACI Virtual Care website](#)

[ACI Virtual Care Central SharePoint](#)

[Virtual Care in Practice Guidelines – ACI \(including Telehealth Readiness Assessment\)](#)

[Electronic Information Security Policy – NSW Health](#)

[Virtual Care: A guide to a successful consultation](#)

[Telehealth Master Guide NSW Health \(funding and reporting\)](#)

[Telehealth User Guide NSW Health \(funding and reporting\)](#)

[HRFS Clinical Priority Brief](#)

[HRFS Organisational Models](#)

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