

Virtual care for cardiac rehabilitation

This guide aims to help you to deliver services as effectively as you would in person.



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Introduction

Virtual care, also known as telehealth, uses technology to safely connect patients with health professionals to deliver care when and where it is needed. Virtual care modalities include telephone and videoconferencing (the traditional modes of telehealth), the internet and remote monitoring.

High-quality evidence supports the use of virtual care within cardiac rehabilitation settings, with more than 30 unique virtual care trials conducted internationally.¹

Video consultations are beneficial as they allow clients and health professionals to see each other, including non-verbal communication. They also allow for group participation, enhancing efficiency and providing the opportunity to share experiences.²

To determine the quality of service delivery and associated outcomes, it is recommended to include the collection of service and clinical outcome data.³ This will support quality improvement processes, so that best practice in virtual care delivery can be reported and upscaled, and lessons learnt can be shared with colleagues.

This guide assumes your service has implemented a virtual platform such as:

- Pexip
- myVirtualCare
- Skype for Business
- Scopia (Hunter New England Local Health District only, transitioning to myVirtualCare in 2021).

Setting up your workspace [Go to page 2](#)

Consider how to set up your workspace:

- Adapt your workspace so that participants see a private and professional space. Check what is being shown behind you.
- Adjust the lighting and be conscious of glare from exposed windows.
- Minimise background noise.
- Check how your attire appears on screen.

Setting up your digital space [Go to page 2](#)

Consider your digital environment:

- Familiarise yourself with your hardware capabilities and software.
- Arrange your screen to reduce distractions.
- Have resources available to enable you to email/demonstrate with ease.
- Set up your screen and camera to encourage eye contact.
- Frame your face at a comfortable distance and avoid looking down into the camera.

Preparing the client [Go to page 4](#)

In advance of the session:

- talk with them about what to expect
- guide them in what they need and how to connect
- identify a back-up means of communication
- obtain contact details for safety and risk management
- If possible, do a practice run to alleviate the client's concerns.

Adapting your therapeutic skills [Go to page 6](#)

During the call, you can enhance rapport with a client by adapting your therapeutic skills:

- Check your positioning on the screen.
- Make eye contact with the camera.
- Emphasise your active listening skills.
- Check how the client is feeling.

Navigating common challenges [Go to page 7](#)

Be prepared to:

- manage clinical risk
- maintain boundaries
- explain any lags in sound or the video feed to keep the conversation flowing.

For further virtual care guidance, contact your local telehealth/virtual care manager or lead.

Setting up your workspace and protecting client confidentiality and privacy

Your environment

Review your workspace before you start videoconferencing.

Make sure that you conduct video consultations in a private space. Ensure that other people are not able to overhear your session and that you will not be interrupted (for example, place signage on doors).

Consider any objects that are visible in the background and remove any client information that may be visible. You may like to include plants and artwork, but remove personal photographs, belongings or things that are distracting.

Tip

Be aware of windows and doors. You are trying to create a private space for the client. Consider not having windows or doors in your image to reduce the chance of someone passing by or unexpectedly dropping in.

Attire

Dress professionally as you would for a face-to-face consultation.

Remember that some cameras can have difficulty with striped or patterned clothing, which may strobe or appear distorted on screen.

Tip

Consider dressing in block colours that contrast with your background.

Your lighting

Lighting can have a big impact on the client's experience. Poor lighting can make it difficult for clients to see you and be a source of distraction.

Before a consultation, adjust your equipment to achieve the best lighting conditions. Try to avoid backlighting, which happens when the source of light is positioned behind you, such as through a window. Also try to position yourself in a way that reduces shadowing of your face.

Tip

You might like to consider professional lighting, like a ring light, if the lighting in your workspace is suboptimal.

Background noise

Ideally your workspace should be away from major sources of noise, especially other people talking. Other background noise, like traffic, can also make it more difficult for you and the client to hear each other and can be distracting.

Minimising background noise will improve the quality of the call for you and the client.

If background noise is an issue for you, consider using noise cancelling headphones to reduce unwanted and distracting sounds. Headphones with a built-in microphone close to your mouth will ensure your voice is heard more clearly by the client.

Tip

Don't forget to turn off or mute your phone and other alerts!

Setting up your digital space

Your video conferencing platform

Before starting, make sure you are familiar with how your video platform operates. You should access training in the platform and do several practice calls, so you are confident before making calls with clients.

Your screen

Be aware of what programs and applications are open on your computer. Close these or minimise programs that are not required for your session.

This is particularly important if you plan to share your screen, both to aid your navigation in-session and to protect privacy. This also helps to minimise distractions even if you are not screen sharing.

It is preferable to have a dual screen set-up. This allows you to view the client on one screen, and use the other one to view their medical record or other relevant resources that you are discussing.

Tip

We easily get distracted by emails coming in. Consider disabling email alerts and other notifications during your session to give your full attention to the client.

Your camera position

Think about your camera as if it is the client's eyes. Position your camera so that it is natural for you to look at the lens while the client is speaking. Align it with the mid-line of your body to face the client squarely.

It is recommended that your camera be positioned at or slightly above your eye line. You don't have to maintain eye contact all the time, but maintaining eye contact can help demonstrate that you are engaged and listening.

Your resources

Prepare any resources you may use during the session in advance. Videoconferencing software often offers integrated document or screen sharing functions.

Upload your resources before your session.

We recommend making an easy-to-access folder with all your resources ready to go.

Note in the client's medical record that the consultation is being provided by video conference.

Tip

If you are sharing online materials, consider bookmarking frequently used resources in advance.

Framing your face

You should be the main object of focus in the foreground. This will create a comfortable image for the client to look at.

Think of the screen being split into thirds: your shoulders should line up with the bottom third and your eyes should line up with the top third. This gives you about 10cm between the top of your head and the top of the screen.

Tip

Consider seating yourself about half a metre from your camera. This will give you enough space to lean slightly forward to demonstrate you are listening to the client.

Preparing the client

Be open about strengths and limitations of video consultation

It is useful to discuss the advantages of communicating by video, while also acknowledging that challenges can arise.

Advantages

- Video consultation can overcome access difficulties, for example, distance, time, mobility or health barriers
- It enables easy screen file sharing.

Challenges

- It can seem unnatural at first
- Technical difficulties sometimes arise which may interrupt the consultation.

Ask the client if they want to include a support person or an interpreter in the consultation.

Advise the client that they can withdraw from the consultation and receive their care in person if practicable.

Guide the client in setting-up

Guide the client through the things that they will need to do to connect.

Prepare a guide to send to the client with simple details of how to set up and log on.

Things to consider

- Find a quiet and private location
- Internet connection and bandwidth requirements (see specifications for software used)
- Identify a device to use
- Download any required software
- Likely data usage for the consultation
- What the client should do if they cannot connect. All clients should have the IT support phone number
- Remind the client that others may be able to see the room they are in
- Billing or other administrative procedures

- Security of the platform and implications for privacy
- Use of recording functions on the platform
- If the client is Aboriginal or Torres Strait Islander, they may feel more comfortable with an Aboriginal colleague present
- Including an interpreter service for clients' whose first language is not English.

Enquire about the client's confidence and experience with using videoconferencing software, and technology in general, so they can be given more guidance if needed.

Allow enough time for client set-up, particularly if they are not confident.

Consider whether they may need additional help (for example, by telephone, or from a carer or family member) when getting started.

Protecting Clinician Privacy

To protect your privacy, when dialling a client from a work mobile, personal mobile or landline, clinicians must prefix the phone number being called with the numbers '1831'. This will ensure the client cannot see the phone number that you are calling from (you will appear as a 'private number' caller).

Please test this privacy prefix prior to calling a client to ensure your service supports this feature. Contact your provider if it does not.

Procedure and protecting client privacy

1. At the start of all virtual care consultations (telephone or video), verbal consent must be provided from the client and documented in the client's health record. Written consent is not required as consent is implied through participation.

2. Start of consultation - Clinician to client Script:

'Today we are meeting using a video-link. I want to assure you this consultation is not being recorded and the information you share with us is confidential and private. Equally we would respect that you would not record us either. We will document this information in your health record the same way as if it was a face to face meeting and it will be stored securely and used appropriately.'

Identify a back-up communication method

Before the first session with a client, it is recommended that you establish a back-up plan to use in the event of connectivity issues.

This may be needed when connection with a client can't be established, or when a video call has a lot of interruptions.

Your back-up plan might involve a mobile or landline number to call, or a secure online chat-based alternative such as Pexip or myVirtualCare.

Communicating this plan to the client in advance will minimise any disruption to the session.

Risk management planning

Have a plan prepared and shared with the client in the event of:

- clinical deterioration
- client disengagement
- connectivity problems
- privacy concerns.

Include:

- phone number or other means of contact
- the address of where they are connecting from. This can be used to identify local services, or to send help
- existing health practitioners and/or general practitioner details
- other contacts such as informal carers if relevant.

Adapting your therapeutic skills

While clients in some contexts may highly value video counselling, some practitioners may find it harder to build engagement and rapport. In this section we consider the things you can do to show the clients you are listening and engaged.

Positioning and posture

Use your image as a form of real-time feedback to adjust your posture and position.

Check the framing of your face and aim to face the client square-on throughout the session.

Sit far enough away from the camera to give yourself space to lean in from time to time. This helps to show you are engaging with what the client is saying.

Make eye contact with the camera

Perfecting eye contact over video can be challenging. Looking at the client's image on screen may not be regarded as eye contact by the client.

Treat the camera lens as if it is the client's eyes: place something eye-catching as a focal point near your camera lens to help develop this habit.

It is also important to consider if the client is not comfortable with eye contact. They may also not feel comfortable showing themselves on video for reasons due to cultural considerations, trauma or personal preferences. Respectfully check with the client to ensure this is okay.

Emphasise active listening skills

The non-verbal signals we use to build rapport may be less noticeable to the client over a videoconferencing feed. To ensure these signals are clearly communicated, it can be helpful to make them more explicit.

Demonstrate connectedness with the client by nodding, using engaged facial expressions, gestures, paraphrasing or making empathic statements.

Be aware that sometimes we can be more still than usual when in front of a camera. Relax to avoid settling into a closed tense posture, and feel free to use hand gestures and body movement.

Check in with the client

Checking in with the client periodically about the session can be helpful, not just about technical things like signal quality, but also to show you are thinking about the client's experience.

The beginning of the session and transitions in conversation are good places to check how the client is finding the session and whether they feel okay.

Take care when taking notes

If taking notes during the session, be aware that this will be obvious on-screen.

Explaining that you will be taking notes during the session can help the client understand what you are doing. Remember to resume eye contact and active listening.

Keyboard noise can also be very prominent when using a computer microphone, so consider using a separate headset microphone if you are taking notes electronically during the session.

Tip

Screen sharing or whiteboard functions can be used to make notes together with the client, such as a session agenda or key points. These can be a shared point of focus to help deepen the collaboration.

Navigating common challenges

Clinical risk management

Management of elevated clinical risk follows the same principles as face-to-face work, with additional considerations for:

- the risk of losing contact with the client when they are not physically present
- the possibility that the client is in a distant location where the practitioner may be less familiar with services.

Useful elements of a risk management protocol

- Ensure an alternative means of contact is available, such as telephone.
- Ensure there is a record of address details for the client, and contact details for their cardiac rehabilitation health practitioner or general practitioner.
- Become familiar with the relevant legislation or regulations local to the client if in another state.
- Reinforce with the client the importance of accessing the service from a consistent location and/or knowing their location at the time of the session.
- Consider the impact of any location changes on risk management and access to local resources.
- Consider using a support person (family, friend, etc.) in sessions, and/or as an emergency contact.

Maintaining boundaries

Avoid individual identification via email. Departmental email addresses are a useful alternative, enabling more transparent care and less reliance on individual clinicians.

Avoid using social communication platforms, which can make boundaries less defined. Also avoid using personal log-ons for any platforms used and clarify boundaries and expectations when required.

Dealing with lag

Many of us have experienced an awkward lagged conversation when using videoconferencing to talk to colleagues, friends, or family. The causes of lag are most commonly associated with internet connectivity.

A video call relies on simultaneously uploading video data from your own computer and downloading video data from the caller's computer. These tasks occur within the bandwidth you have available in your internet connection. Lag happens when you don't have enough bandwidth to support the simultaneous upload and download of data.

Note that upload speed is slower than download speed, so when someone has a connectivity issue, it is more noticeable to the other parties on the call than it is to the person with the slow connection. If you receive notifications about poor connectivity, check in with the client about whether the quality is okay for them, rather than relying on your own experience of the call.

Options for dealing with lag

- Reduce the quality of your video call
- Close any other programs using the internet
- Switch to a different connection
- Explain why lag occurs
- Slow the pace of your conversation to reduce talking over one another
- Switch to your back-up plan.

Tip

Consider your standard practices for session time being interrupted by technical issues. Prior to the session, ensure you have discussed a contingency plan in the event of connectivity issues. Do you extend the length of a session to make up for the interruption?

Virtual care in the NSW Health system

NSW Health employees can use room-based videoconferencing equipment or web-based platforms to support the delivery of virtual care services.

The use of a web-based platform provides greater flexibility on the location of participants, removing the need to travel to provide or access healthcare. This supports clinicians to connect to clients, their carers and other providers that may be located at home, work or other suitable locations such as a general practice. Non-government providers can use a desktop computer, laptop or mobile device such as smart phone or tablet to connect.

Approved web-based platforms in NSW Health include:

- Pexip
- myVirtualCare
- Skype for Business
- Scopia (Hunter New England Local Health District only).

Due to privacy risks, the use of Zoom, FaceTime, Facebook/Facebook Messenger or WhatsApp video calling is not permitted.

The features and accessibility of web-based platforms have similar functionality. It is at the discretion of the local health district and individual service to decide which platform is suitable for the clinical use case. It is advised that services select one option and use it consistently.

Most clinical services in NSW use Pexip because it has been available for a longer period of time. A recent release of myVirtualCare provides an alternative when additional requirements and a waiting room are required. Both platforms are easy to use and have access to technical support.

Pexip simplifies video communication between videoconferencing platforms such as Skype for Business. To get started you will need to acquire a Virtual Meeting Room Number (VMR). You can acquire a Pexip VMR [here](#).

Videoconferencing platforms have many functionalities which are useful to support consultations. You should discuss what functional requirements you need with your local telehealth/virtual care manager or lead (see [Local contacts and training](#)).

When recording a client consultation, please ensure written consent is obtained prior to any recording being undertaken.

References

1. Jin K, Khonsari S, Gallagher R, et al. Telehealth interventions for the secondary prevention of coronary heart disease: A systematic review and meta-analysis. *Eur J Cardiovasc Nurs* 2019; 18: 260–271.
2. Supervia M and Lopez-Jimenez F. mHealth and cardio-vascular diseases self-management: There is still a long way ahead of us. *Eur J Prev Cardiol* 2018; 25: 974–975.
3. Gallagher RN R, et al. Cardiac Rehabilitation Quality in Australia: Proposed National Indicators for Field-Testing. *Heart, Lung and Circulation* (2020), <https://doi.org/10.1016/j.hlc.2020.02.014>

Further reading

- Delivering healthcare remotely to cardiovascular patients during COVID-19: A rapid review of the evidence *European Journal of Cardiovascular Nursing* 0(0) 1–9 DOI: 10.1177/1474515120924530 <https://sagepub.com/doi/10.1177/1474515120924530>
- Future-proofing cardiac rehabilitation Transitioning services to telehealth during COVID-19 *European Journal of Preventive Cardiology* 2020 <https://journals.sagepub.com/doi/10.1177/2047487320922926>
- Tips for telephone consultations www.heartonline.org.au/resources
- The future is now: a call for action for cardiac telerehabilitation in the COVID-19 pandemic from the secondary prevention and rehabilitation section of the European Association of Preventive Cardiology <https://journals.sagepub.com/doi/10.1177/2047487320939671>
- Pfeiffer S. Beyond the clinic: Transforming your practice with video consultations. SJ Publishing; 2018.
- Muir S, Meyer D, Thomas N. Is online video counselling at least equally acceptable and equally as effective as in-person counselling? Report prepared for the Australian Government Department of Veterans' Affairs. Canberra: Commonwealth of Australia; 2017. <https://www.dva.gov.au/health-and-wellbeing/evidence-compass/online-video-counselling-least-equally-acceptable-and-equally>
- Rawstorn JC, Gant N, Direito A, Beckmann C, Maddison R. Telehealth exercise-based cardiac rehabilitation: a systematic review and meta-analysis. *Heart*. 2016; 102: 1183-1192. doi:10.1136/heartjnl-2015-308966

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<http://videomentalhealth.org>

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