

# *The RACGP implementation guidelines for video consultations in general practice*

A telehealth initiative

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The Royal Australian  
College of General  
Practitioners



RACGP

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Pty Ltd

## *Implementation guidelines for video consultations in general practice*

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The objective of this guide is to assist general practitioners and their practice teams in being fully informed from an independent, cohesive source in order to make decisions with due diligence on a range of issues in relation to setting up video consultations in their practice.

This guide will be updated as feedback is received and new information becomes available through engagement with industry and other stakeholders. As the market matures, new providers, new opportunities, new pricings, and new commercial options will become available. RACGP Oxygen Pty Ltd is working with industry vendors and will offer business-based solutions on a range of telehealth solutions in future updates.

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## 1. Introduction

### Background

In 2010 the Australian Government announced the Connecting Health Services with the Future: Modernising Medicare by Providing Rebates for Online Consultations initiative. This initiative commenced on 1 July 2011 with the release of Medicare rebates and financial incentives to encourage the uptake of online video consultations.

Telehealth video consultations provide opportunities for care to be provided utilising additional technologies. However, without informed decision-making, general practices may purchase or use solutions that are not fit-for-purpose, and which provide inadequate video and/or audio quality for video consultations.

It is important that video consulting is accessible and executed safely thus ensuring the health profession continues to engage in one of the building blocks of e-health in Australia.

This guide is intended to provide understandable and easy to interpret guidance on a range of implementation, technical and usage issues. It will be updated regularly as new information becomes available and as technologies evolve. Please check The Royal Australian College of General Practitioners (RACGP) website regularly for updates: [www.racgp.org.au/telehealth](http://www.racgp.org.au/telehealth).

The College is currently undertaking multiple streams of work around telehealth which includes engagement with video conferencing hardware and software vendors, the video consultation industry, the Australian Government including the Department of Health and Ageing, the National E-Health Transition Authority (NEHTA) policy setters and the health profession.

Later versions of this guide will include a checklist of hardware, software, and practice procedures needed to conduct video consultations. It will also provide further specific advice on:

- end-to-end quality assurance requirements
- end-to-end security and privacy requirements for all who participate
- internet connections of sufficient speed, quality, and reliability to allow video consultations to occur without affecting or being affected by the practice's clinical and administrative IT systems
- video conference technology systems with advice on how each solution performs against purpose specific selection criteria
- practice environment and equipment recommendations
- an authenticated health service provider directory to ensure that GPs can easily identify and engage with specialists who have the capacity and the necessary connectivity
- the mechanism by which documents and patient health data can be securely shared during a video consultation
- on demand and unique video consultation booking management tools that are interoperable across providers. These will deliver benefits and functions similar to that of peer-to-peer software that are:
  - secure and private
  - suitable for the medical practice environment
  - able to work across multiple video technologies
  - scalable – able to adapt to increased demands
  - customer support driven.

For a checklist of recommended questions for practices to ask vendors when choosing a technological solution for video consultations, see page 19.

## 2. Telehealth

### What is telehealth?

#### 2.1 Definition

Telehealth essentially means 'healing at a distance'. It is the electronic transmission and storage of health information/images in the delivery of both clinical and nonclinical health related services, utilising a range of telecommunications technologies. The RACGP is using the term 'telehealth', and for the purpose of this guide, will refer to the use of video technology for video consultations where a consultation is conducted by video conference between a patient and a specialist in another location. The video consultation will involve real-time (synchronous) two-way visual and audio.

The potential for new initiatives in the telehealth arena is vast. This guideline relates specifically to video consultations with a specialist in another location. In time, this guideline will be expanded to address different safety and quality issues for other types of consultation such as multidisciplinary case conferences or for other media such as SMS, email or telephone.

The following components are included in the broad definition of video consultation:

- the clinical consultation is not performed in the traditional face-to-face method but via a digital medium (eg. voice recording, video)
- information is transferred electronically to a patient or a healthcare professional at a second location
- the healthcare professional employs clinical skills and judgment to provide healthcare and feedback to the patient.

Telehealth can be delivered via technologies that are either asynchronous (ie. store and forward such as email) or synchronous (ie. real time such as video consultation). Regardless of how telehealth is defined, the focus should be on the patient and healthcare delivery, not just the technology.

#### 2.2 Potential benefits to the Australian healthcare system

Telehealth will assist in meeting the current and future needs of the Australian healthcare system by:

- enabling fair and equitable access to health, particularly to rural, remote and Aboriginal and Torres Strait Islander patients, patients in residential aged care facilities, and those with disabilities or special needs
- improving the efficiency of healthcare
- supporting the sustainability of the Australian healthcare system
- reducing the cost of healthcare
- making better use of the professional health workforce
- improving clinical governance and health services integration.

### 2.3 Potential benefits to patients

The potential benefits to patients include:

- reduced travel time and costs
- increased access to local health services
- improved timeliness of healthcare
- reduced need to take extended amounts of time off work
- reduced need to make lengthy family or day care arrangements
- reduced time away from home
- increased sustainability of rural communities.

### 2.4 Potential benefits to healthcare professionals

The potential benefits to healthcare professionals include:

- reduced need for specialist travel to rural and remote clinics
- increased availability of medical specialist and specialised services
- provision of an alternative method of communication
- ability to provide real-time two-way professional development in different specialist areas through telehealth video consultation
- supporting rural recruitment and retention of healthcare professionals.

### *3. Change management*

Successful video consulting requires the video consultation system to be extremely simple to purchase and use. Adequate education of health professionals, adjustment to administrative procedures, scheduling and other changes to workflow and patterns also need to be considered. Video consultations are a new domain within health service provision. As the utility and benefits become evident the RACGP will provide guidance and develop resources to support uptake of this e-health initiative.

## 4. *End-to-end quality assurance*

There are many technical, organisational, and human factors involved in achieving a successful high quality online video consultation. Suitable video consultation technology is only one factor.

Quality assurance systems need to ensure the necessary practice environment, equipment, technology and data connections are available to deliver the required quality experience.

From a human and organisational perspective this includes user training, clinical and operational checklists and guidelines, reporting and monitoring mechanisms, and appropriate standards based national infrastructure.

The RACGP has produced several guidelines and standards that will support high quality care:

- *Computer security guidelines (3rd edition)* [www.racgp.org.au/ehealth/csg](http://www.racgp.org.au/ehealth/csg)
- *Standards for general practices (4th edition)* [www.racgp.org.au/standards](http://www.racgp.org.au/standards)
- *Standards for general practices offering video consultations* (soon to be released addendum to the *Standards for general practices 4th edition*).

## 5. End-to-end security requirements

### 5.1 Overriding principles

Maintaining information security is vital and requires planning and technical knowledge. Best practice principles governing internet communication security should be applied to telehealth in addition to compliance with the RACGP *Standards for general practices (4th edition)* and *Computer security guidelines (3rd edition)*.

Communication, documentation of processes and identifying appropriate training for staff and general practitioners is essential to maintaining computer security. Computer and information security refers to:

- availability of information – available and accessible when needed
- integrity of information – not altered or destroyed in unauthorised ways
- confidentiality of information – only authorised people can access the information.

Areas to consider include:

- video conference calls transmission
- video conferencing interface
- video consulting management interface (scheduling, call launching)
- security of patient information
- the physical environment
- video conference equipment
- video conference directories
- security of service hosting
- data sovereignty – there is the potential that data may be stored overseas, therefore data should stay on computers and servers that are physically located in Australia.

## 6. *End-to-end privacy requirements*

### 6.1 Overriding principles

Best practice principles governing internet communication privacy should be applied to telehealth in addition to compliance with the RACGP *Standards for general practices (4th edition)* and *Computer security guidelines (3rd edition)*.

In addition to internal policies that are concerned with access rights and other data handling processes, privacy laws require organisations that deal with personal information to make available to the public a policy about their data handling practices including collection, use and disclosure. Practices should obtain legal advice about this and other obligations under state, territory and national privacy laws, and codes of conduct and indemnity.

Areas to consider include:

- video conference calls transmission
- video conferencing interface
- video consulting management interface (scheduling, call launching)
- privacy of patient information
- the physical environment
- video conference equipment
- video conference directories
- privacy of service hosting
- data sovereignty – there is the potential that data may be stored overseas, therefore data should stay on computers and servers that are physically located in Australia.

For further information see The National Privacy Principles at [www.privacy.gov.au](http://www.privacy.gov.au).

## 7. Internet connectivity

The internet connection should be able to provide an adequate quality patient/healthcare provider video consultation experience without affecting or being affected by the core clinical and administrative functions of the practice IT systems. The size of the practice and its internet usage will impact on the speed and quality of the internet connection needed to provide adequate quality for video consultations. If the connection is shared with multiple internet-enabled devices such as computers, practice software, smart phones and tablets, and EFTPOS devices, the amount of traffic on the network will always be a consideration until there is sufficient bandwidth. Practices may need to consider a dedicated broadband internet connection with appropriate capacity.

The Australian telecommunications industry is being positioned to deliver more reliable, higher definition and cost effective broadband connectivity via a number of different methods, including fibre optics, wireless and satellite.

A business grade broadband connection is recommended to ensure adequate agreed service levels and fault response/fix times and a lower level of contention (the amount service is shared with other users resulting in a poorer quality service) than consumer services.

It is recommended, if possible, to install separate, dedicated connectivity to run real-time video to avoid contention and issues with the local network.

### 7.1 Upload and download data speed

For video conferencing the upload speed is just as important as the download speed. A synchronous service, where upload and download parameters are identical is required.

Video consultation technologies can be delivered using low standard or high standard definition. Many hardware manufacturers maintain that a minimum bandwidth to achieve high definition can be achieved at increasingly low bandwidths. Depending on the technology and the resolution required a minimum data speed of approximately 1 Mbps in each direction is generally required for standard definition connections. There is a consensus of opinion that clinical video consultations require a minimum of standard definition connection or service. High definition rises to 1.5 Mbps upwards to 6 Mbps. Best practice would be high definition, however it is noted that this is not always possible across all geographical locations throughout Australia.

We recommend that every general practice visit [www.speedtest.net](http://www.speedtest.net) and establish an assessment of the baseline capacity of their internet connection.

### 7.2 Network and video quality

The connectivity option will have a large effect on the quality of video and audio transmitted and received. An inadequate internet connection may reduce the user experience in the following ways:

- audio dropouts
- lip sync problems
- pixilation
- frozen frames
- video but no audio
- audio but no video
- total session disruption.

These problems may be caused by slow transmission (known as latency), packet loss (video and audio data being lost), and jitter (variations in the delay in sending information back and forth. Faster, higher bandwidths tend to have less jitter).

## *8. Video consultation technology solutions*

Currently the Medicare Benefits Schedule (MBS) is not mandating or endorsing any particular technical requirements for online video consultations.

However, the MBS does stipulate that clinicians are confident that the technical solution they choose is compliant with requirements relating to video quality, security, support, privacy and interoperability. For further information see [www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/connectinghealthservices-techandclinical](http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/connectinghealthservices-techandclinical).

When considering the full range of technology solutions no one specification is a determining factor in success. Users need to consider end-to-end integration (the whole system). This includes hardware, software, internet speeds, dedicated video equipment and the internal information technology (IT) environment of the practice.

## 8.1 Types of video consultation technologies – an entry level guide

Type	Description	Pros	Cons
<b>Web based conferencing</b>	Accessed through web browser – generally requires installation	<ul style="list-style-type: none"> <li>• Easy and reliable to get started, works first time in most technical environments including mobile tablets without the need for an ‘app’</li> <li>• Accessible anywhere there is a web browser</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced quality, smaller images</li> <li>• Reduced functionality in some products</li> <li>• Limited or no interoperability</li> <li>• Competing for bandwidth may impact on quality</li> <li>• Low quality video</li> </ul>
<b>Computer based video conferencing</b>	<ul style="list-style-type: none"> <li>• Video conferencing software client installed on computer</li> <li>• Commercial grade solutions work with a central server</li> <li>• Some solutions connect directly from one computer to another</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial grade solutions offer high definition quality at a low cost and are easy to get started</li> <li>• Interoperable with other standards based video conference systems</li> <li>• Can be deployed to multiple computers</li> <li>• Works with latest versions of hardware and software</li> <li>• Integrates with other e-health systems</li> <li>• Potential for integration into practice management platforms to enable ‘click to connect to appointment’</li> </ul>	<ul style="list-style-type: none"> <li>• Requires a software download and sometimes firewall permissions</li> <li>• Uses the computer peripherals and resources, which all need to be selected correctly</li> <li>• Software may require extremely high PC specifications (high end) and is also affected by other existing running applications</li> </ul>
<b>Tablet video conferencing</b>	Video conferencing software client or ‘app’ installed on a tablet device	<ul style="list-style-type: none"> <li>• As above, plus no need to select peripheral devices so works reliably first time</li> <li>• Mobility</li> </ul>	<ul style="list-style-type: none"> <li>• Small screen size</li> <li>• Most tablets only contain SD camera and will transmit SD quality only</li> <li>• Very low processing power</li> <li>• Battery dependant</li> <li>• WiFi/3G connectivity only</li> </ul>
<b>Desktop video conference appliance</b>	Self contained video conference solution that sits on the table or desk	<ul style="list-style-type: none"> <li>• Can use separate data connection from main practice for quality and reliability</li> <li>• Can act as a second monitor for PC</li> <li>• Robust dedicated unit often part of a quality controlled, managed network</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Lack of flexibility</li> <li>• Can present integration challenges</li> </ul>
<b>Video conference room appliance</b>	<ul style="list-style-type: none"> <li>• Self contained video conference solutions fixed or on trolleys</li> <li>• May be in dedicated room or multimedia room</li> </ul>	<ul style="list-style-type: none"> <li>• Moveable from room-to-room</li> <li>• Pan-tilt-zoom (PTZ) cameras can be controlled by remote site</li> <li>• Self contained solution</li> <li>• Can be purpose built for specific clinical scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Cost</li> <li>• Fixed to one video conference technology</li> <li>• Can be inconvenient, bulky and inflexible</li> <li>• Requires management</li> </ul>
<b>Immersive video conference solution</b>	Immersive telepresence suite, multi codec or single solely dedicated to conferencing	<ul style="list-style-type: none"> <li>• Purpose built rooms</li> <li>• Immersive principles of: full high definition, lifesize images, correct camera gaze angle for eye contact</li> </ul>	Cost

## 8.2 Hardware video quality

It is recommended that practices seek further guidance on manufacturers' specifications and IT support, however minimum requirements include:

- frame rate 25 frames per second
- round-trip latency should ideally be less than 200 ms (it is noted that this may not always be achievable in remote settings).

## 8.3 Audio quality

It is recommended that practices seek further guidance on manufacturers' specifications and IT support, however minimum requirements include:

- for clinical consultations and to avoid poor intelligibility, audio should be encoded at a minimum of 16 kbit/s
- headsets or speakers/microphones with echo-cancelling properties should be considered to reduce echo.

## 8.4 Interoperability

Technical compatibility will be an important factor in the delivery of video consultations and a national management layer may assist in addressing this. Enabling interoperability between products from different vendors has become more important than ever as health information is exchanged via new technologies. Practices should pre-test the interoperability of general practice to specialist video conference systems because without it consultations cannot proceed. Practices are advised to keep a log showing the telehealth system used by participating specialists and confirmation of interoperability testing.

## 8.5 Training

Vendor solutions should include training for practice staff and clinicians. Practice training sessions on video consultations should include GPs, practice nurses and practice staff. The following issues should be considered:

- relevant policies and procedures
- equipment location
- equipment set-up
- scheduling appointments
- booking procedures and relevant staff (ie. telehealth coordinator).

Please see the forthcoming RACGP *Standards for general practices offering video consultations* (addendum to the *Standards for general practices 4th edition*), Criteria 3.2.1 and 3.2.2 for further information related to staff training and qualifications.

## 8.6 Support

Providers of video conferencing hardware and software should offer and provide support promptly. The exact nature and speed of support should be detailed in the sale or service contract.

## 8.7 Issues to consider when selecting technologies

When considering peer-to-peer technologies (eg. Skype) it is important that GPs are aware of limitations and security risks. Certain technologies have limitations, capacity restraints and security risks.

These include:

- not meeting the necessary levels of security and privacy. While some potentially provide encryption of the transmission itself, the data around the session is not secure
- an un-encrypted log remains on each computer detailing the call
- not containing a secure address book (open and available to all)
- all participants require an account and need to be in each other's address book
- participants 'presence' is known to other participants while they remain in each other's address books
- lack of interoperability between different versions and other solutions
- not providing end-to-end quality assurance or offering any technical support
- the potential exists for unwanted, automatically dialled or re-recorded calls (SPIT – spam over internet telephony)
- unpredictable and variable user experiences
- using proprietary and closely guarded protocol details
- no certainty that there are no 'backdoor' mechanisms available to gain access to the data (ie. legal hacking).

## 9. Practice environment and equipment

### 9.1 Equipment

When choosing equipment, consideration should be given to the manufacturers' specifications for:

- computer software
- dedicated video conference appliance
- a bundled video conference system to include: codec, monitor, A/V peripherals, stand, camera and microphone.

### 9.2 Monitors

It is recommended that practices seek further guidance on manufacturers' specifications and IT support, however considerations include:

- the choice of computer screen should be made pragmatically, depending on circumstances
- at the clinician desktop, large screen displays enable the clinician to see a large image of the patient/clinician and view/edit clinical information.

### 9.3 Audio devices for computer video consultation solutions

It is recommended that practices seek further guidance on manufacturers' specifications and IT support, however minimum requirements include:

- high fidelity speaker phone
- the audio devices should have echo-cancelling properties.

It is also important to consider the audio environment of the room and the ability to mute the sound at each end, which will improve the audio quality substantially.

### 9.4 Video devices for computer video consultation solutions

It is recommended that practices seek further guidance on manufacturers' specifications and IT support, however minimum requirements include:

- a high definition camera is recommended (720 p or more)
- auto focus is highly recommended.

### 9.5 Recording of session information

It is recommended, from a medicolegal and security perspective, that practices adopt a default position of not recording video consultations unless exceptional circumstances apply and the patient gives explicit prior consent. It should be noted that Commonwealth and state legislation applies to video recording and that it is difficult and expensive to de-identify recordings that contain both audio and visual images of a person. Clinically appropriate recordings however, may include still images of skin lesions, or a video recording of a tremor or gait, for example.

## *10. Setting up the video consultation software and equipment*

### 10.1 Using the equipment

Depending on the video consultation software and equipment chosen, the vendor will provide information regarding use of the software which should cover:

- registering and installing the software
- searching for and adding contacts
- configuring privacy settings
- scheduling 'consultations'
- troubleshooting.

### 10.2 Connecting the camera

If using an external camera, installation software may have been provided – please refer to vendor instructions.

- It is advisable to pre-test the camera to ensure it is functioning correctly
- Ensure correct camera gaze angle so that eye-to-eye contact is achieved.

## 11. The video consultation – physical requirements

### 11.1 Room set-up

Environmental requirements are the same as those for a normal consulting room, ie. a room that is private and large enough for 2-4 people to sit comfortably.

### 11.2 Facilities for video consultations on site

General practices offering video consultation services may need to adapt their practice facilities to provide an appropriate physical environment for telehealth consultations.

The forthcoming RACGP *Standards for general practices offering video consultations* will recommend that practices consider:

- a quiet room where consultations will not be subject to interruptions and where the raised sound volume routinely associated with video consultations will not be overheard by others or disturb others nearby
- arrangements to protect the privacy and dignity of patients who may be required to remove clothing for a physical examination (eg. a screen in the room or a separate private area where patients can remove clothing and be suitably covered with a gown or drape ahead of the video consultation)
- plain décor that will not distract from visual images on the screen
- a 'child friendly' setting for young patients
- good lighting – where there is a window in the room the camera should be positioned in front of the window, or it should be covered
- capacity for the camera to be zoomed in on the patient or the patient to be brought closer to the camera
- ready access to medical equipment that may be needed during a video consultation
- ready access to resources for managing adverse events during a video consultation
- 'Do not disturb' signage that indicates when a video consultation is in progress.

### 11.3 Facilities for video consultations off site

General practices offering video consultations from sites located away from the practice should satisfy themselves that the facilities provide a safe and effective environment for video consultations in line with the elements described above.

## *12. Standards for general practices offering video consultations*

The RACGP recognises that telehealth provides considerable opportunities to improve health outcomes and access for patients to 'attend' a consultation without some of the personal inconvenience and personal or travel costs ordinarily involved in a typical face-to-face consultation.

To guide GPs through telehealth consultations and provide a safety and quality framework for patients and GPs, the RACGP is working on a number of telehealth initiatives, including the development of standards for general practices offering video consultations and an online training and education module on video consultations that will be available in 2012.

The RACGP is pleased to announce that the Australian Government Department of Health and Ageing has engaged the RACGP in a project to develop standards for general practices offering video consultations.

The project aims to develop and disseminate standards that will assist GPs (or designated clinicians on behalf of the patient's usual GP) to interpret safety and quality issues in the context of a video consultation between a patient and a specialist in another location.

The standards deemed to have particular significance for safety and quality in a video consultation context will include additional explanatory material for 22 existing criteria and will form an addendum to the RACGP *Standards for general practices (4th edition)*.

Priority areas include clinical issues such as determining if a video consultation is appropriate for the individual patient or intended consultation, a process to identify participants in video consultations, risk management protocols, privacy and security of the consultation and data, and reliable and secure technical systems fit for clinical purpose.

RACGP templates and resource material will be developed to assist GPs and practices with managing video consultations.

The final addendum to the RACGP *Standards for general practices (4th edition)* will be available on the RACGP website from October 2011. See [www.racgp.org.au/telehealth](http://www.racgp.org.au/telehealth) for more information.

## *13. Medicolegal guidelines*

General practitioners (or their designated clinician) participating in a video consultation should ensure they have medical indemnity cover and seek advice from their medical defence organisation/medical indemnity insurer.

## *14. Policies*

When choosing to offer video consultations, practices will need to further develop existing practice policies and procedures relating to:

- management of patient health information and the security of health information
- documentation of the video consultation
- provision of clinical handover.


For further information see:

- RACGP *Computer security guidelines (3rd edition)* [www.racgp.org.au/ehealth/csg](http://www.racgp.org.au/ehealth/csg)
- RACGP *Standards for general practices (4th edition)* [www.racgp.org.au/standards](http://www.racgp.org.au/standards)
- RACGP *Standards for general practices offering video consultations* (soon to be released addendum to the *Standards for general practices 4th edition*).

## *Checklist for items to consider in implementing video consultations – questions to ask vendors*

Practices should research the options available to determine which systems will best suit their needs, particularly in relation to standards, security and privacy, interoperability and technical requirements.

Practices may wish to consider:

Issue	Addressed 
The cost to the practice	<input type="checkbox"/>
The security of the transmission – whether it is encrypted	<input type="checkbox"/>
Whether the practice is able to install the equipment or if IT support is required	<input type="checkbox"/>
The speed of the connection and bandwidth requirements – approximately 1 mbps in each direction is needed for standard definition	<input type="checkbox"/>
Whether the practice needs to modify the current network wiring	<input type="checkbox"/>
The ability to access the preferred healthcare provider	<input type="checkbox"/>
The quality of audio transmission – audio should be encoded at a minimum of 16 kbit/s	<input type="checkbox"/>
The quality of the video transmission – frame rate 25 frames per second and round-trip latency should be less than 200 ms	<input type="checkbox"/>
The system and software requirements, eg. Windows XP	<input type="checkbox"/>
The technical support (if any) provided by the internet video conferencing provider	<input type="checkbox"/>
The ongoing support and maintenance costs	<input type="checkbox"/>
Who can view the call log and phone book	<input type="checkbox"/>
Whether the data will be routed overseas outside of Australian privacy legislation requirements	<input type="checkbox"/>
Which systems the practice can ‘talk’ to – interoperability	<input type="checkbox"/>
The ease of use and technical requirements	<input type="checkbox"/>

## Glossary

**Asynchronous:** A term used to describe, store and forward transmission of medical images or information because the transmission typically occurs in one direction in time.

**Contention ratio:** The ratio of the potential maximum demand to the actual bandwidth. The higher the contention ratio, the greater the number of users that may be trying to use the actual bandwidth at any one time and, therefore, the lower the effective bandwidth offered, especially at peak times.

**Codec:** A device or computer program capable of encoding and/or decoding a digital data stream or signal.

**Digital certificate:** A mechanism used to verify that a user sending a message or data is who he or she claims to be.

**Encryption:** The process of converting plain text characters into cipher text (ie. meaningless data) as a means of protecting the contents of the data and guaranteeing its authenticity.

**Distant site:** The distant site is defined as the telehealth site where the provider/specialist is seeing the patient at a distance or consulting with a patient's provider. The site may also be referred to as the consulting site.

**Designated support clinician:** A member of the general practice team who provides clinical support on behalf of a patient's usual GP at the patient-end of a video consultation with a specialist in another location (eg. another GP, practice nurse or registered Aboriginal health worker).

**Router:** A device that provides connectivity between networks, eg. between an internal network and the internet. A router forwards data from one network to the other and vice-versa.

**Patient-end:** The end of a video consultation between a patient and a specialist where the patient is present.

**Standard:** A statement established by consensus or authority that provides a benchmark for measuring quality that is aimed at achieving optimal results (NIFTE Research Consortium, 2003).

**Synchronous:** This term is sometimes used to describe interactive video connections because the transmission of information in both directions is occurring at exactly the same period.

**Telehealth:** 'Healing at a distance' which involves the electronic transmission of health information and/or images in the delivery of clinical services utilising a range of telecommunication technologies.

**Video consultation:** A consultation conducted by video conference between a patient and a specialist in another location.

**Video consultation co-ordinator:** The member of the general practice team with primary responsibility for co-ordinating patient bookings, clinicians' availability and properly functioning equipment.

**Video consultation etiquette:** The professional behaviour that supports quality visual and audio performance during a video consultation.

**Video recording:** A recording of a video consultation which must be managed with the same level of security, privacy and confidentiality as any other patient health information.