Australian Wound Management Association Telehealth Framework Document

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Background to document

Scope of the Problem

Australia is a country in which the population is largely situated within large cities. As a consequence to this, tertiary and specialist services are also located within large cities. The provision of specialist services, such as wound care, has historically been reliant on the ability of the patient or the specialist health professional to travel long distances.

Patients travelling to city centres for wound consultation and specialist consultation, face issues such loss of productivity, time away from family and community and costs for travel and accommodation not encountered by people living within the metropolitan area. It is not uncommon for the patient to take 3 days away from their home and work to attend a 30 minute Consultant review in a tertiary service.

Despite many rural and remote initiatives over recent years, the health needs of many Australian communities are still not adequately met. Residents of rural and remote communities continue to show poorer health outcomes than residents in metropolitan centres, while the health of Indigenous communities remains unacceptable. Many rural and remote communities experience ongoing difficulties in recruiting and retaining an appropriate and adequately trained medical and health workforce, while residents face increasing difficulties in accessing appropriate care in situations where integration and continuity of care are woefully inadequate.

Telehealth and telemedicine have been widely used in Australia over recent years as a means of overcoming problems of access to health care and the shortage of health professionals in rural and remote areas. The appropriate and correct use of Tele Health has been found to increased access to health services, cost-effectiveness, enhanced educational opportunities, improved health outcomes, better quality of care, better quality of life and enhanced social support.
The utilisation of Telehealth across the vast Australian continent has the potential to strengthen links between tertiary centres and remote or rural sites. It reduces the time for responses from specialist consultation. The process facilitates wound consultations, specialist consultations and educational support of health professionals working at remote or rural sites.

The patient suffering from a chronic diseases or disability is most likely the one to truly benefit from Telehealth consultations. As the cost of Telehealth consultations reduce and the quality of the systems improves, the service would be useful not only to remote rural patients but also to those residing in metropolitan areas, who find it difficult to get to their appointments.

The aim of this framework document is to provide an understandable and easy to interpret framework for wound providers utilising Teleheath. This will assist the provider to make decisions with due diligence on a range of implementation, technical and usage issues based on the AWMA's

Standards of Wound Management, to assist in the management of patient's with a wound(s) requiring Telehealth.

Definition:

E-health, Telemedicine and Telehealth all refer to the provision of health care at a distance using electronic transmission of health information/images in the delivery of both clinical and non clinical health related services.

The video consultation will involve real-time two-way visual and audio consultation.

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

- The clinical consultation is not performed in the traditional face to face method but via a digital medium;
- Information is transmitted electronically to a patient and /or wound healthcare professional at a second location;
- The wound healthcare professional employs clinical skills and judgement to provide wound healthcare advice or feedback to the patient or treating wound care provider.

Delivery of Service:

There are many Telehealth delivery options including videoconferencing, store and forward, internet and telephone.

Videoconferencing (VC) is an immediate, interactive consultation involving the patient, family, carers and health professionals. VC allows for real time consideration of skills and competencies, the availability of resources and most importantly patient preference in the assessment and planning of care. It also provides an opportunity for education of staff, the patient, family and carers.

'Store and Forward' refers to the process where information is gathered and sent at a time convenient to both sites. For example, an Xray is taken the day prior to the VC consultation. The rural site forwards the information to the Tertiary site where the information is converted to a format that meets the Tertiary sites data needs. Wound images and emails are also examples of this type of delivery option.

Internet access and use is of primary importance allowing for the sharing of information such as test results and treatment algorithms. The issues related to consent and privacy will be discussed later in this document.

Telephone consultation and discussion of wound care options is also cost effective, immediate and is a deliverable form readily available to most sites. It is an immediate, clear line for communication that allows discussion and problem solving. Utilisation of telephones for the sharing of patient information also faces issues related to consent and privacy.

Hardware and software requirements

Whilst it is not possible to dictate minimum hardware ideally, for clinical consultations the VC hardware, software and environment configuration ensures an acceptable patient experience, clinical accuracy and safety, security and privacy, interoperability, audit and billing functions. The hardware required may be divided into two types:

1. Diagnostic quality

2. General quality

Consideration should be given to the physical environment, ensuring privacy, no limitation to movement, and examination with excellent lighting to view the wound. In order to ensure a successful telehealth program the GP or other health professional will need to establish a network of wound specialists whom they can draw on for such consultations.

Typical hardware-VC based configuration includes:

- At least one camera, additional cameras may be used to achieve multiple views;

- A terminal unit which provides audio and video processing capabilities and networking

- At least one display monitor;

- Built-in and/or external microphones;

- User interface, provided by a hand-held remote control;

- The ability to interface external devices such as document cameras, digital stethoscope, ultrasound imaging equipment;

- Third party add-ons can be used to provide alternative user interface system (e.g. AMX);

- Often dedicated space is used with attention paid to physical privacy and consideration of environmental features such as soundproofing and lighting.

Training & coordination

Practitioners will need access to short training sessions or courses to understand the various forms of teleconsultation

Coordination

Some interactions will be easier to set up and run than others .Planning and thorough communication will ensure the room bookings and practitioners required are all available at the time required. Record keeping and billing procedures will need to be adjusted accordingly.

Funding

Funding is required to support clinician engagement:

▪ The GP or specialist who is providing advice might be compensated on the same (time related) basis as for conventional in person consultations;

▪ A telehealth subsidy payment (per occasion of service) might be considered.

Governance arrangements

A clear understanding of the role of the participants within the consultation should be available. Governance around privacy, security, safety, administration, marketing, education and training and evaluating effectiveness will be required. Specific expertise will need to be sought in the some of these aspects.

Factors related to wound consultations

- Patient is offered a video consultation re the management of their wound. The process is discussed and verbal consent obtained-(patient has read the patient information brochure-appendix…)
- The wound specialist is contacted and an appointment is booked and confirmed with the patient
- As much information (marked below with*) as possible about the patient and the wound has been transmitted in advance when the appointment is made
- At the allotted time the patient's wound care provider makes the video consultation to the specialist once the patients wound is prepared for viewing-special attention to the room set up to ensure brightness, contrast, skin tone and field of view have previously been tested or are known to the clinician requesting the consultation.
- The patient is introduced to the Wound specialist, confidentiality is reinforced and the patient is positioned to speak to the specialist and allow viewing of the wound
- The video consultation continues with the wound assessment history/concerns conveyed to the specialist
- Consultation etiquette
  -Usually one person only can speak at a time so perhaps start by ensuring that each person is given an opportunity to speak
  -.Introduce speakers if relatives are also involved in the consultation.
  - Allow for a time delay
  -Do not rush the questions.
  -Try to minimise external noise by placing a sign post on the room explaining quietness is required.
- A management plan is agreed upon with follow up as required .It is important to confirm who is doing what at the end of the consultation so repeating the plan is important for all attendees
- The video consultation ends and the management plan implemented
- A written summary of the consultation is made at both ends and further reviews planned as required-this may even be just by sending an image for 'advice"

Wound Assessment:

It is essential that in gathering and forwarding a patient's wound history the health professional utilises the standards for any wound consultation: Items marked with * ideally have been transmitted at the time of making the specialist appointment

The consultation time is limited thus only the most essential information should be given during the teleconference to allow adequate time for discussion and planning management.

*History: (AWMA Standards for Wound Management Standard 3.)

*Reason for presentation

*Health history

*Age and specific age related changes

*Previous wound history and outcome

*Medication history, Sensitivities and allergies

*Psychological implications related to wounding

*Nutritional status

*Previous relevant diagnostics and investigations

*Pain assessment

*Vital signs

*Type of wound, aetiology and original mechanism of wounding

Dimensions of the wound

- Length
- Width
- Depth
- Circumference
- Undermining

Clinical Characteristics of the wound bed, edge and peri wound

- Colour/texture of wound bed
- Colour/texture/shape of the wound edge
- Colour/texture of surrounding skin
- Structures on view

Exudate

Odour

Inflammation

Infection

Photographic Record of Wounds

Photographic images for wound assessment, published: 2007 Institute of Medical Illustrators National Guidelines on clinical Photography in Wound Management established guidelines for wound care specific images.

It must be recognised that the person taking the photo at a remote or rural site is often not an expert in this field, does not have access to expensive camera equipment or IT support. Guidelines for wound photography should reflect that there are two tiers of photographers:

Rural and Remote Health Professional – amateur photographer

- Small digital camera
- Photo taken at 90 degrees to wound surface
- At approx 0.5 metre from the wound surface
- With camera set to macro
- Flash on automatic?? Acknowledge poor lighting that cannot be controlled
- A measure – ruler – should be used to show length and width
- An arrow should be included showing the proximal end of the wound (pointing to the patient's head)

Expert/Professional Photographer: see guidelines of the IMI
Institute of Medical Illustrators. J Vis Commun Med. 2007 Mar;30(1):32-5

Consultations seeking "opinion" and "comment"

Frequently requests are sent by e-mail asking for comments or advice on managing wounds. The process of documentation of the conversation or advice given must be undertaken according to the standard of the organisation.

Requests for opinions should not to be confused with the official referral to a specialist team. The referral process will vary from hospital to hospital and should be well documented so that there is no confusion regarding the pathway. When incorporating Telehealth review, the process should include guidelines that state which patients or conditions would not benefit from Videoconference review. This may include wounds of the genitals or breast or wounds where palpation of lymph nodes is fundamental to the patient assessment.

Key barriers:

- Technical difficulties and lack of technical support.

- The geographic location of videoconference systems away from clinical areas can make for difficult access.

- A comprehensive needs assessment is not undertaken prior to implementation of the program and the program fails to adequately address the needs of the telemedicine service.

- The lack of adequate telehealth infrastructure and a shortage of qualified staff.

- The absence of reciprocal licensure and reimbursement agreements with other jurisdictions.

- Physicians- resistance and a shortage of providers –? restricted growth;

- The cost of the technology, payment structures and payment for telemedicine is inconsistent nationwide.

- Medical licensing by state makes it difficult for physicians to provide telemedicine across state lines, because doctors have to maintain licenses in each state.[can we alter this as now we have central registration for Doctors]

- Software incompatibility between two or more countries or institutions.

- Internet congestion causing delays or a low frame-rate of the video pictures and interruptions and delays in voice transmission.

- High communication charges and equipment costs.

- Other communication problems like a change of IP address and configuration of the receiving network, a broken cable at the host network and alteration of the cabling at the host site without authorisation.

- Untrained service providers including physicians and staff.

- Poor infrastructure and other logistical challenges.

- Telehealth services are considered time consuming, especially during the early stages of establishment.

Checklist of issues to consider when planning Telehealth consultations

1. Security of Patient information
2. Equipment / Infrastructure availability for Videoconferencing
   a. Equipment
      i. Essential
      ii. other
   b. Facility (Rooms)
      i. Size
      ii. Location of equipment
      iii. Lighting
      iv. Background – standard, non cluttered with blue background
      v. Privacy – should be maintained
      vi. Appropriate to
         1. wound care – Infection Control issues
            close to clinic for completing dressingsafe

         2. positioning for limbs
         3. number of persons attending the appointment
   c. Access
      i. PC within the work place
      ii. Internet
      iii. Links to Tertiary Services
      iv. Process of consultation
   d. Wound management needs/cost
3. Human resource availability
   a. Skill mix
   b. Turn over of staff
   c. Allocation of staff to facilitate consultations
      i. Tertiary site
      ii. Rural/remote site
      iii. IT/ Telehealth Coordinators - roles
      iv. Nursing
      v. Other – Xray/Bloods/splinting/pathology
4. Legal issues
   a. Patient consent
      i. Who is responsible
      ii. How/where is it kept
      iii. Timeliness
   b. Shared information
      i. Patient identifiers
      ii. Hosp to hosp
      iii. Hosp to health professionals
   c. Storing and use of photos
      i. Ownership?
      ii. Secure
      iii. Retrievable/accessible
5. Practice Standards –see Medical Board of the Northern Territory 2002
6. Funding
   a. ongoing/recurrent
   b. staff
   c. equipment
   d. maintenance
   e. education

Telehealth patient information

What is a telehealth visit/consultation?
There are many Telehealth delivery options including videoconferencing, store and forward, internet and telephone. An increasing popular form is video conferencing. Video conferencing hardware and software to connect you to specialists who are not located near you reduces the need to travel to receive an opinion about your wound care. You will be able to see and hear and talk to the doctor or other health care specialist.

Your telehealth appointment
Your doctor has made an appointment for you to see a specialist who is not located near you to assist with the management of your wound. Where possible much of the background information regarding your wound has already been passed onto this specialist when the appointment was confirmed.
You will meet using videoconferencing technology so that you will not have to travel too far, therefore reducing time, costs and stress.

Your privacy is important
Your personal health information is important and must be protected. Personal health information is any information that can identify you and link you to health care services you receive. Your doctor will not give this information to anyone other than those involved in your wound care without your prior approval, unless required by law.
You can withdraw this permission at any time before or during your telehealth consultation. You have a right to see your personal health information and to request corrections if the information is inaccurate or incomplete.

How does a telehealth visit work?
A telehealth appointment is like a standard appointment except that it may be in another room where the videoconferencing equipment has been set up. Your own doctor or nurse specialist will be with you during the consultation and may ask questions of you and of the requested specialist during the consultation.
Ideally to save time and ensure a smooth process you may be positioned on an examination table in such a way as to ensure easy viewing by the specialist of you wound. In other case you may be asked to stand or change position in order to get a complete picture of the wound and its environment.

Is there a cost for a telehealth consultation?
In certain circumstances Medicare provides a rebate for your doctor for telehealth consultation,just like a standard consultation. However , your GP may require a fee above the Medicare rebate This fee will need to be paid in the normal way. In addition, the specialist that you are 'seeing' by telehealth technology will also receive a Medicare rebate for the consultation. If you specialist charges above the Medicare rebate then you will need to pay the extra cost for this visit.
There maybe consultations in which the Medicare rebate is not available .These fees need to be discussed prior to the consultation

Further information on telehealth
--suggest we put in some government websites

Consent for Telehealth

Consent may be in the form of either verbal or written. If the consultation is not recorded then verbal consent is usually adequate.

Principles of informed consent:

- The patient needs to be given the information
- The patient needs to understand the information. This means the information has to be at a suitable level for understanding, and that the patient should have time to read it, and /or opportunity to speak with an appropriate person
- The patient needs to make a choice. The choice can be revisited at anytime.

Verbal consent—used for low risk situations, such as unrecorded consultations

Implied consent---used in routine situations which are already well understood by patients, such as a standard visit

Consent should cover possible risks, possible benefits, safeguards and alternatives.

Consent form for Telehealth

Telehealth consultation informed consent form

Benefits of a telehealth consultation may be:

- Reducing waiting time to see a specialist or other distant service
- Avoiding your need to travel to the specialist or other distant service
- Assist your local health service to better care for you and your wound

Risks of having a Telehealth consultation may be:

- It may not be as complete as a face to face service
- There could be some technical problems that affect the video consultation
- The health care service uses systems that meet recommended standards to protect the privacy and security of the video visits. However, the service cannot guarantee total protection against hacking or tapping into the video visit by outsiders.

If the video consultation does not achieve everything that is needed, then I will be given a choice about what to do next. This could include a follow up face to face visit, or a second video consult. I can change my mind and stop using video consultations at any time, including in the middle of a video visit. This will not make any difference to my right to ask for and receive health care.

I agree to have video consultations with……………………………………………………………………………

(insert name of doctor, or other health care provider)

Name of Patient---

Signature of patient---

Date--

Additional consent for recording video or images

I agree to have this video consultation recorded, or to have photographs taken and conveyed to specialist as required. This material will be sent and stored securely and used only to benefit my health care.

I have the right to see the video or images, and receive a copy for a reasonable fee. I understand that the service cannot guarantee total protection against hacking or tapping into the recording by outsiders.

Signature of patient……

Date---

Recommendations provided by an external agency to government on telehealth- The Australian Government through the Department of Health and Ageing commissioned Uniquest to provide expert advice and options to assist in establishing appropriate arrangements to facilitate the introduction of video-consultation. The full report is available through---
http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/EC471B2E09EE7370CA2578A4001092BE/$File/UniQuest%20Telehealth%20Assessment%20Report%20.pdf

The broad consultative process used by Uniquest ensures that this AWMA document has relevance to our clinicians serving in a variety of settings. Uniquest findings indicate that savings may not always be the obvious. Minimising the need to travel is obvious .It would also be expected that there would be financial savings using this process however unless the health services were bearing the travel costs there is limited cost savings in this field.

In the words of the Uniquest researchers-"The implementation of telehealth video consultations should be seen as an iterative process that will require a number of years of gestation before maturity will be reached".

The researchers have summarised their results in twelve recommendations .These are included in this introduction in order to establish an understanding of how the speciality of wound management will consider setup arrangements etc.:

Recommendation 1-- *Video-consultation should be phased in over several years, with a primary focus, in the first instance, on Patient-GP-Specialist interactions, reflecting well established Telehealth practice.*

Recommendation 2-- *Home based VC could be considered in some scenarios as suitable systems become available, and after demonstrations have shown good levels of acceptability, reliability, security, safety and affordability.*

Recommendation 3-- *In the short-term, clinical consultations involving complex diagnostic and management decisions, where the patient is not accompanied by another health professional, may have to be limited until standards-based VC equipment is available for use at the patient endpoint. PC based equipment may be suitable at the health professional endpoint.*

Recommendation 4-- *PC based equipment may be appropriate at the patient endpoint when there is another health professional accompanying the patient, who can assist in diagnostic and management decisions.*

Recommendation 5-- *In hospitals and residential aged care facilities, where there is a high probability of diagnostic uncertainty and where complex medical decisions may be required, dedicated VC equipment should be utilised at the patient endpoint. PC based equipment may be suitable at the health professional endpoint.*

Recommendation 6-- *Until demonstrations indicate otherwise and for the purpose of claiming MBS items for online consultations, VC at the patient endpoint should primarily occur in a health setting where conventional clinical consultations occur, to ensure authentication of the patient, and to provide technical and clinical assistance when required. This includes GP surgeries, community health centres, hospital outpatient clinics, hospital wards and residential aged care facilities.*

Recommendation 7-- *Colleges and other professional bodies should consider developing guidelines for the safe and effective use of VC by their members.*

Recommendation 8-- *Funding for VC could be on the same basis as equivalent face to face consultations listed in the Medical Benefits Schedule.*

Recommendation 9-- *Payments to compensate for the higher cost of VC and to encourage the use of VC could be introduced. This could include a loading to each consultation referred to in Recommendation SR8.*

Recommendation 10-- *Additional incentive payments might be offered to GPs operating in rural settings to encourage their participation. In metropolitan areas, similar incentive payments could be offered when the consultation involves a person living in a rural setting or a person with significant disability. The latter group should include persons living in Residential Aged Care Facilities.*

Recommendation 11-- *Telehealth service providers should periodically review and update their privacy practices, policies and notices to ensure that they adequately address the management of information gathered during Telehealth consultations.*

Recommendation 12-- *A successful Telehealth implementation will require an active change management strategy. This would entail consultation with clinicians, the development of guidelines and marketing of the initiative.*

Resources:

MBS Online
Medicare Benefits Schedule (www.mbsonline.gov.au/telehealth)
Connecting health services with the future: Guidance on security and privacy issues for clinicians
(www.mbsonline.gov.au/telehealth)

Medical Board of Australia
Good medical practice: A code of conduct for doctors in Australia
(www.medicalboard.gov.au/Codes-Guidelines-Policies.aspx)
Guidelines: Technology-based patient consultations
(www.medicalboard.gov.au/Codes-Guidelines-Policies.aspx)

RACGP
Computer and information security standards (4th edition) (www.racgp.org.au/ehealth)
Factsheet on video consultation etiquette (www.racgp.org.au/telehealth)
Implementation guidelines for video consultations in general practice
(www.racgp.org.au/telehealth)
Post-video consultation patient evaluation tool (www.racgp.org.au/telehealth)
Standards for general practices offering video consultations: An addendum to the RACGP Standards
for general practices (4th edition) (www.racgp.org.au/telehealth)
Template for patient information brochures (www.racgp.org.au/telehealth)
Template for video consultation booking checklists
(www.racgp.org.au/your-practice/e-health/telehealth/resources/templates)

Royal Australian and New Zealand College of Psychiatrists
Professional practice standards and guidelines for telepsychiatry
(www.ranzcp.org/Resources/Telehealth-in-psychiatry.aspx)

Royal Australasian College of Surgeons
Telehealth resources (www.surgeons.org/member-services/interest-groups-sections/e-
health/telehealth)
Surgeons connect with telehealth (www.surgeons.org/news/surgeons-connect-with-telehealth)

Royal Australasian College of Physicians
 Telehealth (www.racptelehealth.com.au)

 Other resources

 The socio-economic impact of telehealth: a systematic review *J Telemed Telecare December 1, 2003
9: 311-320*

 Australian Bureau of Statistics (ABS) & Australian Institute of Health and Welfare (AIHW), 2008: The
 Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, Canberra: ABS &
 AIHW

Rural, regional and remote health: indicators of health status and determinants of health, Rural
health series no. 9. Cat. No. PHE 97. Canberra: AIHW. Australian Institute of Health and Welfare
2008b: Australia's Health 2008, Cat. no. AUS 99. Canberra: AIHW