Telehealth

An Avant issues and discussion paper

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TELEHEALTH: AN AVANT ISSUES AND DISCUSSION PAPER

Introduction

Telehealth is increasingly becoming an important feature in a wide range of health services. It provides potential for patients to have more timely access to health care, better health information and better tools to help them manage their health and wellbeing.[1]

It also has the potential for doctors to improve the delivery and quality of the care they provide, reduce practice and healthcare costs, manage a wider population of patients and create opportunities not currently available in traditional office-based medical practice.[2]

However, with the benefits come risks.

Avant has received a number of requests from members for advice and legal guidance on a range of clinical issues involving telehealth services. In advising members about these issues we have identified several risks and challenges associated with the use of telehealth, including continuity of care, the doctor-patient relationship, the lack of hands-on examination, supervision and cross-border issues.

In Avant's experience, early adopters of new technology sometimes have a limited understanding of some of the medico-legal issues that can arise from this technology. On the other hand, those who could benefit from the services new technology has to offer are reluctant to embrace it due to fear of potential medico-legal risks, disruption and change.

Research shows that patients want "health information, better access to care team[s], and simple everyday tools to manage their health and wellbeing. This includes electronic or telemedicine consultations (e-visits or video visits)."[3]

Many terms are used to describe the application of technology to provide non-face-to-face contact with patients. These terms include telemedicine, telehealth, e-health and e-medicine. These terms are often used interchangeably. In this paper, we primarily use the term "telehealth" to describe the provision of care to patients not in the same place as the provider. We include an explanation of telehealth definitions at the end of this paper.

This paper outlines our experience, the benefits and risks of telehealth, and current professional guidelines. It also seeks stakeholders' views on how a robust and useful framework for considering the use of telehealth in future service delivery to patients can be established.

Avant's experience

Avant's Medico-Legal Advisory Service has provided advice to members who have encountered or have concerns about medico-legal issues associated with a range of telehealth services. These services have included:

- remote doctor-patient consultations via video, internet or email;

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1 Phillips RL *et al*. A Family Medicine Health Technology Strategy for Achieving the Triple Aim for US Health Care. *Family Medicine.* 2015;47(8):628-35.
2 ibid.
3 ibid.

- remote provider collaborations using multi-point video conferencing with or without the patient present[4];
- remote nurse-patient consultations under the supervision of a doctor;
- services to patients requesting prescriptions online;
- online consultations, often without ever speaking directly to the patient, followed by ordering of tests for a variety of conditions including sexually transmitted diseases;
- the delivery of test results and other clinical information and health education by electronic means.

We provide advice and information to our members on these issues based on the current broad regulatory framework which includes legislation, professional guidelines and regulations, and legal decisions. One of the challenges we face is that while these services may not be unlawful, there are legitimate questions about whether they constitute good medical practice. The pace of technological change, and the emergence of new service-delivery models, means there are often no clear professional standards or criteria on which to judge this.

Benefits of telehealth

The many stated benefits of telehealth are primarily based on its ability to extend health care beyond traditional face-to-face medical practice. As most medical practitioners are driven to deliver patient-centric care with a goal of patient satisfaction and meeting consumer demand, these benefits offer opportunities.

The benefits of telehealth include:

1. *It is clinically effective*: In a recent Cochrane review[5] various types of telemedicine were shown to be effective, including in the management of heart failure and diabetes. Other research has highlighted its effectiveness in other areas, including telepsychiatry (where the use of telehealth is well established and has been found to be no different to face-to-face care in some studies); chronic obstructive airways disease; tele-oncology and tele-stroke services.[6]

2. *It is cost effective*: Although the quality and conclusions of cost-effectiveness studies are variable and heterogeneous, the literature highlights significant cost savings to health systems through reduced use of hospitals and acute care modalities, and improved patient compliance, satisfaction and quality of life.[7] Cost savings can also

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[4] For example Project Echo where multi-point video conferencing is used to educate community providers and/or conduct virtual specialty clinics in a “hub and spoke” knowledge sharing network. See http://echo.unm.edu/.

[5] Flodgren G *et al*. Interactive telemedicine: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews*. 2015;(9):Art No. CD002098.

[6] Sabesan S, Kelly J. Implementing telehealth as core business in health services. *The Medical Journal of Australia.* 2015;202(5):231-2.

[7] Ekeland AG, Bowes A, Flottorp S. Effectiveness of telemedicine: A systematic review of reviews. *International Journal of Medical Informatics.* 2010;79:736-71.

be achieved by providing health care and advice early in the development of an illness, thereby intervening before serious illness develops.[8]

3. *It empowers patients*: Patients whose care, education and engagement is supported with telehealth feel more confident and empowered, and experience better provider-patient relationships.[9] Discussions can also be recorded and used as a valuable reference for patients and the healthcare team, particularly with care involving complex information.[10]

4. *Promise of future improvements*: Some studies show improvement in many aspects of the health system, including shorter waiting times, fewer unnecessary referrals, high levels of patient satisfaction and equivalent diagnostic accuracy in some limited circumstances and studies.[11] One paper forecasts a future that "holds promise for active technology that guides, coaches, and measures how patients are following [doctors'] guidance".[12] Another raises the benefits of seeing into the patient's home to assess environmental factors and easier access to members of the patient's family.[13]

5. *Improved access to care*: This especially applies to specialist care in rural, remote and under-served communities where specialised care is not available.[14] [15] This leads to fewer patient transfers and improved outcomes through better access to specialists.[16]

6. *Coordination of care:* Better care coordination for patients with chronic disease has been shown overseas, especially by the US Veterans Health Administration.[17]

Questions:

Do you agree with the benefits of telehealth? Have you identified or experienced any others?

What do you think are the drivers for telehealth?

Risks and challenges

The pace of technological change in medicine can mean that insufficient attention is given to all the potential risks. Challenges identified through Avant's experience and a review of the literature include:

1. *Patient selection:* Many patients are suitable for telehealth services at some stage throughout their healthcare journey.[18] Clinically appropriate patient choice remains

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[8] Daniel H, Sulmasy LS. Policy Recommendations to Guide the Use of Telemedicine in Primary Care Settings: An American College of Physicians Position Paper. *Annals of Internal Medicine*. 2015;163:787.

[9] Ekeland, above n7.

[10] DeJong C, Lucey CR, Adams Dudley R. Incorporating a New Technology While Doing No Harm, Virtually. *JAMA*. 2015;314;2351-2.

[11] Ekeland, above n7.

[12] Phillips, above n1.

[13] DeJong, above n10.

[14] Bagot KL *et al*. Telemedicine in the acute health setting: A disruptive innovation for specialists (an example from stroke). *Journal of Telemedicine and Telecare*. 2015; 21:434-48.

[15] Daniel, above n8.

[16] Sabesan, above n6.

[17] Hill RD *et al*. Review of Veterans Health Administration Telemedicine Interventions. *American Journal of Managed Care*. 2010;16:e302-10.

one of the most important considerations associated with telehealth. Ultimately, it remains the responsibility of the doctor to determine when it is appropriate to provide health care by telehealth.

2. *Limitations of non-face-to-face consultation:* The inability to examine the patient when deemed necessary may lead to bias that in turn may lead to errors in diagnosis and treatment. Inappropriate testing and prescribing may be more likely to compensate for the limitations posed by being unable to examine the patient. Further, telehealth services are generally (except in certain circumstances) not reimbursed by Medicare.

3. *Disruption of the doctor-patient relationship and continuity of care:* Disruption to care can occur because patients have easier access to services via telehealth from healthcare providers other than their usual doctor. Telehealth may also lead to depersonalisation of the doctor-patient relationship, since touch and communication with body language have been shown to have therapeutic value in that relationship.[19]

4. *Supervision:* Although no different to services provided in person by non-doctors, telehealth services provided by allied health and nursing professionals may raise issues regarding supervision and credentialing of those services. Roles and responsibilities may be uncertain and may lead to an increase in medico-legal and clinical risk.

5. *Confidentiality and privacy:* Privacy, confidentiality and security may be problematic, particularly with internet-based technology.

6. *Cross-border issues:* Providing telehealth services across international and state borders raises privacy, licensing and other regulatory issues and concerns.

7. *Technological limitations:* Services provided by telehealth may be subject to technological limitations and uncertainty. A lack of bandwidth for video or internet-based consultations may hamper the delivery of care and lead to an increase in risk to patients.

8. *Provider satisfaction*: Doctor satisfaction in some circumstances may be challenged, especially when the work environment is disrupted by telehealth.[20] Some studies show that telehealth may increase doctors' workload and may increase dissatisfaction and burnout.[21]

9. *Professionalism and education*: Educators need to ensure that core competencies can be adapted or developed to cover the skills required to use new technologies such as telehealth appropriately. These skills include communicating and developing

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[18] Sabesan S *et al*. Practical aspects of telehealth: are my patients suited to telehealth? *Internal Medicine Journal.* 2013;43: 581-4.
[19] Daniel, above n8.
[20] ibid.
[21] DeJong, above n10.

rapport with the patient, conducting virtual assessments, and recognising the limits of safe use of telehealth.[22]

Questions:

Do you agree that these are the main risks and challenges?

Are there any others?

Professional guidelines

Ethical and regulatory guidelines are increasingly being developed to incorporate some of the risks and challenges of telehealth that doctors must consider.

In 2012, the Medical Board of Australia published its *Guidelines:Technology-based patient consultations*[23] — designed to be read with the Board's *Good Medical Practice: A Code of Conduct for Doctors in Australia*[24] — which describes what is expected of all doctors registered to practise medicine in Australia.

The guidelines set out the expectations of medical practitioners who participate in technology-based consultations, including video-conferencing, the internet and telephone, as an alternative to face-to-face consultations. The guidelines highlight many of the risks and challenges already mentioned, including the need for the practitioner to accept ultimate responsibility for evaluating information used in assessment and treatment, irrespective of its source.

They also state that when using technology-based consultations, the doctor must:

- apply the usual principles for obtaining their patient's informed consent, protecting their patient's privacy and protecting their patient's rights to confidentially;
- make their identity known to the patient;
- confirm to their satisfaction the identity of the patient at each consultation. Doctors should be aware that it may be difficult to ensure unequivocal verification of the identity of the patient in these circumstances;
- provide an explanation to the patient of the particular process involved in the technology-based patient consultation;
- assess the patient's condition, based on the history and clinical signs and appropriate examination;
- accept ultimate responsibility for evaluating information used in assessment and treatment, irrespective of its source. This applies to information gathered by a third party who may have taken a history from, or examined, the patient;
- make appropriate arrangements to follow the progress of the patient and inform the patient's general practitioner or other relevant practitioners;
- keep an appropriate record of the consultation;
- keep colleagues well informed when sharing the care of patients.

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[22] ibid.

[23] Medical Board of Australia. Guidelines: Technology-based patient consultations. Medical Board of Australia; 2012. Available from: www.medicalboard.gov.au/Codes-Guidelines-Policies.aspx.

[24] Medical Board of Australia. Good Medical Practice: A Code of Conduct for Doctors in Australia. Medical Board of Australia; 2014. Available from: http://www.medicalboard.gov.au/Codes-Guidelines-Policies.aspx.

Questions:

Are you aware of the Code of Conduct and of the guidelines for technology-based consultations?

Are these guidelines sufficient to guide practice when new technologies are being used for consultations? Do these guidelines need to be strengthened or relaxed in today's technology-driven world?

The need for College-based guidelines or guiding principles

Despite a burgeoning use of telehealth services, there are few published guidelines and guiding principles from professional colleges and societies in Australia. The result is that there is a lack of specialty-specific guidance in Australia to help doctors navigate this new territory. There is therefore little to guide doctors on appropriate standards of clinical practice when considering whether or not to adopt or develop a new model of care that uses telehealth.

The development of guidelines for telehealth has been partly driven by concern over the quality of care that can be delivered remotely, as well as the numerous layers of clinical information that can be made available with various forms of telemedicine.[25] The literature describes a variation in the quality of care that telehealth delivers, albeit without any comparison with face-to-face care.[26] These factors (and others) have led some overseas jurisdictions to place limitations on the use of telehealth.[27]

The Royal Australian and New Zealand College of Psychiatrists (RANZCP) has developed the *Professional Practice Standards and Guide for Telepsychiatry*.[28] In this guide, the RANZCP outlines various standards for teleheath including standards relating to patient consent; collaboration with patients; engagement with carers; patient safety; ethical considerations and confidentiality. These guidelines also outline various clinical applications in which telemedicine can be used.[29] RANZCP has also developed information sheets for patients and their carers.

The Royal Australian College of General Practitioners (RACGP) has developed *Implementation guidelines for video consultations in general practice*.[30] These guidelines mainly apply to one type of telehealth (video consults) and focus on some of the technical aspects of this technology.

Various guidelines and documents have been developed in other countries. The American Telemedicine Association (ATA)[31] has been a forerunner with respect to the number and

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[25] Lebret JM. Is a Video Doctor Visit Good or Bad Medicine? *Medscape*. 2016. Available from: http://www.medscape.com/viewarticle/860369.

[26] Linder JA and Levine DM. Health Care Communication Technology and Improved Access, Continuity, and Relationships - The Revolution Will Be Uberized. *JAMA Intern Med.* 2016:176(5):643-44.

[27] Schoenfeld AJ *et al*. Variation in Quality of Urgent Health Care Provided During Commercial Virtual Visits. " (2016) *JAMA Intern Med.* 2016:176(5):635-42.

[28] Royal Australian and New Zealand College of Psychiatrists. Telepsychiatry: Professional Practice Standards and Guides for Telepsychiatry. Melbourne: RANZCP, 2013. Available from https://www.ranzcp.org/Files/Resources/RANZCP-Professional-Practice-Standards-and-Guides.aspx

[29] Ibid.

[30] Royal Australian College of General Practitioners. *Implementation guidelines for video consultations in general practice*. 3rd ed. Melbourne: RACGP, 2014. Available from http://www.racgp.org.au/your-practice/guidelines/implementation/

[31] Available from: http://www.americantelemed.org/

scope of guidelines developed across various specialties[32] and clinical applications.[33] Various state medical boards in the United States have adopted some of these guidelines.[34]

The Provincial Health Authority of British Columbia in Canada has published guidelines similar in scope to the RANZCP guidelines that include recommendations about quality measurement and evaluation.[35] Various colleges in Canada, including the College of Physicians and Surgeons in British Columbia, have published standards[36] similar in nature to the Medical Board of Australia's guidelines referred to above.

The American College of Physicians (ACP) has developed a position paper on telehealth.[37] In this paper the ACP calls for the development of further clear guidelines, and recommends (among other things) that:

- an expanded role for telehealth be encouraged;
- telehealth is most useful when there is an existing doctor-patient relationship and should be used mostly in this context;
- episodic direct-to-patient telehealth should only be used as an alternative to the patient's usual general practitioner when required to meet the patient's acute care need;
- various steps must be taken by a physician conducting a telehealth consultation when no prior doctor-patient exists;
- ethical standards are maintained;
- security and confidentiality is ensured; and
- telehealth is adequately funded.

Questions:

Should Colleges and professional societies in Australia develop speciality-specific guidelines or guiding principles for the use of telehealth by their members?

What criteria should be used to judge whether a new type of telehealth service constitutes good practice and should be adopted? Who should be the judge?

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[32] Krupinski EA and Bernard J. Standards and Guidelines in Telemedicine and Telehealth. *Healthcare.* 2014;2(1):74-93.

[33] American Telemedicine Association. Practice Guidelines for Live, On Demand Primary and Urgent Care. ATA, 2014. Available from: http://www.americantelemed.org/docs/default-source/standards/primary-urgent-care-guidelines.pdf?sfvrsn=4.

[34] Krupinski, above n32.

[35] Province of BC Health Authorities. Telehealth Clinical Guidelines. Version 9, updated September 2014. British Columbia (Canada): PHSA; 2015. Available from: http://www.phsa.ca/Documents/Telehealth/TH_Clinical_Guidelines_Sept2015.pdf.

[36] College of Physicians and Surgeons of British Columbia. Professional Standards and Guidelines – Telemedicine. British Columbia (Canada): CPSBC; 2015. Available from: https://www.cpsbc.ca/files/pdf/PSG-Telemedicine.pdf.

[37] Daniel, above n8.

Definitions

The Australian Government's Department of Health adopts the definition of telehealth used by the International Organization for Standardization: "use of telecommunication techniques for the purpose of providing telemedicine, medical education, and health education over a distance".[38]

The literature describes many different categories of telehealth. The American College of Physicians has published a position paper[39] on the use of telemedicine in primary care, which includes the following categories:

1. *Asynchronous:* Technology which transmits patients' medical information and is not used in real time, such as email consultations, forwarding images such as x-rays to other health professionals for diagnosis and advice, and other internet technologies to store and forward information.

2. *Synchronous:* Real time interactive technologies, such as video consultations and instant messaging, social media or telephone, including virtual "teleclinics". This also includes such services as tele-intensive care units; remote robotic surgery; tele-monitoring in aged care services; tele-oncology services;[40] tele-rheumatology; tele-dermatology and tele-psychiatry.[41]

3. *Remote monitoring:* Where a patient's health information is gathered through technological devices at remote centres, such as blood pressure, blood sugar readings or ECG monitoring, and evaluated and stored in the patient's medical record for future use.

4. *Mobile health services:* Mobile technology such as smartphone applications, text messaging and wearable measuring devices used to manage and track health conditions, or to promote health behaviours.

This publication is not comprehensive and does not constitute legal or medical advice. You should seek legal or other professional advice before relying on any content, and practice proper clinical decision making with regard to the individual circumstances. Persons implementing any recommendations contained in this publication must exercise their own independent skill or judgment or seek appropriate professional advice relevant to their own particular practice. Compliance with any recommendations will not in any way guarantee discharge of the duty of care owed to patients and others coming into contact with the health professional or practice. Avant is not responsible to you or anyone else for any loss suffered in connection with the use of this information. Information is only current at the date initially published. © Avant Mutual Group Limited 2016.

[38] Department of Health. Telehealth. 2015. Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/e-health-telehealth.
[39] Daniel, above n8.
[40] Sabesan, above n6.
[41] ibid.