



Telehealth

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Telemedicine or telehealth is not new to the healthcare sector. It has been used in rural healthcare practice as well as other general and specialist practices in different parts of the world. Low risk patients could be managed in communities via remote assessment by general practitioners (GPs) through video consultation,¹ and telehealth services could also be extended to other healthcare professionals for management of other health conditions if necessary, such as patients being unable to attend in person. The emergence of the global COVID-19 pandemic has proliferated the growth of telehealth practice in societies.

Telehealth can become a “new friend” to many patients in the post-COVID era. However, there are still issues related to wider use of telehealth such as interpretation of the definition of telehealth, medico-legal considerations and potential risks posed by telehealth.

In this issue, we are honored to have Dr. Kar-Wai TONG to provide us with deeper insights regarding telehealth. Dr. Tong has served in the healthcare and social care sectors at a management level for over a decade and is now a visiting lecturer in healthcare management. He holds a doctoral degree in Juridical Science (Hong Kong) with a focus on medico-legal liabilities in telehealth practice. He has also attained a PhD (UK) with a comparative study on happiness from the Confucian perspective. He was called to the Bar (England and Wales). He is also an enrolled Barrister and Solicitor in New Zealand (non-practicing) and Legal Practitioner in New South Wales, Australia (non-practicing).

¹ Greenhalgh T, Koh GCH, Var J. Covid-19: a remote assessment in primary care. *BMJ* 2020; 368:m1182 doi: 10.1136/bmj.m1182

A New Friend Named 'Telehealth'

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Introduction

Telehealth may not have been a popular name for the general public prior to the global COVID-19 pandemic, but it is renowned now, having caught the attention of judges during the outbreak. In *Wray v Wray*,² for instance, Altobelli J sitting on the Family Court of Australia said at paragraph 84, 'It was a Telehealth [sic] consultation, which is unsurprising given the COVID-19 pandemic'. While the term 'telehealth' seems to be fashionable today, there have been various terminologies for the practices of such a state-of-the-art technology. They include 'virtual health and care', 'ehealth' (or 'e-health'), 'telemedicine', and 'telehealth', etc. Furthermore, there are new additions, such as 'mobile health' and 'mhealth' after the high penetration of smartphones in various societies. It may not be easy to identify the first use of telehealth,³ as the literature did not record uniformly about the time of emergence of telehealth.⁴ It was conjectured that space-flight programmes in the United States may have triggered off the first development of telehealth.⁵

Definitions and Applications

Telehealth is evolving and so are its applications. It traditionally contains four basic components, namely medical (now healthcare), technological, spatial and benefits.⁶ There are a number of definitions even in various documents of the World Health Organisation and one of them is as follows, 'Telehealth involves the use of telecommunications and virtual technology to deliver healthcare outside of traditional healthcare facilities. Telehealth, which requires access only to telecommunications, is the most basic element of 'eHealth,' which uses a wider range of information and communication technologies (ICTs).'⁷

Applications of telehealth are diverse. In the past, the 'store-and-forward' mode and face-to-face real-time interactions were common applications.⁸ With the advent of technologies, contemporary applications of telehealth cover a wide range of healthcare, including, for example, telesurgery and robotics, teleradiology, telepathology, telepsychiatry, teledermatology, teleambulance, teletriage, tele-ICU, etc. The rise of artificial intelligence may further improve the quality of telehealth and facilitate the growth of new care models.⁹

Laws Governing Telehealth Practices

Not all jurisdictions have enacted telehealth laws and their understandings on telehealth are not identical. In Malaysia, the Telemedicine Act 1997 defines telemedicine as 'the practice of medicine using audio, visual and data communications'.¹⁰ In Oklahoma, United States, telehealth (not 'telemedicine') carries a statutory meaning, as amended, of 'the practice of healthcare delivery, diagnosis, consultation, evaluation and

² *Wray v Wray* [2021] FamCA 117 (Family Court of Australia).

³ Rashid L Bashshur, Timothy G Reardon and Gary W Shannon, 'Telemedicine: A New Health Care Delivery System' (2000) 21(1) Annual Review of Public Health 613, 615.

⁴ Olivia R Liu Sheng, Paul Jen-Hwa Hu, Chih-Ping Wei, Kunihiro Higa and Grace Au, 'Adoption and Diffusion of Telemedicine Technology in Health Care Organisations: A Comparative Case Study in Hong Kong' (1999) 8(4) Journal of Organisational Computing and Electronic Commerce 247, 251.

⁵ Karen M Zundel, 'Telemedicine: History, Applications, and Impact on Librarianship' (1996) 84(1) Bulletin of the Medical Library Association 71, 72.

⁶ Sanjay Sood, Victor Mbarika, Shakhina Jugoo, Reena Dookhy, Charles R Doarn, Nupur Prakash and Ronald C Merrell, 'What Is Telemedicine? A Collection of 104 Peer-Reviewed Perspectives and Theoretical Underpinnings' (2007) 13(5) Telemedicine and e-Health 573, 574.

⁷ World Health Organisation, 'Telehealth' (2022) <<https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/sectoral-interventions/health-care-activities/strategies>> accessed 19 December 2022.

⁸ Bill Gillette, 'Telecommunications Technology Makes its Mark on Healthcare Delivery' (2003) 13(8) Managed Health Executive 36, 36.

⁹ Craig Kuziemy, Anthony J Maeder, Oommen John, Shashi B Gogia, Arindam Basu, Sushil Meher and Marcia Ito, 'Role of Artificial Intelligence within the Telehealth Domain' (2019) 28(1) Yearbook of Medical Informatics 35.

¹⁰ Telemedicine Act 1997 (Act 564), Malaysia, section 2.

treatment, transfer of medical data or exchange of medical education information by means of a two-way, real-time interactive communication, not to exclude store and forward technologies, between a patient and a healthcare provider with access to and reviewing the patient's relevant clinical information prior to the telemedicine [*sic*] visit ...' However, consultations through audio-only telephone communications, facsimile transmissions, non-secure video conferences, and instant messages, etc. are explicitly excluded from its definition.¹¹ In Hong Kong, to the best knowledge of the author as of this writing in early May 2023, there is no statute governing the practices of telehealth and he is not certain of any legislative plans of the local government to make such a bill.

Medico-Legal Considerations

From the medico-legal perspective, telehealth strengthens the human right to health, in addition to boosting inter-professional exchanges and collaborations among different healthcare practitioners,¹² by shortening the physical distances between patients and healthcare practitioners,¹³ so as to enhance the equitable access to healthcare for patients in remote areas and/or of underprivileged groups for their enjoyment of 'the highest attainable standard of health conducive to living a life in dignity'.¹⁴ To cite an example, article 4(b) of the Health Protection and Medical Care (Seafarer) Convention 1987 requires each member state to put in place measures to safeguard healthcare protection for seafarers 'as comparable as possible to that which is generally available to workers ashore',¹⁵ and it is believed that telehealth could help the shipping industry to strengthen such protection for seafarers.¹⁶ Telehealth also promotes the dignity of older persons, for instance, through a strategy of 'ageing in place' to allow them to live at home and continue daily living in their neighbourhood in a dignified manner.¹⁷ The World Health Organisation has issued various guidelines,¹⁸ with a hope to sustain the use of telehealth to face worldwide health challenges like the COVID-19 pandemic.

However, telehealth is not risk-free from a legal perspective. Innovations and technological developments are most of the time, if not always, growing faster than legislative enactments.¹⁹ The same was also true to the evolution of telehealth and legal uncertainty was considered one of the barriers to the development of telehealth.²⁰ Healthcare practitioners were slow to adopt telehealth as they were concerned with the potential legal liabilities when there was a lack of telehealth legislation and legal precedents.²¹ Likewise, they

¹¹ Oklahoma Administrative Code, §317:30-3-27.

¹² Patricia C Kuszler, 'Telemedicine and Integrated Health Care Delivery: Compounding Malpractice Liability' (1999) 25 American Journal of Law and Medicine 297, 305.

¹³ World Health Organisation, 'Telemedicine: Opportunities and Developments in Member States – Report on the Second Global Survey on eHealth: Global Observatory for eHealth Series' vol 2 (2010), 9 <<https://apps.who.int/iris/handle/10665/44497>> accessed 19 December 2022.

¹⁴ United Nations Committee on Economic, Social and Cultural Rights of the Economic and Social Council, 'Substantive issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights' (E/C.12/2000/4, CESCR General Comment 14) (2000), [1] <https://digitallibrary.un.org/record/425041/files/E_C.12_2000_4-EN.pdf > accessed 19 December 2022.

¹⁵ International Labour Organisation, 'Health Protection and Medical Care (Seafarers) Convention 1987' (as revised by the Maritime Labour Convention 2006), art 4(b).

¹⁶ Toral Patel and Ben Stanberry, 'Telemedicine in Shipping: Barriers and Opportunities' (2000) Journal of Telemedicine and Telecare 6(Supplement 1), 213, 213.

¹⁷ Kar-wai Tong, 'Dignified Ageing in Place Using Electronic Health Records as a Backbone: A Medico-Legal Perspective' in V T S Law and B Y F Fong (eds), *Ageing with Dignity in Hong Kong and Asia* (Springer, Singapore, 2022).

¹⁸ For instance, Western Pacific Region of the World Health Organisation, *Implementing Telemedicine Services During COVID-19: Guiding Principles and Considerations for a Stepwise Approach* (WPR/DSE/2020/03) (2021) <<https://apps.who.int/iris/rest/bitstreams/1346306/retrieve>> accessed 19 December 2022; World Health Organisation, *WHO Guideline: Recommendations on Digital Interventions for Health System Strengthening* (World Health Organisation, Geneva, 2019, Licence: CC BY-NC-SA 3.0 IGO); World Health Organisation, *Digital Implementation Investment Guide (DIIG): Integrating Digital Interventions into Health Programmes* (World Health Organisation, Geneva, 2020, Licence: CC BY-NC-SA 3.0 IGO); World Health Organisation, *Consolidated Telemedicine Implementation Guide* (World Health Organisation, Geneva, 2022, Licence: CC BY-NC-SA 3.0 IGO).

¹⁹ Mark D Fenwick, Wulf A Kaal and Erik P M Vermeulen, 'Regulation Tomorrow: What Happens When Technology Is Faster than the Law?' (2017) 6(3) American University Business Law Review 561, 567-568.

²⁰ Elisabeth Medeiros de Bustos, Thierry Moulin, and Heinrich J Audebert, 'Barriers, Legal Issues, Limitations and Ongoing Questions in Telemedicine Applied to Stroke' (2009) 27(Supplementary 4) Cerebrovascular Diseases 36, 36.

²¹ Robert F Pendrak and Peter Ericson, 'Telemedicine and the Law' (1996a) 50(12) Health Financial Management 46, 47.

were not certain if malpractice insurers would cover their telehealth practices, especially for patients located outside their licensed jurisdictions.²² Professional bodies have filled this vacuum to a certain extent by publishing safety guidelines and made cross-border initiatives to facilitate the growth of telehealth. For instance, the General Medical Council in the UK published guidelines to facilitate doctors to use social media to communicate with patients and colleagues.²³ The Canadian Medical Protective Association revised its 2006 telehealth guidelines in 2021²⁴ and has provided an updated resource hub for doctors to manage telehealth requests specific to the COVID-19 pandemic.²⁵ In Hong Kong, the Medical Council of Hong Kong issued ethical guidelines on telehealth practices in 2019.²⁶

In theory, there are three major types of potential legal risks in telehealth practices: (a) traditional medico-legal issues such as clinical negligence, informed consent, licensure, patient data and privacy; (b) issues exclusive to telehealth practices, e.g. electronic signature, reimbursement, contractual relationship with third parties like suppliers of telehealth equipment and Internet service providers; and (c) conflict of laws in cross-border telehealth practices with respect to a court's jurisdiction and enforcement of judgments.²⁷ While the enactment of telehealth law is not uniform across countries and in light of the lack of sufficient legal precedents, there has been doubt if conventional legal principles would be applicable to telehealth practices.²⁸

Conclusion

With the widespread use of telehealth during the COVID-19 pandemic, many patients may have become accustomed to this virtual and convenient mode of care. On the other hand, it is not clear if healthcare practitioners are well-versed in its inherent medico-legal risks. Although the number of litigations involving alleged telehealth malpractices is minimal, if not none, healthcare practitioners should not underestimate the potential medico-legal risks, as patients have been more aware of their rights, as illustrated in a few court cases in the United States.²⁹ The issue of whether or not the number of litigations involving telehealth may go up after the COVID-19 outbreak is subject to time and further surveillance.

²² Christopher Caryl, 'Malpractice and Other Legal Issues Preventing the Development of Telemedicine' (1997) 12(1) *Journal of Law and Health* 173, 201.

²³ General Medical Council, 'Doctors' Use of Social Media' (2013) <https://www.gmc-uk.org/-/media/documents/gmc-guidance-for-doctors---doctors-use-of-social-media_pdf-58833100.pdf> accessed 19 December 2022.

²⁴ The Canadian Medical Protective Association, 'Practising Telehealth' (2021) <<https://www.cmpa-acpm.ca/en/membership/protection-for-members/principles-of-assistance/practising-telehealth>> accessed 19 December 2022.

²⁵ The Canadian Medical Protective Association, 'Telehealth and Virtual Care' (2022) <<https://www.cmpa-acpm.ca/en/covid19/telehealth-and-virtual-care>> accessed 19 December 2022.

²⁶ Medical Council of Hong Kong, 'Guidelines for all Registered Medical Practitioners' (2019) 26 *Newsletter* 1. <<https://www.mchk.org.hk/files/newsletter-26th.pdf>> accessed 19 December 2022.

²⁷ Kar-wai Tong, 'Telehealth as a Double-Edged Sword: Lessons from Court Cases to Gain Understanding of Medico-Legal Risks' (2019) 38(1) *Medicine and Law: World Association for Medical Law* 85, 89.

²⁸ Ian R Landgreen, "'Do No Harm": A Comparative Analysis of Legal Barriers to Corporate Clinical Telemedicine Providers in the United States, Australia and Canada' (2002) 30 *Georgia Journal of International and Comparative Law* 365, 390.

²⁹ Tong (n 27) 96. See, for example, *MacDonald v. Schriro* (case no.: CV 04-1001-PHX-SMM (MHB) (United States District Court, D. Arizona, 2008), not reported in F.Supp.2d, Westlaw citation number: 2008 WL 2783472); *Griffin v. Moon* (case no.: 1:12-cv-02034-LJO-BAM (PC) (United States District Court, E.D. California, 2014), not reported in F.Supp.3d, Westlaw citation number: 2014 WL 994077); *Jackson-Davis v. Carnival Corporation* (case no.: 17-24089-Civ-Scola (United States District Court, S.D. Florida, 2018), not reported in Fed. Supp., Westlaw citation number: 2018 WL 1468665).

Key messages

- (a) Telehealth may not have been known to many people before the COVID-19 pandemic, but it has become a common practice of healthcare during the outbreak.
- (b) Telehealth and its applications are evolving.
- (c) Jurisdictions may or may not have enacted statutes governing telehealth practices. They may not have the same understandings on telehealth. In Hong Kong, to the best knowledge of the author as at early May 2023, there is no such statute at present.
- (d) The number of case precedents involving telehealth malpractices is minimal, if not none.
- (e) Telehealth promotes the human right to health and helps dignified ageing.
- (f) Telehealth is not legal-risk free. The current popular use of telehealth does not eliminate its inherent medico-legal risks.
- (g) Owing to the lack of modernised legislation and legal precedents, it is not certain if traditional legal principles would be applicable to the telehealth practices.

This paper is written in the personal capacity of the author and the opinions expressed therein do not represent the organisations which he works for or is affiliated with.