Cancerworld

Telemedicine in Cancer Care: Patient Empowerment, Policy, and Implementation

Adriana Albini / 15 February 2023

This online seminar, that took place on 16 January 2023, concluded the second and final phase of the SPCC Telemedicine in Cancer Care project. It was chaired by Robin Zon, Michiana Haematology Oncology and ASCO Telemedicine Expert Panel, Mishawaka, US.

Telehealth: Patient Education Considerations

Raymond Chan is Director and Professor of Cancer Nursing, Caring Futures Institute, Flinders University, South Australia. In his presentation, Prof. Chan followed the definition of telehealth given in the well-cited New England Journal of Medicine Catalyst article published in 2018: "The delivery of health care, health education, and health information services via remote technologies." This is a very broad definition that includes telemedicine, m-Health and all the technology used in the provision of healthcare. Patient education in telehealth could be both about how to use telehealth to deliver patient education or how to provide education for patients to better use telehealth. The former has been covered extensively in previous SPCC seminars and resources are available on their website, so Prof. Chen focussed instead on the latter: **how to educate patients to use telehealth**. The objectives of patient education are to increase the use of telehealth, enhance its experience, and reduce disparity. Looking at some data from Cancer Australia, during the Covid-19 pandemic in 2020, there was an upward trend in the use of telehealth, which was mainly delivered by phone. Only a small minority of people used video calls. Interestingly, this pattern is still prevalent today, although it might change after the Australian government decided to encourage the use of video versus telephone calls. Annie Banbury and her team published an article in 2022, [Cancer care and management during COVID-19: A comparison of in-person, video, and telephone consultations](#) (*J Telemed Telecare* 28(10)). The study found that the majority of telehealth consultations had been carried out by telephone during the pandemic, although both clinicians and patients preferred video.

The consensus was that videoconferencing allowed for more accurate consultation; patients were also more likely to think that video consultations achieved as much as in-person appointments. Many guidelines, including the ASCO Practice Standards, suggest a mixture of in-person, video, or other modes whenever required and appropriate.

REFLECTING ON EXPERIENCES DURING COVID

Figure 4   Total MBS monthly services for selected professional attendances: Standard GP Attendances in 2020, by month and delivery type
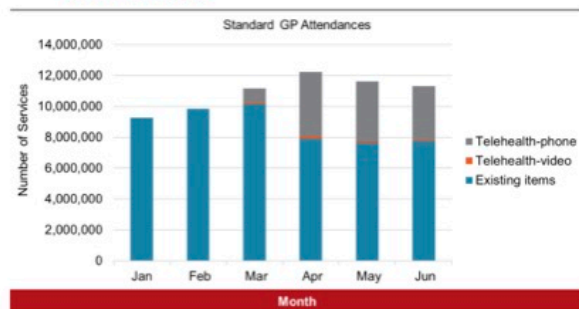
Figure 5   Total MBS monthly services for selected professional attendances: Specialist Services in 2020, by month and delivery type

Cancer Australia 2020

Most people can do well with telephone consultations, and most of the people who use telehealth only use the phone. This raises a few questions: who of these telephone users could benefit from video calls or more advanced technologies? Who might have lost access to care because they could not use telehealth or attend in-person care? And if these patients are not even using video, how could they benefit from more advanced and diverse platforms like m-Health, wearables and so on? Of course, using telephone rather than video is usually not up to the patient, more likely it is the choice of the providers, as it is easier for them to integrate it into their workflow. **Why is education important?** A wealth of systematic reviews identifies the top barriers to the adoption of telemedicine as: training, cost, workflow, time of providers, and low reimbursement (see Clemens Scott Kruse et al., [Leveraging Telehealth for the Management of Breast Cancer: A Systematic Review](#), *Healthcare* 10(10) 2022). But the number one factor is **training the user**. A systematic review published in 2021 (Spelten Evelien R. et al., [Best practice in the implementation of telehealth-based supportive cancer care: Using research evidence and discipline-based guidance](#), *Patient Education and Counseling* 104), included 19 research papers and 23 guidance documents. It highlighted that in implementing best practice telehealth, it is important to ensure that users have at least a basic knowledge of the system. Addressing privacy proactively is also crucial, especially when people are in their home environment. Achieving user confidence in the process, protecting user rights and their interest is critical to system sustainability. Poor knowledge of how the system works among healthcare providers can also have a negative impact.

OBSERVATIONS AND QUESTIONS

| Most people can do well with telephone	Most people who use telehealth only use telephone	Questions:
1. Who of the people who use telephone could benefit from videos?	2. Who might have lost access to care because they could not use telehealth or attend in-person care?	3. If these patients are not even using videos, how do they really benefit from more advanced and diverse platforms (mHealth, wearables,...)?

Chang et al 2021 PMR Journal; Banbury et al 2022

Professor Chan quoted from "ASCO Interim Position Statement, Telemedicine in Cancer Care", approved in July 2020: "Patient education efforts by all providers and healthcare stakeholders should include information on utilising telemedicine." But who among all providers and healthcare stakeholders actually considers patient education via telemedicine as part of their role to the point of investing time and resources on it? ASCO acknowledges the great digital divide, which is exacerbated by complex barriers at patient level, such as socioeconomic factors, geographic location, digital literacy, and so on. It also acknowledges that "there are few resources addressing the inequity of technology, service, utilisation, and literacy required for patients to confidently utilize telemedicine." This scenario has not changed a great deal in terms of patient education, when it comes to how much we are doing to address technology inequity and literacy at patient level. In 2021 MASCC (Multinational Association of Supportive Care in Cancer) published a paper on how the supportive care community should address disparity in telehealth use. In it, Prof. Chan and his group proposed a number of strategies at various levels. Addressing inequity should not only be done at patient level, but across the health system and also at policy level. Looking at the barriers at patient level, potential solutions might be assessing readiness to use telehealth; providing training and technical support; ensuring access to devices and broadband; availability of interpreters for telehealth encounters when there are language barriers; and engagement of informal caregivers. All things that perhaps we take for granted, but there are parts of the population who actually still have many of these barriers when trying to access equitable care.

In 2021, Prof. Chan and his team published an article in *Annals of Oncology*, [The efficacy, challenges, and facilitators of telemedicine in post-treatment cancer survivorship care: an overview of systematic reviews](#). Among the most cited facilitators were ease of use, portability, increased affordability of technology, travel costs and time savings, and a more personalised approach. Among the barriers were low technology literacy, lack of trust in technology or concerns around ethics and security, low motivation, lack of technical support, cancer-related fatigue, and cognitive issues. Furthermore, some patients would also miss the companionship, engagement and emotional support provided by face-to-face contact with clinicians. **How can patient education help to address these complex barriers?** What is available and what is feasible in practice in a busy clinic? Prof. Chan discussed this subject with a number of clinicians. They all agreed that helping the patient understand how to install and use an application, educating them on the benefits of telehealth in an

oncology setting, and reassuring them about privacy would all be very positive, but in many instances, they do not have the time to do it. And so, other questions can be raised. Who do you really need to offer education and training to in a busy clinical environment? Who actually needs education and training? What education and training do you offer? How much education do you offer? Is one-off enough? How much training is required to increase someone's digital literacy? Who of these people are likely to adopt telehealth after some training? And who is just simply never going to use it despite training? And last but not least, **whose role it is to offer education?** And who has the time to do it?

Chan et al 2021 Annals Oncol
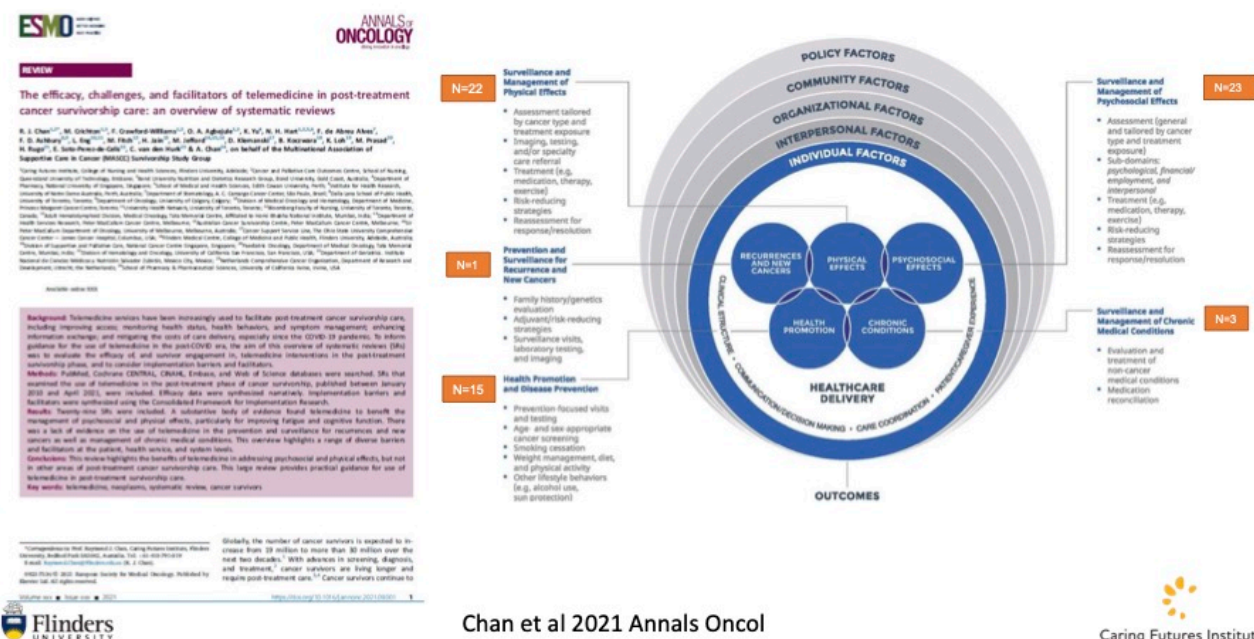
Standard 1 in the ASCO Telehealth Standards in Oncology, is on "Patient selection and implementation of telehealth in oncology" and it is important to refer to it in order to assess for which patient telehealth is appropriate, and what clinicians can educate patients on. When we go through the standards in the document, we can work out what sort of education implications there may be for patients: how to transmit images for a more standardised pathway, what the visit can be like according to patient preference, what is feasible and individualised orientation, such as instructions on how to use the platform navigation and to access support where available. ASCO Practice Standards are meant for the practice itself, but we can apply an education lens on them when thinking about patient education. When it comes to PROMS, for example, many patients say that they want to know the rationale for frequency of reporting. They want the assurance that their clinicians are indeed looking at and responding to PROMS. So, a practical tip for cancer care leaders and clinicians is to go through the ASCO Practice Standards to develop a policy and procedures specific to patient education; to consider and ensure resources and infrastructure to support such practices; and to consider roles and responsibilities of the team (clinician/non-clinician) in delivering that education.

Next, we should consider **the value of self-management education**. Self-management is defined as "the individual's ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition". When we think about self-management education we normally think, for example, about patient management of symptoms, or treatment. But actually, many of the components involved in self-management are very useful in a telehealth context. For instance, patient empowerment, respecting self-agency, individual

assessment of telehealth capability, involvement of families/social networks. Looking again at addressing patient level barriers, we could really think about how to use self-management educational tools to address some of these barriers, which may include, among others, motivational interviewing. Through this type of dialogue, a health professional can help a patient think of ways to overcome access barriers, appreciate that face-to-face care is not necessarily superior, and so on. Prof. Chan looked at a case study, where an oncology nurse is trying to implement a telehealth-based exercise programme for a 71-year-old gentleman with prostate cancer, who lives alone and requires follow-up care, including regular PSA testing and symptom management. The patient has been resistant to using telehealth, but it is too far to travel to the treatment centre. At home he does not have broadband, but the niece, who lives nearby, does. So, how do we think about some of these issues to help him from a self-management education perspective? Many clinicians will probably not have the time to think about how to get this gentleman to use telehealth. But when we are, for example, doing patient counselling, when we are using the SMART Goals or motivation interviewing to encourage him to participate in exercise, we can also think of how we can address some of the barriers in telehealth. We can look at issues such as accessing broadband, for example. And we need to think about the gentleman's niece who has broadband. Can she help with technical issues, or does she herself need orientation? It is worth thinking about embedding self-management education when we address telehealth barriers.
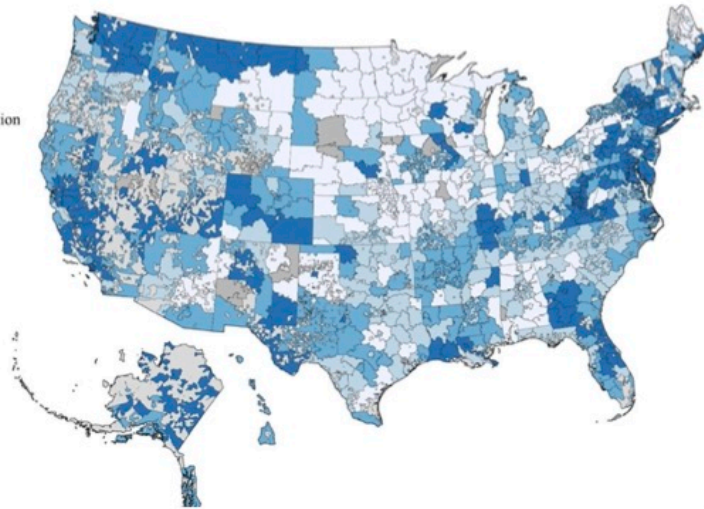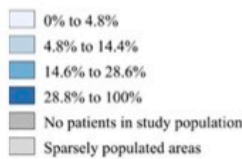
Telehealth works well for many but not for some. Therefore, advancing efforts to address equity needs to be a priority, and education is one way to help, but it is not the only way. It is important to acknowledge that education practices can be challenging and time intensive. Education alone is very limited in respect to addressing equity. Consider the ASCO Practice Standards when it comes to developing clinic-level processes for patient education. And lastly, we should think about the potential of using more self-management education, beyond information giving, with an aim to empower patients to optimise telehealth use.

Telemedicine Policy and Implementation

Debra Patt is a Breast Medical Oncologist; Executive Vice President Public Policy at Texas Oncology (TxO); Professor at Dell Medical School at The University of Texas at Austin, US. She is also Editor-in-Chief of the Journal of Clinical Oncology, Clinical Cancer Informatic. Prof. Patt has been an advocate of telemedicine implementation for over a decade, well before the Covid-19 pandemic urged on its adoption. Together with Dr. Zon, she was part of the ASCO taskforce that developed the recommendations and standards for the use of telemedicine in cancer care in 2021. TxO has over 220 locations throughout Texas and southeastern Oklahoma, with a network of more than 500 physicians. They see about 70,000 new cancer patients per year in a variety of clinical settings across the territory. This organisation is a good model from which much can be learned, even outside the US, on how to use telemedicine tools across different practices.

Telemedicine use later in Pandemic

Proportion of patients with at least 1 telemedicine encounter

- 0% to 4.8%
- 4.8% to 14.4%
- 14.6% to 28.6%
- 28.8% to 100%
- No patients in study population
- Sparsely populated areas

The Covid-19 pandemic had an unprecedented policy upheaval for telemedicine in the United States. These policy changes paved the way for an increase in its use. There were federal and state changes and there will be more, that could permit or limit these tools for patients. In addition to the policies to make them legal, how these services are paid for also matters. Although the federal government outlined that the CMS (Centre for Medicare and Medicaid Services) might pay for something, commercial payers had to follow suit to have payment parity for telemedicine. And then there are some grey areas in terms of policy as we move forward. Regarding implementation, we need to think about telemedicine as a tool that we will use to provide better patient care for patients where they are. And so, we must think about how we access services, how we choose technology platforms, how we manage the technology and technology growth, and then, how we can place it in the context of a suite of different services that we would offer to the patient, beginning with simple things like telephony and omnichannel communication. And with telemedicine, we can think about electronic patient reported outcomes, patient portals, digital education, and disintermediating sites of clinical trial accrual. This is a constant process that will continue to evolve, because it is something that will take time, and even the vendors that are offering some of these services today will continue to evolve and change our perspective.

In March 2020, the US saw some major federal policy shifts that changed the nature of the availability of telemedicine to Medicare beneficiaries at first, and subsequently, to everyone else in the country. A table published by the KFF shows some of the restrictions that were relaxed: loosening privacy regulations; allowing patients to access services from their homes; allowing phone visits to qualify as telemedicine; waving the need for a pre-existing relationship; allowing clinicians to practise across state lines. All of this made telemedicine services much more readily available. Then we saw widespread coverage and reimbursement for telemedicine services across states and insurers, initially with low to no cost sharing for patients. We also saw an expanding telecommunications infrastructure and efforts were made to ensure that the health workforce could meet the expanding needs for telemedicine visits. As a natural consequence of all of this, from April 2020, many Medicare beneficiaries began to use telemedicine. Its adoption in primary care started early, before April, although the numbers were still low across the board. Later in the pandemic, the use of telemedicine increased dramatically. But it was far greater in areas of clustered urban centres, with rural areas facing more challenges.
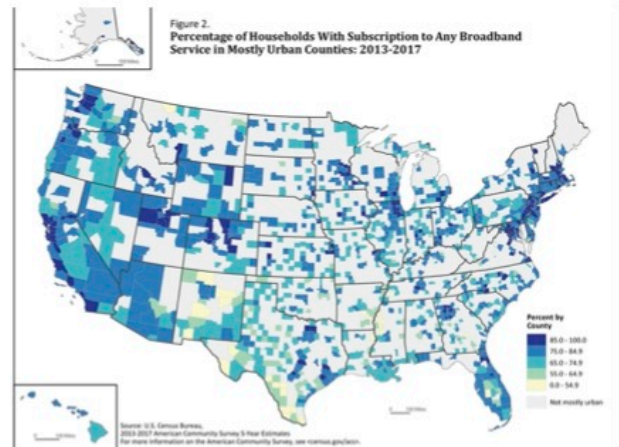
Interstate Medical Licensure Compact

U.S. State Participation in the Compact

= Compact Legislation Introduced
= IMLC Member State serving as State of Principal License (SPL) processing applications and issuing licenses*
= IMLC Member State implementation mixed - MD Board is serving as SPL processing applications and issuing licenses - DO Board is serving as non-SPL issuing licenses only*
= IMLC Member State non-SPL issuing licenses*
= IMLC Passed; Implementation In Process or Delayed*

* Questions regarding the current status and extent of these states' and boards' participation in the IMLC can be directed to the respective state boards.

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Telehealth policies were extended to December 2024 in the Consolidated Appropriations Act of 2023, allowing for patients to continue to be treated at home, at least from a federal standpoint. Although many states waived the need during the pandemic for a doctor to have a licence to practise in their jurisdiction, most states still require a local licence. However, we are now seeing increased participation in the Interstate Medical Licensure Compact, which allows some doctors to obtain a licence to practise medicine in other member states. Prof. Patt herself applied for this and found the process relatively easy, although they are still all separate licences, and one must follow every state's compliance guideline. Participation in the Compact paved the way for many states to continue to have widespread use of telemedicine across the borders. Unfortunately, some of the states with more healthcare deficiencies have not as yet adopted the Compact, that would give them access to better resources through telemedicine. Although this is relative to the US, other countries are operating along similar lines. There was also payment parity, so payers in the commercial market have continued to pay for telemedicine at the same rate as in-person, in that they saw it not as a service in and of itself, but rather a tool to deliver a healthcare service that was already established.

Broadband access is a limitation to access

- Broadband access– rural
- SES barriers—data plans
- Logistic barriers

Figure 2.
Percentage of Households With Subscription to Any Broadband Service in Mostly Urban Counties: 2013-2017

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Implementation has many challenges, in terms of access, platforms and technology issues. Speaking again about the US, but true for other countries as well, there are broadband limitations across the country. The number of households with subscription to any broadband service is limited in many states, especially in rural areas, although it has become an increased priority since the pandemic because it is not only telehealth services that require broadband access, but also tele-education, teleworking, and so on. Even if you do have broadband access, there may still be a digital divide caused by socioeconomic barriers. One of the most common ones is that among patients who would seek to use telemedicine on their smartphone, not everyone has unlimited data plans. So, holding the line to speak to a clinician for ten minutes or longer is not a realistic option, although at an in-person appointment, a waiting time of 10-20 minutes is normally expected. This is something important to keep in mind with telemedicine. And then sometimes there are logistic barriers, the largely adult cancer population is not always the most tech savvy. Language barriers can be an issue too. Although we need to improve upon all of these digital divides, telemedicine itself is helping us cross some of the barriers. It is a way to improve healthcare delivery to patients who otherwise would be challenged with access. Another critical factor is the technology platform. In the United States, early on people were using platforms that were private, but not necessarily HIPAA secure. A HIPAA secure platform is really what we should use. But we need to be careful because most of us practise in larger organisations and even though a platform might be HIPAA compliant, it might be so only with an individual clinician. Practises or primary care delivery organisations have different obligations with regards to security. So, even if a vendor claims to be HIPAA secure, the platform may not meet the criteria of security required for larger organisations. In the choice of vendor, we also need to make sure that the system is as easy as possible for patients. Does the vendor have a virtual waiting room? Is the platform going to integrate with our other solutions like our electronic health record or practice management system? And will we be able to use that integration to implement this platform at scale? These are important things that organisations need to look into when they select a vendor.

We also need ways to overcome technical issues. We all encounter technical issues at some point, but it is particularly important to help cancer patients with them, because when they seek care with their provider, they most likely are already in a challenged and vulnerable state. Texas Oncology, under the direction of Prof. Patt, developed an onboarding team for telemedicine support. They

hired virtual care pilots (VCPs) to help patients manage tech challenges and platforms, and virtual medical assistants (VMAs) to deal with the workflow of patients in the clinic, thus reducing the burden on in-person staff, who can then focus on in-person tasks. Initially, TxO hired 8 counsellors to greet patients, and virtual MAs to initiate the video call before the clinician does: they gather all the necessary information from the patients, then put them into a waiting room and set their expectation for what the visit will entail. This system has worked so well that TxO went on to hire 80 people working only virtually to support remote services. There is a nurse triage team, which is located in hubs that are regionally dedicated, so people are getting the same nurses, but virtually, and the clinicians know those nurses, because they are regional. Using these virtual services has reduced the time for responsiveness by over 66%. So now patients are able to get responses within one to two hours of their call. Texas Oncology also offers other support services by telemedicine, including dietitians, social work, virtual care groups, white glove services for pharmacy; and have launched a Virtual Advanced Practise Provider (APPs) Clinic, so physician extenders can perform some of the visits by virtual care services. Initially they just hired four APPs who were specifically dedicated to virtual care, and answered to the medical director (Prof. Patt.) The APPs provide coverage for providers that are on leave, virtual same day urgent care visits, program visits. There is also a Remote Nurse Triage team, that has been able to decrease time to responsiveness, as it allows the clinic nurse to concentrate on supporting the clinical team.

Virtual Care Pilot Description

Virtual Care Center Team

Support Existing Telemedicine

Virtual greeters and MAs will facilitate existing telemedicine by greeting patients and doing intake before local providers see their patients. This relieves in-person staff pressure

Virtual APP Clinic

Virtual APPs provide coverage for APPs on medical leave and APP shortages, as well as new urgent care visits and program visits. Revenue from these visits stay with the local sites and the attending physician

Nurse Triage Team

A pool of remote triage nurses covers multiple clinics and relieves in-person staff pressure

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Telemedicine will help us solve care delivery challenges now and in the future. By providing virtual services not only are we able to give better quality to our patients, but we can manage flexible staffing capacity at sites; we are able to provide palliative care to regions that otherwise would not have access to it; we can offer virtual support groups, virtual dietitian consultations, virtual counselling, as well as pharmacy support. Telemedicine should not be limited to a doctor talking to a patient, rather it should be a suite of clinical services provided for patients, and that patients can navigate as easily as possible.