Humanism in telemedicine: Connecting through virtual visits during the COVID-19 pandemic

Megha Shankar, MD[1,2]; Meredith Fischer, MA[3]; Cati G. Brown-Johnson, PhD[3]; Nadia Safaeinili, MPH[3]; Marie C. Haverfield, PhD[4]; Jonathan G. Shaw, MD, MS[3]; Abraham Verghese, MD[5]; and Donna M. Zulman, MD, MS[1,3]

[1] VA Palo Alto Health Care System Center for Innovation to Implementation (Ci2i), Menlo Park, California
[2] Stanford University Center for Primary Care and Outcomes Research (PCOR) and Center for Health Policy (CHP), Stanford, California
[3] Division of Primary Care and Population Health, Stanford University School of Medicine, Stanford, California
[4] Department of Communication Studies, San Jose State University, San Jose, California, United States
[5] Department of Medicine, Stanford University, Stanford, California

Megha Shankar, MD (corresponding author)
795 Willow Rd
Bldg 324 152-MPD Ci2i
Menlo Park CA 94025
Telephone: 650-725-7747
Fax: 650-617-2736
Email address: meghs@stanford.edu

Support

This study was supported by a grant from the Gordon and Betty Moore Foundation (#6382; PIs Donna Zulman and Abraham Verghese). Megha Shankar is supported by a VA Office of Academic Affairs Advanced Fellowship in Health Services Research. The views expressed herein are those of the authors and do not necessarily reflect the views of the Department of Veterans Affairs, the Gordon and Betty Moore Foundation, or Stanford University School of Medicine.

Prior presentation(s): none

Abstract

The COVID-19 pandemic is spurring the massive deployment of telemedicine to prevent risk of infection and address healthcare workforce demands. In primary care, many visits have shifted from in-person to telemedicine, introducing a potential barrier to the human connection that is central to clinical care. We adapted existing frameworks that seek to foster humanism in clinical care—the Four Habits Model and Presence 5—to the virtual care context. Reconceptualizing these frameworks to video visits in particular yields strategies for four phases of the visit – (1) Before the Visit: Set up for Success, (2) Beginning the Visit: Establish a Connection, (3) Throughout the Visit: Invest in the Relationship and the Patient's Story, and (4) Completing the Visit: End on a Meaningful Note. Adopting explicit humanistic practices can help clinicians foster meaningful connections with patients through video visits amidst this challenging pandemic and in the future as telemedicine becomes more widely integrated into clinical care.

Key words (6): telemedicine, patient-physician relationship, patient-physician communication, humanism, virtual care, video visit

Abbreviations: COVID-19 (Coronavirus Disease 2019)

Among the multitude of workforce and protocol changes required by the COVID-19 pandemic, telemedicine is emerging as a key strategy to reduce population-level risk exposure, protect and preserve clinical staff, and concentrate resources on higher acuity patients and COVID-19 related care.[1] Originating from the Greek root tēle-, tēl-, tēle meaning "far off, afar, at or to a distance,"[2] telemedicine encompasses clinical care offered through video-based care, as well as remote patient monitoring, secure messaging, and mobile apps. As care shifts from in-person to video visits, however, there is a risk of jeopardizing the human interaction that is pivotal to clinical care and deeply meaningful to both patients and clinicians, particularly in the primary care setting. Explicit strategies are needed to ensure that humanism remains central in virtual care.

Telemedicine offers various benefits, particularly during a public health crisis like COVID-19, and is often described as satisfactory, convenient, and cost-saving by patients.[3,4] Some patients feel more comfortable discussing sensitive issues with the increased interpersonal space provided by telemedicine.[5] The barriers posed by distance and technology can also have negative consequences, however; during virtual visits, physicians tend to talk more than patients, and there is evidence of less psychosocial counseling and more depersonalization.[3,5,6] While telemedicine is increasingly delivered via smart phone and tablet, the technology often requires both the clinician and patient to learn how to use a new platform. This creates potential for a digital divide that can disproportionately exclude older adults, patients without access to technology, lower socioeconomic populations, and those with disabilities or other vulnerabilities.[7] There is also risk of telemedicine technology being perceived as overwhelming

or confusing, and presenting privacy concerns.[3,5,6] All of these factors can detract from open communication and from the overall experience of both the patient and the clinician.

These communication and rapport-building challenges of telemedicine, further compounded by the stressful circumstances of COVID-19, call for strategies to help clinicians forge meaningful interactions with patients during virtual visits. Frameworks such as the Four Habits Model[8] and Presence 5[9] offer evidence-based guidelines to foster humanism and connection in clinical care. Applying these frameworks to telemedicine can help clinicians preserve interpersonal connection during virtual encounters, especially in a time of crisis that necessitates physical distancing. Below, we draw on these frameworks and research focused on telemedicine communication practices[3,4,6,10-13] to offer practical guidelines about how to meaningfully connect with patients during a video visit.

Before the Visit: Set up for Success

Physical and psychological preparation before a virtual visit creates a foundation for a high-quality interaction and productive visit. Clinicians may have back-to-back video visits due to the high-volume of mental and physical health needs in a crisis, and refreshing between visits by adopting a ritual such as standing up and/or taking three deep breaths[9] can help a clinician recharge and focus their attention. Performing a brief chart review of the patient's social history[9] before initiating a visit can help a clinician become familiar with key psychosocial information about a patient and illustrate knowledge about a patient's history and life circumstances.[10] Prior

to the appointment time, it is also important to check audiovisual equipment and ensure a quiet environment to facilitate a smooth, mindful visit.[13]

Beginning the Visit: Establish a Connection

The beginning of a video visit offers an opportunity to set a tone of respect and establish rapport for the virtual interaction. Without the routine door opening and handshake of an in-person encounter, introductions are sometimes neglected,[3] but a simple introduction garners trust[13,14] and a verbal acknowledgement should be extended to everyone visible on the screen. It is important to consider privacy concerns, so clinicians should ask if patients are comfortable discussing all of their health concerns via the specific technology being used[15] and with others in the room during the virtual visit.[10] Patients should be made to feel they have entered a protected space with video visits, away from physical distractions, such as ringing telephones or staff interruptions.[5] Offer an opportunity early in the conversation to describe the flow of a virtual visit and set a shared agenda that incorporates a patient's goals and priorities.[10]

Throughout the Visit: Invest in the Relationship and the Patient's Story

During the video visit, active listening, empathy, and attention to emotional cues are critical elements to building a therapeutic relationship.[8,9] Clinicians should sit up straight and lean forward to show interest, nod to signal listening, optimize eye contact by periodically looking directly at the web camera, and stay seated within the camera frame.[14] Video visits allow clinicians to adjust volume to ensure optimal audio communication and leverage the observation

of patient body language and voice tone.[11] While not possible to offer a tissue or a comforting hand on the shoulder through video, eye contact and verbal acknowledgement of emotions (e.g., "I can see this is hard for you" or "As I listen to you, it sounds like you are worried"[16]) can be an effective substitute within the scope of virtual care and should be used frequently to ensure that patients feel heard and that their emotions are validated. It is also important to minimize interruptions to allow the patient to tell their story; notice lag time and wait three seconds before responding to avoid rushing the patient.[11] In all visits, but especially during emotionally sensitive conversations, clinicians should reduce technology distractions by disabling picture-in-picture functions that show the clinician's own image, verbalizing any need to go off-screen (e.g., when fixing technology or taking notes), and avoiding eating, drinking, and fidgeting.[14] The rapid transition to new technologies and new modes of interaction amidst a pandemic is challenging for everyone; when technical frustrations arise, professional acknowledgement and troubleshooting will help build a patient's trust in telemedicine as a means of care.[11]

As the video visit progresses, various tailored strategies can be employed to elicit the patient's perspective[8] and connect virtually with the patient's life circumstances.[9] Here, video visits offer a unique advantage by providing a view into the patient's home life. The video visit might also offer an opportunity to meet caregivers and understand the patient's social support, including emotional and tangible support for health-related issues, and support for virtual care technology. Clinicians should also be attentive to certain risks posed by social distancing and stay-at-home orders; video visits can be used to assess a patient for concerns that may increase in times of

crisis, such as housing instability, food and medication insecurity, substance use, and intimate partner violence (the latter of which should be addressed cautiously, acknowledging privacy concerns as above).[17-19] Finally, in many ways a video visit is an invitation into a patient's home, offering a clinician the opportunity not only to evaluate home safety, but to view cherished family members, pets, and belongings important to the identity of the person under their care.

Completing the Visit: End on a Meaningful Note

The end of the video visit is an opportunity to further build trust with patients and caregivers and solidify a connection. If applicable, reinforce the diagnosis and treatment plan by asking for patient teach-back.[8] A clear and simple follow-up plan should be agreed upon, and explaining the available avenues for further interaction with the health care system can offer reassurance as patients stay at home during mandated social and physical distancing. Clinicians should also discuss a plan to follow-up on unaddressed or future concerns[13] and, when possible, send educational materials and an after-visit summary electronically, or by mail. Closure of a visit can include a reference to the patient's family, health and social concerns, and priorities. In this way, clinicians convey to the patient that they listened fully and want to provide care that is aligned with the patient's circumstances and goals.

The uncertainty and stress posed by COVID-19 will continue to generate unrelenting demands on the healthcare workforce, yet humanism is more important than ever in this context. Even though virtual care precludes the physical contact that is central to the practice of medicine,

specific strategies can help clinicians foster meaningful connections with patients during video-based encounters. Integrating humanistic principles into telemedicine will help clinicians and patients endure this challenging time, safely from a distance, yet together.

Acknowledgements

We would like to acknowledge Mariko Kanda Kelly, BA; Ted Andrew Miclau, BA, MS; Gisselle De Leon, BA, and Raquel Garcia, BA for contributing to the literature review for this manuscript.

Conflict of Interest Statement

All authors have no potential, perceived, or real conflicts of interest to disclose. None declared.

References

1. Hollander JE, Carr BG. Virtually Perfect? Telemedicine for Covid-19. *N Engl J Med.* 2020.
2. Merriam-Webster. Tele. *Merriam-Webster*.
3. Hjelm NM. Benefits and drawbacks of telemedicine. *J Telemed Telecare.* 2005;11(2):60-70.
4. Agha Z, Roter DL, Schapira RM. An evaluation of patient-physician communication style during telemedicine consultations. *J Med Internet Res.* 2009;11(3):e36.
5. Miller EA. The technical and interpersonal aspects of telemedicine: effects on doctor-patient communication. *J Telemed Telecare.* 2003;9(1):1-7.
6. Daniel H, Sulmasy LS. Policy recommendations to guide the use of telemedicine in primary care settings: an American College of Physicians position paper. *Ann Intern Med.* 2015;163(10):787-789.
7. Dorsey ER, Topol EJ. State of Telehealth. *N Engl J Med.* 2016;375(14):1400.
8. Frankel RM, Stein T. Getting the most out of the clinical encounter: the four habits model. *J Med Pract Manage.* 2001;16(4):184-191.
9. Zulman DM, Haverfield MC, Shaw JG, et al. Practices to Foster Physician Presence and Connection With Patients in the Clinical Encounter. *JAMA.* 2020;323(1):70-81.
10. Gordon HS, Gopal RK. Making the Most of Your Patient's Video Visit. VA Center of Innovation for Complex Chronic Healthcare.

11. Henry BW, Ames LJ, Block DE, Vozenilek JA. Experienced Practitioners' Views on Interpersonal Skills in Telehealth Delivery. *The Internet Journal of Allied Health Sciences and Practice.* 2018;16(2).

12. Hiratsuka V, Delafield R, Starks H, Ambrose AJ, Mau MM. Patient and provider perspectives on using telemedicine for chronic disease management among Native Hawaiian and Alaska Native people. *Int J Circumpolar Health.* 2013;72.

13. Sabesan S, Allen D, Caldwell P, et al. Practical aspects of telehealth: doctor-patient relationship and communication. *Intern Med J.* 2014;44(1):101-103.

14. Telemedicine: A Practical Guide for Incorporation into your Practice. Web: American College of Physicians; 2020.

15. Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency. 2020. Accessed April 2, 2020.

16. Way D, Haley E. COVID-19 Tips and Tricks: Breaking Bad News via Tele-Medicine. Philadelphia VA Medical Center; 2020.

17. Selvaratnam T. Where Can Domestic Violence Victims Turn During Covid-19? *Opinion* 2020. Accessed March 26, 2020.

18. Hicks T. How People in Addiction Recovery Are Dealing with the Isolation of COVID-19. *Health News* 2020. Accessed March 26, 2020.

19. Saadian S. Responding to Coronavirus: Ensuring Housing Stability During a Crisis. 2020. Accessed March 26, 2020.