Editorial

MDM Policy & Practice

MDM Policy & Practice
1–4

DOI: 10.1177/2381468320976364
journals.sagepub.com/home/mdm
SAGE

Shared Decision Making in the Era of Telehealth: Implications for Practice and Research

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Date received: August 25, 2020; accepted: November 4, 2020

Since its emergence in late 2019, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus responsible for the coronavirus disease 2019 (COVID-19), has infected over 14 million individuals worldwide.[1] This unprecedented pandemic has forced clinicians to rethink how health care can be delivered to minimize the risk of disease transmission and promote patient safety while still meeting the general health needs of patients. As a result, telehealth visits (either by telephone or telehealth audio and video platforms) have become the preferred mode for many encounters.[2] It seems increasingly likely that such telehealth visits will persist long after the pandemic has abated, resulting in the need to assess the impact of this change on clinical care and patient-centered research.

Shared decision making (SDM) refers to the process by which clinicians and patients work through clinical problems together to arrive at decisions that make emotional, practical, and intellectual sense for the patient.[3] This process is highly dependent on clear and unhurried communication. Effective SDM is essential to patient-centered care and is recommended by many professional societies when confronted with particular medical decisions.[4] However, how to best implement SDM remains unknown. Strategies that rely on decision aids or patient-education materials have been developed, but uptake of these tools remains low in clinical practice.

What does the current shift toward telehealth in care delivery mean for SDM? Can technology be leveraged to facilitate effective SDM? Will this shift minimize or exacerbate health care disparities? What does this change mean for how researchers study SDM? In this commentary, we explore these questions from the perspectives of clinicians and researchers.

Historical Perspective

Telehealth encompasses multiple visit modalities, including synchronous live video, a live telephone call, asynchronous interactions on web-based platforms, and remote patient monitoring.[5,6] Traditionally, it has been used in attempts to minimize disparities in access to care for rural and underserved populations. Until recently, state legislation and state Medicaid programs restricted telehealth delivery through the services that can be provided, provisions for reimbursement, the location and licensure of the clinician providing services, and the physical location of the patient (requiring patients to travel to a designated telehealth-enabled center).[5,6] However, due to the current pandemic, the Federal Coronavirus Aid, Relief, and Economic Security (CARES) Act and an expansion of Section 1135 of the Social Security Act relaxes provisions on originating sites and eligible services for reimbursement, allowing clinicians to reach patients across a broader context.[7] Relaxation of rigid

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telehealth guidelines means patients can now receive routine care from their home.

Expanding Telehealth Delivery

The new flexibility of telehealth options has led to a surge in the number of telehealth visits during COVID-19. Prior to COVID-19, approximately 17,000 Medicare patients received a telehealth service weekly; in the last week of April 2020, that rose to about 1.7 million.[8] The scope of telehealth can be wide, reaching more patients overall and of diverse backgrounds and yielding the promise of achieving SDM broadly. Yet, there is significant variation in the method of delivery (phone or video); such variations have implications for SDM. Research has shown that achieving SDM over a phone call is feasible,[9] but also may preclude use of any ancillary materials the clinician would use in an in-person encounter. Alternately, use of videoconferencing technology allows the clinician and patient to see each other. This medium provides the possibility for nonverbal cues both to be expressed and addressed (e.g., facial cues suggesting confusion), and offers an opportunity to show visual aids designed to promote patient comprehension via "screen sharing," which may lead to increased SDM.

However, drawbacks to videoconferencing exist. Clinicians may have to learn new online platforms, obtain necessary equipment (e.g., webcams), learn institutional protocols relevant to patient privacy and data security, and alter their documentation to ensure reimbursement coverage. From the patient's perspective, such technological solutions require varying degrees of access to technology, technical acumen, and potential out of pocket costs. Furthermore, if online platforms are used, they need both to connect to the internet and to have access to a stable internet connection may preclude some patients from benefitting from a telehealth encounter. Use of telehealth can also introduce communication challenges due to pauses or interruptions caused by poor internet connections, potentially limiting conversations and likely SDM.

The adoption of telehealth solutions further introduced additional issues regarding potential breaches in data security and privacy.[10] Patients' level of awareness and concern of these risks will vary, as will their willingness to engage in telehealth due to these potential risks. It is imperative that clinicians and other health care staff are aware of institutional data security and privacy measures to ensure they can accurately address patient concerns. Despite these challenges, trusting relationships built between patient and clinician are shown to occur through telephone alone;[9] videoconferencing software is only expected to further increase these relationships.

Impact on Health Disparities

Although telehealth initially was designed to reduce disparities,[7] the current reliance on personal technological devices could introduce additional disparity. While 85% of Americans have a smartphone and 75% own a computer,[11] a significant number of patients may lack internet access, as well as access to necessary tools to engage in telehealth. Similarly, some patients may lack familiarity with technology needed to execute these visits (e.g., downloading apps). There also may be patients who are not comfortable with telehealth, do not have a private space to have a telehealth visit, or prefer to wait until they are able to be seen in person. The potential disparities introduced by telehealth are likely to be associated with age, digital readiness, income, education level, and race.[2] Some of these patient characteristics are already associated with low rates of achieving SDM in clinical visits.[12] Racial minorities have been shown to have lower rates of SDM in clinical studies, suggesting that telehealth could exacerbate disparities within these populations in terms of SDM.[12]

Conversely, telehealth could help reduce disparities in some circumstances. The resources required for in-person visits are not trivial—patients need the means to travel to appointments, the ability to take time away from other duties (work, caregiving, etc.), and sufficient health and mobility to travel. Telehealth may offer both a less time-intensive and geographically restricted option for care. It may allow access to appointments that would otherwise not happen without technology (e.g., for those living in rural communities), may allow less time in waiting rooms/traveling, and may provide a more comfortable experience for patients (receiving care at home).

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Impact of Clinical Research

Translating in-person SDM clinical research to telehealth is possible but will require adaptations. For optimal observation and assessment of SDM, recording telehealth interactions is recommended. Requiring recording of telehealth visits introduces challenges such as liability of platforms previously unused and storage management of the recordings. Furthermore, not all videoconferencing platforms being used to provide telehealth have adequate recording capabilities. It is possible to mimic typical in-person recording of clinical visits by setting up a recorder to view or listen into the telehealth videoconferencing screen or phone call; however, video quality may be reduced. Research teams will need to determine which option is the most feasible based on their unique setting and research needs, while maintaining HIPAA compliance.

Despite new considerations in maintaining personal health information, there are potential benefits to SDM clinical research in the telehealth setting. One benefit may be the ability to reduce experimenter bias during virtual research visits. During in-person SDM research, the researcher may remain present in the clinical exam room for note-taking or recording operation, potentially introducing experimenter bias through subtle, inadvertent behaviors.[13] Via telehealth, researchers may be able to turn off their video during the virtual visit, which may reduce the influence their presence has on data collection for SDM clinical research.

Conclusion

Use of telehealth in the medical field has increased rapidly as patients access health care during the COVID-19 pandemic. There are multiple benefits and drawbacks to transferring such a large portion of in-person health care visits to virtual visits. Drawbacks are mainly related to access to technology and having technological acumen; benefits include greater access to visits for researchers and the ability to record patient-clinician interaction with less experimenter bias.

SDM is highly dependent on clear and unhurried communication between patient and clinician. The shift toward telehealth in care delivery means placing additional responsibility on clinicians to ensure that clear communication occurs. Such responsibility may be easier addressed via the use of videoconferencing software (as opposed to telephone interactions) due to the ability to recognize facial cues and to share resources in real-time via screen sharing.

Any current studies that are researching SDM in a clinical setting are almost certainly forced to switch to telehealth due to the current pandemic, which presents a unique opportunity to expand the understanding of achieving SDM in multiple capacities. It remains unclear whether a shift to the use of telehealth encounters may minimize or exacerbate health care disparities and it is important to expand research in this area. Although the COVID-19 pandemic was unprecedented, it may be useful in expanding the understanding of SDM in the context of telehealth and ultimately help provide better care for patients during times when they cannot be physically present with their clinicians.

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