Advancing Telemedicine Within Family Medicine's Core Values

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Abstract

Telemedicine adoption has been gradual but accelerated during the COVID-19 pandemic. It is important for us to pause and consider how this impacts family medicine. How do we ground ourselves so that we use technology to enhance our practice while maintaining fundamental family medicine values? In this article, we explore how telemedicine interacts with five family medicine tenants: contextual care, continuity of care, access to care, comprehensive care, and care coordination. Keeping this framework in mind and using a health equity lens can help us retain fundamental family medicine values as we adapt to rapid technological change.

Keywords: *telemedicine, family medicine, health equity, virtual visits*

Introduction

The pandemic caused by COVID-19 has accelerated the application of telemedicine to promote physical distancing while continuing to provide medical care.[1] The changes seemed to have occurred overnight, but telemedicine has existed for many decades.[2] The gradual adoption of telemedicine is a result of a number of barriers. Reviews have reported challenges including limited exposure/knowledge of telemedicine, lack of devices, organizational readiness, motivation, incentives, unsuited services, and fit with workflows and systems.[3–5] Recent events required a rapid adoption of telemedicine but there remain concerns. A fundamental question that lingers is how will telemedicine impact the discipline of family medicine? We reflect upon our core values because they enable our discipline to adapt the technology to our values rather than allowing the technology to change our practice.[6]

The 5 C's of Family Medicine

The core values of family medicine, articulated in the 5 C's of family medicine include: *contextual care, continuity of care, access to care, comprehensive care, and care coordination*. Here we outline how telemedicine can be deployed in a way that maintains these values (*Table 1*).

CONTEXTUAL CARE

Visits conducted through videoconferencing may decrease the ability of providers to provide contextual care if significant others who would normally accompany a patient are no longer included in visits. The relationship between patients and staff can also elicit important facts that might not arise in a virtual visit. When using telemedicine, we can encourage patients to include other important people in their life who themselves may find it difficult to travel to the clinic. We can also pay attention to visual clues that offer social and environmental context and increase the contextual care provided by the entire medical team.

CONTINUITY OF CARE

Virtual visits are often provided outside of the medical home, thereby disrupting continuity of care. It is critical that family medicine provides telemedicine options within the medical home. Providing a blend of in-person and telemedicine options will likely increase continuity.

ACCESS TO CARE

Widespread telemedicine adoption increased utilization in primary care among white patients while decreasing among black/African, Latinx, Asian/Pacific Islander patients.[7] Virtual visits also increase access for patients with physical disabilities or multiple social strains such as child-rearing, elder care, or unstable employment. This may be especially impactful for low-income patients for whom the cost of

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Table 1. The 5 C's to Guide Telemedicine in Family Medicine

	DEFINITION	APPLICATION TO TELEMEDICINE
Contextual care	Understanding the patient in the context of family and community.	Encourage patients to include loved ones in telemedicine visits. Pay attention to visual clues that offer social and environmental context.
Continuity of care	Caring for the same family over a long period of time.	Maintain a diversity in patient contact methodologies.
		Involve nonprovider team members in care, either during telemedicine visits or asynchronously to maintain team-based continuity.
Access to care	Patients' means of entry into the health care system.	Offering telemedicine visits improves access. Provide access to telemedicine outside of traditional office hours.
Comprehensive care	Evaluation of patient's totality of health needs.	Modify clinic workflows driven by in-person episodes of care. Increase the use of asynchronous population health strategies.
Care coordination	Provider's role as an advocate with other systems on behalf of patient.	Attend to shifting dynamics between clinic-based teams with remote work that could hamper care coordination. Build and maintain a relational culture. Telemedicine may increase provider's confidence and patient satisfaction as a result of closed-loop communication.

With proper telemedicine processes and training, family medicine providers could use the 5 C's of family medicine.

transportation and time away from work can be significant. However, we provide access to telemedicine outside of traditional office hours, increase education around telemedicine services, and ensure access to interpreter services.

COMPREHENSIVE CARE

The current medical home model relies on workflows designed for in-person team-based care interactions for multiple important functions including nurse care management and integrated behavioral health. There are also services that patients need that simply cannot be done virtually (vaccinations, laboratories, procedures, physical examinations, *etc.*). These clinic workflows must be modified and will require asynchronous population health strategies.

CARE COORDINATION

Telemedicine options such as e-visits, telephone visits, and video visits may improve care coordination by facilitating more closed loop effective communication between providers and patients. However, team-based care may be less effective with telemedicine encounters that occur just between provider and patient. In addition, team functioning may be inhibited as more staff work from home. We need to build and sustain healthy, relational, and high-functioning teams as the telemedicine reduces the amount of time that team members spend colocated, compounding the challenges of the clinical-burnout epidemic in the "tail" of the pandemic.[8]

Conclusions

Telemedicine can enhance our ability to provide equitable care, but programs must be developed to account for family medicine's core values. Health disparities are oftentimes magnified when new modalities of care are implemented. It is crucial that telemedicine programs be developed to maximize the potential equity gains and minimize harm. Family medicine is well poised to influence telemedicine in this arena.

Convenience, quality, safety, and cost-effectiveness of health care[9] remain drivers of telemedicine adoption. A focus on the 5 C's framework may help us design systems that preserve our values, produce desirable clinical outcomes, and improve health equity.

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