

Let Telemedicine Enhance Your Medical Home

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In spring 2020, we all were thrust into the world of social distancing, personal protective equipment, and reaching out to our patients through every potential mechanism at our disposal. Telemedicine quickly became a safe alternative for patients to access health care, although providers struggled with implementation and continue to navigate its scope and sustainability moving forward.¹ Families of children with medical complexity (CMC) faced even greater hardships during this coronavirus disease 2019 pandemic, balancing the need for close medical follow-up for their child with the risk of virus exposure on entering a medical setting.

In this month's *Pediatrics*, Mosquera et al² provide us with pre-coronavirus disease 2019 data to reassure us that adding telemedicine access to an existing complex care medical home can be effective in improving both clinical and financial outcomes. This population of children all had ≥ 2 hospitalizations or ≥ 1 PICU admission in the previous year and a likely risk of future hospitalization at the time they were enrolled into the complex care clinic. Families were randomly selected to receive comprehensive care (experienced primary care physicians, 24/7 access by phone, same-day illness care on weekdays in clinic, hospital consult when inpatient) or comprehensive care plus audio-video telemedicine access. CMC with telemedicine access had 4 fewer days of care outside of

the home per child-year, lower rates of serious illness, reduced hospital admissions, and reduced PICU admissions. The authors went further and documented a reduction in mean total health system costs of \$7563 per child-year compared with a cost of only \$308 per child-year to set up and conduct telemedicine visits.

In normal circumstances, we would all reflect on the value of telemedicine for this high-risk population and cautiously determine how and when we would like to implement it into our practice. This year, many practices may have used telemedicine but have not had the time or foresight to study its impact. We appreciate innovators and early adopters like Mosquera et al² providing us with the evidence to support our family-centered stories of telemedicine in action. During this study, primary care physicians and families were slow to warm up to telemedicine, with an average of 10 telemedicine visits per month initially, growing to 55 visits per month at study end in March 2020. Given the explosion of telemedicine use in the past year, I am confident that the rate of acceptance, as well as monthly telemedicine use for CMC, would now be considerably higher, likely leading to even greater impact. As shown in this study and previous pediatric telemedicine studies,³ increases in use can still be cost-effective if individualized medical decisions are being made by primary care providers and replace the need for more expensive emergency

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department visits and/or days of care in a medical setting.

Yet telemedicine in primary care continues to face challenges. Patients face 3 overlapping barriers to accessing telehealth: the absence of technology, digital literacy, and reliable Internet coverage. Together, these barriers comprise the digital divide, which disproportionately affects people of color, people living in rural areas, and those with low socioeconomic status.^{4,5} In this study based in Houston, Texas, only 2 of 209 families randomly assigned

to the telemedicine group did not have the necessary technology (smart device + Internet access).² As we identify and debate solutions to the digital divide for vulnerable populations, we must partner with community agencies, schools, Internet service companies, and government leaders to overcome barriers to both technology access and digital literacy.

A prevailing theme in this study (and others)⁶⁻⁸ is that experienced primary care providers who have an existing relationship with CMC and

their caregivers do make a difference in the health of their most vulnerable patients. Adding telemedicine to their pediatric medical home can enhance that value even more.

ABBREVIATION

CMC: children with medical complexity

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