

Children with Medical Complexity and Telemedicine: A Good Combination

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While it is difficult to find anything positive to say about the COVID-19 pandemic, the expansion of telemedicine has been beneficial for many. A great test of the use of telemedicine is to determine whether or not it can be of benefit when it is applied to a population of children who are medically complex and enrolled in a comprehensive care program. Will telemedicine use by these patients and their families lead to requiring fewer medical services outside homes (e.g., emergency department, inpatient admissions, or clinic)? Mosquera et al ([10.1542/peds.2021-050400](#)) discussed this question by conducting a randomized controlled trial on patients with complex medical needs enrolled in their comprehensive care clinic program.

The authors randomized 422 patients, with 209 receiving routine complex care services from their program plus access via telemedicine to a specially trained pediatrician with expertise in dealing with medically complex children. The control group of 213 patients received all the routine services provided by the program, but no telemedicine access. Primary outcome measures included "outside-the-home" care days. Other outcome measures including the rate of developing serious illnesses resulting in a hospital stay over a week, an admission to the pediatric intensive care unit, or a death, and costs to the health system. The authors collected this data from August of 2018 through March of 2020, which was the start of the pandemic in the United States.

The benefits of telemedicine are quite impressive, with a 91% reduction in the average total health system costs per child. Before we celebrate these benefits, we need to pause and recognize opportunities to improve telemedicine as noted in an accompanying commentary by Dr. Neil Herendeen from Golisano Children's Hospital in Rochester, New York ([10.1542/peds.2021-051429](#)).

Dr. Herendeen reminds us that if telemedicine needs to reach those who may not have the technology knowhow, let alone internet access to reduce the risk of disparities. The reimbursement for telemedicine also needs to be adequate to sustain telemedicine.

Are you using telemedicine? Have you developed strategies to ensure access to it? Please share your thoughts in our comments section after reading this article and commentary.

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