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Title

Community Health Centers Rapid Adoption of Telemedicine during the COVID-19 pandemic: a mixed methods study

Priority 1 (Research Category)

COVID-19

Presenters

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Abstract

Context: Prior to the COVID-19 pandemic more than half of Community Health Centers (CHCs) in the United States had not utilized any telemedicine services. However, the pandemic elicited dramatic shifts in care delivery and use of telemedicine services expanded. Existing data provide little insight into how CHCs were able to rapidly adopt telemedicine during the pandemic. Objective: To describe telemedicine adoption patterns and understand clinic's approaches to shifting care delivery. Study Design and Analysis: Parallel mixed methods design. Setting or Dataset: CHCs from the OCHIN network. Population Studied: EHR data from 203 CHCs (01/01/2019-6/31/2021). Qualitative data collection from a sample of 13 CHCs that remained open. Practices purposively selected for variation on geographic region, rurality, and patient demographics. Interviews with 16 practice members from these 13 CHCs. Outcome Measures: Telemedicine (phone, web-based) and in-person visit rates; factors influencing adoption and implementation of telemedicine. Results: Most clinics in our sample were in urban areas (n=175) and served a majority of uninsured and publicly insured patients (12.8% and 44.4% respectively) across racial and ethnic minority groups (16.6% Black, 29.3% Hispanic). During our analysis period there was a 791% increase in telemedicine visits from before the pandemic (.06% pre- vs. 47.5% during). A latent class growth analysis was used to examine differences in patterns of adoption of telemedicine across the 203 CHCs. The model resulted in 6 clusters representing various levels of telemedicine adoption: no/low, low/medium, medium, medium/high, high with steady decline, high with rapid decline. A mixed methods approach streamlined these clusters into 4 final groups: low/medium adoption with steady decline, medium/high adoption with slow decline, high adoption with rapid decline, and high adoption with maintenance/sustainment. Clinics that reported rapid adoption of telemedicine attributed this change to leadership prioritization of telemedicine, robust quality improvement processes (e.g., using PDSA processes), and emphasis on training and technology support. Conclusions: In response to the COVID-19 pandemic, telemedicine adoption rates varied across clinics. Organizational factors contributed to the clinic's ability to rapidly adopt and retain telemedicine services throughout the pandemic. These approaches could inform future non-pandemic practice change.