
Abstract

Can Hybrid In-Person and Virtual Care Delivery Models Increase Telehealth Access to Vulnerable Populations in the Post–COVID-19 Era?

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Abstract

Background: The COVID-19 pandemic dramatically increased telehealth use; however, it simultaneously widened the digital health divide. Several studies in New York City (NYC) demonstrated that communities with the highest COVID-19 prevalence also had the lowest telehealth use. Moreover, the social distancing measures used to curb COVID-19 led to isolation, loneliness, and the avoidance of needed in-person care. Mobile integrated health programs utilizing both in-person components and virtual components can overcome social determinants that limit access to telehealth. Our mobile integrated health program, community teleparamedicine (CTP), employs care managers and community paramedics to engage patients with chronic illness and facilitate telehealth visits with emergency physicians.

Objective: We aimed to (1) describe the CTP cohort with respect to demographics and self-reported loneliness and (2) compare CTP visit locations to COVID-19 case rates by zip code.

Methods: Demographics were collected at CTP enrollment, and patients completed the UCLA Loneliness Scale (a summed score of 7 or higher indicates significant loneliness). Patients' experiences with CTP were assessed by using anonymous postvisit surveys with a 5-point Likert scale. We presented descriptive statistics of survey results. CTP patients' home addresses were compared to modified zip code tabulation area data on cumulative rates of COVID-19 cases per 100,000 people (NYC Department of Health's COVID-19 GitHub repository).

Results: From January 2021 to February 2022, a total of 275 patients enrolled in CTP. These patients had an average age of 70 years, 49% were female, 53% were non-White, 16% were Hispanic or Latino, 42% resided in Manhattan, 30% resided in Brooklyn, 20% resided in Queens, and 8% resided in Bronx. Further, 1 in 5 patients reported significant loneliness; 37% lived alone; 61% were single, divorced, or widowed; and 70% did not have a home health aide. Only 8% did not own a computer, 4% did not have internet access, and 23% did not use a smartphone. Between April 2019 and October 2021, nearly 25% of NYC zip codes with CTP usage were among the top 50 zip codes with the highest cumulative rates of COVID-19 cases. CTP patients were satisfied with this hybrid model of virtual care; at least 95% of patients found that it was easy to connect to the physician, were satisfied with the care provided, felt less anxious about needing to return to the hospital, and agreed that CTP was easier than going to the hospital.

Conclusions: The hybrid in-person and virtual CTP program, which was specifically designed to address known barriers to accessing telehealth, successfully reached NYC communities that traditional telehealth programs did not, of which many experienced the highest rates of COVID-19. Our initial results indicate positive patient experiences; however, further qualitative research is needed to fully understand if facilitated telehealth also reduces isolation and loneliness as well as improves health and well-being.

Conflicts of Interest: None declared.

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KEYWORDS

telemedicine; mobile integrated health; COVID-19; digital divide

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