



# Trends in Usage of Telemedicine During and Post Covid-19 Pandemic Surge in NYC 2020

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## ABSTRACT

**Background/Introduction:** The COVID-19 pandemic has thrust telemedicine to center stage in the U.S. healthcare landscape. Telemedicine, video and voice visits, has maintained access to medical care at a safe distance. In addition, its use has opened new avenues of application in continuity of chronic care. The way telemedicine is utilized in an urban, underserved population is not well-defined.

**Methods:** This project takes place at a Federally Qualified Health Center located in Central Harlem in Manhattan that serves as a training site for internal medicine residents. Demographically, 45% of the patients identify as African American, 31% Latino and 58% live below 100% of the Federal Poverty Level (FPL). With this cross-sectional study, we attempt to identify trends in the adoption and use of telemedicine services during and post COVID-19 pandemic Spring 2020 surge in NYC and its potential correlation to health disparities in our patient population.

**Results:** We analyzed results based on age, zip code, and preferred language. During our study period of March to August 2020, 51% (n = 2898) of all visits were tele-visits. From March to May, 2020 (COVID-19 spring surge), 64% of visits were tele-visits. The elderly (>65 years) had 360 tele-visits of which 11% were video visits, lowest of all three groups. The highest utilization (43%) was seen in the 45–64 years age group. From June–August, 2020 (post-surge), there was a 36% decrease in tele-visits with the steepest decline seen in the elderly. Analysis of Central Harlem zip code data for the surge reveals that out of 816 tele-visits, 22% were video. Post surge, there was an overall decrease in the number of visits but an increase in video (n = 594 with 33% video). Sixteen zip codes with the highest FPL (>30%) had 17% tele-visits with 25% video. Again, post surge there was a drop in tele-visits but an increase in video by 35%. Primary language was English in 84% (74% voice and 26% video) of visits and Spanish in 12% (80% voice and 20% video) of tele-visits. Post surge, English was the preferred language in 89% of visits (65% voice, 35% video) with Spanish in 9% (87% voice and 13% video).

**Conclusion:** The data reveals that despite a willingness to adopt telemedicine services and continue usage post surge, there are potential barriers to optimum utilization of video visits. Older age, technology awareness, and the need for interpreter services are all limiting factors. Further investigation into patient related factors is needed. From these trends, we hope to propose solutions to overcoming these barriers to healthcare access for chronic disease management well beyond the pandemic.

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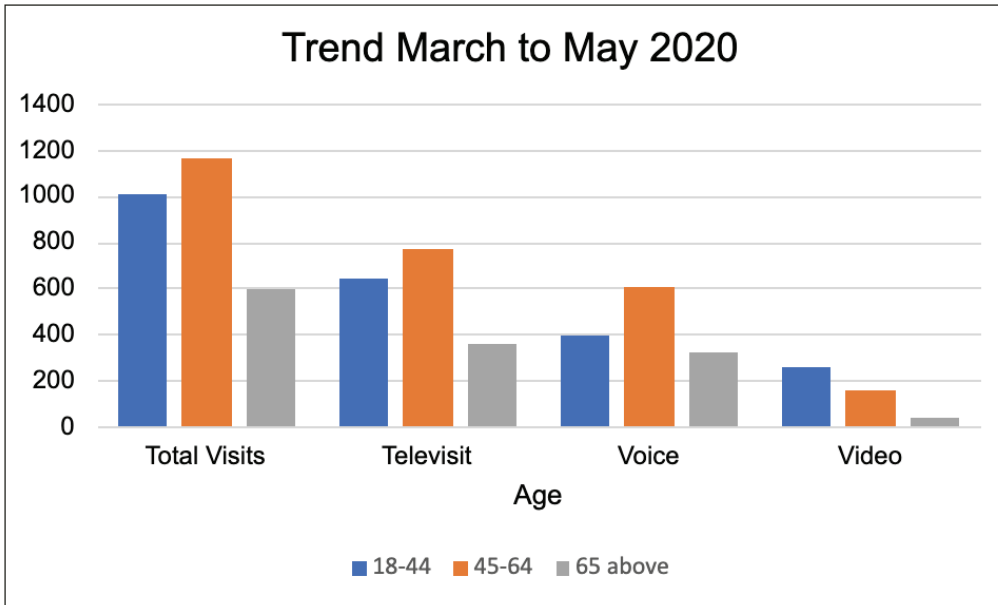
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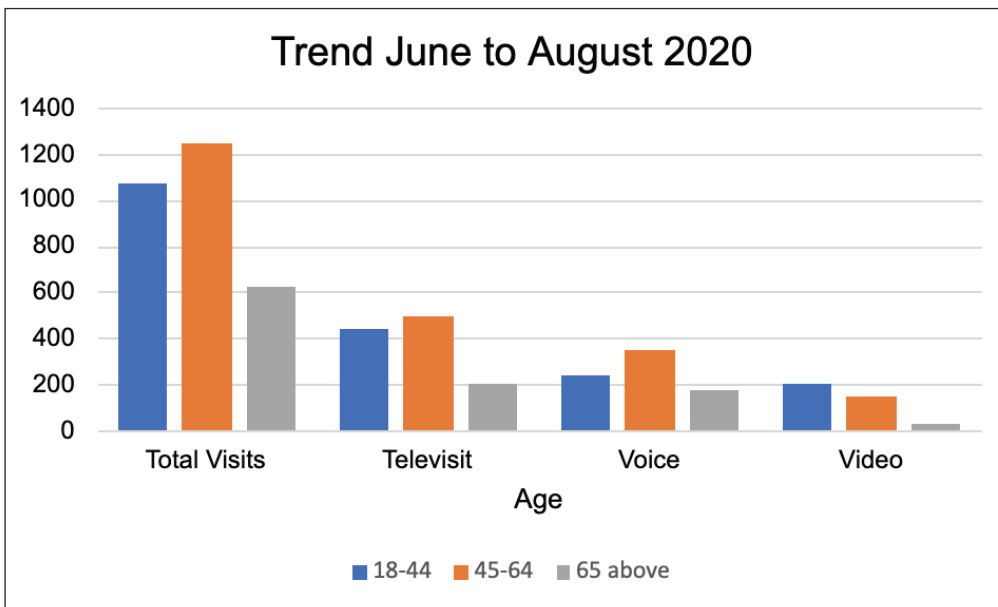
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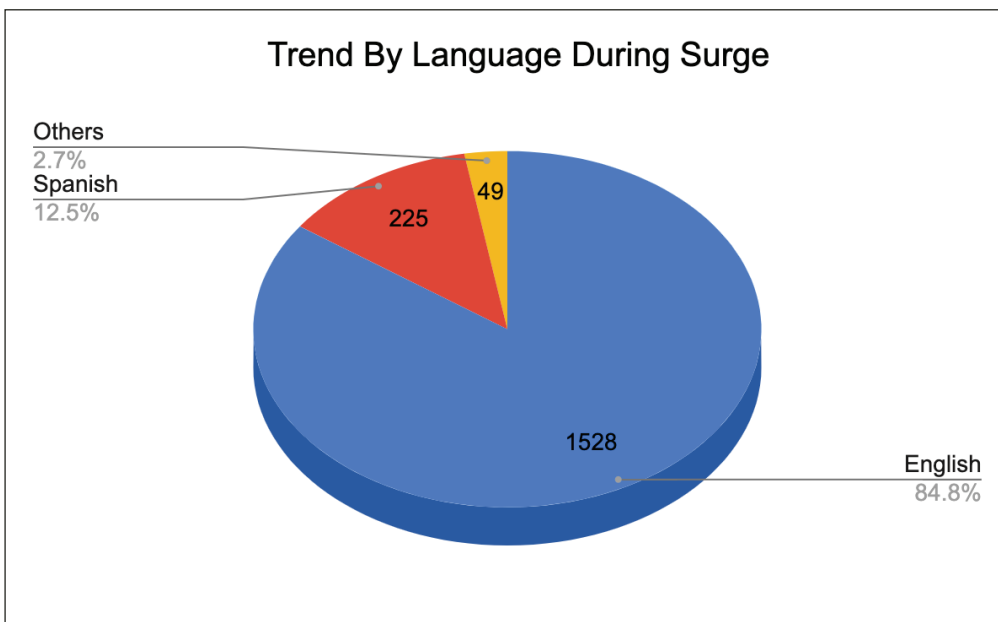
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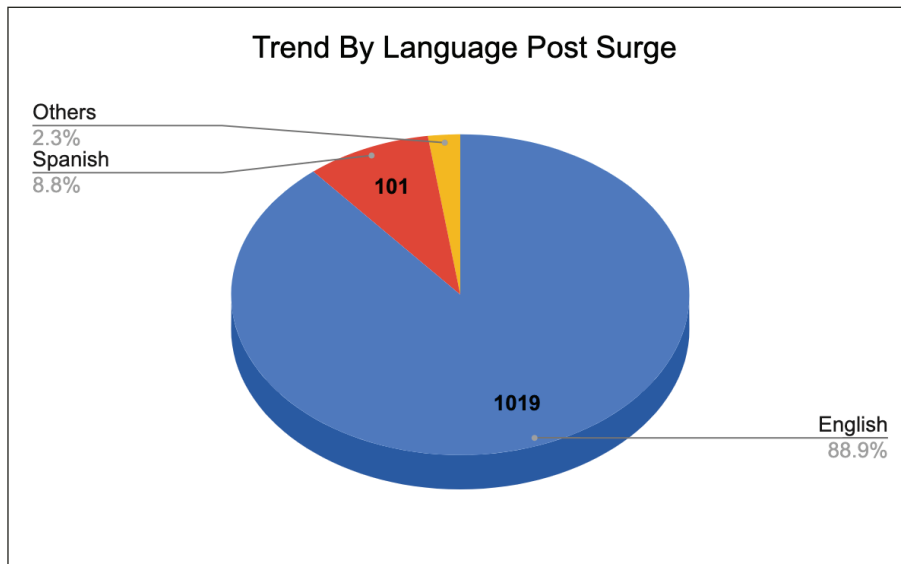
Televisit trend by voice and video during surge.



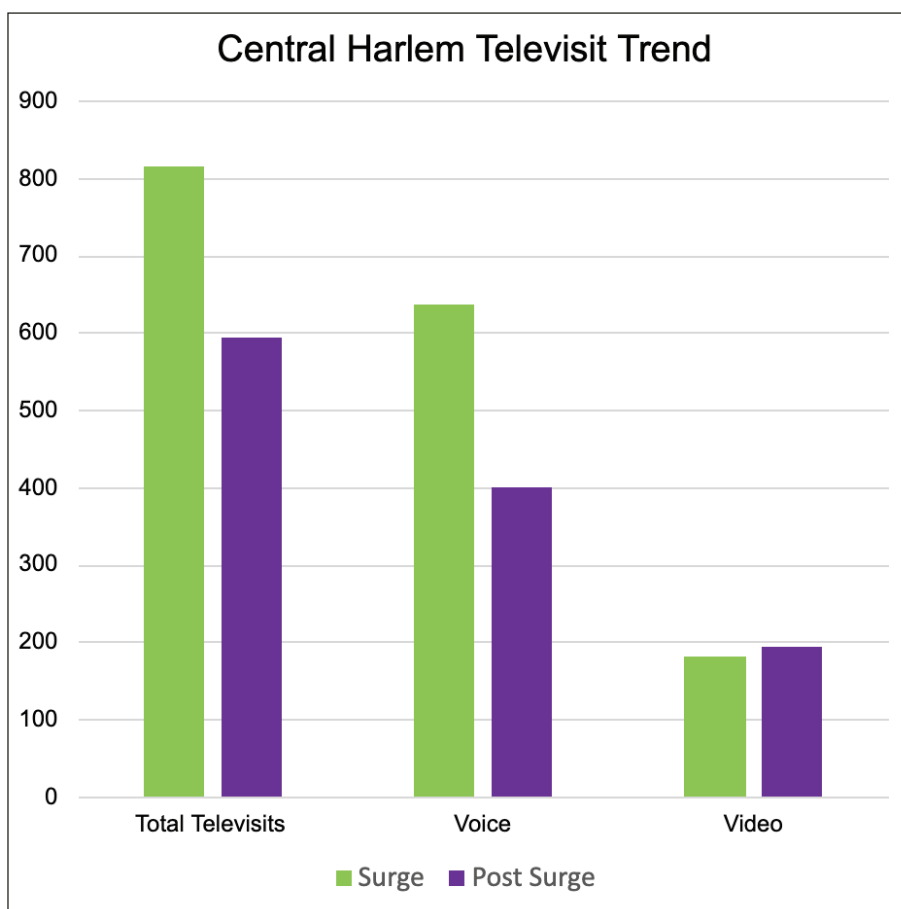
Televisit trend by voice and video post-surge.



Televisit trend based on language during surge.



Televisit trend based on language post-surge.



Televisit trend by voice and video during and post surge in Central Harlem.

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## COMPETING INTERESTS

The authors have no competing interests to declare.

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