

Telehealth use in a Radiation Oncology Tertiary Center and Satellite Networks



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PURPOSE / OBJECTIVE

Telehealth use has been increasing over the last 5 years in ambulatory care centers in medicine. The implementation of telehealth in radiation oncology and other specialties grew exponentially in light of the COVID-19 pandemic.

Given this unique circumstances that necessitated widespread telehealth use, we demonstrate our experiences and impact of rapidly adapting telemedicine in our academic tertiary and satellite radiation oncology centers and the possible benefits of use after the pandemic period.

MATERIAL & METHODS

- The monthly averages for virtual, phone, and in-person patient visits were compiled from **August 1, 2019 (prior to pandemic) to August 1, 2020.**
- Telehealth platforms used were phone and virtual interactions. "Virtual" was defined as the use of audio-visual media such as Zoom through Epic.
- The pre-pandemic period was considered as the months before March 2020 and the pandemic period after March 2020.
- Data was collected from a tertiary academic center and 1 satellite center located 10 miles from the tertiary center.
- An independent t-test was used to determine the significance of the types of telehealth visits during the specified periods. All tests were 1-sided with **statistical significance determined at p<0.05**

RESULTS

- Prior to Feb. 2020, all patient visits were in-person.
- The average number of **in-person visits** in our radiation oncology clinics **declined significantly by 35%** during the pandemic period (**n=285.4 visits**) from the pre-pandemic monthly averages (**n=152.5 visits; p<0.001**)(Fig.1).
- The lowest number of in-person visits coincided with the national CDC restrictions in April 2020 (n=81)(Fig.1)
- There was no significant difference in the average monthly number of patient visits between **2020 (\bar{x} =321.3) and 2019 (\bar{x} = 285.4) (p=0.464).**
- **Follow-up visits** increased **significantly (p<0.001)** during the pandemic as compared to the pre-pandemic period.

Fig.1: Patient's visits in radiation oncology department

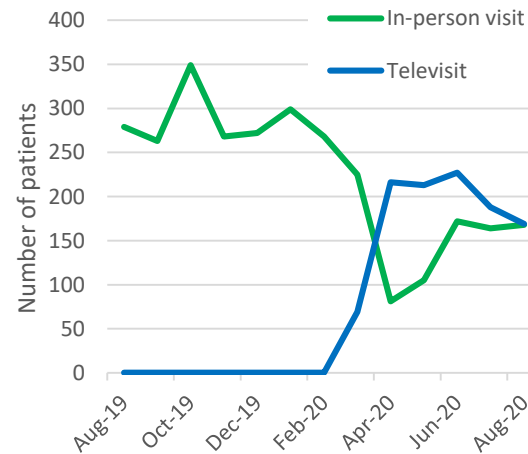
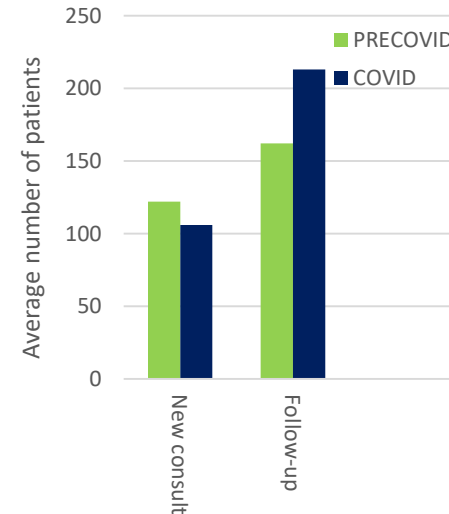


Fig. 2: Type of patient encounter before and during the pandemic



RESULTS Cont.

- There was no significant change in new patient consultations during the pandemic period (**p=0.53**) (Fig.2).
- Phone visits were the most commonly used virtual platform making up 75% and 63% of the total telehealth visits at the main and satellite clinic respectively.

SUMMARY / CONCLUSION

- Our centers' experiences demonstrate the seamless integration of telehealth with traditional healthcare visits which can serve as an alternative to physical patient encounters especially for follow-up visits.
- The pandemic has been a stressful life event especially for cancer patients who have felt isolated, afraid, and experienced psychological stress from uncertainty and dealing with cancer in a pandemic.
- Access to health care visits during the pandemic through telehealth has gone a long way in alleviating patient's anxieties.
- Continue to integrate telehealth in radiation oncology after the pandemic period for follow-up visits, alongside traditional in-person visits to improve access and compliance for continued cancer care.

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