



Research Week 2021

Telemedicine Visits in an Established Multidisciplinary Central Nervous System Clinic for Radiation Oncology and Neurosurgery (RADIANS) in a Community Hospital Setting: Early Experience

Samantha C. Bowen, BA, Rohi Gheewala, BS, Wencesley A. Paez, MD, Timur Mitin, MD, PhD, Brandon Lucke-Wold, MD, PhD, Jerry J. Jaboin, MD, PhD, Charles R. Thomas, Jr., MD, Jeremy N. Ciporen, MD
bowensa@ohsu.edu
Department of Neurological Surgery, Oregon Health & Science University

Keywords

central nervous system, community hospital, multidisciplinary, neurosurgery, radiation oncology, telemedicine

Abstract

Introduction

The COVID-19 pandemic made a profound impact on healthcare services in the United States. Social distancing measures were instituted in April 2020 and telemedicine visits were identified as an alternative to in-person clinic visits. Our established community hospital-based multidisciplinary central nervous system (CNS) clinic (RADIANS) offered telemedicine visits as an option for follow-up visits. We report our patients' experience.

Methods

Telemedicine options – video or phone teleconferencing – for patients evaluated in our multidisciplinary CNS clinic were introduced in June 2020. Both radiation oncologist and neurosurgeon were simultaneously present for the telemedicine visit. Descriptive patient demographics, survey responses, and travel time and distance calculations were analyzed. Satisfaction score was compared to previously published.

Results

A total of twenty-five telemedicine visits (n=22 video; n=3 phone) were completed since July 2020. Patient demographics are as followed: mean age was 59 years (range=22-81), women (9) and men (16), repeat telemedicine visits n=10, malignant CNS disease (17) and benign disease (5). Mean one-way distance traveled was 165.07 miles (median=114; range=0.8-358). Mean roundtrip travel time was estimated at 5hours 5mins. Mean telemedicine visit duration was 15.3 mins (range=4-46). Mean patient satisfaction score for telemedicine visits was 4.84. Eighty-eight percent of patients preferred being followed by both specialists during the same telemedicine visit.

Conclusion

Telemedicine visits enable simultaneous multidisciplinary CNS evaluation with both radiation oncologist and neurosurgeon. Patients who opted for the telemedicine visits found them just as effective as in-person visits, saving time and travel costs particularly during the current COVID-19 pandemic. Satisfaction score was numerically higher than historical score previously published. Most patients agreed they would likely use the telemedicine visit option for future follow-up. Our early results strongly support offering telemedicine visits to patients. The telemedicine visit platform facilitates the multidisciplinary clinic model and should be considered for more widespread utilization.