

# Research Week 2022

## Your (Virtual) Doctor is Ready to See You Now: Telemedicine for New Patient Consultations at an Abdominal Wall Reconstruction Center

Nicole M. Santucci, MA; Jordon O. Bray, DO; Thomas L. Sutton, MD; Mudassir S. Akhter, MBBS; Sean B. Orenstein, MD; Vahagn C. Nikolian, MD nikolian@ohsu.edu; Department of Surgery, Oregon Health & Science University; Portland, OR, USA Department of Surgery, Oregon Health & Science University; Portland, OR, USA

### Keywords

Telemedicine, Abdominal Wall Reconstruction, Virtual Care, Hernia,

## Abstract

#### Background

Telemedicine has emerged as a viable option for in-person visits for the evaluation and management of surgical patients. Increased integration of telemedicine has allowed for greater access to care for specific patient populations, but relative outcomes are unstudied. To evaluate the efficacy of telemedicine-based new patient preoperative encounters in comparison to in-person encounters.

#### Methods

We performed a retrospective analysis of adult patients undergoing new patient evaluations from April 2020-October 2021. Telemedicine visits consist of both video and telephone-based encounters. Visit types, patient demographics, preoperative diagnosis, travel time to the hospital, and prior imaging availability were reviewed.

#### Results

A total of 276 new patient encounters were conducted (n=108, 39% telemedicine). Indications for evaluation included inguinal hernia (n=81, 30%), ventral hernia (n=149, 54%) and groin or abdominal pain (n=30, 11%). Patients undergoing telehealth evaluations were more likely to have greater travel distance to the hospital (91km vs 29km, p=0.002), ASA >2 (59.3% vs. 41.1%, P<0.01), and cross-sectional imaging-confirmed diagnoses (73% vs 47%, p<0.001) at the initial visit. Patients who were evaluated for a recurrent or incisional hernia were more likely to be seen through a telemedicine encounter (69% vs 45%, p<0.001). Downstream care utilization among telemedicine encounters was appropriate with only 13% of patients necessitating supplemental in-person evaluation. Operative intervention was more commonly recommended following an in-person encounter (57.1%). vs 42.6%, P=0.02). Patients evaluated with telemedicine-based evaluations more commonly required medical optimization (27.8% vs 13.7%, P=0.005).

#### Conclusions

We report the efficacy of telemedicine-based consultations for new patient preoperative evaluations related to hernia repair and abdominal wall reconstruction. Telemedicine is a useful modality for preoperative evaluation of new patients with hernia and advanced abdominal wall reconstruction needs. Understanding this patient population will allow us to optimize telemedicine encounters for new patients and improve access to care for patients in remote locations.