Effective Telehealth – Open Heart Readmissions

Varun Rao¹ BS, Michael GeRue² MSN, Douglas Gray² MD
Indiana University School of Medicine¹ ; Parkview Heart Institute²

Background
The purpose of this study is to compare open heart surgery (OHS) Telehealth patients (TP) and non-Telehealth patients (NTP) using outcomes data such as hospital readmission, emergency department (ED) presentations, observation hours, and office visits. Visits for atrial fibrillation (Afib), pleural effusions (PE), and sternal wound complications (SWC) are of particular interest for this study.

Methods
A retrospective chart review of 110 patients above 18 years old who had OHS at Parkview Heart Institute from 2020 were assessed using hospital readmissions, ED presentations, observation hours, and office visits outcomes. Separate forms for blinding, demographic data, and surgery information were completed for every patient. A Telehealth form was completed out for every Telehealth intervention had per TP. An outcomes form was completed for each outcome had by each patient. TP outcomes were compared with NTP outcomes. Fisher’s exact test and $X^2$ was used for statistical analysis ($p=0.05$).

Results
Results display a sample size of the total patient population (110/436). There was no significant difference found between NTP and TP in terms of office visits (79.5% vs 93%, $p=0.598$), readmissions (3 vs 6, $p=0.889$), and observation visits (0 vs 3, $p=0.558$). Significance was found between NTP and TP in terms of ED visits (0 vs 9, $p=0.025$). Most frequent reason for NTP readmission “other” (7.7%) and TP “other” (4.2%), reason for ED visit for NTP (all 0%) and TP “other” (7.0%), reason for observation visit for NTP (all 0%) and TP “other” (1.4%), reason for office visit for NTP “other” (76.9%) and TP “other” (91.5%).

Conclusion
TP presented to the ED significantly more than NTP. The largest outcome category was “surgery follow up” office visits listed in the “other” section. Data collection and analysis are in progress. At the time of writing this abstract, final results are not yet available.