**Impact of telephonic outreach versus in-person clinical pharmacist visits on medication findings in a heart failure clinic**

**Authors:** Maria Peluso, PharmD, Maryann Choy-Ames, PharmD, BCPS, BCACP, Rebekah Krupski, PharmD, BCACP

**Practice Site:** Novant Health Presbyterian Medical Center Heart and Vascular Institute – Charlotte, NC

**Background:** Changes to the way that health care is delivered during the COVID-19 pandemic needed to be expanded to increase safety and decrease exposure. Telehealth outreach has become a valuable tool to provide care to patients while minimizing the transmission risk of COVID-19, but potentially limits those in which in-person visits may be more appropriate, such as patients with heart failure that require close monitoring.

**Objective:** The objective of this study was to evaluate the difference in medication findings, discrepancies, and outcomes in patients that received telemedicine visits versus in-person clinic visits performed by a clinical pharmacist.

**Methods:** In this single-center, retrospective chart review, patients of the Heart and Vascular Institute Elizabeth Cardiology (HVIEC) scheduled for a heart failure (HF) telephonic appointment between March 2020 and July 2020 and patients scheduled for an in-person shared model visit after that time frame were chosen at random to be evaluated for medication discrepancies identified by the clinic’s clinical pharmacist. Pharmacist encounters as well as in-person clinic visit encounters were obtained from the electronic health record (EHR) based on clinic schedules. The primary endpoint was mean number of medication findings per patient during telephonic outreach prior to heart failure clinic appointments versus mean number of medication findings per patient during in-person shared visits at heart failure clinic appointments. Medication findings included lack of treatment, suboptimal treatment, adverse reactions, drug interactions, adherence barriers, and other. Secondary endpoints included number and type of findings identified, interventions made, number of patients reached versus not reached during telephonic visits, hospital readmissions and emergency department visits within 30 days of the most recent HF visit, and number of patients that were able to be coded as transitional care management (TCM). A student t-test was utilized to analyze the primary endpoint, and descriptive statistics were used for all secondary endpoints.

**Results:** A total of 130 patients were included in the study, with 65 in each respective group. There was no significant difference found in mean number of medication findings, with an average of 1.68 findings per patient (109 total) in the telemedicine model versus 1.66 findings per patient (108 total) for the in-person shared visit model (95% CI [-0.40-0.37]; P=0.937). For both groups, the most common types of findings were adherence barriers and suboptimal treatment. Provider ordered labs was the most common intervention for telephonic patients, while dose change was the top intervention for in-person patients.

**Conclusion:** Among heart failure patients that had a visit with the clinical pharmacist at HVIEC, neither telephonic visits nor in-person shared visits differed in number of medication findings per patient.