

**Ava M. Karam**

L3

LSU Health Sciences Center, New Orleans, LA

Hannah M. Robinson; Samuel R. Barber, MD; Jacob Kahane, MD; Leslie S. Son, PhD; Moises A. Arriaga, MD, MBA, FACS

LSUHSC Otolaryngology; Our Lady of the Lake Hearing and Balance Center

**“Hospital re-admission rates related to presence or absence of hearing amplifiers for in-patients with congestive heart failure”**

**BACKGROUND:** Hospital re-admittance for chronic diseases such as congestive heart failure (CHF) is a significant life and cost burden on patients, physicians, and hospital institutions. 23% of patients with CHF are readmitted to the hospital within 30 days of their initial admission date. 75% of adults 70 years or older with CHF have hearing loss, but little is known if the presence of comorbid conditions is associated with differences in these readmission rates. This study evaluates 30-day readmission rates for patients with CHF and hearing loss based on hearing amplification use.

**OBJECTIVES:** This study evaluates if hearing amplification devices provided to patients prior to discharge and utilized during verbal discharge care instructions decrease 30-day readmission rates for patients admitted with CHF who had a hearing deficit.

**METHODS:** This is an IRB approved prospective, non-blinded interventional study. Patients admitted for CHF completed a validated 15 question survey to screen for a hearing deficit. Inclusion criteria comprised – questionnaire scores over 10 and impending discharge to all dispositions. Subjects were either placed in one of two arms, those that received a hearing amplification device, or those without a hearing amplification device using an alternating assignment method. Patients enrolled in the hearing amplification group were educated on the device and instructed to wear it when receiving verbal discharge care instructions. Readmission rates within 30 days of discharge were identified and compared across the two groups.

**RESULTS:** Of 41 subjects enrolled, 13 were in the non-hearing amplification group and 28 were in the hearing amplification group. Of subjects, 3 (23.1%) enrolled without a hearing amplification device were readmitted within 30 days of their initial discharge date. 6 (21.4%) enrolled with a hearing amplification device were readmitted within the 30-day period. The frequency of hospital readmissions between these groups were not significantly different,  $\chi^2 = (1, N = 41) = 0.014, p = .91$ .

**CONCLUSIONS:** Preliminary results demonstrated no relationship between hearing loss and readmission rates can be drawn with the present data. Results were limited by sample size. Ongoing data collection with a larger study population may identify possible associations between hearing loss and hospital readmission rates in patients with CHF.