

**Title:** Assessing the potential need for a multidisciplinary outpatient diuresis clinic to prevent heart failure readmissions

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**Introduction:** Heart failure (HF) hospital readmissions challenge the medical field, increasing costs to patients and hospitals. At SSM Health St. Clare Hospital-St. Louis (SC-SL), the HF readmission rate between April 1, 2018 – March 31, 2019 was 19.2%. Previous studies found that pharmacist-led clinics and outpatient diuresis clinics reduce hospital readmissions and costs.

**Methods:** Patients included had signs or symptoms of acute HF and a 30-day HF readmission between April 1, 2018 – March 31, 2019. The primary outcome was the number of preventable 30-day HF readmissions to SC-SL, defined as patients readmitted solely for treatment with IV diuretics. Secondary outcomes included financial consequences of readmission, total number of HF-related hospitalizations during study period, length of stay, adverse effects associated with IV diuresis, and opportunities for HF medication optimization. Data were analyzed through descriptive analysis.

**Results:** Ninety-three patients were included. There were 44 preventable readmissions (47.3%), accounting for a total hospital supply expense of \$99,424 over 204 hospital days. Patients with preventable readmissions accounted for a total of 130 HF-related hospitalizations during the study period. Adverse effects associated with IV diuresis included hypotension (2.3%) and hypokalemia (18.2%). Fifty-two percent of patients had opportunities for medication optimization.

**Conclusions:** Nearly half of the HF readmissions studied were deemed preventable if IV diuresis had been provided in the outpatient setting. Additionally, side effects of IV diuresis were rare or remediable. These findings, in addition to the potential for decreased costs and outpatient medication optimization, support the development of a proposal for a multidisciplinary outpatient HF diuresis clinic at SC-SL.