

# Introduction of Home-applied Subcutaneous Furosemide to Treat Heart Failure Exacerbations

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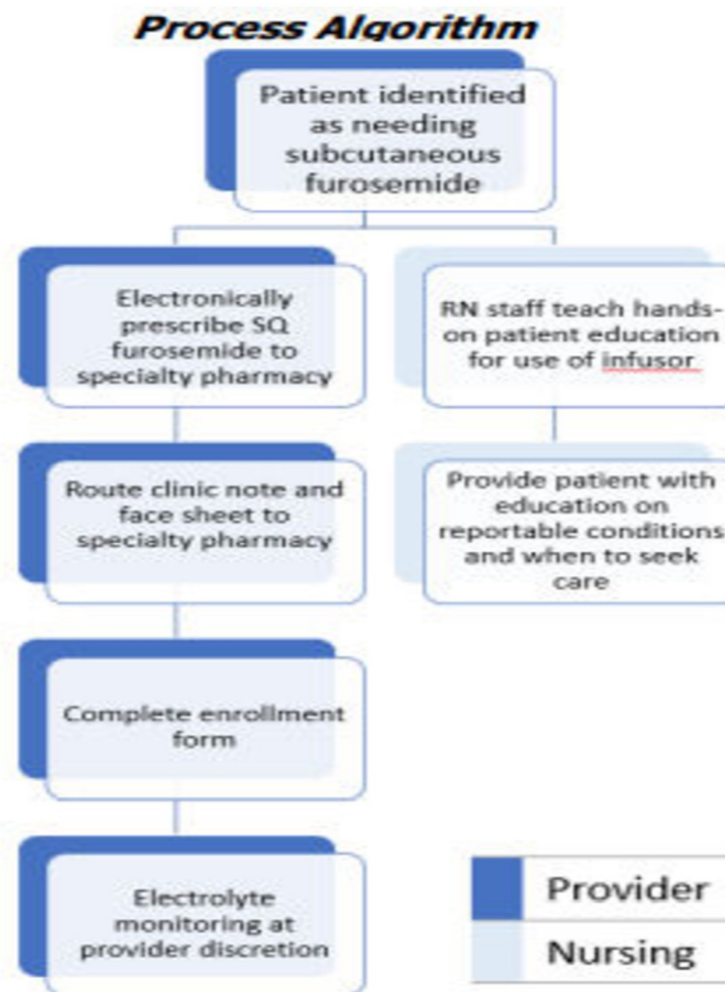
## INTRODUCTION

- ❖ Heart failure (HF) is the #1 cause of hospitalization for patients over 65 years old, and mortality increases after each HF hospitalization
- ❖ Treatment options for outpatient HF exacerbations have previously consisted of increasing oral diuretics and/or giving intravenous (IV) Lasix
- ❖ IV Lasix is the key intervention to try to treat HF exacerbations and prevent HF hospitalization (HFH), however it requires a medical facility for application
- ❖ Subcutaneous (SQ) Lasix is a novel strategy that has been shown in trials to have similar efficacy and bioavailability to IV Lasix
- ❖ SQ Lasix does not require IV access and has a simpler administration, allowing patients to self-apply while at home. This can potentially lead to easier and faster treatment for outpatient HF exacerbations

## METHODS

- ❖ Our medical center began preparing for the implementation of SQ Lasix into the ambulatory setting in 2022
- ❖ Through a collaborative effort including the pharmaceutical vendor, clinical nurse specialists, ambulatory HF pharmacists, Epic champions, APPs, and a physician champion we were able to design and implement a prescription algorithm and education plan
- ❖ This process involved education of RNs, APPs, and physicians as well as the addition of SQ Lasix in Epic to allow for electronic prescription
- ❖ We began prescribing SQ Lasix in the ambulatory setting of our academic medical center in the spring of 2023
- ❖ We typically prescribe for patients we feel to be experiencing or at imminent risk of HF exacerbation and eventual HFH
- ❖ Our goal has been to safely implement the use of SQ Lasix out of our ambulatory HF space and to monitor through data collection whether we can help minimize/prevent HFH and/or ED presentations with the introduction of SQ Lasix

## OUTCOMES/RESULTS

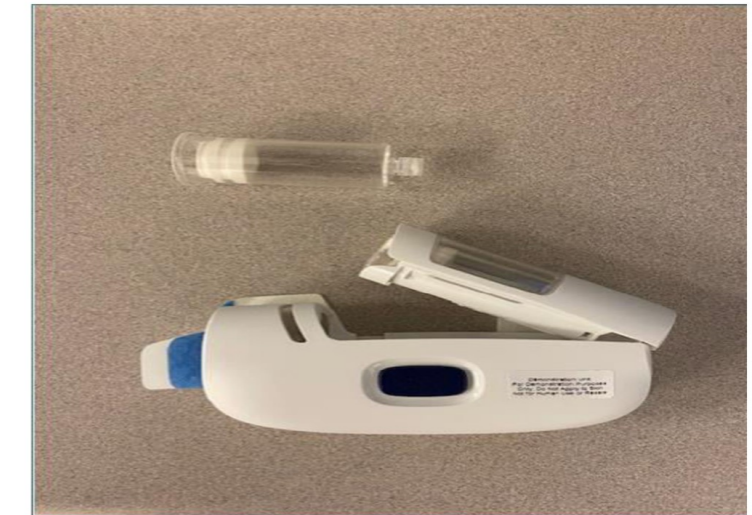


### ❖ **Completed**

- ❖ Prescription algorithm and Epic integration
- ❖ Education to ensure staff comfortability
- ❖ Education to ensure patient comfortability and competence with SQ Lasix infusor
- ❖ Signals of reduced HFH in our HF pts prescribed SQ Lasix
- ❖ Prescribed to 33 patients so far, 32 scripts from HF physician assistant

### ❖ **Future**

- ❖ Trial completion to assess for reduced HFH, 30 day HF readmissions, and improved QOL



## DISCUSSION

- ❖ We were able to successfully implement SQ Lasix as an option for our providers to prescribe for our ambulatory HF patients
- ❖ Education was successfully provided to multiple levels of team members for to allow for successful launch
- ❖ Preliminary data suggests that SQ Lasix application has led to improved symptoms in our HF patients experiencing decompensation
- ❖ With the intervention of home-based patient applied SQ Lasix there have been signals of reduced HFH in our first cohort of prescribed patients, trial underway

## REFERENCES

- ❖ 2022 AHA/ACC/HFSA guideline for the management of heart failure: *Circulation*. 2022
- ❖ Afari et al. Subcutaneous furosemide for the treatment of heart failure: a state-of-the art review. *Heart failure reviews*, 24(3), 309-313
- ❖ A novel small-volume subcutaneous furosemide formulation delivered by an abdominal patch infusor device in patients with heart failure: results of two Phase I studies. *Eur Heart J Cardiovasc Pharmacother*. 2024 Jan; 10(1): 35-44