Furosemide Lounge Quality Improvement Project at King's College Hospital, London

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<u>Background</u>: The average length of stay for a heart failure (HF) admission in the UK is 13 days, at an average cost of £3,796. This accounts for approximately 2% of the total NHS budget.

<u>Aim</u>: To investigate the potential saving associated with establishing a 'Furosemide Lounge' at Kings College Hospital (KCH), where patients with HF could be treated with intravenous (IV) diuresis on a daily outpatient basis.

<u>Methods</u>: This was an observational cohort study of patients admitted to KCH with a primary diagnosis of HF between 1st October 2015 & 27th March 2016, using local data collected as part of the National Heart Failure Audit. This was interrogated for patients on IV diuretics who would be suitable for discharge to a Furosemide Lounge. Factors mandating inpatient diuresis were agreed by consensus and included inadequate weight loss, deranged electrolytes, haemodynamic instability, other medical or social issues, and dose fluctuations. To ensure reliability and improve objectivity of screening, study investigators independently screened a random sample of the dataset. This calibration exercise was repeated until 90% agreement was achieved. Independent_screening of the entire cohort was subsequently performed and estimated date of discharge if a Furosemide Lounge existed generated was derived.

Results:

243 patients were screened. 30 patients (12.3%) were appropriate for management in a Furosemide Lounge at a saving of 143 bed days. The principle reasons for unsuitability were lack of IV diuresis, <48 hours of IV furosemide, and ongoing medical or social issues. The estimated gross saving from opening a Furosemide Lounge in our service is £79,761.11, or £448.10 per day. This is equivalent to the estimated cost of a Furosemide Lounge, before admission avoidance and in-hospital complications are accounted for.

<u>Conclusion</u>: The introduction of a Furosemide Lounge may be a cost-effective means to shorten HF admissions in selected patients.