**Clinical and safety outcomes following introduction of a decision support tool to improve heart failure therapy initiation on discharge**

**Background:** A decision support tool prompting clinicians to initiate and optimise heart failure therapy in hospital was integrated into the electronic medical record in Christchurch Hospital Cardiology in October 2023 and has resulted in higher rates of HF therapy initiation prior to discharge. We aim to evaluate the impact of this tool on post discharge clinical events and rates of significant renal dysfunction and hyperkalemia.

**Method:** Data were obtained for 200 consecutive patients discharged from Cardiology after October 2023 when the heart failure tool was introduced. All follow up blood tests, ED/hospital presentations and incidence of mortality were reviewed via Health Connect South over the six months following admission.

**Results:** Among 200 patients (Median age = 65+/- 13.7 years, 34%=female, 68%=HFrEF) 12% had an unplanned readmission within 30 days. Thirty day readmission for syncope or symptomatic hypotension was 2.5% and for renal dysfunction or hyperkalemia was 1.5%. HF readmission rates were 3% at 30 days and 15% at six months. Within six months of discharge, a creatinine rise >30% occurred in 8.5% of patients and hyperkalemia (K+>5.5mmol/L occurred in 3% of patients with no serious adverse events in either group. All-cause 30 day and 6 month mortality rates were 0.5% and 3% respectively.

**Conclusion:** A decision support tool supporting early HF medication initiation and optimisation was associated with low rates of treatment related adverse events. Local readmission and mortality rates compare favourably to reported rates from registry and trial data.