



Abstract 81 Figure 1 Hazard ratio

Conflict of Interest None

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## PEOPLE PRESCRIBED LOOP DIURETICS HAVE A POOR OUTCOME EVEN WITHOUT A DIAGNOSTIC LABEL OF HEART FAILURE

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**Background** Lack of a robust, practical definition of heart failure not only creates diagnostic uncertainty but limits the utility of epidemiological estimates of incidence, prevalence and prognosis on which health-care planning (both diagnosis and management) depends. Moreover, because of these uncertainties, heart failure research often focuses on patients with whom there is a high degree of certainty about the diagnosis, which may be a small fraction of the total disease burden. One important feature of heart failure is congestion and class of pharmaceutical agents is used almost exclusively (at least in the UK) for the treatment of congestion, namely loop diuretics.

**Purpose** We sought to describe the incidence and three-year mortality of patients with a diagnosis of heart failure and/or prescribed loop diuretic therapy in a substantial regional population.

**Methods** The NHS Greater Glasgow & Clyde Health Board provides healthcare for approximately one million people. We obtained and linked records for primary and secondary health-care, prescriptions and deaths between 2010 and 2016.

We identified a heart failure diagnosis by using a list of 127 diagnostic codes from hospital (International Classification of Disease, tenth revision [ICD-10]) and primary care (Read) coding schemes. We defined incident heart failure as the first record of heart failure in primary or secondary care in any diagnostic position. We defined patients as being initiated on a loop diuretic if they received repeat prescriptions or died within 90 days of the first prescription. Patients were excluded if they died on study inclusion date; n = 635 patients.

**Results** Patient characteristics and three-year survival are shown in the table below. The three-year mortality for patients prescribed a loop diuretic only was 27%; it was 37% for those who received a diagnosis of heart failure but were not prescribed a loop diuretic, and it was 48% for patients diagnosed with heart failure and who were also prescribed a loop diuretic (table 1).

**Conclusion** Many more patients receive a prescription for a loop diuretic than were diagnosed with heart failure.

The prognosis of patients prescribed a loop diuretic is generally poor and even worse if they also have a diagnosis of heart failure.

Conflict of Interest None