Natriuretic peptide level at heart failure diagnosis and risk of hospitalisation and death

- Natriuretic peptide (NP) testing in primary care is used to prioritise referral for specialist diagnostic assessment in people with heart failure symptoms.
- NICE recommend patients with a moderate NT-proBNP (400-2000pg/ml) are seen within six weeks and a high NT-proBNP (>2,000pg/ml) within two weeks.

**Aim**

To report risk of hospitalisation and death by NP level at time of heart failure diagnosis.

**Population**

- Patients with NP test in primary care and HF diagnosis.
- 40,007 participants
- Mean age: 78.5 years
- 52% Female, 48% Male

**Time to diagnosis**

- Moderate NT-proBNP: 72 days
- High NT-proBNP: 28 days

**Hospitalisation**

- Hospitalised in the year following diagnosis: 40,007 diagnosed
- 55.2% (22,085) Hospitalised
- 44.8% (17,922) Not hospitalised

**Survival at 1, 5 and 10 years**

- Low NT-proBNP (<400 pg/mL)
- Moderate NT-proBNP (400-2000pg/ml)
- High NT-proBNP (>2000 pg/mL)

- 1 year: 81%
- 5 year: 50%
- 10 year: 23%

**Interpretation**

A national mandatory rapid referral pathway, like the cancer ‘two-week wait’, for people with heart failure symptoms and a high natriuretic peptide level may be needed to prevent unnecessary hospital admissions and potentially improve survival.

**Reference:**

**Support:**
NIHR National Institute for Health Research

**Department:**
Nuffield Department of Primary Care Health Sciences