

Establishing an ambulatory unit for people with heart failure

Chris Wilkinson, Maggie Fearby, Nicola Hildreth, Kristian Bailey. Newcastle upon Tyne Hospitals NHS Foundation Trust

The problem

In the UK, heart failure accounts for:

- 1 million bed days per year¹
- 2% of the total NHS budget¹
- 75,000 admissions per year²
- The burden of heart failure is projected to grow substantially in the coming years, as a result of population ageing, accumulation of co-morbidities and increased survival from other cardiovascular diseases.³

Even pre-pandemic, hospitals were above safe levels of bed occupancy.^{4,5}

Changes are needed to improve the current quality of care for patients with heart failure and to expand and meet growing demand.

There is evidence that heart failure care, including diuretics and prognostic medication optimisation, can safely be delivered in a day-case, rather than inpatient, setting for ambulatory patients.^{6,7}

Previous provision

Newcastle Hospitals serve a population of over 3 million, with 200,000 acute admissions and 1.25 million outpatient attendances annually.⁸

On-site consultant-led cardiology care is provided at the Royal Victoria Infirmary daily on the cardiology wards and acute medical admissions unit, and through referral from other specialities.

Patients with heart failure would usually be admitted to the cardiology ward, or referred to a cardiologist if required, where a patient was admitted elsewhere. Following discharge, follow-up could be arranged through a well-established team of community heart failure specialist nurses.



The team in the new unit

Image credit: @newcastlehosps

A new model of care

In April 2021, an ambulatory heart failure unit opened, and two newly appointed heart failure specialist nurses started.

Patients with heart failure can access the unit for daily clinical review, intravenous diuretics, and optimisation of medications on an outpatient basis.

Protocols have been established to ensure streamlined, efficient, and evidence-based care, and optimal the patient experience.

The specialist nurses will oversee the unit, provide expertise for inpatients on the cardiology ward, and accept direct referrals from other specialties, and liaise with the community teams. They are supported by the existing experienced heart failure cardiologist, who is supporting their development as independent prescribers.

Evaluation & quality assurance

- The demographic and clinical characteristics of users will be prospectively collected.
- Survey data on patient satisfaction, and outcome data including 30-day readmission and mortality rates will be collected.
- The average length of stay will be compared, excluding the COVID-19 period of widescale service disruption.

Conclusion

A new ambulatory cardiology unit, supported by a specialist nursing team, will expand and improve the provision of care for patients with heart failure, be more robust to meet future demand, and offers opportunities for staff development and education.

A comprehensive evaluation, including patient satisfaction and clinical outcomes, is ongoing.

References

1. British Heart Foundation. An integrated approach to managing heart failure in the community. 2015.
2. National Institute for Cardiovascular Outcomes Research. National Heart Failure Audit: 2020 summary report. 2020.
3. Conrad N, Judge A, Tran J, et al. Temporal trends and patterns in heart failure incidence: a population-based study of 4 million individuals. *Lancet*. 2018;391(10120):572-580.
4. Nuffield Trust. Quality watch: Hospital bed occupancy. 2021.
5. National Institute for Health and Care Excellence. Bed occupancy - emergency and acute medical care in over 16s: service delivery and organisation. NICE guideline 94. 2018.
6. Aston C, Rushton J, Satchithananda D. Inpatient care on an outpatient basis: A novel approach to heart failure management. 2011.
7. Lee DC, Beleznai DT, Hassan MS, et al. Ambulatory management of acute decompensation in heart failure. *British Journal of Hospital Medicine*. 2019;80(1):40-45.
8. Care Quality Commission. The Newcastle upon Tyne Hospitals NHS Foundation Trust Inspection report. 2019.