

# Heart Failure

Allowing heart failure patients to be monitored at home, without the need for frequent face-to-face consultations.

## Background

The need for remote patient monitoring for high-risk patients has never been greater. By enabling more care to be delivered in people's homes, remote monitoring can help to reduce face-to-face appointments, ease pressures on clinicians and ease waiting list pressures. Digital health keeps patients in a safe environment and reduces the risk of infection transmission.

## Solution

Our technology-enabled heart failure service monitors patients in their own home through our digital health platform. Patients or carers measure agreed vital signs and enter data using a communication method that suits them, including:



Email



Bluetooth devices



SMS



Automated phone call



Online



Smartphone app

## Benefits of service

- **Improves health outcomes**

The service improves self-care by increasing the patient's awareness and understanding of their condition, and by enabling them to take a more active approach in the management of their own health.

- **Reduces A&E admissions**

Our evidence shows enhanced monitoring of these long term conditions has reduced hospital admissions.

- **Increases clinic capacity**

Home monitoring reduces face-to-face appointments, enabling clinicians to prioritise time with patients who need the most help.

- **Improves patient satisfaction**

The service gives patients a choice about how they receive their healthcare. It is easy to use and patients do not have to take time out of their day to attend routine appointments.

## How the service works



Patient takes their readings at home using a device including blood pressure, oxygen, temperature, weight and heart rate.



Patient sends readings to a clinician using a method of their choice.



If readings fall out of range, the clinician is alerted to take appropriate action.



Readings are sent to the patient record for authorised professionals to view.



The clinician can choose to follow-up using video conferencing or telephone.

## Case study: Norfolk Community Health and Care Trust

- The self- testing service is for patients who have recently experienced heart failure and need to be monitored to ensure their vital signs are within safe range.
- Patients are given medical devices and training to monitor their vital signs at home. These include blood pressure, temperature, weight, pulse rate and oxygen saturation.
- The service was designed to improve the quality of life for patients and free up hospital beds and surgery time. It allows patients with heart disease to monitor their vital signs at home and relay readings directly to a clinician.
- The patient sends the readings to clinicians via an online submission form or automated telephone service.
- The service enables clinicians to monitor trends and intervene if readings move outside individual thresholds. It encourages patients to recognise changing symptoms and promotes self management of their condition.
- The service complements the work of the trust's heart failure team which attends to patients in clinic, at home and via telephone consultation.

## Outcomes

Analysis by the Trust of the six months before and after the service has revealed the following among a cohort of service users:

**88%**

reduction in bed days.

**89%**

reduction in A&E admissions.

**65%**

reduction in GP visits.

**45%**

reduction in Out of Hours appointments.



*"If patients go outside of the set parameters, we can intervene much more quickly. We can also see what's going on between our visits as well as what's happening when we're actually there. We're using the technology to try and make ourselves a little bit more efficient, so it's saving on the travel time and face to face visits. So, it's really about keeping the patients more stable, keeping them out of hospital and giving them that independence to sort of monitor their own condition".*

**Rhona Macpherson, Lead heart failure nurse Norfolk Community Health and Care Trust**

