

# A heart failure and lung disease remote monitoring service reduces A&E admissions and bed days at Norfolk Community Health and Care Trust

Norfolk Community Health and Care Trust has reported a reduction in A&E admissions and bed days among a group of high-dependency patients following the introduction of a new remote-monitoring service for people with heart and lung disease. 51 patients are currently being monitored on the service.



### The solution

The remote monitoring service allows patients with heart and lung disease to monitor their vital signs at home and relay readings directly to a clinician. The service was designed to improve quality of life for patients and free up hospital beds and surgery time.

The service enables clinicians to monitor trends and intervene if readings move outside individual thresholds. It encourages patients to recognise changing symptoms and promotes selfmanagement of their conditions.

The remote monitoring service complements the work of the trust's heart failure team which attends to patients in clinic, at home and via telephone consultation.

www.inhealthcare.co.uk

The self-testing service is for patients who have recently experienced heart failure or chronic obstructive pulmonary disease and need to be monitored to ensure their vital signs are within safe range.

They 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 patient then sends the readings to clinicians via an online submission form or automated telephone service, depending on how confident they feel using technology.



### **Outcomes**

The trust introduced Inhealthcare's remote-monitoring service to improve quality of life for patients living with heart and lung disease and free up hospital beds and surgery time. The trust subsequently reported a reduction in A&E admissions and bed days among a group of high-dependency patients.

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

65%

reduction in out-of-hours appointments\*

The analysis also showed a similar trend for patients who stayed on the normal service, suggesting that nurses were able to spend more time with patients who needed care the most.

\*The Norfolk Community Health and Care Trust analysis is based on the outcomes of 10 patients using the service





We have the automated call every day at 11am and I provide readings for weight, blood pressure, oxygen saturation and pulse. It provides great peace of mind and lots of people say how well I seem. Some people might be afraid of trying out new technology, but I try to advise them how good it is.

Tony Robinson, 83, a retired transport driver with heart failure



Our teleheath service has successfully reduced the need for face-to-face visits during the pandemic and allows patients with long-term conditions to shield themselves from the risk of infection. In this case, because I was able to monitor the individual so closely we were able to avoid an admission to hospital.

Rhona Macpherson, the lead heart failure nurse



"It is very reassuring for me. If we have a problem, we are straight through to the heart failure nurse - and consultant if necessary - in a very short space of time. The problem is sorted out, usually through medication, and we don't have to go back into hospital or see a GP. It saves a lot of waiting for doctors and cuts out a lot of anxiousness. My children and grandchildren supported us with the technology when we first started. Now we have mastered it. This is a great way forward."

Jan Robinson, wife of patient Tony Robinson

## Patient story: Donald Ray



Donald Ray, an active 89-year-old, was on holiday with relatives in Indonesia when he started feeling tired and short of breath. Fearing a recurrence of the heart failure he had suffered five years earlier, he sought medical advice. Local doctors carried out some tests and advised him to take it easy for the rest of the holiday.



The Rays returned home to Norwich at the beginning of March just as coronavirus started sweeping through the UK. Donald was seen by the family GP and referred to the heart failure service at the Norfolk Community Health and Care Trust which added him to Inhealthcare's remote care service.

Every morning, Donald uses a simple medical device to measure his vital signs - blood pressure, temperature, weight, pulse rate and oxygen saturation - and sends these via email to the trust for analysis by algorithm. If any readings fall out of range, an alert is created and sent to clinicians to intervene as necessary.

Donald's condition deteriorated and early in July he was fitted with a pacemaker. He continues to recuperate at home, pottering around the garden, reading books, spending time with his wife of 57 years and keeping in touch with their five grown-up children and seven grandchildren.

"The system has provided reassurance. You know that information which could be significant in the way your health is going – whether it is stable or deteriorating – is being monitored and early action such as changed medication can be taken. You don't have the problem of wondering who to phone, what to say and then getting through to the right person.

It's quite obvious that Rhona Macpherson, the lead heart failure nurse, is keeping a close eye on me. You couldn't ask for more than that. Without this service, I would have had to phone someone to find out what was happening. It gave me confidence that my state of health was being looked at all the time."



# About Norfolk Community Health and Care (NCH&C)

www.inhealthcare.co.uk

NCH&C provides community-based NHS health and care to everyone, from babies to the elderly, via more than 70 different service locations across Norfolk. Serving a population of nearly 900,000 people, the trust delivers community dentistry, services for children, young people and families, therapies, community nursing, end of life care and specialist nursing. We believe that people are better looked after locally and this belief drives us to work hard to bring our expert care to patients in our seven community hospitals, within GP surgeries and in their own homes