A patient with heart failure: how it can be done. The Hull model.

John, 82, was first admitted to hospital before Christmas last year with gross swelling of his legs and breathlessness. “In retrospect”, he says, “I must have been unwell for a few months. I had a heart attack in the 1990s, but had been so well since that I hadn’t thought anything much about my heart.” By the time he was admitted, he was almost bed-bound and had to sleep upright in a chair for the previous week. “It was awful,” he says with a chuckle. By the time I reached hospital, I couldn’t really do anything for myself, and it was my son who made me call for an ambulance”.

When he arrived at hospital, John was taken to the medical assessment unit where he was assessed, received a chest X ray, an ECG and some blood tests, and was immediately started on intravenous diuretic treatment. A key blood test was his b-type natriuretic peptide, a hormone released by the heart when it fails. In John’s case, BNP level was 15 times higher than normal for his age, confirming the diagnosis of heart failure. Next morning, he was reviewed by the cardiology team and transferred to the cardiology wards. “I was given a drip for 24 hours a day and confined to my bed”, he says. “Every day the doctors came round to see me to see how I was getting on and to change the treatment.”

During his stay, John lost 15 litres of fluid (as excess urine), meaning he lost 15 kg in weight. He had an echocardiogram (an ultrasound of his heart) which showed that the left ventricle, the main pumping chamber of the heart, was severely damaged by his previous heart attack. He was discharged after 10 days taking a combination of an oral diuretic and three disease modifying drugs, namely a better blocker, and ACE inhibitor and a mineralocorticoid receptor antagonist.

“I was really worried about going home because I had been so ill”, says John, “but they were really good to me. There was a discharge liaison nurse who was a point of contact if anything went wrong. I was given an appointment to see the Professor two weeks after I went home, and they put a monitoring machine in my house for me. I have to weigh myself daily and take my blood pressure so that they can see how I am getting on”. In addition, he was supported at home with regular visits from the heart failure community nurses.

It is now 6 months since John was admitted. The doses of his medication have gradually been increased, and the home monitoring system (telemonitoring) has been withdrawn as he is doing so well. He has been referred to the specialist heart failure rehabilitation team and has been doing supervised exercise sessions three times a week.

“The main thing for me was that I felt safe,” he says. “All the time, I knew the team was looking out for me, and who I needed to call if I ran into trouble.”

John was looked after by Professor Clark at the Hull and East Yorkshire NHS Hospitals Trust. The Trust has developed a heart failure team that allows close supervision of patients. The combination of expertise that the team has allows the patient to see the right person at the right time, with all the components of the care package linked together in the best interests of the patient.