



Position Statement on Virtual Wards

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British Society for Heart Failure (BSH) position

The BSH broadly supports the use of virtual wards for heart failure (HF) patients, as an alternative to hospitalisation for eligible patients in units with sufficient HF expertise and specialist staffing and for enhanced post-discharge support (early supported discharge). With appropriate case selection and data gathering, this may lead to beneficial outcomes for both patients and healthcare systems. While the principle of virtual wards is welcomed, there must be a commitment to ensure that specialist care is not diluted and that the workforce is supported in numbers to deliver this care safely.

Background

The Government is set to announce plans to treat more than half a million patients a year in “virtual” hospital wards as part of a reform of urgent and emergency care. The Department of Health and Social Care has said about 50,000 elderly and vulnerable people could receive tailored support at home each month, as part of a strategy to shift some NHS care out of hard-pressed hospitals. Around 3,000 virtual beds are due to be created before next winter.

The Health Secretary has claimed that up to 20 per cent of hospital admissions are avoidable with the right care in place. He added that virtual wards would help “ease pressure” on stretched A&E services by expanding the care provided in the community so that each month up to 50,000 of the most vulnerable, frail and elderly patients could be better supported to continue living independently or recover at home. Those with heart failure count in this cohort.

Virtual wards have the potential to reduce the number of readmissions to hospital. Unplanned readmissions of people within a short time after discharge from hospital are detrimental to both patients, including those with heart failure, and to healthcare systems. For patients and carers, lack of support for managing recovery at home has the potential to increase the risk of complications requiring readmission.

The Government’s plan is to build on the virtual wards already in place in the NHS, which see patients treated from home while being monitored by clinicians either through daily visits or video calls. It will see the use of urgent community response teams scaled up, with hopes to increase the number of patients seen by healthcare staff.

Virtual Wards - definition

Virtual ward care provision is defined as being similar to hospital care provided by an interdisciplinary team, coordinated over time and delivered either in person at home, via telephone

or at a local clinic. Care can include telemonitoring or case management with clear multidisciplinary oversight.

Heart failure virtual wards (HFVW) provide an opportunity to manage decompensated heart failure patients in the community with specialist support using digital technology, as an alternative to hospitalisation. Heart failure patients with reduced ejection fraction (HFrEF) and those with preserved ejection fraction (HFpEF), have multiple co-morbidities and as such require close care. There have been some reported survival gains and reduction in rates of unplanned readmission for heart failure, but more research is needed.

What is current guidance on this issue?

Existing NICE guidelines on chronic heart failure management (2018) recommend people with heart failure should generally be discharged from hospital only when their clinical condition is stable and the management plan is optimised. Timing of discharge should consider the wishes of the person and their family or carer and the level of care and support that can be provided in the community. To reduce the likelihood of readmissions, it is recommended that these patients are reviewed within two weeks of discharge to consolidate care received and management changes made during admissions and optimise HF therapies. There is no NICE specific guidance on the use of virtual wards for heart failure patients. However, over the last decade, significant expertise and evidence has been accumulated in the UK and abroad demonstrating the safety and efficacy of managing patients with acute decompensated HF with ambulatory or outpatient intravenous diuretics in heart failure specialist units.

Considerations

Retention of Specialist Care

Due to the complexities of managing heart failure patients, their care should remain under specialists even in a virtual ward setting. The [National Heart Failure Audit](#) consistently demonstrates that HF patients have better outcomes under the care of a specialist.

Safe Staffing Levels

The BSH and the [Getting It Right First Time \(GIRFT\)](#) cardiology report recommend 2-4 whole time equivalents nurses per 100,000 population, to cater for patients with HF (this includes those with HFpEF.)

There are sadly very few services in the UK that meet the recommended safe staffing levels.

It is therefore clear that existing HF staff would be required to support a roll-out of virtual wards to support eligible patients which could potentially incur delays for other HF patients. Delays in accessing HF specialists and therapies are associated with a decrease in quality of life and an increase in hospitalisations. This would be additionally burdensome on an already overstretched and understaffed system. The virtual ward model for heart failure management therefore should not replace the need for sufficient number of heart failure specialists (nurses, pharmacists, rehab team and doctors).

Data collection

It is vital that data is collected to analyse the effect of virtual wards on outcomes of those with heart failure, including mortality, readmissions and patient-reported outcome measures.

Patient Understanding and consent

Explicit consent will need to be sought from patients as this model is different from being in a hospital bed. The pros and cons of either model (virtual ward versus hospitalisation) must be clearly articulated to patients, and patients should be provided with a patient information sheet documenting the main differences between places of care.

Digital exclusion and health literacy

There remain significant challenges to tackle digital exclusion and health literacy to increase the proportion of heart failure patients that can be managed remotely, and this will require further consideration.

Co-ordination of Care: Case Study

The practical components of providing virtual ward care as an alternative to hospitalisation in suitable patients or for enhanced post-discharge care for people with heart failure are becoming clearer. At a local level, it may involve coordination of care such as described in the properly funded and resourced pilot study in Liverpool which has just received ongoing funding from the ICS.

Following:

Dr Rajiv Sankaranarayanan, Liverpool University Hospitals NHS FT & Merseycare NHS FT Heart Failure Virtual Ward:

- 278 patients (median age 73, range 28-96 years) with acute decompensated heart failure in the Liverpool heart failure virtual ward (70% required IV diuretics and 30% escalation of oral diuretics), managed since May 2022.
- Patients with confirmed acute decompensated HF are referred from a variety of sources (A&E, AMU, hospital wards, community HF teams), consented and onboarded to the HF virtual ward with the HF passport APP if suitable (exclusion criteria to ensure the highest risk patients are excluded – haemodynamic instability, acute coronary syndrome, pulmonary oedema, arrhythmias with haemodynamic instability, other medical conditions which require hospitalisation, complex social issues, inability of patient or carer to provide daily readings).
- Outpatient intravenous diuretics are delivered as a bolus (4 mg/mt) using an elastomeric pump in an outpatient/ambulatory HF Unit or in patients' homes (for frail patients) and blood tests performed using point of care testing kit.
- All patients are under the care of a named HF consultant cardiologist who conducts daily virtual ward rounds and is available for advice from 8AM to 8 PM 7 days a week.
- Other team members include HF specialist nurses, telehealth hub nurses, home IV diuretic nurse, pharmacist, and community rapid response team.
- The service runs from 8am-8pm 7days a week and there is also a multi-speciality regional MDT.
- Patients feeling unwell with amber/red flag symptoms or signs can be reviewed with rapid response service at home/ community or ambulatory HF Unit. Patients feeling unwell with red flag symptoms or signs out of hours are advised AED attendance.
- Results have shown good patient satisfaction, 50% reduction in 30-day all-cause readmissions and 70% reduction in 30-day mortality.

HF Virtual Ward patient case study (example):

A 67-year-old with a background of Ischaemic Heart Disease, inflammatory bowel disease and decompensated HFrEF was referred to the Liverpool HF virtual ward by her community HF specialist nurse. She was treated with ambulatory outpatient bolus intravenous diuretics and medications optimised to quadruple HFrEF therapy. She remained symptomatic and her ECG showed LBBB with a QRS duration of 150 msec. She underwent CRTD implant whilst on the virtual

ward and was discharged to the long-term conditions remote monitoring segment after 21 days on the HF virtual ward and improved symptom status.

British Society for Heart Failure recommendations:

- The heart failure virtual ward is not a substitute for hospital level care for people with heart failure with haemodynamic instability, pulmonary oedema or who require additional monitoring and interventions.
- Development of local virtual ward processes must include the lead heart failure clinician with clearly defined clinical inclusion and exclusion criteria. The assessment of the social determinants of health that could impact the safety of patients enrolled in virtual wards should be considered.
- Patients with heart failure in the virtual ward must have a care plan developed by a heart failure specialist and implemented by a team with expertise in heart failure.
- Assessment of safe staffing requirements for heart failure virtual wards is essential and should not compromise the care provided by existing heart failure services to outpatients.
- To determine the safety and effectiveness of virtual wards, an audit programme for evaluation should be embedded from the outset with pre-defined reviews to assess impact on outcomes (quality of life, hospitalisation, mortality).
- Data collection to assess outcomes from the outset is advised.

