



HEART FAILURE & VIRTUAL WARDS

DEFINITIONS - HEART FAILURE

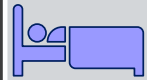
- When the heart is not able to pump nutrient and oxygen rich blood around the body. Many different conditions can cause it.



Shortness of breath (SOB) when you're active or resting



Swollen feet, ankles, stomach and around the lower back area



Extreme tiredness and fatigue



Dizziness, loss of appetite, palpitations, cough

Many causes can lead to heart failure, and it is a long-term (chronic) conditions. Sometimes it can deteriorate and result in an hospital admission



DEFINITIONS

VIRTUAL WARD

- To support patients unwell or at risk of deteriorating patients stay at home, or to discharge patients sooner from hospital.
- Healthcare professionals can continue to monitor your health readings (blood pressure, pulse, oxygen levels) after discharge at home using technology
- **Advantages**



Comfort of your home



Less risk of hospital acquired infections



Personalised care, the readings are reviewed live by experienced nurses

■ **Disadvantages**

Reliant on technology use, possibly a supportive family, health inequalities, communication barriers

EQUIPMENT



- Smart-phone (yours or given by the company) – requires the app to be downloaded
- Tablet (like an iPad) – will come with the app installed



- Blood Pressure Monitor



- Portable electrocardiogram



- Combination of digital remote monitoring and face-to-face treatment. At present there are 11 companies providing the NHS with technologies – depends on what hospital covers your area.



- Pulse oximeter that reads the oxygen level and the pulse through your finger (usually connects to the app for the transmission of the data)
- Thermometer



- Spirometry (for respiratory conditions)



- Weighting scales

FEATURES

Clinician features

- ✓ Alarms are sent to us when for example Blood Pressure is too high or too low for what we have set as “normal”
- ✓ We can communicate via messages, telephone or video-call
- ✓ We can send reminders for you to submit readings
- ✓ Machine learning (AI) to learn based on data to inform patients and clinicians

- Mixture of options for healthcare professionals and patients – these vary A LOT between companies offering the service

The screenshot displays the 'doccla' patient portal interface. On the left is a sidebar menu with options: 'Main Menu' (with a close icon), 'Overview', 'Find patient', 'Patient Menu' (with a large black redacted area), 'Patient groups: NWL - Community Ealing Heart Failure Remote Monitoring', 'Metadata:', 'Responsible: NWL - Community Ealing Heart Failure Remote Monitoring', 'Compl. questionnaires', 'Add measurements', and 'Basic data'. The main content area shows a 'Period' filter set to '1 month', a dropdown for '- All questionnaires -', and a timestamp '08/01 10:11'. Below this is a series of questions with answers:

Have you felt short of breath today?	No
Are you short of breath while sitting?	
Are you short of breath while getting washed/dressed?	
Did your breathing keep you awake last night?	No
Did you need extra pillows?	
Did you cough during the night or in the morning?	
Are your ankles or legs swollen?	No
Can you manage the stairs?	Yes - Normal
Have you noticed any change in the distance you can walk?	Yes - Normal
Have you experienced any chest pain?	Yes
Describe the type of pain	Slight pain now and again, nothing too bad

FEATURES

Patient features

- ✓ Questionnaires – sometimes disease specific, covering symptoms, mental well being, free type in
- ✓ Free-type in feedback
- ✓ Education videos, leaflets or text
- ✓ Video, phone, picture uploading
- ✓ Patient reminders
- ✓ Access to 7 day week support, sometimes 24/7

- Mixture of options for healthcare professionals and patients – these vary A LOT between companies offering the service



FREQUENTLY ASKED QUESTIONS

Is it safe?

- ✓ Appears safe, our local experience shows very little re-admissions to hospital during the virtual ward period
- ✓ Nationally the data supports this

Is it better than hospital care?

- ✓ In some cases yes, when you don't need to be monitored 24/7
- ✓ Overall, we can't say the way we usually measure these things take a long time and involves recruiting patients to studies
- ✓ The 11 providers don't help

Is it just to free up the beds in hospital?

- ✓ Not at all, compared to the amount of patients that are in hospital at an point in time, only a few meet the criteria and that are strict pathways to ensure this

Who usually gets to be enrolled into a virtual ward?

- ✓ In the NHS, patients with long-term conditions such as Chronic Obstructive Disease (COPD), Heart Failure, diabetes or parenteral antimicrobial therapy