Remote Monitoring in Heart Failure – Does it Improve Care in a Community Setting?

Rebecca Hyland, Heart Failure Nurse Consultant, Clinical Lead for Community Heart Failure Service, Wiltshire Health and Care.

Introduction

Heart Failure is a complex syndrome which has a significant impact in NHS resources, the patient and their family.

This quality improvement project forms part of a national project examining the role of remote monitoring for patients with all types of heart failure. We will me measuring quality of life during the 6-month monitoring, and whether key outcomes such as reduced hospitalisations, improved medication titration and patient engagement.

The Issue

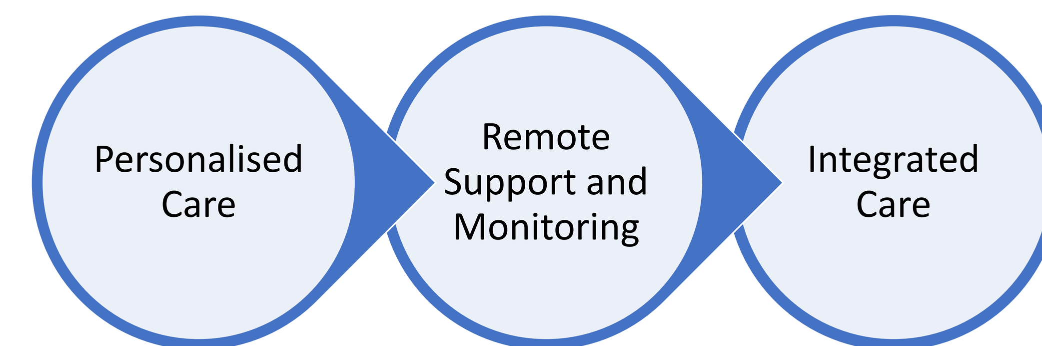
- Heart Failure (HF) is a complex clinical syndrome where the heart does not adequately pump blood around the body.
- HF affects around 900,000 people in the UK but is expected to rise due to an ageing population, more effective treatments, and improved survival rates after a heart attack [1].
- The burden on the NHS is significant, accounting for 1 million bed days per year, 2% of the NHS total, and 5% of all emergency admissions to hospital [1].
- In the Banes Swindon and Wiltshire Integrated Care System, 15,000 people have a HF diagnosis, 8685 admissions, costing £21,111,701 [2].
- A new Wiltshire wide community HF service started April 2022; aim to care for all patients with HF within the county

References

[1] NICOR www.nicor.org.uk
[2] Fighting Failure www.fightingfailure.co.uk/heart-failure-in-your-area
[3] NHSE www.England.nhs.uk/nhs-at-home/managing-heart-failure-at-home
[4]NHS Futures https://future.nhs.uk/NHSatH

Managing HF@Home Project

This NHS England project aims to support people to manage their condition using remote monitoring, to minimise unnecessary face to face reviews, avoiding hospital admissions and readmissions, and enhancing patient autonomy. This project has three core elements: [3].



The process to taking part included:

- Submission of expression of interest
- Interview with NHSE

My service was selected as one of 10 sites around England; a mix of secondary, community and primary services will take part in the 6-month long project, each involving at least 50 patients which will further enhance the knowledge of how remote monitoring supports people to live well with HF.

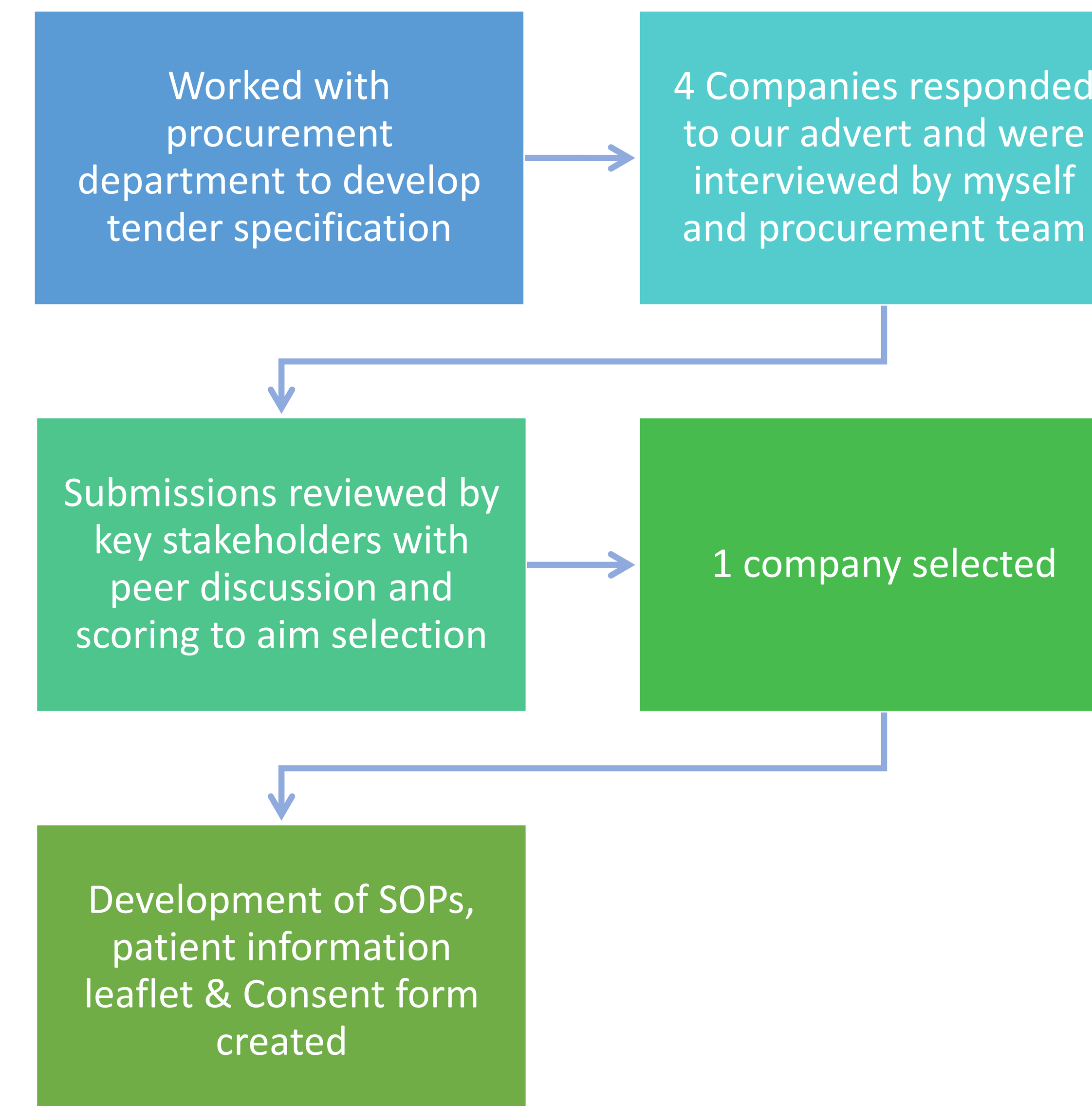
We received £100,000 to implement this project

My service supports patients with all types of HF, and Wiltshire has a large geographical area, so I hope to show that through the utlisation of digital tools, we can up titrate key prognostic medication promptly, and identify people who are decompensating, responding accordingly preventing admission and poor outcomes.

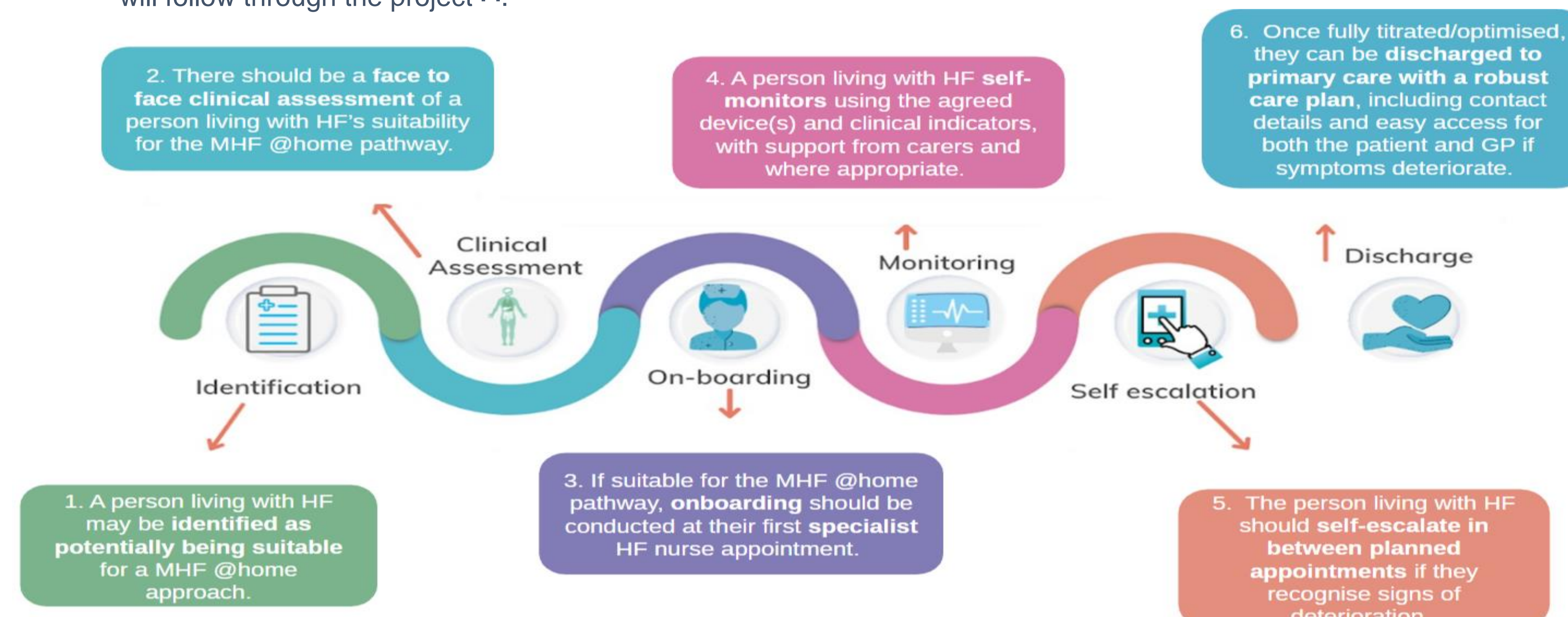
The diagram below illustrates the pathway patients will follow through the project [4].

A New Model of Care

As an organisation, there was no inhouse remote monitoring available, so we had to initiate a tendering process. This involved developing a specification of essential and desirable monitoring variables.



Equipment is now available, we will measure BP, HR, and weight, displayed on website portal rated red amber green according to preset and personalised to the specific patient



Educational Component

The Managing HF@Home Project, enabled a proportion of the funds obtained to be used for continued professional development; enhancing knowledge to enable and enhance personalised care.

Discussion with the team lead to an educational plan which included:

- Advanced skills such as physical assessment or decision-making skills
- Advanced communication skills in ends stage disease
- Cardiac rehabilitation skills

Evaluation

Key measurements will be taken at baseline, three-month and six-month intervals including:

- Patient reported outcomes using EQ5D, KCCQ and P3CEQ quality of life tools
- All cause primary care, community and outpatient contacts
- All cause A&E, admission and 30 day readmission episodes
- Details of interactions with cardiac rehabilitation social prescribing and social services.
- Data on Age, Gender, ethnicity, rurality and deprivation
- Type of HF and NYHA scores

It is hoped that information collected from this project will not only support a national model of remote care for patients with HF, but also develop services at a local level, sharing experiences with NHS@Home teams.