

Virtual Ward (also known as Hospital at Home)

Our work supporting North-West England

Overview

Working with trusts and clinical teams in the North-West of England to establish, implement and maximise Virtual Wards. We effectively helped teams review patient flow, worked with acute systems to identify areas for improvement, and created pathways to support patients outside of the hospital.

Name

NHS England North-West comprising:

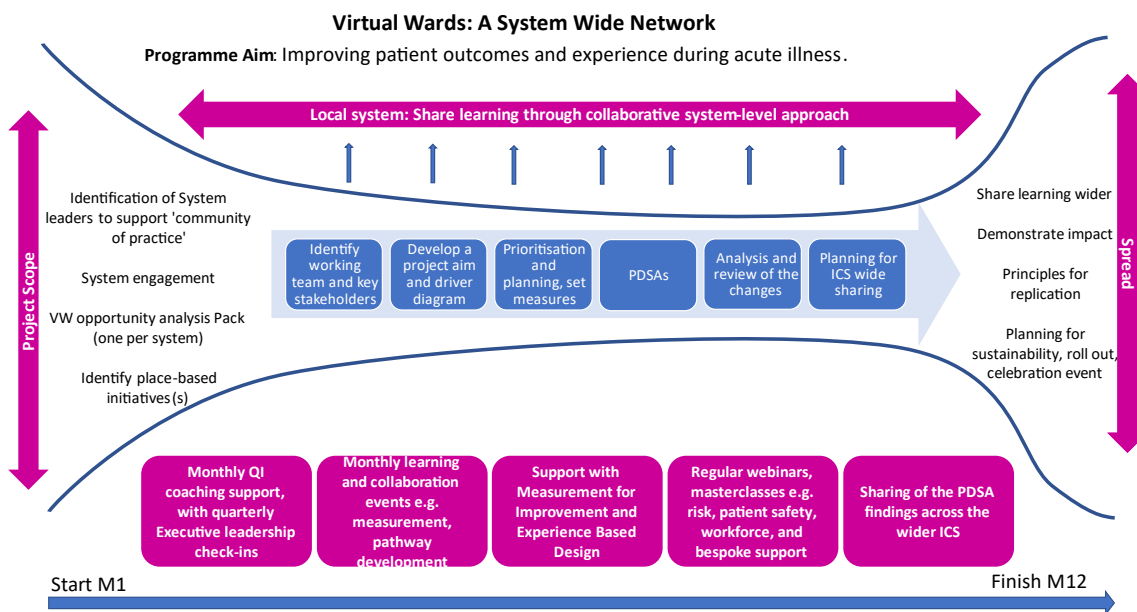
1. Blackpool Teaching Hospitals NHS FT/ Fylde Coast
2. Northern Care Alliance NHS FT (Four care organisations comprising Oldham, Salford, Fairfield / Bury and Rochdale)
3. Countess of Chester Hospital NHS FT
4. Lancashire & South Cumbria NHS Foundation Trust / Lancashire Teaching Hospitals NHSFT
5. Liverpool University Hospitals NHS FT
6. Mid Cheshire Hospitals NHS FT
7. University Hospitals of Morecambe Bay NHS FT
8. Warrington and Halton Teaching Hospitals NHS FT

Core components/principles

Our work was undertaken with reference to NHS England guidance and supporting information found on their website and on the excellent NHS Futures Platform (see link below) [Virtual Wards Network - FutureNHS Collaboration Platform](#)

What we did (the process)

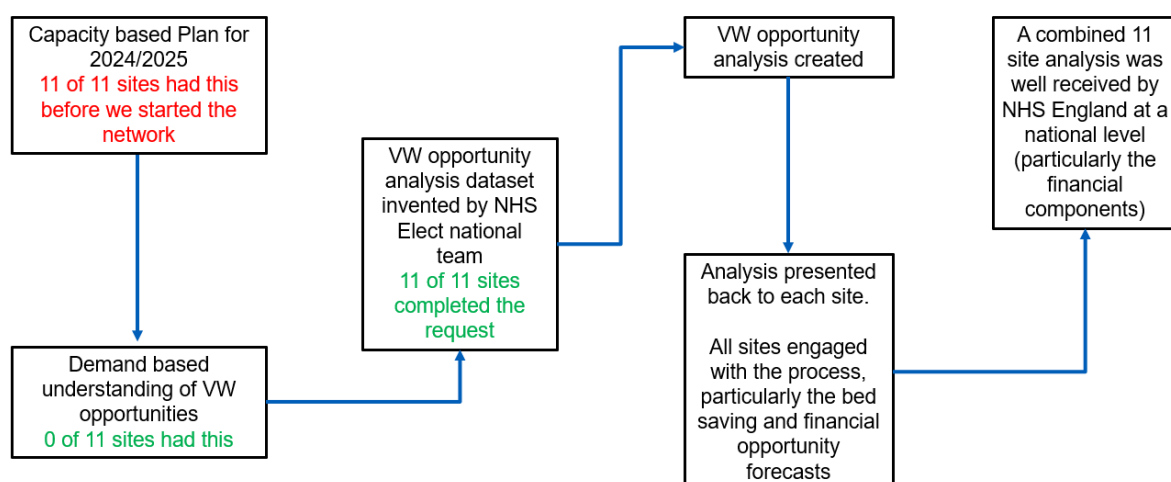
This is summarised in the schematic below and described in more detail on the following page:



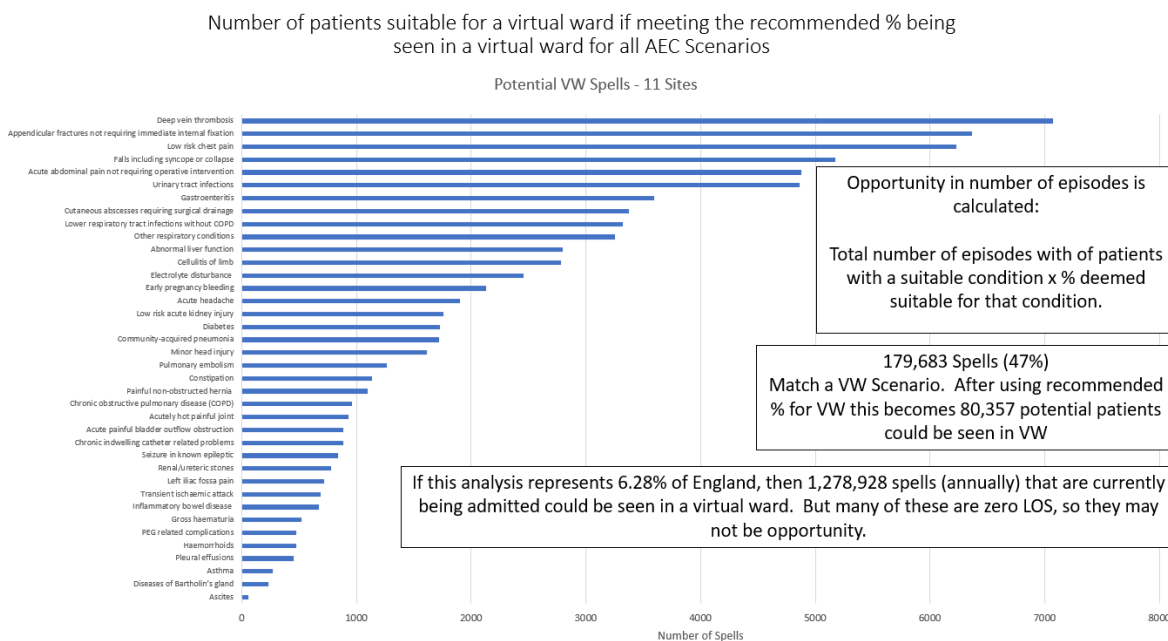
- **Initial diagnostic discussion** with each of the teams about their current service and plans and to agree on the best way of supporting them.
- **Undertook data analysis** of current hospital admissions that could be converted to a Virtual Ward and 'actual' virtual ward activity to review the case mix.
- **Discussed casefile reviews of patients who are identified as suitable for a Virtual Ward** to establish processes to manage them safely in a Virtual Ward environment
- **Supported mapping and developing pathways** usually comprising frailty, heart failure or respiratory
- **Ran a series of webinars and world cafes** with other systems on topics such as patient safety, risk management, workforce and data
- **Provided access to our virtual ward patient and staff experience based design tools (EBD)** supported by our analysis and report highlighting themes and suggested next steps
- **Offered clinical leadership to support service model change** and review practice working with individuals, teams or through local workshops /meetings
- **Provided measurement expertise** to support analytics and capacity demand studies and
- **Provided a QI coach** who kept in regular contact, providing links to all our resources and expertise as well as connecting to other teams and nationally recognised good practice.

What we achieved (outcomes/data)

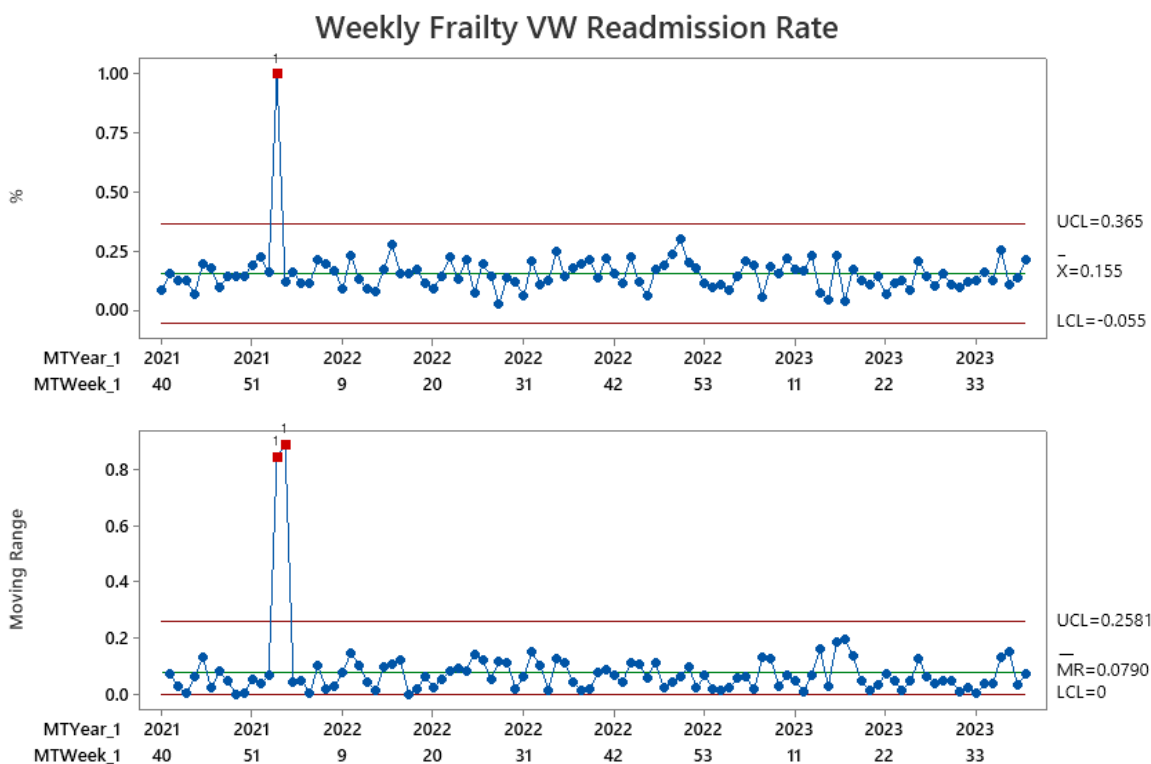
Our overall approach to data is shown in the figure below:



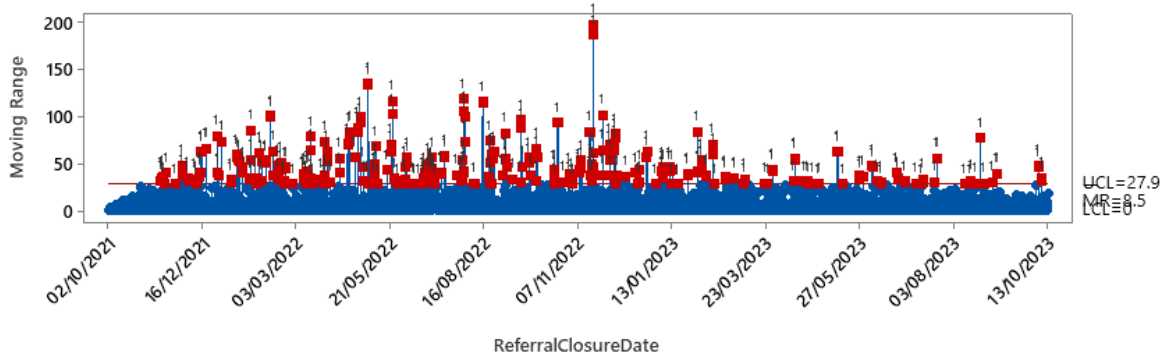
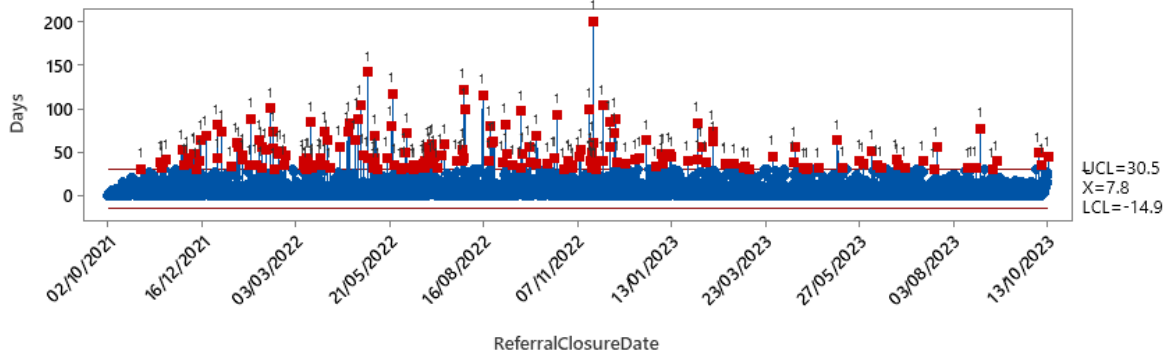
An example of more detailed opportunity analysis across all 11 sites is shown below. Each individual site also received their own version of this data across the main pathways to inform how we could best support them achieve their local plans and improvements.



Below are some examples of analysis undertaken for an individual site allowing more detailed analysis of virtual ward actual and potential activity covering readmission rates, LoS / discharge and the days between them.



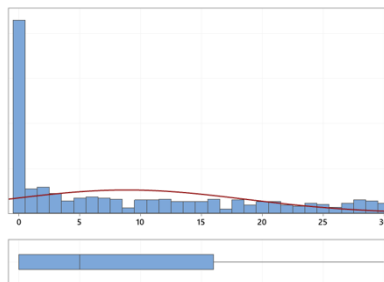
Frailty LOS (by Discharge Date) - Days



4665 admission over the 2 years

684 of these admissions were readmitted (to a VW or a hospital) (15%)

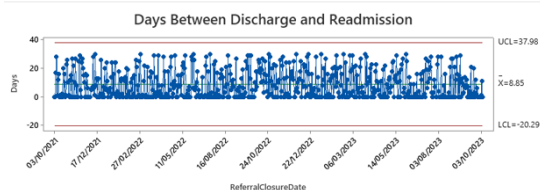
Days between Discharge and Readmission



Anderson-Darling Normality Test

A-Squared	38.52
P-Value	<0.005
Mean	8.8468
StDev	9.7167
Variance	94.4148
Skewness	0.774077
Kurtosis	-0.776651
N	633
Minimum	0.0000
1st Quartile	0.0000
Median	5.0000
3rd Quartile	16.0000
Maximum	30.0000
95% Confidence Interval for Mean	8.0884 9.6052
95% Confidence Interval for Median	3.0000 6.0000
95% Confidence Interval for StDev	9.2093 10.2837

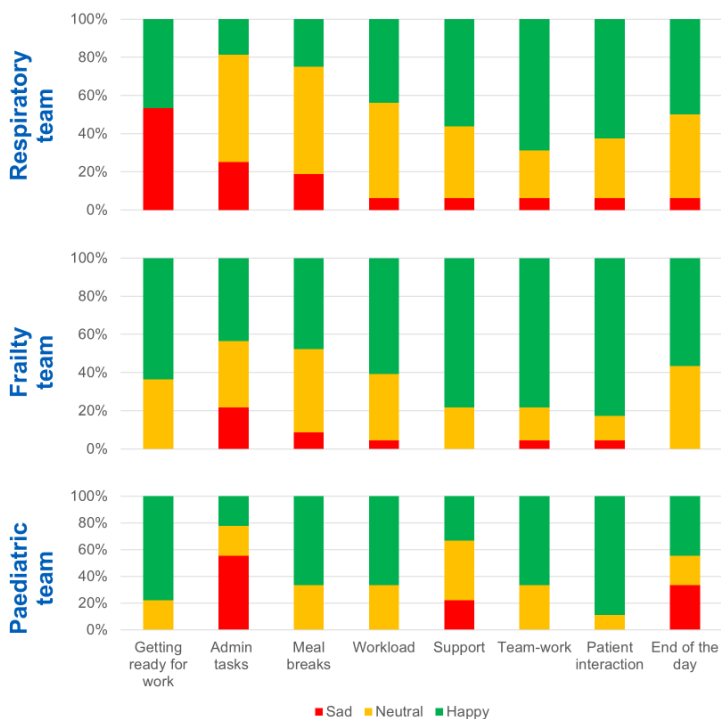
95% Confidence Intervals



Experienced based design

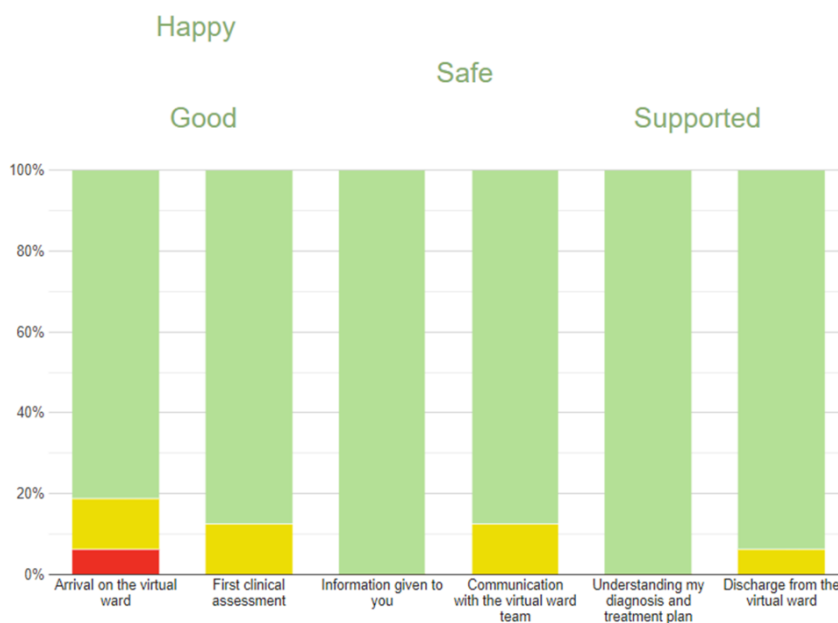
We also undertook patient and staff experience work using our Experience Based Design (EBD tools at both system and individual trust level). Below is an example of some staff mapping:

Overview of emotional maps



And an example of some patient experience mapping:

Patient Emotional Map



Summary

Using a quality improvement approach tailored to each system or site, we were able to:

- Help teams identify how they could increase their virtual ward / hospital at home activity appropriately using clinical data to inform priorities and plans;
- Make tangible differences in areas such as readmissions and individual pathways such as heart failure and respiratory care;
- Support teams improve data usage sustainably to underpin their proposals;
- Map current and proposed pathways to implement improvements;
- Share national best practice and share local experience through networking and events to address issues such as workforce development, patient safety and risk management;
- Map patient and staff experience to support each pathway's development and to improve the patient journey;
- Benchmark and influence national guidance based on our work.

Testimonials from staff and patient groups

“Extremely helpful. I feel there is a wealth of knowledge and experience which has been shared by organisations which are further along the journey and will be beneficial to future developments at UHMB.”

“Extremely helpful. As Virtual Wards were quite a new programme of works it was useful to hear how peers were progressing.”

“It was useful to hear other people's Virtual Ward experiences and how they managed thorny issues.”

“Shared knowledge reduced duplication of effort and gave food for thought to avoid pitfalls.”

Key system contacts

[Deborah Thompson, Managing Director, NHS Elect](#)

[Simon Griffiths, Director, NHS Elect](#)

[Matt Tite, Director, NHS Elect](#)