Welcome to the 8th NHS Virtual Wards Summit: Embracing Hospitals at Home!

17th June 2025
Etc venues Manchester, 8th Floor,
11 Portland Street M1 3HU

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Chair Opening Address

Dr Gurnak Singh Dosanjh
GP
LLR ICB

Keynote Speaker

Adrian Matthews
Consultancy Head of Yorkshire & Humber Region
NECS Consultancy

necs A care system support organisation

NHS

Integration and collaboration across NHS pathways and Virtual Care

Adrian Matthews, ChMC

Head of Yorkshire & Humber Region, NECS Consultancy

17 June 2025

Introduction

‘Be curious, not judgemental’

Context

“We must design for the way people behave, not for how we would wish them to behave”.

Donald Norman, designer

NHS 10-year plan ‘shifts’	Public tensions
Hospital to Community	Supportive of more care in primary and community, but anxious about potential reductions in hospital services
Analogue to Digital	Support greater use of data to improve health delivery, but considerable concerns about data sharing beyond direct care
Treatment to Prevention	Recognise role of government in helping us to be healthy, but no consensus about NHS role in providing preventative service

Delivering 3 shifts with virtual care

Hospital to Community:

Virtual Wards; remote monitoring; hospital at home; chronic disease management; long term condition management; medicines management through NHS App; virtual assessments and prioritisation; managing and monitoring health conditions from home

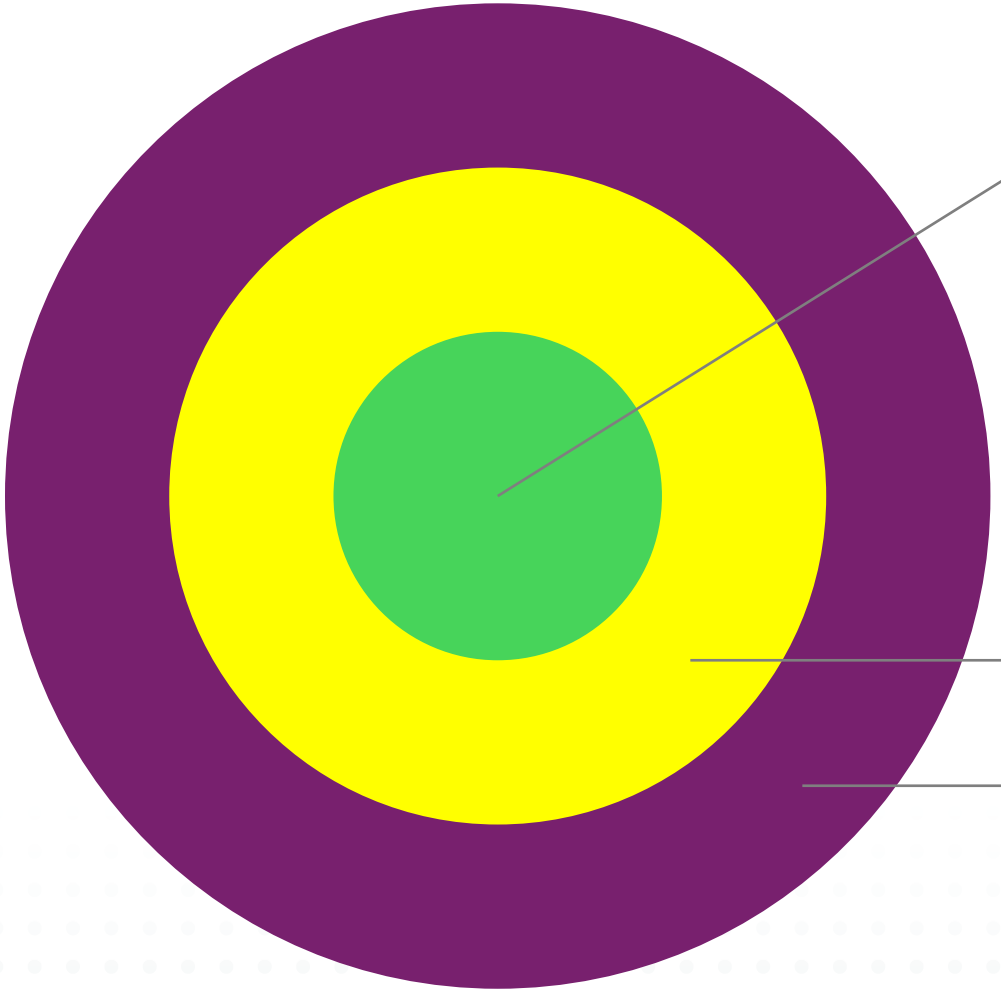
Analogue to Digital:

Utilising NHS app for better understanding of health data and self-management; data & digital infrastructure and integration; interoperability and information sharing

Treatment to Prevention:

Wearables; digital vaccinations; digital screening; at home diagnostics; treatment and support; integrated at home testing & remote early detection; digital health checks

Why is virtual care important



Why – Virtual Care benefits

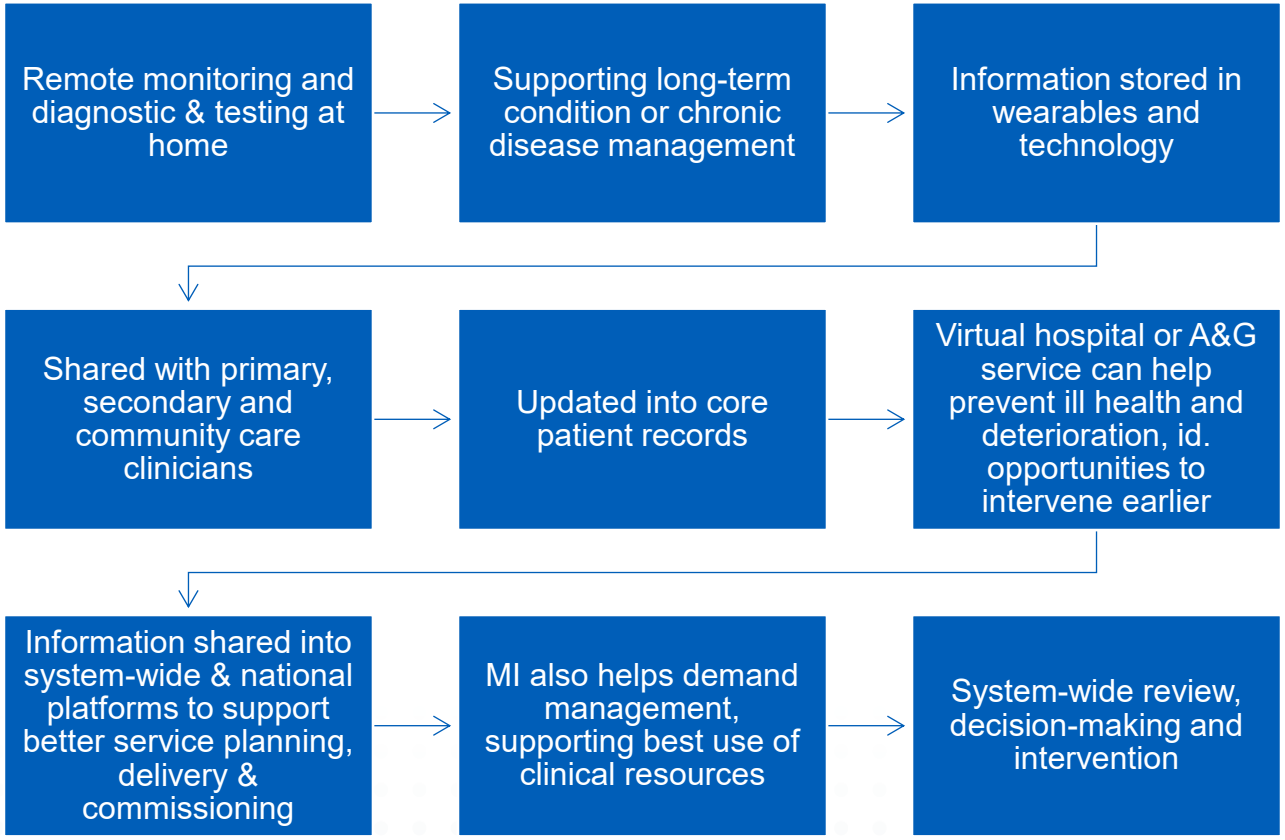
- Improve access to healthcare and specialists
- Convenient for patients
- Increases cost efficiency and effectiveness, reduces demand on other services
- Provides care continuity
- Improves patient engagement and outcomes
- Supports chronic disease and long-term condition management

How - Delivered through collaboration

What - Unlocked through integration

Integration in Virtual Care and NHS pathways

Provision of coordinated and seamless healthcare services across organisations



What is collaboration

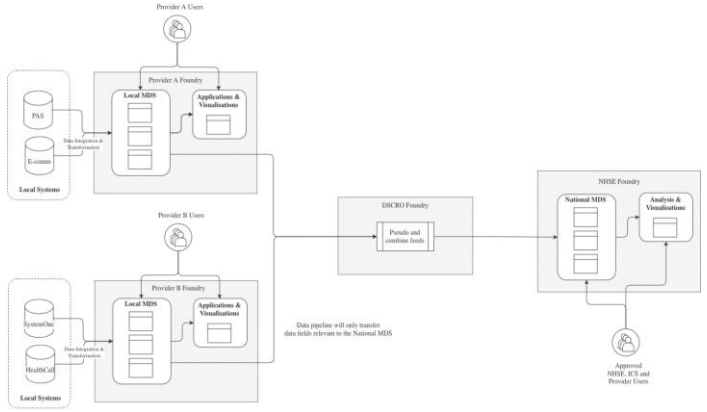
Formerly disparate teams and partners working together to deliver common goals

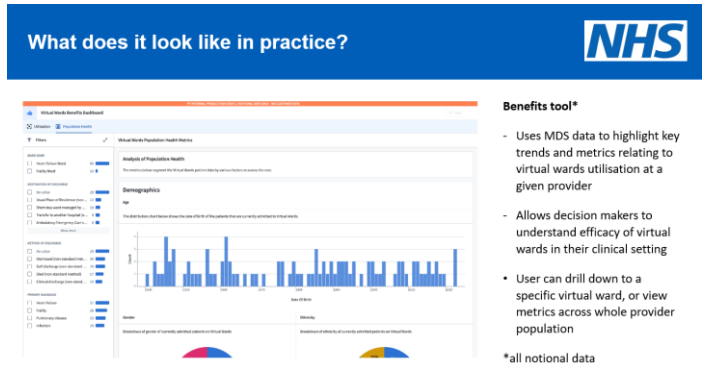
How - establish clear goals; define roles and responsibilities; encourage open communication; utilise collaboration tools; and foster a culture of trust and respect

Barriers to implementing virtual care	What do we need to do to implement virtual care
Systems don't t	Interoperable systems, secure information access across organisations and staff groups
Data i	Proactive data sharing and review
D re	Lean review of patient journeys and plan across teams, services and organisations
and app aches to t	Clear product and digital strategy, linked with above
t a syste	Shared purpose and closer cross-organisational working
d	Right IG frameworks and data tables across systems
time to	Create headroom for experts to deliver effectively
Do	Patient engagement to find out how this will work best
We don	A realistic workforce plan that we can action
Don't have ana nd issues or impact	Easily accessible management information and supportive analytics

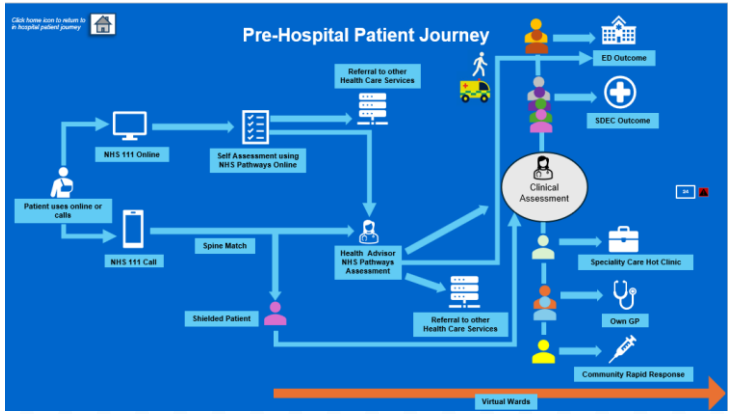
Examples

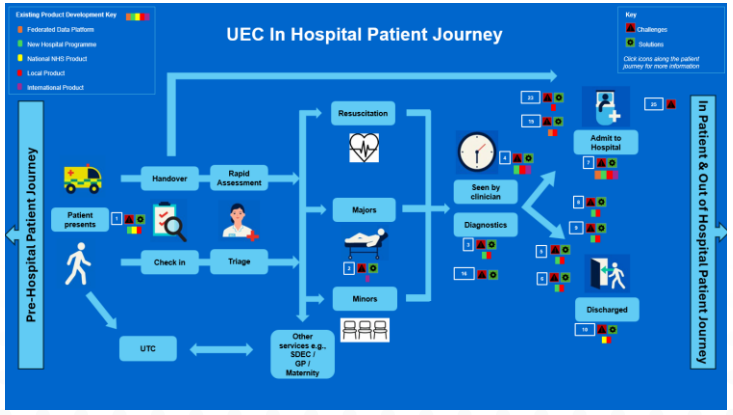
Virtual Ward Minimum Viable Product





Urgent & Emergency Care digital products roadmap





Conclusion

“People will forget what you said. They will forget what you did. But they will never forget how you made them feel.”

Maya Angelou, Poet, singer and civil rights activist

We can achieve many of the things we don’t think at first are possible, when we work together

Patient care, delivery and management, but also integration of data and results, impact, statistical analysis to improve services and outcomes

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Panel Discussion

Mrs. Clarisse Ann Lagman
Phlebotomy and Point of Care Testing Manager (Transformation and Delivery), Oxford Health NHS Foundation Trust

Esther Birrell
Lead nurse, Paediatric virtual ward
UHL University Hospitals Of Leicester NHS Trust

Alison Davis
Clinical Quality Improvement Lead
University Hospitals of Leicester NHS Trust

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Refreshments & Networking

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Chair Morning Reflection

Dr Gurnak Singh Dosanjh
GP
LLR ICB

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Case Study

doccla

Case Study

Rebecca Edwards: MRI H@H Acute Service Lead
&
Prasanna Rao-Balakrishna: Joint Medical Lead
MFT City-Wide H@H

Digital transformation supporting novel care delivery models

MFT Hospital at Home (Urgent Care in the Community)

Rebecca Edwards: MRI H@H Acute Service Lead

Prasanna Rao-Balakrishna: Joint Medical Lead MFT City-Wide H@H

Manchester University Foundation Trust

- MFT is one of the largest trusts in the country (> 2.5 million patients per year).
- At one time Manchester Royal Infirmary has 726 inpatients on average.
- Increasing numbers of patients are presenting to our hospitals, leading to real challenges with resources.
  - Poor patient experience & outcomes
  - Impact on flow of patients
  - Impact on staff experience
- **Care at Home** is not a new concept but instead is evolving, where care that would traditionally be delivered in an inpatient setting is now able to be done at home.
- The opportunities to care for patients at home who would normally be in hospital is endless:
  - ***it just requires a different mindset***
- Supports new NHS Urgent and Emergent Care Plan June 2025

Evolution of the MRI Hospital at Home service

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April 2022 → Dec 22 → Sept 23 → April 24 → 2024-25 → 2025 → **Now**

- MRI Acute Hospital at home established. 2 staff members working Mon-Fri 8-4
- Expansion of core clinical pathways for streamlined H@H care i.e. HF, AF, post surgical
- Expanded regular staff base to allow opening 8am-8pm, 7 days/week
- Community H@H established, based within central MLCO
- Access to timely investigations/ imaging agreed formally
- Closer working between acute and community teams, creating one "hospital at home"
- Over 1800 patient cared for remotely, with overwhelmingly positive patient feedback, optimisation of patient care and reduced reattendance rates
- **Urgent Care Community Division** (integrated community offer: H@H, Crisis response, D2A, IV therapy, Intermediate Care, single point of access, SPCT)

  Step up from community services, care homes, GPs
  Step down from ED/ SDEC and inpatient areas

Considering the possible…

Always ask if the patient can receive their care closer to home ?

NHS England

‘Step up’ and ‘Step down’ models

Step up

Step up models provide an alternative to admission to hospital for acutely unwell or deteriorating patients who can be offered the choice between being treated at home or in hospital.

Patients can be ‘stepped up’ to a virtual ward service by primary or community care, from single points of access (SPoAs), same day emergency care (SDEC) or emergency department (ED).

Step down

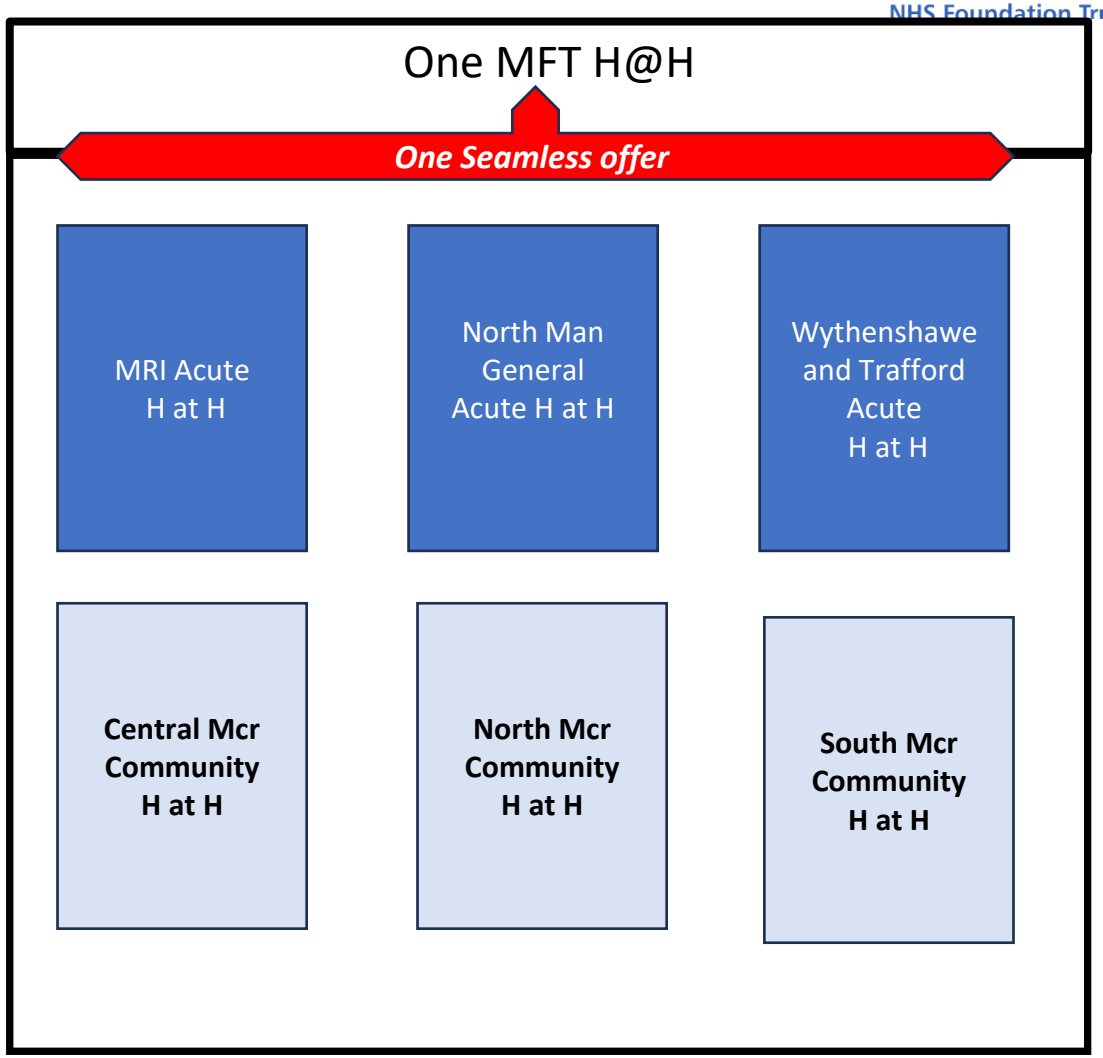
Step down models facilitate earlier transfers from inpatient wards by enabling patients who are not medically optimised for discharge to continue to receive medical treatment, oversight and diagnostics at home.

Patients can be ‘stepped down’ from hospital inpatient wards.

Source: Getting is Right First Time (GIRFT) Making the most of virtual wards, including Hospital at Home Practical guidance for clinicians to maximise use of virtual wards for the benefit of patients (https://gettingitrightfirsttime.co.uk/wp-content/uploads/2024/09/FINAL-Making-the-most-of-virtual-wards-September-2024-update.pdf)

MFT H@H

- Started as locality individual services
- Developed into a City-wide offer
- Moved into one locality model
- Robust telemedicine protocols embedded within care
- Remote vital sign monitoring (DOCCLA): continuous and intermittent
- Timely face to face assessment, intervention care and support in the home or via SDEC services
- Wrap around care at home by the MDT (Geriatricians, GP's, ACP's, Nurses, physiotherapists, occupational therapists, social workers, pharmacists, and speciality team input)



Hospital at Home Offer: Core Components

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Continuous and intermittent vital sign monitoring.	Virtual MDT Board Rounds.	Key routes of escalation of those requiring urgent medical review.	Consultant /GP review in the home or specialist consultant virtual support	Social support in the home
Therapy support at home.	IV therapy /Sub Cut Fluids (Diuretics/ ABX) in the home.	Daily telemedicine clinical assessment via telephone or video.	Nursing care in the home	Pharmacy support in the home

National Ask: is this the whole picture?

NHS England key focus is that of 3 specific defined pathways:

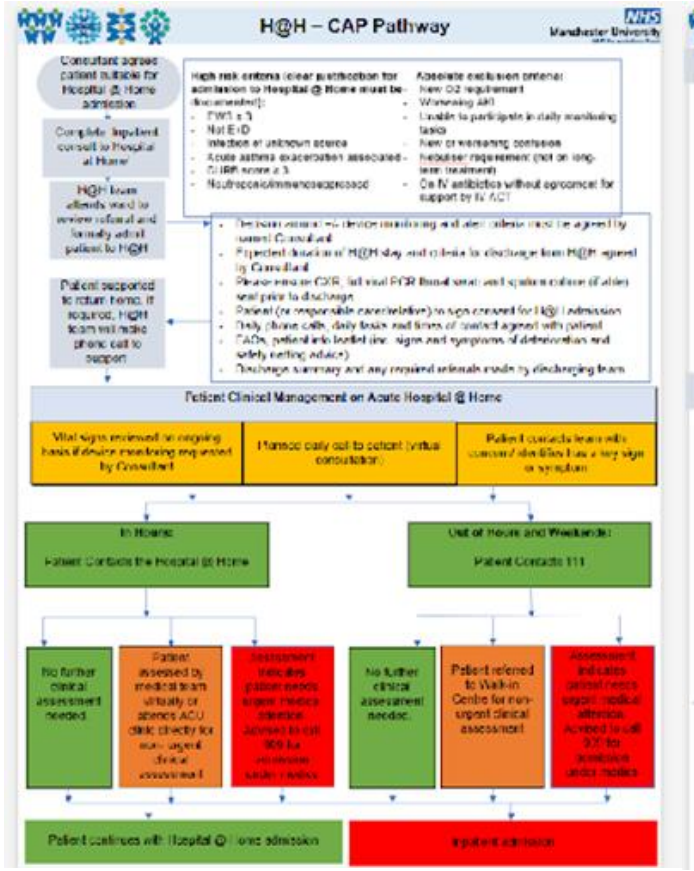
1. Frailty
2. Heart failure
3. Acute respiratory infections

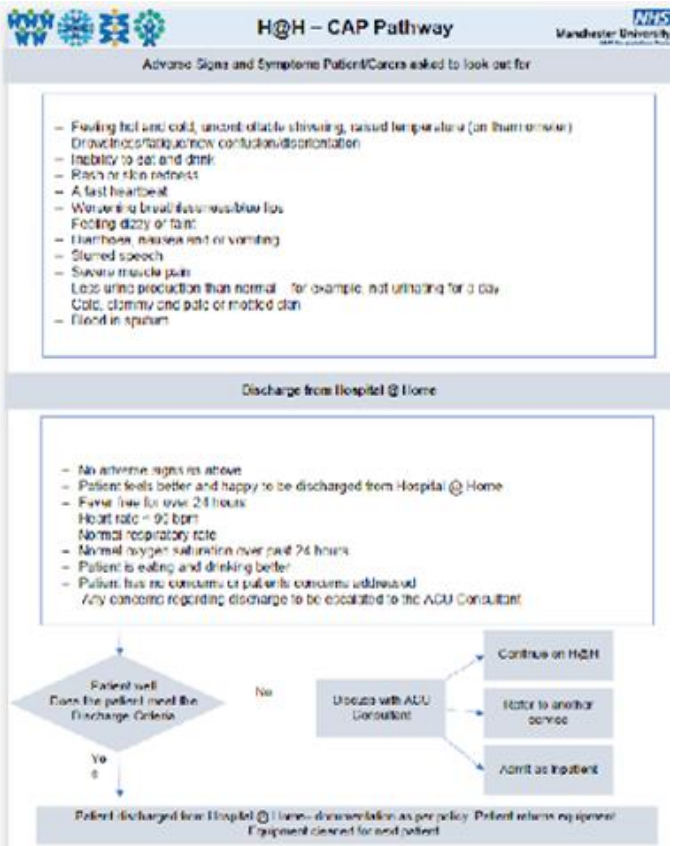
- MFT have expanded the scope beyond the national ask
- flexibility helps patient flow and maximizes opportunities
- Provide a diverse and inclusive offer for our population groups across Manchester
- MRI v Wythenshawe v North Manchester – includes similarities and variation in population groups
- Standardisation of the offer is key whilst ensuring local patient populations needs are met

Formalised Pathways

Current formalised pathways

- Frailty
- CAP
- Respiratory Virus
- General Infection
- AF
- Heart failure
- COPD
- Covid
- Renal overload
- Hypertension





We do much more……..

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- Frailty
- Abdo pain
- Acute hepatitis
- AF
- Apical pneumothorax
- Asthma
- CAP
- Covid
- Cellulitis
- Chest pain
- Heart failure
- Decompensated liver disease
- Constipation and hyponatraemia
- IECOPD/NIECOPD complex
- Diverticulitis
- DVT

- Electrolyte abnormality
- Gastroenteritis
- Flu
- Asthma and Flu
- HIV and Flu
- Hypertension
- Infection
- Viral illness
- LRTI
- Diarrhoea
- Neutropenic sepsis
- Urosepsis
- Tonsillitis
- Stroke
- Sinusitis
- Rash

Planned Expansion of Scope

- Surgery (Pre and post op)
- Pancreatic cancer surgery
- Reactive seasonal care
- IBD
- Trauma

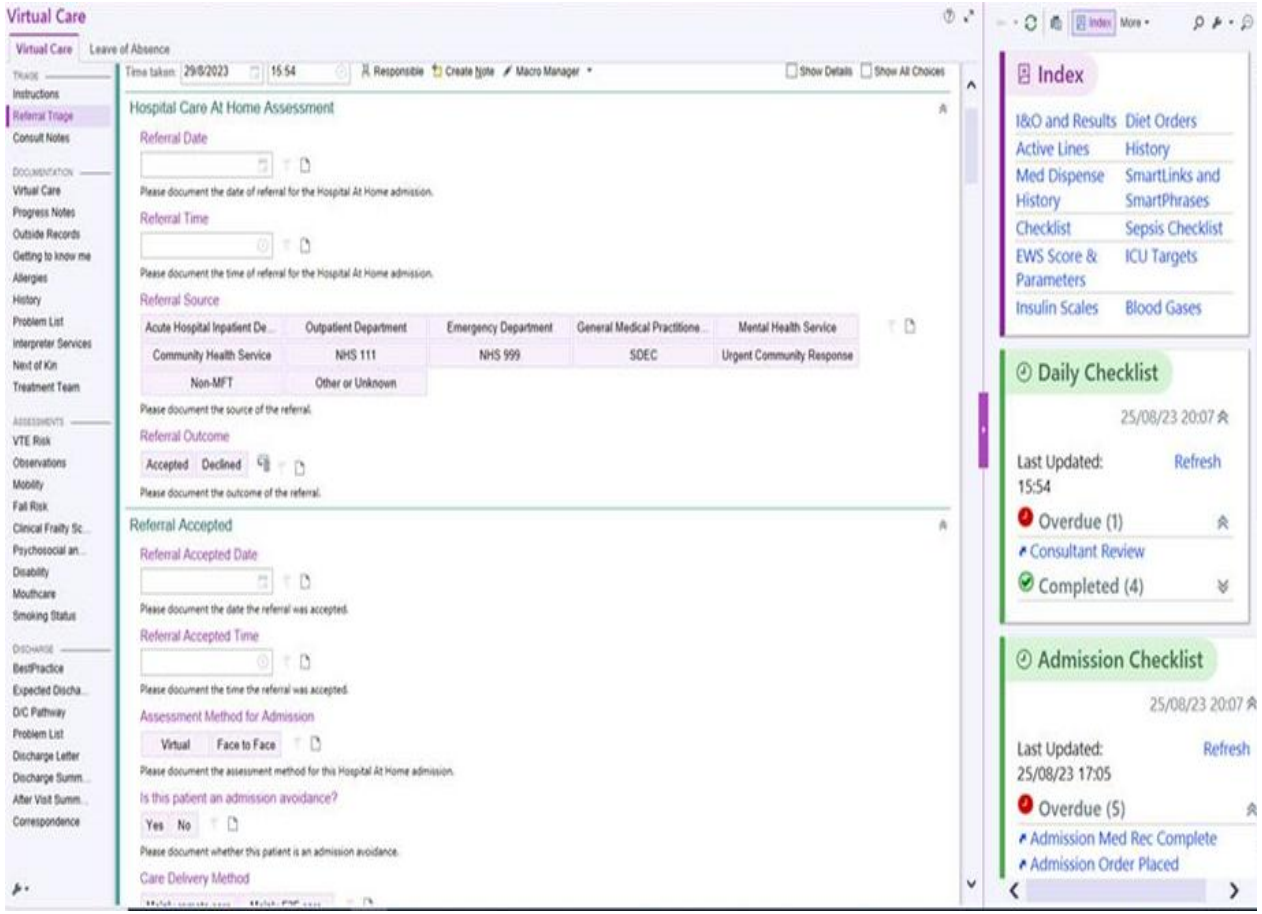
Digital Systems

Challenges:

- No EPR system has H@H across acute, community and primary care boundaries
- Most EPR systems are only designed for inpatient OR outpatient
- Logistical challenges i.e. tests and investigations
- Managing data/reporting while upscaling model

How we overcame them:

- Working with EPIC to develop a bespoke Hospital at Home environment
- Ward manager comprehensive view of all activity on one screen
- One view for all H@H related activity
- Referral triage allows for smooth step-up procedures and improved data reporting capabilities
- Ability for hybrid working across teams



Workforce

Challenges:

- Service growth at pace
- New ways of working: Virtual care
- Digital integration
- Maintaining competence in clinical skills and knowledge whilst working virtually

Solutions:

- Embedded within SDEC clinical setting
- Ensuring ongoing development of staff and diversity of work (improving retention)
- Providing opportunity for progression i.e. OT/PT/Pharmacy/Nurse Specialists/Physician Associates

Remote Monitoring

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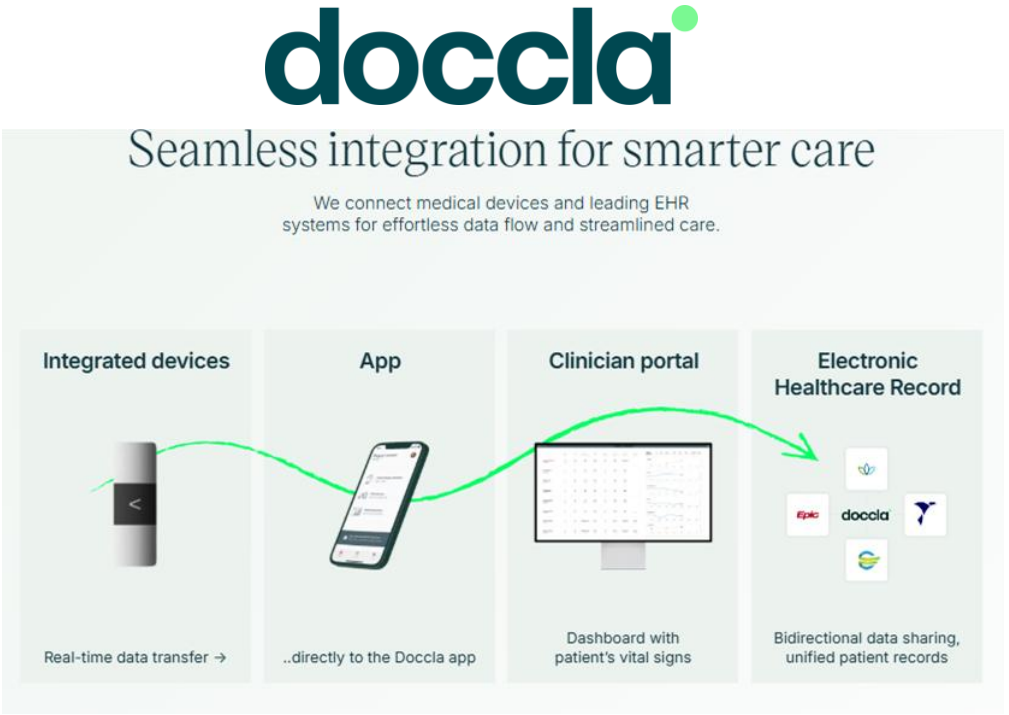
Challenges:

- Lack of national offer for continuous monitoring
- **One size does not fit all**: Lack of variation in digital remote monitoring offer
- Lack of integration with EPR systems for workload optimisation
- Ease of use of technology and patient digital literacy



How we overcame them:

- Procurement process led by clinicians
- Communication channels with provider (Doccla) allowing for continuous service development
- Work towards Doccla and EPIC integration
- Ensuring remote monitoring provider has a spectrum of options to individualise patients care

The need for a flexible and varied digital offer: Doccla

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doccla

Continuous (passive) monitoring

- Ease of use for patient/carer
- Predict deterioration/acuity quicker
- Method of choice by patients and staff
- Higher staff workload

Intermittent monitoring

- Patient familiar with technology
- Lower staff workload
- Lower data burden
- More tasks for patient

Non vital sign based data

- Patient questionnaires/validated assessments
- Nutrition
- Hydration
- Pain
- Wound care
- “end of the bed” assessment

Benefits to the digital offer

- Allows for reduced reliance on health care borders
- Meeting the needs of the local population
- Optimised use of inpatient beds
- Builds Clinician Trust in remote care (supports management of risk)
- Able to widen clinical scope of services
- Patient and carer confidence
- Increased communication between healthcare provider and patient/family
- Improves patient/carer inclusion in their healthcare
- Central online dashboard accessible on mobiles/ computers for healthcare teams to be able to monitor in an office or on the move

The art of the possible

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Questions?

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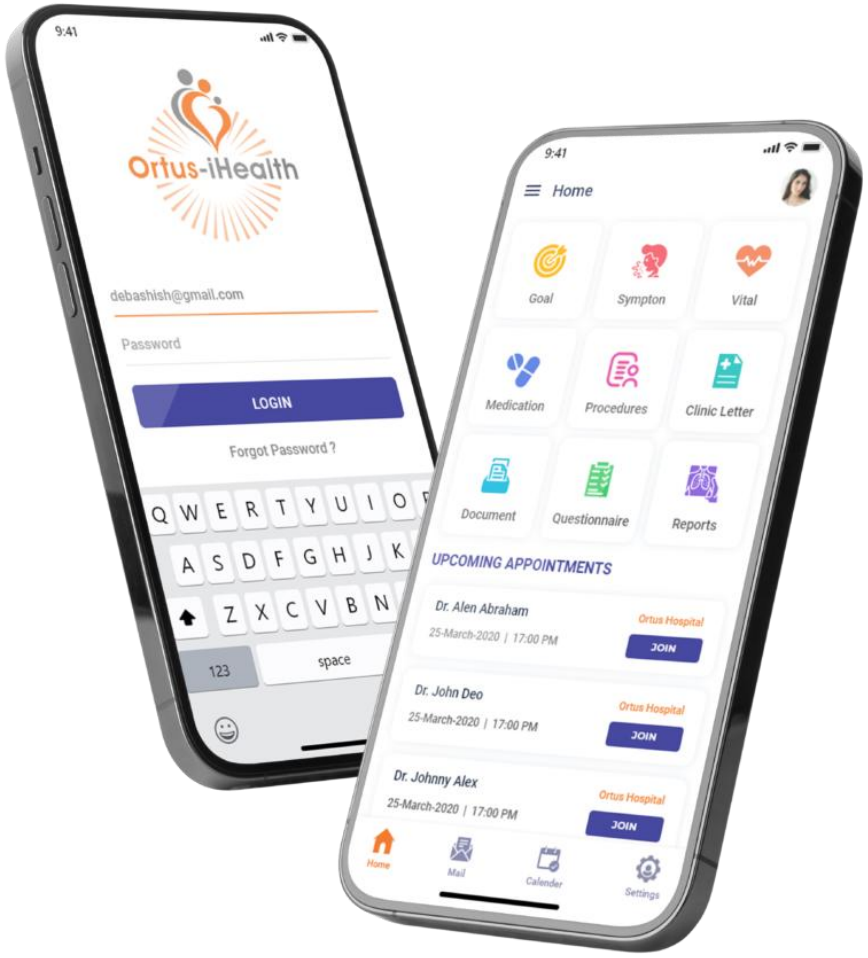
Case Study

Ortus-iHealth

Case Study

Dr. Debashish Das
Consultant Cardiologist, Barts NHS Trust
CEO & Founder, Ortus-iHealth

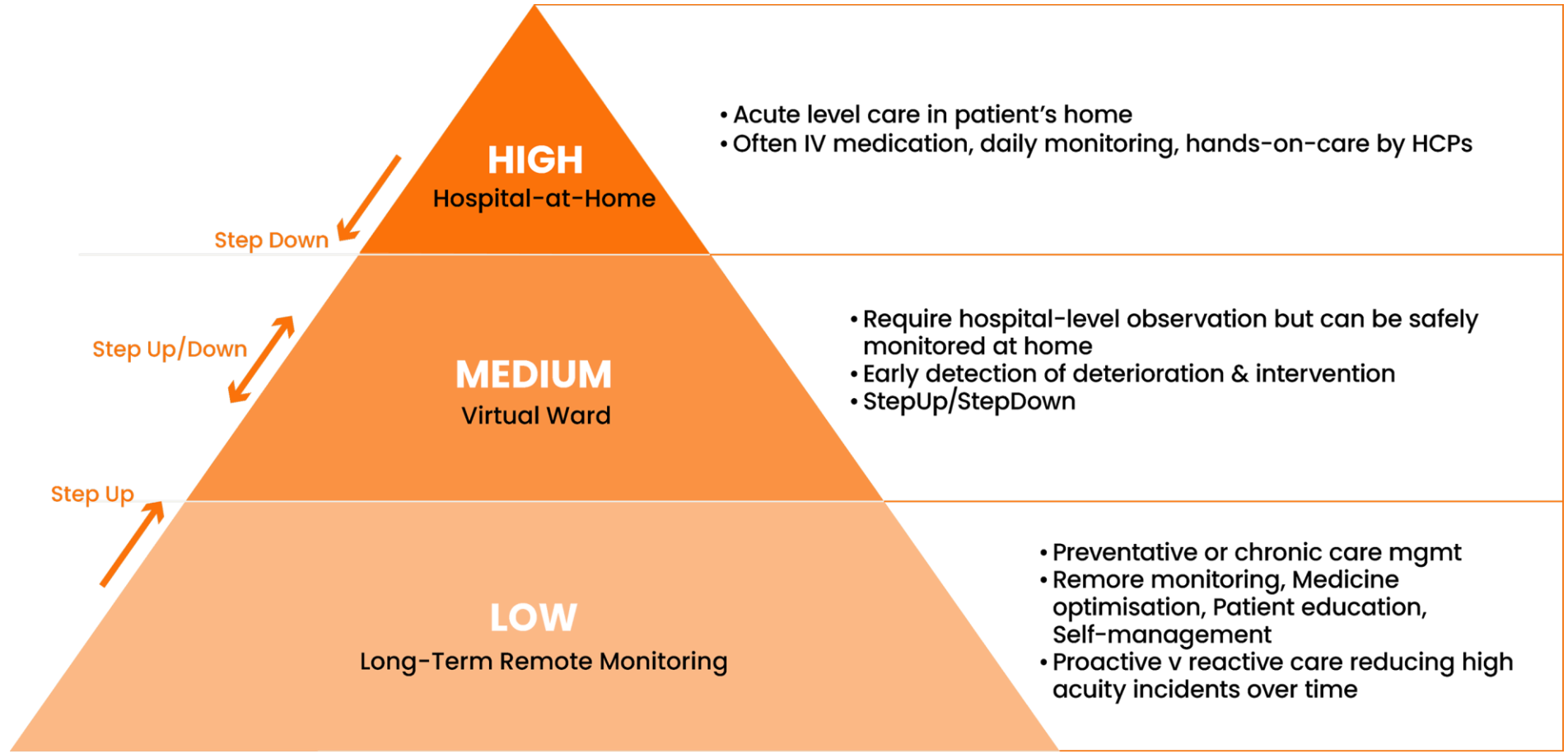


Comprehensive Remote Patient Care Addressing the Full Acuity Spectrum

Moving Beyond Hospital at Home with Integrated Long-Term Remote Monitoring and Early Intervention

Debashish Das
Consultant Cardiologist St Barts Hospital
Clinical Director Cardiology Whipps Cross Hospital
CEO Ortus-iHealth

The Acuity Pyramid in Remote Patient Care



Definitions

Hospital-at-Home – avoid hospitalisation

Provides acute-level care in a patient's home as an alternative to hospital admission.

Often includes IV medications, daily monitoring, and hands-on care by healthcare providers

Virtual Wards – reduce re-admission and prevent clinical decline

Monitor patients remotely after discharge for early detection of deterioration.

Manage patients who may still require hospital-level observation safely outside the hospital environment

Long-Term Remote Patient Monitoring – prevent disease progression, detect deterioration early

Ongoing, non-acute monitoring, typically patients with chronic conditions, or on an elective care pathway

Proactive rather than reactive care reducing high acuity incidents over time

Includes wearable devices, patient-reported outcomes (PROMs), digital rehabilitation, and education

Acuity Pyramid Features

Feature	Hospital-at-Home	Virtual Ward	Long Term Remote Monitoring
Target Population	Acute High Acuity	Post Acute Medium Acuity	Chronic Low to Medium Acuity
Objective	Substitute Hospitalisation	Prevent Readmissions	Prevent Disease Escalation
Duration	Short-Term episodic care	Transition Phase (1-3 weeks)	Continuous Long-Term
Care Modalities	IVs, Daily Visits, Urgent Interventions	Monitoring Episodic Visits	Digital Monitoring, Patient Education and Coaching
Technology Requirements	Low/Medium Telehealth	Medium/High Remote Monitoring, Alarms	High Wearables, Tracking, AI Risk Scoring

Value of the Acuity Pyramid

Hospital-at-Home and Virtual Ward

Addressing only the top of the pyramid limits impact to short-term, high-acuity cases.

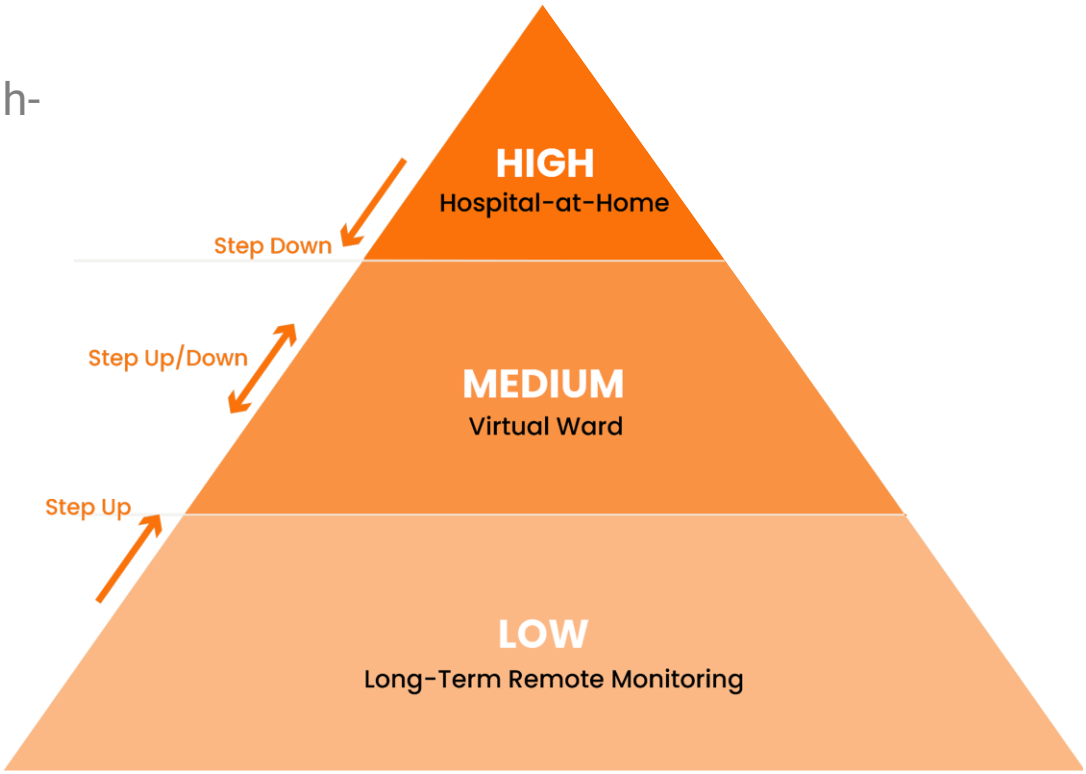
Long Term Monitoring

Adds value across all acuity levels, supporting long-term health outcomes and reducing demand on acute services.

Evidence

Studies show that preventive and early intervention (bottom and middle of the pyramid) lead to:

- A 20-30% reduction in hospitalizations in chronic disease patients.
- Improved quality of life, with reduced morbidity in long-term conditions like heart failure, diabetes, and COPD.



Benefit of the Acuity Pyramid

Ortus-iHealth

Improved Patient Outcomes

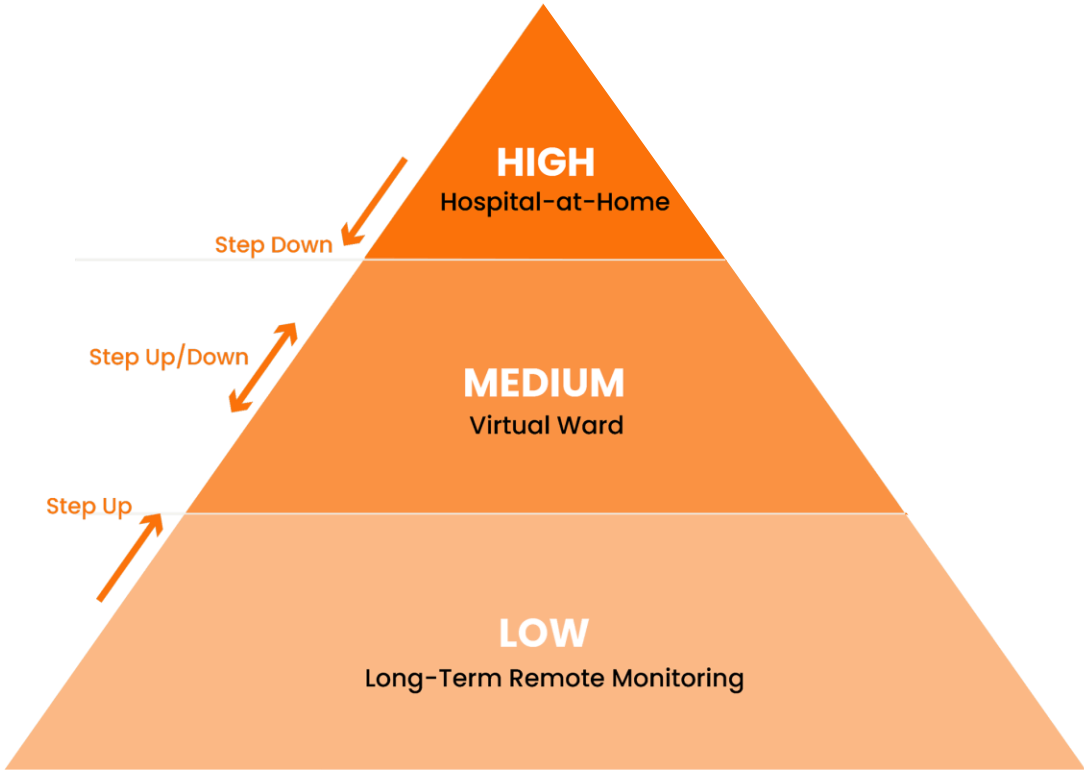
Proactive care reduces emergency admissions – example: Liverpool HF remote monitoring

Cost Savings

Long-term RPM has been shown to reduce total healthcare costs by 10-15% per patient by lowering the frequency and severity of high-acuity events (Reference: Digital Medicine Studies, 2020).

Patient Satisfaction

Patients experience continuity of care, feel empowered through digital tools, and report higher satisfaction scores.



Building a Digital offering

Unified Platform

Combining Hospital-at-Home, Virtual Wards and Long-Term Monitoring into one system covering all acuity levels.

Interoperable

Integration with EHRs, PROMs, and risk assessment tools, patient education and self-help for holistic and continuous care.

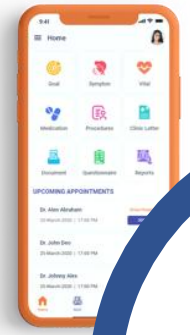
Scalable Care

Flexibility to move patients up or down the acuity pyramid as their condition changes, optimising resource use.

Platform Overview

Access

Web, apps and smart devices
Any time, any place, anywhere



Clinics & Consultations

Clinic and V-Clinic modelling, delivery, automation, appointments and Consults

Track, Discharge & Share Outcome Data

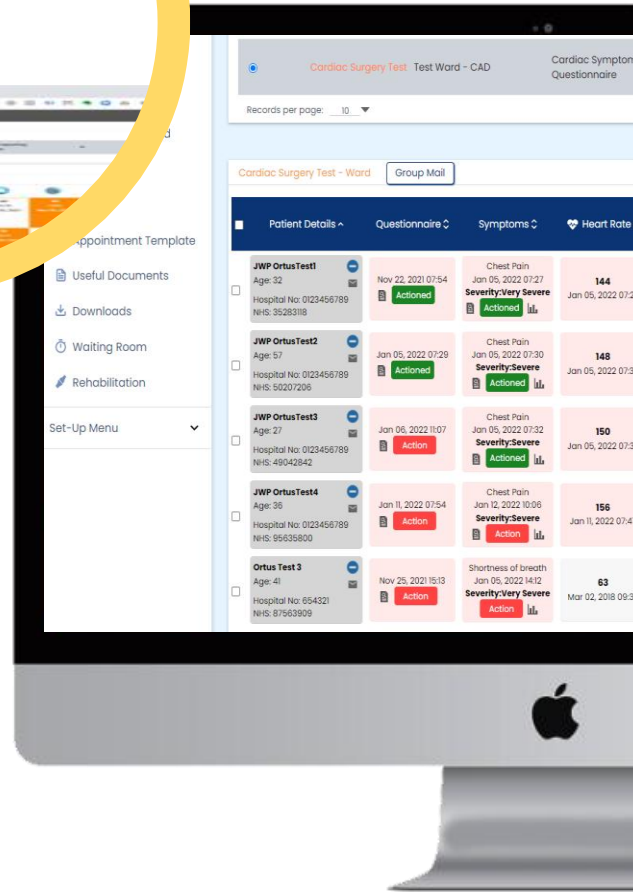
Clinic, Population, PAS & EPHR

Assessment

Pre & Post Clinic PROMs, PREMs,
Quality assessments &
eConsent

RemoteMonitoring
Pre & Post Treatment

Pathway dashboards,
need based prioritization &
early discharge



Removes barriers and delivers flexible access & pathways, remote monitoring, a dashboards, content, consent, engagement & clinics

Building your Digital Pathways

Build Your Service Pathways

- Is this H@H, VW or LTC –RPM?
- Cadence of intervention/review
- What Data do we want
  - What Observations? Vitals, Bloods, Wounds?
  - Symptoms tracking - Questionnaires
- What are the signs of deterioration?
- Asynchronous messaging
- Health education & Rehab
- PROMS/PREMS
- Medication updates & advice

Patients in the Community

The Patient receives automated and timed contact:

1. Prompts and reminders for taking measures
2. Health education info
3. Review notifications
4. Medication updates

Ward round questionnaires
Symptoms & Vitals monitoring .
Ongoing review
on the dashboard.
The option to provide feedback as appropriate

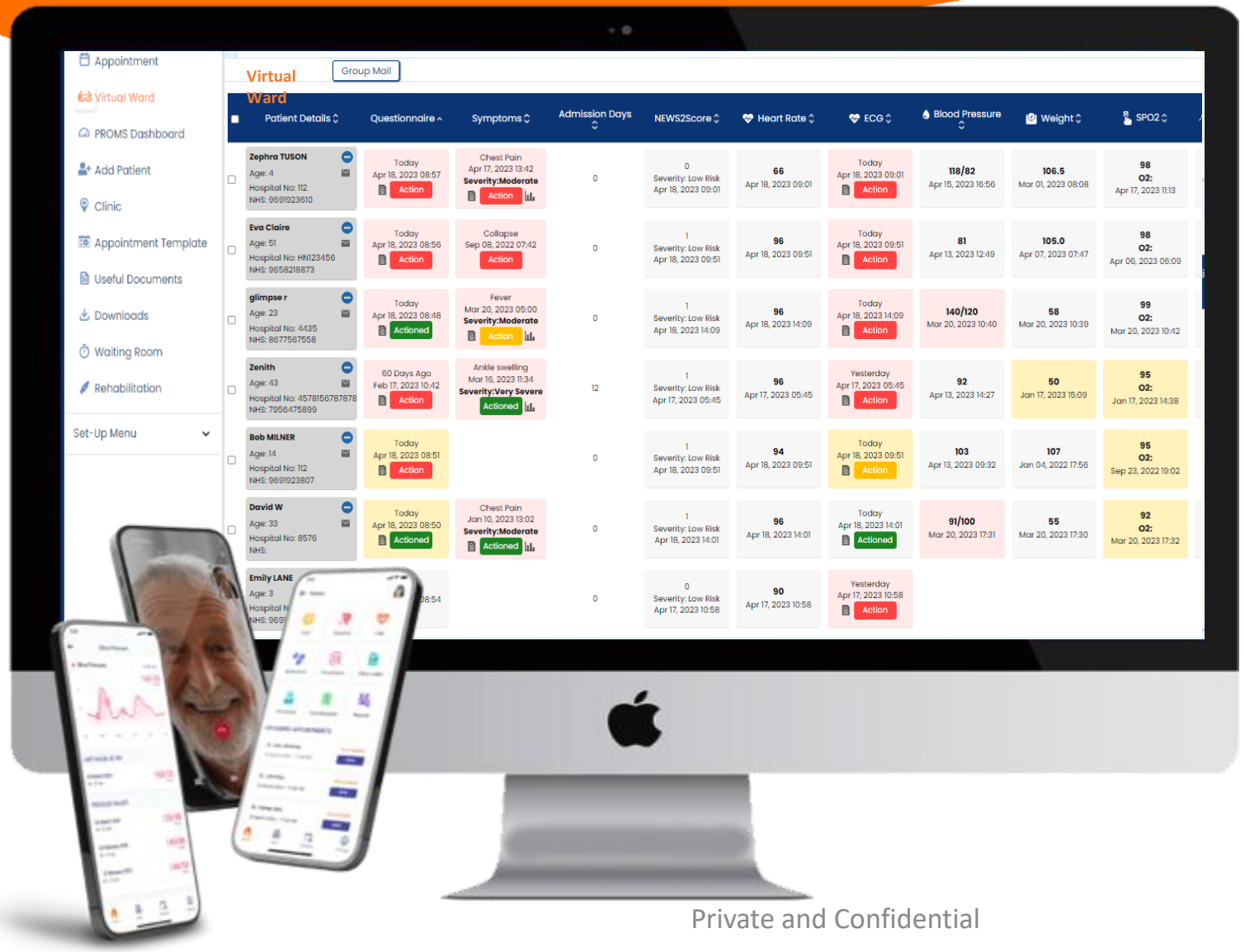
Patients can communicate back with care provider through asynchronous Messaging and using device

Medications & messages can be reviewed. Care adjusted and escalations managed

Connecting Systems and Platforms

Send to Cerner

Virtual Ward & Remote Patient Monitoring



Patient and Clinician Experience

- Easy to access and use
- Outstanding user experience

Keeping Patients Safe

- Patient prioritisation
- Risk mitigation

Automated Care Plans

- Pre-assessment questionnaires
- EConsent
- PROMs collection

Facilitating

- Reduce emergency admission
- Early discharge
- Scaled virtual wards and remote monitoring

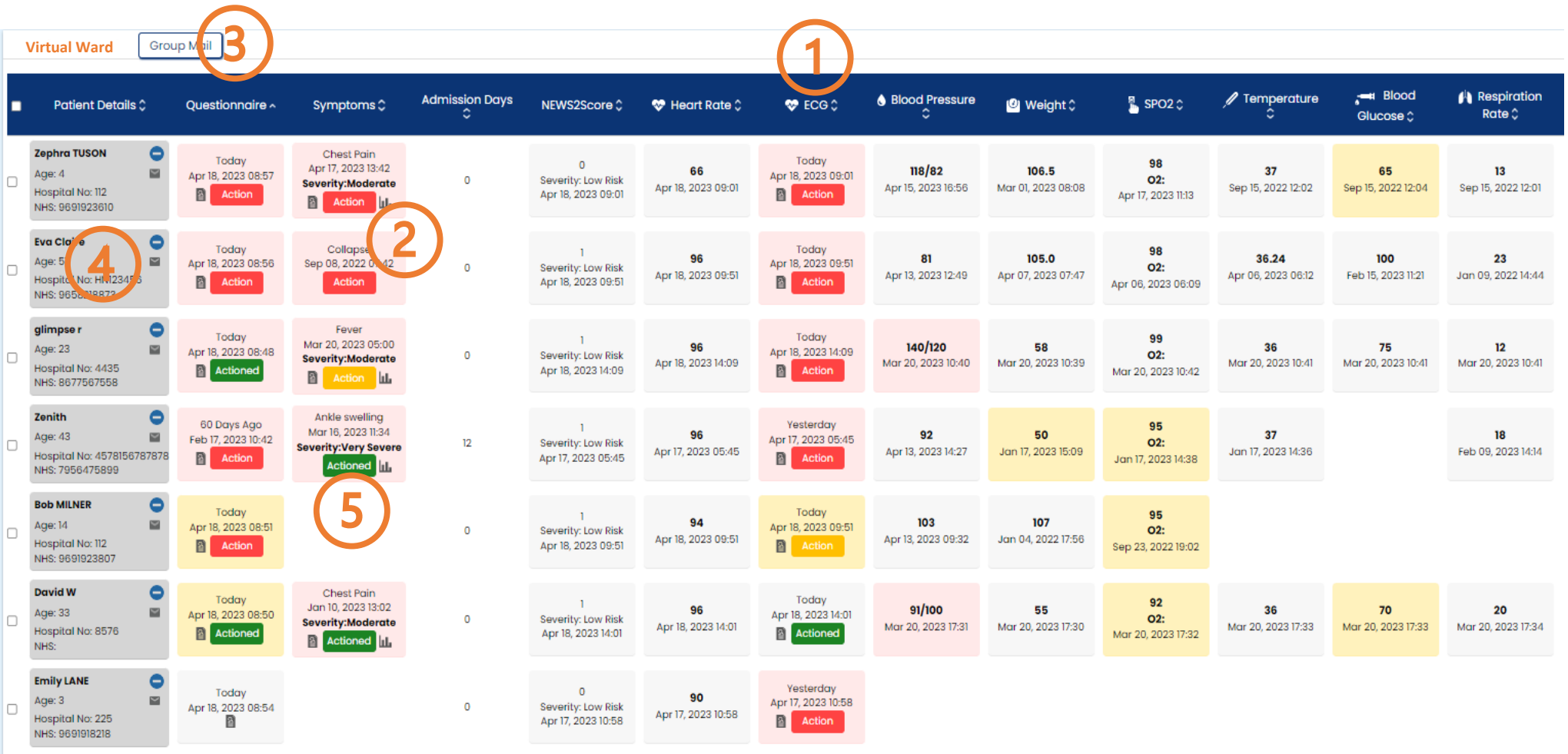
Integrated

- Devices
- FHIR/HL7 Integration
- Cerner, EMIS, *SystemOne & Epic*

Dashboard

Configurable, Scalable

Ortus-iHealth



1. Observations and ECG Tracking

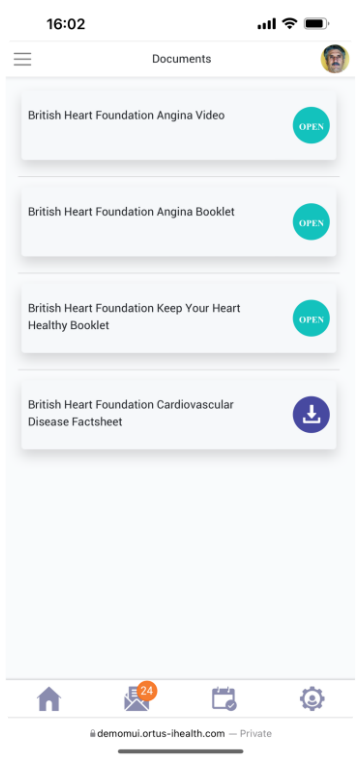
2.Symptoms Monitoring

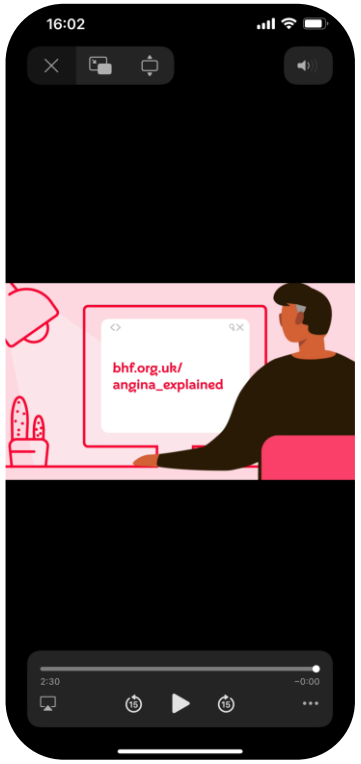
3. Deteriorating patient questionnaire

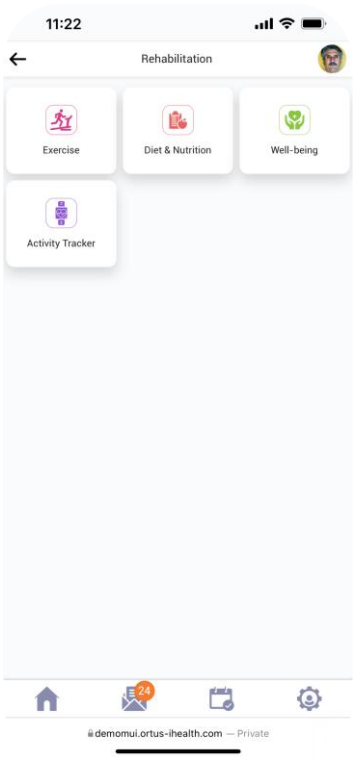
4. Templated, Individual and Group Messaging

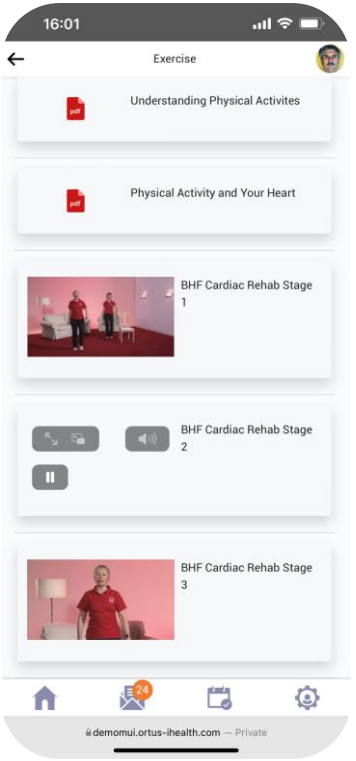
5. Prioritise Patients and Take Action

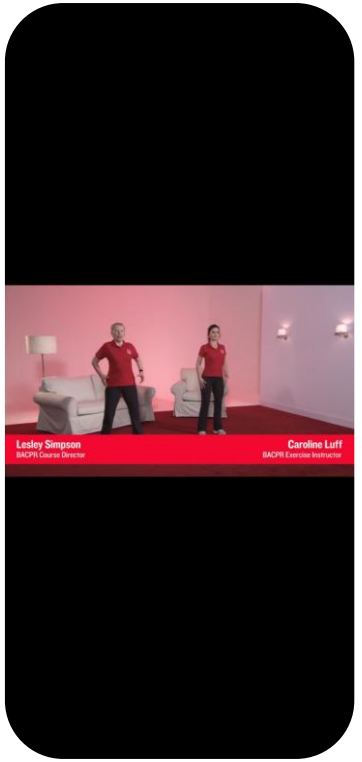
Patient Support and Self-Management











Supplement with Digital Education/Care Plans

Digital Rehabilitation Support

Low Risk NSTEMI Virtual Ward

The Case for Change

Ortus-iHealth

In the UK, Non-ST Elevation Acute Coronory Syndrome (NSTEACS) is the most common type of acute coronary syndrome (ACS) accounting for approx. 100,000 cases per year

The management of STEACS places a significant burden on the healthcare system requiring significant cost and resources including hospital admissions, diagnostic tests and invasive procedures

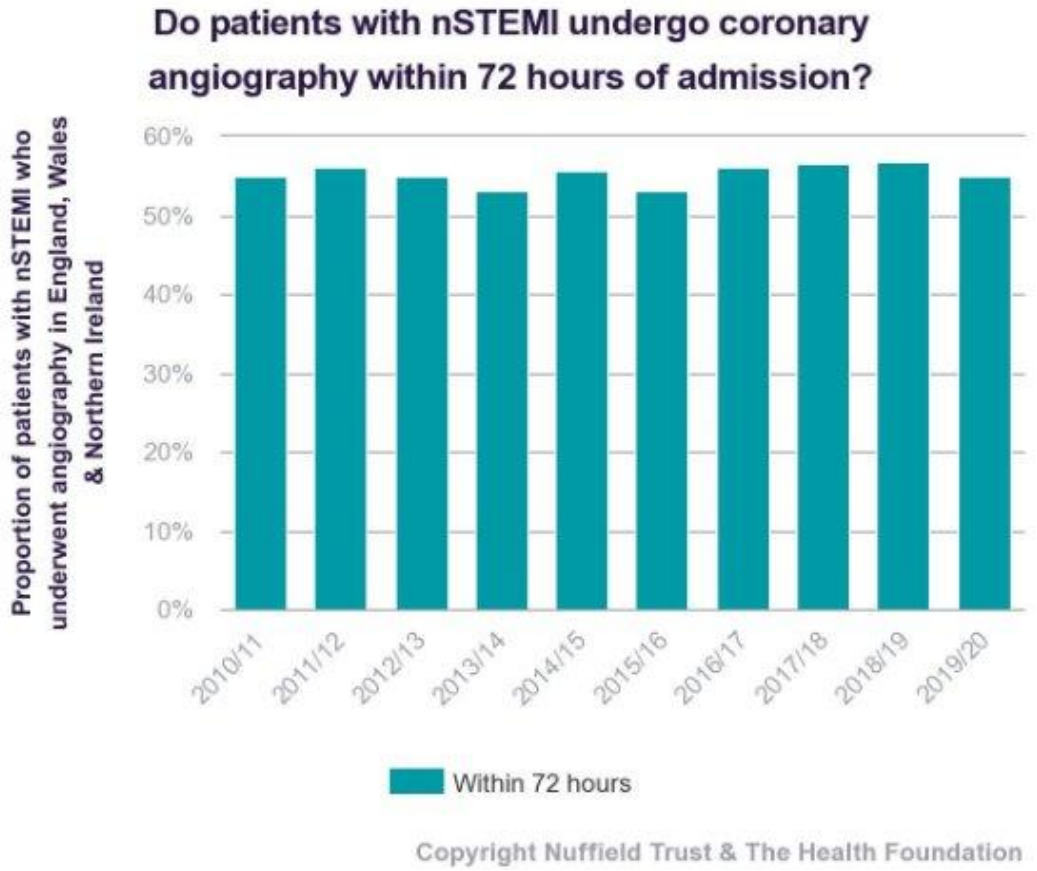
Timely treatment with angiography is critical in avoiding adverse outcomes with National and International guidelines recommending treatment within 72-96 hours of admission for higher risk patients

There is considerable variation in the time from admission to angiography for NSTEACS patients and many hospitals are failing to meet the targets

Low Risk NSTEMI Virtual Ward

The Case for Change

- In 2021/22, only 55% were treated within 72 hours - BCIS target of 75%
- Long in-patient waits for angiography (often 5-10 days) with difficulty in prioritising higher risk patients (1st come 1st served)
  - Poor Patient experience
  - Low satisfaction
- In lower-risk patients the benefit-to-risk ratio of early invasive procedures is less clear
- Opportunity to risk assess NSTEMIs
  - Providing early/expedited procedures in the high and very high risk
  - Early discharge with OP angiography in the low riskReducing waiting times



ATLAS Virtual Ward

Ortus-iHealth

B.I.G. BARTS INTERVENTIONAL GROUP

Patient has NSTEMI and awaiting angiogram

Patient meets ATLAS Criteria

Angiogram

Patient on virtual ward until angiogram

Fill out daily Cardiac Symptoms Checker

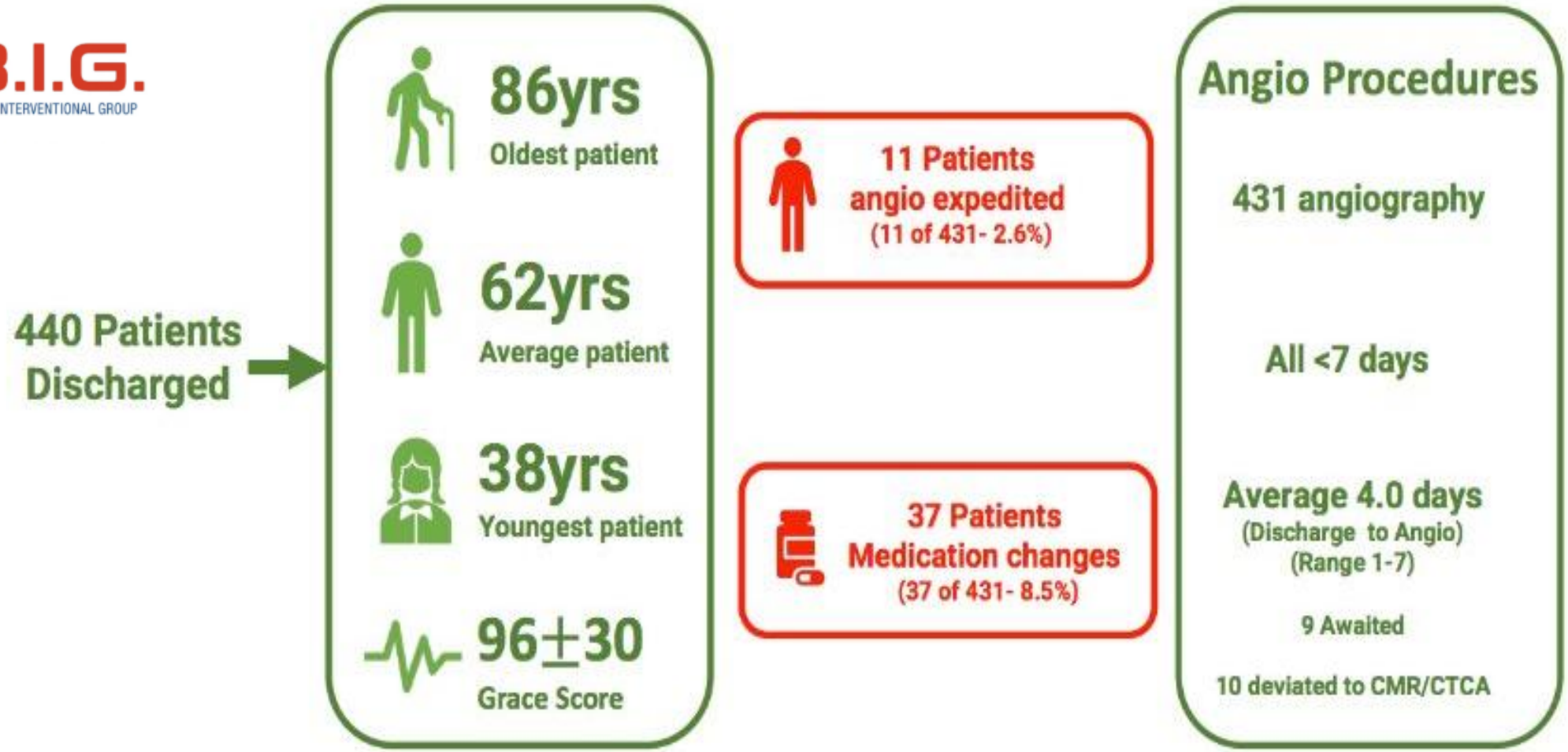
Daily Reviews by Advanced Nurse Practitioner

Alerts are Actioned and Escalated

ATLAS Virtual Ward Results

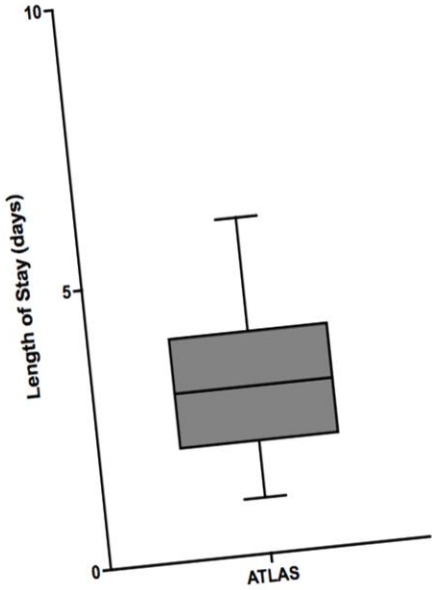
B.I.G.
BARTS INTERVENTIONAL GROUP

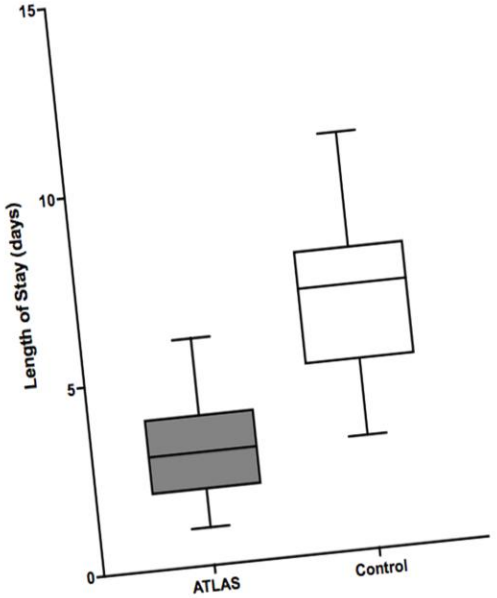
Ortus-iHealth



ATLAS Virtual Ward Results

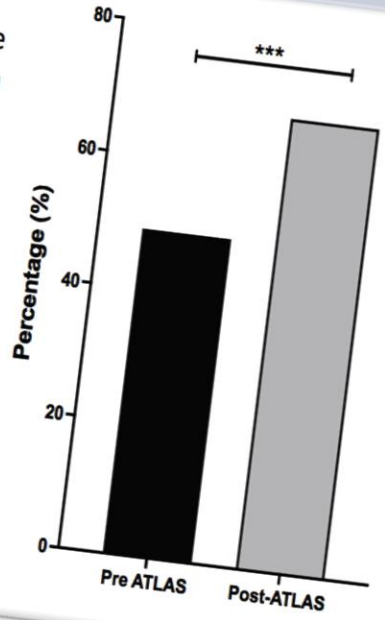
Improved Efficiencies: Decreased Wait For Angiography





Lower wait for high risk patients

- Key aim of pathway was to increase the proportion of patients treated within 72hrs
- NICE/GIRFT recommendation
- Pre-Pathway
  - 49% of patients were treated within 72hours
- Post Pathway
  - Increased to 67%



ATLAS Virtual Ward Results

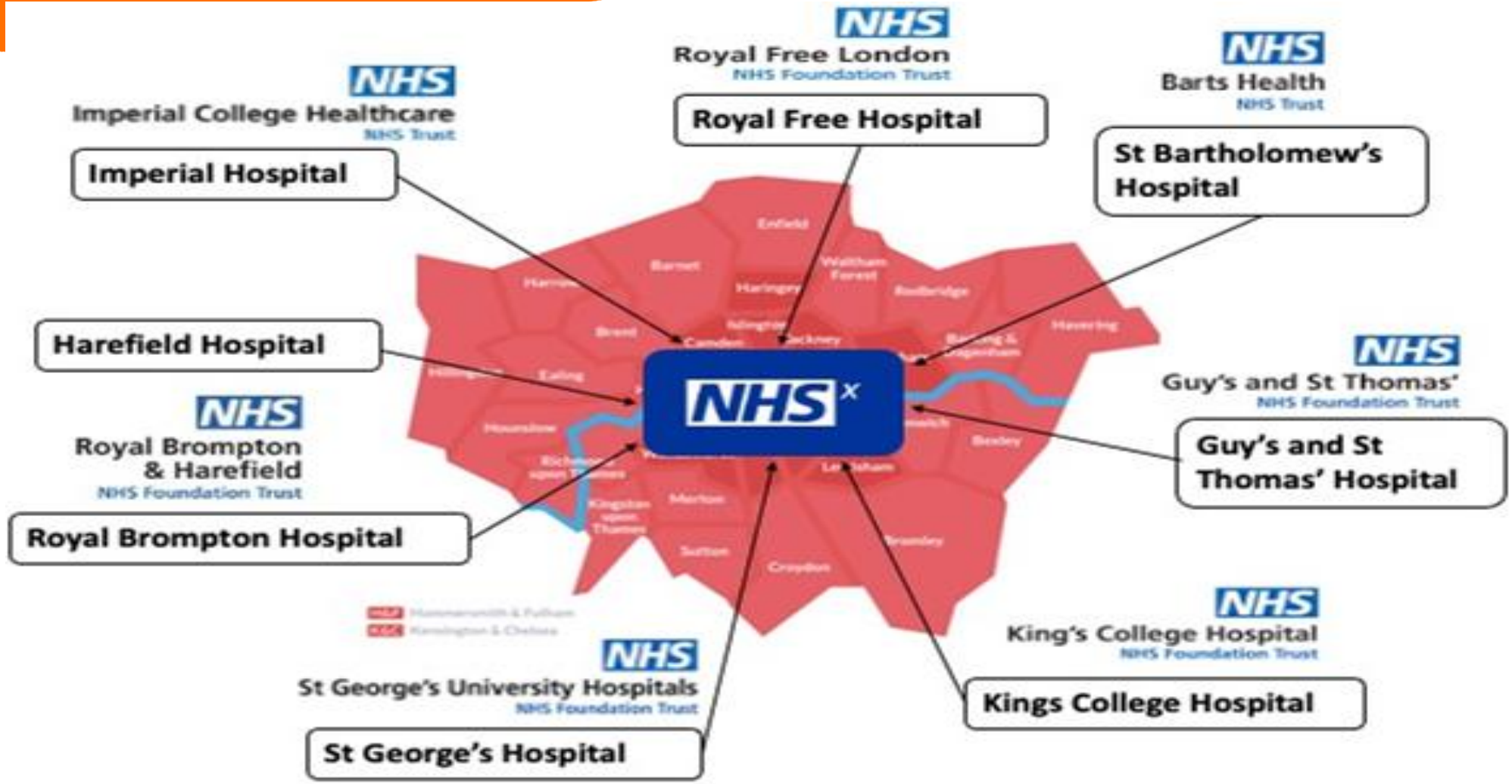
Improved Efficiencies: Cancellations

- NSTE-ACS listed in urgent slots
- Potential for on-the day cancellations if emergencies
- Cancellation rate in IHTs over time-period: **29.1%**
- **0.4%** rate in ATLAS pts
- Predictability to plan lists

Improved Efficiencies: Decreased Wait For Angiogr

London Cardiac Surgical Patients

NHS London Clinical Networks



Pan London Cardiac Elective Surgery Wait List

Currently 1,800 patients are on the Elective Cardiac Surgery waiting list, as part of a total of 7,000 patients who receive surgery annually

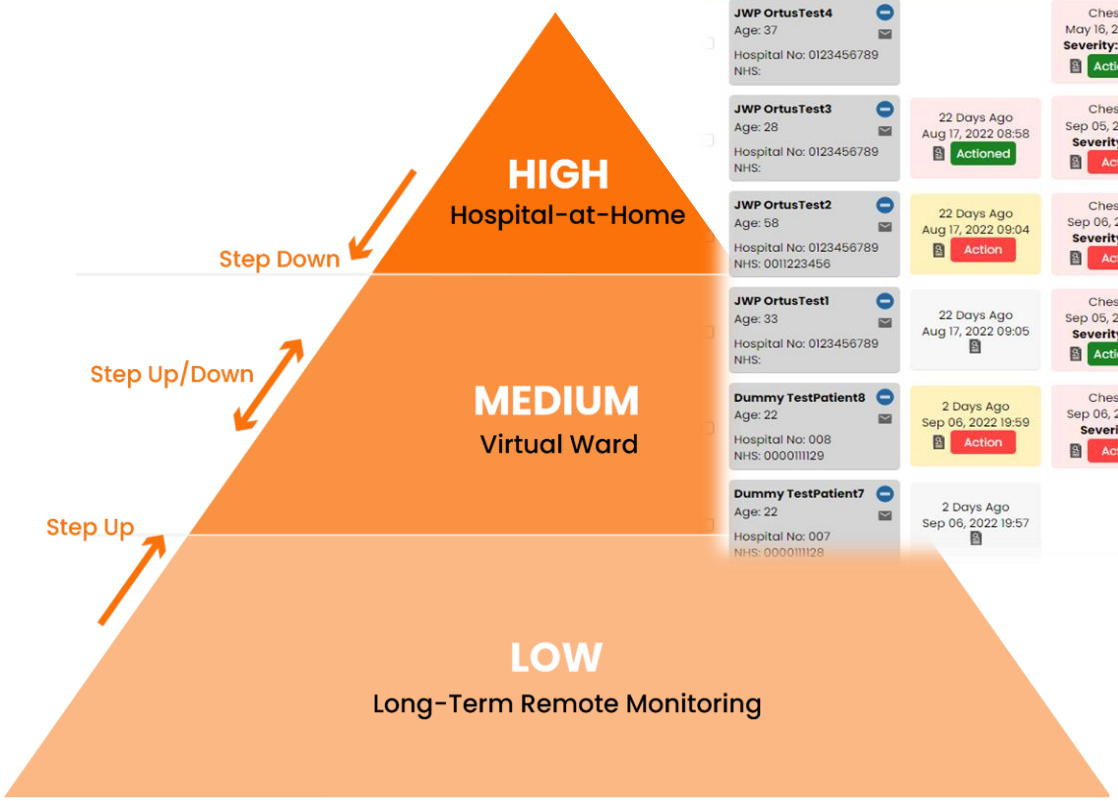
Waiting times are steadily increasing. Large majority of patients facing P2 clearance times *in excess of 12 weeks*

Substantial and increasing risks of morbidity and mortality whilst waiting for cardiac operations

An end-to-end Elective Cardiac Surgery pathway transformation was needed to enable *operationally* efficient and *clinically* safe, effective, high-quality care

Elective List Remote Care Pathway

Ortus-iHealth



Multiple Remote Monitoring Lists

Patient Details	Questionnaire	Symptoms	Heart Rate	Blood Pressure	Weight	SPO2	Temperature	Blood Glucose
JWP OrtusTest4 Age: 37 Hospital No: 0123456789 NHS:		Chest Pain May 16, 2022 05:54 Severity:Moderate Actioned	144 Jun 06, 2022 06:56	150/111 Jun 06, 2022 06:55	101.2 Jun 06, 2022 06:55	98 Jun 06, 2022 06:56	36.8 Jun 06, 2022 06:57	7.3 Jun 06, 2022 06:56
JWP OrtusTest3 Age: 28 Hospital No: 0123456789 NHS:	22 Days Ago Aug 17, 2022 08:58 Actioned	Chest Pain Sep 05, 2022 09:47 Severity:Severe Action	122 Sep 05, 2022 10:48	133/112 Sep 05, 2022 10:48	88.5 Aug 18, 2022 10:17	99 Aug 18, 2022 10:17	36.9 Aug 18, 2022 10:17	
JWP OrtusTest2 Age: 58 Hospital No: 0123456789 NHS: 0011223456	22 Days Ago Aug 17, 2022 09:04 Action	Chest Pain Sep 06, 2022 15:07 Severity:Severe Action	120 Sep 06, 2022 10:00	117/104 Sep 05, 2022 10:40	88.4 Sep 05, 2022 10:42	98 Sep 05, 2022 10:41	36.5 Aug 18, 2022 10:11	
JWP OrtusTest1 Age: 33 Hospital No: 0123456789 NHS:	22 Days Ago Aug 17, 2022 09:05	Chest Pain Sep 05, 2022 09:43 Severity:Severe Actioned	120 Sep 05, 2022 10:45	133/101 Sep 05, 2022 10:44	97.3 Aug 18, 2022 10:15	98 Sep 05, 2022 10:46	36.3 Aug 18, 2022 10:14	
Dummy TestPatient8 Age: 22 Hospital No: 008 NHS: 0000111129	2 Days Ago Sep 06, 2022 19:59 Action	Chest Pain Sep 06, 2022 19:04 Severity:Mild Action	101 Sep 06, 2022 20:03	110/78 Sep 06, 2022 20:03				
Dummy TestPatient7 Age: 22 Hospital No: 007 NHS: 0000111128	2 Days Ago Sep 06, 2022 19:57		56 Sep 06, 2022 20:01	88/67 Sep 06, 2022 20:01				

1. Observations Tracking

2.Symptoms Monitori

3. Deteriorating patient questionnaire

4. Templated Individual and Group Messaging

5. Prioritise Patients and Take Action

Barts Remote Monitoring Surgical Data

Scope

1432 patients enrolled (Sept 2022 –Dec 2023) remotely monitored up to July 2024

72% Males, 18% Female, 71% engaged with the Remote Monitoring programme

Results

120 patients escalated as deteriorating and surgery brought forward

Unplanned admissions 0.98% RPM vs 5.71% not $P<0.05$

Mortality remotely monitored 0.59% RPM vs 1.9% $P<0.05$

Bed days saved1200 days - Cost Saving £1M

Cost per live saved £15K

Cost per QUALY £1.5K - **highly cost-effective** (below £20,000–£30,000 **per QUALY NICE Threshold)**

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Fireside Interview

Mr James Benson
Chief Executive Officer
Central London Community Healthcare NHS Trust

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CONVENZIS

Case Study

livework

Case Study

Tracy Stocker
Director of Operations for Flow and Integration
Medway NHS Foundation Trust

Virtual Hospital

Improving Productivity, Efficiency and Patient Flow

Tracy Stocker

Director of Operations, Flow and Integration

Medway NHS Foundation Trust

SRO Medway and Swale Virtual Ward

NHS Medway NHS Foundation Trust

Patient FIRST

HSJ

TECHNOLOGY AND INNOVATION

Exclusive: 'Virtual hospitals' to be launched in 10-Year Plan

By Joe Talora | 13 June 2025

10-Year Health Plan to launch "virtual hospitals"

The upcoming 10-Year Health Plan is set to propose the introduction of "virtual hospitals" based on patients directly contacting consultants on an Uber-style platform, *HSJ* has been told.

Senior sources have indicated the proposal will involve a major overhaul and expansion of the existing "advice and guidance" model, whereby GPs can seek advice from a consultant before referring a patient to hospital, in the hope of finding an alternative.

Described by one well-placed official as "Uber for consultants", the new proposal would create a system for GPs and individual patients to directly seek advice from any consultants, including those outside their home area, who make themselves available.

It is being described as "virtual hospitals" or "virtual clinics".

COOKIE SETTINGS

NHS Medway NHS Foundation Trust

Virtual Hospital is now an officially recognised movement!

Central to delivering the 10-year plan

- Digital
- Prevention focused
- Keeps care in the Community

There must be no delay in the scaling up of Virtual Hospitals

Start now.

HSJ

MENU

WEST HERTFORDSHIRE TEACHING HOSPITALS TRUST

Virtual wards saved trust £1.3m a year

By Zoe Tidman | 12 June 2025

West Hertfordshire Teaching Hospitals Trust carries o
home service

Hong Kong harbour and skyline

The Rise of the Home-Based Healthcare Revolution in China

Tara Donnelly
Founder | Digital Care

June 2, 2025

With a population of 1.4 billion, the People's Republic of China is facing a pressing challenge in providing effective medical services throughout the country, particularly given the age profile of this vast population.

BUSINESS REPORTER BR

World's largest virtual hospital enhances cutting-edge health access for millions

MANAGEMENT

SPONSORED BY SAUDI DELEGATION TO THE WORLD ECONOMIC FORUM

Saudi Arabia has put digital healthcare and technology at the heart of its transformative vision

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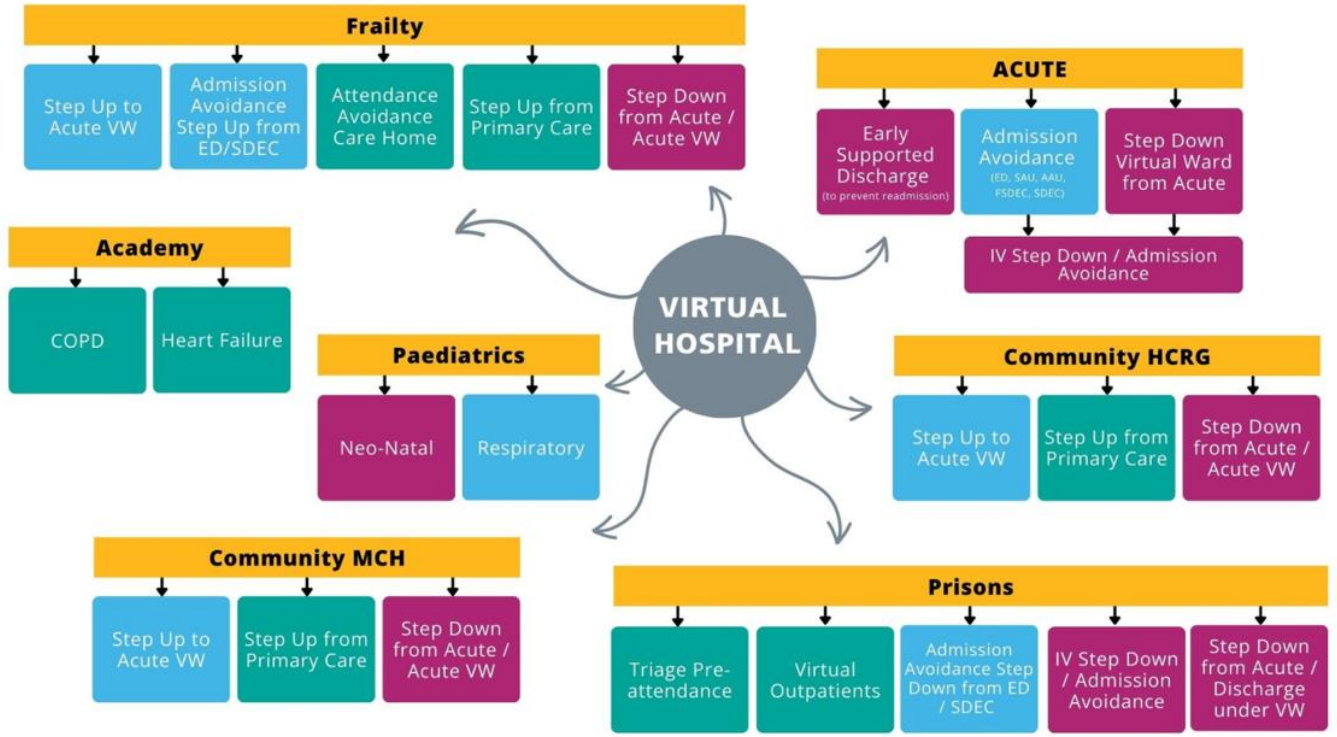
NHS Foundation Trust

What is a virtual Hospital?

- Fully integrated joined up care
- Multiple specialities
- Complex Patients
- Risk Stratification and Digital Triage
- Modular Architecture
- On Demand Consultant access

OUR VISION: THE MEDWAY & SWALE VIRTUAL HOSPITAL

1. A **patient-centred connected infrastructure**, delivering the highest quality and safest care at home.
2. A true **partnership** between services.
3. We need to transform our services, **putting the patient at the centre**, and most patients recover more effectively **at home**.
4. We need to **build bridges between services** to ensure most patients don't need to step foot in hospital.
5. We need **joined-up infrastructure** (outcome targets, data, tech, workflows/pathways).



MEDWAY & SWALE LANDSCAPE

- Population of 427,000 people
- Medway and Swale have some of the highest deprivation levels in the UK, with some wards in the 10 per cent most deprived areas in the country
- Medway and Swale population is mixed with 13 national indicators of health scoring better and six worse than the average in England
- High DNA rates
- Significant health inequality
- Rurality and patchy infrastructure
- Late presentation of disease with high levels of acuity and comorbidity
- Vulnerable patients across five prisons and young offender institutions

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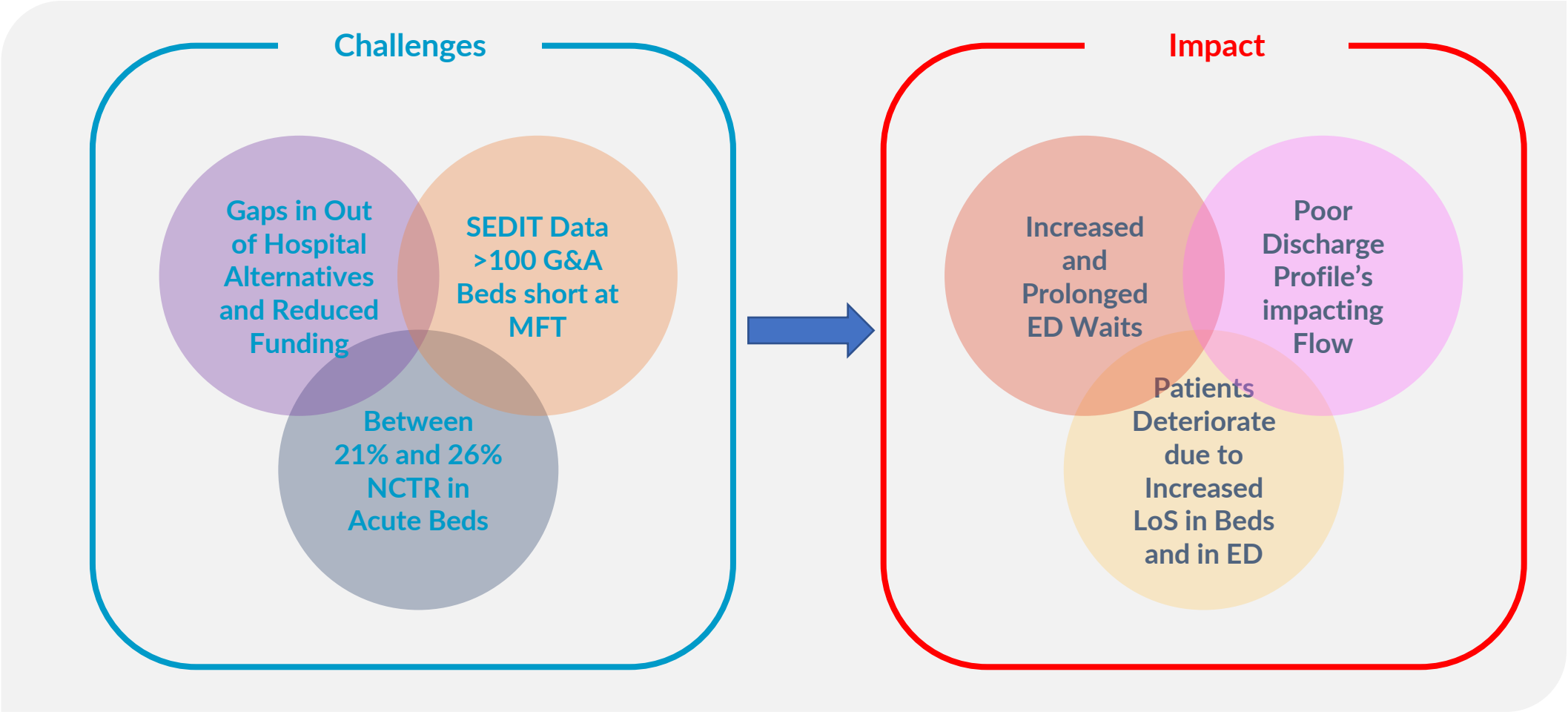
- c. 550 General and Acute beds
- Single Site in a Town Centre
- Two Local Authorities
- Two Community Providers
- Seven frailty wards
- Gaps in community provision

NHS Medway NHS Foundation Trust

CHALLENGES NOT WITHIN MFT CONTROL



OUR ROADMAP OF TRANSFORMATION

NHS Medway NHS Foundation Trust

ACUTE

80 beds | >100% occupied

Step Down from an Acute Bed:
- Frailty
- Spec. Med.
- Acute Med.
- Surgery
- Theatre recovery
- Elective
- Obs and Gynae
- Oncology

Early Supported Discharge:
- Orthopaedics

Admission Avoidance from:
- ED
- SDEC
- FSDEC
- AAU
- SAU
- Outpatients
- Community VW
- Hot Clinic

COMMUNITY

Community VW (HCRG) 20 beds

Step Up from GP and community services
- Frailty
- Heart Failure
- Respiratory
- other

Step Down from ED, SDEC, Acute wards and from Acute VW

Community VW (MCH) 25 beds

Step Up from GP and community services via Urgent Response
- Frailty
- Heart Failure
- Respiratory

Step Down from ED, SDEC, Acute wards and from Acute VW

Prisons

Pre-Attendance Triage: Triage for suitable clinical pathways in the prison overseen by AVW physician

Admission Avoidance from:
ED | SDEC | FSDEC | SAU | AAU

Step Down from an Acute Bed into the Prison VW:
Frailty | Spec. Med. | Acute Med.
Surgery | Theatre recovery | Elective
Oncology

IV pathway

Virtual Out-Patients for appropriate services

PAEDIATRICS

Neonatal Pilot: Enabling clinically well babies to go home with family with Team Noah support. Family provided with feeding equipment and scales

Paediatric respiratory VW in scope

ACADEMY

Using technology and CNS expertise to set up clinical parameter to be monitored alongside education, advice and tips to manage condition at home, prevent exacerbation and ED attendance. Supported by the VW team using technology and apps.

Heart Failure | Respiratory | Frailty

FRAILTY

Building upon HCRG-led frailty ward.

Acute VW frailty pathway requires expansion linked into HCP Frailty Strategy using the same tech, processes and principles of the other VW provisions

Opportunity to separate pathway once a robust integrated frailty offer is delivered and a geriatrician can be funded

Residential Homes:
21 use Feebris/Isla (IG required for monitoring remotely from our platform)

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THE BENEFITS OF THE VIRTUAL HOSPITAL

REDUCE AVOIDABLE DEMAND

Avoid admission and reduce ED attendance

FREE UP HOSPITAL BED CAPACITY

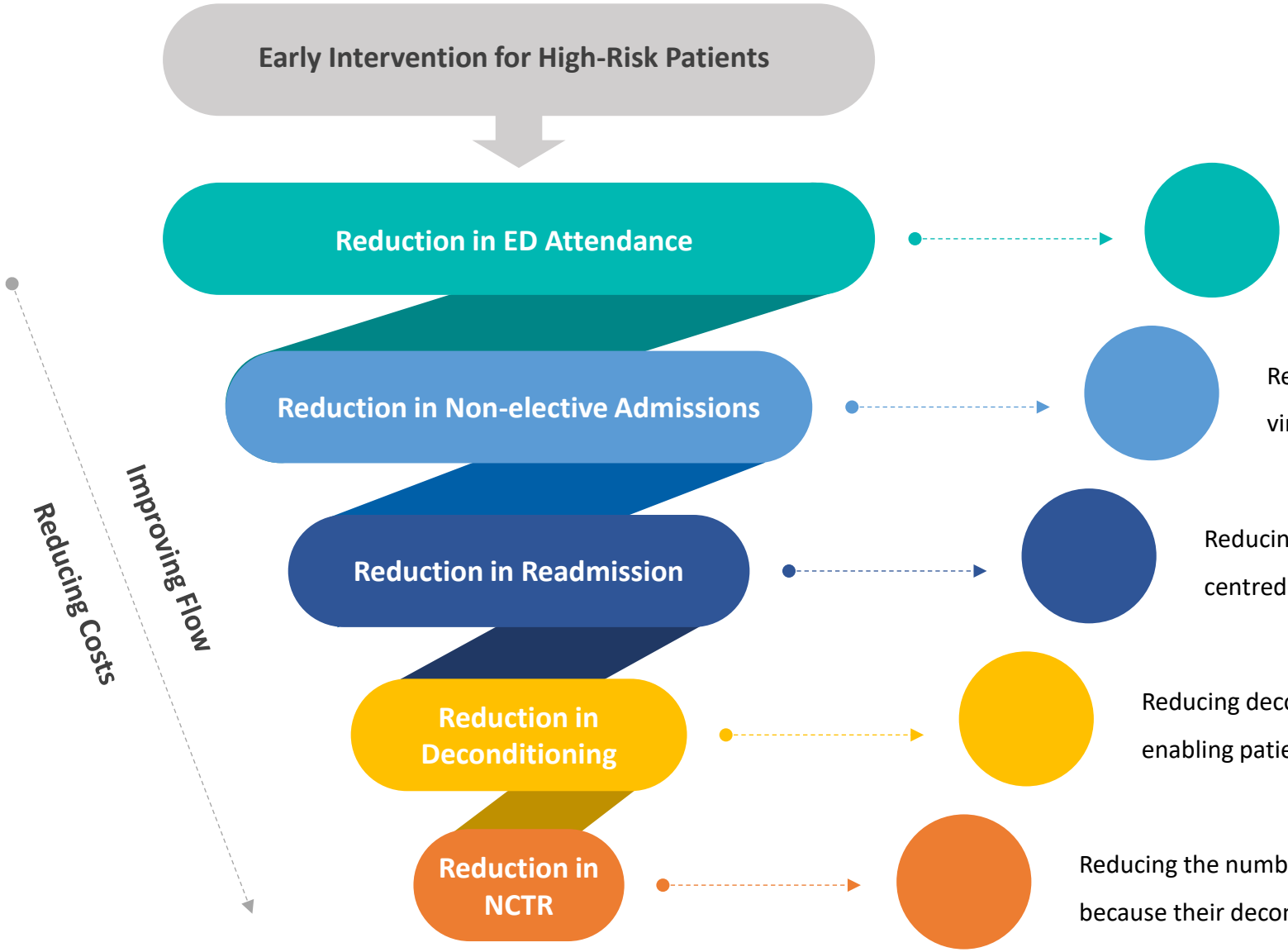
- Reduce LOS
- Release acute beds
- Income from extra activity in released beds
- Backlog reduction
- Release clinical time = workforce efficiency
- Safe and high quality care

REDUCE AVOIDABLE DEMAND

Reduce readmission rate

Downstream impact on flow and costs

Medway NHS Foundation Trust



Improvement in 4h/12h attendance performance by enabling alternative to ED for high-risk patients

Reducing admissions from high-risk patients by providing a virtual admission as an alternative where appropriate

Reducing readmissions through efficient and patient-centred follow-up at home

Reducing deconditioning by shortening length of stay or enabling patients to recover entirely at home

Reducing the number of patients who become no criteria to reside because their deconditioning leads to delayed transfer of care

Governance, Quality and Patient Safety

Workshop held to collect perspectives on priorities for integrated virtual wards. Specific focus on governance requirements, quality and Patient Safety metrics.

Scope: Medway and Swale.

Participants from; MFT, MCH, HCRG, M&S HCP. ;-)

Activities:

- Mapping current services at organisational and local system level
- Capturing perspectives on priorities and gaps to ensure all organisations processes and requirements are concidered / met
- Ensuring patient engagement and feedback in developing services to ensure safe, high quality services adressing health inequalities
- Capturing requirements for governance

Towards more integrated working and governance.

To enable the pursuit of, and reporting against system goals and metrics.

Providing Safe high quality services for patients.

EXAMPLE: PRISONS VIRTUAL AND SUPPORTED HEALTH PROGRAMME

NHS Medway NHS Foundation Trust

Project

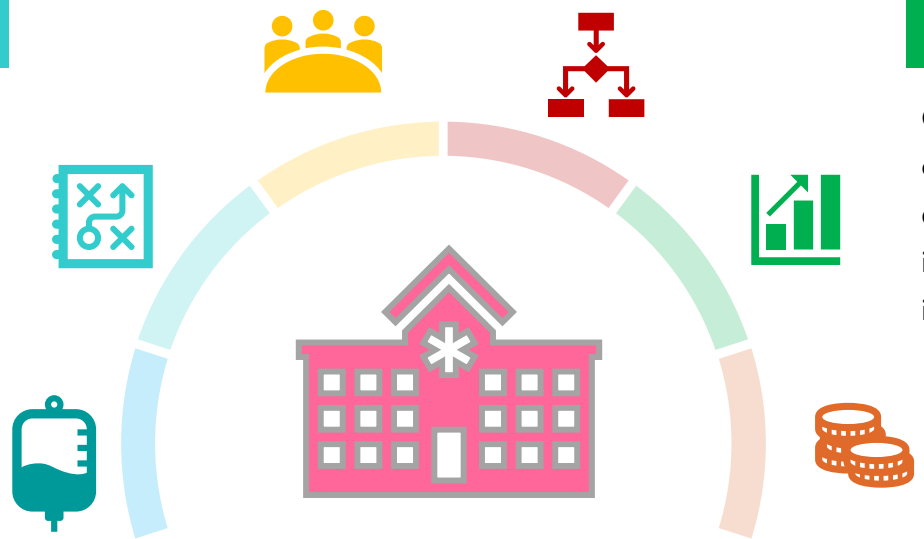
Clear project plan agreed across all organisations. Clear milestones, deliverables with required and measurable outcomes. RAID logs, TAFG's, Steering Group and programme governance – Patient First

Governance

Developing a governance framework which spans the four organisations involved in the healthcare of prisoners; clinical governance, medicines management, risks and safety, feedback, PSURF, IG and legal / legislative requirement. Ensuring clinical accountability across all of the pathways as well as sharing learning and service development.

Planning

Collaborative partnership working to ensure the programme is designed to meet the health needs of the patient and is efficient in delivery with all security considerations met



Metrics

Cross-referencing data from all organisations to identify the types of conditions the prisoners attend ED with. This enables us to design the new pathways with the greatest economy of scale and in-turn deliver the grater efficiencies. Also baseline to measure impact / success

Clinical

Co-designed Clinical Pathways which are safe, and high quality; delivered in the appropriate setting using technology and joint skillsets. In-line with security and healthcare requirements

Efficiency

Delivering this programme will result in efficiencies across the four organisations, including productivity efficiencies, reduced ED attendances, Early Supported Discharge, Alternatives to ED. A reduction in DNA's for outpatients and the potential for cash out savings if demand is moved from the acute. Escort and bed watching costs are with the NHS not HMPPS.

The operating system for our virtual hospital

NHS Medway NHS Foundation Trust

A single platform for the continuum of care

- Scalable across **unlimited pathways** (community & acute)
- Scalable across **all patient groups** (paediatrics & adults)
- Supporting **low and high acuity** health management (intermittent and continuous monitoring)
- **Connective tissue** between local services (supporting virtual MDTs inc. acute teams, community teams, care homes and GPs)
- **Proven impact** (evidenced ROI for the NHS)
- **Evolving** with our vision (co-production of innovation)

Proactive care
Early detection in the community (e.g. care homes)

Early intervention
Community nursing and neighbourhood teams

Early & safe discharge
Step-down virtual wards

Alternative to admission
Step-up virtual wards

The operating system for our virtual hospital

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Patient Empowerment

- **Accessible**: Last-mile delivery for the most vulnerable patients
- **Intuitive**: Offline functionality and an extremely intuitive interface to remove barriers of network and digital competence
- **Precise**: clinically reliable assessment at home, with decision-support at every step

The operating system for our virtual hospital

NHS
Medway
NHS Foundation Trust

Clinical Platform for Integrated Care

- **Virtual MDTs**: Coordination across clinical teams, including seamless referrals, action tracking and communication (e.g. video/messages)
- **Personalised**: Risk assessment against clinical standards and personalised baselines for patients with co-morbidities
- **Advanced Insights**: Intuitive presentation of insights to support diagnostic process, e.g. lung sounds, cardiac reports, medical images

Intermittent

PULSE OXIMETERS

BLOOD PRESSURE CUFFS

THERMOMETERS

DIGITAL STETHOSCOPES

GLUCOMETERS

SCALES

SPIROMETERS

ULTRASOUND (Coming soon)

IV FLUIDS & POCT (Coming soon)

Continuous

PULSEOX-BASED
OXYGEN SATS, PULSE, RESPIRATOR RATE, ARRHYTHMIA

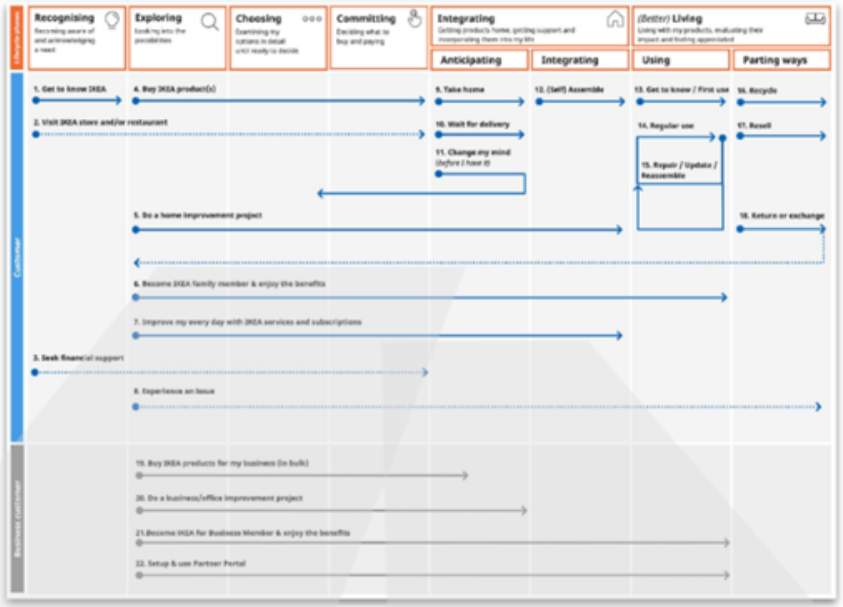
ECG-BASED
ECG, RESPIRATORY RATE, ARRHYTHMIA, STRESS, ACTIVITY

THERMOMETER-BASED
TEMPERATURE

ACTIVITY-BASED
ACTIVITY, SLEEP PATTERNS

A nested system

The virtual hospital, centred around the patient journey.
We call this Level 0 (L0).



Evolving Dynamic NHS VH Blueprint

Each service within the virtual hospital, still centred around the patient journey.
We call this Level 1 (L1).

Integrated care journeys that span across services.
We call this Level 2 (L2).

Clinical pathways, governance SOPs, and policies, centred on staff experiences.
We call this Level 3 (L3).

Our Patient Journey Framework for Medway

L0

The virtual hospital, centred around the patient journey.

L1

Each service within the virtual hospital, still centred around the patient journey.

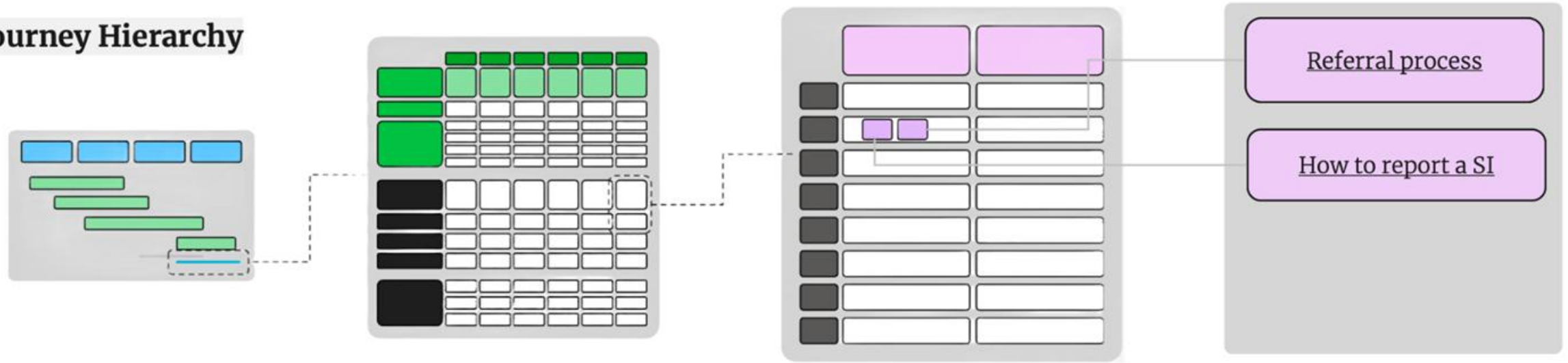
L2

Integrated care journeys that span across services.

L3

Clinical pathways, governance SOPs, and policies, centred on staff experiences.

Journey Hierarchy



EXAMPLE: CVD & RESPIRATORY ACADEMY - A DIGITAL NERVOUS SYSTEM

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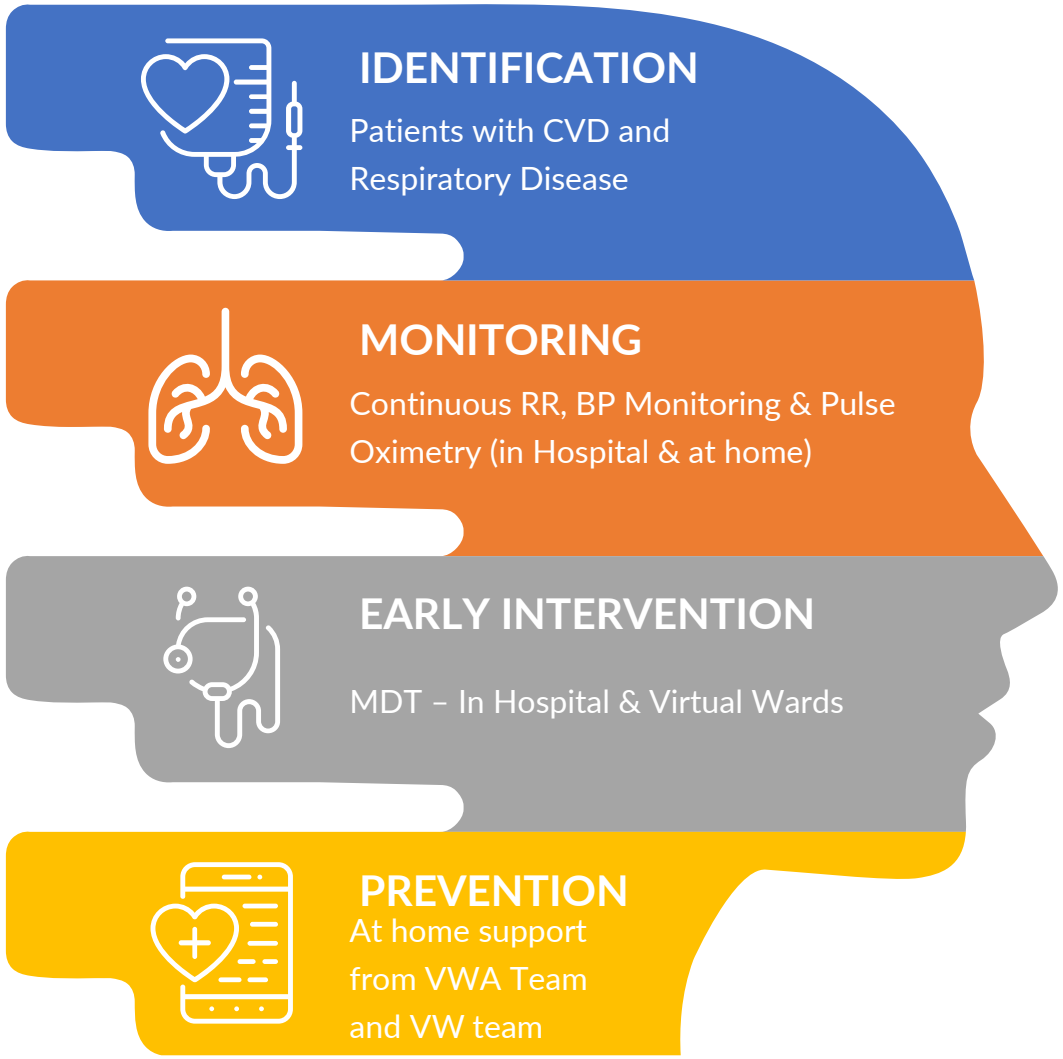


IDENTIFICATION

Patients display a pattern of exacerbations and illness

Culminating in repeat Hospital attendance / admission

RR is most important predictor of prognosis / clinical condition

MONITORING

Suite of tools: RR monitoring, Blood Pressure & Pulse Oximetry at home & in Hospital

EARLY INTERVENTION

Virtual team to respond to Virtual Ward patient alerts

Hospital team respond to inpatient alerts as they occur

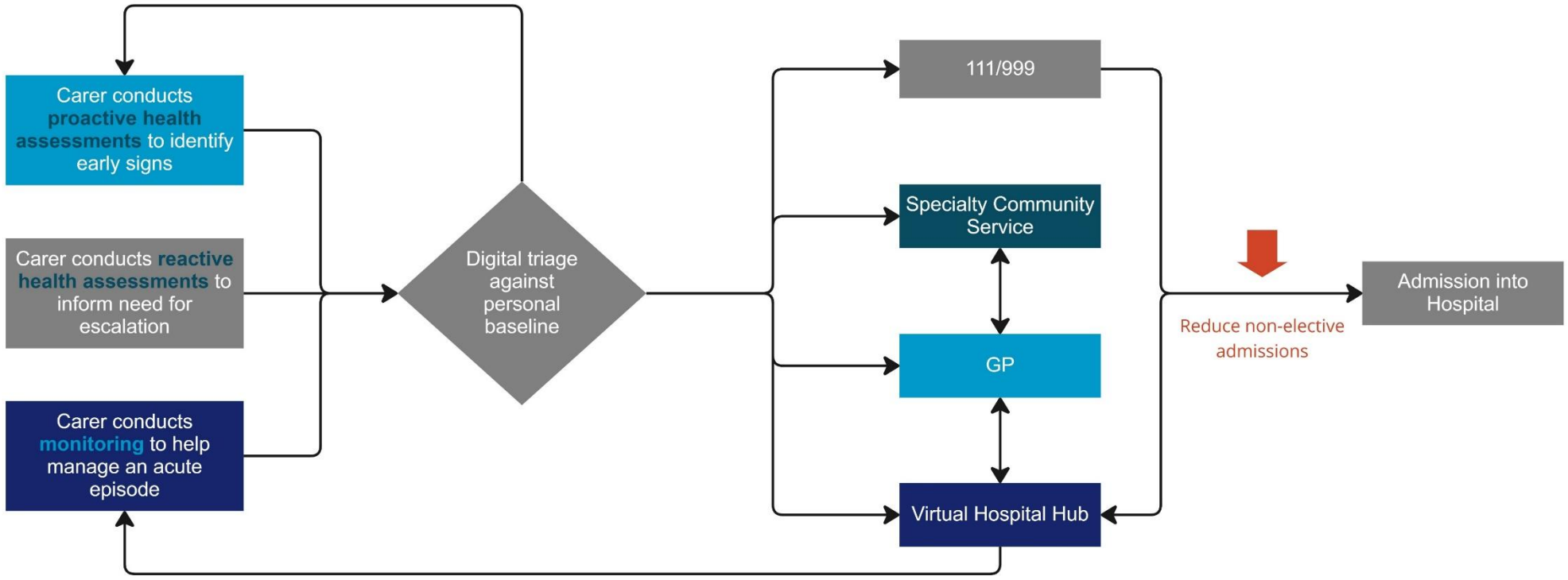
PREVENTION

RS Provides dedicated patient onboarding team 7 days per week to support Virtual Wards team & provide patient education

EXAMPLE: INTEGRATED CARE PATHWAYS FOR CARE HOMES

NHS Medway NHS Foundation Trust

With digital technology acting as the connective tissue between services, the process of identifying, assessing and escalating health concerns to the appropriate clinical services can be streamlined. This can in turn dramatically reduce service inefficiencies.



TECHNOLOGY ALONE DOES NOT EQUAL CHANGE

NHS Medway NHS Foundation Trust

Build transformation partnership beyond technology

- **Connected Infrastructure:** a virtual operating system that can connect all our services and enabled integrated ways of working
- **Change management:** enabling our teams to embed innovation sustainably, inc. providing training, digital academies, blueprints and impact reporting.
- **Ongoing support:** responsive and holistic support for clinical users and patients
- **Co-production of innovation**: developing new functionality to accommodate emerging needs as we embed the virtual hospital

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Lunch & Networking

Chair Afternoon Reflection

Dr Gurnak Singh Dosanjh
GP
LLR ICB

CONVENZIS

Case Study

Luscii
an OMRON Healthcare Service

Case Study

Lee Gutcher
Director of Strategic Partnerships
Luscii

Daniel Harrison
Advanced Practitioner Pharmacist
South Tyneside and Sunderland NHS Foundation Trust

Natalie Spark
Advanced Clinical Practitioner
South Tyneside and Sunderland NHS Foundation Trust

Jonathan Lewis
Managing Director
Luscii

LUSCINIA

A TRIBUTE TO THE LADY WITH THE LAMP

Create more time to care

INSIGHTS

PROVEN TRUSTED METHOD

Over a decade of experience

All our insights are integrated into our product and services, allowing us to tailor our approach to your specific needs. COPD / ARI NICE. 30+ scientific publications.

350+ implementations / Scalable model

Our implementation journey is full of templates and standards, which we customise together to meet your requirements. Scalable business model. Lego build.

Programmes for 150 different conditions

Includes many programmes developed in collaboration with NHS clinical teams, ready for use.

HSJ AWARDS — Primary and Community Care Innovation of the Year 2022

HSJ AWARDS — Patient Digitising Patient Care Award of the Year 2022

PHARMA INDUSTRY AWARDS — Partnership Alliance of the Year 2022

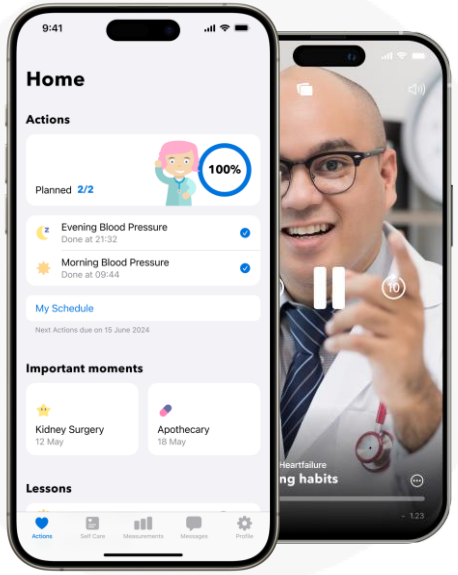
IRISH HEALTHCARE awards2022 — Innovation in Primary Care 2022

WHY LUSCII

Patient Care with System-Wide Monitoring

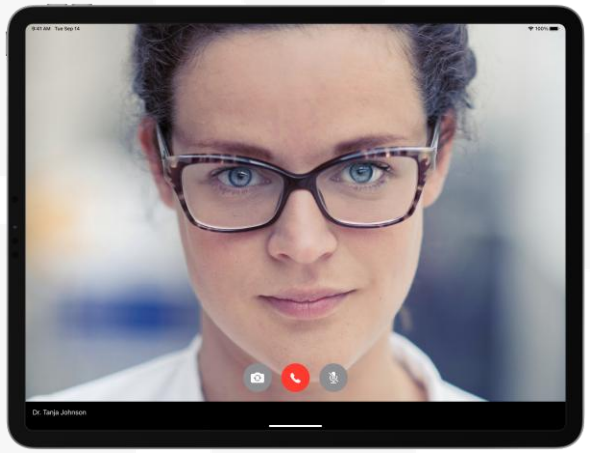
Monitoring

Easy and confident decision making using Luscii AI Clinical Engine



Patient Empowerment

Empowered patients with more insights and control over their own health



Contact

Reassured and confident patients at home because they are still connected to

INNOVATION

‘Hospital in a Box’

Changing Asthma Care

- Asthma pathway facilitating early discharge.
- Blended model of care via Luscii
- Improving patient compliance

Case study: Mr. T Watson

Acute phase

- Transferred to Hospital at Home
- Set up on Luscii > Parameters set > Visits agreed

Recovery

- Blended care to remote monitoring only
- Inhaler education and self care

Follow up

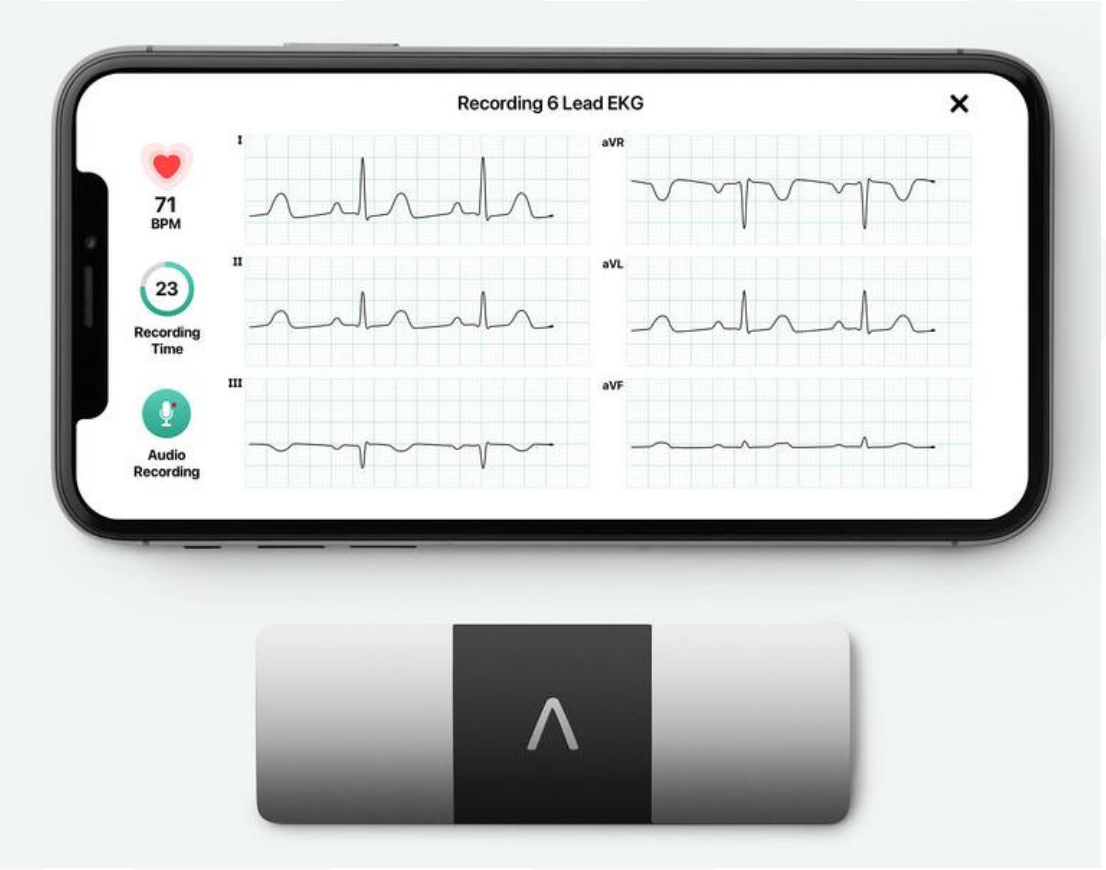
- Information from Luscii shared with specialist secondary care team to direct long term management
- Patient able to recognise deterioration and seek help earlier.

FUTURE LUSCII PROGRAMME

Atrial fibrillation Pathway

Using the KardiaMobile 6L ECG Pathway

- Patient performs daily ECG, heart-rate and questionnaire
- Practitioner performs daily video calls and remote medicine optimisation
- Saving SDEC, ED and the GP time. Increasing capacity and allowing more patients to be treated at home
- Custom built Luscii programme



Questions….?

TRUSTED PARTNER OF THE NHS

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The Royal Wolverhampton
NHS Trust

NHS
Maidstone and
Tunbridge Wells
NHS Trust

NHS
Chelsea and Westminster Hospital
NHS Foundation Trust

NHS
Imperial College Healthcare
NHS Trust

WEST LEEDS
PRIMARY CARE NETWORK

NHS
Shropshire Community Health
NHS Trust

All Together
Better
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Keynote Presentation

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8th NHS VIRTUAL WARD SUMMIT 17TH JUNE 2025, MANCHESTER

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SMART HOSPITAL @ HOME VIRTUAL WARD
A GENERALIZED APPROACH

Presented by:

Dr Nnaemeka Nnamani-SAS Doctor SMART virtual ward

Jacqueline Hammond –Head of Nursing Clinical Nurse lead SMART H@H virtual ward

MEDWAY MARITIME HOSPITAL

GILLINGHAM, KENT, ENGLAND

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INTRODUCTION

NHS Medway NHS Foundation Trust

- Virtual ward(VW) is a modelled healthcare delivery that offer hospital level care to patient at comfort of their own home.
- The objective of our service is to deliver hospital level care for all patients above the age of 18, who would ordinarily be admitted in hospital bed.
- Patient's care is enhanced with technology.
- What we do, reduces hospital admissions, Reduces LOS in acute bed, Reduces re-admissions, promote better patient experience and decongests ED.

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WHERE WE ARE

- Medway Foundation Trust (MFT) located in South- East of England, with hospital bed capacity of 651.
- Covers Medway and Swale, a population of 42,7000
- One of the high areas of deprivation in the UK, housing high population of low socio-economics groups and very vulnerable members in the society.

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WHO WE ARE

NHS Medway NHS Foundation Trust

- We are the Surgical Medical Acute Recovery Team (SMART) providing H@H virtual ward, Vascular Access across the hospital, and OPAT services for our 2 community partners. (MCH & HCRG)
- A Multidisciplinary team of Doctors, Nurses, and allied healthcare staff.
- We provide a high quality hospital level care at patient's home with the use of technology and innovation.
- Our model is created to mimic NHS England framework and design for a virtual ward.
- A generalist approach but still delivering a holistic multi speciality service .

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SMART TEAM SERVICE WORKFORCE

- 3 Acute Medical Consultants with 3PAs weekly/On-calls
- 1 Specialty Doctor
- 1 Clinical Lead
- Microbiologist for weekly OPAT MDT
- 1 pharmacist
- 1 SHO (short term locum)
- 3 Nurse practitioners
- Band 6, 5, 4 Nurses
- Therapies and other allied healthcare
- Admin support

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- Our ward has a capacity of 80 beds. Can go up to 120 on PAS during busy periods
- We are a 12 hour service-Shift pattern- 8am- 6pm and 10am to 8pm.
- The service is enhanced by 2 Community virtual wards with a capacity of- 50 beds
- In house referrals are received from all specialties, and attendance units in the hospital.

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Clinical Governance

- SMART Acute physician is responsible for all medical admissions under the service.

- For All other specialties, the inpatient admission clinician remains the same when accepted on our ward

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INCLUSION CRITERIA FOR ADMISSON

Medway NHS Foundation Trust

- ❑All patient over 18 years old in Medway and Swale
- ❑All specialties
- ❑Admitting consultant agrees to transfer with clinical support via referral team
- ❑Patient is safe to start acute treatment or continue acute care in outpatient setting
- ❑Patient and family consent for discharge onto SMART virtual ward
- ❑Patient is compliant with proposed care and not confused (Exceptional to living with responsible fulltime adult or a safety patient tailored safety net can be implemented)
- ❑Patient has access to telephone for communication

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EXCLUSIVE CRITERIA FOR ADMISSION

- Patient under 18 years
- Patient outside the catchment areas(there is exception to this)
- Patient who lives alone and safety net cannot be mitigated
- Patient who is Confused, disoriented and lacking capacity(safety net cannot be mitigated)
- Patient deemed high risk to staff (safety net cannot be mitigated)
- Acutely hypoxic patient

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ADMISSION PATHWAYS

STEP UPS ON VIRTUAL WARDS

- ✓ Community referrals from community virtual ward
- ✓ Community specialty teams – Heart failure team, Respiratory, Frailty
- ✓ Acute areas- A/Es, Ambulatory care(SDEC)
- ✓ Assessment units
- ✓ Urgent response team
- ✓ Interventional radiology(IR) dept
- ✓ Hospital theatre

STEP DOWNS ON VIRTUAL WARDS

- ➢ All hospital bedded patient in different areas

All hospital referral are made on Hosp intranet to SMART dashboard(not integrated with EPR)

Community referral are made via NHS email.

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SERVICE DELIVERY MODEL

THE SMART VIRTUAL WARD OPERATED ON 4 HUBS

1.**TRAWLER HUBS**- FISH AROUND HOSPITAL, PICK REFERRALS, TRIAGE, ADMIT ON OUR DASHBOARD

2.**VIRTUAL HUB-** ENSURES TECH ENABLED REMOTE MONITORING, DAILY PATIENT COMMUNICATION, MONITOR DASHBOARD, TRACK VITALS, INTERPRET TRENDS, REVIEWS AND ESCALATED ALERTS. THIS ARE DUTY OF BAND 6 NURSES WHO UNDERSTANDS DECISION MAKING

3.**VISITING HUBS**- ALSO KNOWN AS THE HOSPITAL AT HOME TEAM. OFFERS FACE 2 FACE REVIEW, IV ANTIBIOTIC, ACUTE WOUND CARE, NEB WEAN, OXYGEN SUPPORT, FLUID OFFLOAD, BLOOD INVESTIGATIONS

4.**VASCULAR HUB-** ENHANCE ACUTE IV ANTIBIOTICS PATHWAY IN HOSPITAL AND COMMUNITY AND, ALSO FACILITATE OUR OPAT SERVICES.

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SMART DAILY ACTIVITIES

- Daily morning board rounds- Every patient reviewed and discussed
- Allocation of task to hubs
- Doctor responsible for virtual ward rounds, virtual clinical reviews/attends to escalations, face to face review in SDEC, review of community referrals, arrange timely face 2 face clinic appointment for SDEC, provide prescriptions, admits on EPR and provide EDNs.

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GENERALIZED APPROACH

SMART model allows us to accept and see all categories of patient hospital

SURGERY	MEDICINE
General surgery	Emergency, Acute, Gen Medicine, Frailty
Urology	Respiratory
Orthopaedic	Cardiology
Breast care	Endocrine
Obstetrics and Gynae	Oncology and Haematology

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RPM

- Feebris & Isla
- Continuous and intermittent
- Patients admitted on specialty wards

-ortho
-Resp
-Cardo
-Urology
-Surgical
-Investigation
-Monitoring

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LENGTH OF STAY

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- Joint replacements – ESD 1 - 2X VISIT LOS 14 days post op
- Elective Urology 1-2 VISIT LOS 7 Days post op
- Elective Breast- 2-4x visits LOS 2 -14days
- Heart Failure **Daily visits** LOS 1 – 14 days

- Emergency Urology 2 – 4 visits LOS 14 days
- Emergency general surgery 2-4x visits LOS 2 -14days
- Respiratory – 1 -2 visit LOS 3 to 5 days (Step down)
  2 - 4 LOS 7 to 10days
- Oncology **Daily visits** LOS 1 to 14days

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DISCHARGES AND RE ADMISSION

- Majority of patients are safely discharged back to GP, community specialty team, HMP.
- Some may requires follow up with parent team
- Few may be reviewed via SDEC, ESAC, SAU and E/D
- **Escalation**- Safey net both during and out of hrs, 111 or 999 in out of hrs.

We've had 3 mortalities- All were referred as terminally ill and palliative.

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FUTURE OF SMART VIRTUAL WARD

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- To provide 24 hours monitoring
- Give community IV fluid and stat first dose of IV antibiotics
- Community Acquired pneumonia / chest infection diagnosis via point of care testing
- Establish a virtual hospital in KENT & MEDWAY

Thank you. *Can take Questions*

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Panel Discussion

Tracy Stocker
Director of Operations for Flow and Integration
Medway NHS Foundation Trust

Lina Ramsden
Regional Virtual Ward Lead
NHS England

Adrian Matthews
Consultancy Head of Yorkshire & Humber Region
NECS Consultancy