Digital Health Rewired 12th March 2024

What have we learnt from Virtual Wards and where next?

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Health
Innovation
Network
South London

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The Health Innovation Network — south London

Strategy Overview 2021 - 2026

Health Innovation Network South London

Ensuring south London benefits from national innovation priorities which address health inequalities.

Supporting innovators and the workforce in the health and care system to achieve faster adoption of innovations and drive economic growth – with a focus on digitally-enabled business models.

Delivering health and care change programmes with a focus on long-term conditions and mental health to improve health outcomes.

Evaluating the effectiveness of innovations in a real-world setting and generate evidence to identify which innovations should be adopted in health and care.

Building a sustainable, resilient, diverse, and joyful organisation.

Health and Care Change Programmes

Providing a balanced portfolio of programmes with a focus on long-term conditions, including mental health, and local priorities.

Innovation and Industry Partnerships

Supporting health and care innovators and workforce to achieve faster adoption of innovations and drive economic growth – with a focus on digitally-enabled business models.

Evaluation Services

Providing support to evaluate the impact of new innovations in the real-world, plus the evidence base to choose interventions and to support spread and adoption.

Innovation Selection Support

Helping organisations to articulate their needs to be addressed by innovations, to select the best interventions / technologies to meet these needs and to design programmes to deliver improvement.

Capability and Community Building

Collaborating on major local programmes, connecting people, creating partnerships, and increasing capabilities of provider and commissioner organisations through a range of people development programmes.

Our Vision

We want a future where health and care innovation spreads fast. We're building it by connecting people with great ideas, inspiring people to think differently and giving them practical support to do something new.

HIN capabilities

The Health Innovation Network for south London - hosted by Guy's & St Thomas' NHS Foundation Trust, - gives you access to a team of more than 75 staff with expertise across a range of health innovation specialisms and clinical areas, alongside agile project management.

Our projects are underpinned by working in partnership with patients, carers and service users to help us approach innovation in a truly person-centred way.

The HIN benefits from an award-nominated marketing and communications team, alongside a full corporate services function to ensure administration runs smoothly.

Our remit as a health innovation network means we have a highly-developed network of regional, national and industry partners and commissioning organisations.

Through the national network, we work with the 14 other health innovation geographies across England and influence the national innovation agenda through our close ties to NHS England (NHS E) and the Office for Life Sciences (OLS).
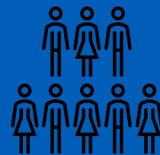
Mental Health

CVD & Diabetes Prevention

Evaluation & Implementation Science

Involvement & lived experience partners

Community and Care Homes

Innovation

Patient Safety & Experience

Digital Transformation & Technology

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Programme delivered on behalf of NHS England London and London Integrated Care Boards

1a

Review of the remote monitoring market and technology adoption in London

1b

Technical specification for procuring virtual ward technologies

2a

Research into **partnership working** to accelerate the remote monitoring market

2b

Making the case for Virtual Wards by articulating the **benefits**, alongside the **data** needed to evidence them.

Rapid mixed methods evaluations and virtual wards pathway mapping

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What have we learnt about the benefits of virtual wards and building a sustainable business case?

Key benefits

Patient experience

- Improved patient experience and satisfaction
- More personalised and holistic care
- Improved quality of life

Staff benefits

- Improved staff experience
- Improved recruitment and retention of staff
- Released time to provide personalised care

Clinical and population health

- Decreased nosocomial infections
- Reduced deconditioning and inpatient falls
- Avoided harm of hospital stay

System and financial benefits

- Better use of finite resources
- Reduced avoidable non-elective admissions and re-admissions
- Improved ED performance

"Having people around you makes you want to recover more quickly. It's like you want to give up more when you're in a hospital bed"

Patient forum participant

Patient experience

"Interacting with people instead of lying in a bed for three weeks… We're here, we feed Dad … he interacted with us, and you know, being in the home environment." *(Carer)*

"If you're at home by yourself, that can be very isolating and could have an impact on your mental health." *(Patient)*

Evidence type	Evidence details
Systematic review of H@H	Higher levels of patient satisfaction than on traditional inpatient wards was found (nb based on low quality evidence) [1]
GIRFT	Over 99% of patients on existing VWs would recommend the service [2].
VW Evaluation	96% of patients said they would use the service again. 97% of patients responded with the highest positive response possible when asked if they would recommend the service to family and friends [3].
VW Evaluation	93% of patients whose care was tech-enabled and 100% of patients whose care was non-tech-enabled stated they were satisfied or very satisfied with their experience [4].
VW Evaluation	The study found a clear preference for VWs as well as positive physical and mental benefits reported across 14 case studies with patients and families [5].
VW Evaluation	Extremely positive feedback was provided about VWs (7 patient interviews) [6].

[1] Leong MQ, Lim CW, Lai YF. *Comparison of Hospital-at-Home models: a systematic review of reviews*. BMJ Open. 2021 Jan 29;11(1): doi: 10.1136/bmjopen-2020-043285.
[2] Getting It Right First Time, NHS England (2023). *Making the most of virtual wards, including Hospital at Home*.
[3] Prosser-Snelling E., Wells E., Shemko E, *NNUH Virtual Ward Final Report* (2022).
[4] KSS Insights (2022), Northamptonshire Virtual Wards, Rapid Evaluation – Summary Report.
[5] Elliot, S, Winter, G. and Ridge, W. (2021), *Final Evaluation of the Leeds Virtual Ward (Frailty)*.
[6] Grout, J, Mason, P (2022). *Black Country Virtual Ward - Rapid Evaluation of Dudley Group of Hospitals step-down Paediatric Virtual Ward*.

Clinical benefits

"I wasn't in a happy place at the hospital…They just kept poking and prodding me. I'd had enough of that…

When you're lying in the hospital bed, you see other people ill. And [it] just makes you ill.

[On the virtual ward] I was in the comfort of my own home. With my family. With meals that I wanted to have. I got better really quickly."

(Patient)

Type	Evidence
GIRFT	Patients on a Virtual Ward are: • five times less likely to acquire an infection • eight times less likely to experience functional decline. • avoiding potential harms associated with care in a hospital setting, such as falls and delirium. Reduced extended stays in Emergency Departments (GIRFT suggest extended stays in ED increases mortality by at least 10%) [1]
NHSE evidence summary	Patients who are hospitalised are 61 times more likely to develop disability in Activities of Daily Living compared to those not hospitalised {2}
NHS E Evidence summary	Deconditioning - the loss of physical, psychological and functional capacity due to inactivity - is associated with the loss of muscle mass, increased risk of falls and reduced independence. • Deconditioning contributes to delayed hospital discharge in more than 47% of older patients • Once discharged from hospital, only 39% of those with a new or additional Activities of Daily Living Disability were back to their usual level of function after one year [2]
Systematic review	No significant difference in or lower mortality found within Hospital at Home services (nb based on low to moderate quality evidence) [3]
Peer reviewed journals	Information provided on costs associated with deconditioning, falls and health care associated infections are detailed in these reports: 4 and 5

[1] Getting It Right First Time, NHS England (2023). *Making the most of virtual wards, including Hospital at Home*.
[2] NHSEI Tour de East, How to get involved booklet.
[3] Leong MQ, Lim CW, Lai YF. *Comparison of Hospital-at-Home models: a systematic review of reviews*. BMJ Open. 2021 Jan 29;11(1): doi: 10.1136/bmjopen-2020-043285.
[4] Mudge AM, Kasper K, Clair A, et al. *Recurrent readmissions in medical patients: a prospective study*. J Hosp Med. 2011;6(2):61-67. 10.1002/jhm.811
[5] Guest JF, Keating T, Gould D, et al Modelling the annual NHS costs and outcomes attributable to healthcare-associated infections in England BMJ Open 2020;10:e033367. doi: 10.1136/bmjopen-2019-033367

Key Messages

Making the most of finite resources

- Emerging research suggests that staff on VWs can safely deliver care at a lower staff-to-bed ratio (esp tech-enabled VWs) and VWs have the potential to optimise resources by reducing cost per patient stay compared to IP beds – **emerging health economics analysis shows that every £1 invested results in £2.80 saved**

Patient feedback suggests they want this model of care

- **Overwhelmingly positive feedback from patients** should be a key driver of ongoing investment

Variation and service integration are core challenges

- Variation across multiple vectors: population need, workforce and existing community-based services. **Integrating services across that variation is a challenge and relies on developing local relationships.**

Due to evidence limitations, the business case currently is for R&D

- **Inconsistent acuity and costings methodologies impede comparative research** across systems. Incomplete data is a key challenge for robust evaluation.
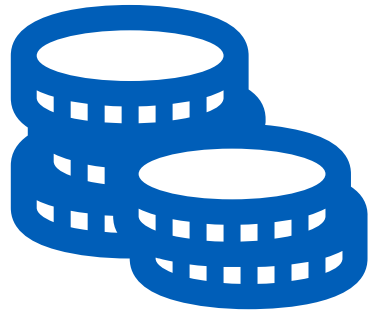
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Where next with virtual wards?
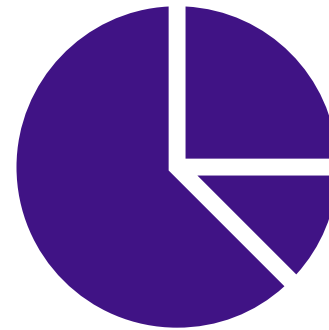
Thank you and questions

Please contact us for further information: amanda.begley@nhs.net

Technical specification

Partnership working

Benefits/ Business case

Evaluations – more to come!