Scottish Borders Health and Social Care Partnership Integration Joint Board

20 March 2024

Virtual Hospital at Home- Funding Proposal

Report by Laura Jones, Director of Quality & Improvement, NHS Borders

Scottish Borders Health and Social Care PARTNERSHIP

1. PURPOSE AND SUMMARY

1.1. **To seek support to progress to a second stage of development for Virtual Hospital at Home Capacity across the Scottish Borders, building on evidence obtained from the recent establishments of Hospital at Home and Respiratory Virtual Ward services**.

1.2. There is a National interest in expanding virtual capacity across Health and Social Care Partnerships to help support system wide flow and complement hospital inpatient capacity. There has been a prolonged and sustained period of pressure across NHS Borders due to several reasons which include high bed occupancy, increased delayed discharges and increased length of stay.

1.3. This has resulted in congestion and overcrowding in the Emergency Department, lengthy waits for inpatient beds and the requirement for unfunded surge beds. Boarding patients out with speciality has impacted on the elective programme. The current situation increases risk of patient harm and has adverse consequences on patient and staff experience.

1.4. The security of funding would see NHS Borders being able to strengthen a new Virtual Hospital service; creating a resilient and sustainable service that offers a safe pathway as an alternative to hospital admission, or to provide early supported discharge for patients who require ongoing clinical supervision.

1.5. The ask to extend funding would support essential workforce development and further virtual beds to be opened (over and above the initial outlay of hospital at home and respiratory virtual ward beds). The additional funding will support the necessary resources, staffing, training and equipment required to accommodate the anticipated increased demand as the service scales up for a broader period of testing.

1.6. This paper provides the Health and Social Care Partnership with the opportunity to deliver an enhanced model of integrated care at an overall reduced cost. The Virtual Hospital project aims to:

- Improve the quality of patient care and wellbeing.
- Reduce the reliance on inpatient care and treatment.
- Reduce the overall costs of care to Health and Social Care
- Reduce occupied bed days and readmission rates into an acute setting.

2. RECOMMENDATIONS

2.1. **The Scottish Borders Health and Social Care Integration Joint Board (IJB) is asked to approve the allocation of non-recurrent transformation funding to support a year of testing at scale of a combined virtual hospital at home service.**

3. ALIGNMENT TO STRATEGIC OBJECTIVES AND WAYS OF WORKING

3.1. It is expected that the proposal will impact on the Health and Social Care Strategic Framework Objectives and Ways of Working below:

Alignment to our strategic objectives					
Rising to the workforce challenge	Improving access	Focusing on early intervention and prevention	Supporting unpaid carers	Improving our effectiveness and thinking differently to meet need with less	Reducing poverty and inequalities
X	X	X	X	X	X

Alignment to our ways of working					
People at the heart of everything we do	Good agile teamwork and ways of working – Team Borders approach	Delivering quality, sustainable, seamless services	Dignity and respect	Care and compassion	Inclusive co-productive and fair with openness, honesty and responsibility
X	X	X	X	X	X

4. INTEGRATION JOINT BOARD DIRECTION

4.1. The IJB issued a direction, SBIJB-200923-1, to establish a hospital at home pathfinder for the Scottish Borders. This model was to be developed and tested for the population of Eildon to assess impact and scalability.

4.2. The direction requested a six-month test of change for the Hospital at Home service as a transformation programme, to enable the development of a full Business Case. As part of this test of change, the Health and Social Care Integration Joint Board were supportive of a bid being made to the Scottish Government / Healthcare Improvement Scotland for further funding to support testing.

5. BACKGROUND

5.1. In recent years, healthcare professionals have been considering new ways to respond to the acute care needs of older adults with frailty and other long-term chronic conditions. Where inpatient care is needed, traditional hospital-based models bring a level of risk to older adults. Safe, modern, person centred, community-based alternatives are increasingly being explored at both National and local level. This has resulted in a shift in focus within the NHS towards providing hospital-level care in a person's home environment.

5.2. The Scottish Borders is a rural area which in 2019, had a population of 115,510. The rurality of the region contributes to the fact that 32% of data zones in the Scottish Borders are within the bottom quarter of data zones for access deprivation in Scotland. With 50% of its population living in rural areas, this makes it the most rural mainland coterminous HSCP/Health Board in Scotland[1]. Whilst the size of the Scottish Borders population puts it in the medium sized category it has a large land area and a sparse population density which presents its own challenges in providing health and social care.

5.3. The Borders also has the second oldest population in Scotland with 24.8% of its population over 65 years of age[2]. This is significantly above the national average of 19.10% (the National over 65 population will grow to around our current level in 2045). These demographic characteristics are a major driver of the high demand for health and social care services and the importance of having both local and equitable access to services.

5.4. The Hospital at Home pilot launched in April 2023. It has an inclusive patient criterion encompassing all adults over the age of 18, primarily residing in the central area of the Scottish Borders. The programme is versatile and skilled in overseeing various conditions, including (but not limited) OPAT, Heart Failure, Frailty and General Older People related illness. In its development, the service has also managed to provide some respiratory care (separate to Virtual Respiratory Ward) via ad-hoc support which has been given by the Respiratory Specialist Nurses when required. The Hospital at Home Test of Change gained National recognition form Healthcare Improvement Scotland, for its exemplary collaboration, methodology, governance, data collection and rapid implementation.

5.5. Since the pilot has begun in the Eildon locality, the service has made significant progress in providing acute health care to patients in the comfort of their own home. As of February, a total of 256 patients have been admitted to the programme. On average, patients have stayed for 7.5 days in a hospital at home model. A Borders-wide expansion will provide an opportunity to extend the service to the remaining three localities. There has been a positive impact of caring for patients in their own home retaining their existing care support and preventing deconditioning resulting from being out with a patient's normal environment.

5.6. Following a successful bid for non-recurrent monies from Scottish Government, the respiratory service team developed the infrastructure and pathways for a respiratory virtual ward (RVW) by using remote monitoring equipment supplied through a third-party company – Current Health. NHS Borders are the first Board in Scotland to utilise this equipment in this way. Following rapid planning and development, the virtual ward became operational on Tuesday 23rd January 2024 and has made significant steps in establishing a virtual bed base.

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[1] https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2018/02/understanding-scottish-rural-economy/documents/00531667-pdf/00531667-pdf/govscot:document/00531667.pdf

[2] https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/scottish-borders-council-profile.html

5.7. During the RVW Test of Change during August 2023 there was 12 virtual ward admissions during a six-week period, with two patients re-admitted to the virtual ward on more than one occasion. The median length of stay was 7.5 days. An estimated 62 occupied bed days were saved during the six weeks the virtual ward was operational.

5.8. In the three months since admissions to the virtual ward were paused a further 41 patients who were admitted to hospital would have been eligible for remote monitoring, with the potential to save 69 additional bed days from early supported discharge.

5.9. The RVW reopened in January 2024 with additional national funding and has seen 36 admissions with an average length of stay of 6.3 days. This has been estimated at an additional 149 bed days saved.

5.10. National funding is due to finish at the end of March 2024 for RVW workstream and at end of June 2024 for Hospital at Home. In the current financial climate, these models will only be affordable if they are able to demonstrate collective value, integration into a single entity (which shared resources and pathways) and cost effectiveness. NHS Borders is currently seeking non-recurring funding to support a year of testing of a combined virtual hospital at home service at full scale across the Scottish Borders.

6. VISION

6.1. For the Health and Social Care Partnership to truly transform, fundamental changes in how we deliver care services to our communities has to change. Our vision is to seamlessly integrate community-based clinical care, creating a connected and convenient system that brings care directly to people's homes. We aim to break down the barriers between traditional health care settings and the local community by connecting patients and their families to high-quality care. Delivering an integrated model that aligns to existing community nursing localities, will enable a joint service to demonstrate these core values described in 1.4 above.

6.2. During this next year, the teams will work together to synergise pathways and create a workforce, with the right skill mix, that will be able to support a larger number of acutely unwell patients at home. This will aim to gain close alignment to locality nursing teams to ensure an effective and resilient workforce model making best use of advanced nursing skill sets across localities.

6.3. There is recognition that any investment during the current financial climate can be considered a risk. However, in order to demonstrate the capability of a truly integrated system (with the potential to offset hospital-based care with community-based care), transformative funding is required; this will support interfacing with other transformational bundles to truly demonstrate system wide change. This is felt to be a critical priority to build a model of care for the long-term future of the Scottish Borders population and ageing demographic outlined earlier in the paper.

6.4. Phase two has been modelled on the service operating 7 days per week between the hours of 8am – 6pm aiming for virtual bed capacity of 48 across the Scottish Borders with the following indicative workforce:

6.5.

- 6.44 WTE X Band 7
- 12.87 WTE x Band 6
- 4.29 WTE x Band 3 HCSW
- 1 WTE x Consultant
- 2 WTE x Middle Grade Doctors

- 1 x WTE Band 4 Admin
- 0.48 WTE x Band 5 Pharmacy Technician

6.6. Phase two aims to take the Virtual Hospital at Home service to scale to demonstrate the resulting impact on occupied beds days to enable a reduction in inpatient beds. Critical dependencies to enable the transfer of inpatient beds to virtual on a recurring basis include the full deliver of other workstreams within the Urgent and Unscheduled Care Programme as well as the full realisation of additional care capacity funded through the IJB. Critical workstreams include:

- Front door flow navigation.
- Older persons care including community hospitals, integrated reablement.
- Surge beds – additional social care capacity.

6.7. In addition, any reductions in existing levels of provision across health and social care need to be closely monitored to understand the impact on whole system bed capacity.

6.8. Phase two will require close tracking of all outcomes and will involve refinement of a proposal around a long-term workforce model, building in any considerations around resources that may be required in the out of hours period. The long-term viability of this model will be dependant to realising the expected benefits to enable the closure of inpatient beds.

7. IMPACTS

Community Health and Wellbeing Outcomes

7.1. It is expected that the proposal will impact on the National Health and Wellbeing Outcomes below:

N	Outcome description	Increase / Decrease / No impact
1	People are able to look after and improve their own health and wellbeing and live in good health for longer.	Increase
2	People, including those with disabilities or long-term conditions, or who are frail, are able to live, as far as reasonably practicable, independently and at home or in a homely setting in their community.	Increase
3	People who use health and social care services have positive experiences of those services, and have their dignity respected.	Increase
4	Health and social care services are centred on helping to maintain or improve the quality of life of people who use those services.	Increase
5	Health and social care services contribute to reducing health inequalities.	Increase
6	People who provide unpaid care are supported to look after their own health and wellbeing, including to reduce any negative impact of their caring role on their own health and well-being.	Increase
7	People who use health and social care services are safe from harm.	Increase
8	People who work in health and social care services feel engaged with the work they do and are supported to continuously improve the information, support, care and treatment they provide.	Increase
9	Resources are used effectively and efficiently in the provision of health and social care services.	Increase

Financial impacts

7.2. To develop the model in phase two taking the service full scale will require pump priming transformation funds totalling £2.1 million. The ambition had been to offset some of this cost through national allocations to be ringfenced for this area. However, the national financial challenges facing NHS Scotland now mean that any external allocations are unlikely to be provided. Therefore, it is proposed that a transformation fund is allocated to the IJB for 2024/25 ring fenced to support this area:

Grade	Hours	Hours	Staff	Days	Hours	Uplift	Total Hours	WTE		Total Cost
Nurse band 7	0800-18-00	9.5	3	7	199.5	41.895	241.395	6.44	75,033	483,002
Nurse band 6	0800-18-00	9.5	6	7	399	83.79	482.79	12.87	62,689	807,083
HCSW band 3	0800-18-00	9.5	2	7	133	27.93	160.93	4.29	41,842	179,564
Consultant	40hrs per week only for 52 weeks per year	40	1		40		40	1.2	201,649	201,649
Admin Support band 4	0900-1700 (no holiday cover)	7.5	1	5	37.5		37.5	1.00	37,818	37,818
Middle Grade Doctors	40hrs per week only for 42 weeks per year	40	2		80		80	2.00	107,235	214,470
Pharmacy Technician band 5	15 hours per week for 52 weeks	15	1		15	3.15	18.15	0.48	51,146	24,755
Travel, Supplies and Licenses										150,000
										£2,098,342

Equality, Human Rights and Fairer Scotland Duty

7.3. Each service completed an individual Equality, Human Rights and Fairer Scotland Duty Impact Assessment but a new one will need to be carried out to capture an integrated model.

7.4. Stage 1 – Proportionality and Relevance has been completed at this stage.

7.5. Given the complexities and time pressures at pulling this integrated model together we will look to start Stage 2 and Stage 3 as soon as feasibly possible. This will be done once an integrated model has been scoped out.

Legislative considerations

7.6. Currently there are no relevant legislative considerations that impact the work on Hospital at Home.

Climate Change and Sustainability

7.7. Virtual models can contribute to supporting climate change mitigation and adaption by reducing the carbon footprint associated with traditional hospital care. The service could require less energy-intensive infrastructure compared to traditional hospitals. This includes lower energy requirements for heating, lighting, and other operational needs, resulting in reduced carbon emissions associated with energy consumption. More work would be required to understand the true impact in this area.

7.8. This model aims to provide care in a patient's own residence, reducing the need for resource-intensive hospital equipment/utilities. This includes the efficient use of electricity, medical supplies, and other resources such as laundry facilities.

7.9. The model can also help minimise indoor air pollution by providing care in a patient's home, where air quality can be more easily controlled and maintained compared to traditional hospital where expensively run ventilation and filtration systems.

7.10. Respiratory Virtual Ward estimated it was able to save 1719KgCO2 emissions during a six-week period.

Risk and Mitigations

7.11. Below is a table of the key strategic risks facing the service as it currently stands with potential safeguards and actions in place to mitigate these.

7.12. Two principal categories of risk have been considered: strategic and service.

Ref	Type	Risk description	Possible mitigation
1	Strategic	No national funding is received to deliver the project recurrently.	It is not possible to mitigate for this risk as there are no alternative local sources of funding.
2	Strategic	NHS Borders is currently one of a number of Boards on Scottish Government financial escalation. Therefore, any decision to invest in services must be a risk backed decision and must provide best value not only for the service but for NHSB.	Build evaluation and benefits measurement to ensure business needs are supported and the right rationale for investment.
3	Strategic	Failure to secure sponsorship and support from executive or finance stakeholders	Ensure alignment with local strategic priorities; effective governance to manage stakeholders.
3	Service	Unable to identify supplier who can meet technical service requirements	Horizon scanning of existing remote monitoring solutions; engagement with stakeholders in Scotland and England who have implemented technology enabled virtual wards to share experiences and lessons learned.

4	Service	There are insufficient clinical and administrative resources to deliver a safe and resilient virtual capacity ward.	Identify opportunities to maximise use of existing resources.
5	Service	Patients are not supportive of virtual care model	Obtain patient feedback about benefits and challenges from virtual ward care through feedback questionnaires; arrange in depth interviews with cohort of patients to explore challenges experienced using remote technology.
6	Service	Cannot track the benefits realised, leading to project de-prioritisation if short term return on investment cannot be proved	Build evaluation and benefits measurement into the project from the start; ensure a strong and compelling line of sight between project aims, investment objectives, business needs, anticipated benefits and the enablers and system features required to realise them.
7	Service	There is a risk that operational scalability may be limited due to local workforce challenges leading to partial outcome realisation and inconclusive model options.	The programme continuously evaluates the scalability of the service under a Scottish Borders context and will adjust staffing levels or allocation as needed to minimise any negative impacts to the integrity of the TOC.

8. CONSULTATION

Communities consulted

8.1. As early adopters of the Health and Social Care Partnership's Equality, Human Rights and Fairer Scotland Duty Impact Assessment process, the service has proactively identified several groups, paying specific attention to any gaps there may be.

8.2. The service will look to re-engage with identified group as well as others to understand the impact of integrated service.

8.3. The group are currently monitoring data through intelligence and feedback forms to proactively make changes where possible. Some of the groups that will be consulted previously included:

· Patient Representatives
· Physical Disability Group
· Strategic Ukrainian Settler Group
· Drug & Alcohol Partnership
· Poverty
· Ethnic Minority Group

Integration Joint Board Officers consulted

8.4. The IJB Chief Officer, Medical Director, Director of Nursing, Midwifery and AHPs and Director of Financial have been involved in scoping out a phase 2 proposal for Virtual Hospital and Home.

Approved by:

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Background Papers: None included

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