Scottish Borders Health and Social Care Partnership
Integration Joint Board

24 January 2024

Whole System Capacity of Health & Care Modelling

Report by Jen Holland, Director of Strategic Commissioning and Partnerships and Steph Errington – Acting Director of Planning & Performance

1. PURPOSE AND SUMMARY

1.1. The purpose of this paper is to appraise Integration Joint Board members of the work commissioned by the Health and Social Care Partnership Joint Executive Team to review health and social care capacity, and to seek comments on the scope and approach proposed.

1.2. The Scottish Borders is currently experiencing high demand for its services across health and social care settings. This leads to access issues as noted within our Health and Social Care Strategic Framework. There are waits for care and treatment across a range of services, including in the community and in hospital and challenges access interim and respite beds in the community to support effective unscheduled care flow across the whole system.

1.3. In order to ensure improved outcomes, best value and to improve capacity across the health and social care system there is a requirement to profile current demand versus capacity as well as likely future demand in order to strategically plan and commission effective hospital and community settings for now and into the future.

1.4. The modelling of health and social care demand is in its relative infancy and further consideration will be needed to agree the scope of the modelling required and the settings to be included.

2. RECOMMENDATIONS

2.1. **The Scottish Borders Health and Social Care Integration Joint Board (IJB) is asked to:-**

a) Note the work that will be commissioned by the Health and Social Care Partnership
b) Provide comments on the approach being undertaken to inform the commission

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	

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. A Direction is not required

5. BACKGROUND

5.1. In September 2021, NHS Borders worked with Public Health Scotland to advise on demand for and commissioning of care home beds in Scottish Borders for next 10 years (to 2030).

5.2. Modelling indicated that there would be a need for 187 additional care home beds within the Scottish Borders by 2030. This represents an annual increase of between 14 and 20 care home admissions per year.

5.3. In contrast between 2009 to 2019, there was a 1% increase for number of care home registered residents in Scottish Borders, despite a 20% increase in the population aged 75 and over. This showed that care home demand did not increase proportionately to demographic change. There is a need to assess the current level of demand for residential care, and also other means of accessing care such as care at home and support from a Personal Assistant through Self-Directed Support -Direct Payments.

5.4. The Public Health Scotland Whole System Modelling service is at present building a Social Care Demand Model which follows a discrete event simulation approach, in which capacity in social care and intermediate care and assessment is tracked against demand as clients flow through the system. With flows from acute services and the community into social care services being considered, the model allows bottlenecks, such as queues from social care referrals, to be modelled as capacity constraints impacting on other parts of the Health &Social Care system. This modelling is currently focussed on the Hawick area only and is linked to anticipating demand for a new Care Village facility

5.5. The Public Health Scotland Whole System Modelling team is currently experiencing capacity challenges due to other workload and this along with problematic aspects to the baseline modelling tool has meant that the Hawick modelling is yet to report to the Care Village Board.

6. ASSESSMENT

6.1. In previous discussions at the Integration Joint Board relating to our performance in key areas, and the impacts that this has on outcomes, spend and performance in other parts of the system, the Integration Joint Board have indicated that there is a need for a better understanding of the demand / need versus the capacity available in the Scottish Borders for health and social care services. As a result, the HSCP Joint Executive Team have explored how to best deliver this.

6.2. It was agreed that a 'whole system capacity of care modelling' needs to be undertaken at pace in order to fully understand current and future demand versus capacity realities and challenges but also to address critical areas of pressure such the waiting times to receive a care at home

package of care, the lack of interim and respite beds and the number of people delayed waiting for care in acute hospital settings.

6.3. The aim would be to highlight areas in the whole system, that if corrected, potentially have system wide benefits – in terms of community outcomes, quality of care, unscheduled care flow, financially and from a staffing perspective.

6.4. Clarity on the scope of the whole system modelling would require to be built in to the any modelling brief and decisions will need to be made with regard to whether acute beds include all inpatient beds or simply adult beds and whether the modelling will cover both unscheduled as well as planned care beds. There will also be a requirement to establish clear governance routes to support effective decision-making when modelling outputs become available.

6.5. Capacity and expertise to undertake the necessary whole system capacity of care modelling does not exist internally within NHS Borders or Scottish Borders Council and will therefore need to be commissioned externally.

7. METHODOLOGY AND OUTPUTS

7.1. Whole system capacity of health and care modelling needs to be undertaken at pace in order to fully understand current and future demand versus capacity realities and challenges but also to address critical areas of pressure such as the number of delays in acute hospital settings, the lack of interim and respite beds and the waiting times to receive a care at home package of care. A whole system modelling exercise will enable us to more fully understand the pressures across the all areas of provision both hospital- based and within the community.

7.2. This whole system modelling should look at as a minimum, the following five areas of focus:

- Understand the demand and pressures within the community in relation to social work and social care. The modelling to include social work assessment waiting lists and level of un-met need within the community and any associated capacity / resourcing challenges.

- Gain an understanding of the whole patient / client journey and the touchpoints where preventative action may avoid creation of a negative series of dependant events resulting in a Delayed Transfer Of Care (DTOC) as an outcome. The modelling to have a focus on the role of Early Intervention and Prevention and Reablement in supporting individuals to have a reduced need for formal intervention by social work and social care and / or a hospital admission.

- Gain an understanding of the profile of Delayed Transfer of Care (DToC). Understand better the discharge and referral process and the role of key teams, personnel and processes within. Also look at a time analysis, repeated pressure points and causes of delay as patterns and cost analysis.

- Assess Demand, Capacity, Activity and resultant Queue (DCAQ) in the discharge pathway, inclusive of interim beds as well as care at home and nursing/residential home care.

- To develop a model highlighting potential issues and capable of predicting the impact of modifying each element using Discrete Event Simulation. Assess the impact of DTOC on acute hospital patient flow whether it was initiated as unscheduled or scheduled care.

- To develop a model that defines the provision if all need was met in the right place at the right time.

7.3. The modelling will focus on adult beds only.

7.4. A Modelling Steering Group will be established with representation from all service areas in scope as well as the performance and business intelligence teams from the health board and council. The commissioned provider will report to this board. The Modelling board will report into the Strategic Commissioning Board (to which the Modelling Steering Group will be accountable) and to the HSCP Joint Executive Team, who in turn will report onward to the Integration Joint Board.

8. SCOPE

Settings

8.1. As well as the DTOC analysis the aim of this modelling exercise is to highlight areas in the whole system, that if corrected, potentially have system wide benefits –in terms of flow, quality of care and financially. This suggests as wide a range of settings should be included in order to obtain whole system understanding and therefore ultimately whole system benefit. Settings likely to be in scope are:

8.2. Scottish Borders Council Care at Home Service - To include the care at home delivery delivered by the council Adult Social Care service analysing such things as volume of hours, delivery across the county and workforce modelling.

8.3. Scottish Borders Council Residential Homes - To include the six, council run residential settings and referral in to and demand within these settings.

8.4. Scottish Borders Council Social Work Assessments - To include analysis of the social work assessment capacity and processes with a view of addressing waiting lists.

8.5. Scottish Borders Council Day Services - To explore the role of day services and other community services and links to respite and early intervention and prevention.

8.6. External Care at Home and Supported Living provision - To work alongside the Care at Home Design project to explore opportunities for delivery of care at home services via different models with a view of improving capacity and sustainability and achieving better outcomes for clients. To include the role of Extra Care Housing and Housing with Care.

8.7. External Residential and Nursing home provision - To include the seventeen external residential and nursing homes with a particular focus on establishing the correct profile and role of interim and respite beds.

8.8. External Day Service provision - To explore the role of day services and other community services and links to respite and early intervention and prevention.

8.9. NHS Borders Acute Inpatient beds and Emergency Department - To include all adult beds both unscheduled and planned. To include a bed modelling exercise in order to right-size the bed estate in acute settings.

8.10. NHS Borders Community hospital settings - Modelling of beds and type of beds to meet need in community hospital settings in the Borders.

8.11. NHS Borders Community Teams - To include teams such as Home First and District Nursing and the role such teams play in the patient / client journey.

Non setting specific

8.12. The modelling exercise will endeavour to identify where the opportunities for Early Intervention and Prevention and Reablement are best developed in order to have maximum impact on specific service settings. The modelling therefore will likely look at the role of community provision in the Borders which is largely commissioned.

8.13. This exercise should make use of available data and also highlight data gaps and data quality issues in order that these can be addressed to improve intelligence.

8.14. The modelling should also include elements of demography forecasting and prevalence analysis as part of this exercise.

8.15. A financial modelling exercise across the whole system will enable us to understand the cost of health and care across all settings and enable better deployment of resources in order to deliver on any findings resulting from this exercise.

9. IMPACTS

Community Health and Wellbeing Outcomes

9.1. 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

9.2. It is expected that the outcomes of the assessment of need and associated capacity will assist the Integration Joint Board to ensure the right care, in the right place, at the right time, and to deliver best value with the limited resources that it has.

Financial impacts

9.3. A Commissioning Brief has been created and any costs will be specified as part of submissions of interest. These are covered within the integration scheme and the schemes of delegation / standing orders of NHS Borders and the Scottish Borders Council.

Equality, Human Rights and Fairer Scotland Duty

9.4. A stage 1 Integrated Impact Assessment was undertaken and is attached in the Appendix. As this relates to an assessment of care capacity, rather than a plan, strategic change or new policy, it was deemed that a stage 2 Integrated Impact Assessment is not required. However, once decisions start to be taken on how to use this information to commission services / approaches, Integrated Impact Assessments will require to be undertaken.

Legislative considerations

9.5. There are no relevant legal considerations for this report.

Climate Change and Sustainability

9.6. There are no relevant climate change and sustainability impacts associated to this report, however this can be considered as part of any future commissioning process.

Risk and Mitigations

9.7. The report fully describes all the elements of risk that have been identified in relation to this project and no specific additional concerns need to be addressed.

10. CONSULTATION

10.1. An important feature of this modelling exercise will include engagement with a range of stakeholders.

10.2. Once the findings of the assessment are complete, consideration will then need to be applied to the approach to the commissioning of any findings, along with the appropriate level associated integrated impact assessments and consultation.

Integration Joint Board Officers consulted

10.3. The IJB Board Secretary, Director of Strategic Commissioning and Partnerships and the IJB Chief Officer have been consulted, and all comments received have been incorporated into the final report.

10.4. In addition, consultation has occurred with our statutory operational partners at the HSCP Joint Executive Team.

Approved by:

Jen Holland, Director Strategic Commissioning and Partnerships
Steph Errington, Acting Director of Planning and Performance

Author(s)

Bryan Davies and Stephanie Errington

Background Papers: n/a

Previous Minute Reference: n/a

For more information on this report, contact us at bryan.davies@scotborders.gov.uk and Stephanie.Errington@nhs.scot