

Agenda Item No:

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Report to:	Humber and North Yorkshire Integrated Care Board
Date of Meeting:	13 March 2024
Subject:	Integrated Care Partnership Futures Group – Connected Humber and North Yorkshire Proposal
Director Sponsor:	Professor Charlie Jeffery – Vice Chancellor University of York Academia Participant Member Karina Ellis – Executive Director Corporate Affairs
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STATUS OF THE REPORT:	
Approve <input checked="" type="checkbox"/> Discuss <input type="checkbox"/> Assurance <input type="checkbox"/> Information <input checked="" type="checkbox"/> A Regulatory Requirement <input type="checkbox"/>	

SUMMARY OF REPORT:

The purpose of this paper is to provide the Board with an overview of the proposal from the Integrated Care Partnership Futures Group.

The vision in the proposal is to seize a once in a generation opportunity to ensure Humber and North Yorkshire Integrated Care System is the central driver for improving health, care and wellbeing outcomes for the 1.7 million people that live in the geography.

The impact of the offer in the proposal has been identified as:

- enhancing integrated places leading to new/improved cross sector collaboration and partnerships, enabling them to plan and invest together for long-term population gain based on a mutually inclusive return on investment model,
- creating the opportunity for professionals from different sectors to work in harmony, using the same data to transform the life chances of our most dis-advantaged families, improving the health, care and wellbeing outcomes of whole communities,
- developing long-term benefits and sustainable gains regarding turning the dial on health inequalities in Humber and North Yorkshire's most deprived wards.

Core to the offer in the proposal is the creation of a Humber and North Yorkshire Integrated Data Engine for Analytics (HNY IDEA) centre that connects academic expertise (data science, research and evaluation) with HNY resources at a system and at the most local place level. HNY IDEA would oversee the creation of 'Connected HNY' – a database capable of providing the data insights necessary to support local professionals design improvements with local people and communities that impact on direct service delivery, improve outcomes and drive efficiency in integrated service delivery.

This proposal provides an example of the strategic leadership role of the Integrated Care System in creating an environment in which public sector and commercial partnerships can work together. This will lead to a sustainable model of collaboration that takes forward research, service planning and investment, and operational integration that has previously been beyond the reach of us all.

The Board is asked to consider the proposal; approve and support the direction and the next step which includes a small request for investment.

RECOMMENDATIONS:

Members are asked to:

- i) Consider the proposal and approve the vision and direction set out in section 3.3.
- ii) Support the next steps and approve the funding request of up to £100,000 to support the development and initial implementation of a test case as set out in section 3.6.

ICB STRATEGIC OBJECTIVE

Managing Today	<input type="checkbox"/>
Managing Tomorrow	<input checked="" type="checkbox"/>
Enabling the Effective Operation of the Organisation	<input type="checkbox"/>

IMPLICATIONS

Finance	There is a request for an initial investment to support the development of a business case and initial implementation that will support the economic modelling and return on investment in a business case.
Quality	The outcome of the changes arising from the use cases will focus on improving quality of services and outcomes for people.
HR	There are no HR implications arising directly as a result of the proposal. There may be workforce implications arising from the transformation that is proposed by the implementation of any agreed service change
Legal / Regulatory	The legal or regulatory issues arising from the proposal are mainly Data Protection and Information Governance related, see below.
Data Protection / IG	There are Data Protection and IG implications arising from the implementation of a sharing and linking data. This will require engagement with communities and consent models to be considered. These have been part of the considerations and there will be learning from Bradford.
Health inequality / equality	The proposal when implemented would have a direct impact on addressing health inequalities and equity across Humber and North Yorkshire.
Conflict of Interest Aspects	There are no conflicts of interest identified in relation to the proposal.
Sustainability	There are no sustainability impacts as a result of the proposal.

ASSESSED RISK:

There is a risk that if we do not implement this proposal that we will not be able to achieve our ambition of radically improving Children and Young People's Health, Care and Wellbeing that we have set out in our strategy.

MONITORING AND ASSURANCE:

The arrangement for monitoring and assurance of this work would be through the Integrated Care Partnership which reports through to the ICB and Health and Wellbeing Boards.

ENGAGEMENT:

The report highlights that there has already been engagement with professionals around the proposal.

The development and implementation of the proposal will require further engagement with stakeholders and public involvement in co-producing changes to services.

REPORT EXEMPT FROM PUBLIC DISCLOSURE

No Yes

If yes, please detail the specific grounds for exemption.

Integrated Care Partnership Futures Group – Connected Humber and North Yorkshire Proposal

1. INTRODUCTION

- 1.1. The purpose of this paper is to provide the Board with an overview of the proposal from the Integrated Care Partnership Futures Group. The full proposal is available at appendix 1. The Board is asked to consider the proposal; approve and support the direction and the next step which includes a small request for investment to develop a detailed business case and delivery plan; and to seize a once in a generation opportunity to ensure Humber and North Yorkshire Integrated Care System is the central driver for improving health, care and wellbeing outcomes for the 1.7 million people that live in the geography.

2. BACKGROUND

- 2.1. Humber and North Yorkshire Integrated Care Partnership took a ground-breaking decision in June 2023 to establish a Futures Group. The purpose of the Futures Group is to pursue partnership working that increases the capacity and effectiveness of the Integrated Care System in delivering on its long-term ambitions. The Futures Group goes beyond the existing health and care partnership (NHS, local authorities, patient voice, voluntary sector) and harnesses the capabilities of universities, colleges, the private sector (local, national and international) and health charities.
- 2.2. The Futures Group is a ‘first mover’ (thought leader and innovator), multi-sector partnership that considers the transformative change that would be required to have an impact on the health, care and wellbeing of the population in Humber and North Yorkshire. The group opens up that bandwidth by focusing on the medium to long term only, and to not typically discuss matters which are likely to have impact within a three-year timeframe but preparing for the years beyond that.
- 2.3. Working across four main themes – research, workforce, technology, and population health – it is hoped that the futures approach of the Humber and North Yorkshire ICS will be recognised nationally as a model for understanding and tackling the longer-term drivers which all too often manifest in short term pressures and reactive decision-making.
- 2.4. Since its first meeting in June 2023, the Futures Group recognised the role that data plays in integrating and redefining service delivery and outcomes for people and communities. It also recognised that if we are going to achieve the aim of narrowing the gap in health life expectancy and improving healthy life expectancy, we need to develop interventions which bring about a step-change in the life chances of children and young people in Humber and North Yorkshire which will bring returns to individuals, social cohesion, economic productivity and public services across the whole life course.
- 2.5. Through a series of workshops and two further formal meetings the Futures Group have taken the focus on the role of data, explored the four main themes above, learnt what others are doing, understood the work already happening in Humber and North Yorkshire, considered several ‘knotty’ questions in ethical data usage and consent and developed a proposal that is summarised in the rest of this paper, with a full version provided in appendix 1.

2.6. Regular updates have been provided to the ICP, and the ICB received a verbal update in February 2024. There has been engagement with a wide range of stakeholders with a particular emphasis with the Place Directors, recognising the importance of community engagement.

3. THE PROPOSAL

3.1. **The vision** - to seize a once in a generation opportunity to ensure that Humber and North Yorkshire is a national trailblazing site and central driver for improved health, care, and wellbeing outcomes for the population through data driven integrated and redefined services.

3.1.1. Our aim is to revolutionise health, care and wellbeing in Humber and North Yorkshire through the strategic application of data science, alongside local professional wisdom and voice of people in our communities – ensuring Humber and North Yorkshire is the heart of leading evidence based integrated service delivery.

3.1.2. This will begin with a focus on children and young people, enhancing service delivery and ultimately driving value across the whole life course, narrowing the gap in healthy life expectancy, and making a step-change contribution in addressing the long-term objectives of ICSs in improving population health, reducing inequalities, increasing value for money, and contributing to broader social and economic development.

3.2. **The problem** - More than 200,000 of the 1.7 million people who live in Humber and North Yorkshire are living in poverty. More than 60,000 children living in low-income families. More than 2,400 people each year die from causes considered preventable.

3.2.1. Within Humber and North Yorkshire there is a considerable gap in healthy life expectancy (up to 15 years) between those from the most and least deprived communities in the area.

3.2.2. There is further compelling evidence in the [Child of the North reports](#) supporting the moral, ethical and economic imperative of using data more effectively to address health inequalities.

3.2.3. A fundamental problem restricting integrated care is the inability of practitioners to share and integrate information across organisations. At a national level the future projections show further worsening of current trends in health and wellbeing with wider societal factors having profound impacts on our children and young people.

3.2.4. The evidence is clear - our inability to share information acts as a major barrier to planning and delivering integrated care and driving forward the health, care, and wellbeing outcomes needed by our population.

3.3. **The offer** – the impact of the offer in the proposal has been identified as

- enhancing integrated places leading to new/improved cross sector collaboration and partnerships, enabling them to plan and invest together

for long-term population gain based on a mutually inclusive return on investment model.

- creating the opportunity for professionals from different sectors to work in harmony, using the same data to transform the life chances of our most dis-advantaged families, improving the health, care and wellbeing outcomes of whole communities.
- developing long-term benefits and sustainable gains regarding turning the dial on health inequalities in Humber and North Yorkshire's most deprived wards.

3.3.1. The core offer in the proposal is the creation of a Humber and North Yorkshire Integrated Data Engine for Analytics (HNY IDEA) centre that connects academic expertise (data science, research and evaluation) with HNY resources at a system and at the most local place level.

3.3.2. HNY IDEA would oversee the creation of 'Connected HNY' – a database capable of providing the data insights necessary to support local professionals design improvements with local people and communities that impact on direct service delivery, improve outcomes and drive efficiency in integrated service delivery.

3.3.3. In parallel, the IDEA would develop *HNY Insights* as a platform that allows practitioners to share information efficiently and securely.

3.3.4. In addition, the proposal includes:

- Establishing the 'Connected HNY' database within the NHSE Yorkshire Secure Data Environment (SDE).
- Focusing initially on data applications involving children and young people.
- Forming an 'oversight and scrutiny' group containing national stakeholders.
- Prioritising linking 'health' records with education records from the Department for Education in the first phase of work.
- Adopting a place-based level approach that brings the relevant stakeholders (health and education etc) together with communities to adopt data driven solutions to specified problems.

3.4. **The learning from others** - Bradford have built and tested the first 'Integrated Data Engine for Analytics' (IDEA) centre. The West Yorkshire IDEA centre directs and improves the design, delivery, and evaluation of public services (with a current focus on autism and 'early help').

3.4.1. The creation of a HNY IDEA network would build on the work of Bradford and transform policymakers' understanding of demand 'on the ground', facilitate its ability to predict need and provide data tools for designing and evaluating the impact of policies.

3.4.2. Bradford has shown the power of connecting routine administrative records, including health, social and educational data, through both the Born in Bradford project and the Connected Bradford database. The evidence is clear

that the IDEA centre concept is functional and effective in Bradford and there is a need to expand this further.

3.4.3. The proposal for HNY will take this across an Integrated Care System in order to create integrated service provision and improve the health and wellbeing of a whole population and lead the way for Yorkshire and the Humber.

3.5. **The assets and partnerships available** – we are ideally placed in Humber and North Yorkshire to act as a centre of innovation establishing best practice and scalable solutions for data infrastructure, tooling, analysis, and research that can support and drive improvements in population health and reduce health inequalities.

3.5.1. This proposal has a strong interdependency with the Innovation, Research and Improvement System (IRIS) and supports their ambition to be able to access/share/integrate data for research purposes.

3.5.2. We are already making strides in the development of the following which create the strong foundations for the proposal

- linked data environment and bringing together health and care data across the system.
- approaches and implementation of place based and system wide population health programmes.
- work is already underway to implement the '*Born and Bred in*' approach originally started in Bradford (IRIS programme).

3.5.3. The HNY IDEA centre would add value to existing population health work at system and place and offer tangible added value through academic expertise for embedding evaluation helping to better measure the success of local initiatives.

3.5.4. Based on the engagement for the development of the proposal the offers of support to progress this have work include:

- The Connected Bradford team support to HNY to support IDEA. Importantly, the team are leading a 'Secure Data Environment' (SDE) initiative for Yorkshire are offering support to the creation of Connected HNY.
- The research-intensive universities across Yorkshire and the North of England (via the N8's Child of The North initiative) are able and willing to support HNY ICB.
- The Alan Turing Institute through their 'Digital Twins' programme.

3.6. **The what next** – to turn this ambition into a reality the Futures Group is looking for support and approval from the Board to the direction that is set out and for a small contribution of up to £100,000 investment to start the process. This funding would be used to specify the business case for a full investment in the proposal, including a calculation of the long-term return on investment. It would also be used to set out a detailed delivery plan with appropriate milestones to enable effective oversight by the ICP. This would be more than matched by external co-funding that this work would attract. We are already in discussions with the Yorkshire SDE Programme around funding support.

- 3.6.1. The funding will support detailed planning on:
- **Establishment of the IDEA centre**, securing research analytics and staff time. The creation of the centre will include funding to secure population health and sector specific analytical expertise together with project management resource to administer and manage the programme.
 - **Data driven test use case projects** across defined localities, each aligned to local priorities, including work with communities, to co-design better, more effective and efficient local systems (see below example proposed test cases).
 - **Integration of academic partners** with the ICB through joint funded positions (including internships, MSc and PhD degree projects) and the launch of an annual 'Applied Data Science prize' and scholarships to attract the brightest minds to act on the hardest societal challenges.
 - **A data pipeline to national government** with the HNY IDEA able to provide a more accurate, composite picture of need, and enhanced capacity to evaluate impact, informing policy making.
- 3.6.2. The test use case projects for Connected HNY would take advantage of existing work as well as new proposals and will require further consideration with the Place Directors
- Born and Bred in - uses an active consent process that enables identifiable, routine data from multiple sources to be linked to improve the health and wellbeing of families. Thus, it provides an excellent opportunity to engage with the community and 'prove the principle' of connected data for improved health outcomes.
 - Autism assessment and support crisis – bringing health and education together to effectively support children and young people. This will help engage communities within the HNY IDEA from the outset but also lay the groundwork for the practical implementation of information sharing systems. It will also help address a major problem afflicting health and education with immediate effect building on existing work in Bradford.
- 3.6.3. **Return on investment** - there are a number of case studies in the full proposal from Humber and North Yorkshire and Bradford that start to demonstrate the value that can be driven from this work. The following is detail of the economic modelling / return on investment we plan to consider as part of the further business case development.
- 3.6.4. Early childhood programmes offer a high return on investment. An analysis of such programmes in the US (by Noble Prize-winning economist James Heckman) has shown a **sevenfold return on investment**, attributed to reduced costs in healthcare, the criminal justice system, as well as increased earnings in adulthood. In short, the ICB could reduce the need for more expensive downstream interventions by addressing health problems and removing barriers to education early in life.
- 3.6.5. In 2013, the Chief Medical Officer for England estimated the following costs to England of failing to support children and young people (costs that have escalated over the following decade):

- £4 trillion: the approximate cost of preventable health and social outcomes faced by children and young people over a 20-year period
- £1.24 to £2.48 billion: the costs of preterm birth to age 18 (including parental costs and lost productivity).
- £640 million to £2.24 billion: the annual long-term cost to society of severe traumatic brain injuries in children to healthcare, social care, social security costs and productivity losses.
- £588 to 686million: the long-term annual costs of child obesity
- £1.58 billion: the annual short terms costs of neurodevelopmental problems (e.g., autism) in children aged 5-15 years.
- £2.35billion: long term costs of neurodevelopmental problems (e.g., autism) in children aged 5-15 years.

3.6.6. The CMO used her annual report to highlight the 6-10% annual expected rate of return achieved through investing in interventions early in life calculated by James Heckman.

3.6.7. However, the evidence is clear: we are currently unable to meet the health needs of many children and young people because of the divide between health and education service delivery. This means that many children experience health barriers to education that could and should be supported. The long-term consequences are devastating, with the evidence showing that early unmet needs increase the risk of children experiencing poor health and ultimately becoming NEET (Not in Education, Employment or Training). Moreover, the evidence shows that improving the educational attainment of children and young people decreases the risk of long-term physical and mental health problems.

3.6.8. The HNY IDEA centre provides a once in a generation opportunity to use advances in data science to connect health and education and provide a platform that will allow the savings identified by Heckman to be realised across Humber and North Yorkshire.

3.6.9. Importantly, the platform that will be created through HNY IDEA will support a wide range of other opportunities to improve efficiencies in healthcare (e.g., older adult care) in addition to the 6-10% annual expected rate of return from the immediate application of the data science insights to early childhood support. The platform will additionally allow robust evaluation of future investments allowing a step change in the ability of the ICB to support evidence-based interventions and stop investments in initiatives that can be seen to have little to no impact.

4. RECOMMENDATIONS

4.1. Members are asked to:

- iii) Consider the proposal and approve the vision and direction set out in section 3.3.
- iv) Support the next steps and approve the funding request of up to £100,000 to support the development and initial implementation of a test case as set out in section 3.6.

Appendix 1 – Connected Humber and North Yorkshire Full Proposal