

The N8 Cross-Theme Workshop

Delivering opportunity – improving outcomes for Children and Young People (CYP) through data science



Professor Charlie Jeffery and **Anne Longfield CBE** highlighted that children in the North of England are more likely to grow up in poverty in comparison to the rest of England. This means individual life chances are not being fulfilled, damaging social cohesion and future economic productivity. Child of the North (CotN) aims to change this situation, creating a **socially inclusive society**, growing the economy and diverting need away from public services.

No individual service or system can tackle the problems CYP face today. We must come together to support the Government’s Opportunity Mission and **build a better future for all CYP**. The 18th October 2024 workshop brought academics, data scientists and key stakeholders together to start the conversation **on how** change can take place through data science and generate action.

Connected data research in the North of England is world class, and we need to rise to the challenge of **scaling up this work**. It is a challenge that concerns data scientists, subject specialists, stakeholders and the public. We need **trust, consent, and collaboration** for connected data research to thrive, making universities a perfect hub for starting this conversation. No single university has all the necessary assets; we need to collaborate to create a framework for impact.



ACTION POINTS

N8

Connecting and coordinating people – make people aware of expertise across themes and involve the voices of students with lived experience of relevant issues.

Communicate opportunities and keep people up to date with what's going on.

There is a need for the correct infrastructure to relay information and connect individuals.

Maintain a **focus on key priorities** (e.g., the 12 CotN/CfYL series topics). A streamlined and focused collaboration will help meaningful collaboration across the North.

Child of the North

Improve messaging to the wider academic community around the goals of Child of the North.

Make better use of the assets within our regional universities – aligning the strengths of the universities with the CotN vision.

Embed more lived experience within the leadership team of CotN so the direction is not set by academics alone.

Employ a **youth strategy** recognising that the future relies on our next generation of current undergraduates, PhD students etc.

N8 CIR

Coordinate efforts around **data harmonisation** and explore ways of connecting data.

Explore how **evidence across data science projects** can be synthesised to facilitate collaboration and increase impact.

Improve understanding within the universities and across external stakeholders about the availability of data and research expertise.

Organise regular meetings and actively pursue opportunities to connect with child health researchers.

Enhance communication to increase awareness of initiatives taking place across different regions.

INTRODUCTION

The workshop consisted of three sessions: (i) improving outcomes for CYP and the role of universities; (ii) the opportunities created through the CotN initiative, and (iii) an overview and panel discussion about data, analytics, and AI assets within the North of England.

Breakout sessions with three mixed groups consisting of data scientists, CotN academics, and external stakeholders were held between sessions discussing the questions outlined below.

What actions do we need to take to connect our data science and child research communities within our eight universities?

Improve communication: There needs to be better communication across regions to enhance awareness of current work. A data mapping exercise would allow for better collaboration and implementation across projects. Additionally, better understanding is needed in terms of research projects and individual research niches – this will better facilitate collaborations as stakeholders can be signposted to relevant academics.

Suggestions to facilitate actions

A spreadsheet where projects can be listed alongside key researchers and contact details.

A mini-conference call where researchers can get to know each other before working on projects together. This could occur before a conference so conversations can be targeted and be more productive as individuals already have an idea of who they want to talk to.

A common place is needed so individuals can express interest and promote research – current methods involve individual signposting and working within work groups for ease.

Engage the next generation of academia: There is a lack of alignment between CoTN/CIR activity and PhD and early career researchers. This further extends to undergraduate students, where it appears that many students are unaware of what research is going on across our universities. Thus, it was suggested that a **student advisor** may be of benefit to the N8 themes.

A universal language: Speakers from the education sector described one fundamental issue being **language and communication barriers** between education, researchers/data scientists, and NHS trusts – we need a **universal dialogue** where we can all communicate effectively. A hub/common

ground is needed so we can bridge the gap of disconnect across the education, research, and health sectors – especially tackling the detachment of students.

Data methodology: Frustrations surrounding the complexity of data linkages were shared, especially as data spans a vast range of methodologies (e.g., interventions, trials, case-studies). A ‘best-practice’ method of linking ‘cross-method’ resources is needed to maximise efficiency.

What actions do we need to take to connect and coordinate activity across the N8 so that we can add value and avoid duplication of effort?

Connect and coordinate across N8: We need to link various levels to ensure that all relevant individuals are included in the conversation.

Communicate as leaders: We can maintain a profile on a wide range of research topics by emphasizing that individuals in the North have a right to speak.

Maintain visibility and leadership: Keeping the N8 group visible and connected to the system, with key leaders involved, will enable us to create new principles and policies that will become the norm for future society.

Establish a pledge: A pledge to collaborate on these issues within the N8 and across UK universities is necessary and will help identify the research that is already being conducted.

Address duplication of efforts: To avoid redundancy, we must eradicate imposter syndrome and tackle the gap faced by women in STEM, fostering a new generation of confident PhD students who communicate their work.

Teach collaboration, communication, and confidence: Equipping PhD students with the necessary skills through training in collaboration and communication will empower them to research and advocate effectively.

How do we make certain that our academic communities combine data insights with the lived experiences of communities within their region?

Utilise qualitative data: By moving away from solely quantitative data, we can provide clear insights into lived experiences and demonstrate the extent to which problems are entrenched within our society. We need qualitative data to get to the root of the problem and provide solutions that are accessible to everyone.

Develop a co-production arm: Currently research encompasses a short-term exploitative view of individuals, often in impoverished communities. This is not ideal and we need to instead embed long-term relationships and communication lines within communities and utilise people as part of the solution and as a driving change for improvement.

Involve students: Key groups, such as students and widening participation programmes are often overlooked, despite them holding key information that can be used to generate solutions to many of the problems society faces, such as low academic attainment/ higher education progression in deprived areas. These students break the cycle of poverty and so we need to frame questions that increase their engagement, allowing us to study the differences in environments and experiences.

Platform for lived experiences: It is important that we provide individuals with lived experience an adequate platform to voice their opinions on research that is being conducted. It was questioned whether advisory groups may be beneficial to the N8 to ensure research and data is reflective of the community it aims to benefit.

“TO ENSURE A SYSTEM THAT IS WELL VERSED AND CONNECTED, WE NEED TO TAP INTO THE RHYTHMS OF CYP LIVES”



Enhance recruitment and data collection methods: It is essential to revise the recruitment process for research subjects to move beyond self-selection, ensuring diverse and representative participation. This approach allows for insights that reflect the true experiences of various communities. Additionally, academic communities should actively connect with engaged communities and develop systems for collecting data that is easily narratable, making insights more accessible and relatable to those affected.

Promote co-production and inclusivity: Fostering co-production in research is crucial for involving community members, particularly those from overlooked demographics such as BAME individuals, travellers, and people from different religious backgrounds. This collaboration can lead to a deeper understanding of community needs. It is also important to acknowledge that the responsibility for systemic failures lies with organisations rather than with individuals, creating a more supportive environment for collaboration and understanding between academic institutions and the communities they serve.

Adopt a multidisciplinary approach: It is vital to overlap the services provided by different organisations to identify what is most significant for the community. By coming together, we can create a more comprehensive understanding of the needs within our communities and develop more effective solutions.



How do we make certain that our 'child research data science' communities are plugged into the systems and services within their regions and shaping policies?

Emphasising local engagement: It is crucial to promote involvement in local practices, as policy shaping primarily happens at a local level rather than a broader N8 perspective. Engaging at the community level is where meaningful impact can be made.

Addressing regional coordination challenges: The absence of a regional organisation makes it difficult to unify efforts. For instance, in Leeds, leaders from health and care systems are collaborating with research professionals to better align research priorities with health system improvements. The Child Health Outcome Research At Leeds (CHORAL) centre is facilitating discussions to focus on these efforts.

Connecting with N8 initiatives: While local engagement is vital, there should also be a mechanism to connect back to the N8 to identify common objectives that various regions can pursue collectively.

Utilising existing infrastructure: Many regions already have boards and meetings that act as interfaces for these conversations. It is important to leverage existing structures and infrastructure, with research supplementing and informing policy across different localities.

Building strong community relationships: Effective policy implementation requires robust relationships between research communities and local practitioners. Establishing hyper-local "hubs" can facilitate this, ensuring that the policies are not only well-informed but are also applied as intended to meet community needs.

Extending beyond basic conversations: Opportunities exist to deepen engagement. For example, in York, embedding marketing staff within relevant departments has enhanced their understanding of recruitment needs. A similar approach could be applied to data scientists in child research.

Embedding researchers in local settings: Encouraging data scientists to spend time within local authorities can help them better understand the context and challenges, leading to more practical solutions. This approach is already supported by initiatives like NIHR funding for researcher placements in local authorities.

Supporting long-term funding and integration: The N8 could play a role in supporting the application process for securing research positions within local authorities and embedding these roles for the long term, especially if evaluations show positive outcomes. This support could extend beyond NIHR funding, such as through initiatives like Y-PERN.



How do we ensure that our cross-University community and data assets are allowing national policies to be shaped by data insights from the North of England?

Presenting a unified voice: It is essential for multiple regions in the North to come together and speak with a combined voice. Collaboration across

universities will amplify the impact of the region's data insights on national policy.

Retaining Northern data assets: There is a risk that, without proper management, valuable data could be controlled or utilised predominantly by institutions in the South of England. Retaining data assets within the North is critical to ensuring regional perspectives shape national policies.

Shifting academic culture: The current focus in academia on publishing peer-reviewed journal articles needs to expand to include policy-focused research outputs. Universities should encourage researchers to produce policy briefings and conduct meaningful research that impacts decision-making. Alternative publishing pathways, which influence policy more directly, should be promoted.

Making research accessible to policymakers: Establishing a scheme for researchers to communicate their findings in lay terms could help influence policy. There should be a focus on the impact of research beyond traditional academic measures, potentially linking N8 initiatives to broader impact outcomes and supporting "impact funding" aimed at public outreach instead of journal articles.

Organising policy-oriented workshops: An N8 workshop themed "Publications into Policy" could facilitate the translation of academic research into actionable policy recommendations.

Targeting policy impact through strategic focus: For the N8 to make a national-level impact, it should select specific policy areas to prioritise, such as choosing one focus for a year or a few for a multi-year period. Concentrating efforts in this way would make it easier to advocate for policy changes and present evidence to policymakers.

Establishing funding streams for policy work: Creating small, streamlined funding streams dedicated to policy-related research across universities could help make policy-oriented projects a higher priority.

Boosting media presence for N8 members: Raising the profile of N8 universities in national media, especially with outlets like Channel 4 in Leeds or the BBC in Manchester, would ensure that the expertise and insights from the North are on the media's radar and can contribute to public discourse and policy debates.



How do we help our academic communities apply the evidence generated from the research for societal benefit?

Foster ongoing collaboration: Involve groups, particularly those who have contributed to writing reports, in networking events to share insights regularly. This ensures that valuable perspectives are continuously exchanged and utilized.

Facilitate connections: Encourage collaboration between academics and clinicians to address societal challenges. By working together, these groups can tackle pressing issues more effectively.

Engage policymakers: Provide presentations to clarify the policymaking process, helping researchers align findings with decision-makers' needs. Understanding this process empowers researchers to make their work more relevant to policy discussions.

Enhance training opportunities: Include training in networking events to engage diverse backgrounds and expertise effectively. This will help participants understand and appreciate the various contributions brought to the table.

Create fellowships and placements: Establish more opportunities for PhD candidates, with university funding to support these initiatives. Such programs will better prepare emerging scholars to apply their research in real-world contexts.



CONCLUSION

Collaboration is key to ensure we can support the government in their mission and provide them with the evidence and support needed to create change. Universities need to act as hubs where we can support data connection and collaborate to build a better future for all children and young people. Through working in a holistic manner, we can facilitate the development of research interventions that encompass all aspects of society, leaving no individual behind.