Health Innovation Network

Forging a more equitable healthy future through digital and data

6 recommendations to reduce health inequalities

August 2024

Contents

| Foreword

We know that digital technology undoubtedly presents a significant opportunity to positively transform the delivery of health and care services in the UK and globally. But the acceleration of transformation of healthcare through digital simultaneously carries the potential risk of widening the health inequality gaps that exist within our communities.

There remains a **19-year gap in healthy life expectancy** between the most and least affluent areas of the country. People in the most deprived neighbourhoods, certain ethnicities, and in vulnerable health groups, are developing multiple long-term health conditions 10-15 years earlier, spending more years in ill health and dying sooner, than those in the least deprived communities.

Despite efforts in the health and care system to address these deeply entrenched health inequalities, business-as-usual approaches are not yet making the seismic shift and generational change that is needed to address the vastly differing experiences of healthcare and health outcomes across society.

Discussions around digital and data and health inequity can often focus on the digital divide, but digital and data also offer huge opportunities in helping address the inequality gap.

We must, as a health system, be trusted by our communities to transform services in a way that supports them, rather than 'digital' being forced upon them. Innovation can undoubtedly improve health inequalities for our most vulnerable communities – but it is an iterative, personalised process that requires us to build trust at a local population level.

There is not a one size fits all solution. But there is a one size fits most, which can then create the time and resource to care for those who cannot access digital services.

This report seeks to examine what needs to happen nationally and locally to create a digitally inclusive society, where health and care research includes the most marginalised, and data is used ethically and effectively to level up the health of our nation.

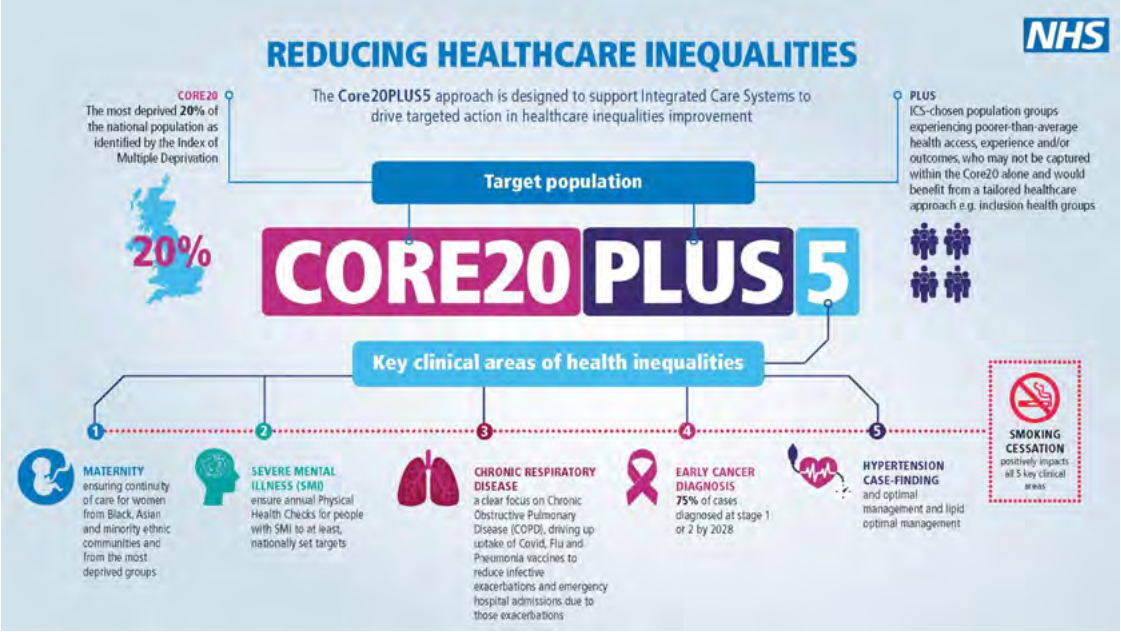
Richard Stubbs

Chair of the Health Innovation Network and CEO of Health Innovation Yorkshire & Humber

Background

The Health Innovation Network is a collective of 15 local health innovation networks across England whose mission is to drive the spread and scale of evidence-based innovations across the NHS and social care in England.

As a Network, we are committed to supporting the transformation of care pathways through adopting and scaling innovations equitably, ensuring that no one is excluded when trying to access services and/or suffers poorer clinical outcomes as a result of innovation. We align our programmes to NHS England's Core20PLUS5 framework and prioritise supporting innovations that address health inequalities through our innovator support offer.



Tackling healthcare inequalities and engaging in digital and data-led clinical transformation could be seen at odds, but digital innovation has a vital role to play in addressing unfair variation in access, experience and outcomes.

Leaders from across the northern health and care system, NHS England, health foundations and industry came together at **HETT North** on 28 February 2024 to explore the role of digital and data in addressing health inequalities – with the aim of sharing learnings and creating a list of recommendations that can be shared nationally.

The roundtable was attended by nine participants who represented views from across industry, academia, the voluntary and charity sector, and healthcare providers.

The Health Innovation Network would like to thank all those who attended the roundtable and shared their valuable insights.

Case study 1: Using data to support our communities to support themselves

West Yorkshire Innovation Hub, Health Innovation Yorkshire & Humber

To address high ambulance conversion in deprived areas in West Yorkshire, the West Yorkshire Innovation Hub is taking a three-pronged approach to understand:

- **Clinical needs**:
  What are the clinical reasons ambulances are being called regularly?
- **Public perspective**:
  Why choose ambulance over other services?
- **Asset understanding**:
  Where are our healthcare services based?

West Yorkshire Integrated care board (ICB) and ambulance data provides insight into clinical needs while Healthwatch Wakefield is providing insight into attitudes towards emergency healthcare. Finding out, for example, if out-of-hours calls are received due to a lack of transport.

Collaboration with social prescribers and housing agencies is shaping a plan to provide healthcare resources within communities so the need to travel is reduced.

A report with recommendations on supporting communities to support themselves will be published later this year.

The Yorkshire and Humber Secure Data Environment pulls information from primary and secondary care, social care and police data to get a holistic view of place and people, including the homeless population.

Case study 2: Creating a digital strategy using population insight to tackle inequalities

Health Innovation Manchester and NHS Greater Manchester

There is a 17-year gap in life expectancy between the richest and poorest areas in Greater Manchester (GM), with child poverty reaching 26% in the poorest areas. 16% of the GM population are non-users of the internet and 23% are not digital due to financial pressures.

With the health and accessibility context in mind, GM engaged with 250 professionals and 250 citizens to ask how digital can support health and care.

1,700 data points were distilled into five clear ambitions.

Each ambition has been sense checked with citizen panels, juries and councils and delivery is monitored against these ambitions at ICB level.

Read Greater Manchester's Health and Care Digital Transformation Strategy.

Greater Manchester's five digital ambitions

1. **Deliver integrated co-ordinated and safe care**
2. **Enable staff and services to operate efficiently and productively**
3. **Empower citizens to manage their health and care needs**
4. **Understand population health needs and act upon insights**
5. **Accelerate research and innovation into practice**

Building and maintaining trust in digital transformation is a long-term investment

Trust is key to successful transformation, but it's not just trust in 'digital' or trust in 'data' that we should seek. It's trust in how this insight is going to be managed and how it's going to benefit the population.

Trust is earned over time so conversations cannot stop once a round of public engagement has finished. We need to go back and check our interpretations are correct, and deliver the benefits based on that interrogated insight.

To truly address health inequalities, we need to find our audiences, they won't come to us. Community foundations are an entry point into lots of grassroots organisations that enable meaningful conversations. But it's not just a single 60-minute interview to validate a digital prototype. It's continual engagement, checking assumptions before moving on to the next stage of development.

Example: Dialogue between the NHS and blood donors

As an NHS blood and transplant donor, the NHS use nudge techniques to support you every step of the way. When I've given my blood donation, I'm told where that blood is going to be used. For me, that reinforces why I'm a blood donor because I see a very practical use of that, and I feel valued.

We can make assumptions that the public don't want their health data to be used for research and planning, anonymised or not. However, the Wellcome Trust did some research in 2014 with the OneLondon Group which found public appetite for their data to be used, including by commercial organisations, where there's a need to develop drugs or health technology, was welcomed - but there needs to be clarity about where the benefits lie. For example, if data is being used to develop innovations that can help the public and patients, there will be a lot of support for it as long as it's done the right way.

Sometimes that misassumption about what the public might think can make us more cautious to pushing forward.

Of course, there are certain population groups who can give trust and certain population groups are reticent. To adopt a blanket trust approach can alienate communities who will not give that trust so we have to look into the data to understand where we need to do more work to bring those communities with us.

There are seldom heard voices within the health and social care system who need to be listened to and their insight acted upon. Clinicians need to be involved in development and brought on the journey too.

RECOMMENDATION:

Maintain dialogue with your stakeholders, playing back stages of the engagement journey.

Engaging seldom heard communities, not just professional patients

We can use data to identify gaps and then engage with different communities to find out if there is a language or training barrier. But then how do we access those people? Is it through communities or religious groups? Is it through other support organisations for maternity services? There's no right answer and it's a continuous learning process.

The research all of us currently do isn't truly inclusive as we profile the people who want to take part in research. We need to actively go into the community to ensure that it is as representative as possible.

The NHS funded an **inclusion toolkit** for a project where they spoke with travelling communities and people from South Asian backgrounds to understand what the barriers to digital inclusion might be.

There is no one-size-fits-all approach. We need to understand barriers on a very individual, granular level and it's only physically going into the community that's going to address that.

We may be tempted to charge headlong to digitally enable all our population groups, but of course there are some who don't want that and would become overwhelmed by it.

The increase in ambulance conveyance data from case study 1 could be partly due to people disengaging with increased digitisation of access to health services, and simply calling 999 because it doesn't require an internet connection. But that doesn't mean we shouldn't forge a path for digital and data.

A digital pathway can be torn down by the accusation that for 3% of the patients it is not fit for purpose.

What we don't say is that's great for 97% and that it frees up physical face-to-face capacity, which can be used to better support the 3%.

We are explicitly creating pathways, which may not have purpose for everybody. We need to be confident and comfortable at championing why digital pathways exist, understanding it's not for everyone and being comfortable with that.

RECOMMENDATION:

Proactively engage with digitally excluded communities specific to your locality.

Collaborating across boundaries and beyond the NHS

Digital exclusion is a countrywide problem, that needs a countrywide solution. We need to avoid the trap of coming at this from an NHS-only perspective and think 'place-based'.

How the Good Things Foundation understood their audience

- The Good Things Foundation in Sheffield have hubs where people can navigate through the complexity of their digital world over a cup of tea.
- They stress the need for a cup of tea to get people through the door.

Perhaps we have a slightly stereotypical view about who are the digitally excluded. We know certain communities or certain demographics would be more likely to fit the bill, but you can be digitally excluded because of:

- **The lack of a device.**
- **The lack of data on your phone.**
- **The lack of a confidential space in your house.**

Digital exclusion is more complicated than we think, and we need not tackle it just as the NHS.

RECOMMENDATION:

Engage with voluntary sector and local authorities to see how they can help support with resources.

Real-world examples of making digital accessible

- eConsult partnering with Vodafone is an interesting example of healthcare working with other industry partners to tackle digital exclusion, which can include access to healthcare services such as the NHS app.
- The Digital First Primary Care programme has a team of 16 Digital Facilitators in Greater Manchester who sit down with staff and patients in practices, offer that cup of tea and show them how the NHS app works for prescriptions and appointments. In the last six months we've seen a real shift in how those localities are accessing care and repeat prescriptions. So that direct one-on-one contact can't be underestimated.
- We're helping a trust with how maternity services are accessed, mainly with the Tamil speaking community, helping support people with no digital technology. The trust is recycling phones and they're distributing them to support their antenatal service, reducing the digital divide. Our service is deliberately a web-based service, not an app, that can be accessed from libraries and community centres for expectant mothers without a phone.

So how do we learn from industry and bring it back into the healthcare system, going far beyond traditional PPIE (Patient and Public Involvement and Engagement) approaches?

For digital inclusion and co-design, we should be able to share ideas and lessons across boundaries. At the moment, sharing of research, ideas, implementations and results from one Integrated Care Systems (ICS) is shared on an ad hoc basis.

The Health Innovation Network has a role to play in building an innovation movement tailored for those at different stages of their journey and accelerate solutions to meet that challenge.

Using data effectively to tackle health inequalities

The NHS is awash with data but do we really use it effectively to understand inequalities in our communities and how do we adapt our approaches?

Some believe we should be mandated to tackle inequalities and that NHS England incentives are required to manage data effectively and that's the only way it will happen.

But in the absence of policy change, there are some practical examples of how data is already transforming services, freeing up time and reducing the emotional, and financial, burden on patients.

Example of using data to transform a service:

Sickle cell disease can impact school or work attendance due to frequent hospital visits for red blood cell exchange.

Automated red blood exchange machines are already being used by trusts to help patients get well faster.

Working with the national Blood Transfusion Service and the haemoglobinopathy specialist centres, we commissioned work to map out where patients lived and where they were travelling to, generating data-based evidence for a business case for more automation – reducing the pressure on services and helping patients live better lives.

RECOMMENDATION:

Task digitally mature Integrated Care Systems to create 'tackling inequalities' blueprints for those nearer the start of their journey.

Freeing up capability in the system so the right people can do the right jobs

We have the capabilities and expertise within the health and care system to analyse data and derive actionable insights from it, but they may well be doing routine reports rather than utilising their skills in population health analytics.

The Health Foundation estimated there are 10,000 analysts working across the NHS in England, so we've got the people and, in theory, we have the richest health data in the world. In practice, it's not all high quality. It's not joined up. It's not connected.

There needs to be an audit of skills versus delivery as the NHS England reporting is currently creating barriers to delivering and measuring the success of digital transformation projects.

We also need to think about the next generation of our 1.2 million staff. Are we training them now so that when they come to the frontline they're equipped with the right kind of skills and knowledge to take advantage of the opportunities that we know digital innovation provides?

If we don't do that, we're constantly going to be up against this cultural impasse of no time, no money and no risk appetite. Digital should underpin every service, not seen as something separate.

RECOMMENDATION:

Evaluate and redesign data analysis provision.

Examine how we're training health and social care professionals.

Measuring success – what and how do we measure the role digital plays in affecting health equity?

The health and care system is in financial crisis so it can be difficult to make the case for prioritising this type of work. We need to make our case stronger by showing what human impact we're going to make. That's important to articulate when embarking on any project - understanding what is not happening, and what could happen with investment.

Benefits statements need to go beyond the NHS budget line. For example, we should consider the role healthcare plays in terms of getting people back to work.

Health plays a massive role in people's ability to hold down a job. We have a shortage of workers in this country, which is only going to get worse, so we need a business case that talks about more than cash-releasing savings and talks about taking the pressure off the Department for Work and Pensions and other government departments. And as the NHS, and as health and care more generally, we need to get better at explaining how an investment in healthcare will benefit all government spend.

The Treasury sees health as a drain on resources. We don't make the investment case well enough, and when we're getting into digital at the scale we're talking about, it must be about UKPLC as a whole rather than just cash-released saving back into the NHS.

Digital is the fourth utility and it's frustrating that we must make the case for it. We can conceptualise this in terms of humans, of care bed days, of time saved. But one of the challenges is where do the benefits sit and then who pays them?

And that's the bit we've not articulated. Clearly these don't sit with one organisation, they're pan-system and that's the biggest challenge in making the case for future benefits.

We are data rich, but not analysis rich. So, the gap between crafting good questions that can be answered using data, agreed between senior managers and clinicians, other leaders and the analysts using data from NHS, academia and elsewhere - that's where a lot of progress can be made.

We need to finally crack how we spread adoption at pace and scale. We're still trying to really crack this in the context of an overstretched system. And what does great look like in the future? And who's responsible for building that?

RECOMMENDATION:

Decide core measurement criteria across all Health Innovation Network/ICSs and who is ultimately responsible for reporting. Share best practice in financial and safety and quality measurements.

Summary of recommendations

PEOPLE

Building and maintaining trust

RECOMMENDATION:

Maintain dialogue with your stakeholders, playing back stages of the engagement journey.

PEOPLE

Engaging seldom heard communities

RECOMMENDATION:

Proactively engage with digital excluded communities specific to your locality.

SYSTEMS

Collaborating across boundaries

RECOMMENDATION:

Engage with public and private partners to see how they can help support with resources.

SYSTEMS

Using data effectively

RECOMMENDATION:

Task digitally mature Integrated Care Systems to create 'tackling inequalities' blueprints for those nearer the start of their journey.

SYSTEMS

Capability in the systems

RECOMMENDATION:

Evaluate and redesign data analysis provision. Examine how we're training health and social care professionals.

SYSTEMS

Measuring success

RECOMMENDATION:

Decide core measurement criteria across all Health Innovation Networks/ICSs and who is ultimately responsible for reporting. Share best practice in financial and safety and quality measurements.

Contributors

Laura Rooney: Director of Strategy, Health Innovation Manchester

Richard Stubbs: Chair of the Health Innovation Network, CEO of Health Innovation Yorkshire & Humber

Dr. Gareth Thomas: Digital Innovation Director, Health Innovation Manchester and NHS Greater Manchester

Josh Keith: Assistant Director of Health Analytics, The Health Foundation

Zoe Wright: CEO, The Real Birth Company

Judith Doherty: Account Director, CDS

Nick Prentice: Manager, Technology Strategy, KPMG

Victoria Vaines: Project Manager, WY Innovation Hub, Health Innovation Yorkshire & Humber

Sarah Tyres: Medtech Delivery Lead, IRLSS, NHS England