Reflecting on the COVID-19 pandemic to inform the health and care system of the future: the AHSN Network experience
The coronavirus (COVID-19) pandemic has had a dramatic and sustained impact on England’s health and care system, not only in terms of the pressures placed on it by the pandemic, but also how it rose and adapted to the ever-changing challenges it was forced to address.

Changes in clinical practice were quickly implemented; resources were refocused; new models of care were implemented at pace and scale; and innovations were rapidly identified and rolled out to support increasing patient numbers and alternative ways of delivering care. A new sense of freedom to act given the urgency of the situation meant that people working in the system felt a sense of permission to be creative, finding solutions to challenges and exploring new ways of delivering care. The health and care system we see today is a stark contrast to what we were familiar with at the start of 2020, and the pace at which this has been achieved is unprecedented. Everyone who has been involved in adapting and delivering services during the pandemic should be hugely proud of what they have achieved.

However, now is not the time for this period of rapid transformation to falter. Although the health and care system is still under pressure from the pandemic itself, with the roll out of mass vaccinations there will come a time when it has the capacity to consider a future with and beyond COVID-19. We therefore need to look ahead and restart core services whilst dealing with patients affected by ‘long COVID’, and perhaps the greatest future challenge the system will face: the ever-growing backlog of patients. Rather than reverting back to ‘business as usual’, we should seek to create a ‘new normal’, building on the rapid progress made throughout the pandemic and firmly implement innovative ways of commissioning, planning, and delivering health and care. Not all of the changes
made during the pandemic will be relevant to the future, so there is a need to identify those with the potential to have a long-term positive impact. The health and care system is at a point of inflexion, and we have a real opportunity to reimagine how we structure and deliver services and use learnings and insights from the pandemic to inform future planning. However, this opportunity is time limited, and we have an urgent need to better equip leaders across the system with learnings and insights from the pandemic to inform future planning and delivery.

To support the potential for innovation to continually transform the health and care system and best capitalise upon the rapid progress made throughout the COVID-19 pandemic, the AHSN Network launched its ‘Health and Care Reset’ Campaign in April 2020. The campaign builds on the work AHSNs have undertaken with health and care systems across England and seeks to better inform the ongoing debate to create the health and care system of the future.

In this report, we firstly focus on nine core themes to highlight the changes we have observed throughout the pandemic. We also review how the AHSN Network contributed to these and, perhaps more importantly, look ahead to the future and outline a series of key recommendations we believe are vital to realising the opportunity to create a truly innovative health and care system for the future.

I hope you enjoy reading the report and find value in our insights and actionable findings.

Richard Stubbs
Vice-Chair, AHSN Network
Chief Executive Officer, Yorkshire & Humber AHSN
The AHSN Network was ideally positioned to contribute to, support and in some instances, lead advancements required to respond to the COVID-19 pandemic. During the first wave of the pandemic, AHSNs adapted to support the health and care system to respond nationally and regionally, while many of our staff were also redeployed to NHS organisations to directly work on COVID-19 response projects.

The AHSN Network’s Health and Care Reset Campaign was launched to collate the wealth of learnings and insights from this time, with a focus on uncovering, celebrating, and spreading innovations and identifying new ways of working to support patients, staff, and systems at a time of national emergency. The campaign was focused on mapping the course to a future beyond the pandemic and we sought to learn from our experiences to offer recommendations to realise opportunities and ambitions for a modern health and care system.

Our research focusses on nine themes which reflect the experiences of the AHSNs, working in partnership with health and social care in England throughout the pandemic. In each of these themes, we offer recommendations to support the health and care system to reset and build back stronger.
Theme 1: **Spreading adoption of innovation at pace and scale**

Adopting innovation at pace was key to the pandemic response. Rapid evidence-gathering, alongside an understanding of the solutions available, was fundamental to delivering necessary changes quickly. Relationships were also crucial in brokering support and breaking down organisational barriers and AHSNs were able to draw on their pre-existing relationships to support the response. Our ability as AHSNs to flex, and act quickly, as well as draw upon our established networks and knowledge of available innovations supported the spread of innovation at pace and scale. We should now maintain the flexible approach that enabled such changes and capitalise on the strong connections across organisations to ensure innovations can continue to support health and care to respond to its greatest challenges.

Theme 2: **Joint working with industry**

The pandemic has firmly highlighted the broad benefits of industry working with health and social care for mutual benefits. This is not limited to the adoption of new products and services, but also harnessing the expertise, insights and techniques from industry into health and care. The need to act, inherent in the pandemic response, enabled easier relationships to be built between NHS and industry partners, breaking down barriers previously in place. Our existing relationships with industry partners meant we could enhance their support.

Theme 3: **Driving faster evaluation of innovation**

Rapid implementation of new products and pathways brought about need for rapid, yet thorough evaluation to understand the efficacy of innovations and new approaches. During the first wave of the pandemic, AHSNs led regional evaluation projects to gather insights into new ways of working. However, it highlighted the absence of any pre-existing national rapid evaluation programmes and exposed inconsistencies in the way evaluation is coordinated and funded. Our review demonstrates the need for national policy to promote evaluation in significant service change and that evaluation for large-scale changes should be appropriately funded. Increased capacity for evaluation and applied research is also required, which can be met through training and collaboration.
Theme 4: Responding to the impact of COVID-19 on patient safety

The Patient Safety Collaboratives (PSCs) embedded in AHSNs enabled fast, coordinated activity to support teams on the frontline of the COVID-19 response. The PSCs reprioritised work during the pandemic, focusing on identifying and managing people at risk of deterioration; implementing safer tracheostomy care; and supporting maternity and neonatal units to safeguard mothers and babies.

We also capitalised on the breadth and depth of our established relationships to enable, develop and share support in a timely and targeted manner. During the first wave, it became apparent that low oxygen saturation in COVID-19 patients directly correlated with worsening illness. So we supported the national roll-out of the COVID Oximetry @home model so patients could self-monitor, with support from primary care. As we emerge from the pandemic, we will continue to develop innovations that positively impact patient safety and will build on the deep connection between AHSNs and PSCs. The freedom to act, afforded to frontline staff during the pandemic, will be a powerful asset as we look to the future, coupled with the right quality improvement framework.

Theme 5: Using digital as an enabler for change

The COVID-19 pandemic was a watershed moment for digital transformation, as the population significantly increased its use of digital channels. AHSNs supported local and national health and care partners to develop and deploy digital products within days, compared with the multi-year timelines projected before the pandemic. In 2020, we conducted research to understand how technology is an enabler in reducing the care burden and coping with COVID-19, and to identify what should be sustained for the longer term as the ‘new normal’ continues to emerge. Learning from this report includes recommendations for more dedicated support to drive health-tech innovation into the NHS. We will also facilitate strategic partnerships with industry and academia to enable transformation and will use behavioural change methods to support regional transformation.
Theme 6: **Co-producing services to meet the needs of people and communities**

Evidence shows that co-producing services with communities can improve population health and tackle underlying inequalities. Following the initial pandemic wave, we sought to learn from patient experience and the engagement undertaken during the crisis to develop recommendations for best practice in co-design as we look to reset. We undertook research and took our findings to a round-table event where experts helped shape our recommendations. Despite challenges, there was clear evidence of co-production during the pandemic, and organisations with established co-production practices responded well to patient need. It's now evident that co-production should play a key role in the evolution of the health and care system, but it requires sustainable infrastructures and a strong commitment from leadership. As the brokers of partnerships for innovation, AHSNs can help develop the relationships required to achieve this.

Theme 7: **Understanding the impact of the COVID-19 pandemic on inequalities**

The COVID-19 pandemic highlighted the prevalence and impact of health inequalities, with higher COVID-19 risk evident among particular communities. However, the appetite to better understand the challenges and opportunities to do things differently also increased. Through our work, we explored the links between COVID-19, inequalities and diversity, and the need to think differently as we ‘reset’ and build a more inclusive society. The AHSN Network sits at the cornerstone between health innovation and economic growth, meaning we have an opportunity to work with local and national leaders to effect meaningful change on policy and further address the current drivers behind ever-increasing health inequalities. All 15 AHSNs have already committed to diversity pledges to ensure our work embeds equality, diversity and inclusion. We will build upon this to help create a health and care system that is accessible and fairly supports all sectors of society. Local leaders should be empowered with the tools to improve health outcomes and deliver inclusive growth and wider prosperity, while health should be considered a priority across all Government departments and as an outcome in all economic development policies.
Theme 8: **Understanding the critical role of the workforce**

Innovation spread and adoption are not solely about deploying products or new approaches; the workforce and their needs and abilities are also key. The COVID-19 pandemic drove a ‘culture of innovation’ across the health and care system, which should be nurtured and maintained as we reset. Staff are now more willing to share knowledge, experience, and stories in relation to culture and leadership, and recognise their role in enabling and sustaining change. A group of AHSNs came together to collate regional and national work to understand the determinants of leadership and culture in our systems that enabled change at pace during the pandemic and to identify and sustain positive changes for future working. We will now support further cultural change to enable innovation to become a mainstay in working practices.

Theme 9: **Using COVID-19 as an opportunity to reassess delivery of care and the structure of the health and social care system.**

The pandemic provided a unique and unprecedented opportunity to reassess the structure, pathways and integration of the whole health and social care system. Rather than slipping back to old ways of working we should capitalise on this opportunity to change. The momentum should be maintained by continuing to work collaboratively across all partners; embedding working practices and cultural change; and maintaining and developing shortened procedures for approval and appraisal of drugs, digital technologies, equipment, and guidance, where this can be achieved safely.
The research outlined in this report demonstrates the opportunity for the AHSN Network to work with local and national leaders to support the health and care system to reset in the wake of the pandemic and successfully deal with ever-emerging challenges: such as the growing patient backlog. Furthermore, we are keen to continue working with leaders from across the health and care system to drive forward innovation and realise the vision for a more innovative and equitable health and care system.

Across all these themes, several overarching recommendations emerged, which are key enablers to transforming the health and social care system:

- Valuing and embracing change
- Rewarding and championing innovation
- Greater devolved leadership and workforce empowerment
- Building on existing relationships and forming new partnerships
- Removing barriers and adopting agile techniques
- Greater co-production including the workforce, patients, and the public
- Understanding population needs and addressing inequalities
- Greater integration across the health and care system
- Increased flexibility of the health and care system and its workforce
- Greater sharing of lessons, knowledge, and rapid insights

The research outlined in this report demonstrates the opportunity for the AHSN Network to work with local and national leaders to support the health and care system to reset in the wake of the pandemic and successfully deal with ever-emerging challenges: such as the growing patient backlog. Furthermore, we are keen to continue working with leaders from across the health and care system to drive forward innovation and realise the vision for a more innovative and equitable health and care system.
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Throughout the COVID-19 pandemic, the AHSN Network has contributed to, led, and supported the health and care system with the advancements needed to respond to the challenges it has faced, focusing on uncovering, celebrating and spreading innovations and new ways of working to support patients, staff and systems at a time of national emergency. This ability to respond locally – and collaborate across England to share learnings and insights to enable rapid transformative change – demonstrated the power of the AHSN Network and the value in our unique locally rooted but nationally reaching approach.

Regionally, our bespoke approach focused on providing expertise to NHS regions and local recovery cells, rapidly identifying technologies to support systems to manage their response, helping source vital equipment and supplies, driving the digitisation of primary care and supporting care homes, to name but a few. Nationally, individual AHSNs supported the rapid roll-out of digital primary care: working in conjunction with NHS England and NHS Improvement, NHSX and NHS Digital, near-total uptake of video and online consultation technologies was achieved in just two months across GP practices in England.

We worked at scale to support the safety of patients, care home residents and clinical staff by providing training resources to care homes and supporting local PPE procurement initiatives. Many of our staff were redeployed into health and care systems to provide support through managerial or clinical roles.

A new sense of freedom to act, given the urgency of the situation, meant that people working in systems felt a sense of permission to be creative and find solutions in new ways. Whether initiatives were implemented at a local or national level, we were a key driver in identifying, implementing and evaluating innovative solutions at pace and scale to deal with the challenges of the pandemic.

Nationally, the AHSN Network has been outstanding and was rapidly commissioned to support the COVID-19 response to deliver through its model of operating as a locally connected, coordinated national network.

Matt Whitty, Director of Innovation, Research & Life Sciences, NHS England and NHS Improvement
The AHSN Network Reset Campaign

To bring together this important work at a national level and collate the huge wealth of learnings and insights we were accumulating, we launched our ‘Supporting the Health and Care Reset Campaign’ in April 2020. This campaign aimed to spread insights, learnings and value-adding innovations captured by AHSNs across England to support immediate delivery of patient care and look to a future ‘with and beyond’ COVID-19. The campaign focuses on a number of overarching themes such as digital and co-production, seeking to better understand how they played a fundamental part in the response to the pandemic and how they can also play an important role in tackling future challenges such as the ever-growing patient backlog.

This report looks ahead to the future rather than providing a compendium of examples of existing initiatives, which are plentiful and widely published already (see links provided throughout this document). Instead, the report outlines learnings identified through the AHSN Network’s Reset Campaign and offers recommendations that can be used to address ever-changing challenges and realise opportunities and ambitions for future work and the future structure of the health and care system.

Building on the AHSN Network experience to shape the health and care system of the future

As we write, the pandemic continues to present us with ever-changing challenges. As vaccines developed in short timescales never previously thought possible are being approved and used in the UK, new variants of the virus with greater transmissibility continue to emerge. The COVID-19 pandemic will undoubtedly remain a challenge for some time to come, and it is vital that innovation continues, that successful projects are maintained and expanded across the country, and that we learn from those that were not successful to seek alternatives. We will continue to work with partners across the health and care system to identify, implement and evaluate innovations that improve the system’s continued response; tackle challenges faced with the ever-growing patient backlog and emerging long COVID; better support the workforce; and support the delivery of continued high-quality patient care.

Despite the immediate pressures on the health and care system, there is a real need to look ahead to a longer-term future. This future, or ‘new normal’, should acknowledge and build on the wealth of changes implemented during the pandemic and use them to chart the course towards a health and care system of the future.

Mapping the course to this longer-term future is the primary objective of the AHSN Network’s Health and Care Reset Campaign, seeking to influence future local and national decision-making, contribute to the ongoing policy debate, and inform ongoing work such as NHS Confederation’s NHS Reset Campaign and NHS England’s Collaborative NIHR ARC/AHSN partnership (formerly the ‘Beneficial Changes Network’). The campaign also provides actionable insights that local and national leaders can use to help shape future systems and services, building on the recent progress and realising the potential for the reimagined health and care system that has been discussed for some time.
Theme 1: Spread and adoption of innovation at pace and scale

Report
Review of spread and adoption approaches across the AHSN Network

Blog
Using telephone and video tools for GP consultation in care homes:

Blog
Eight conditions framework for rapid change in health and care:
Key learnings

- Rapid and timely gathering of evidence about systems, stakeholders and need, coupled with a good understanding of solutions is required for effective spread and adoption of innovation.
- Relationships are critical to successful innovation spread and adoption, and closer connections between AHSNs and partners such as NHSX and NHS regional teams are beneficial.
- Digital communication has increased engagement and efficiency, with new ways of interacting and collaborating likely of value to the future work of our AHSNs.
- Our ability to act very quickly to flex, move and target expertise enabled our rapid response to evolving and changing priorities and supported the rapid spread/adoption of innovation.

As the COVID-19 pandemic escalated and impacted NHS services, speed and flexibility were of the essence, ensuring changes needed for the NHS to adapt and cope with the unfolding crisis were implemented rapidly. Much of this work involved the rapid and agile spread and adoption of innovation: something that is at the heart of the AHSN Network’s expertise and ongoing activity.

What we did

AHSNs identified different strategic responses to meet the needs of local systems, including:

- responding through the acceleration of existing programmes or innovations
- rapid roll-out of new ways of working
- identification of approaches and innovations to meet pressing need.

We proactively offered support and reacted to the needs of health and care systems, which were rapidly changing their own ways of working. The combination of accelerated spread of existing solutions and reactive work enhanced relationships with local partners. Shifts within the national context also had a substantial impact on ways of working. Systems for engagement and partnership increased, decision-making processes were compressed, and a shared purpose gave impetus to the need to change and adopt new ideas and approaches. We were able to pivot our resources and expertise and use our cross-sector (especially commercial) networks to rapidly identify proven technology solutions to meet the COVID-19 challenges, collating a searchable database of more than 350 innovations within days of the first national lockdown.

Working as a network with neighbouring AHSNs sped up impact and provided the support needed for national organisations. Some staff were redeployed to work directly within member organisations or with teams from other AHSNs, while others worked outside their usual job roles to take on operational tasks that supported the COVID-19 response. AHSNs also supported NHSX and NHS Digital with the rapid roll-out of remote consultation within primary care.

On the adoption of innovation we’ve seen really good examples on the remote consultation software for primary care that’s been rolled out with NHSX and NHS Digital, working with ourselves and the AHSN Network.

Matt Whitty,
Director of Innovation,
Research & Life Sciences,
NHS England and
NHS Improvement
Our staff, feeling the impetus of a shared aim within the health and care system and the desire to work towards patient benefits, were flexible and explored alternative ways of working. For example, one AHSN ran a 78-hour ‘hackathon’ to adapt an existing innovation to meet shifting needs.

Despite rapid roll-out of many innovations, we recognised the need to continue to collect and use evidence to assess outcomes and processes for the safety of patients and service users and to create sustainable adoption that met the information needs of commissioners. Putting in place evidence-collecting measures at the start helped reassure commissioners that approaches would be validated.

**Framework for evaluating crisis-response measures**

The Royal Society for Arts, Manufactures and Commerce (RSA) developed a framework to evaluate the crisis-response measures established during the pandemic. This tool recognises different approaches to assessing and handling the crisis-response measures – ‘End, Amplify, Let Go, Restart’ – that offer a more nuanced approach to post-crisis systems change than simple ‘keep these/stop these’ assessments. We used this process in much of our work.

**RSA’s crisis-response evaluation framework**

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What we learned

Organisational shifts, diminished barriers and rapid creativity

The pandemic produced an ‘unfreezing effect’, and important shifts in organisational structures, processes and cultures – some negative, but mostly positive – influenced our work. Systems we previously found challenging to work with to enable change opened up to new ideas and put in place processes that allowed rapid decisions to be made. Rapid creativity was needed to adapt existing innovations and approaches to meet organisational needs during the pandemic.

Empowerment and facilitation of decision-making

Leadership empowered people to make decisions and ensured the right people with the right skills to make those decisions were in place. Fewer committees were needed to approve decisions, so implementation was quicker and easier. Decisions were also sped up by a new ‘give-it-a-go’ attitude and because evidence from multiple settings was less frequently requested. This more permissive and open environment, with a shared purpose and sense of urgency, seemed more open to experimentation. Although empowerment and permission were key, a top-down mandate also facilitated rapid change, with decisions made at greater speed when local barriers were removed.

Building on existing relationships and embracing new connections

Easy access to a range of innovations from our existing portfolio allowed us to provide a variety of rapid solutions to meet different needs. Just as before the pandemic, relationships were key to facilitating spread and adoption. Finding new ways of engaging, including virtual engagement, enabled rapid communication and decision-making.

Established relationships evolved alongside the new structures and needs of the health and care system, with many of our AHSNs working alongside and within local and national bodies such as NHSX, NHS England, NHS Improvement, and local system cell structures. This opened up new ways to work closely with stakeholders, allowing us to contribute to decision-making about solutions.

Barriers and obstacles

Despite our achievements, we also faced challenges. Some of our AHSNs experienced obstacles due to competing priorities within a system overloaded by the pandemic response and evolving national-level information and guidance. In the early stages of the crisis, it was difficult to see how to help, but our role became clearer and more valuable to the health and care system over time and with positive engagement.

Existing relationships helped us to:

- identify needs and offer appropriate support
- quickly understand new organisational structures and decision-making groups, identifying new gatekeepers and understanding the context
- identify early adopters of useful programmes or innovations to gather case studies and information about what worked well to spread these among other organisations and partners.
Some key areas of the response have been particularly valuable and will be of relevance in the future as we continue to support local systems in response to COVID-19 and beyond.

- We should consider what makes relationships successful and continue to invest time and effort to create solid networks with stakeholders.
- We should review practices around system engagement with digital communication methods but recognising that face-to-face communication may still be needed to build new relationships.
- We should consider how to collect evidence about the outcomes of rapidly implemented change, the mechanisms that enabled those rapid changes, and their sustainability.

**As AHSNs, we should also:**

- We should build on the increased flexibility with which we reacted to the needs of local systems and the way we quickly gained understanding of systems, stakeholders, needs and solutions.
- We should capitalise on closer connections between AHSNs and cross-system partners that developed while working with national organisations such as NHSX and local COVID-19 teams.
- We should organise staffing resources to maintain ‘flex teams’ that work to strengths rather than job roles and can respond reactively to system requests for support.
- We should recognise and build on our role in facilitating conversations across systems that have been more open to sharing and learning from each other since the pandemic began.

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### Useful resources

**Report** – [Review of spread and adoption approaches across the AHSN Network](#)

**Resource** – [Supporting homes and health professionals to recognise when residents may be deteriorating or at risk of physical deterioration](#)

**Blog** – [Using telephone and video tools for GP consultation in care homes](#)

**Resource** – [Equipping teams with skills and strategies to address health inequalities](#)

**Blog** – [Eight conditions framework for rapid change in health and care](#)

**Resource** – [RSA framework to evaluate COVID-19 crisis response measures](#)

**Resource** – [Support for long-term condition management during and after COVID-19](#)
Theme 2: Increasing joint working between health and care systems and industry
Key learnings

- Industry has far more to offer the NHS than just access to the latest products and innovations, it brings with it a wealth of insights, knowledge, techniques, and different perspectives.
- Improved outcomes, increased quality of life for patients, and advancement of the health and care system cannot be achieved by the NHS alone.
- The pandemic has broken down some barriers to joint working between the NHS and industry, often facilitated by the AHSNs, which act as a bridge between the two sectors.

The NHS and industry have a long and varied relationship, with industry often seen simply as a ‘supplier’, not recognising the wealth of knowledge and learnings it is also able to bring. Partnership working has the potential to deliver significant benefits to patients and the system itself. When working with the NHS, industry faces a complex set of national, regional and local systems that are very challenging to understand and negotiate. Often this inhibits industry’s ability to work with the NHS and gain successful spread and adoption of their innovations.

AHSNs are two-way brokers of innovation, raising awareness among health and care providers about the availability of commercial solutions and their expertise and, conversely, helping companies to navigate and open doors. The benefits of this have become clearer than ever during the COVID-19 pandemic. Much of the AHSNs’ work during the pandemic has focussed on brokering successful partnerships between industry and the health and care system, and as a result we have gained a number of valuable insights and learnings which are summarised below.

What we did

Building upon industry’s contacts and networks

Our existing relationships with industry enhanced the support we provided to the NHS and facilitated industry’s desire to support the NHS with the challenges it faced. In the early stages of the pandemic, when availability of ventilators and other essential supplies was an issue worldwide, industry used its global network of partners and robust supply chains to source additional supplies for the NHS. Some companies worked with nonmedical manufacturers, sharing blueprints for products and helping them adapt production lines to produce essential supplies quickly. Many examples of this work was facilitated or supported by AHSNs.

Facilitating innovation and new technologies

As it became apparent that social distancing measures introduced to prevent transmission of COVID-19 would remain in place for a considerable time, the health and care system needed to adapt its primary and secondary care service delivery to enable consultations and procedures to continue. Industry stepped forward with innovations that could be trialled free of charge to provide proof of concept before they were rolled out across the health and care system. In turn, AHSNs often brokered introductions to facilitate pilot projects.

Innovations and new technologies

- Digital platforms for remote consultations, which have transformed routine appointments in both primary and secondary care.
- Artificial intelligence solutions to enable remote assessment of scans, allowing specialists at distant sites to provide guidance for more general healthcare teams on local management of patients with conditions such as stroke.
- Digital solutions to allow monitoring of blood pressure and identification of atrial fibrillation at home, without the need for a face-to-face appointment.
The NHSX communications team are grateful for the help from AHSN communications colleagues. Our in-house team has been hugely stretched, and the support of experienced AHSN comms professionals has been lifesaving.

The Health at Home work is a good example. We stood up at speed, with AHSN help, a campaign and microsite to help the public access digital NHS services during the pandemic.

Matthew Gould, CEO of NHSX
What we recommend

Moving forward, a huge opportunity remains to further the enhanced relationship between industry and the health and care system.

- We should embrace this new partnership and work collaboratively to change the health and care system rather than simply falling back into ‘old ways’ once the pandemic begins to subside.
- We should continue to work together to co-create digital innovations and solutions that work for the NHS and for patients rather than industry developing solutions in isolation that perhaps do not fit the needs of the NHS.
- It is our hope that previous challenges associated with industry and the NHS working together will continue to be reduced, allowing the NHS and its patients to benefit from the latest innovations and insights from industry.
- AHSNs should be brought into conversations between industry and the NHS earlier, recognising our ability to facilitate cross-sector conversations and deliver effective spread and adoption.

[COVID-19] has provided industry with a real opportunity to highlight the additional value we can bring when tackling major healthcare system challenges, such as support with service redesign, theatre efficiency and patient pathway optimisation. It is my hope that collaboration between industry, the NHS and the Government continues to be embraced as a way of supporting the health service in its long recovery – innovation and agility will be key here, and we look forward to continuing to share our expertise in these areas to support tackling the backlog and helping more patients to get the treatment they need.

Amy Peters, Senior Manager, Government Affairs and Policy Medical Devices, Johnson & Johnson

Useful resources

Blog – Pandemic heralds new wave of collaboration between digital companies and NHS

Blog – COVID-19 lessons supporting the NHS during COVID-19

Blog – The great potential of digital health innovation for NHS service restoration

Blog – Lived experience of industry informs the health and care reset

Blog – Leading the way: NHS innovation accelerator innovations able and ready to deliver the third phase of NHS response to COVID-19

Guidance – Adapting stroke services during the COVID-19 pandemic: an implementation guide
Theme 3: Driving faster evaluation of innovations

Report
Rapid evaluation of health and care services – shaping a sustainable solution for the post-COVID reset

Video
Lessons learned from COVID-19 around rapid research and evaluation

Case study
COVID-19 case study 1: Helping to improve the quality of care
Key learnings

- Examples of excellence in evaluations are evident, but these are not widespread and there are inconsistencies.
- There is no one best way to perform excellent evaluation and nor should there be; different types of evaluation require different approaches.
- There is a lack of clarity on support and funding options to perform rapid evaluations of service change.

The level and speed of change in the health and care system in response to the pandemic was unprecedented, with rapid implementation of new pathways and service models and a dramatic shift to digital and remote provision. Moving forward, there is a real need for fast, agile evaluation techniques that allow us to continually understand whether these changes are beneficial or potentially harmful: accessing this information in near-real-time or against rapid timelines would allow innovations to be better adapted and enable more effective spread and adoption of innovations and their associated learnings. However, there is also a need for monitoring frameworks to collect the data and insights needed to inform these evaluations and generate: evidence of benefit/disbenefit over time, a better understanding of training needs, and greater awareness of the resource requirements for monitoring/data collection.

What we did

In the first wave of the pandemic, AHSNs led numerous exemplary regional projects to rapidly gather insights and evaluate practice. In many instances, AHSNs worked together with other local partners, such as applied research collaborations (ARCs), ICSs, clinical commissioning groups (CCGs), professional bodies and other national partners, as outlined in the following examples:

South West AHSN
- **Used rapid learning** from the pandemic to change their usual approach to service evaluation, allowing them to gather information quickly and in a way that was meaningful and useful to stakeholders in real-time

West Midlands AHSN
- Identified shared priorities among CCGs and developed analytical projects based on those priorities, with funding pooled across CCGs. Current evaluations are ongoing and include evaluation training

Health Innovation Manchester
- **Led work across their local system** to collectively define trials and diagnostics to evaluate and respond to the national priorities on research, along with local priorities for innovation and transformation from Manchester City Region’s NHS command-and-control structures

UCLPartners
- Rapidly developed a partnership with the Intensive Care Society to share emerging clinical practice in intensive care units

No pre-existing national programme could evaluate the changes in an effective and systematic way or give an agreed sense of what good evaluation looks like. The [Collaborative NIHR ARC/AHSN partnership](#) (formerly the ‘Beneficial Changes Network’) was set up to address this, but still leaves the question of how resources to evaluate new interventions are allocated on an ongoing basis.
What we learned

The pandemic exposed a number of gaps in the way rapid research and service evaluation happens in the health and care system, relating to:

- funding
- skills mix
- lack of coordination and consistency across rapid service evaluation
- regional variation in approaches across the country
- lack of centrally agreed standards or expectations.

We therefore set out to understand regional and national barriers, facilitators and opportunities to reviewing evidence quickly and performing rapid and rigorous evaluations in health and care services. UCLPartners worked with London School of Hygiene & Tropical Medicine to carry out a series of semi-structured interviews with leaders across a range of health policy and frontline service delivery organisations and with applied health service researchers, focusing on three challenges. The recommendations emerging from these interviews were tested in a sponsored roundtable discussion with 12 leaders from national NHS bodies, national and local National Institute for Health Research (NIHR) organisations, National Institute for Health and Care Excellence (NICE) and third-sector organisations. The aim was to shape a series of national policy recommendations, using learning from COVID-19 to support rapid evaluation of health and social care services.

A number of themes emerged from our conversations:

- Evaluations are critical to improving care in the health and social care system but are not necessarily prioritised or resourced.
- Nationally, it is not always clear how research funders’ priorities are specified and coordinated, and prioritised research often does not reflect service providers’ needs.
- Regionally, rapid evidence reviews are often duplicated across the health and care system, while some service providers do not have resources to do them at all.
- Commissioners have no systematic way to access and pool resources to perform regional quality service evaluations.
- Researchers are funded to generate and are judged on publications, requiring a rigour that may not align with the priorities of health and care commissioners. The definition of ‘good evaluation’ is therefore variable in type and quality. It ranges from rapid insights through externally commissioned evaluations by think tanks or consultancies to thorough research funded by NIHR evaluation teams or the ARCs.
- Service users and NHS and social care workers must be central to any evaluations.

Three challenges

- Delivering a shared aim – There is a range of different views on what service evaluation is, depending on roles, expectations, outputs and perspectives. How do we overcome these different views and work to deliver a common goal?
- Funding – Resources and funding for service evaluation are often unclear, varying across the country. What are the roles of national bodies? What sources of funding exist? How can we improve transparency and understanding about how the NHS funds and resources rapid service evaluation?
- Capability and aligning resources – Health and social care needs to have a system in place in which research infrastructure and health and care services are closely aligned, mutually agreeing a strategic approach at national, regional and ICS levels. What could this system look like and how do we put in place what the health and care system needs?

We now aim to work with the wide range of involved stakeholders to help ensure that rapid service evaluation underpins all significant future health and care service changes, providing commissioners, healthcare professionals and the public with confidence that changes being implemented are for the benefit of the health and care of the population.
What we recommend

• There should be a national policy to promote evaluation of all significant service changes.
• Large-scale service change should have an appropriate funding allocation to support evaluation.
• Clarity on expectations surrounding different funded entities should be sought, striking a balance between research and evaluation.
• Greater parity for social care evaluation and research is needed.
• There should be a system for ongoing dialogue between the NHS and care with researchers to identify priority needs for service evaluation and research.
• There should be greater national and regional coordination across research and evaluation partners.
• There should be a national repository of available evaluations and applied research.
• Increased capacity for evaluation and applied research is needed, which can be met through increased staff training and collaborations across a wider range of providers with complementary skill sets.

Useful resources

Report – Rapid evaluation of health and care services – shaping a sustainable solution for the post-COVID reset

Video – Lessons learned from COVID-19 around rapid research and evaluation

Case study – COVID-19 case study 1: Helping to improve the quality of care

Workshop report – Rapid learning and improvement during COVID-19

Blog – Learning from Nightingale: how to implement a learning systems approach
Theme 4: Responding to the impact of COVID-19 on patient safety

- **Report**
  - Safer care during COVID-19

- **Blog**
  - Patient safety after COVID-19

- **Report**
  - Patient safety in partnership: our plan for a safer future 2019-2025: progress report
**Key learnings**

- Having Patient Safety Collaboratives (PSCs) embedded within AHSNs enables fast, coordinated activity with teams on the frontline, ICSs and regional NHS teams and is key to our unique place in a nationally led, locally responsive improvement and innovation system.
- Working together, keeping it simple, sharing widely, testing, and learning can increase the speed and impact of any innovation or change in practice.
- A clear focus on outcomes and permission to be creative means people working in health and care system can find solutions in ways they were not able to before.

As healthcare systems around the world struggled to comprehend and stay ahead of the COVID-19 pandemic, the safety of patients was a primary concern.

**What we did**

Patient Safety Collaboratives (PSCs) responded quickly to the immediate crisis in March 2020 and reprioritised their day-to-day work. Some staff went back to frontline roles or supported national teams, while PSCs' work was rapidly redirected to focus on three priorities.

**Three priorities for PSCs**

- Identifying and managing patients at risk of deterioration
- Implementing a safer tracheostomy care programme to help hospital staff care for patients with a tracheostomy
- Supporting maternity and neonatal units to safeguard mothers and their newborn infants

**Patient safety initiatives during the pandemic**

The 15 PSCs, which are hosted by the AHSNs, are collectively the biggest patient safety initiative in the history of the NHS. They are uniquely placed to work at system level and with individual organisations, connecting national priorities with local needs. Like AHSNs, PSCs have developed local and regional networks across sectors and collaborate nationally. During the pandemic, we capitalised on the breadth and depth of these relationships to good effect to stay locally connected and responsive, linking with regional teams’ COVID-19 cells to enable, develop and share other relevant support in a timely and targeted manner.

- We swiftly capitalised on opportunities, such as jointly hosting a series of webinars with the Royal College of General Practitioners (RCGP). For example our webinar on physiology and oximetry relating to COVID-19 has been watched more than 11,000 times. Another example was a spontaneous collaboration that created advice for staff suddenly faced with difficult conversations with families and loved ones of patients with COVID-19. All of these resources are collated on our AHSN Network website.

To capture intelligence and insights in a rapidly developing situation, PSCs contributed to a learning tracker, which allowed feedback on local needs and learning around the country to be shared quickly and inform dialogue with commissioners.

**COVID Oximetry @home**

During the first wave of the pandemic, it became apparent that low oxygen saturation directly correlates with worsening condition, even
in people feeling otherwise well, and it is now known to identify a risk of poorer outcomes. After the first wave, PSCs explored using pulse oximetry to monitor patients at home and detect declines in condition that might require hospital review and admission. This lifesaving intervention produces reductions in mortality, hospital length of stay, and the number of patients requiring intensive care admission and ventilation. After supporting eight pilot sites, PSCs are helping roll out the national COVID Oximetry @home model so patients can self-monitor oxygen levels at home (including care homes), supported by primary care. From December 2020, PSCs also supported widespread implementation of a COVID virtual ward pathway, which supports early discharge of patients with COVID-19 with a pulse oximeter and oversight from secondary care. From a near standing start in summer 2020, 100% of CCGs in England had fully implemented COVID Oximetry @home by the end of December 2020.

**National Tracheostomy Safety Project**

The National Tracheostomy Safety Project was well known but not used consistently across the health and care system. Its importance increased due to the numbers of patients with COVID-19 who required a tracheostomy for artificial ventilation. In five months, PSCs helped increase the number of sites implementing all three interventions in the project’s care bundle from 71% of acute hospital trusts to 92%. A long-term study showed that following the programme reduces serious incidents by 55%, which will have had an immediate and very positive impact for patients.

**Technology support**

The safety of care home residents was in the spotlight during the pandemic; AHSNs contributed to impressive achievements in this area, and our portfolio of projects to support care homes and domiciliary care staff continues to grow. Tools to spot the early signs of deterioration, such as RESTORE2, have been implemented across all our footprints. PSCs supported care homes to access digital tools and IT solutions, such as Safe Steps in Greater Manchester. North East and North Cumbria (NENC) AHSN’s Well Connected Care Homes project supported the digital application of NEWS2 by developing a new e-learning resource on the National Early Warning Score. We also quickly surveyed technologies used to manage deterioration of patients and support maternity and neonatal staff.

Most of us will never have experienced anything this challenging in our professional lives. PSCs are just one part of the system that has played their part in a national emergency. This time in our history is unprecedented and the COVID-19 pandemic has resulted in a number of positive changes. Cycles of change have been accelerated in order to make care safer for patients.

Cheryl Crocker, AHSN Patient Safety Director
What we learned

After the first wave of COVID-19 subsided in the summer of 2020, a rapid-learning report, *Safer care during COVID-19*, reflected on the PSCs’ experiences. The most impressive reflection was how quickly PSCs were able to pivot from existing programmes at short notice and align their work to meet the new demands required due to the pandemic. Understanding why this was possible will help us become even more effective in our patient safety role.

Common factors to our work that could be applied by any health or care team

- **Rapid cycle learning** – The patient safety model for improvement is based on rapid cycles of test and change, with measurement in place from the start to check whether an improvement has been made. It provides a framework that means teams should never be afraid to try something out. During the COVID-19 pandemic, these cycles became faster and on a much larger scale.

- **Insights and solutions** – The ability to gather and share knowledge became more important as the wealth of research and publications available grew exponentially. Curating the right information was of enormous value to hard-pressed frontline workers.

- **Toolkits and resources** – Always ‘keep it simple’ – aim for high-quality, consistent, easy-to-follow guidance. The tracheostomy care toolkit was supported by a fast-response bedside guide, with easy-to-use action cards created by the Chartered Institute of Ergonomics and Human Factors.

- **Connectivity and relevance** – Rapid learning, developing insights and quickly producing and cascading toolkits and resources to the right people when most needed was made possible by the PSCs’ local, regional and national connected networks. The ability to leverage this knowledge of systems and quickly connect underpinned the transformational impact of their COVID-19 response. The impact can be much greater the wider organisations seek to influence change.

“AHSNs and PSCs have a unique ability to connect people and work at both system level and with individual organisations to swiftly capitalise on opportunities. As we now consider the health and care reset, I hope we have learned from the pandemic to be brave and understand that transformation can start small and grow quickly when the right factors are in place.”

Natasha Swinscoe, Lead AHSN Network Chief Officer for Patient Safety

The deep connection between AHSNs and PSCs is key to our unique place in a nationally led, locally responsive improvement and innovation system. This was evident during the pandemic in the fast coordinated activity with teams on the frontline, local health systems and regional NHS teams. Working together – keeping it simple, sharing widely, testing and learning – can increase the speed and impact of any innovation or change in practice.

The main benefit realised during the pandemic was a freedom to act, with people working in the health and care system feeling permitted to be creative and find solutions in new ways.
What we recommend

The way forward for PSCs is captured in our plan Patient safety in partnership: our plan for a safer future 2019–2025, which was updated in December 2020. It sets out how AHSNs and PSCs will contribute to the NHS Patient Safety Strategy through PSCs’ work supporting the delivery of the National Patient Safety Improvement Programme and the AHSN Network’s focus on accelerating innovation.

- We must consider the safety of the workforce, as this clearly affects patient safety, by maintaining a ‘just’ culture that learns from errors, understands system failures and supports staff to ‘do the right thing’ despite the high-stress environment COVID-19 created.
- We must not lose the momentum of the freedom to act, as this will be a powerful asset during reset, coupled with the right quality improvement framework to capture and share learning.
- We should build on the deep connection between AHSNs and PSCs.

As PSCs we should:
- Seek to continue developing innovations that positively impact on patient safety, including ongoing work on medicines safety, mental health and a discharge care bundle for people with chronic obstructive pulmonary disease (COPD) as part of NHS England and NHS Improvement’s Adoption and Spread Safety Improvement Programme.

Useful resources

Report – Safer care during COVID-19
Blog – Patient safety after COVID-19
Resource – Safe Tracheostomy Care toolkit
Blog – Utilising networks to implement rapid tracheostomy care improvements at pace and scale in a pandemic
Resource – COVID oximetry and virtual wards
Theme 5: Using digital as an enabler for change

Report
The AHSN Network digital and AI reset report: lessons and legacy from the COVID-19 pandemic in health and care:

Blog
Technology, long-term conditions and COVID lessons:

Resource
Deploying technology to help vulnerable people isolated by COVID-19:
Key learnings

- Our work supporting partners allowed them to develop and deploy digital products and services far quicker than would have been imagined prior to the pandemic.
- Working with systems maintained the initial digital transformation gains and sense of shared purpose.
- Digital and data technologies are simply enablers not drivers: transforming patient pathways, with a focus on improving outcomes, should always be the ultimate goal.
- Robust data infrastructure, data operability and common standards facilitated data sharing within national policy and governance frameworks.
- Digital, information and health literacy at all levels within society minimises digital exclusion and ensures health inequalities do not worsen.

The COVID-19 pandemic has been a watershed moment for digital transformation across all sectors. Under lockdown and worried about exposure to infection, citizens started using digital channels such as Zoom and MS Teams for everything – supermarket shopping, financial transactions, remote learning and working from home. At the same time, the health and care system was rapidly expanding its ability to offer consultations and deliver patient care remotely.

This rapid expansion of digital technologies exposed fracture lines within society, highlighting and sometimes increasing existing inequalities and the digital divide, with the most vulnerable hit hardest.

What we did

We played a pivotal role in supporting partners in the health and care system to develop and deploy digital (and data-driven) products and services to respond to immediate needs within days or weeks compared with the multi-year timelines before the pandemic. Working with local, regional and national partners such as NHSX, we mobilised quickly to respond to the pandemic and witnessed first-hand the opportunities and challenges this presented.

- **Digital First Primary Care**: Across the country, many AHSNs became embedded members of integrated teams, working with NHS England and NHS Improvement, NHSX, NHS Digital, commissioning support units (CSUs), and local health systems to move towards a digital first approach, where patients can easily access advice, support and treatment using digital and online tools. We supported GP practices in activities such as rolling out online and video consultations, GP Connect, care home digitisation and GP information technology (IT) hardware to support these tools. This is demonstrated through UCLPartners’ [Proactive Care Frameworks](#), which were created to help primary care teams manage patients with cardiovascular and respiratory long-term conditions using a virtual first approach and mobilising the wider workforce. The Digital First Primary Care Programme existed prior to lockdown but witnessed an astonishing acceleration during 2020.

- **Electronic Repeat Dispensing (eRD)**: As a response to the COVID-19 pandemic, primary care systems were encouraged to increase rates of eRD to reduce the amount of patients visiting the GP for repeat prescriptions. To support our colleagues within systems,
AHSNs worked in partnership with systems to deliver a series of webinars to raise awareness of eRD. Analysis of eRD across the Midlands region shows an increase in 27% of eRD items dispensed since pre-COVID efforts, greater than the national increase of 17%. This translates into 976,628 additional items dispensed since the baseline, with the greatest increase in items switched to eRD noticed during the 3 months after the AHSNs collaborative eRD webinars. In addition to the immediate care delivery benefits, there is a time saving associated with switching patients to eRD, with an estimated time saving of 7,991 hours saved per year of GP/practice time collectively across the region. Each month saw an increase in the number of patients benefiting from eRD; not only from improved social distancing; but from receiving a medication review by practice and pharmacy staff. Across the region 179,672 additional patients were switched to eRD during the months of March to July 2020.

- **TechForce19**: The AHSN Network worked closely with NHSX, the Ministry of Housing, communities, local government and other partners to quickly identify technologies to support people particularly vulnerable or isolated during the pandemic, including new parents, homeless people, unpaid carers, young people, and patients with cancer. The TechForce19 challenge awarded 18 winners £25,000 each to rapidly test products to meet COVID-19-related needs.

Throughout the pandemic, we worked with the health and care system to maintain the initial digital transformation gains and sense of shared purpose. This included working with systems to transform patient pathways focused on patient and citizen needs.

“"I’ve had video consultations with my GP for 12 or 13 years. And so we’ve not just started it, we’ve accelerated and scaled up at an astonishing pace. So we’ve gone from 6% in 12 years to over 90% in six weeks.""  

**Neil Mortimer, West Midlands AHSN**

“The innovators have moved fast, they have built things to help the vulnerable and isolated – with the challenges of COVID-19 set to continue for months to come, health and care providers now need to use these innovations as inspiration for what can be done and look to scale the solutions that match local needs.”

**Anna King, Health Innovation Network South London**
We conducted a short research study in 2020 to understand how technology was an enabler in reducing the care burden, better managing and coping with the effects of COVID-19, and identifying what should be sustained for the longer term in the ‘new normal’. Findings from *The AHSN Network Digital and AI Reset Report*, published in September 2020, highlights important learnings.

**Health is our greatest national asset** and should be nurtured and protected, with preventative health requiring more attention in the long term. Social care and health care should be given equal weight, with patient pathways reconfigured to integrate health and social care around patient and citizen needs, so that improved outcomes are the goal, with digital and data technologies as enablers.

Greater urgency, speed and agility need to be instilled as the ‘new normal’ to address the ongoing chronic disease ‘epidemic’ and minimise the impact of future viral pandemics. People should be mobilised more effectively to solve problems through more flexible roles and a shared purpose.

A robust data infrastructure, data operability and common standards are important to facilitate data sharing within national policy and governance frameworks. This will help to empower people, communities, and health and social care staff to serve local needs, minimising health inequalities and rebuilding communities in line with the ‘levelling-up’ agenda in a decentralised, distributed health resilience model.

**Access to digital technologies should be promoted across the health and care system wherever they add value. However, this needs to be done in a fair and equitable way by considering the needs of all potential end users and all parts of society. There is a complex relationship between digital interventions, patients, end-users, and health inequalities/digital exclusion and its important this is understood. Ensuring digital literacy – particularly amongst older people – is key to ensuring services and the digital platforms they rely upon can be accessed by all. Striving for equitable and accessible health and care services will also help to prevent further exacerbation of the health inequalities we currently see within society.**

**Richard Barker, Health Innovation Network**

**What we recommend**

Great progress on adopting digital technology was made throughout the pandemic in terms of technologies that were rapidly adopted, the way this was approached, and how digital was viewed across the health and care system. Key themes that should be a priority for the future emerged, and we are keen to further explore these with health and care partners to capitalise on the rapid positive progress made throughout the pandemic:

• Work more closely with Health Education England on adoption and spread of health, digital and
information literacy via regional networks – part of the cultural change required to embed the thinking that ‘health is much bigger than the NHS, it is everyone’s responsibility’.

- Facilitate and broker strategic partnerships with industry and academia for large-scale, long-term sustainable patient pathway transformation and preventative health, while advocating nationally for system incentives and levers to be more supportive of preventative health.
- Play a larger pivotal role in local/regional health improvement and preventative health and care integration, working with local authorities, councils and communities.
- Facilitate development of decentralised data models guided by centralised information governance and data standards.
- Identify more innovative place-based projects to scale up nationally for maximum impact in terms of outcomes – developing local social assets as part of the levelling-up agenda.
- Use behavioural change methods from our national and local programmes, including PSCs, to provide ‘boots on the ground’ support to COVID-19 reset transformation initiatives.
- Scale up our strengths in real-world evidence and evaluation, including developing models and support tools around implementing innovations and evidence.
- Provide more dedicated support to drive healthtech innovation into the NHS, including advising small and medium-sized enterprises (SMEs) on key NHS needs, so they can focus limited resources on these innovations and develop successful commercial strategies.

**Useful resources**

**Resource** – Supporting primary care to move towards a digital first approach


**Blog** – Technology, long-term conditions and COVID lessons

**Resource** – Deploying technology to help vulnerable people isolated by COVID-19

**Blog** – NHS Reset: is technology the answer to supporting patients with long term conditions after COVID-19?

**Case study** – Implementing digital solutions

**Case study** – Supporting people with long-term conditions

**Blog** – How tech is transforming mental health support for expectant and new mothers during COVID-19
Theme 6: Co-producing services to meet the needs of people and communities

Blog
AHSN Network – COVID-19: Learning from those with lived experience.

Report

Blog
How to make virtual consultations accessible to all
Key learnings

- Organisations that had already embedded co-production practices into their ways of working were able to respond better to patient needs during the pandemic.
- Despite challenging and unprecedented times, co-production was possible during the pandemic and, where adopted, helped service changes to be effectively realised at pace.
- Our work has highlighted that co-production should play a vital role in the evolution of the health and care system.

The reality of the pandemic meant citizens were faced with unprecedented experiences – both in how they used health and care and in their lives in general. Consequently, the health and care system was faced with making rapid decisions about services to be able to effectively manage additional pressures and the social restrictions required to prevent further infection. This also meant that continued changes were required as new information and evidence emerged, making it challenging for patients to navigate services and limiting organisations’ abilities to engage users.

Once the true nature of the pandemic was realised, the familiar and reassuring relationship between patients and the health and social care system altered dramatically and rapidly. Some people felt unable or unwilling to use services for fear of being exposed to COVID-19 or ‘overwhelming’ the system. This highlighted the importance of understanding the lived experience of patients and service users when redesigning services and demonstrated the vital role of co-production as the health and care system moves beyond the immediate pandemic response.

Co-production

Co-production, or co-design, is where health and care professionals share power with patients, carers, service users and the public to plan and deliver care together. It is driven by mutual recognition that everyone has a vital contribution to improve health and care for individuals and the broader population. Co-production can support:

- individuals to design and agree actions for their own health and wellbeing (personalised care)
- organisations to design, plan and improve services, together with their users
- systems to make accountable strategic decisions about priorities for population health, service provision and research.

What we did

Evidence shows that co-producing, or co-designing, services with people and communities can improve population health and tackle underlying inequalities – ambitions fundamental to NHS England and NHS Improvement’s proposals for the future of ICSs.

Following the initial pandemic wave, the AHSN Network sought to support these ambitions by learning from patient experience and engagement undertaken to develop recommendations for best practice in co-design as we emerge from the pandemic. We undertook research through literature reviews, collation of best practice, and structured interviews with individuals. We identified more than 600 pieces of information offering insights into patient experiences during the pandemic.

In December 2020, we took the emerging insights from our research to a virtual round table, which included system leaders, experts by experience, and co-production specialists. We asked them to help shape our findings into recommendations that could help the NHS and its partners achieve their aims for ‘resetting’ services following the outbreak of the COVID-19 pandemic by highlighting potential priority areas for adoption and implementation of co-production.
What we learned

Patient experience

Although limited in its scope, our research enabled us to draw conclusions regarding the overall patient experience during the COVID-19 pandemic. It’s clear from our findings that, there was not one homogenous experience from this time, and deeper national research should be undertaken to truly understand the impact of the pandemic on patients and service users.

As the virus gained momentum, rapid and unprecedented changes were made to the health and care system to enable organisations to respond. Patient experiences of these changes and of care in general during this time varied depending on the service, patient background, age and locality. While some changes made to protect patients and staff during the height of pandemic had detrimental effects on service users, many others were seen as positive developments.

For example, many patients welcomed the increased availability of online and virtual consultations introduced to maintain social distancing and limit face-to-face interaction services. For some groups, such as parents and carers and people living in rural areas and people with limited mobility, these changes made services more accessible. However, we know this was not the case for all cohorts: for some, limited access to technology meant virtual consultations were challenging. This demonstrates the vital role of co-production: allowing us to better understand the barriers and enablers and develop solutions and create service offers that are accessible to all.

Health inequalities

Evidence suggests that the pandemic exposed greater health inequalities than were previously estimated. Not only were some communities at greater risk from COVID-19, but mental and physical ill health were also disproportionately concentrated in poorer communities.

The COVID-19 pandemic not only highlighted existing health inequalities, but, in some areas, exacerbated them, particularly as some communities were seen to be at disproportionately greater risk of serious illness from COVID-19. ‘Shielding’ became a central experience for millions of people during the pandemic. However, as a result, many people at greater risk experienced reduced contact, greater isolation, reduced exercise, poorer mental health and wellbeing, and declining physical health. People with pre-existing conditions subsequently felt left alone to make judgements about risk, trade-offs and how best to manage their health.

Midway through the shielding process, NHS England and NHS Improvement worked with people with lived experience to co-produce updated shielding guidance. Once redesigned with the needs of users at the heart, this was seen to offer greater support and clarity during what many felt was a confusing and isolating time, demonstrating the value brought by co-production.

Co-production and engagement during the pandemic

Our studies show that, although challenging during the pandemic, some local health and care systems successfully used co-production and engagement to facilitate practical support for people in crisis; secure rapid feedback and insights to improve the local response; reduce the negative impact of rapid changes; shape the design of services or new ways of working; and input into the development of plans and guidance.

Rapid feedback to inform decision-making

Although routine feedback and measurement were halted during the early stages of the pandemic, many organisations re-established contact to understand impacts on patients and staff once the scale of the response was understood. Organisations with well-established engagement and co-production mechanisms
Our work has revealed a wealth of insights into how co-production played a part in the system’s response to the pandemic. It’s important that we now utilise these learnings to inform the future. Below are our recommendations for co-production which we believe are crucial to ensuring equitable patient care, which is accessible and meets the needs of all the population.

- Fundamentally, co-production should play a major role in the evolution of the health and social care system, improving our understanding of co-production and what works best to develop services that meet the needs of the population.
- Co-production now needs ‘sustainable infrastructures’ to be embedded fully in the design and development of services, and co-production frameworks should be built into operating models to be considered standard practice. These processes will also allow organisations to respond better to the needs of service users during a crisis.
- Service redesign and quality improvement should be guided by real-time, methodical, actionable data on patient and staff experiences. Population feedback and insights should be part of the core data, with analytics to support population health management.

Hyper-local engagement

Case studies demonstrate that engagement in some areas took place at a hyper-local level, enabling organisations to truly understand the needs of targeted cohorts within communities. In response to the pandemic, local community support networks were established, bringing together voluntary sector organisations with volunteers, local authorities, and health and care. It was these networks that provided considerable support to people during the pandemic but also facilitated hyper-local engagement. In some areas, we saw that primary care networks (PCNs) were able to use these networks to understand and address the needs of their local populations.

Co-production during the pandemic

Health and care organisations with strong channels to capture regular feedback and insight repurposed these by moving activities online or capitalising on relationships with partners, including local Healthwatch organisations. Although not widespread across the whole of health and care, we saw positive examples of co-production of new services during the pandemic. In the Bristol, North Somerset and South Gloucestershire health and care system, commissioners used the established citizens’ panel to recruit service users to co-produce its 111 First service, alongside staff and clinicians. Similarly, people with lived experience in Somerset contributed to the development of mental health services designed to respond to the anticipated growing demand.

What we recommend

- Fundamentally, co-production should play a major role in the evolution of the health and social care system, improving our understanding of co-production and what works best to develop services that meet the needs of the population.
- Co-production now needs ‘sustainable infrastructures’ to be embedded fully in the design and development of services, and co-production frameworks should be built into operating models to be considered standard practice. These processes will also allow organisations to respond better to the needs of service users during a crisis.
- Service redesign and quality improvement should be guided by real-time, methodical, actionable data on patient and staff experiences. Population feedback and insights should be part of the core data, with analytics to support population health management.
Leadership must be committed to co-production for it to be effective. We therefore recommend that leadership surrounding co-production is developed and spread to produce new cadres of leaders who ‘listen and host’.

To achieve aspirations for ICSs, leaders at all levels need to establish the culture and practice of co-production as a foundation. PCNs need to feel empowered to organise a collective voice to address inequalities and shape population health strategies at a local level.

Sustainable partnerships need to be developed with ‘very local’ community organisations to spread co-production culture and innovation.

As patients with long-term conditions are increasingly waiting longer for treatments and procedures in the wake of the pandemic, support for self-management in the form of education, peer support and personalised care plans will be needed.

Further innovation will be needed at national, regional, ICS, place and neighbourhood levels to build a sustainable infrastructure, embedding partnership with people and communities as ‘the norm’, and to support local communities’ routine involvement in planning for system priorities.

As brokers of partnerships for innovation, AHSNs can help develop the relationships needed to develop sustainable co-production infrastructures; spread personalised models of care; help local systems identify and use best practice approaches to co-production in local innovation and improvement programmes; and create learning communities to uncover and share best practice.

**Useful resources**

**Blog** – [AHSN Network – COVID-19: Learning from those with lived experience](#)

**Guidance** – [Strategic coproduction: Public Health England, working with communities for wellbeing](#)

**Report** – [NHS Confederation – A new relationship between the NHS, people and communities; learning from COVID-19](#)

**Blog** – [How to make virtual consultations accessible to all | UCLPartners](#)

**Blog** – [Involving people who have had COVID-19, and carers, in developing rehabilitation services | UCLPartners](#)
Theme 7: Understanding the impact of COVID-19 on inequalities

Report
Levelling up Yorkshire and Humber: health as the new wealth post-COVID:

Report
Diversity and innovation: a celebration of BAME innovators and our pledges to do more:

Webinar
Building diversity in digital health:
Key learnings

• The COVID-19 pandemic clearly highlighted the prevalence and impact of inequalities within society, with higher mortality observed within communities with high levels of deprivation.
• The appetite to better understand the challenges we face, the opportunities to think and do things differently, and how we can go about embedding those changes for the future has increased.
• It’s important we build upon this appetite and increased awareness to firmly tackle the stubborn inequalities that exist within society.
• The AHSN Network has a significant potential role to play in influencing local and national leaders to effect meaningful change upon policy and the current drivers behind inequalities.
• The AHSN Network’s diversity pledges are fundamental to the way we work, and other organisations and support agencies could adopt similar approaches to ensure equity in the services they offer and the work they support.

The mortality throughout the COVID-19 pandemic has been stark; however, a disproportionate impact on some parts of the population has also been clear. Data show that those from black, Asian and minority ethnic communities, older people, men, people living in the country’s most deprived areas, those who are obese, and those living with long-term conditions have been most affected by the pandemic and had the highest associated mortality.

This disproportionate impact has shone a light not only on the prevalence and impact of inequalities within society, but also how the COVID-19 pandemic has further exaggerated existing inequalities. These inequalities can be grouped into many categories including social, economic and health; however, there is an intrinsic and unbreakable link between them all. This means that tackling one area – such as the economic circumstances associated with a specific population group – will have a direct positive impact upon their health, meaning the unjust differences in health outcomes we see across the population could readily be addressed.

As we look towards living with and beyond COVID-19, it’s vitally important the understanding of the pandemic’s disproportionate impact is not lost and that we seek to use the data, knowledge and insights obtained to create a better future. In the short term, this means working across society and with different

“Approximately 21% of the whole NHS workforce identifies as Black, Asian or minority ethnic, including approximately 20% of nursing and support staff and 44% of medical staff

NHS Workforce

“

It’s much easier to make healthy life choices when you have lots of opportunity, income and security.

Professor Rob Copeland
Advanced Wellbeing Research Centre,
Sheffield Hallam University

“
societal groups to understand appropriate interventions that offer the potential to reduce the immediate impact of the pandemic. In the longer term, this means continuing work to improve population health and reduce the health inequalities within society, so that should another pandemic emerge, we are in a much better place to tackle it and its impact should be far less disproportionate. Given the disproportionate impact of the COVID-19 pandemic on certain parts of society (including those with obesity), addressing the obesity challenge as part of the focus upon population health should be a key priority.

However, tackling health inequalities is only a very small part of the overall mission to ensure equity within society. In the previous section we discussed how, as we work towards ‘resetting’ our health and care system in the wake of the pandemic, we need to learn practical lessons from our collective response by involving patients, carers and healthcare professionals to name but a few. Put simply, this means that we must make sure everyone who has a stake in the NHS has the opportunity to have their say on how we might do things in the future. As we seek to ‘reset’ the health and care system in the wake of the pandemic, this means we need to build back services that are accessible to and address the needs of all parts of society. This doesn’t just mean service users (e.g. patients and carers), it also means making sure that we build back an NHS that appeals to and meets the needs of a diverse workforce.

What we did

Prior to the outset of the pandemic, Yorkshire and Humber AHSN was working in collaboration with NHS Confederation and Yorkshire Universities on a national and regional campaign ‘YHealth4Growth’ to increase awareness of health inequalities – focusing on their prevalence and impact – and highlighting the intrinsic links between health and wealth. This work continued throughout the pandemic, focusing upon the links between health, wealth and the impact of the COVID-19 pandemic. In July 2019, the collaboration published a report, ‘Levelling Up Yorkshire and Humber: health as the new wealth post-COVID’, highlighting the prevalence and impact of inequalities across the region throughout the pandemic.

In December 2020, the partnership held a follow-on webinar to further explore ‘The role of health in driving economic renewal and social inclusion’, arguing that a renewed focus on population health and tackling inequalities has the potential to tackle the economic impact of the COVID-19 pandemic. Central to the discussions was a ‘health-in-all policies approach’, demonstrating the need to capitalise on the increased appetite for transformation and the greater focus on population health that has arisen during the pandemic to ensure health is considered alongside the economy in all decision-making. The authors argue this is key to begin tackling the stubborn inequalities within society.
In a webinar on Building Diversity in Digital Health, Richard Stubbs, CEO of Yorkshire and Humber AHSN and a member of NHS Confederation’s Diversity Taskforce, made the point that ensuring an inclusive NHS workforce and working environment is key, otherwise we will potentially exclude a large part of the existing workforce and the valuable ideas and insights they bring. Dr Bina Rawal, a non-executive director of the Innovation Agency, references a similar point in a blog for NHS Confederation as part of the NHS Reset Campaign. She argues that: “The NHS workforce challenges presented by the COVID-19 pandemic and the opportunity to build on the progress made are discussed more in the next section. Spread and adoption of innovation within England’s health and care system is at the heart of the AHSN Network’s expertise and activities. It’s vitally important that through this work we consider the impact of innovations upon their users (including both the workforce and patients) and the services themselves to ensure they don’t exclude any groups of society or make accessing services or information harder. It’s also vitally important that the needs of innovators are fully understood and that the services we offer innovators are accessible and relevant to all parts of society. We discussed earlier that approximately 21% of the NHS workforce identifies as Black, Asian or minority ethnic and, as a large percentage of the health innovations within England come from within the NHS itself, if the services we offer aren’t accessible to this group, we are potentially missing out on a wealth of innovations that have the potential to positively impact patient outcomes and delivery of health services. It’s also important that the role of innovation in tackling and addressing health inequalities is understood, prioritising support for innovations which actively address this challenge.”

In order to reset the health and care system to a healthier work environment for all employees, we first need to understand and lay bare ‘inconvenient truths’ before beginning to tackle them.

Dr Bina Rawal, Non-Executive Director, Innovation Agency

Agencies like the AHSNs have the ability to engage and involve the public and undertake processes such as equality analysis to assess and better understand the potential impact of innovations we are working to spread and adopt.

Nicole McGlennon, Managing Director East Midlands AHSN
Through our work, we explored the links between COVID-19, inequalities and diversity, and the need to think differently as we ‘reset’ the health and care system and build back a better and more inclusive society. The devastating impact of the COVID-19 pandemic has been clear; however, its impact has not been wholly negative. We have seen strides of improvement in a number of areas across health and care, alongside large shifts in the mindsets of those working within and connected to the health and care system. We have also seen a real appetite to better understand the challenges we face, the opportunities to think and do things differently, and how we can go about embedding those changes for the future. As we look forward, it’s important that we capitalise on these external factors before it’s too late, use our better understanding to plan future work and activities, and build upon the great work already taking place.

What we learned

The AHSN Network sits at the cornerstone between health innovation and economic growth and works closely with England’s key health and care organisations. Our network of 15 AHSNs are also closely embedded within local health systems including primary/secondary care, public health and local government. This means the AHSN Network is very well placed to work with local and national leaders to effect meaningful change upon the inequalities within society. The report recently published by Yorkshire and Humber AHSN, NHS Confederation and Yorkshire Universities outlines a series of recommendations aimed at local and national leaders. These recommendations focus upon ensuring the North is ‘levelled up’ so that a fair and inclusive society can be enjoyed by all and that change is affected at a national level to ensure greater equity across all parts of society and all of the country.

What we recommend

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### National recommendations

- Increase health research and development spending in Yorkshire and the Humber.
- Empower local leaders with the tools to improve health outcomes and deliver inclusive growth and wider prosperity.
- Give greater priority to wellbeing in investment decisions.
- Ensure health is included as an outcome in all economic development policies.
- Ensure health is a priority for all government departments.

### Recommendations within Yorkshire and the Humber

- Development bodies’ and anchor institutions’ strategies from all sectors should have the explicit aim of delivering inclusive growth and prioritising health outcomes, including measuring impact.
- Partners should seek to understand, diversify and strengthen local supply chains for key health and public services.
- Partners should commit to supporting jointly funded posts, secondments and exchanges between sectors to deepen collaboration and deliver inclusive growth and better health outcomes.
- Partners should look to strengthen joint analysis and foresight through the establishment of observatories (or similar structures) to inform effective public policy and interventions by sharing local data and other evidence from across sectors.
- Anchor institutions should collaborate to coordinate and align their roles in transformative place-wide change, including areas not immediately within their core domain.
This growing and increasingly important area of work will be continued by the collaboration throughout 2021 and into the future, seeking to work closer with local and national leadership to gain further momentum.

All 15 AHSNs have already committed to a number of diversity pledges to ensure our work, including the innovations and innovators we support, embeds equality, diversity and inclusion. It’s important that we build upon this work in the future, ensuring that the health and care system of the future is accessible to and address the needs of all parts of society: including both the individuals accessing the health and care system and the workforce who work within it.

Although the pledges below have already become integral to the way AHSNs work, we believe many other organisations and agencies who collaborate with and support the NHS could learn from our work in their area and also embed similar pledges within their working practices. Supporting organisations with this process is an area where the AHSNs could provide advice and assistance.

### AHSN Network’s diversity and innovation pledges

- We commit to implementing a recognised process to self-assess and improve equality performance in each of our organisations.
- We commit to empowering and supporting our staff to be positive role models for equality and diversity.
- We commit to understanding the impact of our work on all members of our communities and for our work to reflect the equality and diversity within these communities.

### Useful resources

- **Report** – [Levelling up Yorkshire and Humber: health as the new wealth post-COVID](#)
- **Report** – [Diversity and innovation: a celebration of BAME innovators and our pledges to do more](#)
- **Webinar** – [Building diversity in digital health](#)
- **Webinar** – [YHealth for growth one year on: the role of health in driving economic renewal and social inclusion](#)
Theme 8: Understanding the critical role of the workforce

Blog: Making the NHS the best place to work
Blog: Working differently
Blog: NHS Reset: why the challenge to reset is a cultural one
Key learnings

- Innovation spread and adoption are not solely about simply deploying products or ways of doing things: the workforce and their needs/skills and abilities are a fundamental part of this.
- The COVID-19 pandemic has driven a ‘culture of innovation’ across the health and care system, and this should be nurtured and maintained, as it is key to effective innovation.
- The pandemic has created an environment where staff are willing to share knowledge, experience and stories in relation to culture and leadership and their role in enabling and sustaining change in health and care services.

The workforce is the beating heart of the health and care system. Every member of staff, whatever their role, is critical to keeping the system running smoothly and ensuring best outcomes for all patients. The pandemic has impacted on the workforce in many different ways, and all staff – doctors, nurses, allied health professionals, healthcare assistants, technicians, pharmacists, administrators, cleaners, to name just a few, in both secondary and primary care – put themselves on the line during the pandemic, despite the pressure, concerns and stress this brought. It’s important that the role of the workforce – not just in terms of the delivery of services but also how the culture in our organisations and teams is fundamental to continued innovation across the health and care system. It is also important to understand how we support the workforce to maintain resilience and build culture in our organisations and systems for innovation.

What we did

Our Reset Campaign has provided a valuable opportunity to pause and reflect on how the health and care workforce has changed throughout the pandemic, understand the impacts of these changes after COVID-19, and explore how to retain and embed the positives as organisations move forward.

In Theme 2, we talked about how spread and adoption at pace and scale were achieved throughout the pandemic, largely due to the attitude and approach of staff across the health and care system. There was a feeling of empowerment, a desire and devolved authority to problem-solve and adapt to provide the most effective patient care despite the challenges, and a strong appetite to innovate by adopting new tools or techniques. Staff weren’t asked to ‘do innovation’ – they took it upon themselves to embrace the new attitudes, environments and opportunities to change how they deliver patient care. We saw rapid uptake of digital technology across the whole system. There were more collaborations, increased appetite for risk, and less focus on bureaucracy and red tape. Leadership and culture were also critically important in enabling staff to step outside their usual roles to find innovative solutions.

A group of AHSN leads therefore came together to collate regional and national work to understand the determinants of leadership and culture in our systems that enabled change at pace during the pandemic and to identify and sustain positive changes for future working. The group shared examples of positive change across England during the pandemic and identified a number of elements common to good culture and leadership, as well as five key themes including techniques for supporting rapid change and removing obstacles.
What we learned

Working party group methods

AHSNs gathered lessons learned through formal capture of data in regions via a mixed approach. Some AHSNs built on their relationships with their ICSs and facilitated group interviews of local leaders to record changes and ensure learnings were fresh in people's minds. In other regions, rapid insights from various COVID-19 response cells that had been set up were captured and shared as case studies.

The Burbidge Model was used to gather lessons learned, while the Iceberg Model was used to categorise and make sense of information to identify ways to build resilience for future challenges.

Each representative AHSN sought and contributed data from their locality to provide valuable insights into leadership and culture and what had been observed and reported formally or anecdotally through network connections. Rather than a formal systematic review of literature around culture and leadership since the onset of COVID-19, the group focused on insights gained and observed during the work of our AHSNs as a connector of frontline health and care, academia and industry, using formal academic publications, regional reports, white papers and blogs to support their findings.

We saw:

- increased collaborations and an increased appetite for risk taking
- less bureaucracy and red tape
- 53% of staff surveyed within North East Cumbria citing greater partnership working
- NHS Nightingale North West Hospital built in 13 days
- system leadership in Greater Manchester (GM) came together to step up rollout of digitised innovations
- barriers removed where previously were in place i.e. unblocking IG system issues
- removal of assurance processes
- increased productivity, less travel and more agile working
- one workforce culture in GM
- more than 300,000 people applying for care jobs as part of the regulated care campaign compared with 25,000 previously in Lancashire and South Cumbria.

Rapid change was enabled by the following structures:

- Clearer leadership
- Fewer permissions needed
- Freedom to act
- People trusted with finding solutions rather than being told what to do.

A simple cell structure was set up for strategic decision-making, with the overall system having a single purpose and focus – a shared system aim. As a result, we saw:

- redesigned multidisciplinary teams (MDTs), patient flows and repurposed hospital wards and departments
- non-urgent care stood down
- leaders seeking the wisdom of frontline staff and trusting them with tasks
- greater visibility of workforce and organisational development professional capabilities in supporting change
- reduced burden of assurance and governance.
We found that professionals were empowered and had more psychological safety to act. There was more compassion, love and care for colleagues and their families (‘Clap for Carers’, etc). As a result, we saw:

- More freedom to get on and deliver
- Less direction and more trust

- Work is what you do not where you do it
- Acceptance of family as part of our lives: kids, cats and dogs interrupt meetings – and that is ok
- Team connectivity and wellbeing now a priority
- Job title less important
- Less hierarchy. (LSC Lessons Learned report Digital)

The Clinical Leaders Network set up a call to action for support of wellbeing of frontline staff during the COVID-19 pandemic, and the Innovation Agency has supported action learning sets focused on wellbeing.

Elements common to good culture and leadership

- Embracing new technology
- Fewer permissions needed
- Empowerment of staff
- Less red tape
- Increased collaboration
- Increased appetite for risk
- Clearer leadership

Five key themes

When we saw rapid uptake of technology...  
...there were leaders willing to collaborate.

When we saw good culture...  
...we saw teams ready to change.

When we saw good leadership...  
...we saw empowered teams with permission to act.

When we saw people taking risks...  
...we saw that they felt psychologically safe to do so.

When we saw change at pace...  
...we saw less red tape and bureaucratic processes.
The health and care system should be immensely proud of how its staff have adapted to the new circumstances, but this brought new pressures and concerns, as well as risks to mental, physical and emotional wellbeing. Some measures are unsustainable, so the system must find alternative long-term solutions to ensure the welfare of its staff. Other measures have succeeded in offering new and efficient ways of working that might never have been considered without the impetus of the pandemic, and these should be expanded.

Interest and appetite for rapid innovation uptake has undoubtedly become more widespread across the health and care system throughout the pandemic. To realise the transformation of the system associated with implementing new technologies at pace, buy-in for innovation among the health and care workforce will be key. This cannot come through top-down mandates or management structures. Building a ‘culture for innovation’ among the workforce, empowering them to effect change and think differently is therefore important for spread and adoption of new ideas and working practices. It is vital that we capitalise and build on the progress made in developing this culture during the pandemic.

The work by AHSNs has uncovered and given voice to staff who want to share knowledge, experience and stories in relation to culture and leadership and their role in enabling and sustaining change in health and care services. It is essential to separate this from other contributing factors – i.e. processes and structures – so that its importance is not diluted or lost and it is not put in the ‘too-hard-to-tackle’ box. The phrase ‘culture eats strategy for breakfast’ is now more pertinent than ever to what our AHSN Network is doing. We must maintain consistency of purpose, hold our nerve, and champion good culture and leadership to ensure it has parity with more tangible, easy-to-measure, operational relations. If we do this, we will truly transform health and care services for the better.

**What we recommend**

The health and care system should be immensely proud of how its staff have adapted to the new circumstances, but this brought new pressures and concerns, as well as risks to mental, physical and emotional wellbeing. Some measures are unsustainable, so the system must find alternative long-term solutions to ensure the welfare of its staff. Other measures have succeeded in offering new and efficient ways of working that might never have been considered without the impetus of the pandemic, and these should be expanded.

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**Potential future work for the AHSN Network**

- Using the methods we have established and making them more accessible across the AHSN Network to allow others to undertake similar work.
- Developing a toolkit to support an innovation culture that we and our partners can use to enable change and rapid spread and adoption of innovation.
- Show our leadership of change by developing and sharing a culture and leadership framework that might use ‘I’ statements aligned to the determinants we discovered.

‘As a leader I create safe spaces where everyone can speak up without fear.’

‘As a leader I remove obstacles such as red tape when I want my teams to implement rapid change.’

‘As a leader I engage my staff from the outset of change and empower them to act without unnecessary permissions.’

‘As a leader I support people to take risks by not blaming them when things don’t go as planned.’
Useful resources

Blog – Making the NHS the best place to work

Blog – Working differently

Blog – NHS Reset: why the challenge to reset is a cultural one

Resource – Culture and leadership project information collated on FutureNHS (FutureNHS login required):
- Facilitated group interviews of local leaders to record changes
- Rapid insights captured from various cells that had been set up and shared as case studies
- Burbidge Model to gather lessons learned
- Iceberg Model to guide systemic thinking
Theme 9: Using COVID-19 as an opportunity to reassess delivery of care and the structure of the health and care system
Key learnings

- As we move into the ‘new normal’, the pandemic has provided a unique and unprecedented opportunity to fundamentally reassess the structure, pathways and integration of the whole health and care system.
- Health and social care is a single system comprised of different interlocking subsystems. Joint-working between all of them is essential to delivering effective patient care.
- Every member of staff in every hospital department, every general practice and every care home has a key role to play in keeping the health and care system running smoothly.

The changes the health and care system needed to make in response to the COVID-19 pandemic fundamentally altered how primary, secondary and social care services are provided and supported. Some changes were contemplated in recent years but were in the early stages of implementation – or deemed too challenging to introduce until the COVID-19 crisis forced people’s hands. Other approaches were entirely new and were developed due to the urgent need to offer treatments for COVID-19 and protect patients and health and care workers. Although some adaptations only provide only a temporary solution to an urgent problem and may be retired once the pandemic passes, many have been extremely successful – despite former misgivings about altering the status quo – and therefore have the potential to be rolled out more widely across health and care services. The fact that relatively dramatic changes have been widely adopted and accepted, albeit out of necessity, offers renewed hope that transformation of the health and care system has only just begun.

What we did

Since its inception in 2013, the AHSN Network has been a driver for improved patient outcomes by connecting the health and care system with academic organisations, local authorities, the third sector and industry. Our network’s unique position as a bridge between the different stakeholders has allowed us to support the implementation of service innovations locally and nationally. As such, we were ideally positioned to support adoption of innovation and facilitate service redesign during the pandemic.

Perhaps the biggest shift in the health and care system due to COVID-19 has been the use of digital technologies to facilitate remote consultations in both primary and secondary care. All AHSNs supported the rapid roll-out of digital primary care, helping NHS England and NHS Improvement, NHSX and NHS Digital to achieve near-total uptake of video and online consultation technologies across GP practices in England in just two months. In April 2020, we partnered with the Digital Health and Care Alliance (DHACA) to run two webinars to explore how practices were implementing ‘total triage’ solutions during COVID-19. In addition to listing the many benefits of online and video consultations, participants in the webinars recognised that the move to total triage is not just about the technology and ‘turning on’ a system – this instead has to be an improvement journey.
What we learned

Maintaining privacy

As the rapid need to adapt to the pandemic became clear, the Information Commissioner’s Office (ICO) recognised the need to act outside its normal ambit in the interests of public safety.

With the need to shift from face-to-face consultations, its regulatory approach towards mobile apps such as WhatsApp and Skype (which breach NHS and UK Data Protection Act rules for the handling of patient identifiable data (PID)) was relaxed to facilitate digital consultations. NHSX rapidly followed suit, allowing healthcare professionals to use such messaging tools to carry out their duties. Although certain caveats were in place – for example, permission was not extended to storage of PID using these tools, transmissions were restricted to instances of absolute necessity, and strong passwords and other data protection measures were required – clinicians felt they had an opportunity to use these apps to enable and enhance their care offering.

Many of these apps have become a fundamental part of delivering patient care and are returning significant benefits, so it would be wrong simply to stop using them as the pandemic starts to abate. However, as we move forward with digital modernisation of the health and care system, ensuring the privacy of patients and compliance with data protection laws will be paramount to maintaining public confidence.

Data as the foundation for future healthcare and actionable analytics

COVID-19 has highlighted the critical nature of the timeliness of health data, especially in a fast-moving pandemic. Analytics in quarterly, monthly or weekly cycles are simply not adequate to drive population health or decision-making: near-real-time analytics at the frontline are needed to drive actionable decisions and have any impact.

However, the newly recognised need and urgency may overwhelm strategic visions. Planning for health data needs to ensure systems are agile and that data cross organisations to enable multi-agency responses, meaning standardisation of data formats will be key.

It will also be important not to reduce healthcare to form-filling or to take people away from delivering healthcare. How we achieve this balance between rushing for actionable analytics and cautious laying of data foundations will determine whether the future of digital healthcare will be streamlined and efficient or will continue to present challenges.
Accelerating access to treatments

Where traditional routes for treatments from studies to bedside have been slow, the urgency of the pandemic showed that it is possible to get drugs to patients quickly. For example, the multi-agency approach and horizon-scanning infrastructure of the Accelerated Access Collaborative (AAC) enabled safe and timely patient access to therapeutics with evidence of benefit for symptomatic patients with COVID-19. Three medicines were made available to NHS patients with COVID-19 within hours of study readouts and further therapies are under consideration. This streamlined process should be maintained beyond the pandemic, while still ensuring rigorous evaluation of safety and efficacy.

Sustainability

The post-COVID-19 ‘new normal’ offers the chance to rethink the environmental path the NHS takes. Sustainability and working towards a greener society are increasingly important for society and are also increasingly rising up the priority list within the NHS. As part of our role in supporting innovators, we are increasingly working with innovators to ensure that the work they do is sustainable, that they implement sustainability plans within their product development, and that any new products they are developing will have a positive impact on the environment. We are also increasingly using a carbon calculator to identify the positive environmental impact of the innovations we are supporting with spread and adoption. For example, we have supported the adoption of placental growth factor (PlGF) testing across England – a test that diagnoses women at risk of suspected pre-eclampsia, and in addition to patient benefits, is expected to have saved in excess of 3,043,660 miles driven through avoided appointments.

We are also working locally and nationally to embed the ambition to create a greener NHS and to achieve NHS Net Zero by 2030. We are working with many local and national partners on this work, including the NHS Sustainability and Development Unit, who are leading on many of the suggestions below.

Suggestions for a greener NHS

- Reviewing environmental policies for sustainable best practice on waste, recycling, transport, plastic use, water, energy, heat, power and buildings.
- Reinvigorating use of ‘social value’ legislation in commissioning decisions, so that they fully take into account social, economic and environmental benefits.
- Transforming procurement practices to greatly increase the use and development of regional and local suppliers of equipment, materials, goods and food and to support initiatives such as NHS Forest and Incredible Edible.
- Working from home as much as possible to cut down on unnecessary travel and consequent toxic emissions.
- Embedding virtual or remote GP and outpatient consultations that have a positive environmental impact, whilst ensuring digital inclusion for the whole population.
- Supporting local walking and cycling initiatives and actions to protect and enhance the local natural environment and wildlife.
- Generating local and regional employment and training opportunities to fill NHS vacancies and ameliorate local unemployment.
Changing perceptions

The response to the COVID-19 pandemic has been a wake-up call that has changed many perceptions about the health and care system. In Theme 2, we discussed the fundamental shift in the perception of the relationship between the system and industry.

We also learned that, despite many misconceptions, the health and care system is not a ‘super tanker’ that cannot move quickly. Despite previous caution towards change within the system, the pandemic has shown it can be agile, flexible and fast-moving when required. We must collectively learn how this was achieved and how the system can continue to respond positively to population needs at a faster pace and scale. This knowledge should be used as a lever when instigating changes should resistance to further modernisation re-emerge.

We have learned that maintaining our personal health and reducing our vulnerability to illness is a personal responsibility, not the responsibility of the health and care system. We expect to see a growth in demand from citizens and a response from innovators for tools to enable this.

Patients with COVID-19 nearing the end of their care within the health system but still requiring supervision could not be discharged home and so needed to be directed to the care system. But social care was already overcapacity, so the health system could not discharge patients and free up increasingly scarce beds for incoming patients. This clearly demonstrates that health and care are two components of a single system that need to work in partnership for the wider system to be effective. Related to this is recognition that all health and care staff at all levels are equally important to effective functioning of the system and deserve equal recognition and reward.

These changes in perception must be taken into account as the health and social care system is reset and we look ahead to future challenges.

What we recommend

As we move forward there is clear appetite and enthusiasm not to capitalise on the unprecedented opportunity the pandemic has presented to fundamentally reassess the structure, pathways and integration of the whole health and care system. The new momentum must be maintained by:

- Continuing to recognise and take advantage of the fact that the health and care system is a single system comprised of different interlocking subsystems – each relying upon the other.
- Embedding into working practice and culture the fact that every member of staff has a key role to play in keeping our health and care system running smoothly – if one cog is missing, a wheel cannot turn.
- Maintaining the closer working and open communication between primary, secondary and social care that was needed to optimise care across the whole pathway.
- Considering both potential unintended negative upstream or downstream effects within the health and care system and,
conversely, any beneficial effects across a broader section of the health and care pathway.

- Maintaining and further developing shortened procedures for approval and appraisal of drugs, digital technologies, equipment and guidance. Where this can be achieved safely, with protection of patient privacy and without exacerbating inequalities.

- Harnessing the opportunities of digital innovations to improve patient care and to audit that care and patient outcomes across sectors in real-time rather than months down the line.

- Taking the opportunity to rethink the environmental path the NHS takes to minimise its impact on climate change – the other global crisis of this generation.

Useful resources

Blog – NHS Reset: Lessons and insights from the AHSNs on supporting innovation during COVID-19

Blog – NHS Reset: The race to systematise service innovation: how to make the changes in practice and mindset sustainable

Blog – NHS Reset: Data as the foundation for future healthcare and actionable analytics

Blog – NHS Reset: Failure to clarify privacy guidelines in the wake of COVID risks derailing digital health

Blog – NHS Reset: Let’s reset the NHS to green

Video – Positive service shifts accelerated by COVID-19: lessons for leaders
Virtually no aspect of UK citizens’ personal and professional lives or health and wellbeing have been untouched by the COVID-19 pandemic. The impact was felt no more acutely than in the health and care system. AHSNs adapted to the dynamic environment of the pandemic by ensuring learnings and best practice identified through our work were applied in ‘real-time’. This had a positive impact on the system, improving its response to the peaks and troughs of the crisis.

Whilst the health and care system continues to experience pressure owing to the pandemic itself, this pressure increasingly being surpassed by the pressures associated with the next challenge facing the health and care system: restarting core services and dealing with the ever-growing patient backlog, increasingly being referred to as the ‘recovery phase’. Throughout this period there will likely be an inevitable clamour for a ‘return to normal’ or to revert to ‘the way things used to be’. However, it is vitally important that the progress and beneficial changes made throughout the pandemic aren’t lost and that we capitalise on a time-limited window of opportunity to help shape the health and care system of the future.

Not all of the rapid transformations that were introduced throughout the pandemic will or should endure, but some changes point the way to a more modern, responsive and flexible model for delivering health and care services to the population. The rapid identification and evaluation undertaken through our reset work will undoubtedly help positive changes to be adopted locally and throughout the country, when relevant. It is not just changes to patient-facing services that should be taken forward – useful and important changes in administration, management, research, funding, workforce, collaboration and partnership working have also emerged as the system responded to the pandemic.

Our learnings and recommendations from the AHSN Network Reset Campaign

The transition to a longer-term view should focus on identifying rapidly implemented changes across the health and care system that should be sustained and will have a positive impact now and moving forward. This will allow us to realise the vision for a more innovative health and care system of the future.
Valuing and embracing change

Changes to how patient care is delivered, how systems are structured and how the workforce functions were a fundamental part of the response to the COVID-19 pandemic. Much of the health and care system’s historical caution around change has reduced, likely driven by innovations in patient treatment and service delivery being rapidly spread and adopted. Positive changes have been genuinely valued and embraced, as the benefits for patients and the workforce have been clear. To realise the future health and care system for which many are striving, we need to ensure that the workforce at all levels values and embraces change. The ability of AHSNs to be key enablers of rapid spread and adoption of innovation will be hugely positively influenced by this renewed focus.

Rewarding and championing innovation

The positive changes in the health and care system were largely driven by the workforce itself. Many changes originated from frontline staff, who benefited from a feeling of empowerment to develop innovative solutions that allowed them to deliver effective patient care. Although much innovation prior to the pandemic originated from within the system, we need to ensure that this is protected and developed further. The feeling of freedom to ‘be innovative’ among the workforce needs to be sustained. Staff should be encouraged to identify better ways of undertaking their role and delivering care and be given the capacity to do so – and they should be rewarded and recognised for their efforts.

What we recommend

The AHSN Network Reset Campaign was instigated at the early stages of the pandemic to focus on how the health and care system can work with staff, patients and the public to understand, translate and adapt the best of COVID-19-related innovations and initiatives into everyday practice. In this report, we have used nine themes to reflect on how the system has changed during the pandemic and highlight experiences across the AHSN Network.

For each theme, we outlined our learnings and recommendations on how we should approach specific areas of activity or health and care system structure in the future. Below we outline some common threads across the themes, which we believe are key enablers and vitally important topics of transformation for a modern health and care system.

We hope local and national leaders will find value in these actionable recommendations, and AHSNs can work in partnership with systems and stakeholders across England to build upon and further develop our initial work. This is discussed in more detail in the next section.
Removing barriers and adopting agile techniques

Rapid adoption of innovation across the health and care system has often been hindered by barriers associated with procurement and other formal processes within local and national structures. Many of these barriers were removed during the pandemic, with lengthy processes dropped in favour of efficient agile techniques. This enabled adoption of innovation and procurement of new products or services at a pace not previously experienced, but without impacting on patient safety. We now have the opportunity to continue using these new efficient processes, supporting continued rapid spread and adoption of innovation. The ability to adopt agile techniques – sometimes learning from the private sector – should also be applied across many processes within the health and care system in the future.

Greater devolved leadership and workforce empowerment

Innovation within the health and care system cannot simply be achieved through ‘top-down’ mandated policies; it must be instigated locally and originate from local systems, as was often the case throughout the pandemic. Despite the national command-and-control structure taking away much local decision-making during the pandemic, there was greater devolved responsibility and empowerment to do things differently. This empowerment was felt by systems, trusts and individual staff, with many developing their own ‘in-house’ solution to problems. It’s vitally important that the drive and empowerment associated with ‘bottom-up’ innovation is not lost and that local systems, trusts and their workforce can continue to be innovative in their approaches to patient care.

Building on existing relationships and forming new partnerships

Relationships are critical to the successful spread of innovation, irrespective of COVID-19. Even prior to the pandemic, AHSNs were unique in connecting the health and care system with academic organisations, local authorities, the third sector and industry. The pandemic response highlighted and reiterated the importance of AHSNs bridging the gap between different organisations. It’s vitally important that this joined-up way of working within the health and care system and across sectors is sustained for the benefit of all, with closer relationships forged between the NHS and the private sector, and AHSNs continuing to act as a bridge between different stakeholders and sectors.
**Greater co-production including the workforce, patients and the public**

Although rapid innovation during the pandemic had a largely positive impact, it also highlighted shortcomings in co-production. Remote consultation was rapidly implemented across primary care so GPs could continue interacting with patients. However, some patients found it difficult to access services, as the needs of the wider population sometimes weren’t considered or issues associated with digital literacy or digital poverty were left unhighlighted. There is great appetite to address this shortcoming, and our expertise can facilitate conversations in the future.

**Understanding population needs and addressing inequalities**

The pandemic shone a light on societal inequalities through its disproportionate impact on Black, Asian and minority ethnic communities, those living in deprived areas, and people unable to access newly digitised services to name but a few. These challenges must be addressed nationally and locally as we reimagine our health and care system. The long-term drive towards ‘personalised care’ also hinges on ensuring care is accessible and relevant to all parts of the population. AHSNs are well placed to lead the dialogue around this, building on existing work and striving for future changes in local and national policy.

**Greater integration across the health and care system**

The pandemic showed that disparate parts of the health and care system are essential to one another: social care needs to function effectively to free up critical care beds in secondary care and allow patients to be discharged, while better integration between primary and secondary care is needed to ensure effective patient triage and flow. The pandemic also highlighted shortcomings in data and connectivity between different parts of the system and the pace at which data is available. Huge strides forward were made, but current limitations still preclude the use of many innovative products. A focus on greater structural integration between health and care and greater investment in data connectivity are vital. We were involved in a number of integration and connectivity projects prior to COVID-19, and the progress made during the pandemic paves the way to adopt more novel innovations and improve patient care.
Increased flexibility of the health and care system and its workforce

The pandemic highlighted some of the health and care system’s shortcomings in flexibility and its ability to meet changing demands. The system rose to this challenge throughout the pandemic – for example, introducing staff ‘passports’ so staff could move freely between hospitals – but this will require continued focus. Increased flexibility of the system and its workforce will be needed: adapting to new hybrid ways of working, flexing to deal with future demand associated with long COVID or patient backlogs, and adapting to staff movement and associated retraining. The system has a prime opportunity to be more innovative in how it delivers care and manages its workforce, with greater flexibility likely resulting in better preparedness for the future and for potential future pandemics.

Greater sharing of lessons, knowledge, and rapid insights

The pandemic saw a concerted effort by the health and care system and many other organisations – including the AHSN Network – to capture and rapidly share lessons, knowledge and insights to deliver immediate value to the system’s response. Historically, the system has not done this well, but the pandemic showed that it can effectively capture, share and build on lessons from other local and national organisations. This should be developed further in the future, supporting spread and adoption of innovation through effective sharing of lessons and learnings nationwide and ensuring the whole country has access to the latest tools and techniques to deliver effective patient care. Our national network combined with our local reach provide the perfect platform to capture learnings and insights on a local level, rapidly evaluate relevance and potential impact across the rest of England, and ensure lessons and insights are effectively shared across all regions.
In many ways, the pandemic highlighted the importance of innovation in health and care, which has in turn further highlighted the unique role played by AHSNs. Our role has therefore become even more integral in supporting the scoping and shaping of future health and care delivery. Our core purpose is to “Transform Lives Through Innovation” and we will continue to collaborate with all stakeholders in order to multiply the scale and impact through our outcomes-led programmes. Our ability to work nationally, regionally and locally is key to effective pivoting, cascading, empowering and enabling rapid transformation.

- No other organisation has the benefit of our AHSNs’ cross-sector networks, especially with industry.
- We have eight years’ combined knowledge and expertise of what does and does not work in innovation adoption; we’re keen for others to learn from our unique insight.
- We are able to horizon-scan and quickly find proven solutions to challenges and then, via our local networks, rapidly import and export these solutions.
- The development of the National AHSN Innovation Pipeline is a unique, high-impact horizon-scanning tool, which offers health and care an unparalleled insight into innovations.
- We have freedom to innovate and create teams of passionate problem-solvers and are not slowed down by bureaucracy and complicated sign-off processes.

The AHSN Network therefore has an important role to play in supporting the health and care system to reset and recover from the COVID-19 pandemic. We are committed to working with local and national stakeholders to build upon and further develop the recommendations we make within this report. This will require us to work regionally and nationally, embedding and retaining the positive transformations implemented during the pandemic. We will also continue supporting the system on its journey ahead, continuing to identify innovations to tackle some of the greatest emerging challenges – such as the ever-increasing patient backlog – and the other new challenges we will continue to face.
At the outset of the pandemic, the AHSN Network joined forces with NHS Confederation and the Health Foundation to support the ‘Best Practice and Innovation’ theme of NHS Confederation’s ‘NHS Reset’ Campaign. This national campaign focusses upon ten ‘high-level’ strategic topics that reflect how the health and care system has responded during the pandemic. Galvanising partners across health and social care, the NHS Reset Campaign recognises the sacrifices and achievements of the COVID-19 pandemic, and looks ahead to rebuilding local systems and resetting the way we plan, commission and deliver health and care for patients and communities.

Development team

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We worked in partnership with...