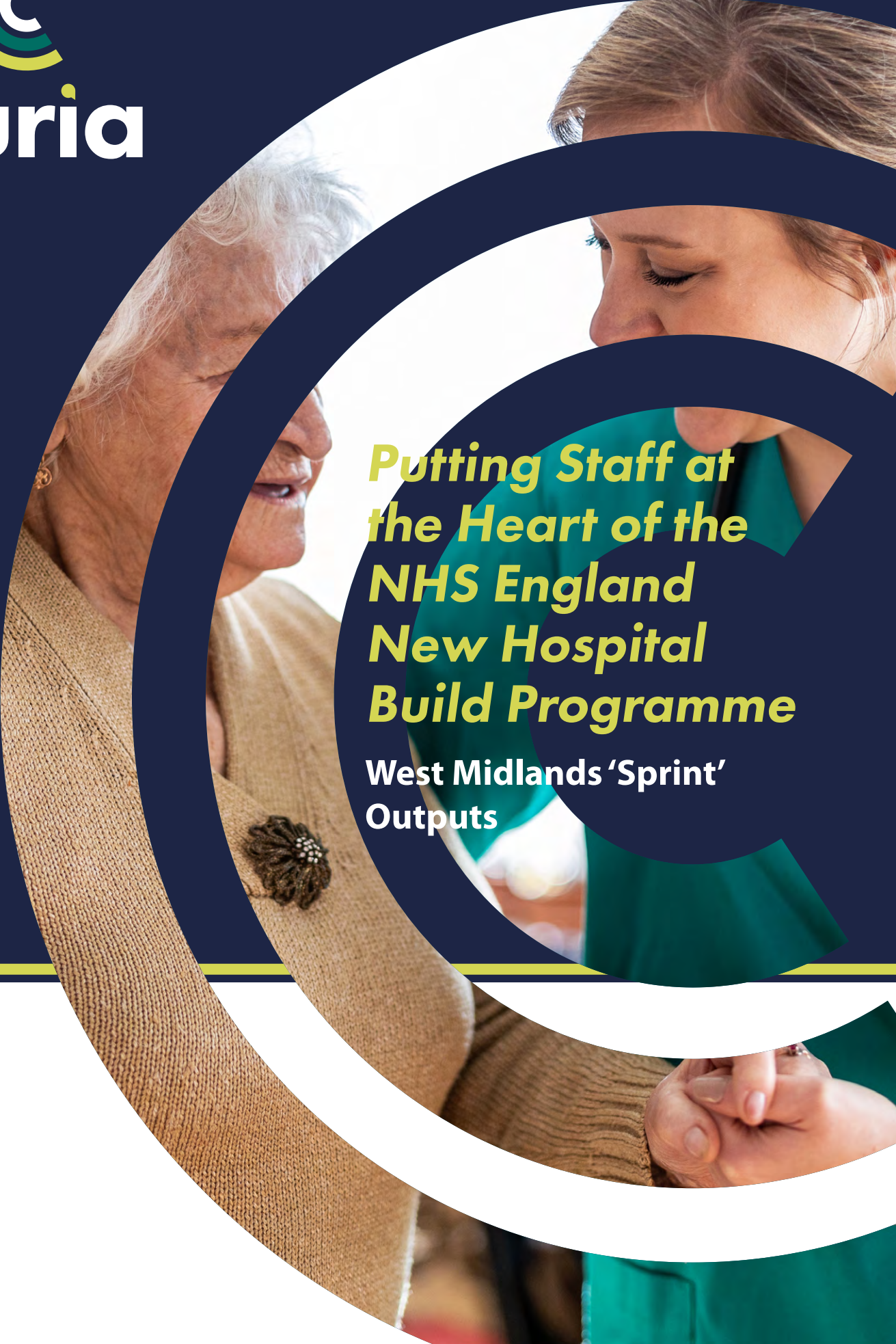


A large circular photograph dominates the right side of the page. It shows a close-up of an elderly woman with white hair, wearing a beige cardigan with a dark brooch, looking down. Next to her is a woman in a teal NHS uniform, also looking down. Their hands are clasped together at the bottom of the frame. The background is dark blue.

Putting Staff at the Heart of the NHS England New Hospital Build Programme

**West Midlands 'Sprint'
Outputs**



Summary

Curia delivered a 'sprint' roundtable designed to put staff at the heart of the New Hospital Build Programme. The discussion focused on several subjects related to putting staff at the forefront of change management as the NHS delivers new hospital design and digital transformation. The suggestions made are useful to keep in mind for the delivery of the New Hospital Build Programme as it develops and for the retrofitting of the current NHS Estate.

This report is designed to enable estates and workforce teams across the NHS to utilise this thinking in improving the effectiveness of change management with NHS staff. This report also enables the Static Systems Group (SSG) to consider alternative ways of building trusted relationships with potential customers within trusts and at a national level with NHS England, given the proposed centralisation of future decisions with respect to the procurement of systems.



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Foreword

In the face of numerous challenges surrounding the construction of new hospitals and the imperative for digital transformation, the insights gathered during the New Hospital Build Programme 'sprint' roundtable provide optimism for the modernisation and optimisation of the NHS. Even for existing hospitals, the roundtable participants identified manifold opportunities to enhance and streamline healthcare delivery, ensuring that attendees were armed with ideas to deliver in their respective organisations. We hope this paper is as useful to those who read it as to those who generously gave up their time for others to benefit.

This report serves as a guide for NHS leaders navigating the intricate landscape of healthcare infrastructure improvement within their local areas. The overarching theme, echoing throughout the discussions, accentuates the significance of prioritising patient and staff needs in both the conception and execution of healthcare facilities.

At its core, the report advocates for the formulation of a national plan for hospital construction, advocating standardised practices over the prior fragmented approach. This strategic initiative aims not only to augment staff recruitment and retention but also to cultivate patient-centric environments. The emphasis on individual bedrooms with ensuite bathrooms, while enhancing patient comfort, instigates a critical discussion around visibility and potential isolation. To address these concerns, the report suggests harnessing digitisation and tracking technology to identify and alleviate potential challenges.

The concept of the 'smart hospital,' embodying interconnected systems weaving together diverse healthcare entities and services, emerges as a cornerstone for the improvement of patient pathways and communication among patients, families, and healthcare professionals. Overcoming barriers and integrating feedback mechanisms are underscored as indispensable elements for advancing individual patient care.

Crucially, the 'sprint' attendees championed the involvement of both staff and patients in the design process, recognising the pivotal role of support staff in healthcare. The nexus between staff wellbeing and enhanced patient outcomes is a recurring theme, with proposals for dedicated spaces and wellbeing centres. This report advocates for a comprehensive approach to digital transformation, acknowledging potential challenges such as staff resistance and the need for robust training programs. Inclusive digital solutions, attuned to the varying digital literacy levels of both staff and patients, are imperative.

Efficient healthcare data utilisation is spotlighted, urging for interconnectivity between systems and organisations to alleviate issues like redundant data entry, fostering improved communication and reducing time wastage. The proposal of a unified patient record system seeks to enhance efficiency and eliminate unnecessary competition among healthcare organisations.

The report begins with an innovative case study which stands as an example of the transformative power of strategic thinking in digital healthcare infrastructure. In an era where technological innovation propels the evolution of medical practices, the journey undertaken by Static Systems Group (SSG) offers invaluable insights. The study underscores the significance of a meticulously planned and phased approach to implementing digital advancements, ensuring not only seamless integration but also a profound understanding by stakeholders. A commitment to flexibility, data analytics, and early stakeholder engagement emerges as a beacon for those navigating the complex landscape of healthcare transformation. By prioritising these principles, the case study showcases not just a successful digital evolution but a blueprint for how healthcare organisations can navigate change while preserving the integrity of their core operations.

NHS leaders are encouraged to leverage this report as a compass, guiding them in prioritising patient and staff needs, embracing digital transformation, fostering open communication, and exploring innovative solutions. The collective wisdom distilled within these pages stands poised to shape a more resilient and responsive healthcare infrastructure for the benefit of all.

We hope you can use some of these ideas and models to implement within your team. Thank you to all those who participated in the meetings, particularly NHS England New Hospital Build Programme and our sponsors, SSG – Static Systems Group.



Professor Mike Bewick
Co-Chair NHS Innovation
and Life Sciences
Former Deputy
National Medical
Director, NHS England

Professor Ann Keen
Commissioner, NHS
Innovation and Life
Sciences Commission
Former Health Minister



Attendees

Attendees	First Name	Surname	Job Title	Job Title
Mr	Rob	Grover	Director of Workforce	NHS England – New Hospital Programme
Ms	Bev	Basset	Strategic Workforce Lead	NHS England – New Hospital Programme
Dr	Nick	White	Chief Medical Officer	NHS Shropshire, Telford, and Wrekin
Mr	Iain	Fletcher	Assistant Director of Programmes – Guidance and Shared Learning	NHS England – New Hospital Programme
Mr	Martin	Sadler	Executive Director of IT and Digital	West Birmingham Hospitals NHS Trust
Mr	Lincoln	Gombedza	Practice Educator	North Staffordshire Combined Healthcare
Mrs	Carolyn	Fleurat	Transformation Lead Nurse for Community Services	MPFT
Dr	Ewa	Truchanowicz	Assessor and CEO	Innovate UK and EGRAT Ltd
Mr	Adam	Thomas	Chief information Officer	The Dudley Group NHS Foundation Trust
Mrs	Jodie	Kingsford	Service Manager	MPFT – Inclusion (Online)
Mrs	Heidi	Maringisanwa	Nominated Individual	Better Care Services Ltd
Mr	Steve	Barnett	Executive Vice President	C2-Ai Ltd
Prof.	Mike	Bewick (Chair)	Co-Chair	NHS Innovation and Life Sciences Commission, Curia
Prof.	Ann	Keen (Chair)	Commissioner	NHS Innovation and Life Sciences Commission, Curia
Mr	Ben	Howlett	CEO	Curia
Mr	Richard	Tew	Technical Director	SSG Static Systems Group
Mrs	Kate	Cassidy	Head of Marketing	SSG Static Systems Group
Mr	Stuart	Guest	Senior Business Development Manager	SSG Static Systems Group
Mr	Matt	Thompson	Senior Account Manager	SSG Static Systems Group



Delegates gather at the SSG Tech Centre to receive a live demonstration from Static Systems Group on the latest nurse call system technology.

Strategic Implementation of Digital Infrastructure in Healthcare

Following a strategic meeting with NHS England earlier this year, it was agreed that a practical example of a piece of technology rolled out within an NHS setting would frame the discussion at the Sprint. The ways in which attendees at the sprint reflected on this practical example framed the way in which attendees thought about the best way to make change happen.

In the dynamic landscape of healthcare, the integration of digital infrastructure is imperative for improving operational efficiency and patient outcomes. In the SSG Tech Centre we discussed the importance of implementing digital advancements seamlessly, with a focus on phased implementations, open platforms, stakeholder engagement, and data-driven decision-making.

Background:

SSG is on a journey to enhance digital infrastructure by incorporating IP, POE, and VoIP technologies. Recognising the importance of future-proofing, SSG aim to establish a robust foundation for future digital features while ensuring a smooth transition for healthcare staff.

Key Strategies:

1. **Phased Implementation:**
 - Rather than overwhelming staff with a sudden influx of new features, SSG adopts a phased approach to implement digital changes. This allows for gradual adaptation and ensures that each change is thoroughly understood and integrated into existing workflows.
 - The emphasis is on a pragmatic pace of implementation, with success measured not by the quantity of technology introduced but by the tangible outcomes delivered.
2. **Open Platforms:**
 - SSG work closely with other best-in-class digital technology companies to integrate their technologies, where they can. This simplifies the user experience for patients and their caregivers.
 - SSG recognise the value of flexibility in integrating enhanced features into the core digital system. For example, the integration of nurse call with mobile devices and falls sensors is deferred until the clinical team is comfortable with the core system.
 - This approach facilitates the addition of advanced features when the time was deemed right, leveraging the existing infrastructure and minimising disruptions.
 - As technology is developing at such a pace, this approach also acknowledges that technology will be different in 3-5 years and anticipates inevitable change.
3. **Incorporation of Analytics:**
 - Acknowledging the pivotal role of data in digital transformation, SSG recommends that each digital implementation includes an analytics module. This commitment to data-driven decision-making allows staff to measure the impact of changes and extract valuable insights for continuous improvement.
4. **Stakeholder Engagement:**
 - In large-scale projects like the New Hospital Programme, involving numerous stakeholders, SSG recognises the potential distance between clinical staff and technology suppliers. To mitigate this, early engagement with clinical staff is prioritised.
 - Early engagement enables the identification of specific needs, such as the requirement for two-way speech at the bedside in response to the high volume of single rooms at the forthcoming new Midland Metropolitan Hospital. This collaboration ensures alignment with the digital strategy of the Trust and led to the inclusion of two-way speech in the project specification.

Results:

SSG's strategic approach to digital infrastructure implementation is yielding positive outcomes:

- Seamless integration of core digital features without disrupting daily operations.
- Gradual adoption of enhanced features based on staff familiarity and readiness.
- Data-driven decision-making facilitated by the incorporation of analytics modules.
- Early stakeholder engagement leading to the identification of specific needs and successful alignment with a healthcare organisation's digital strategy.

Conclusion:

This illustrates the significance of a well-thought-out strategy in implementing digital infrastructure in healthcare. By prioritising phased implementation, flexibility, data analytics, and stakeholder engagement, SSG is using digital technology to transform workflow and improve patient safety, whilst minimising disruption to patient and staff.



Hospital Design

It was clear that attendees felt that when designing new hospitals and healthcare infrastructure, the primary considerations should be the needs of patients and the staff. Given that the buildings are there to serve the patients, they should be built with their needs in mind and any measures to improve staff efficiency or morale will improve patient care. There is, for the first time, a national plan for hospital building, rather than each local area building separately without national standards.

National planning aims to introduce new methods to help recruit and retain staff. Attendees reported that, when designing patient services, there has been a greater effort to ensure single bedrooms with ensuite bathrooms. This does, however, create a visibility problem for the patient, and they may feel lonely or be at risk from falls. Digitisation can help identify those risks through various metrics and tracking technology.

The attendees stressed that when designing building intelligence system metrics, such as how to monitor heat, light, and patients falling, other important measures need to be considered. The features of proposed 'smart hospitals' consider not only the footprint of the building but also the footprint of the system. Smart hospitals would aim to link to people's homes, mental health teams, community health teams, community nurses, and care homes and make those systems interconnected.

The aim is to streamline systems to make patient pathways more efficient and less frustrating to navigate. Attendees agreed that this should break down individuals' barriers and identify how to improve individual patient care whilst connecting them with family and healthcare professionals.

Patients and Staff Voice

In healthcare, staff are expected to work at their peak in incredibly traumatic circumstances, especially in hospitals. Attendees felt that healthcare staff need better support, and that staff should have a voice in designing new systems. Additionally, the consensus was that it is critically important to listen to all healthcare staff, not just doctors and nurses. This is because there are considerable numbers of support staff who are essential to the running of the healthcare system and would benefit from investment. The staff voice should feed into the design process as substantial amounts of evidence show that overall healthcare performance comes down to staff performance.

Improvements in staff effectiveness and morale are reflected in improved patient satisfaction, decreased mortality rates, reductions in staff absenteeism, and lower infection rates. To discover the staff voice, attendees suggested collaborating with cohort trusts, conducting site visits, and holding deep dive workshops, one-to-one meetings, surveys, and interviews. However, they felt that this needs to be regularly evaluated to ensure staff needs are reviewed and areas for improvement identified.

The patient and public voice should also be listened to and supported to increase engagement. The needs and desires identified from the patient voice should be factored into design briefs for new and existing services. An attendee noted that currently, one of the issues patients regularly complain about is car parks as they feel that they are regularly difficult to navigate or find spaces in. Another noted issue was the distance from bus stops to the hospital doors, which can be as much as a mile and is particularly difficult for those with mobility issues. Feedback tools should be easily accessible for staff and patients and should be regularly analysed to ensure continuous learning.

Attendees felt that knowledge platforms should be open to outside organisations to facilitate data sharing and the dissemination of good practice and improvements. Many attendees agreed that it is important to show staff that they are listened to. Suggested measures to improve staff morale and wellbeing included dedicated staff spaces and wellbeing centres, 24-hour access to food, and 24-hour access to childcare for the children of staff.

Digital Transformation

Regarding expenditure, digital investment can lead to an increase in productivity due to streamlining of services. When designing a digital system, attendees felt that it is good practice to consult staff on what they need to improve their jobs and that feedback will allow for better decisions. There does need to be an awareness that some staff have low digital confidence. As a result, there should be user testing to see what technology might help staff in their daily work. Attendees have found that when staff create workarounds to avoid problems, they often create risks for patients and therefore, they should be avoided as much as possible. Workarounds may have been 'functional' for years but frequently resulted in suboptimal resource usage, such as high-grade staff performing tasks better suited to other staff.

Some staff can be hostile or anxious about digital transformation due to significant changes in their working practices. Attendees suggested that there should be efforts to show staff how problems can be overcome by modern technological solutions. This can be achieved by collaborating with staff to gradually introduce the new solution so that they can get to know it over time. Some staff can create more work because they misunderstand the procedures. Ensuring effective training and assistance to mitigate these misunderstandings is crucial. Digital transformations do however exclude those who are not digitally connected, such as those without smartphones. An attendee explained that digital transformation can support the percentage that are digitally literate, more efficiently freeing up staff to devote more care to the remaining patients who are not digitally connected. Overall, the hope was that using a digital approach would make healthcare a more enjoyable workplace and improve day-to-day experiences.



NHS England New Hospital Build Programme presents their work on putting staff and patients at the heart of their work

Healthcare Data

The question is, how can information acquired through healthcare systems be used to the best advantage? Using digitisation, information is more readily available and more easily analysed. This data can then be used to identify areas for improvement in hospitals, services, and pathways. However, these data gathering, and digital systems need to be well utilised by staff and be easily accessible for them, otherwise, they will not be used to their best. Attendees felt that it is imperative for digital systems to be interconnective to ensure data is readily available between systems and organisations. Currently, the West Midlands has a system of automated care records, which has led to increased efficiency and ease of data access.

Healthcare data is useful for identifying danger areas, why people do not turn up for appointments, and many other helpful areas. However, healthcare systems need to cut down on double entry of data – attendees strongly agreed on this point. Data double entry frequently causes poor communication between GPs, hospitals, and other hospitals, which creates time wastage that could be better used on patient care. Attendees advocated for a single patient record as currently, various services' data is not often interconnected.

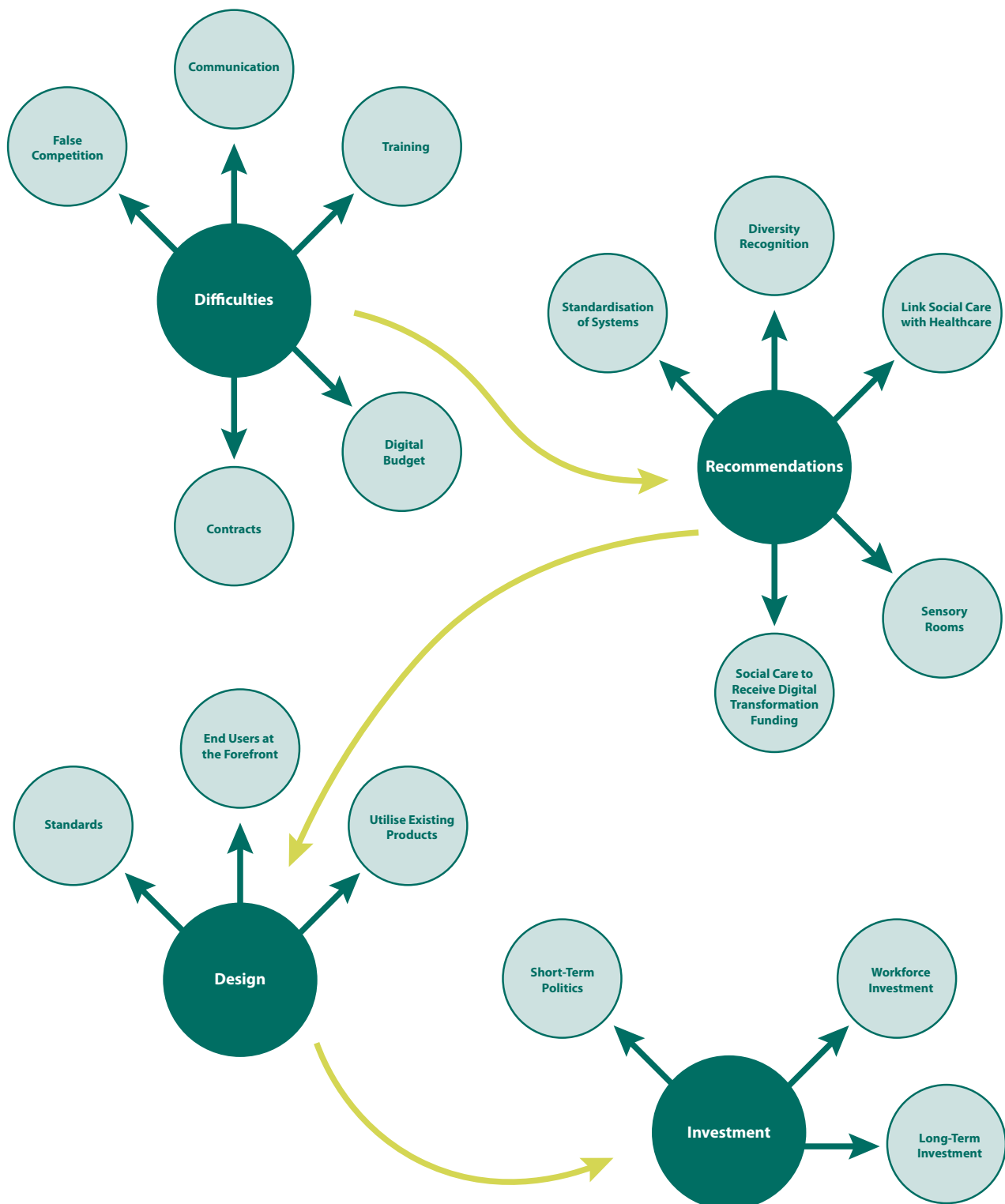


Technological Innovations

Innovative technology must fix real-world problems rather than be implemented for appearances. The COVID-19 pandemic caused significant changes in healthcare operating practices, such as a near-instant push to video conferencing. There are plenty of opportunities to address issues highlighted by the pandemic. One attendee suggested using a system like Dominos Pizza, which has a large amount of live information about their drivers and cargo, to get information from ambulances prior to their arrival at a hospital and streamline emergency care. Another suggestion was to integrate hospital maps with Google rather than clunky hospital apps, as most individuals already use Google regularly. Some healthcare organisations use trackers in wheelchairs to monitor the patient move around the hospital. Several good examples of using technology to streamline everyday activities come from Sweden. Sweden has pioneered implanting SIM cards in the hand, which can then be used to open car doors and pay on card machines. The Swedes also upload hospital notes directly to their patients' phones so that they can be easily transferred to the next hospital, GP, or other healthcare organisation.

Implementation Plan

As part of the sprint, attendees were divided into two groups to identify relevant points to be formed into an implementation plan. Based on these discussions, the following difficulties, recommendations, design, and investment ideas were proposed.



Difficulties

False Competition

There is false competition when competing with other hospitals. Given that it is all in the same public healthcare system, the competition is unproductive and unnecessary.

Communication

There is a lack of inter-service communication in healthcare between the many services, such as pharmacies, care homes, and primary care. Furthermore, more needs to be done to foster communication between patients, carers, their families, and the healthcare system.

Training

When we use digital systems, we forget that we have been trained to do the simplest of things, like menu navigation and right-clicking, over years of use. There needs to be the consideration that not everyone is digitally literate and to accommodate for the possibility that patients (and some healthcare professionals) may need assistance using digital systems.

Digital Budget

There is not a huge budget for digital transformation in many projects. This does not make economic sense as a lack of digital solutions will cost more over time due to recruitment retention issues and reduced safety standards. However, a digital transformation budget should not be a luxury, but an essential part of healthcare budgets as digital solutions saves time and lives.



Contracts

When dealing with hospital contracts, they are mostly focused on bringing older technology up to standard rather than investing in newer technology. Hospitals frequently will not throw away older investments if they have time left on their contract.

Recommendations

Standardisation of Systems

To ensure user efficiency from professional and patient perspectives, standardisation of systems should be implemented. Additionally, this will allow for greater interconnectivity between services and patients.

Diversity Recognition

Services should be designed to consider those with disabilities, learning difficulties, and language barriers, and anyone who does not conform to the 'average' patient, so that healthcare is able to effectively cater for all patients.

Link Social Care with Healthcare

Given the many connections between them, social care should be linked with healthcare to streamline services and pathways for those moving between systems and increase communication between them.

Sensory Rooms

Sensory rooms should be provided to care for those with sensory issues, such as autistic patients, and allow them a safe area to reduce stress.

Social Care to Receive Digital Transformation Funding

Digital transformation would also be effective at overhauling social care, there should be an allocation of funding to social care budgets for this reason.



Design

Standards

Systems should be designed with certain universal standards to ensure compatibility across the healthcare sector. This is particularly the case regarding the user interface so that users can easily navigate the system. Practical applications should be the primary concern.

End Users at the Forefront

Currently, end users are not at the front of the process, more needs to be done to address this and consider end users' needs when designing services, hospitals, and digital transformation.

Utilise Existing Products

There are a multitude of products outside of the healthcare sector that are not currently utilised. Identifying potentially useful products and finding areas of the system in which they may be useful would benefit many areas of the healthcare sector.

Investment

Short-term Politics

Frequently, short-term political imperatives trump long-term investment goals. Long-term investment is needed for valuable results. Therefore, there needs to be allowances within the political system for planning greater than a year and longer than a government term.

Workforce Investment

More development and investment in the workforce are needed to support digital transformation particularly and to enable the workforce to adapt to new challenges in general. Digital skills are the most important to consider and time needs to be set aside for this training.

Long-term Investment

Digital transformation budgets are often reallocated to 'more important' areas and there needs to be a longer-term and consistent plan. The key is long-term investment, both financially and in terms of effort, to ensure a yearly cycle. Instead, currently, there is insufficient investment, which is then reduced or reallocated.



Final Thoughts

Despite the various challenges to building new hospitals and digital transformation, the roundtable felt that there were many opportunities to modernise and streamline the NHS, even for existing hospitals. It is likely most attendees went away with several ideas to take back to their respective organisations.

The 'sprint' roundtable offers valuable insights for NHS leaders seeking to enhance healthcare infrastructure in their local areas. The central theme emphasises prioritising patient and staff needs in the design and implementation of healthcare facilities.

Firstly, the report underscores the importance of a national plan for hospital building, introducing standardised practices to replace the previous fragmented approach. This national planning initiative aims to improve staff recruitment and retention through the creation of patient-centric environments. The focus on single bedrooms with ensuite bathrooms, while addressing patient comfort, also raises concerns about visibility and potential loneliness. Attendees suggested leveraging digitisation and tracking technology to identify and mitigate these issues.

Interconnected systems that link various healthcare entities and services together through the 'smart hospital' concept are something that will benefit patients and staff. The goal is to streamline patient pathways, enhance efficiency and facilitate better communication between patients, families, and healthcare professionals. Breaking down barriers and incorporating feedback mechanisms are highlighted as essential elements in improving individual patient care.

The 'sprint' attendees advocated for giving both staff and patients a voice in the design process. Recognising the critical role of support staff in healthcare, they emphasised the importance of listening to the entire healthcare workforce, not just doctors and nurses. The correlation between staff wellbeing and improved patient outcomes was stressed, with suggested measures including dedicated spaces for staff and wellbeing centres.

As a key driver for increased productivity and streamlined services, digital transformation is essential. However, the attendees acknowledged potential challenges, such as staff resistance and the need for comprehensive training programs. Efforts to overcome these challenges include gradual introduction and collaboration with staff to ensure a smooth transition. Digital solutions should be inclusive, considering the digital literacy levels of both staff and patients.

The efficient use of healthcare data, with a call for interconnectivity between systems and organisations, was made clear. Attendees suggested addressing issues such as double entry of data to improve communication and reduce time wastage. A unified patient record system was proposed to enhance efficiency and eliminate unnecessary competition between healthcare organisations.

Lastly, attendees explored technological innovations, urging the implementation of solutions that address real-world problems. Examples from Sweden, such as implanting SIM cards in hands and uploading hospital notes to patients' phones, showcase opportunities for leveraging technology to streamline healthcare processes.

NHS leaders can benefit from this report by prioritising patient and staff needs, embracing digital transformation, fostering open communication, and exploring innovative solutions to enhance healthcare infrastructure in their local areas.



About Us



Independent, cross-party and not-for-profit, as a policy institute Curia turns policy into practice as the UK's first "do tank". Curia hosts four commissions including NHS Innovation and Life Sciences, Levelling Up, ED&I and Education. Curia provides evidence-based consultancy services, due diligence and socio-economic and environmental analysis. Commissions share best practice through partner publishing and broadcasting agency Chamber UK.

www.curiauk.com



Where Care Meets Tech

Static Systems Group

At SSG we believe that human interaction is an essential part of the care giving process, and that good technology should work to ensure caregivers are free from unnecessary distractions, so they can focus giving their patients the care they need, when they need it.

That's why, for almost 60 years, we have been developing smart technologies that connect people and systems to provide safer, healthier environments for both staff and patients in the acute care setting.

From our first electronic nurse 'call bell' system launched in 1964, that enabled patients in hospital to call for help, we have continued to explore ways that technology can work for our customers. Whether that is providing essential critical alarms, integrated communication systems or software solutions to enhance clinical workflow, our focus is on making patients feel safe and giving our clinical customers more time to care.

We are proud to be a British manufacturer, with a strong heritage in product design, build and installation. As technology advances, our digital solutions can help customers evolve with the ever-changing demands of the healthcare environment, preserving resources, reducing costs, and improving patient care.

As part of the Halma family, we are passionate about creating a safer, cleaner, and healthier world.

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