State of the Nation

Insights from UK Health Innovators

UCLPartners
Health Innovation

Contents

UCLPartners
Health Innovation

Foreword

Foreword

The NHS is under acute and mounting pressure. Rising complexity of patient needs, growing waiting lists, and significant workforce challenges are testing the system's resilience. Without sustained innovation, the risk of systemic failure is real.

This urgency is recognised at the highest levels. The Fit for the Future: 10-Year Health Plan for England sets a clear ambition: "We must create the right environment for innovation and the adoption of new technologies and ways of working that improve outcomes for people." The Life Sciences Sector Vision echoes this imperative, framing innovation as essential not only to patient care, but to economic growth and national competitiveness.

There is no shortage of promising solutions. Digital innovations in particular offer the potential to improve outcomes, enhance patient and staff experience, and drive efficiency. However, despite strong interest and investment, these innovations often fall short of widespread adoption or fail to deliver their full impact. The reasons are well known, but too often remain unaddressed.

To better understand these barriers, we engaged with 50 digital health innovators working across a range of clinical domains and development stages. Their insights were strikingly consistent. Many described fragmented engagement with the NHS, limited opportunities for meaningful co-development, opaque decision-making processes, and duplication across procurement and assurance pathways. Interest was often high, but the path to adoption unclear. These inefficiencies incur real costs, not only to the innovators themselves, but to NHS staff and patients who are denied timely access to potentially transformative tools.

These challenges are not insurmountable. But they do require a shift in how the NHS approaches innovation. Most critically, innovation must be rooted in real-world problems, not abstract solutions. Clinicians should be actively involved from the outset, shaping technologies that work in practice, not just in theory. We need consistent, safe, and streamlined pathways for collaboration and adoption, ones that prioritise value, evidence, and pace.

If a solution is delivering measurable impact in one part of the system, we must ask: what is stopping it from being adopted elsewhere?

Our work at UCLPartners is grounded in a belief that innovation and system improvement must go hand in hand. We are committed to creating the conditions where proven innovations can thrive and scale, where collaboration replaces fragmentation, and where promising ideas are given a fair chance to succeed.

This report captures both the frustrations and opportunities shared by those working at the frontier of digital health. It provides practical insight into the changes needed to unlock innovation at scale, and to build a more agile, responsive health system - one that is truly fit for the future.

Prof Becky Shipley OBE FREng
Chief Research Officer

Introduction

Introduction

Reducing systemic barriers and friction within the NHS is crucial for fostering a culture of innovation that directly benefits the quality of frontline patient care and NHS efficiency. Removing the many hurdles would enable healthcare professionals to innovate more readily innovate and adopt cutting edge advances, leading to improved patient outcomes, enhanced efficiency, and a more responsive healthcare system.

A dynamic and innovative NHS strengthens the UK's international competitiveness in the life sciences. This aligns with the ambition laid out in the Government's Industrial Strategy and the accompanying Life Sciences Sector Plan, which underscores the importance of a thriving life sciences ecosystem for the UK economy. It also directly supports the vision outlined in the NHS 10 Year Plan, which emphasises the need for innovation and technology to transform healthcare delivery over the next decade.

A supportive innovation environment encourages the development and adoption of groundbreaking technologies within the NHS, aligning with Chancellor Rachel Reeves' review of regulatory barriers and Wes Streeting's commitment to unleashing innovation. The establishment of the Regulatory Innovation Office (RIO) also signals a clear intent to navigate and overcome these barriers. A thriving health innovation ecosystem not only attracts investment and talent but also drives economic growth by creating new industries and export opportunities for the UK.

This report identifies various barriers that innovators face through a series of qualitative interviews. It makes recommendations for changes to NHS structures which currently inhibit the ability of innovators to bring new products to market, encourage greater adoption of technology across the NHS to unlock innovation, improve frontline patient care, and drive economic growth.

> *"Every regulator, no matter what sector, has a part to play by tearing down the regulatory barriers that hold back growth. I want to see this mission woven into the very fabric of our regulators through a cultural shift from excessively focusing on risk to helping drive growth.*
>
> Rachel Reeves,
> Chancellor of the Exchequer, January 2025

> *"This isn't just about fixing the NHS – it's about positioning the UK as a world leader in health innovation through our Plan for Change and ensuring our healthcare system drives prosperity rather than holding it back.*
>
> Wes Streeting,
> Health Secretary, Sept 2025

Executive summary

Executive summary

This UCLPartners research report involved extensive qualitative interviews across our partner NHS trusts, to map the journeys of innovators as they attempt to navigate the complexities of the UK healthcare system. The primary aim was to understand the key barriers and challenges faced by both clinical innovators working within the NHS and the adoption of new technologies by Small and Medium-sized Enterprises (SMEs) into clinical settings.

The research sought to understand the impediments, pain points, and bottlenecks experienced throughout the entire innovation lifecycle, from the initial invention phase and the development of minimum viable products to the subsequent delivery and widespread scaling within the NHS.

Innovators highlighted numerous challenges

"If I had an innovation, I wouldn't know where to go to progress it – support functions either don't exist or are not clearly explained, and there is little help with navigating IP and value share.

"It would be helpful to have a clear, mapped out end-to-end pathway, so people know what's needed to successfully progress from one stage to the next and can be on the front foot.

"Ecosystem partners do not come together to leverage mutual problem identification and collective solving.

"A mismatch of where costs and benefits fall across the system makes funding tricky, as there is reluctance to pay for innovation when benefits occur elsewhere.

"There's a win-win for both innovators and the NHS if we commission, procure and adopt at scale e.g. greater certainty for innovators, volume discounts for the NHS, and reduced burden for all.

Executive summary

The research included over 50 interviews with technology specialists either trying to or operating within the NHS and considered the following areas of innovation:

1. Innovation origin

Both organic innovations (ideas originating within the NHS) and open innovations (developed externally).

2. Scaling stage and success level

Innovators at various points in their scaling journey, exhibiting different levels of success in adoption.

3. Technology type

A broad spectrum of technologies, including digital tools and platforms, Artificial Intelligence (AI)-driven technologies, clinical software, workforce management software, and predictive analytics tools.

4. Care setting

Innovations designed for implementation across diverse healthcare environments, including acute care, mental health services, community care settings, and primary care.

> *"Doing 'once' and sharing 'many' would be beneficial, improving efficiency and reducing burden for both innovators and the NHS.*

> *"Trusts' business-as-usual (BAU) implementation teams are not well-equipped to implement and incorporate innovation – a different skillset and dedicated resource and/or teams is needed.*

Pain points along the innovation pathway

The research found that innovation within the NHS is frequently hindered at distinct stages and impedes the transition from initial concept to widespread adoption:

1. Concept development

Lack of clear local strategic vision, limited time, resources, and expertise for organic NHS innovations, a risk-reward imbalance, and poorly articulated priority problems.

2. Proof of concept

Complex commercial and intellectual property arrangements, insufficient coordination among NHS ecosystem partners, and the absence of a clear roadmap for adoption.

3. Product maturity

Difficulties in accessing relevant NHS decision-makers and data, a lack of protected time for NHS staff engagement in co-development and impact evaluation, and time-consuming regulatory approval processes.

4. Operational maturity

Unclear protocols or an absence of governance for technology adoption, risk aversion, insufficient funding (both operational and innovation-specific), and the difficulty in identifying appropriate budget lines.

5. At scale impact

The absence of streamlined commissioning, reimbursement, and access routes, sub-optimal funding cycles, inconsistent payment approaches, disparate procurement processes, and a minimal focus on provider and patient readiness.

> *"We need to make it easier for trusts, staff and patients to know what they can trust to buy or use.*

> *"Trusts' business-as-usual implementation teams are not well-equipped to implement and incorporate innovation – a different skillset and dedicated resource and/or teams is needed.*

Overarching barrier themes

During the interviews, innovators shared insights into a range of barriers they had experienced:

1. Unclear strategic vision for innovation

There is lack of clear direction, vision and strategic intent for innovation at a local (trust through to sub-regional) level, contributing to increased uncertainty for innovators. It is unclear whether innovation is a priority, nor what the most pressing problems are that innovation could help to solve.

2. NHS staff lack time, headspace and expertise to innovate

Home-grown provider innovation is constrained by lack of time, resource, support and expertise. NHS staff do not know what steps are needed and don't feel confident to negotiate commercial and IP arrangements and governance, including conflicts. Risk/reward imbalance can also inhibit clinical innovation.

3. Navigating the innovation pathway is challenging

There is no roadmap for 'what good looks like' and it is difficult to know what steps are involved, what the regulatory and organisational requirements are, how to access support, and how best to ensure success at various stages along the journey.

4. Accessing NHS collaborators and environments is difficult

NHS staff do not have protected time or resource to engage with solution co-creation and evidencing impact. It can be difficult to access development and testing environments, and lack of coordination and collaboration across the ecosystem exacerbates these challenges.

5. Securing funding and procurement is slow and costly

Funding is not prioritised for innovation and there is insufficient BAU as well as new funding for innovation. Misaligned financial incentives and fragmented payment approaches further exacerbate this challenge. Procurement is prohibitive with complex, non-standard and disparate processes across trusts.

During the interviews, innovators shared insights into a range of barriers they had experienced:

6. The NHS struggles to adopt innovation

There is minimal focus on provider and patient capability and readiness for adoption. Frontline staff are not well-equipped nor have the resilience to implement change. Even when there is strong appetite, staff struggle to navigate internal governance processes to proceed with new technologies.

7. Working with the NHS is piecemeal and fragmented

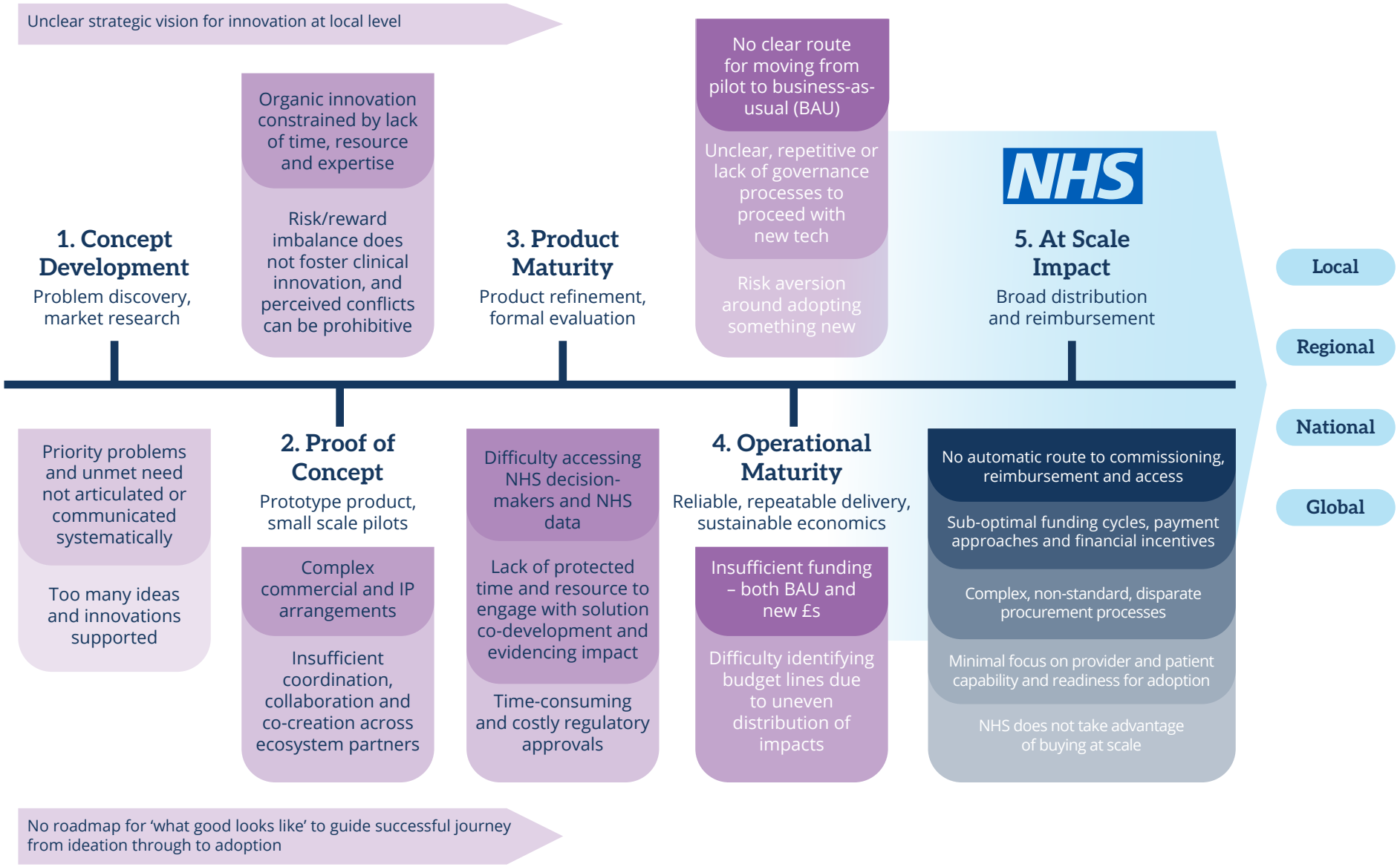
Every trust and Integrated Care Board does things differently, with a multitude of varying approaches across different organisations. Demonstrating success in one organisation doesn't make it much easier to do so in another. Duplication and inconsistency mean high administrative hurdles and burden for innovators.

8. Scaling from one to many is incredibly difficult

There is no clear route for moving from pilot to BAU. And even once an innovation is proven, there is no automatic route to commissioning, reimbursement and access. Furthermore, sales cycles are long, and the NHS does not take advantage of buying at scale.

Overarching barrier themes

There are pain points along the innovation pathway...



Overarching barrier themes

… but also significant opportunity to reduce friction

Concept development

Problem discovery, market research

- Shared innovation vision
- Demand signalling function
- Strategic selection and prioritisation of what to support
- Roadmap for 'what good looks like' and best practice case studies
- Shared accountability and metrics of success

Proof of concept

Prototype product, small scale pilots

- Entrepreneurship training and innovation fellowship programme
- Tailored innovation development support for organic innovation
- Dedicated function for commercial support and expertise
- New functions to connect ecosystem partners
- Support for regulation and evidence requirements

Product maturity

Product refinement, formal evaluation

- Coordination and collaboration to enable access to real world data and testing environments
- "Do once, share many" for evaluation and business case development
- Digital upskilling and capability building to empower NHS staff
- Investment in, and improved access to, data and data infrastructure

Operational maturity

Reliable, repeatable delivery, sustainable economics

- Focused pathway transformation support
- Clear routes and options for moving from pilot to BAU
- Streamlined and standardised procurement routes and governance processes
- Collaborative approach to innovation across organisational boundaries and care settings

At scale impact

Broad distribution and reimbursement

- New funding streams
- Library of 'proven' products
- Active spread of innovation that's yielding benefits
- Greater commitment to buy innovation at the end of the pathway
- Hands-on implementation, integration and adoption support
- Harmonising at-scale procurement, funding and adoption

New functions, shared capabilities and improved ways of working …

….. will help create a fertile environment for innovation to flourish

A shared North Star guides / enables more effective innovation at local level and a 'whole greater than sum of parts'

Clear pathways and dedicated support enables innovation and value creation by NHS staff who know deeply the problems that need solving

Shared resources and capability, along with collaboration and partnership, enables more rapid co-development and testing of the most promising innovations

Sharing in innovation risks and opportunities with NHS and wider partners generates confidence and greater scope to capitalise on technological innovation

Collaboration to operate and adopt innovation at scale generates a 'win-win' across innovators, NHS and patients

Innovation opportunities are optimised, yielding maximal value and beneficial impact for patients, staff and systems

Deep dive into the challenges

1. Unclear strategic vision for innovation

There is lack of clear direction, vision and strategic intent for innovation at a local (trust through to sub-regional) level, contributing to increased uncertainty for innovators. It is unclear whether innovation is a priority, nor what the most pressing problems are that innovation could help to solve.

Absence of innovation strategy and purpose leads to lack of focus to steer effective innovation

- Innovators operate under huge uncertainty – clearer strategic direction and prioritisation of innovation at local level would help provide improved predictability and a clearer path ahead for innovation to be developed and adopted.
- Culture shift and innovation sponsorship by local leaders is needed to ensure that innovation is not simply seen as a 'nice to have'.
- Priority problems need to be articulated to industry so they can design better solutions. There is insufficient demand signalling and priority setting to enable development of innovations that have sufficient 'system pull' (through to adoption).
- Clearer strategic focus and prioritisation re clinical pathways and re tech type would also help to steer effective innovation.
- Too many innovations are supported and there is a plethora of disparate, low-level support to innovators – this approach and dilution of support will not result in conversion to scale and spread.
- There is insufficient support for the most promising innovations that have the greatest scope to yield beneficial impacts, aligning with local and national priorities. Better focus and action to develop the tools and build the infrastructure needed will better enable the most promising technologies to be successfully adopted and scaled.

> *"Lack of a shared North star at local level makes it challenging to innovate at scale.*

> *"There needs to be clearer articulation of the most pressing problems that need solving and systematic, broad communication of this (not just to a few).*

> *"If we support everything, we won't achieve anything – we haven't got the balance right and need to be more strategic and disciplined.*

2. NHS staff lack time, headspace and expertise to innovate

Home-grown provider innovation is constrained by lack of time, resource, support and expertise. NHS staff do not know what steps are needed and don't feel confident to negotiate commercial and IP arrangements and governance, including conflicts. Risk/reward imbalance can also inhibit clinical innovation.

There is strong appetite and interest to innovate, but staff don't know what this entails nor how to proceed

- There is no clear pathway or steps to follow for those in the NHS who are keen to innovate, to help turn their ideas into real-world solutions.
- NHS staff know most deeply the problems that need solving – yet there is an inability to create environments to try things out, little entrepreneurship development and insufficient community building to foster an innovation culture.
- The absence of protected time and prioritisation of innovation vs BAU, together with little upskilling and training, leads to a lack of headspace, expertise, risk appetite and incentive to engage with innovation.
- Risk/reward imbalance is further exacerbated by lack of financial incentives. Whilst clinical innovators in other countries are often financially rewarded, NHS staff need to innovate in their own time. The perception of conflicts and lack of alignment hinder progress
- There is a real issue of retaining workforce and talent, as many are choosing to leave the NHS to pursue their innovation goals. Those who stay often partner with external companies to develop their innovation.
- Innovation is a vehicle to deliver value for patients, staff and systems, but the NHS is losing out on significant value creation potential, which could generate income for reinvestment back into NHS.

> *"We are met with concrete in the NHS, so currently looking to pitch internationally.*

> *"It's hard to co-create and co-design – folk on the shop floor need to be supported with time and money to do the work. It's hard for clinicians to get time off. Invest in people and get more out of people's time.*

> *"The onus is always on you as an individual / clinician to create innovation and negotiate the commercials – it feels difficult and isolating and I have the scars from it.*

3. Navigating the innovation pathway is challenging

There is no roadmap for 'what good looks like' and it is difficult to know what steps are involved, what the regulatory and organisational requirements are, how to access support, and how best to ensure success at various stages along the journey.

Absence of a clear pathway, together with insufficient support to navigate requirements, leads to slower and more costly innovation

- There is little understanding of 'what good looks like' to guide innovators along their journey from ideation through to adoption. It is unclear what steps to follow or how to maximise chances of success at each stage from inception through to adoption.
- It is not always obvious what needs to be proved or demonstrated and what decisions need to be made. Understanding who is responsible or needs to be involved for different aspects of regulatory and organisational requirements can also be a challenge.
- There is significant uncertainty for how an innovation will be incorporated into BAU post-pilot. Knowing upfront what the end point looks like and all agreeing how adoption can be secured is important.
- Accessing support is not easy, as information is disparate and not well signposted. There is often insufficient help or guidance to undertake real world evidence generation, health economic assessment, business case development and evaluation.
- The regulatory and compliance landscape (Medicines and Healthcare products Regulatory Agency, National Institute for Health and Care Excellence, Digital Technology Assessment Criteria, etc) continues to evolve and there is a lot of uncertainty. Overcoming regulatory hurdles is complex and costly and lack of international harmonisation around requirements adds further complexity.

> *"It would be helpful to have a clear, mapped out end-to-end pathway, so people know what's needed to successfully progress from one stage to the next and can be on the front foot.*

> *"Accessing info and support is not straightforward, and it can be challenging for innovators to frame and articulate their value proposition in a way that resonates for the NHS and patients.*

> *"Regulatory requirements and hurdles are slow, costly and prohibitive compared to other jurisdictions, so we're going to explore the US first, despite keenness to proceed within the NHS.*

4. Accessing NHS collaborators and environments is difficult

NHS staff do not have protected time or resource to engage with solution co-creation and evidencing impact. It can be difficult to access development and testing environments, and lack of coordination and collaboration across the ecosystem exacerbates these challenges.

There is no single point of entry or front-door for innovators to work in partnership with the NHS

- The NHS is a complex and varied landscape, making stakeholder engagement within and across organisations challenging. It is difficult to know who to speak to, who is responsible for what and who the key decision-makers are.
- There are no mechanisms or standard approaches for connecting with partners in the NHS to co-develop, test and validate an innovation.
- Processes for accessing NHS data and data infrastructure (including in relation to information governance) to facilitate real world evidence generation can be unclear or duplicative. And trying to join up the picture across trusts adds to the complexity.
- The day-to-day pressures that the NHS is operating under means that when there is engagement it can be overly transactional, as staff have little capacity and resilience to engage with co-creation and evaluation of innovations.
- More support to innovators to help them better understand how innovation fits within a trust (including where and how innovation can add value within clinical pathways), will foster more effective partnership working.
- We need investment in resources and infrastructure to facilitate rapid testing, implementation and integration of products into real world environments.

> *"Cold-emailing or cold-calling doesn't work, but how else can an innovator approach the NHS, unless introductions are made?*

> *"Having networks and avenues to access clinical champions on the ground and people at the top (CEOs, CFOs, etc) is key to innovation being prioritised and 'sticking.*

> *"It's often not clear who has the levers to effect change / who has the authority to make decisions and approvals and who we therefore need to influence.*

5. Securing funding and procurement is slow and costly

Funding is not prioritised for innovation and there is insufficient BAU as well as new funding for innovation. Misaligned financial incentives and fragmented payment approaches further exacerbate this challenge. Procurement is prohibitive with complex, non-standard and disparate processes across trusts.

Funding is not ringfenced or prioritised for innovation and procurement barriers are prohibitive

- There is insufficient funding for innovation, with a lack of BAU as well as new money. This is true across all stages of the innovation lifecycle – from ideation and piloting through to BAU adoption.
- The extent of NHS deficits impacts ability and willingness to release BAU budget for innovation. The time profile of costs vs benefits makes it difficult to take account of longer-term returns.
- There is no clear route for moving from pilot funding to BAU funding, or non-recurrent to sustainable recurrent funding.
- Multiple disparate pots of money are often targeted at different clinical areas, types of technologies or stages of product development. These are often communicated poorly and last-minute.
- NHS organisations can only procure directly in limited circumstances and participating in procurement processes and frameworks is complex, slow and costly, even when procuring for low sums e.g. £5k or £10k.
- It is prohibitive for innovators to have to navigate multiple fragmented procurement procedures across organisations.
- Commissioning, funding, reimbursement and procurement for BAU services doesn't translate easily to innovation.
- Impact of size/balance sheet differential isn't clearly understood

> *"Funding paucity, complexity, and not understanding one's own funding landscape or what budget line to use is problematic.*

> *"If a product is cost saving and a trust department funds it one year, that cost saving gets taken away from their budget the following year. Where's the incentive to engage?*

> *"Many SMEs just don't have the runway to make their product available cheaply whilst they await BAU trust funding. And many start-ups are folding such is the extent of procurement barriers.*

6. The NHS struggles to adopt innovation

There is minimal focus on provider and patient capability and readiness for adoption. Frontline staff are not well-equipped nor have the resilience to implement change. Even when there is strong appetite, staff struggle to navigate internal governance processes to proceed with new technologies.

Successful pull-through of innovation to adoption is inhibited by inadequate support for the NHS as a customer of innovation

- Whilst there is a range of support for innovators, there is not a similar degree of focus on enabling NHS organisations to adopt and integrate new technologies into their day-to-day.
- Innovation requires new ways of working, but teams (e.g. finance, procurement, IT) are under pressure to deliver BAU and have little incentive to engage with innovation. Dedicated resource is required to enable rapid testing, evaluation and integration of innovation products.
- Support is needed to help the frontline to have the headspace, confidence and knowhow to implement change. Clinician championing is critical, but so is patient involvement.
- There is often no obvious route internally for proceeding with new technologies. Greater join-up across teams (operational, clinical, finance, procurement), together with clear and effective governance processes to support decision-making would help mitigate failing at this last step.
- There are no clear routes for moving from pilot to BAU commissioning, procurement and reimbursement of innovation, impacting consistency and longevity of adoption.

> *"There is little to no capacity or resilience on the frontline for prioritising and adopting something new.*

> *"We need to make it easier for trusts, staff and patients to know what they can trust to buy or use.*

> *"Digital skills vary widely – some clinicians do their day job and then go home and code, others struggle to even do the basics with emails... If we're to succeed with digital innovation, we need much greater capability building.*

7. Working with the NHS is piecemeal and fragmented

Every trust and ICB does things differently, with a multitude of varying approaches across different organisations. Demonstrating success in one organisation doesn't make it much easier to do so in another. Duplication and inconsistency mean high administrative hurdles and burden for innovators.

The pace of innovation is slowed, and burden increased, due to lack of standardisation in approaches across organisations

- Every hospital and ICB does things differently, whether in relation to piloting and validating an innovation or in procuring and paying for a new product. It is prohibitive for innovators to have to tailor their approach for every trust and ICB.
- There is unwarranted variation in approaches to real world evidence generation, business case development, and governance relating to data access and Information Governance, cyber security and clinical risk assessment. Innovators need to navigate multiple disparate and often inconsistent processes.
- The lack of shared resourcing, expertise, frameworks and collective accountability leads to inefficiency and duplication for all.
- Willingness and confidence to engage varies widely and can be very dependent e.g. on a clinician's interest, risk appetite, capacity and resilience.
- Whilst ICBs are still maturing, it can be difficult for innovators to work across organisational boundaries. There is an over-focus on acute vs other care settings, which can be limiting. Innovation transcends organisational boundaries – investing in innovation in primary and community care can yield significant benefits for acute care.

> *"If everybody tries to do everything, we won't achieve anything. We need to collaborate to make progress.*

> *"There is uncertainty and variation in the level of clinical and health economic evidence that is deemed acceptable by different NHS organisations.*

> *"More support is needed to help de-risk decision-making and to empower busy NHS staff to have the confidence to take up innovation that works. This includes addressing the 'not invented or tested here syndrome'.*

8. Scaling from one to many is incredibly difficult

There is no clear route for moving from pilot to BAU. And even once an innovation is proven, there is no automatic route to commissioning, reimbursement and access. Furthermore, sales cycles are long, and the NHS does not take advantage of buying at scale.

The NHS is not fully benefitting from innovation due to an inability to adopt proven technologies at scale

- Historially, unlike for medicines, or for digital health tech in other countries, there is no clear, automatic or mandated route for commissioning and reimbursement for health technology. Even if a product has the relevant regulatory approvals and NICE recommendation, this doesn't guarantee adoption.
- The NHS does not make the most of sharing and spreading what works in one place to other places. Increasing awareness and knowledge of what products are available and yielding benefits, would help to scale adoption. There needs to be greater traction and commitment by the NHS to buy and utilise innovation that works.
- Innovators sometimes lack the commercial savvy to know how to sell into the NHS at scale. They are also faced with long sales cycles and time to implement is slow.
- The NHS does not utilise it's buying power, scale and commercial insight to fund and procure at scale – missing opportunities to improve effectiveness, maximise value and get a better deal for the taxpayer.
- All ecosystem partners miss out by not leveraging economies of scale, scope and networks. The opportunity to do things at scale e.g. at local or regional level is vital to scaling innovation successfully and sustainably.

> *"We need to make it easier and more automatic for trusts to pay for innovation and to know what to trust to buy.*

> *"We are often stuck in 'pilotitis', with a lack of movement from pilot to BAU and trusts not knowing which horse to back (even if one of the available products is their own innovation)*

> *"The NHS / UK is good at innovating, but we are weak at adopting and spreading innovation.*

Reducing barriers: recommendations

Innovation barriers

Our interviews with a broad range of innovators provide clear evidence of barriers inhibiting innovation across all stages of the pathway, from ideation through to adoption. However, innovators also highlight substantial opportunities for trusts and ecosystem partners to work together to design and implement solutions for a friction-free pathway and to create the conditions for innovation to thrive. The following pain points were identified through the research:

- **Unclear vision for innovation at a local level**
- **No dedicated support for NHS innovators**
- **Difficulty navigating the innovation pathway**
- **Challenges in accessing NHS collaborators**
- **Funding and procurement are challenging**
- **The NHS is not consistently supported to adopt innovation**
- **Working with the NHS is piecemeal**
- **Scaling from one to many is difficult**

Proposed actions to address key innovation barriers

1. Unclear vision for innovation at local level

- Co-create a **shared innovation strategy**, ensure the vision is clear and that innovation is a priority
- Lead **demand signalling function** to identify and systematically communicate priority problems that need solving
- Bring **strategic focus and prioritisation** for greater pull through of the most promising innovations
- Develop **shared KPIs and metrics of success** and foster / incentivise collective accountability in delivery

2. No dedicated support for NHS innovators

- Establish **clear innovation routes for NHS clinical and/ or operational innovators** to access info and support
- Implement **entrepreneur-ship training** and **establish innovation fellowships**, formalising the role of fellows
- Establish **dedicated innovation development support within trusts** including protected time and training
- Provide **dedicated commercial support and expertise** to clinical innovators and trusts

3. Difficulty navigating the innovation pathway

- Set out **'what good looks like' across the full innovation pathway** from ideation to adoption
- Map out the journey, **articulate what is needed for success** and showcase examples of best practice
- Bolster support to innovators on **regulatory and evidencing** requirements
- Facilitate / drive **greater commitment 'upfront' by trusts to buy** proven innovation at the end of the pathway

4. Challenges in accessing NHS collaborators

- Develop a **stakeholder mapping of the ecosystem** making it clear who's responsible for what
- Strengthen **coordination and connection** across partners; bring innovators and NHS collaborators together
- Lead initiatives to drive improved **access to clinical teams, focus groups** (including with patients/users) and to **real world data** and **testing environments** to enable rapid co-development and testing

Proposed actions to address key innovation barriers

5. Funding and procurement are challenging

- Explore, identify and secure **new funding sources/ streams** (e.g. Venture Capital, philanthropy, establish own shared funds)
- Work with trusts to identify routes for **ringfencing BAU funding** and **options for moving from pilot to BAU funding and procurement**
- **Streamline and standardise procurement processes** and coordinate procurement activities across trusts / ICBs

6. The NHS is not supported to adopt innovation

- Build greater **capability and readiness for staff and patients** to engage with and adopt innovation, including through **digital awareness and upskilling,** fostering culture shift and empowering behaviour change
- Establish more effective **support for pathway transformation** and **integration of new technologies**
- Develop **standardised governance routes and internal processes** to enable staff to proceed with new technologies

7. Working with the NHS is piecemeal

- **Coordinate and align approaches and frameworks** for innovation evaluation, business case development, access to data, etc – "do once, share many", do not reinvent the wheel
- Develop approaches for **investing in innovation across organisational boundaries** and **care settings**
- Build **shared resources, capability and capacity** to adopt, scale and spread innovation successfully

8. Scaling from one to many is difficult

- Develop **models for sharing risks and opportunities** fairly across system partners
- Create a **library of innovation products** to spread awareness of what's available and yielding benefits, to help drive deployment of proven innovations
- Streamline and share expertise to **negotiate, procure and sustainably fund innovation at scale**

Reducing barriers: recommendations

The recommendations in this report closely align with the priorities of the Regulatory Innovation Office and are designed to support the vision outlined in the 10 Year Health Plan and Life Sciences Sector Plan:

1. **Accelerating digital transformation:**
   Reducing barriers to innovation will support the scaling of new technologies and the shift from analogue to digital across the entire system.

2. **Empowering NHS staff:**
   Focusing on training and support for staff will ensure the NHS workforce has the skills to use new technology and drive innovation.

3. **Simplifying the innovation pathway:**
   Clear guidance and dedicated support for innovators to navigate the process will speed up the adoption of new technologies across the NHS.

4. **Cutting bureaucratic barriers:**
   Streamlining funding and procurement will help remove regulatory barriers and free up resources to be spent on new technologies.

5. **Fostering collaboration:**
   Improving how innovators and the NHS work together will help build a strong ecosystem where new ideas are driven from the ground-up based on the frontline needs of the NHS.

Methodology

Methodology

A rigorous methodology was employed, consisting of 50 in-depth, one-on-one structured interviews using a standardised questionnaire. Interviews took place between January and March 2025. Participant selection encompassed a diverse range of innovators currently piloting and partnering with NHS Trusts around the country:

Innovation origin

Innovators both within and external to the NHS.

Scaling stage and success level

Innovators at various stages of adoption with differing levels of success within the NHS.

Technology type

A broad spectrum including digital platforms, Artificial Intelligence (AI), clinical software, workforce management tools, and predictive analytics.

Care setting

Innovations intended for implementation across acute, mental health, community, and primary care.

Overview – interview topics

Interview topics

- Innovation origin
- Product/service
- Impact/value proposition
- Relationship to the NHS
- Stage/scale of the business
- Barriers to invention/development
- Barriers to selling/scale and adoption within the NHS
- Vision of an invention service – usefulness and jobs to be done

50 innovators interviewed

48% Within the NHS

52% External to the NHS

88% Used software

52% Use AI in some form

Overview – innovator scaling categories

Innovation scaling category by open or organic origin

Innovation classification	Scaling category 1	Scaling category 2	Scaling category 3
External to the NHS	22% (11)	16% (8)	14% (7)
Within the NHS	6% (3)	28% (14)	14% (7)
Total	**28% (14)**	**44% (22)**	**28% (14)**

Insight - More open innovations have scaled more successfully vs more organic innovations have experienced failure to scale past modest adoption.

Scaling categories

1. Successfully procured and scaled – commissioned and reimbursed by many NHS organisations

2. Heterogenous adoption despite strength – commissioned and reimbursed by a few NHS organisations

3. Failure to launch despite promise – not commissioned and reimbursed by NHS organisations

Overview – breakdown by technology types

Functional tech category distribution*

Technology category	Number of companies	Percentage (%)
Artificial Intelligence	**29**	**58%**
Digital Health	**27**	**54%**
Patient Management	**22**	**44%**
Diagnostics	**11**	**22%**
Workforce/Scheduling/Admin	**9**	**18%**
Communication	**7**	**14%**
Digital Therapeutics	**5**	**10%**

*** Note:** Some companies / innovations fall across more than one technology category

Methodology

Overview – breakdown by clinical categories

Specific-specialty vs cross-specialty		Distribution by clinical speciality		Healthcare delivery models	
Cross-specialty:	48%	Cardiology:	8%	Telehealth/virtual care solutions:	60%
Specialty-specific:	52%	Mental Health/Psychiatry:	8%	Self-management tools:	23%
		Neurology/Neuroscience:	14%	Clinical decision support:	30%
		Radiology/Imaging:	6%	Point-of-care:	6%
		Paediatrics/OBGYN:	12%	Virtual Reality:	4%
		Rehabilitation:	6%		

Contributors

Technology and innovation in healthcare:

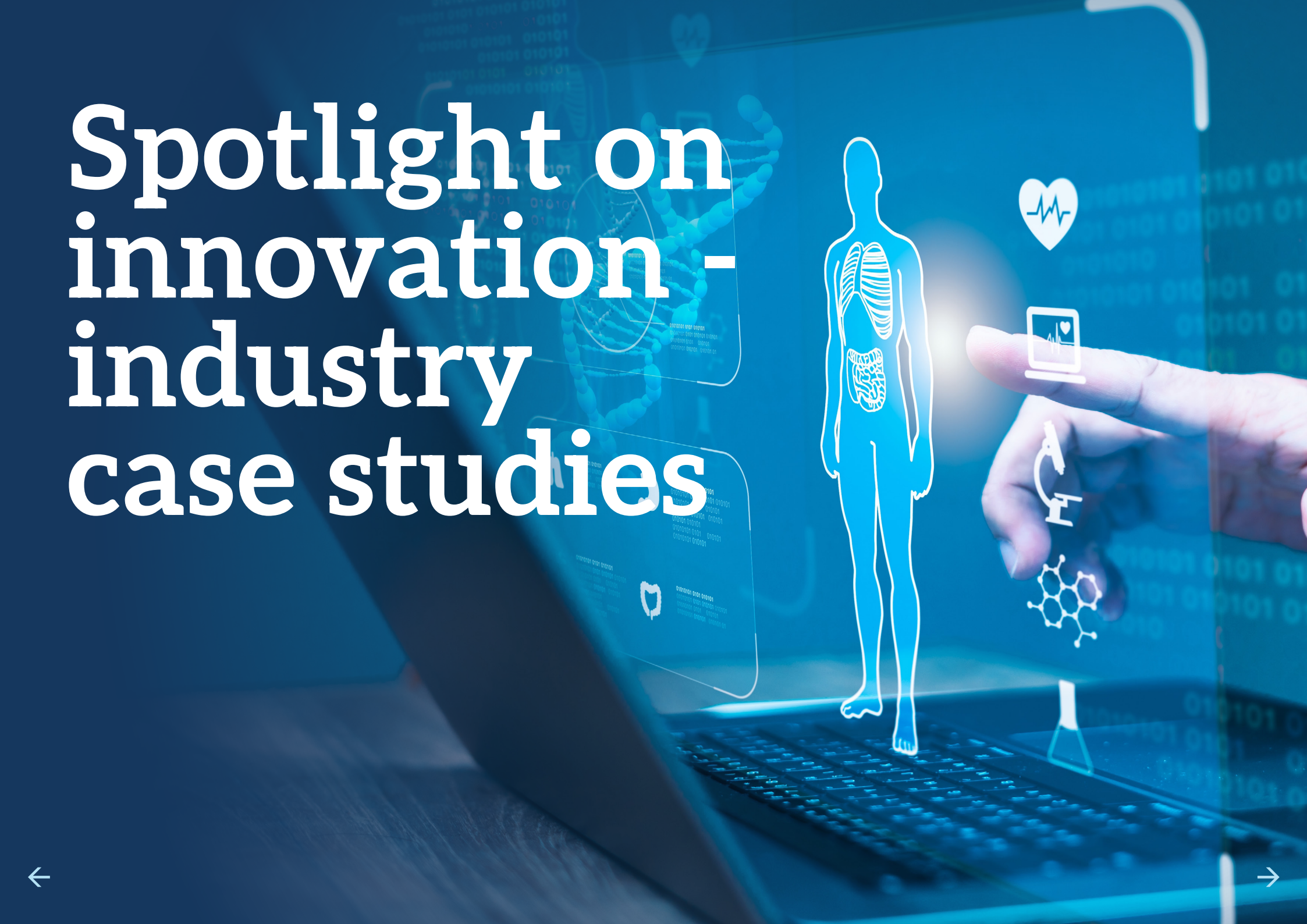
- Digital health and platforms
- Ai and data analytics
- Remote monitoring and diagnostics
- Therapeutics and devices
- Mental health and wellbeing
- Rehabilitation and therapy
- Patient engagement and experience
- Wearables and sensors

Healthcare providers and services:

- NHS organisations
- Private healthcare
- Specialised services

Consulting and support services:

- Consulting and solutions
- Research and development



Spotlight on innovation - industry case studies

Spotlight on innovation - industry case studies

This report focuses on barriers to innovation across the NHS and wider healthcare system in the UK. It is intended to be a positive contribution to public policy decision-making to support the implementation of the Government's 10 Year Plan for the NHS and the work of the new Regulatory Innovation Office (RIO). Addressing these barriers will stimulate greater collaboration between SMEs, trusts and the commercialisation of research to scale widespread adoption in clinical and community healthcare settings.

Reducing these barriers could transform the healthcare system and position the UK as a pioneer in health advancement and the export of health innovation globally. The following case studies illustrate the range of innovations that are currently transforming healthcare in the UK, despite their experiences of barriers. Lowering or removing the barriers that currently inhibit innovators at each stage of the journey - from early incubation to wholescale adoption - would encourage greater innovation and bring significant benefit to patients, health professionals and the wider economy.

In order to represent the broad landscape we have chosen a sample of innovator case studies that demonstrate the possibilities of innovation in the UK.

accurx

DrDoctor

DocAbode

pinpoint

DR JULIAN

get U better

suvera

PocDoc

kanjo

Analogue to Digital

accurx

Description of innovation
Accurx is a secure digital communication platform for the NHS. It supports messaging between healthcare professionals and patients, as well as across care teams, to improve productivity. It enables triage, remote care, integrated working, and service transformation.

Who created it?
Accurx was founded by Jacob Haddad, who came from an engineering and healthcare quality improvement background.

Where in the NHS it is being used?
Accurx is used by over 98% of GP practices in England for messaging and over 50% of practices for triage. Staff in over 150 NHS Trusts nationwide use Accurx for patient and staff communication.

Impact
Over two million messages are sent to patients per day. Practices running Total Triage using Accurx are able to resolve up to 40% of demand asynchronously, without an appointment.

DrDoctor

Description of innovation
DrDoctor is a digital patient engagement platform for appointment management, digital correspondence, form completion, and two-way communication via SMS, email, and the NHS App.

Who created it?
DrDoctor was founded in 2012 by Tom Whicher (CEO), Perran Pengelly, and Rinesh Amin.

Where in the NHS it is being used?
DrDoctor is widely adopted across the NHS, partnering with over 70 trusts and health boards in England, encompassing approximately 50% of UK outpatient activity.

Impact
DrDoctor has saved Oxford University Hospitals over £600,000 in postage. It has reduced Did Not Attend (DNA) rates by up to 30% in some trusts enabling an additional 2,440 patients to be seen annually and generating £317,000 in revenue.

Doc Abode

Description of innovation
Doc Abode is an AI-enabled workforce coordination platform that deploys staff in real time, improving efficiency, safety and patient care — particularly in Urgent Community Response (UCR) services.

Who created it?
Founded by Dr Taz Aldawoud, an entrepreneurial GP and Chief Clinical Information Officer with extensive NHS digital health experience.

Where in the NHS it is being used?
Widely deployed across the NHS, particularly in UCR services, supporting trusts across North Central London (NCL) ICS Adoption is expanding nationally across other ICSs and providers.

Impact
Doc Abode has delivered a 120% increase in patient visits per shift, a 71% uplift in service capacity, and a 50% reduction in temporary staffing costs. Across NCL, scaled deployment is projected to release 10,700+ non-elective occupied bed days annually, easing hospital pressure and enabling more care at home.

Treatment to Prevention

pinpoint

Description of innovation
PinPoint offers an AI-driven blood test to rapidly identify and stratify patients' risk of cancer. Machine learning is applied to 33 biomarkers to generate actionable results to triage patients presented with symptoms.

Who created it?
PinPoint Data Science was co-founded by Dr. Richard Savage, Chief Scientist (who developed the core algorithm), Giles Tully, CEO, and Dr Nigel Sansom, Executive Chair.

Where in the NHS it is being used?
The PinPoint Test has just completed a real-world evaluation within the NHS in West Yorkshire. Over 17,000 patients were tested across 3 trusts and 150+ GP practices. The PinPoint test for Lower GI cancers is due to begin an interventional pilot in late 2025.

Impact
PinPoint demonstrates significant potential to streamline diagnostic pathways, safely ruling patients out to reduce systemic pressures, whilst flagging high-risk individuals for priority investigation.

DR JULIAN

Description of innovation
Dr Julian is a digital mental health platform providing access to evidence-based therapy through video, voice, or text. The platform combines intelligent triage, clinician matching, and integrated outcome tracking to enhance patient engagement and clinical efficiency.

Who created it?
Dr Julian was founded by Dr Julian Nesbitt, an NHS A&E doctor and practicing GP, to improve access to mental healthcare.

Where in the NHS it is being used?
Dr Julian is significantly integrated into the NHS, supporting NHS Talking Therapies, Occupational Health and staff services. The platform is licensed to NHS trusts, national charities, and third-party providers to deliver and manage care at scale.

Impact
Dr Julian has enabled over 200,000 therapy sessions through its own clinical service and over 1 million sessions via its licensed platform. It has demonstrated a 50% reduction in non-attendance rates and a 49.8% drop in therapy dropout as well as improved recovery rates.

get U better

Description of innovation
GetUBetter is a digital platform for selfmanaging common musculoskeletal (MSK) injuries and conditions empowering patients to manage their conditions at home.

Who created it?
GetUBetter was founded by Dr. Carey McClellan, a physiotherapist with extensive experience in emergency and urgent care MSK management.

Where in the NHS it is being used?
GetUBetter is widely adopted across the NHS, trusted by over 40% of English Integrated Care Systems (ICSs), covering an eligible population of over 20 million people, including 80% of London.

Impact
Evaluations demonstrate 50% of patients on a physiotherapy waiting list no longer need an appointment and a 20% reduction in physiotherapy referrals, equating to a £4.20 return on investment for every £1 spent.

Hospital to community

Description of innovation
Suvera is an award-winning CQC-regulated virtual clinic for proactive management of major long-term conditions, specifically targeting hypertension, diabetes, and high cholesterol through an end-to-end service combining technology and care delivery.

Who created it?
Suvera was co-founded by Dr. Ivan Beckley (CEO), Dr. Will Gao (COO) and Ryzard Akita.

Where in the NHS it is being used?
Suvera partners with over 350 GP practices across 27 Integrated Care Boards (ICBs).

Impact
In Lewisham, Suvera achieved an average systolic blood pressure reduction of 10.3 mmHg and 80.8% engagement rates in Core20PLUS5 populations delivering a £9.70 saving to the NHS for every £1 invested. This success earned Suvera a HSJ Digital Award for Reducing Health Inequalities.

Description of innovation
PocDoc provides remote patient monitoring technologies, specifically innovative digital diagnostic kits for at-home health checks.

Who created it?
PocDoc was co-founded by CEO Steve Roest, CSO Kiran Roest and Vladimir Gubala Head of R&D.

Where in the NHS it is being used?
PocDoc is gaining traction across the NHS, and commissioned for cardiovascular disease testing in regions including Yorkshire and the Humber, North East England, and Cambridgeshire. It also integrates with Patients Know Best via the NHS App impacting 22 ICS regions.

Impact
PocDoc's at-home checks free up GP appointments, with each digital check estimated to save 20 minutes of NHS time, supporting the shift towards a more preventative, community-based healthcare model.

Description of innovation
Kanjo is the first system of excellence for neurodevelopmental conditions, starting with ADHD and Autism. Using Kanjo's proprietary predictive models, Kanjo has developed a system of end to end care with higher accuracy than anything else on the market.

Who created it?
Kanjo was co-founded by CEO Sophia Parvizi-Wayne and CTO Deepthi Upalla.

Where in the NHS it is being used?
Kanjo is actively engaged with the NHS to integrate its solutions into existing clinical pathways for ADHD and Autism. It has been recognised by DigitalHealth.London, signaling its potential for broader NHS adoption.

Impact
Kanjo aims to significantly impact ADHD and Autism care by reducing diagnostic waiting times (often 3-4 years currently) and improving assessment accuracy, reducing the diagnostic journey.

76-78 Portland Place
London
W1B 1NT

contact@uclpartners.com

Registered company number 06878225