

BIA's health data vision 2035: harnessing a national asset for growth

An executive summary of BIA's strategic vision for health data and the role of HDRS in realising it.

Call to action

The decisions made today and over the next five years will determine whether the UK successfully harnesses its **health and life sciences data to benefit the population and economy** or falls behind the rapidly accelerating global competition. Success will require coordinated policy and action across government, the NHS, regulators, academia, and industry to enable innovation and its adoption.

This should be supported by a **mandate on HDRS to prioritise UK value creation** with health innovators and job creators, **free from short-term revenue targets** and **enabled by freedom for its leadership to deliver**.

Our vision for 2035

When the UK builds a secure, ethical, interoperable, and accessible health data ecosystem, harnesses it for UK-based innovation and commercialisation, and adopts the innovations this enables, it will have created a **strategic national asset that simultaneously improves care, strengthens NHS sustainability, improves productivity, and grows a globally competitive life sciences economy, improving both the health and wealth of the nation**.

By 2035, the UK's health data ecosystem should function as a unified, intelligent platform powering both a more personalised, preventive medicine healthcare system, and cutting-edge life sciences innovation. Our ambitions for this national resource are to:

- Use health data to deliver **improved population health, sustained economic growth, and job creation**, supporting a thriving UK life sciences sector
- **Transform the NHS** into a research-enabled health system that rapidly evaluates, validates, and adopts data-driven innovations, **improving productivity, sustainability and patient care**.
- Embed health data across the health system to improve prevention, diagnosis and treatment, delivering **better outcomes for patients across the UK**.
- Harness health data to **accelerate UK-based discovery, development and commercialisation** of innovative life sciences products.
- Position the UK as a global leader in data-driven life sciences and AI-enabled biomedical innovation, ensuring **the UK remains one of the world's leading life sciences clusters**.

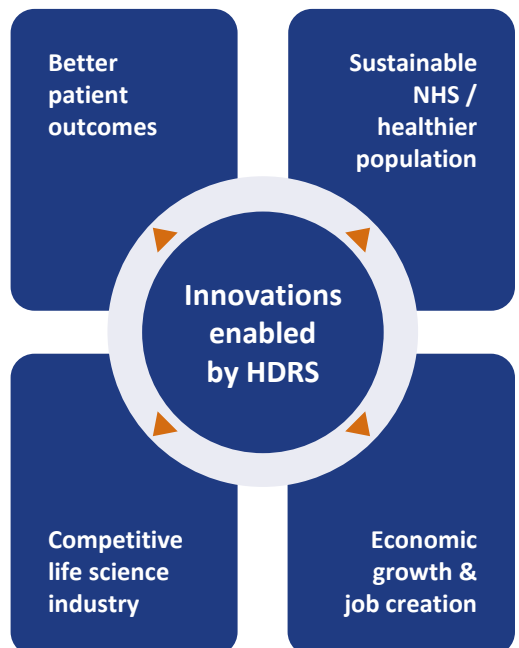
The opportunity

The UK stands at a pivotal moment that demands not just a new gateway to NHS data, but also a deliberate strategy to harness health data as a core national asset to improve health and economic growth.

The NHS faces mounting pressures: an ageing population, a rising burden of chronic diseases, and healthcare costs growing at 1.5% faster than GDP each year - already 11% of UK GDP. These challenges cannot be solved through NHS capacity expansion alone or just bringing healthcare data together – it also requires new innovations to be enabled, validated, and adopted.

In 2025, the Prime Minister announced the creation of a new Health Data Research Service (HDRS) as a secure, streamlined gateway to UK health and care data to enable innovation and economic growth. Global competitors share this ambition and are investing heavily to connect clinical data with research datasets, with over 200 large-scale patient datasets already linking clinical and genomic records. The UK has world-leading foundations but sustaining that leadership to 2035 and fully capturing the health and economic benefits requires deliberate, coordinated action now. HDRS can be a key catalyst to solve these challenges and unlock this opportunity.

Data-led innovation: four interconnected benefits



HDRS's role in our vision

HDRS can play a critical role, alongside other health data custodians, in enabling the responsible use of health data for research and innovation. This will unlock significant economic growth, support home-grown innovation, and deliver better outcomes for patients. Done poorly, the UK risks losing its competitive advantage in data-driven life sciences, with consequences for the economy, the NHS, and patient care alike.

Delivering this vision by 2035 depends on HDRS having a **clear objective of UK value creation** and working in coordination with other data custodians to ensure that that UK SMEs and innovators can access the UK's health data without prohibitive cost or complexity.

To achieve its goals, **HDRS will need a continued focus on:**

- **A secure and robust governance and funding framework, including affordable access for UK SMEs**, free from competing revenue targets, that ensures secure, legally compliant and ethical use, **value return to the UK**, and industry co-development.
- **Collection and standardisation** of comprehensive multimodal data including genomics and multiomics
- **Seamless integration across systems and data types**, with up-to-date records and common standards
- **Secure and efficient access models** that are streamlined and timely
- **Resilient, flexible and scalable technical architecture** capable of enabling AI and other innovative clinical solutions

Creating value for patients, the NHS, life science innovators and the UK economy

The value created by innovations from UK SMEs that prevent ill-health and improve clinical efficiency could significantly outstrip revenues that created from a 'subscription-to-access' model. Innovations enabled by health data have the potential to create value across four interconnected domains:

- For **patients**, they can enable earlier diagnosis, more personalised treatments, and better long-term outcomes through convenient, proactive, and coordinated care.
- For the **NHS**, better use of data can reduce avoidable admissions, improve clinical decision-making, and support more efficient planning and delivery of services.
- For **life science innovators**, access to high-quality health data can accelerate drug discovery, improve clinical trial recruitment and evidence generation, and enable AI-driven advances across the life sciences pipeline.
- For the **UK economy**, these advances can attract investment, support the growth of UK life sciences companies, generate employment opportunities and strengthen the UK's global leadership in data-driven health innovation.

Taken together, these benefits have the potential to **position the NHS as a growth engine**, improving the health and productivity of the nation, and generating export revenues, high-skilled jobs, and inward investment creating positive fiscal multipliers for the UK.

Dr Emma Lawrence, Head of Data Tech Policy and Public Affairs, BIA

"Getting HDRS set up from the start to support innovative UK companies will shape better health for NHS patients for years to come, and in tandem drive economic growth and job creation across the country."

Dr Steve Gardner, CEO PrecisionLife, Chair of Data, AI and Genomics Committee (DAGAC), BIA

"The UK has an opportunity to lead the data-enabled health revolution with HDRS, but only if it marries investment in its data ecosystem to intentional and coordinated policy changes that support UK businesses, to enable responsible innovation and create value alongside the NHS."