

Regulation as an Enabler of Innovation: A Regional Perspective

24.2.2026 - Richard Stubbs | Her Majesty's Revenue and Customs

MHRA Foreword. At the MHRA, our role is to give patients and the public confidence in the safety, effectiveness and quality of emerging health technologies. Innovation and regulation work best together—enabling new solutions to be adopted quickly while upholding the highest standards of protection and trust.

As outlined by Richard Stubbs in the next of our blog series, artificial intelligence shows both the immense opportunity and the need for responsible oversight. AI can transform care, but only when developed with rigour, transparency and fairness. Crucially, this means ensuring that AI training datasets are truly representative of the populations these tools will serve. Without this, technologies risk entrenching inequalities rather than reducing them. Regulation has a vital role in setting the standards that safeguard equity and protect patients.

Richard Stubbs is the Chief Executive of Health Innovation Yorkshire and Humber and a member of the MHRA's National Commission into the Regulation of AI in Healthcare. Richard brings extensive experience in bringing together the NHS, industry, academia and government to accelerate the adoption of innovation that improves patient care, addresses health inequalities and strengthens regional and national innovation ecosystems.

Guest Blog: Richard Stubbs

Working at the intersection of health, innovation and place, bringing together NHS organisations, industry, academia and government to accelerate the adoption of technologies that improve patient care, one lesson has been consistent: innovation does not succeed in isolation. Innovation is a team sport. It depends on systems that give innovators confidence, clinicians assurance, and patients trust. Effective regulation is central to that system.

There is a tendency to frame regulation as a brake on innovation. In practice, good regulation does the opposite. By setting clear standards, providing proportionate oversight and adapting to emerging technologies, regulators create the conditions in which innovation can be developed, tested and adopted at pace. Nowhere is this more important than in the rapidly evolving field of artificial intelligence, and specifically within healthcare. As the Health Secretary said earlier this month[i], “moving too slowly” in the shift from analogue to digital in the NHS risks “locking inefficiency into the system while demand continues to rise”.

AI has enormous potential to improve patient outcomes, support the workforce and drive productivity across health and care. But that potential will only be realised if these technologies are safe, effective and equitable. This is why the work of the National Commission into the Regulation of AI in Healthcare is so important. As a member of that commission, I am privileged to be supporting a generationally important discussion on the ethical, legal and technical requirements of embedding AI into our healthcare system.

The commission's role in shaping a coherent, future-focused regulatory approach sends a strong signal that artificial intelligence is an essential component of how we create a sustainable, personalised NHS of the future where staff and patients are supported and empowered by groundbreaking technology. And it also makes it just as clear that, of course, it must be responsible.

A critical part of that responsibility is addressing bias in AI training data. If AI systems are trained on unrepresentative datasets, they risk reinforcing existing health inequalities rather than reducing them. Regulation has a vital role to play here: setting expectations for transparency, data quality and performance across diverse populations, and ensuring that innovations work for everyone. The NHS exists to serve all the people, all the time; the same must be true of the innovations and AI tools that we use.

Yorkshire and Humber offers a powerful testbed for this approach. We have diverse populations, significant health inequalities, and world-class strengths in research, digital health and applied innovation. Embedding regulation within our local community ecosystems is essential. The opening of the MHRA's Leeds office in the region is a welcome recognition of that. It reflects a commitment to place-based regulation, grounded in real-world delivery and more embedded in the ecosystems of our innovators and health systems.

Regional presence and partnering helps us to usher in the future faster. The MHRA Digital Hub in Leeds brings us regulatory expertise and guidance in real time for some of the exciting programmes we are working on, such as our Yorkshire Digital Twin project, part of the international Digital Twin Consortium, in partnership with the University of Leeds, Kidney Research UK and West Yorkshire Integrated Care Board. This is a world-first project to develop a population health 'digital twin' – a virtual model that mirrors real-world systems to test interventions – beginning with using AI to spot early indicators of chronic kidney disease, one of West Yorkshire's most urgent health challenges.

And the future is already here. The benefits of AI and innovation can already be evidenced in many real-world use cases such as faster diagnostics, a reduction in burdensome and time-consuming admin with ambient voice technology, prevention of disease through automated recognition of early symptoms, and AI-driven drug discovery.

We know from reports such as the Health Innovation Network's Size of the Health Innovation Prize[ii] that innovation can deliver both better care and economic growth. Supporting the life sciences and technology sectors creates high-value jobs, attracts investment and strengthens regional economies, while improving outcomes for patients. A strong regional focus is not a nice-to-have; it is essential if we are serious about tackling health inequalities and ensuring the benefits of innovation are shared.

By aligning regulation, innovation and regional delivery, we can move faster, more safely and more fairly. That is the opportunity in front of us.

[i] The risk with NHS technology is moving too slowly, says Streeting

[ii] Healthcare innovations could boost UK economy by £278 billion - The Health Innovation Network

<https://www.gov.uk/government/news/regulation-as-an-enabler-of-innovation-a-regional-perspective>