

Joint statement from the co-Chairs: INSA-Royal Society policy dialogue on digital infrastructure and healthcare

On 27 November 2025, the Indian National Science Academy and the Royal Society convened an interdisciplinary policy dialogue exploring how technological advancements can be successfully translated into real-world public benefit. Together, we explored how to design, scale and govern digital foundations and health data ecosystems that maintain public trust, support economic growth and serve the public interest. This statement summarises the core insights and shared challenges discussed during our sessions.

Digital foundations for the next billion users

Digital public infrastructure must be scalable, secure and socio-culturally inclusive. India's success with platforms like Aadhaar demonstrates how open, interoperable architectures enable low-cost, population-scale services. To build digital foundations for the next billion users, our discussions highlighted three critical areas:

- Heterogeneity and inclusivity: Solutions must be adapted to local socioeconomic contexts and linguistic diversity.
- Sustainable and open infrastructure: Private investment in hardware must be balanced by investments in open-source frameworks and public software stacks. Physical infrastructure must pivot toward green, energy-efficient designs.
- Resilience and security: Security must be built into systems from the outset by minimising data centralisation and backup operational modes are necessary to avoid catastrophic service failures.

Health in the age of Artificial Intelligence

Artificial Intelligence (AI) offers transformative potential for public healthcare, but its deployment requires representative, high-quality and ethically governed data. By comparing initiatives under the UK's National Health Service and India's Ayushman Bharat Digital Mission, the dialogue addressed several structural priorities:

- Practical clinical integration: To fit within short, high-pressure outpatient consultations in the Indian health system, an immediate focus for AI should be ambient voice-to-record clinical scribing to reduce administrative burdens.
- Data Access: Future systems must include "secure data environments" where data stays in protected hubs and researchers submit code to query it, rather than openly sharing raw data.
- Fairness in data labour: Ethical AI must look beyond data privacy and ensure fair compensation, credit and protection for the annotators, survey respondents and researchers who generate datasets.
- Adaptive regulation: Regulating AI at the level of specific technical configurations is a brittle approach that quickly becomes obsolete; preferable is a tiered regulatory model.

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