

AI in Health & Social Care

The NHS AI

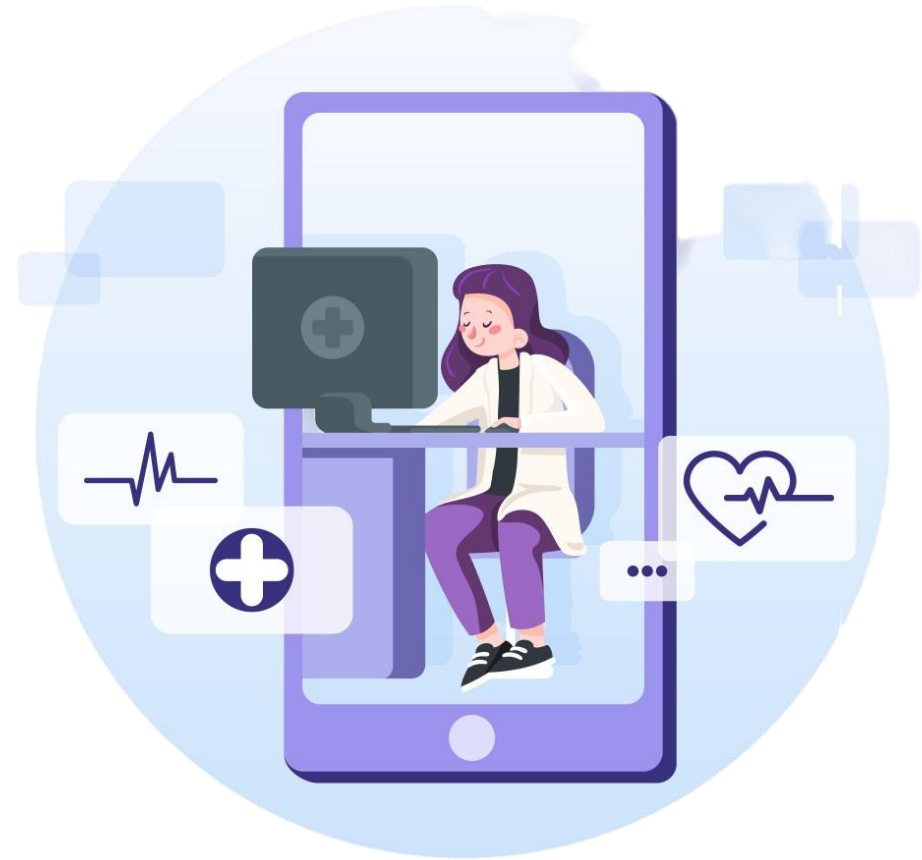
Champions Initiative

Responsible AI in Health and Social Care

Professor Ian Abbs

Chief Executive Officer

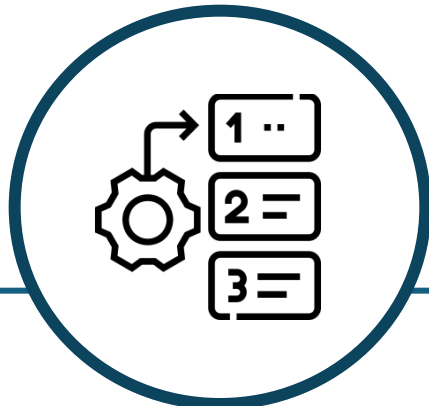
Guy's and St Thomas' NHS Foundation Trust



Deployable AI in healthcare

There are a set of questions we need to ask ourselves:

- What is the purpose of the work we are doing?
- What needs to be true in order to deliver that purpose?
- Who are the key players who have the power to implement and direct transformation in healthcare technology using AI?



**Prioritise areas for
deployment in health &
social care**

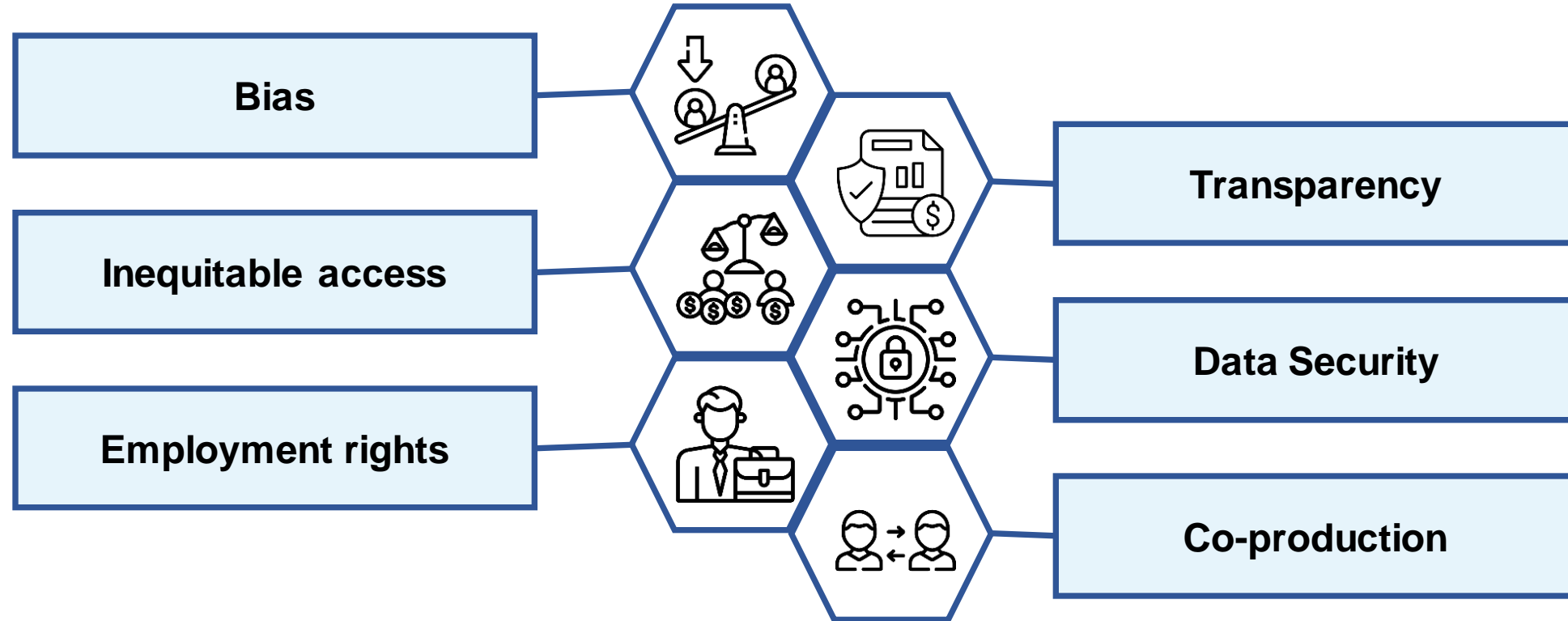


**Develop new structure and
incentive models that
promote deployment**



**Ensure advantages from AI
are
distributed inclusively**

But there are risks...



Deployable AI in healthcare – What are the conditions?

Capabilities of each organisation:



Technology



Governance



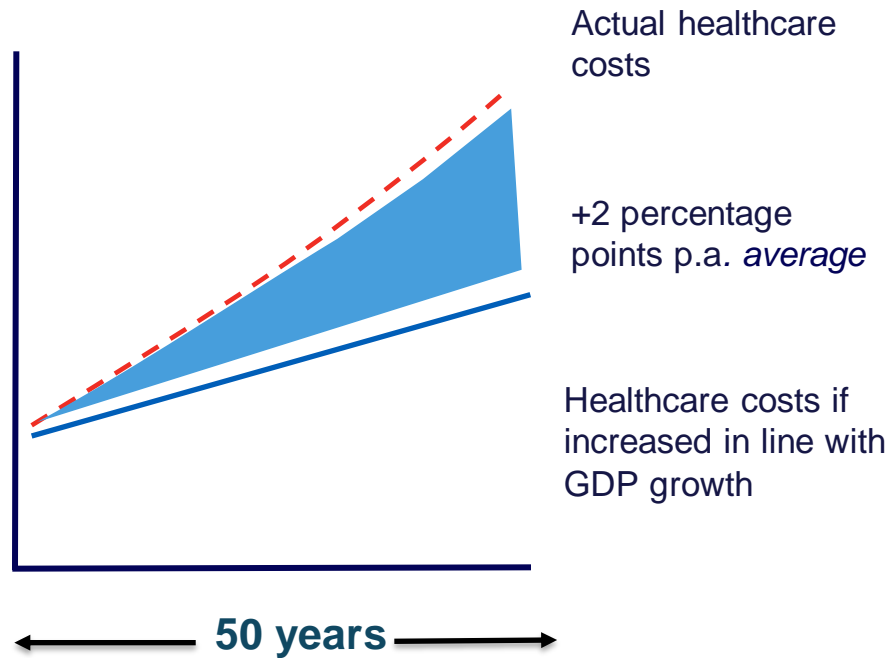
People



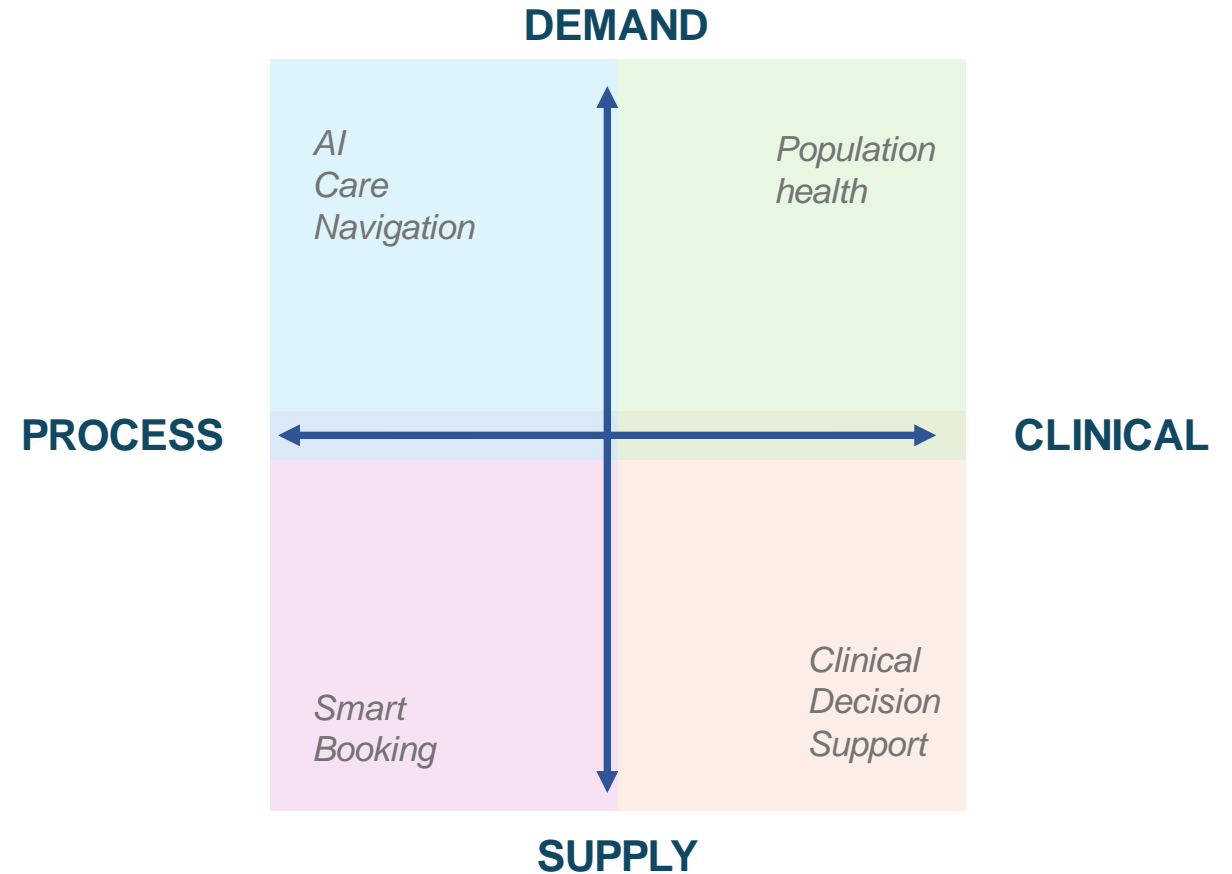
Procurement

AI is critical to sustainable healthcare

Cost as a % of GDP



Source: Healthcare costs: a market-based view (McKinsey Quarterly, 2008)



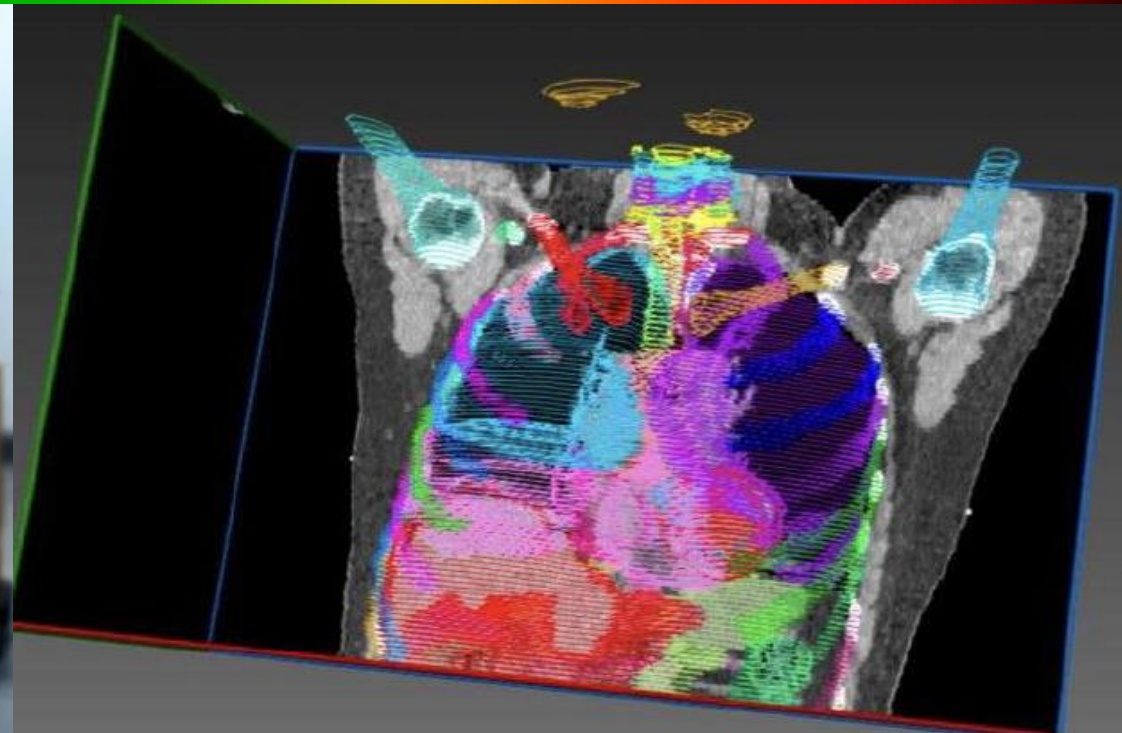


Process

Deployment choices



Patient



Developing standards and policies

As AI technologies are still emerging – standards are being developed and shared across the healthcare ecosystem to ensure consistency, interoperability and security.

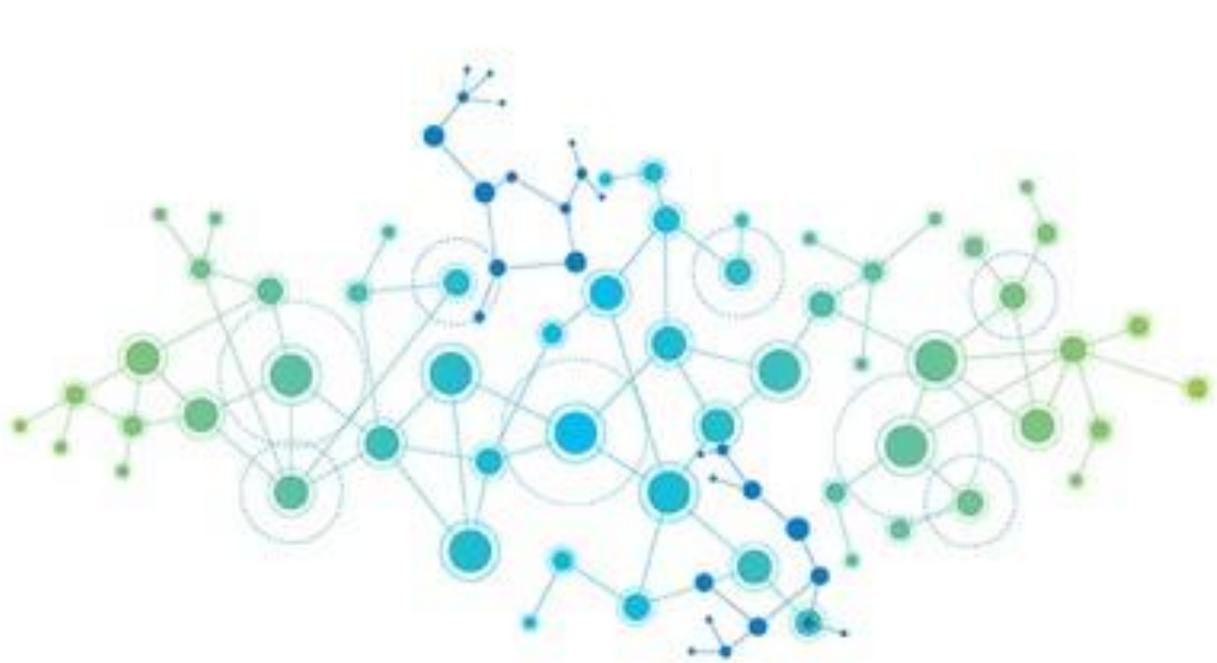
KCL and GSTT had been part of setting up the international collaboration with industry, academia and healthcare organisations - for *Medical Open Network for Artificial Intelligence* – [MONAI](#).

MONAI aims to close the gap from research and development to clinical production environments by bringing AI models into medical applications and clinical workflows -to improve patient care.

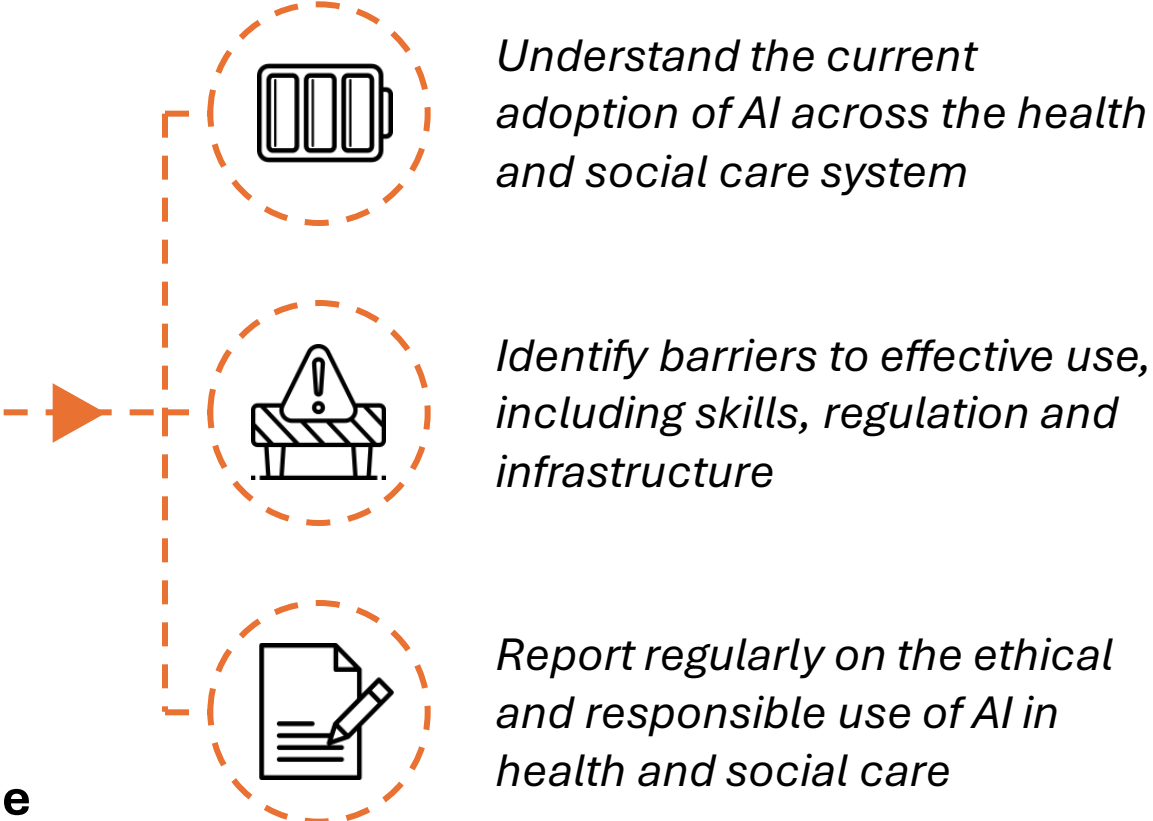
			
			
			
			

A network approach for 'infectious innovation'

A network across the NHS, social care system and wider life science ecosystem...



...modelled on the Genomic Medicine Service



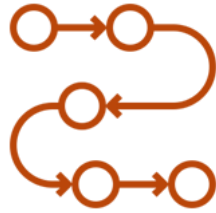
Exploring the scope of these AI Champions

The roles and responsibilities, as well as the commitments in terms of investment and time, will depend on the scope of the network, the context in the individual organisation and will change as the technology evolves



Different organisations will be at varied maturity – what role, skill and seniority is needed from Champions at each level?

- Leading innovator
- Widespread use
- Limited adoption



What are the stages of deployment and what are the levers needed for these Champions to deliver?

- Development
- Testing
- Prioritisation
- Implementation
- Monitoring



From which areas of the health and care sector should these Champions be recruited?

- Operations
- Digital
- Clinical



What are the right criteria that these Champions should be monitoring and reporting on?

- Equality and health equity
- Quality
- Productivity
- Scale of impact

Clinical AI fellowships

The NHS Fellowship in Clinical AI is a 12-month programme which is integrated part-time alongside clinical work, funded by Health Education England.

Fellows are recruited competitively from 7 participating regions across the NHS, drawn from a diverse clinical workforce.

Fellows adopt clinical artificial intelligence technology, they gain experience deploying AI in clinical workflows under expert supervision in multidisciplinary teams.

It is featured in the [NHS Long Term Workforce Plan](#) as an exemplar of upskilling staff to maximise the transformational benefit of AI technologies in the NHS.

“ I am developing a clinical AI decision support system which enhances the acquisition of cardiac MRI. Translating AI science into practice is challenging; this Fellowship will give me a transferable skillset for deploying and implementing such projects. Looking ahead, I'd like to take on a hybrid cardiologist-data scientist role in the NHS and assist in delivering the AI Roadmap. ”

KAVITHA VIMALESVARAN
ST6 Cardiology



Responsible AI Champions will bolster that network



Anthony Wilson	Chief Medical Informatics Officer, Manchester University NHS Foundation Trust
Clarissa Carvalho	Consultant Anaesthetist, Joint Clinical Lead for IT/EHR, Guy's and St Thomas' NHS Foundation Trust
Elvira Perez Vallejos	Professor of Digital Technology for Mental Health, University of Nottingham
Grigorios Athanasiadis	Consultant Urological Surgeon, University of Aberdeen
Hutan Ashrafian	Lead for Applied AI and Big Data Analytics, Institute for Global Health Innovation, Imperial College London
Naeem Soomro	Professor of Urology, EPSRC Northern Health Futures Hub Co-Director, Newcastle Hospitals NHS Foundation Trust
Nicholas Raison	Consultant Urological Surgeon, King's College Hospital NHS Foundation Trust
Nikhil Vasdev	Professor and Chair of Robotic Surgery, East and North Hertfordshire NHS Trust
Nitin Shrotri	Consultant Urologist, Canterbury, East Kent
Ol'Tunde Asháolu	Consultant Emergency Medicine & Surgery, York and Scarborough Teaching Hospitals NHS Foundation Trust
Radu Calinescu	Professor of Computer Science, University of York
Tim Underwood	Professor of Gastrointestinal Surgery, University Hospital Southampton NHS Foundation Trust



AI in Health & Social Care Fireside Chat

Fireside chat **guest speakers**



Dr Anthony Wilson
Chief Medical Informatics
Officer, Manchester University
NHS Foundation Trust

Dr Clarissa Carvalho
Consultant Anaesthetist, Joint
Clinical Lead for IT/EHR, Guy's
and St Thomas' NHS Foundation
Trust

Prof. Elvira Perez Vallejos
RAi UK Equities Committee
Chair, Professor of Digital
Technology for Mental Health,
University of Nottingham

Mr Grigorios Athanasiadis
Consultant Urological Surgeon,
University of Aberdeen

Prof. Hutan Ashrafian
Lead for Applied AI and Big Data
Analytics, Institute for Global
Health Innovation, Imperial
College London

Prof. Nitin Shrotri
Consultant Urologist,
Canterbury, East Kent

Dr Ol'Tunde Asháolu
Consultant Emergency Medicine
& Surgery, York and
Scarborough Teaching Hospitals
NHS Foundation Trust

Prof. Radu Calinescu
Professor of Computer Science,
University of York

Interviewed by
Prof. Prokar Dasgupta OBE,
Chair, Professor of Surgery,
King's Health Partners