NHS
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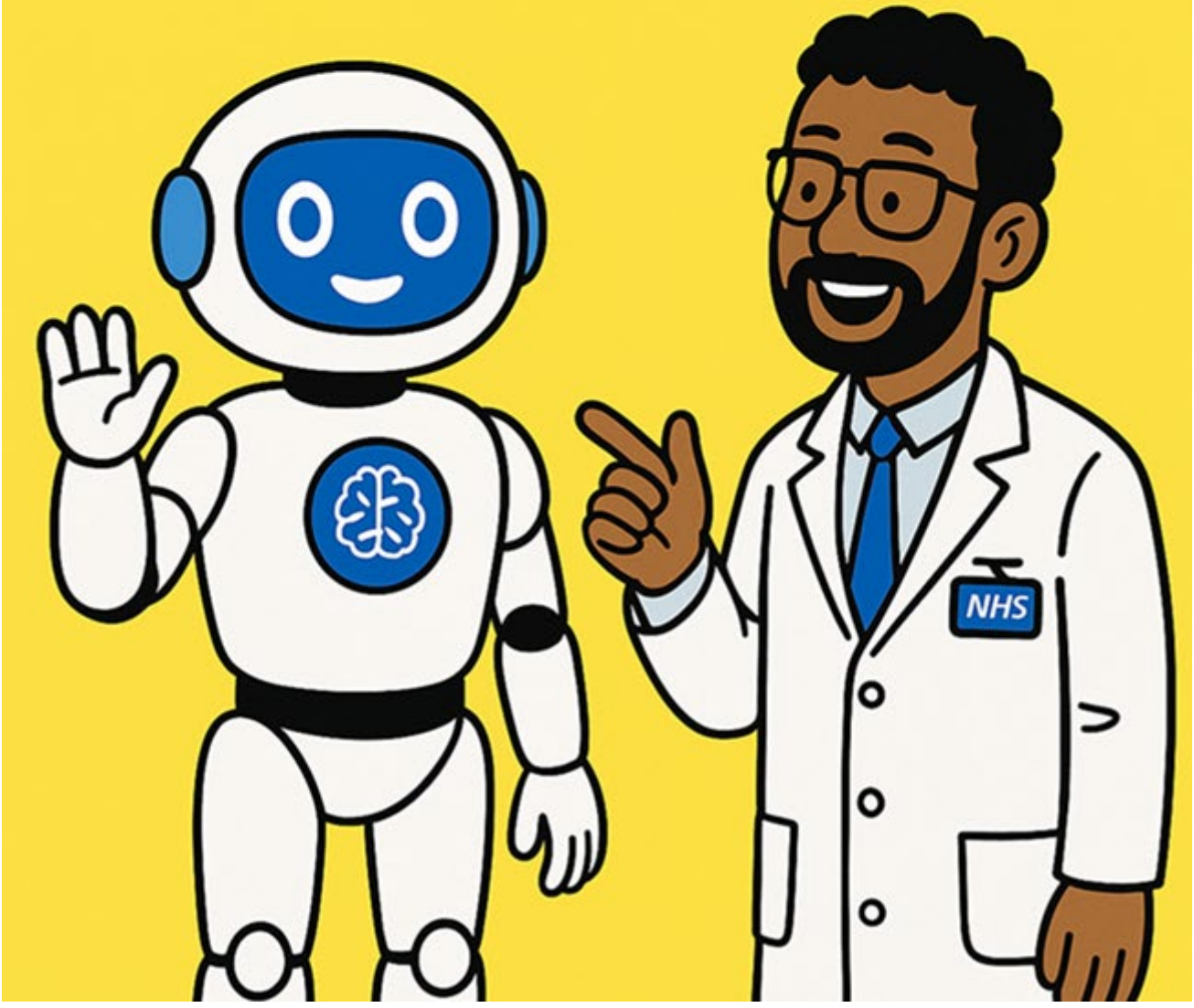
AI Basics

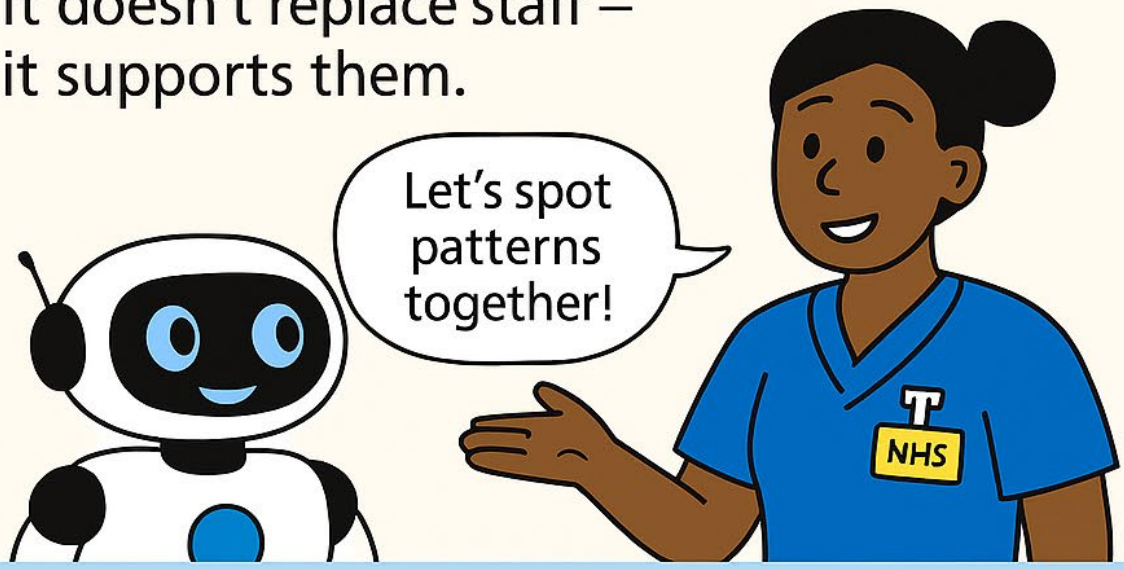
Your First Steps



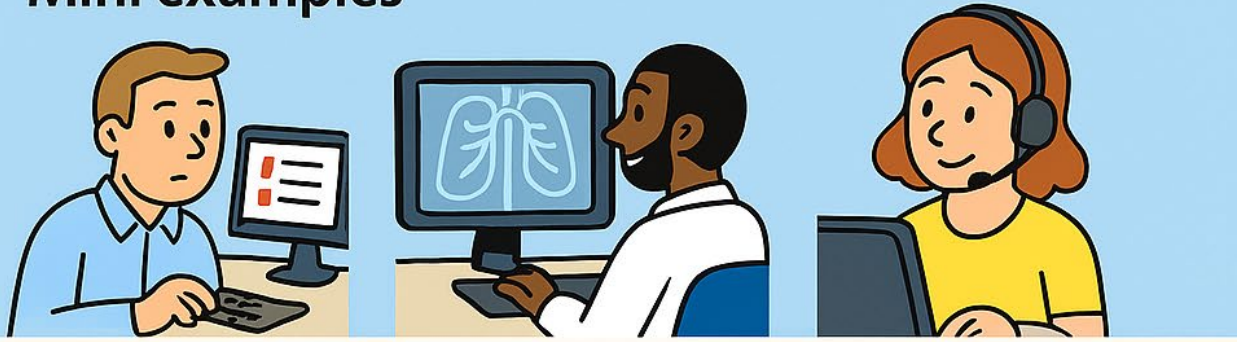
What Is AI, Really?

Demystifying AI in Plain English

AI is like a smart assistant that learns from examples (data), figures out patterns, and helps people do tasks better.
It doesn't replace staff – it supports them.



Mini examples



AI flags unusual transactions for auditors

Clinician checks AI-assisted x-ray results

Admin uses predictive calendar schedule appointments

Why the NHS Cares About AI

Pressure, Prioritisation, and Productivity

The Long Wait: Tackling Backlogs with Algorithms

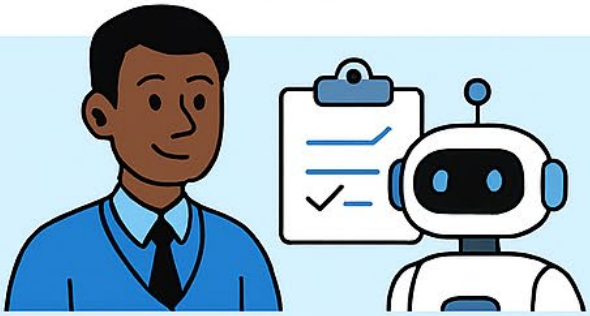
Diagnostic Support: Radiology, Pathology, and the Power of Prediction

Behind the Curtain: How NHS AI Works

Feeding the Machine: Data, Data, Data

To learn, the AI needs mountains of (carefully handled) historical data from NHS records, like patient information and treatment outcomes.

Training vs. Testing: It's Not Just for Doctors!



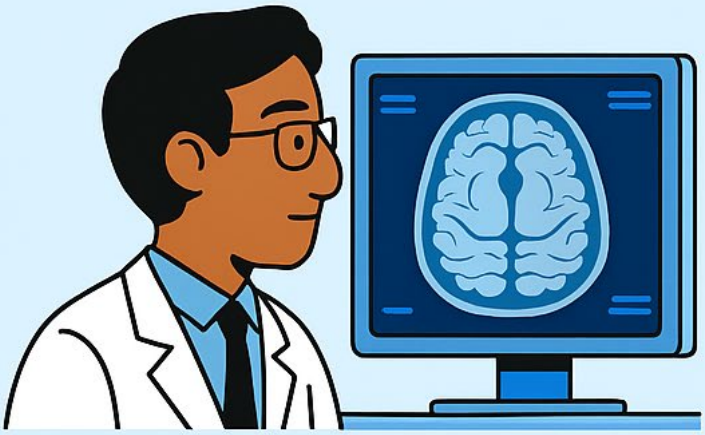
AI is "trained'" on this data to spot patterns and problems, then "tested" to make sure it works well in the real world.

Anomaly Detection in Fraud, Risk, and Governance

AI's number-crunching powers are used to idenfiy suspicious activities or irregularities in governance, security, and bevond

Spotlights: Real NHS AI Use Cases

Brain Scans with Qure.ai –
Radiology That Thinks



Virtual Health Assistants –
Triage Without the Wait

Genomics and Personalised Medicine –
Targeted, Not Templated

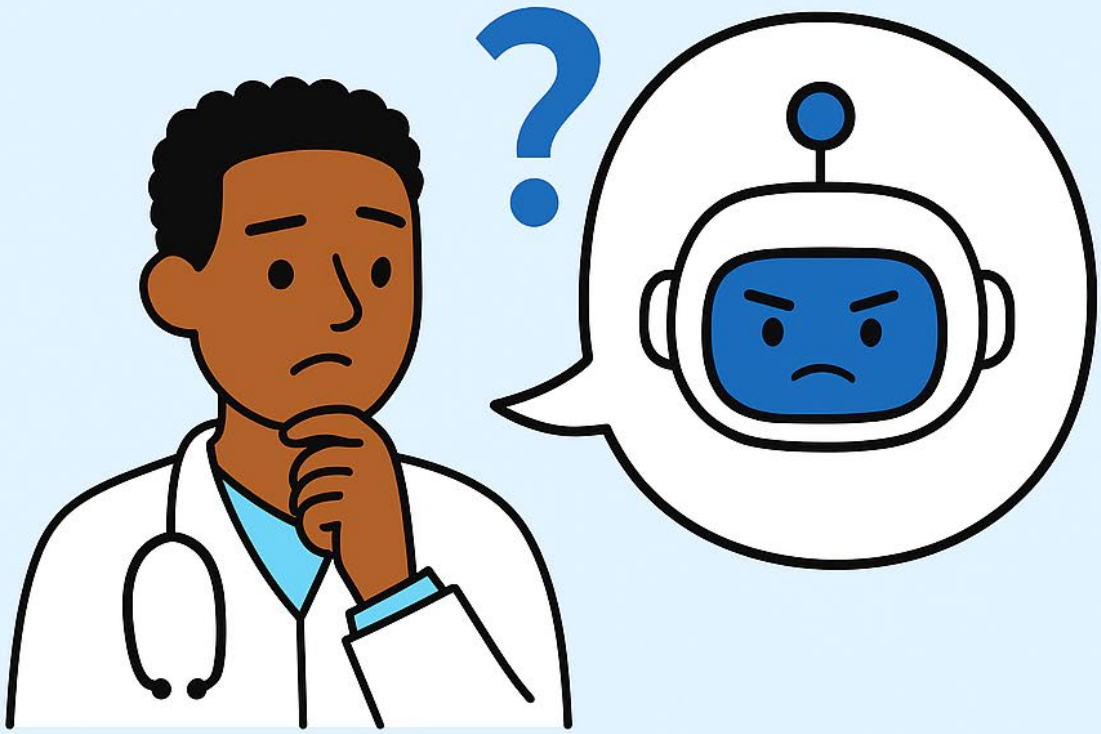
How to Ask if an AI is Trustworthy

To trust an AI, ask questions like:

- Was it tested for safety and fairness?
- When and why does it make mistakes?

Before using AI, it's important to know its limits.

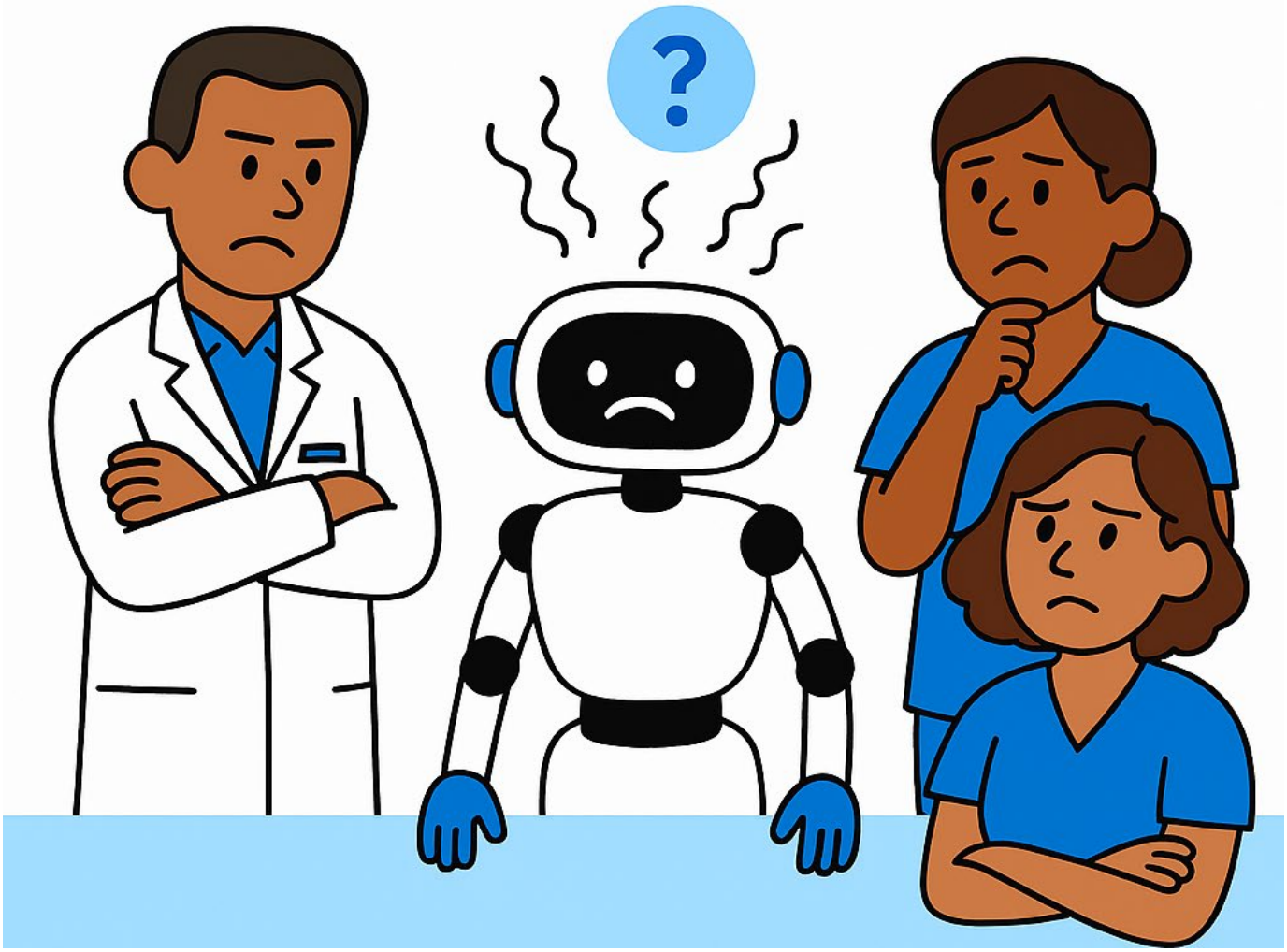
Bias in the Machine: Why It Happens



AI systems learn from historical data and reflect the biases that data contains. If the data is skewed, the AI will be too, leading to unfair outcomess for underrepresented groups.

Accountability: Who ‘s Responsible When AI Gets It Wrong?

When AI goes wrong, the responsibility isn’t just on the technology. It’s about shared accountability among those who develop, implement, and oversee the AI systems.



Getting Started: What You Can Do

AI Literacy for Non-Tech Staff

Learn about AI's capabilities and limitations. Start asking how AI could make a difference in your own work.

Working with Data Analysts & Digital Teams

Consult with experts in your organization to explore AI options and develop new ideas.

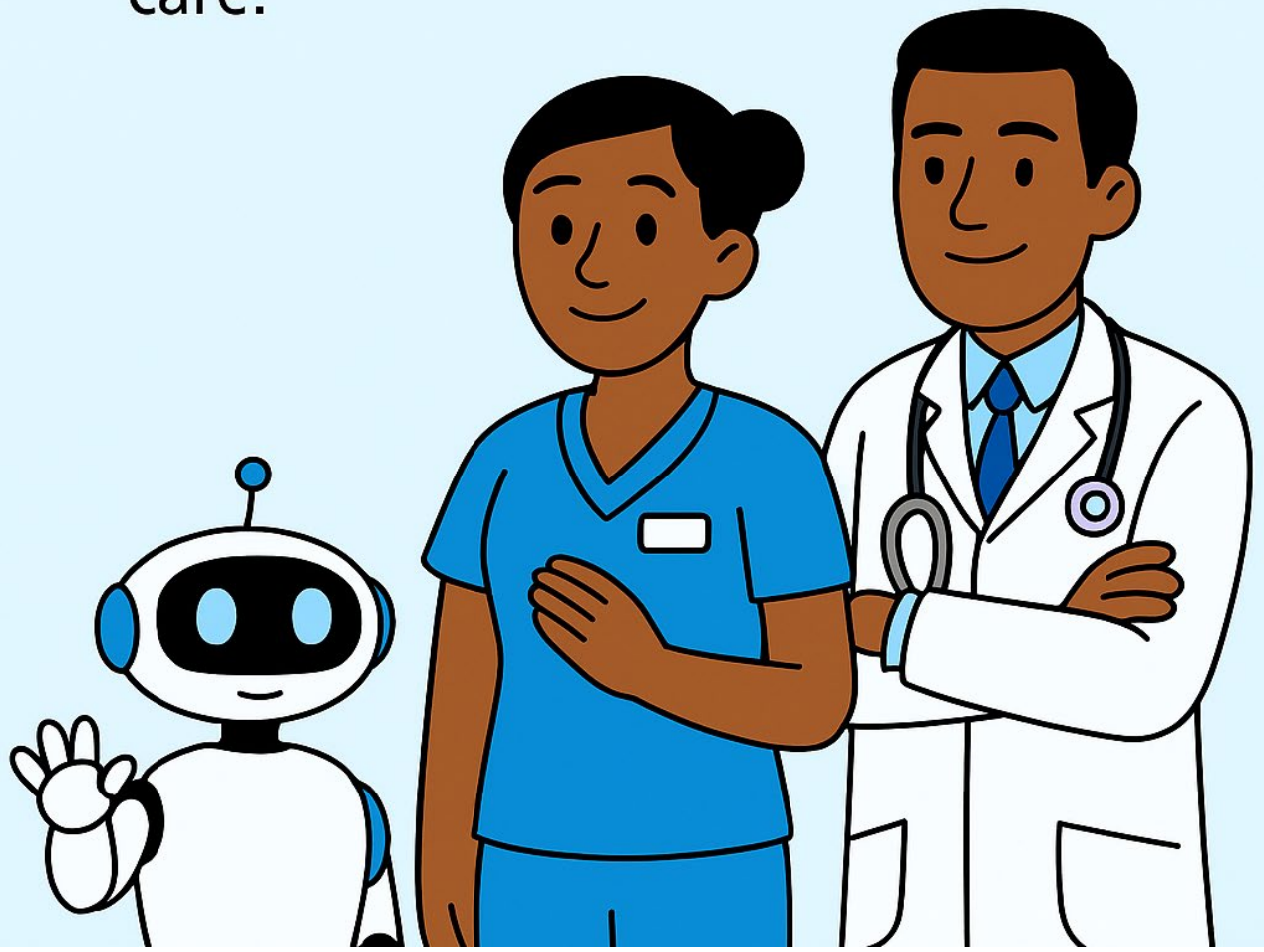
Pilots, Sandboxes, and Proofs of Concept

Test AI in controlled, small-scale projects to see how it performs before wider adoption.

Myth-Busting AI in the NHS

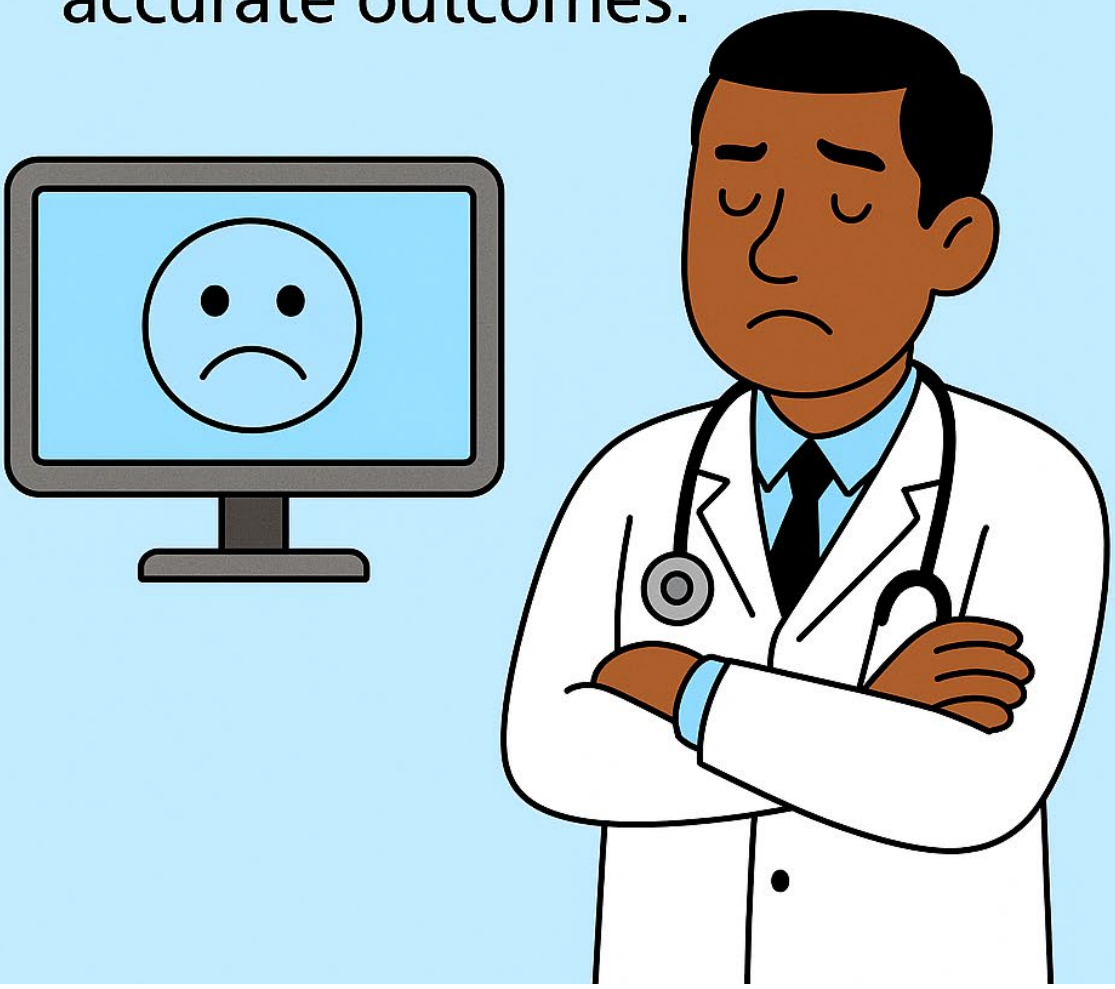
"AI Will Replace Me" – Debunked

AI is an assistant, not a replacement. It handles routine tasks so you can focus on the human side of care.



“AI Is Always Right’– Nope

AI systems make mistakes. They need human guidance and oversight to ensure safe and accurate outcomes.



‘We’re Too Small to Use AI – Think Again

AI isn’t just for large, well-funded trusts. Pilot projects and partnerships can help smaller organizations benefit from AI, too.

An NHS AI Toolkit

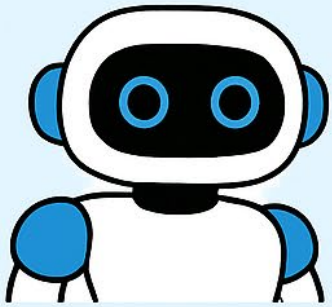
These practical resources are designed to support the understanding, implementation, and governance of AI technologies.

- **Glossary of Key Terms**

- **Template for AI Impact Assessments**

- **AI Use Case Checklist (Governance-Ready)**

Top 5 Key AI Terms

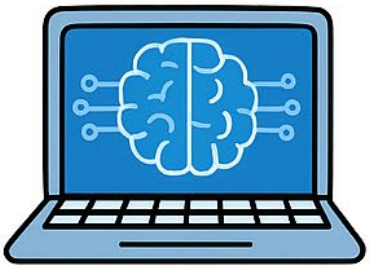


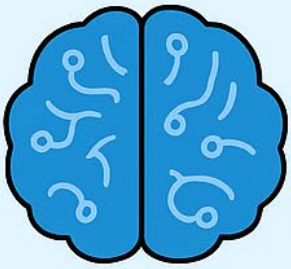
Artificial Intelligence (AI)

Machines doing tasks that normally need human thinking, like learning and decision-making.

Machine Learning (ML)

AI where computers learn from data to improve without being directly programmed.





Neural Network

A computer system inspired by the brain, used to recognize patterns and make decisions.

Natural Language Processing (NLP)

AI that helps computers understand and use human language.

Generative AI

AI that creates new content like text, images, or music based on what it has learned.

What's Next for NHS AI?

Trends to Watch

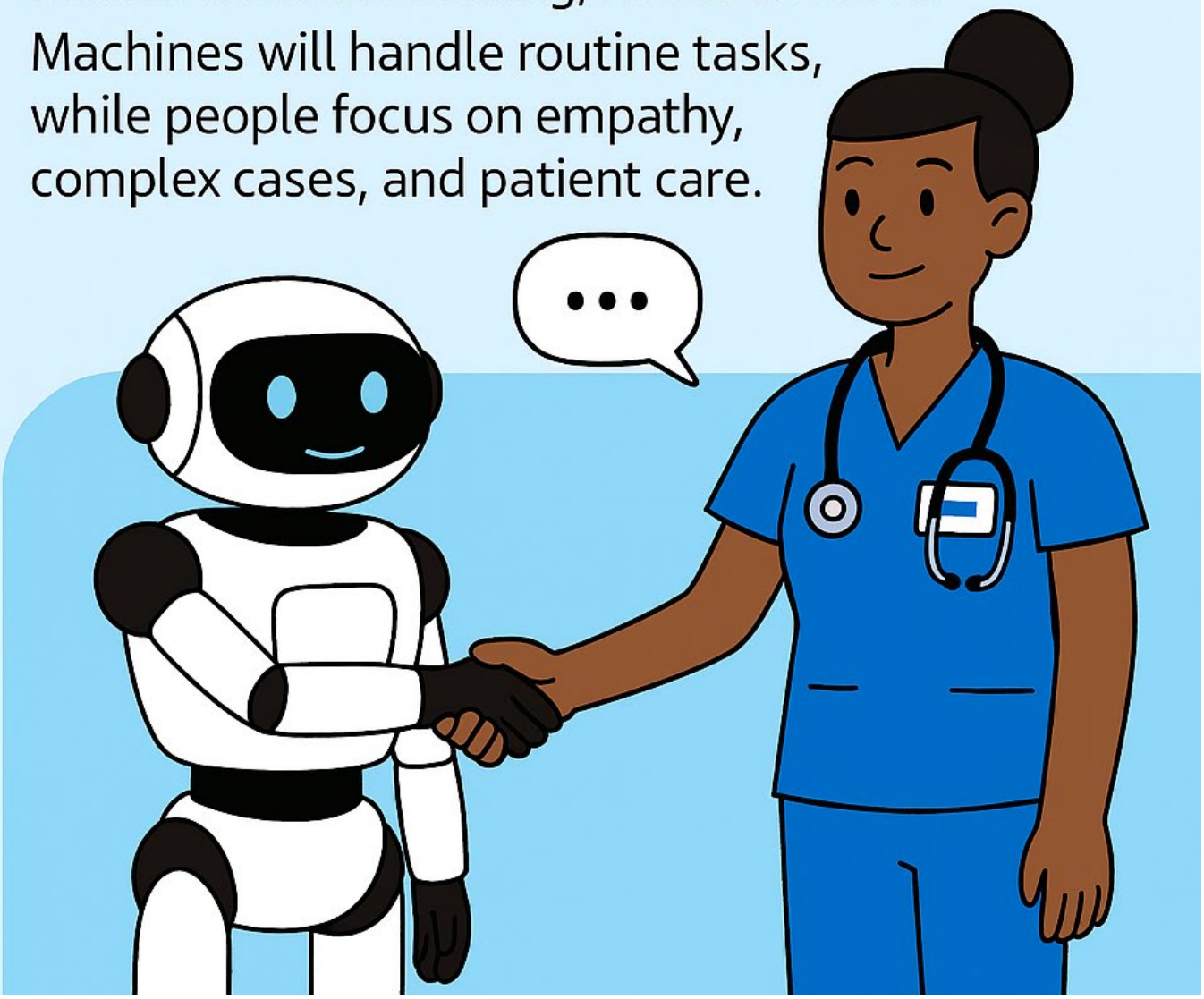
The world of AI is rapidly evolving. It's important to stay informed about emerging trends that could shape the future of AI in healthcare, such as advances in technology, collaborations, and new applications.

The Future of Human-Machine Collaboration

AI isn't replacing healthcare professionals – it's teaming up with them.

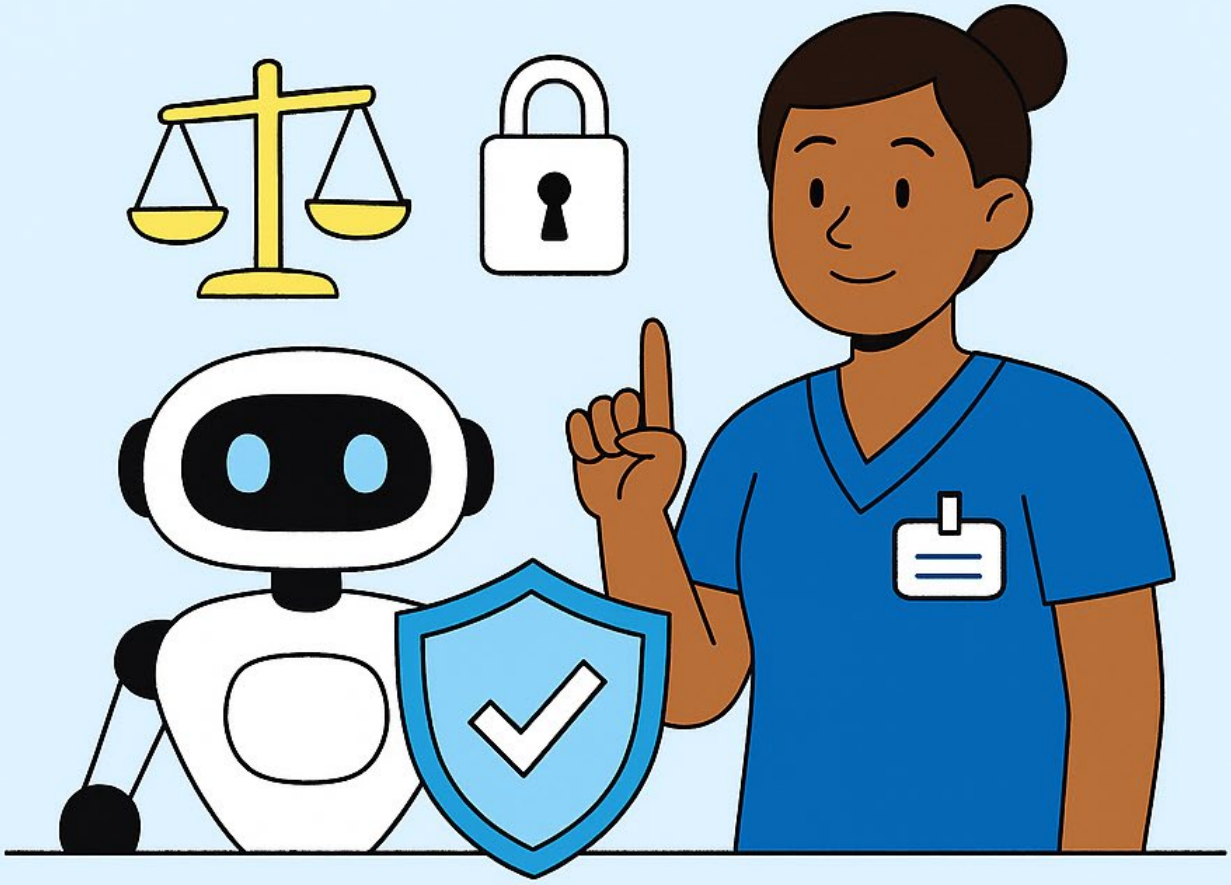
The future is about using AI to support human decision-making, not override it.

Machines will handle routine tasks, while people focus on empathy, complex cases, and patient care.



Staying Safe, Ethical, and Efficient in an AI-Enhanced NHS

Continuous focus on safety, ethical considerations, and efficiency will be key as the NHS integrates AI technologies. Adhering to best practices and regulatory guidance is crucial.



Need help? MIAA can support your next move.

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