

A survey of NHS digital leaders' perspectives about AI

What 50 NHS digital leaders really think about AI, sovereignty and where the value actually sits.

96%

say national AI strategy misses the frontline

78%

are worried about reliance on US tech providers

96%

see the biggest gains in the back office

The story in brief

NHS digital leaders are optimistic about what AI can do for the health service, and confident the UK can build much of it at home. But they feel national strategy is pointed away from frontline reality. They are uneasy about the NHS leaning on US technology providers, and they are clear that the real barrier is people and skills rather than the technology itself. The biggest prize, they say, is not in the operating theatre but in the back office.

About the sample

The sample skews senior and acute: 40% work in acute trusts, and trust board or executive level is the single largest role group, alongside CCIOs, digital directors, transformation leads and clinical leaders.

The headline

Put together, the numbers point to one clear narrative. NHS digital leaders want home-grown AI focused on the back office but feel national strategy and dependence on US technology are pulling against them, while a skills shortage holds everyone back. It is a story about the gap between national ambition and frontline reality, the politics of digital sovereignty and where the NHS actually expects AI to deliver.

At a glance

96%

Strategy misses the frontline

78%

Worried about US reliance

76%

Back UK capability

34%

Skills are the top threat

46%

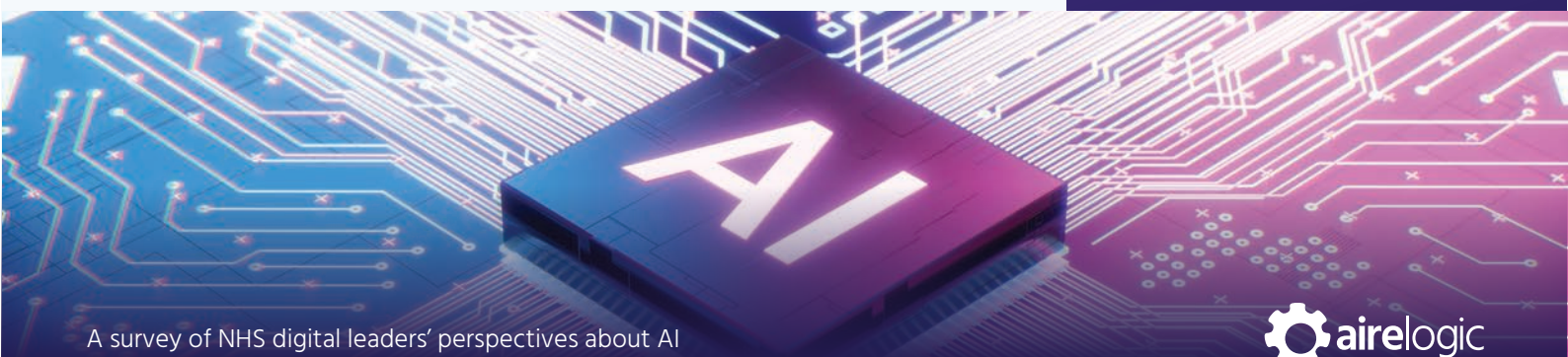
Gains in the back office

6%

Feel well prepared

58%

Want shared decisions



Foreward

Dr Harry Thirkettle, Director of Health and Innovation, Aire Logic

If you've been to any health tech conference lately, you know the NHS AI conversation that dominates the room: diagnostics, imaging, the algorithm that catches what a tired clinician missed at four in the afternoon. Genuinely exciting work. But on the evidence of this survey, it's not what the people delivering NHS digital services say they need most.

We asked 50 senior NHS digital and clinical leaders a blunt question: over the next five years, where will AI make a real difference in your organisation? Not where funding or headlines point, but where they honestly think change will show up. Nearly half said the back office, three times the number who said diagnostics.

This matters, because the NHS spends huge amounts of time and money on work that never touches a patient: rostering, procurement, referral administration, estates, finance, reconciling one system's version of the truth with another's. If national strategy points at the operating theatre while leaders on the ground point elsewhere, that's a misalignment we need to fix.

The second theme is one people talk around rather than about. 78% are worried about the NHS's growing reliance on US-based providers for critical infrastructure, and half name data sovereignty and patient security as their biggest concern about big tech. What strikes me is who's expressing it: this is now the mainstream view among the people accountable for keeping NHS systems running.

76% believe the UK has the domestic capability to deliver world-class AI for the NHS. I agree wholeheartedly, though given my role at Aire Logic I won't pretend to be neutral. This came from NHS leaders themselves, with a clear-eyed view that international partners will still be

needed sometimes. I read it as experts saying they want a genuine choice about where their technology comes from, and don't feel they get one.

The finding I'd most like people to sit with is the least convenient one. Asked what poses the biggest threat to AI adoption, leaders didn't point at technology or money. They said skills, well ahead of the legacy systems and technical debt that usually dominate this conversation. Only 6% rate their own organisation as well prepared to adopt AI responsibly and at scale.

"There's no procuring your way out of a problem like that. No supplier, British or otherwise, can sell an organisation the capacity to absorb what it's just bought."

That capacity is slow, unfashionable work about people, not platforms, and exactly what gets skipped under pressure to release quickly.

What emerges is a group of leaders ambitious about what AI could do, confident in what this country can build, and quietly frustrated that strategy above them and capacity beneath them aren't aligned. 96% say national AI strategy doesn't reflect their priorities; of fifty leaders, exactly one felt fully aligned.

That gap needs closing, quickly, which is why we're publishing this rather than keeping it internal. We'd rather have the argument out in the open at AireFest, with the people who have to make this work, than spend another year talking about diagnostics while the real opportunity waits in a spreadsheet, unnoticed.

Dr Harry Thirkettle

The findings

96%



Say national AI strategy misses the frontline

Almost no one feels national strategy speaks to their reality. 96% say the government's AI strategy for the NHS only partially reflects their priorities, feels disconnected from the frontline, or does not reflect them at all. Just one respondent felt fully aligned. This is the strongest signal in the survey showing a gap between Westminster ambition and the people expected to deliver it.

78%



Are worried about reliance on US tech providers

Concern about digital sovereignty has gone mainstream. 78% are somewhat or very concerned about the NHS's growing reliance on US-based providers for critical infrastructure. Asked for their single biggest worry about international big tech, half named data sovereignty and patient data security, ahead of long-term cost and supplier lock-in on 28%. This is no longer a niche worry for policy specialists; it is a frontline concern.

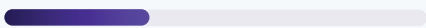
76%



Believe the UK can build world-class NHS AI, with caveats

Confidence in home-grown capability is high but qualified. 76% think the UK has the domestic capability to deliver world-class AI for the NHS. Most of that (46%) is a qualified yes in some areas, with international partners still needed, while 30% think the UK can lead globally outright. The appetite for British-built AI is real, but leaders are pragmatic about where partnership is still required.

34%



Say the biggest threat is skills, not technology

The bottleneck is people. Asked for the single biggest threat to effective AI adoption over the next five years, workforce capability and digital skills topped the list at 34%, well ahead of legacy systems and technical debt on 18%. However good the technology, leaders believe adoption will stall without investment in the workforce to use it.

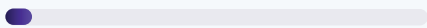
46%



See the biggest gains in the back office, not diagnostics

The real opportunity is unglamorous. 46% expect the greatest efficiency gains in back office and administrative processes, roughly three times the share who pointed to clinical decision support and diagnostics on 16%. Investment patterns broadly match this. The headline-grabbing clinical use cases are not where leaders think the nearterm value sits.

6%



Rate themselves well prepared to adopt AI at scale

Self-assessed readiness is modest. Only 6% rate their organisation as well prepared to adopt AI responsibly and at scale. 42% say they are not well prepared or have not started, and 52% are making progress but with gaps. Ambition is running well ahead of readiness on the ground.

58%



Want AI decisions shared between local and national

There is a clear preference for shared control. 58% think AI adoption decisions should be led by a combination of local and national, rather than handed wholly to central NHS strategy (10%) or individual trusts (22%). On autonomy 40% feel they have significant autonomy within national constraints, while another 40% feel limited or very constrained.

What it adds up to

Ambition is running well ahead of readiness. Leaders want home-grown AI, aimed at the back office, decided jointly between local and national teams, and they want the workforce funded to use it.

NOTE: This is a self-selecting sample of around 50 engaged NHS digital and clinical leaders, not a statistically representative national poll. It is best framed as a snapshot of sentiment among senior digital professionals rather than a robust national survey. Percentages are rounded.

About Aire Logic

Aire Logic is a health tech consultancy that partners with the NHS, public sector and life sciences organisations to deliver meaningful, measurable digital transformation. Employee-owned and B Corp certified, we prioritise societal value over profit, and we design and build technology that improves outcomes, empowers staff and enables a healthier, more sustainable health and care system.