



WHITE PAPER

# EPRs as enablers, not endpoints.

Why value must lead digital transformation

June 2026

By Will Monaghan, Ben Horner, John Goldader, and Thomas Jefferies

Over the past decade, the NHS has invested heavily in electronic patient records (EPRs), yet the return on that investment has often fallen short of expectations. While adoption has progressed, measurable impact on productivity, flow and cost has been limited in many settings. This is not because EPRs lack potential. BCG analysis suggests that, when implemented and optimised effectively, EPR-enabled transformation could unlock £8–12bn of annual value across the NHS through reduced length of stay, improved throughput and lower administrative burden. The challenge is not whether EPRs matter, but how the programmes are governed, deployed and used to drive change.

Across industries, large-scale enterprise technology programmes often fail to deliver the value originally promised. EPRs at care providers are no exception. Without their clinical context, EPR programmes resemble any major Enterprise Resource Planning (ERP) transformation: complex, multi-year and highly exposed to weak governance and poor sequencing.

Once clinical care is added, the challenge increases. Outcomes are harder to define, and variation in clinical practice, pathways and decision-making becomes a defining factor. The same condition may be managed differently across teams, specialties or organisations, making standardisation more complex and value harder to measure. The consequences of poor design are immediate and human, which is why **EPRs must be governed as value programmes, not feature programmes.**

Every configuration choice should pass one test: does it measurably improve care outcomes, safety, experience or productivity?

This article examines why feature-led EPR delivery continues across the NHS, what value-first design looks like in practice, and how organisations can shift towards outcome-led digital transformation.





## 1. Why feature-led delivery still dominates

Many EPR programmes are still governed as technology-first initiatives. They are anchored in delivery plans, structured around extensive feature lists and designed to maximise use of the platform. Progress is measured through technical completion - modules deployed, functionality enabled, milestones achieved. What is often missing is a clear clinical or operational transformation plan, and a deliberate sequencing of change to maximise value.

This approach persists because it provides a sense of control. Waterfall delivery models, defined scope and feature-based milestones make complex programmes easier to manage and report. However, they also shift focus away from outcomes. The implicit assumption becomes that value will follow once functionality is delivered, rather than being designed into the programme from the outset.

Sequencing is where this becomes most visible. When programmes are led by technical readiness, they tend to prioritise what can be built most completely or deployed most easily. In doing so, they miss the opportunity to start where value can be demonstrated early and credibly.

An alternative approach begins with a different question: where can deployment build immediate clinical confidence and deliver tangible benefit? High-acuity settings such as emergency care provide a natural starting point. They cannot pause for system change, and they expose any weaknesses in workflow design immediately. Deploying in these environments forces alignment with real-world practice and, when successful, creates trust that carries into subsequent phases.

Modular deployment models support this value-led sequencing. Phased rollout across care settings allows disruption to be absorbed gradually rather than concentrated in a single “big bang” go-live. Integration choices are also critical. Architectures that allow coexistence with legacy systems during transition reduce risk and protect clinician experience, enabling programmes to prioritise adoption and usability over technical purity.

Viewed through this lens, delivery sequence is not a technical detail. It is a core value decision that shapes confidence, adoption and ultimately the success of the programme.



## 2. Defining value first

Value-led delivery starts by choosing a small number of outcomes and shaping delivery around them. Programmes at University Hospitals of Leicester and University Hospitals Nottingham provide a useful illustration of this approach, focusing on usability, time taken to complete clinical tasks, and safety failure rates such as missed follow-ups or inappropriate patient placement.

Usability was prioritised first. If clinicians find a system slow or frustrating, adoption suffers and expected benefits fail to materialise. In practice, usability became the primary driver of value. Improvements in system speed and workflow alignment reduced time spent on administrative tasks, increased compliance with digital pathways and improved data quality, all of which contributed to better patient flow and safer care.

Establishing traditional baselines was difficult, as paper workflows rarely generate reliable data on time or error rates. Rather than delay progress, the programme focused on directional improvement, using dashboards to track data quality, pathway performance and safety signals. In doing so, usability was not treated as an end in itself, but as the mechanism through which broader operational and clinical value was realised.



### 3. What gets measured gets delivered

Measurement turns intent into action. Dashboards that expose documentation burden, patient flow delays or safety risks create feedback loops that shift programmes from delivery to improvement.

In best-in-class EPR programmes, measurement is not an afterthought - it is built into how the programme is governed. Performance dashboards, outcome metrics and governance structures are deliberately aligned to link technical delivery with clinical transformation and value realisation. Rather than tracking progress solely through milestones or feature completion, these programmes define success in terms of measurable impact on workflows, safety and productivity.

This alignment allows programmes to organise work differently. Technical progression is sequenced to maximise impact, prioritising changes that deliver the greatest value at the lowest appropriate cost. It reduces feature bloat by ensuring that configuration decisions are continuously tested against defined outcomes, rather than expanded to meet perceived capability of the system.

It also shapes how delivery is structured. Programmes that anchor around value are more likely to adopt modular or phased approaches, enabling organisations to absorb change incrementally and build confidence as benefits are realised. In doing so, measurement becomes more than reporting - it becomes the mechanism through which delivery, transformation and value are kept in alignment.

While EPR usability data is increasingly available at a national level, EPR-enabled productivity data is not. Without it, trusts cannot learn systematically from one another or understand why the same system delivers very different results in different settings. In the context of the spending review and sustained pressure on NHS finances, this gap represents a missed opportunity. With much of frontline care now digitised, the system is better placed than ever to use EPR data to drive productivity, improve flow and release capacity within the existing cost base. As a result, the next wave of digital value is likely to diverge: some will come from local digital front doors layered onto EPRs, others from shared data environments that support multi-provider care across systems.



### 4. The risk of over-customisation

Over-customisation increases technical debt, slows upgrades and fragments clinical practice. Regional collaboration can help mitigate this risk, shared templates, configuration and governance reduce duplication and accelerate learning.

Sustained discipline is required to prevent excessive localisation from creeping back in, with dilution of value. Internationally, large integrated providers such as Kaiser Permanente (USA), Intermountain (USA) and Santeon (NL) have taken a value-based approach combining the following key elements to deliver best practice standardisation, combined with local clinical ownership and ability to innovate to drive further value:

- **Standardised data:** to enable system-wide benchmarking (activity and finances)
- **Protocols designed by clinicians:** they own the standard, not just adopt it – focusing on outcomes that matter to patients
- **Integrated governance:** to prioritise and agree digital investments based on value
- **Digital as the enabler, not the driver:** care model embedded into EHR as order sets + decision support
- **Transparency:** measure what matters and facilitate discussions with peers on variance and how leaders achieve their outcomes

Preventing over-customisation is less a technical challenge and more a question of decision rights and value discipline.



## 5. Rethinking SME engagement

Too often, subject matter experts are pulled into screen-level design discussions rather than shaping system-level priorities. This consumes scarce clinical time and reduces impact.

Outcome-led engagement reframes the conversation; it starts by identifying the biggest inefficiency or safety risk within a workflow and ends by defining how improvement will be measured. Clinicians should define clinical intent, not design interfaces, then the service designers play the critical role of translating that intent into system behaviour.

Involving the less digitally enthusiastic clinicians from the outset is particularly valuable. They often surface operational issues that more digitally confident users overlook or work around, helping to create systems that are more resilient and have greater adoption from the outset.

Effective SME engagement is therefore essential to sustaining value.



## 6. Automation as a value multiplier

Automation and AI can reduce manual burden and accelerate delivery, but only when paired with deliberate workflow redesign and change management. Learning from digital leaders globally, there are three areas where automation can add the most value:

**First, integration gaps.** Legacy systems will persist for the foreseeable future, while long-term architecture should aim for native interoperability, the immediate priority must be protecting the clinician workflow. In practice, surfacing the right information at the point of care, quickly and reliably, matters more than architectural purity. Pragmatic approaches, including RPA-style integration, can reduce context switching and manual work, provided they are tightly governed and aligned to clinical need rather than used to mask poor underlying processes.

**Second, design and build.** AI can be used to analyse process maps and configuration choices to identify overlapping pain points, unnecessary variation and redesign risks before they are embedded into the system. Automated testing provides additional assurance during build, but its real value lies in enabling faster iteration and safer change. Crucially, these tools must sit alongside clear clinical ownership of workflows, automation cannot compensate for poorly defined processes or a lack of agreement on how care should be delivered.

**Third, adoption and change.** Traditional deployment models rely heavily on floor walkers and classroom training, neither of which scale effectively. At Northamptonshire, a DAP (Digital Adoption Platform) sits within the live EPR, guiding users step by step, answering questions in real time and targeting messages based on context. It has mitigated limited training capacity and accelerated confidence after go-live. However, technology alone is insufficient, these tools must be part of a deliberate change strategy, supported by leadership, clear expectations and reinforcement of new behaviours.

Once systems are live, optimisation should be continuous. Tools such as ambient scribe demonstrate strong uptake where time savings are tangible and clinicians retain confidence in output quality. AI can also help identify where clinicians spend the most time, highlighting opportunities for further workflow redesign, standardisation or automation. The focus should be on removing unnecessary effort, not accelerating inefficient processes.

Automation does not fix poor design or weak adoption, as recently argued by Andy Callow in *Digital Health*<sup>1</sup>, it is rarely the technology itself that determines whether an EPR succeeds or fails at go-live, but the quality of leadership, organisational readiness and the strength of relationships across the system. The same principle applies beyond go-live. Automation and AI only deliver value when embedded within clear ownership, agreed clinical standards and deliberate change management. Technology enables improvement - it does not substitute for it.

1. <https://www.digitalhealth.net/2026/02/its-not-technology-that-makes-or-breaks-an-epr-go-live/>



## 7. Governance reset: who owns value

Value realisation requires clear ownership. Rather than relying on digital module leads alone, programmes need defined value owners: clinical or operational leaders accountable for delivering outcomes, not just functionality.

In practice, this means embedding those leaders directly into governance. Value owners should hold formal roles within design authority structures, co-owning decision-making forums such as design governance boards or configuration sign-off groups. Their role is not advisory. They are accountable for approving or rejecting design decisions based on whether they deliver measurable impact.

At Northamptonshire, EPMA is owned by the chief pharmacist with the medical director as executive sponsor, while PAS sits with operational leadership. In both cases, ownership is aligned to where impact is felt most strongly. Crucially, these leaders are not peripheral to the programme. They are embedded within its governance, shaping priorities, signing off configurations and determining trade-offs throughout delivery.

This changes how programmes operate. Decisions are no longer driven solely by technical feasibility or delivery timelines, but by their contribution to agreed outcomes. Value owners are empowered to make trade-offs, even where this conflicts with digital or vendor preferences, because they are accountable for the consequences in clinical and operational settings.

This model also exposes gaps. Cross-cutting domains such as outpatients often lack clear ownership, leading to diffused accountability, slower decision-making and increased friction within the programme.

To reinforce this approach, configuration decisions should pass explicit value gates. Each change must be assessed against its impact on care, safety, experience or productivity before progressing. In this way, governance becomes the mechanism through which value is actively managed, rather than assumed.

Clear ownership, embedded within programme governance, is what turns intent into sustained value.





## 8. Conclusion: the opportunity ahead

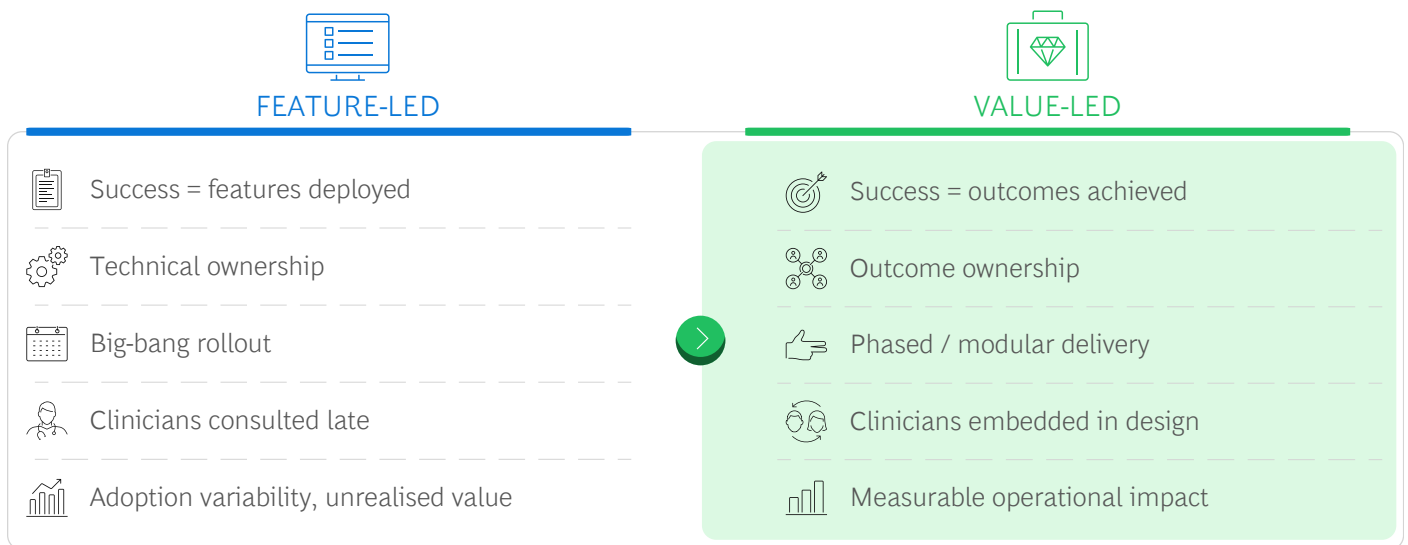
Most clinical care is now delivered digitally. Productivity is the defining challenge facing the NHS, and digital should be viewed as one of the strongest opportunities to address it. That means faster systems, better usability and less time spent on screens. It also means automating the administrative work that surrounds care, from waiting list management to results chasing and appointment scheduling.

Patient experience must sit alongside clinician experience. Outputs from EPRs should be clear, structured and readable. Records aligned to PRSB standards reduce confusion, follow-up calls and administrative burden.

National initiatives such as the Federated Data Platform create real opportunity, but without a shift from feature delivery to outcome-led EPR programmes, the NHS risks missing this moment.

Looking ahead, EPRs will increasingly act as the platform for a more “agentic” hospital - where workflows are not only digitised, but actively orchestrated through automation, decision support and AI-driven agents that anticipate needs, coordinate care and reduce manual effort. In this model, value is not created by adding more technology, but by how effectively it is embedded into clinical and operational workflows.

### Exhibit 1 – Shift EPR programmes from feature delivery to value realisation



If success is measured by features delivered, value will fall short.

If success is measured by outcomes achieved, care will change.

EPRs should not be seen as the end of digital transformation, but as the foundation for it. Realising that future, and the productivity and cost benefits it promises, requires programmes to be structured and governed differently, with clear ownership, deliberate sequencing and an explicit focus on outcomes from the outset.

# About the Authors



**Will Monaghan**

*Group Chief Digital Information Officer*  
University Hospitals of Leicester and  
University Hospitals of Northamptonshire

---

Will currently serves as Group Chief Digital Information Officer for University Hospitals of Leicester and University Hospitals of Northamptonshire, leading the transformation of digital services for 30,000 colleagues serving nearly 2 million patients. He speaks regularly on digital transformation and contributes to national strategy through the Secretary of State's AI Advisory Board, the national FDP steering committee, and as an advisor to Imperial's Digital Health Leadership programme.



**Ben Horner**

*Managing Director and Partner*  
London  
**[Horner.Ben@bcg.com](mailto:Horner.Ben@bcg.com)**



**John Goldader**

*Managing Director and Partner*  
London  
**[Goldader.John@bcg.com](mailto:Goldader.John@bcg.com)**



**Thomas Jefferies**

*Platinion Manager, Enterprise Solutions*  
London  
**[Jefferies.Thomas@bcgplatinion.com](mailto:Jefferies.Thomas@bcgplatinion.com)**

## For Further Contact

If you would like to discuss this report, please contact the authors.



Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. BCG delivers solutions through leading-edge management consulting, technology and design, and corporate and digital ventures. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the goal of helping our clients thrive and enabling them to make the world a better place.

For information or permission to reprint, please contact BCG at [permissions@bcg.com](mailto:permissions@bcg.com). To find the latest BCG content and register to receive e-alerts on this topic or others, please visit [bcg.com](https://bcg.com). Follow Boston Consulting Group on [LinkedIn](#), [Facebook](#), and [X \(formerly Twitter\)](#).

