DRIVING PRODUCTIVITY THROUGH EPR OPTIMISATION AND AI

From launch to impact: unlocking measurable value through EPR optimisation and responsible AI, an article by Dr Benjamin Drew, Executive Consultant, and Chris Lees, Director, both from the Health and Life Sciences Transformation Team at Atos

England's Frontline Digitisation Programme met its target for 90% Electronic Patient Record (EPR) adoption by December 2023, with market tracking suggesting 94% of acute trusts had a live system by March 2025. With implementation achieved, the national focus has shifted from EPR procurement to optimisation.

For system-wide productivity to materialise, optimisation must be treated as a continuous improvement function. From our experience, the following focus areas consistently move the needle:

- **Standardise high-volume clinical workflows:** EPR configuration must actively embed evidence-based pathways, such as standardised order sets, documentation templates and automated tasking logic, so the 'right way' becomes the easy way. This is supported by recent analysis undertaken by Atos to support NHS England that highlighted statistically significant results between key digital data sets and productivity measures.
- **Close the usability gap with targeted tools:** Clinicians rightly compare EPR usability to the best consumer tools. This gap drives delays, alert fatigue and potentially unsafe workarounds. Bridging this gap is central to improving general workforce productivity. Approaches include user-centred configuration, rationalising forms and alerts, and using in-app guidance (digital adoption) to support learning after go-live.
- **Improve data quality and reconciliation:** When upstream information is incomplete or inconsistently coded, it compromises every downstream decision. Practical optimisation focuses on enabling structured data capture at the point of care, enforcing consistent terminology and ensuring safer reconciliation of information from external letters and referrals. This positions the EPR as the single source of truth.
- **Design interoperability around real workflows:** True interoperability is a direct productivity tool, not an abstract technical exercise. Effective design starts by mapping the real-world user journey, for example, a GP referring to a neighbourhood centre. Integration patterns and data standards are then aligned to make information flow seamlessly, supporting the shift to community-based care.
- **Build a sustained optimisation operating model:** Finally, lasting gains require an operating model that treats the EPR as a product, not a project. This involves dedicated governance, clinical safety assurance and robust benefits tracking. Usage analytics and frontline feedback can identify ongoing friction points and quantify impact.

Where AI fits: augment, automate, and assure

When embedded thoughtfully, AI acts as a force multiplier, augmenting clinical judgment and automating administrative burden to accelerate the productivity gains that EPR optimisation seeks. The most immediate opportunities cluster around three core functions:

- **Augment the clinician's time and cognitive load:** This includes such things as ambient scribing to capture consultations and AI-drafted documentation (such as discharge summaries), which convert structured EPR data into clinician-validated text.
- **Automate well-bounded, high-volume tasks:** Agentic AI workflows can take over administrative follow-ups, like chasing missing test results or preparing pre-operative packs, with clear audit trails and fail-safe handoffs. Similarly, operational copilots for bed management or theatre scheduling can surface critical information proactively, replacing alert fatigue with intelligent orchestration.
- **Assure quality and safety at scale:** AI's role is to support, not supplant, clinical judgment. This requires deliberate guardrails: clear accountability models, clinical safety cases and rigorous information governance.

What Atos brings to the challenge

Atos is positioned as a Delivery Partner within NHS England's Blueprinting Programme to help close this gap. Through extensive experience supporting numerous EPR implementations across several EPR vendors, Atos has developed a deep understanding of both the complexities and transformational opportunities inherent in EPR systems. Building on this expertise, Atos has more recently supported NHS England in driving greater value from EPR investments. We're enabling this shift through several practical, interconnected initiatives:

- **A vendor-neutral optimisation approach:** True optimisation must work across the mixed reality of multiple EPR suppliers and the wider digital estate. Our focus is on outcomes, not just a single platform. We've focused on making high-value clinical workflows portable, translating best practices, such as a standardised heart-failure pathway, between different EPR systems.
- **Bridging the usability gap:** To address the well-recognised EPR usability gap, Atos has been focusing on the implementation of Digital Adoption Platforms. This software layers over the EPR, using data to understand precisely how the system is used. This enables targeted, in-the-moment guidance and training to address specific friction points. Insights from the pilots delivered by Atos are informing the national rollout of these innovative digital solutions across the NHS.
- **Blueprinting, adoption, and sustained governance:** As a long-standing partner to the NHS England Blueprinting Programme, Atos has a track record in helping to translate national best practice into executable reality. We've specifically delivered several multi-trust blueprints, synthesising insights from high-performing NHS organisations on EPR optimisation governance, EPR usability training, and EPR service management. This expertise ensures our partnership extends into the 'run' phase, providing the governance and support needed to maintain momentum and ensure alignment with future operational models.

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- **Responsible AI implementation:** Atos ensures AI is embedded as a component of any EPR optimisation strategy, not added as an afterthought. Implementation is governed by rigorous clinical safety, information governance, and monitoring controls that align with national guidance. We can achieve this by leveraging our newly launched Agentic Studio, part of our sovereign and agentic AI facility in Birmingham, ensuring that everything we deliver harnesses the power of agentic AI.

Realising the digital dividend

The NHS has made rapid progress on EPR coverage. The next phase of substantial productivity gains will not be realised by installing more technology, but by intentionally refining what is already in place. From initial business case and procurement through to implementation, optimisation and future consolidation of an EPR system, Atos has the end-to-end expertise to deliver a digital system that drives productivity and improves patient outcomes.

Successful organisations will be those that recognise this not as a short-term IT task, but as a core, long-term operational capability. This is how digital maturity directly translates into organisational productivity, improved patient experience and a system that is truly fit for the future.

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