

# Transforming NHS Healthcare Through Smart Managed Print Services

*How Lexmark is helping NHS Trusts deliver the three shifts at the heart of the 10 Year Health Plan*

## Executive Summary

The NHS 10 Year Health Plan sets out a bold vision for transforming healthcare in England through three fundamental shifts: from hospital to community, from analogue to digital, and from sickness to prevention. Achieving these ambitions requires every part of the NHS infrastructure to work smarter, including the systems that manage how information flows through healthcare organisations.

Managed Print Services (MPS) may not command the headlines, but the evidence from NHS Trusts across England demonstrates that intelligent print management is a critical enabler of digital transformation, operational efficiency, and sustainability. By rationalising fragmented device fleets, implementing secure print release, and supporting the transition from paper-based to digital workflows, MPS creates the foundation upon which broader transformation can be built.

This case study brings together the experiences of three leading NHS Trusts—Nottingham University Hospitals, Liverpool Women’s NHS Foundation Trust, and Aintree University Hospital (now part of Liverpool University Hospitals NHS Foundation Trust)—to show how Lexmark Smart Managed Print Services is helping the NHS deliver measurable improvements in efficiency, security, cost control, and environmental impact.

## The Strategic Context: Why Print Infrastructure Matters

The NHS 10 Year Health Plan is unequivocal about the need for change. As the Plan states: “The choice for the NHS is stark: reform or die.” The three shifts at the heart of the Plan—hospital to community, analogue to digital, and sickness to prevention—demand a fundamental reimagining of how healthcare is delivered.

**From analogue to digital:** The Plan commits to transforming the NHS from “the 20th century technological laggard it is today, to the 21st century leader it has the potential to be.” Central to this ambition is the creation of a single patient record, a transformed NHS App, and the liberation of staff from “a burden of bureaucracy and administration.” For many Trusts, print infrastructure represents one of the most visible and immediate opportunities to drive this shift. Paper-intensive processes slow down clinical workflows, compromise data security, and tie up resources that could be redirected to patient care.

**From hospital to community:** The Plan’s vision for neighbourhood health services requires care to be “digitally by default, in a patient’s home if possible, in a neighbourhood health centre when needed, in a hospital if necessary.” Efficient, secure document management is essential to making care more distributed and

accessible. When clinicians can scan, capture, and route patient information directly into clinical systems from the point of care, they can spend less time on administration and more time with patients.

**Sustainability and net zero:** The NHS has committed to becoming the world's first net zero national health service. Print infrastructure directly impacts environmental performance through paper consumption, energy usage, and consumables waste. Rationalising device fleets, implementing "print less" policies, and adopting zero-landfill recycling programmes all contribute to this goal.

## **The Challenge: Fragmented Fleets and Hidden Costs**

Across the three Trusts, a common pattern emerged: legacy print environments that had grown organically over many years, with multiple vendors, inconsistent device models, and minimal central oversight. The consequences were significant:

### **Nottingham University Hospitals NHS Trust**

One of the largest NHS Trusts in England, NUH serves over 2.5 million residents across three main sites, with 90 wards, 1,700 beds, and 14,000 employees. The Trust's existing output fleet was largely unmanaged and reaching end of life. Without visibility into device usage, the Trust faced escalating costs, paper waste, and security vulnerabilities at a time when it was actively working towards the NHS's paperless targets.

### **Liverpool Women's NHS Foundation Trust**

As a specialist Trust for women and babies, LWH delivers over 8,000 babies, cares for 1,000 babies on its Neonatal Unit, undertakes almost 10,000 gynaecological procedures, and carries out over 2,000 cycles of IVF each year. The Trust's legacy print fleet consisted of 50 different printer models from seven different manufacturers, creating an unnecessarily complex environment that was expensive to run and difficult to manage. The lack of standardisation was compromising output efficiencies and delaying vital clinical processes.

### **Aintree University Hospital**

Part of Liverpool University Hospitals NHS Foundation Trust, which serves a population of around 630,000 people with a workforce of over 12,000 staff, AUH was running an unnecessarily complex fleet of over 1,300 devices from a range of different vendors. The lack of standardisation resulted in increased consumables spending, excess paper wastage, and inconsistent security controls—a critical concern when managing sensitive patient information.

## **The Solution: Lexmark Smart Managed Print Services**

Lexmark partnered with each Trust to design and implement tailored MPS solutions that addressed their specific challenges while supporting broader digital transformation objectives. The approach combined fleet optimisation, secure print management, and integration with clinical workflows.

### **Comprehensive Fleet Assessment and Rationalisation**

Before proposing solutions, Lexmark conducted thorough audits of each Trust's print environment, analysing device locations, usage patterns, and future requirements. This evidence-based approach ensured that the resulting fleet designs were right-sized for actual need, with the right mix of A4/A3, colour/mono, and multifunctional devices deployed in the right locations.

At Nottingham, this led to a fleet consolidation of over 40%, reducing the total number of devices to 993 while maintaining full coverage across the Trust's complex estate. Liverpool Women's achieved a 30% reduction in devices, and Aintree reached its goal of reducing the previous fleet by 70%.

## **Print Anywhere with Secure Print Release**

In fast-paced clinical environments where staff are constantly moving between wards, clinics, and departments, timely access to the right information is critical to patient safety. Lexmark's Secure Print Release solution ensures that clinical documents are only released when the authorised user authenticates at the device, preventing sensitive patient information from being left unattended or accessed by the wrong individual.

By enabling clinicians and support staff to print once and collect documents securely from any enabled device, the solution supports uninterrupted clinical workflows. Staff can retrieve prescriptions, care plans, referral letters, and discharge documentation at the point of need—reducing delays, unnecessary reprints, and the risk of errors caused by missing or misplaced paperwork. This flexibility also provides operational resilience, ensuring critical information remains accessible even if a specific printer is unavailable.

Secure Print Release further supports patient safety and regulatory compliance through comprehensive audit trails. Clear visibility of who printed what, when, and where helps Trusts meet NHS Information Governance and GDPR requirements, while also enabling proactive monitoring, policy enforcement, and continuous improvement of print practices across clinical settings.

## **Integration with Clinical Systems**

Furthermore Lexmark's solutions go beyond basic print management support NHS Trust's digital transformation roadmap with clinical form digitisation, enabling the creation of SMART digital forms that can be scanned directly into patient records via the Lexmark infrastructure. This automated capture and routing of patient information directly into clinical systems reduces manual data entry, improves accuracy, and supports the Trust's pursuit of paperless operations.

## **Proactive Service Management**

Each implementation is underpinned by a five-year plus Lexmark Smart Managed Print Services agreement that ensures continuous optimisation. Proactive consumables management automatically detects when supplies need replenishment, while ongoing service reporting and governance enable Trusts to identify and act on

improvement opportunities. This continuous improvement approach means the benefits compound over time, rather than degrading as often happens with unmanaged infrastructure.

## **Implementation: Collaboration Without Compromise**

Implementing transformational change in busy healthcare environments requires careful planning and close collaboration. Lexmark's approach prioritises minimising disruption to clinical operations while maximising the speed of benefit realisation.

**At Nottingham University Hospitals**, the MPS implementation was completed on schedule within six months, despite the complexity of deploying across 90 wards and three main sites. Lexmark coordinated the implementation process across the Trust's complex estate and ensured onsite support was continuously available, enabling technical concerns to be addressed at the point of deployment.

**At Liverpool Women's**, strong senior stakeholder support combined with Lexmark's collaborative approach meant the implementation was completed within just four weeks. Staff were aware of the benefits of the new infrastructure, ensuring the devices immediately became productivity tools rather than obstacles to workflow.

**At Aintree**, Lexmark worked collaboratively throughout the implementation to ensure the correct devices were deployed in the right locations. Device deployment was overseen by Lexmark experts who understood both the technical specifications and the unique, sensitive healthcare environment in which they were working.

As Lisa Lawrence, Programme Manager at Nottingham University Hospitals Trust, noted: "Lexmark's commitment to ensuring we achieved the goal of the new fleet deployment and introduction of a managed service was always paramount in their approach. Lexmark were always available and did everything possible to ease the transition from our previous suppliers to Lexmark's fully managed print service."

## **Results: Measurable Impact Across Every Dimension**

The outcomes achieved across these three Trusts demonstrate the transformative potential of intelligent print management when implemented as part of a broader digital strategy.

### **Efficiency and Productivity**

Fleet rationalisation delivered immediate efficiency gains by eliminating redundant devices, simplifying support, and standardising user experience across each Trust. At Nottingham, the 40% fleet reduction released valuable ward space that could be repurposed for patient care. At Aintree, moving to a single-vendor fleet eliminated the complexity of managing multiple consumables contracts and support arrangements.

Proactive consumables management and automated replenishment reduced the administrative burden on IT and facilities teams, while improved device reliability minimised downtime and service calls.

### **Cost Savings**

**Liverpool Women’s NHS Foundation Trust achieved a 70% reduction in print-related spend**, with calculable savings from day one. At Nottingham University Hospitals, savings exceeded £1 million over the life of the contract. All three Trusts benefited from the introduction of mono-centric print policies, which significantly reduced the proportion of expensive colour printing.

These savings are not one-off benefits. The continuous improvement model built into Lexmark Smart MPS means Trusts can expect ongoing optimisation as usage patterns evolve and new efficiency opportunities are identified through analytics.

### Page Volume Reduction

Nottingham University Hospitals achieved a 20% reduction in page volumes year on year, while Liverpool Women’s also reported a 20% reduction in page volumes on a year-on-year basis. These reductions reflect both the effectiveness of the policy enforcement enabled by secure print release and the broader shift towards digital workflows that MPS supports.

### Security and Compliance

Secure Print Release transformed document security across all three Trusts. By requiring user authentication before documents are released, the solution eliminates abandoned print jobs and ensures sensitive patient information is only accessible to authorised staff. Comprehensive audit trails support NHS Information Governance requirements and GDPR compliance.

### Sustainability

Aintree University Hospital’s implementation was explicitly aligned with the NHS “Greener NHS” programme. Lexmark’s environmental focus and “print less” ethos and intentionally designed products, delivering technology that operates productively and efficiently over 7+ years, enabled the Trust to drive its sustainability agenda through smarter energy and material consumption. As standard the service includes the Lexmark Cartridge Collection Programme (LCCP), which operates a zero-landfill policy, enables easy cartridge recycling and supports the NHS’s net zero carbon target.

Across all three Trusts, the combination of fleet rationalisation, page volume reduction, and mono-centric print policies has significantly reduced environmental impact.

### Summary of Key Results

Metric	NUH	Liverpool Women’s	Aintree
Fleet Reduction	<b>40%+</b>	<b>30%+</b>	<b>70%</b>
Cost Savings	<b>£1M+ over contract</b>	<b>70% spend reduction</b>	<b>Significant savings</b>
Page Volume Reduction	<b>20% p.a.</b>	<b>20% p.a.</b>	<b>Significant</b>

Implementation Time	6 months	4 weeks	On schedule
Contract Duration	5 years	5 years	Multi-year

## A Blueprint for Excellence: Sharing Best Practice

The success of these implementations has created a valuable blueprint that other NHS Trusts can learn from. Liverpool Women’s NHS Foundation Trust, , has actively engaged with other Trusts to share their Smart MPS project blueprint and recommendations for maximising savings, patient safety, data security, and efficiency benefits.

This collaborative approach exemplifies the NHS’s commitment to spreading best practice and innovation across the system.

## Strategic Alignment: Supporting the Three Shifts

The experiences of these three Trusts demonstrate how intelligent print management directly supports each of the three shifts at the heart of the NHS 10 Year Health Plan:

**From analogue to digital:** By integrating print infrastructure with clinical systems, enabling point-of-care scanning, and supporting the digitisation of patient forms, MPS provides a bridge between paper-based legacy processes and fully digital workflows. The goal is not simply to print better, but to print less—shifting information flows from physical documents to digital records that can be accessed, shared, and analysed more effectively.

**From hospital to community:** As care moves into neighbourhood health centres and patients’ homes, secure, efficient document management becomes even more important. Lexmark’s cloud-based solutions and secure print release capabilities support distributed care delivery models where clinicians need to access and produce documents across multiple locations while maintaining security and compliance.

**From sickness to prevention:** The productivity gains and cost savings delivered by MPS free up resources that can be redirected to preventive care initiatives. When Trusts are spending less on paper, consumables, and device maintenance, they have more to invest in proactive health programmes. The sustainability benefits also align with the NHS’s recognition that environmental health and population health are interconnected.

## Looking Ahead: The Future of Healthcare Print Services

The Trusts featured in this case study are not treating MPS as a one-time project but as a platform for ongoing transformation. Liverpool Women’s plans to use the project as a platform to adopt further “paper light” initiatives through a modular approach. Nottingham University Hospitals continues to work with Lexmark to identify incremental gains in line with both financial targets and their evolving digital roadmap.

As the NHS 10 Year Health Plan implementation progresses, the role of intelligent print management will continue to evolve. Future developments may include:

- **Deeper integration with electronic patient records** to enable seamless capture and routing of clinical information and patient communication
- **AI-powered analytics** to predict device failures, optimise placement, and identify workflow inefficiencies
- **Extended deployment into community settings** as neighbourhood health services expand
- **Enhanced sustainability tracking** to support NHS net zero reporting requirements

## **Conclusion: Print as a Strategic Enabler**

Managed Print Services may not command headlines, but its impact on NHS transformation is undeniable. The evidence from Nottingham University Hospitals, Liverpool Women's NHS Foundation Trust, and Aintree University Hospital demonstrates that intelligent print management delivers measurable improvements in efficiency, cost control, security, and sustainability.

More importantly, MPS creates the foundation upon which broader digital transformation can be built. By rationalising fragmented fleets, implementing secure print release, and supporting the shift from paper to digital workflows, Lexmark Smart Managed Print Services helps NHS Trusts deliver on the three shifts at the heart of the 10 Year Health Plan.

For NHS organisations striving to deliver more with less, MPS offers a proven, scalable pathway to unlock efficiencies, support digital transformation, and improve patient care. It's time to recognise Managed Print Services as a strategic partner in the journey toward a smarter, greener, and more connected NHS.

## About Lexmark Healthcare Solutions

Lexmark has more than 25 years' experience in manufacturing, managing, and servicing millions of output devices globally, placing them in some of the most complex network environments and varied physical conditions. This experience has been adapted to address the specific needs of the healthcare sector, and of the NHS, which continues to be faced with unprecedented financial and efficiency pressures.

Lexmark Healthcare's solutions combine intelligent devices, process and content management capabilities, and managed services to help healthcare organisations bridge the gap between hardcopy and digital information. By providing visibility, control, and continuity in the most demanding 24/7 environments, Lexmark enables clinicians to spend less time dealing with printer issues and more time with patients. [#PatientsnotPaper](#)

### Find Out More

To learn how Lexmark Smart Managed Print Services can support your organisation's digital transformation journey, contact your Lexmark Healthcare account representative ["my details"](#) or visit [https://www.lexmark.com/en\\_gb/industries/healthcare.html](https://www.lexmark.com/en_gb/industries/healthcare.html)