



Government Initiatives

Scanning the horizon: the evolution of Scan4Safety in the NHS

Two years, four phases and six trusts on: the Scan4Safety programme has demonstrated the benefits of adopting standards in the National Health Service (NHS) in England. Through Scan4Safety, which has been called a world first, the Department of Health (now the Department of Health and Social Care or DHSC) funded the implementation of GS1 and PEPPOL standards in six acute NHS trusts (hospitals). As the demonstration phase draws to a close, it is timely in 2018 to reflect on the challenges and achievements of these six organisations.

By Steve Graham



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Introducing Scan4Safety

Six acute NHS demonstrator sites were funded through the GS1 and PEPPOL implementation programme that launched in 2016. It began under the banner of eProcurement. However, early implementation in NHS trusts highlighted the need for the programme to be badged more appropriately given its benefits; hence, Scan4Safety was born.

The six successful trusts that were selected through a competitive bidding process are diverse: some large, metropolitan centres and other district hospitals serving largely rural populations, spanning from the tip of Cornwall to Hartlepool in the north of England. This diversity resulted in the implementation process where these trusts went through being tested in very different healthcare environments—a strength that stands subsequent trusts in good stead. It meant that the learnings that each trust captured would provide knowledge that could help in future implementations, no matter the demands on their own local health populations.

Global standards, specifically GS1 and PEPPOL, are difficult to make tangible. However, in its more basic form, Scan4Safety involved uniquely

identifying, usually through the use of barcodes, each constituent's input to the delivery of healthcare. Scan4Safety was about identifying and tracking "patients, products and places" in hospitals and coupling the scanning of these with common and best-practice "processes." Thus, the "Scan" and the "4" Ps in Scan4Safety become clear.

The implementation of standards in healthcare is a potentially vast and unwieldy objective. A key success factor for Scan4Safety was in breaking this objective down into methodical and manageable tasks. These tasks were grouped into four phases, with a DHSC review panel keeping the trusts on track and assessing the actual progress made against plan.

Safety, operational productivity and efficiency

The key to successful implementation was in Scan4Safety becoming more than just an exercise in procurement and efficiency. These gains, despite their operational utility, were not enough to secure the hearts and minds of doctors, nurses and healthcare assistants working in the NHS.

Securing the buy-in of senior clinicians was critical to ensuring a smooth implementation without interruption to business as usual. Through the appointment of trust board sponsors and clinical champions, these six sites garnered widespread support under the banner of Scan4Safety.

Linking the power of barcode technology to a greater ability to deliver improved patient safety and greater visibility of a patient's pathway through the hospital (and eventually even through the complete NHS system) was an argument that was able to convince those on the frontline of the benefits of Scan4Safety. The full benefits could only be realised through the full and seamless embedding of Scan4Safety across the length and breadth of a hospital's day-to-day activity.

Additionally, the application of Scan4Safety through a structured and coherent methodology, which has since been built upon, captured and documented through the learnings of the demonstrator sites, was a key success factor.

At a national UK level, Scan4Safety underpins a range of initiatives designed to tackle some of the most persistent challenges facing the NHS today, such as the Carter programme, Paperless 2020 and the European Union's Falsified Medicines Directive (FMD).

Demonstrable benefits

In applying GS1 and PEPPOL standards to patients, products and places, the six demonstrator sites quantified and captured the true costs and benefits across their organisations. As the trusts complete final phase requirements and pass through the audit process in 2018, there is a chance to reflect on their pioneering achievements.

Scan4Safety is delivering hard financial benefits, which sit ahead of forecast at the end of the two year programme. Furthermore, there are yet-to-be-quantified benefits relating to time released to care, staff satisfaction, and indications that points to the programme's significant contribution to patient safety. In just one department at the Royal Cornwall Hospital NHS Trust, five extra cases a week have been completed in interventional radiology as a result of Scan4Safety. In all sites, product safety recalls can be conducted almost immediately and now cost the NHS less than £10 each—a marked improvement.

The opportunity

Barcode technology is proven and economic, yet the case for its effectiveness was yet to be made in the NHS before the demonstrator sites. This demonstration has only just begun to touch the surface of the possibilities of barcode technology within the NHS.

What began as a highly ambitious and challenging programme has evolved to a place where the demonstrator sites are looking to continue their work beyond the funded two year period and to extend the scope of Scan4Safety to include further use cases and enabling standards. Scan4Safety has brought into vision the opportunity to reduce the occurrence of medical errors and "never events" and has buy in from senior managers in hospitals whereby they are committing longer term resources and funding to Scan4Safety. With 148 trusts and a multitude of undiscovered use cases to go, the wide horizon of Scan4Safety is beginning to materialise.

What's next?

While the eProcurement Strategy remains relevant and recognisable source material, Scan4Safety has evolved into an internationally recognised programme. With the benefits now demonstrated, it is essential that next steps and the potential for rollout are undertaken in a similarly structured and methodical manner. The full potential of the programme—the release of £1 billion of benefits over seven years as well as organisational and patient safety benefits—will only be realised with continued perseverance as the NHS and its supplier base moves towards GS1 and PEPPOL compliance.

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About the Author



Steve Graham leads on NHS eProcurement policy at the Department of Health and Social Care in England. He developed the NHS eProcurement Strategy, published by the Department of Health in May 2014, and leads a small team focused on delivery of Scan4Safety, a project

to implement GS1 and PEPPOL standards in the NHS, working with six NHS Trust Demonstrator sites and the NHS supplier base.

Steve previously led the Innovative Technology Adoption Procurement Programme for the Department of Health, focused on increased adoption of medical technologies to improve patient outcomes whilst reducing costs. Steve has significant private sector experience, including: procurement roles in manufacturing; Commercial Director for the hospital division of a European pharmaceutical wholesaler; and Director for an innovative supply chain finance solution provider.

As a Member of the Chartered Institute of Procurement and Supply (MCIPS)—qualified procurement professional, Steve has led national, regional and local procurement teams in the NHS, and has set up and managed several regional NHS procurement organisations. He has managed warehousing and distribution operations, and led the national procurement of medical devices and services, particularly in the cardiac and disability sectors.