cracking the code

The NHS in England is moving towards a common barcode system for its supplies and is due to reach an important milestone soon. But what are the benefits and when is it likely to be implemented?
Seamus Ward scans the horizon

Barcodes are not all they seem. They may look pretty standard, with the numbers and thickness of the lines changing to give each product a unique identity. But there are many different types. Indeed, one NHS trust reports finding 13 different types of barcode in a stock room audit, a finding that is not unusual.

Lack of standardisation means it's difficult to collect accurate information – on cost and usage, for example – which makes price comparison, or even when to order new stock, challenging. With no single system, it is no wonder that health service procurement has yet to embrace barcodes with the same gusto as its sister functions in supermarket chains.

However, standardised NHS barcodes are on their way following the launch of the Department of Health's e-procurement strategy last year. As well as standard barcodes for supplies, codes – linked to NHS numbers – could be added to inpatient wristbands as a matter of course.

The strategy opted for the GS1 standard (combined with a messaging standard known as PEPPOL) and in June trusts in England will pass an important milestone in its adoption. By that time, they must have appointed a senior manager to oversee GS1 adoption and have an adoption strategy in place.

The GS1 standards are overseen by a global, not-for-profit organisation, also known as GS1, which is working closely with the Department, trusts, suppliers and other stakeholders – such as the royal colleges – to smooth the adoption of its standard.

According to GS1, by mid-March more than three-quarters of trusts had appointed management leads. However, procurement professionals believe that some may not be the best people for the job. One trust is said to have appointed an interim IT manager to lead its

GS1 strategy, for example. Others say clinicians rather than operational managers would be a better choice.

Glen Hodgson, head of healthcare at GS1 UK, says the Department asked each nominee to carry out a self-assessment to ensure they were right for the job. And he points out that many GS1 leads are finance directors, chief information officers and, occasionally, medical directors.

Some trusts are reportedly holding back on their strategy while they wait for Department guidance and templates for planning and implementing GS1. These had been scheduled for release in January, but were not due to be issued until the final week of March.

Mr Hodgson says the standards offer three main benefits. They improve patient safety, deliver stronger regulatory compliance and lead to operational efficiencies.

'GS1 standards can help the NHS save thousands of lives and millions of pounds,' he says. 'It provides the foundation for integrated patient care, enabling global unique identification,

whether it's of a person, product or place. This information is valuable as it allows you to tie up every activity in the hospital, particularly around the patient journey – everything that happens to that patient and who did it.'

NHS Shared Business Services solutions consultant Dan Godfrey agrees. He

says GS1 and PEPPOL messaging standards are significant steps in transforming NHS procurement, leading to improvements in patient safety and cost savings.

'The use of key procurement standards, including the adoption of GS1 and PEPPOL messaging standards, will enable NHS organisations to better manage their non-pay spend,' he says.

'The quality of data will be much improved and will enable trusts to benchmark their purchases against buying trends across the whole landscape. This in turn will support the drive towards achieving not just cost savings, but deriving better value when it comes to procuring non-pay items.'

Mr Hodgson continues: 'For procurement activities alone, the adoption of GS1 standards in a 600-bed trust would produce savings of £3m-£5m a year – that is directly from the McKinsey *Strength in unity* report [about the potential benefits of global healthcare standards]. There are clear benefits in reduced inventory, supply chain visibility

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– delivering certainty of what you have and where – product safety recall and reducing the transactional costs of supplies.'

GS1 standards could also help trusts comply with forthcoming legislation – this includes the introduction of unique device identification in the wake of the PIP breast implants scandal.

Also, in June, the European Union is to publish its proposals to protect consumers against counterfeit medicines, which are expected to include plans for unique serial numbers on all medicines by 2019.

Mr Hodgson insists trusts' GS1 strategies must not become another document gathering dust on managers' shelves. 'If it is done right, it should help deliver trusts' main strategies – for example, patient-level costing or their unique device identification action plan.'

Leadership, resources and funding are vital. Jackie Pomroy is head of supply chain at NHS South of England Procurement Services. It serves a number of trusts, including Portsmouth Hospitals NHS Trust (its host trust) and Isle of Wight NHS Trust.

She says the executives and senior managers at these two trusts have understood the importance of GS1 and are backing it. But this is not necessarily true in all other trusts.

Despite the delays in the NHS in England as a whole, she believes the process will take off quickly following GS1 roadshows in March and the publication of the Department guidance and templates.

'It will include templates for cost-benefit modelling, how to develop your business case and operational planning. That will focus people's minds very quickly. However, while some people may have a plan by June, that doesn't mean it is going to be implemented by June,' Ms Pomroy adds.

She is chair of a GS1 Southern group for trust procurement staff, from Cornwall to Bristol in the west, Portsmouth and Reading in the east and everyone in between, covering an area along the south coast and up to the M4 corridor. It shares best practice and plans to change its name to the GS1 adoption group and expand its membership to include trust GS1 leads.

Ms Pomroy says the guidance will advise each trust to have a project team in a number of areas, including finance, IT, estates, pharmacy and procurement. 'This is not a tick-box exercise,' she says. 'This is something that has to happen across trusts and then become part of its business as usual.'

The NHS standard contract has changed to require compliance with GS1 and Ms Pomroy says the procurement service will use compliance in their scoring mechanism when assessing suppliers.

'Tesco would say to suppliers that if they don't meet this standard, they will not do business with them,' she says. 'Perhaps that's a point the NHS must reach. A lot of suppliers will talk about the cost of compliance, but it would benefit them as well. It would smooth their supply chain and help them manage their stock better.'

Encouraging uptake

Mr Hodgson says the challenge is to convince both trusts and suppliers of the benefits of GS1. The use of a single barcode system will enable the Department to create a single catalogue of NHS supplies. If a product offered by an alternative supplier – perhaps at a lower price – is the same as the product that is normally purchased, they will have the same barcode, allowing trust procurement teams to compare like with like.

'This single version of the truth will mean that everyone gets the same information about their products. It will reduce the cost of transactions because we will know what product has been delivered, where and at what time. At the moment, a lot of effort is spent chasing proof of delivery.'

The Portsmouth and the Isle of Wight trusts are a step ahead in introducing GS1 barcodes as a result of their work on inventory

management, Ms Pomroy believes. 'Using our inventory management system, we came across 13 different barcode systems being used. There was no standard,' she says. 'We met with a consultant from GS1 in 2012 to demonstrate the issues and from that point on we worked closely with them to drive the change.

'GS1 even wrote to our top 30 suppliers on our behalf to encourage them to adopt its standard. That really helped and we are seeing an increasing number of products with the GS1 standard barcodes.'

A GS1-compliant inventory management system is vital, allowing trusts to control their stock and reap the benefit of spending only when it needs to be replaced, she adds.

Need for standards

Nicola Hall, managing director of Ingenica Solutions, which provides GS1 compliant inventory management solutions, says that without standardisation it is impossible for trusts to understand where their procurement budgets are being spent.

'The NHS will buy a product at a variety of prices and some vary widely, but it hasn't got enough data to manage that. Different trusts will be contracting for items at different times and paying a variety of prices.

'One trust's data showed it paid, over a two-week period, £20 and £40 for the same product,' says Ms Hall. 'Every department could be placing orders for the same common-use items.'

GS1 adoption is a huge change management programme, she adds. 'The big challenge is delivering the strategy. Everyone is quite frustrated about how slowly it is moving forward. Perhaps with the financial imperative, it should be moving much quicker than it is.'

Central Manchester University Hospitals NHS Foundation Trust procurement services development manager Mark Stevens also acknowledges it will be a 'massive project' for trusts (see box), but he is confident that it can be delivered. 'A good example is that you

Forging ahead

Central Manchester University Hospitals NHS Foundation Trust, which has a non-pay spend of about £350m, chose not to wait for the Department guidance to come out. It has been working closely with its suppliers and GS1 to smooth the adoption process.

Mark Stevens, the trust's procurement services development manager, says a recent review of one store room found 17 different types of barcodes. The trust has been talking to suppliers – around 500 to date via webinars with GS1 – about the benefits of GS1 barcodes, both to the trust and the suppliers.

'We've completed an analysis of our stock room and about 60% of our suppliers are already registered to use GS1. But how many are using the barcodes is a different matter.'

Trusts have a role in encouraging suppliers to adopt and use GS1, he adds. 'Trusts must make them aware of GS1 while we are waiting for a mandate on when everyone must move over to GS1.

For some suppliers it could take up to three years. Their supply chains are not just in the UK and they must get a GTIN number for each stage of the supply process before they can get a GS1 barcode. It's not just a matter of labelling a box. There has to be a joint approach and trusts have to get into a position where they can use the GS1 codes. Then, everyone will benefit.'

Mr Stevens adds that the trust has highlighted the clause in the NHS standard contract on the use of GS1 to both its buyers and suppliers, and the importance of moving towards GS1.

Central Manchester has appointed head of procurement and e-commerce Simon Walsh to oversee its adoption strategy, together with a non-executive director. Mr Walsh, also chairman of the Health Care Supply Association, says the trust is taking the GS1 strategy 'very seriously' and approaching it 'with great energy'. The trust is looking at how GS1 can be applied and the consequences of doing so in 12 different areas, including pharmacy, finance and nursing.

'It's not just about procurement or finance, it's also about nursing and avoiding adverse drugs incidents, which of course are a cost to the trust,' Mr Walsh says. 'Ultimately, this is about patient safety. The main thing is to realise the benefits and get the message out – finance and procurement are in a good place to support that message.'

have to have a GS1 code if you want to sell on Amazon,' he says. 'If a vendor that sells handmade bracelets for 50p to £1 can do this using GS1 codes, so should those selling to the NHS – though I understand the greater complexity of their supply chains.'

The trust head of procurement and e-commerce, Simon Walsh, says trusts and suppliers must work in partnership to deliver GS1, but it will not happen overnight.

'We are looking at three to five years for

most trusts. For the bigger trusts, it may be easier as they will have more resources. But for some trusts facing financial challenges, funding for this may not be top of the pile when it comes to prioritising resources.'

Mr Hodgson is pragmatic about implementation. While a number of trusts will lead the way, he believes many others will be surprised about how much of the equipment and systems needed are already in place. Very few will be starting from scratch.

'The vision the Department has is that every transaction that results in an invoice for a trust should be GS1-compliant. That could be in seven years' time, but the focus now is to deliver the procurement savings.'

GS1 barcoding is coming and should help the NHS deliver many of its objectives, including better patient safety and efficiency savings. But the message is clear: this is a medium-term project. ○

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