Progressive EPR deployment - the fast track to digital maturity

Paul Volkaerts, CEO at Nervecentre Software

Nervecentre CEO Paul Volkaerts explains how a progressive EPR deployment is faster - and cheaper and safer - than other approaches, and why that's more important today than ever before.

The NHS is amidst a digital transformation, with a total of £2 billion allocated to improve digital capability across NHS trusts. The ambitious target is for all trusts to have an EPR and reach a core level of digital maturity by March 2025. As many as 30 concurrent EPR deployments will be required over the next two years to meet these targets.

Why choose a big bang EPR deployment?

The traditional approach to EPR deployment is the big bang when old systems are switched off, and the new system is switched on across the entire site – or multiple sites – in one day. It's typical for a trust to dedicate hundreds of people to a big bang project for around two years, followed by a further 12-18 month stabilisation period, before returning to pre-EPR levels of performance when they can start to realise the net benefits.

Every trust that has been through a big bang deployment would say it was a huge project but worth the effort. It's an approach that allows the trust to rally staff towards the singular purpose of achieving high levels of digital maturity in as short a time as possible. However, these projects have challenges too:

- The hospital cannot close its doors during the big bang, so there are many workstreams running in parallel, which all need short-term resources - forcing the trust to buy in expensive external implementation skills

- Project overruns are common and expensive with such large teams, and projected cost benefits are normally not achieved during the first two years

- Hospital staff are asked to accommodate very high levels of change, which can impact morale and wellbeing

- Business-as-usual services and processes can be affected. It is not uncommon for hospitals to issue notices asking the public to avoid coming to the hospital in the months after a big bang and the volume of clinic appointments may have to be reduced. Access to data and visibility of hospital performance can be obscured for months, and medication errors may increase.

- Patient safety may be compromised in specific ways. For example, one trust reported a cluster of never events in the first month after its big bang EPR go-live.

These points are not controversial. They are accepted and expected as the necessary rite of passage to reach the better world of fully digitised healthcare. They come from a retrospective look at the 15 big bang EPR deployments from the past five years. The 30 EPR deployments expected over the next two years will require five times more resources - at a time when freeing up hospital staff is harder than ever before. It's a sudden and dramatic increase in the number of concurrent EPR deployments across the country, and we should expect an associated surge in demand for experienced implementation skills that could outstrip availability.

Modular deployment - the slowest approach

The opposite of the big bang is to deploy the EPR module-by-module. This is a very well-trodden path for hospitals and is usually associated with best-of-breed approaches although it is of course possible to work this way with an EPR from a single supplier. Trusts typically need very few resources when deploying one module at a time, typically as few as five-to-ten people, and often these people have other roles or are on loan to the project one day per week.

Whilst modular rollouts do not have the risks of a big bang, they introduce risks of their own. Projects can lack momentum or executive support if they are not ambitious enough. They can get stuck on points of detail more easily than a big bang deployment would, and they may introduce the need for additional integration with incumbent legacy systems that wouldn't be necessary with a big bang.

But the most significant drawback is that the NHS needs to digitise at pace, and the modular approach is simply too slow to deliver the required levels of digitisation.

Progressive at pace

What if you could roll out an EPR quickly and safely, combining the ambition, executive buy-in and focus of a big bang, but without the risks, disruption, and impact on staff and patients? There is a way to do exactly that, and we call it 'progressive at pace'. Think of it as spreading the big bang over three smaller deployment projects. Our experience of deploying this way is that it can dramatically reduce costs and risk, and avoid disruption to hospital operations and the consequential impact on patients.

This approach to EPR deployment can shorten the time to benefit in comparison to a big bang. With substantially less front-loaded planning, configuration and training, the first parts of the EPR can be deployed years earlier and, with strong project management, the whole EPR project can be completed in less time too.

During a progressive-at-pace deployment, the trust and supplier work on all EPR modules at the same time (as they would with a big bang), so they're building the PAS, medicines, orders, letters, documentation, appointments, infection control, portering, patient engagement, and theatres in parallel; but then deploy them in three sequential tranches of functionality.

Many of the financial benefits of an EPR deployment come from quality and efficiency improvements that translate into reduced cost or increased revenue. The clinical modules generate most of these benefits, so if you deploy these parts of the EPR sooner, you can start to accumulate the benefits sooner too.

Three shorter projects are easier to manage than a big bang, and they cost less too. With fewer parallel workstreams, trusts are less dependent on expensive external resources and can use their own staff more of the time. There is much less impact on staff morale and wellbeing, and the training requirements diminish with each tranche of the deployment as staff successively learn to do more with an EPR they already fundamentally know how to use.

Summary

It is currently most common for NHS trusts to undergo a big bang deployment. But in an environment that is necessarily risk averse, why do we approach EPR deployment in a manner that's well understood to be high risk? There is a better way to deploy EPRs where change can happen progressively, and it is faster, safer and costs less than other methodologies.

The focus is on quality and delivering the trust's targeted transformational benefits, which can start to be accrued in the first year of the EPR implementation, boosting progression to digital maturity goals.

At Nervecentre, we consider ourselves the champions of progressive EPR deployment, which has been coined as the "less glamorous approach that keeps clinicians happy". In my opinion, it is the only model that's appropriate for the NHS today.