Can we do more with clinical audit to prevent NHS data silos?

Could linking clinical audit studies with other datasets provide new insights as NHS organisations work to improve services for patients? Martin Dean, CaseCapture system architect, asks the question.

I was recently asked if it would be possible to highlight NHS trusts that had been affected by ransomware, within a national clinical audit.

NHS cyber-attacks were not the focus of this particular study. But the organisation behind it wanted to understand how ransomware might have influenced data collection, and potentially how it had impacted patients.

Enriching audits

It was an interesting request, which we hadn't received before, despite many years of working on clinical audits across the health service.

It led me to consider what other information, not obviously related to the focus of clinical audits, could help to present a richer and more holistic understanding of the data being captured, and by extension of the services being delivered for patients.

Many audits in the NHS already do link their data to national datasets, such as hospital episode statistics. But could other information, potentially non-healthcare related, facilitate a better interpretation of audit data?

For example, could indices of deprivation help to highlight inequalities? Could we integrate that data into our reporting for NHS organisations, as standard, or as and when needed?

These are questions that come down to audit not being seen as a tool for improvement in isolation. The existence of data silos, and the need to break them down, has long been a topic of national discussion in the NHS when it comes to patient records. Rather than relying only on the record created in a single organisation, clinicians want to see a longitudinal history of a patient's healthcare, to paint an informed picture, before they make decisions.

Should audit be any different, when it is relied on for many important decisions and to highlight important areas of concern?

Existing data, new correlations

Audits do already lead to significant impact. They are a core driving force behind quality improvement initiatives throughout the NHS, and we are proud to have supported many audits that have led to the health service measuring reductions in mortality, and improved outcomes for patients.

But by thinking about new questions, and new ways to correlate data, we might be able to enhance this important source of intelligence even further, to help focus quality improvement programmes where they are needed most.

We already know that deprivation is linked to poorer health outcomes for many patients. But what don't we know? What other datasets already exist that we could utilise to create new understandings on the factors that affect patient outcomes and the healthcare services there to support those patients?

Part of this could be supported by collecting more generic information during audit. But we should avoid putting extra data collection weight on clinicians where we don't need to.

We can bring in much of this information from third parties. A lot of information is freely available, published by the government. We already use a postcode API to check addresses. But included in

that can be a lot of statistical information – such as average income. This isn't difficult information to provide, but it could help to shed new light on what patients are facing.

And, into the future, could suitably anonymised clinical audit data become a source for researchers or even for healthcare AI to find new answers as part of a much larger linkage of datasets?

Collaboration across audits

The possibilities of the future of clinical audit are exciting. But there are also quick wins to be had today. If we collect data on ransomware for one audit, there could be potential to make that available for other audits that want to understand if this has skewed their data.

We also often find that customers collect similar data. In the case of national audits, different royal colleges might be able to better collaborate to collect this data more efficiently and lessen the data input requirements on healthcare professionals.

And even where this data is not similar, a shared understanding of data in different audits could reveal entirely new insights.