Is Vendor Neutral Archiving The Best Building Block For A Digital Patient Record?

With the National Programme for IT fading into the rear-view mirror, new storage contracts for many NHS Trusts need to be sourced. The good news is that this doesn't have to be a problem – and indeed, could be a real opportunity to find new ways of working with patient data of all sorts, thinks Mark Winstone of SynApps Solutions

As National Programme for IT central contracts come to the end of the line, the way many hospitals have been handling their off-line storage for PACS (Patient Archiving and Communications System) X-ray and MRI imaging is coming to an end, too.

Most NHS Trusts have transitioned successfully on to new PACS arrangements. However, for at least some forward-looking Chief Clinical Information officers (CCIOs), the sunsetting of these old Programme deals has prompted them to put some real thought into not just new PACS deals, but possible alternatives to that whole siloed approach. And the one that is coming to the fore is a standards-based approach that is being looked at because it can easily act as a PACS warhorse – but also do a lot more.

That's the Vendor Neutral Archive approach, which can cope with both complex data types such as radiology images but also other sorts of clinical data – including scanned documents, when wedded to a proper Content Management platform.

Apart from its inherent technical capability, NHS CCIOs also like the way it keeps their options open – because with VNA, there's no vendor lock-in; its big advantage is that it is truly neutral, as a true VNA must guarantee that its tags (the metadata used to describe its contents) can be read by another vendor. At the same time, as PACS vendors use the Digital Imaging and Communications in Medicine (DICOM) standard for handing, storing, printing and sharing medical imaging and DICOM allows the integration of scanners, servers and other network hardware from multiple vendors into a PACS, there's great room for flexibility here – VNAs can easily work with non-DICOM as well as DICOM standard documents and images.

Senior health executives appreciate that a great deal because this time round, with so many National Programme lessons to be learned, they want systems that are interoperable so technology from multiple suppliers can be mixed and matched, as they (and their patients) need it.

VNA-based hospital content systems also offer the flexibility of enabling organisations outside a Trust, for example, to securely view patient images if they are referred to a specialist. For these reasons and more, current estimates are that 15% or more of Trusts opting for a PACS change have gone down this road.

Keep simple – but also, as safe as possible

The big take-away: is an enterprise solution that provides a universal infrastructure to capture, store and archive images – plus, when deployed as part of an overall management strategy, provides a number of other key benefits, including forming the backbone of a wider IT platform or as a basis for EPRs (Electronic Patient Records).

A successful EPR strategy is, we all know, a key goal in healthcare, as it is seen as fundamental in providing a secure, seamless service across all health and social care service providers – from Trusts and community health to GP practices – who could share key patient data in a secure, user-friendly way. Thus by taking a content management approach to VNA-based medical records, the distribution of medical data is far more efficient and practicable.

Looking at a VNA for both PACS and a lot more is also closely aligned with the way the Government wants UK HIT (Health IT) to work going forward – local, bottom up and highly open. It is wise to use a technology like VNA that has proved itself in one area of the NHS and open it up to others, avoiding the pitfalls of the National Programme. VNAs are also proven and in wide use across Europe offering lessons in joining up patient information.

There is undoubtedly work involved to make these local projects deliver, of course. First, for ultimate flexibility and reliability, any PACS VNA system has to be able to preserve the original tagging and metadata so that these can be restored as required. It also needs to be able to formalise any platform-specific differences so that its archive can manage and interpret all documents in a uniform fashion, but still be able to efficiently access all the data.

In addition, there are questions that any CCIO will need answering before opening this option up, such as; Can the system handle content from a variety of PACS systems? Can it work with multi vendor storage systems, or just one? Does it support true document cross sharing (XDS)? And the biggest question of all – what problems are we actually looking to solve with VNA?

To conclude, while the concept of a unified storage data system is nothing new in the corporate world, in the NHS, it is still in its infancy. In fact, the NHS has much to learn from the experience of the private sector, where practical, small-scale options are weighed up and the emphasis is always on 'build it small, but ready to scale'. We should also look to Europe as healthcare systems there are putting this philosophy into practice.

We need to take a leaf from their book – and sieze this amazing post-National Programme PACS opportunity. ■

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More: www.synapps-solutions.com

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