

‘NHS CIOs and CCIOs need to lead digital imaging strategy’

Chief information officer Andy Wicks explains why imaging is no longer the responsibility of radiology in Morecambe Bay – but a matter for trust-wide and regional strategy.

The need for a single connected electronic patient record has underpinned the vision at University Hospitals of Morecambe Bay NHS Foundation Trust ever since one of my predecessors started writing our first digital strategy in 1997.

But it’s only relatively recently that I’ve come to fully understand the importance of a trust wide vision for imaging, and the benefits of an ‘image enabled’ EPR strategy.

Making the right imaging available to the right people, in the right place, and at the right time, can be just as important as enabling the digital flow of any other crucial clinical information. But for that to happen the design and management of image flow must be elevated outside of any departmental silo.

In Morecambe Bay we now treat imaging as something to be managed at the enterprise level – and more than that, we want it to enhance care across the hospital, in community and primary care environments across the bay, and at the regional level for our integrated care system partners.

‘Changing the way we look at patients’

Since we digitised radiology back in 2007, we have not only ended a reliance on light boxes and films, but we have been enabling better reporting, more informed clinical decisions and enhanced care.

Visibility of images at the point of care has continued to improve, notably by the more recent upgrade to a second-generation picture archiving and communication system, or PACS from Sectra in 2016.

“This has changed the way we look at patients”, said one consultant musculoskeletal radiologist, who added that radiology is now consequently better connected to clinical delivery. “Examining a patient’s imaging is now like reading a book,” he said.

Our clinicians don’t waste time requesting images from radiology. Wherever they are working, they can now instantly view imaging through the trust’s Lorenzo EPR, or log directly into the PACS where they can interrogate imaging in ways previously reserved for the radiology department. Better visibility means we can avoid unnecessary repeat imaging or more easily decide on the most appropriate tests that need to be done next, whilst radiologists themselves are able to benefit from remote or home-based working, which has been a real boost for recruitment. All kinds of new possibilities are being opened-up.

Extending possibilities beyond radiology images

Importantly our PACS investment is not a radiology investment – rather it is part of an ‘enterprise image management system’. We now have around a dozen departments eager to put their imaging into the system, and that is just in the hospital.

We are having discussions with GPs about whether we can capture ECGs. On the ward nurses have iPods with built in cameras. It wouldn’t be a big leap forward for nurses to take images of pressure sores on the ward, which then they could store in the enterprise image management system to ask for second opinions, or to share with community nurses. Already, often simple, but meaningful differences are being made. For example, instead of a patient having their dressing

removed three times in an afternoon, different staff can view an image of the wound from the first time it was examined. There is massive opportunity – and with the right imaging infrastructure we are now working to take it forward.

My message to other trusts: Don't view your imaging platform as a radiology departmental service. When you start to look into the potential and the benefits of what PACS can do – they apply far outside of radiology. Think of an image as an integral component of a patient's digital record.

Time to get serious about the direction of travel in the NHS

This is about creating an imaging platform to support the direction of travel in the NHS around integrated care. Right at the heart should be a connected EPR, and alongside that, hand in glove should be a single digital record of images. These are not separate considerations.

With our imaging stored in a central vendor neutral archive, we also have the potential to expose it to artificial intelligence and machine learning, as the trust begins to explore these possibilities for transforming the diagnostic landscape, aligning with the Tech Vision put forward by the health secretary.

Imaging now informs our regional discussion. We won't just be sharing images within the hospital, but with GPs and across other providers in our integrated care system ICS – our new enterprise approach supports that.

This supports the patient journey, with many of our patients travelling from Preston and Blackpool. And it allows us to support multi-disciplinary teams which operate across not just our organisation, but across the regional ICS, where clinicians collaborate, and where we can make the most of specialist and scarce resources. Morecambe Bay's dermatology expert is a local GP, for example. We can now easily send images for his opinion instantly. Clinicians from neighbouring trusts can also already log in to our PACS and we are working to create even tighter integrations across the ICS.

Leadership – we need to take ownership

My department in the trust – i3, or informatics, innovation, information – works directly for the chief clinical information officer (CCIO) and has been heavily involved in co-authoring Morecambe Bay's digital imaging strategy. We have even recruited a digital imaging lead, a completely new role, who will work to advance digital imaging beyond radiology now that we are geared up to do this at scale. The individual will work closely with myself and the CCIO.

All of this is having an impact, first and foremost for our ability to enhance care, but also to add to Morecambe Bay as an attractive place to work.

People now see us as a forward-looking trust, with hashtags like #greatplacetowork emerging on social media. Imaging plays a role in that, with flexible working possible for staff who are able to access images remotely from home. As we push out to more ologies – this will help many more professionals. People are excited to be part of the team – a message even spreading through word of mouth between professionals in different trusts – and that is a big compliment.

None of this would be happening if we didn't have the drive from the top of the trust, and the enthusiasm from staff who want the best for their patients. Our approach to imaging is definitely making a difference.