The evolution of digital imaging systems in 2023 – the quick overview

Technology and PACS has *never* stood still, constantly evolving, and none more so than at present.

Integrated Care System (ICS) are part of a fundamental shift in the way the health and care system are organised across the NHS in England. Following several decades during which the emphasis was on organisational autonomy, competition and the separation of commissioners and providers, the focus of the ICS is on regional sharing and providing care as close to home as possible. Collaboration between hospitals and community diagnostic centres (CDCs) provide remote access and services comparable to hospital site capability.

This trend has extended into radiology and the subsequent full spectrum of imaging including high resolution images and video from cardiology, ophthalmology (OCT scanning), medical photography and digital pathology to name a few. Whereas trust’s imaging and PACS have largely operated in silos and competitiveness, through ICSs the focus has changed to integration between organisations and extending into primary care. Hence, a policy shift towards image sharing, cross site working, and interoperability with primary and community care.
The National Strategy for Imaging Networks published in November 2019 recommended the formation of diagnostic imaging networks (INs) to maximise existing capacity, improve access to specialist opinion and benefit from efficiencies and economies of scale by 2023.

There are now several well-established Imaging Networks containing multiple independent NHS organisations procuring regional imaging systems, often with significant variances in workflow and operating models that require investment in IT, systems integration and standardisation (eg exam codes, primary IDs and scan protocols).

All to facilitate patient movement, interdependency between ICSs, operating autonomous systems with different PACS and RIS providers. And ultimately to improve health inequality.

The power is shifting from local to regional decision making and governance, from on-prem to cloud technology, and from on-site to remote working and single (rad)ology to multi-ology systems. EPRs advancing on RIS, the big move to web, cloud and AI, and the NHS top 5 priority of preventative screening (and CDCs). A lot is happening in the world of PACs and medical imaging!

Strategic direction and alignment to national policy are key. Systems that are cloud native, internet facing, standards based, open and interoperable, regional as opposed to per site. To use a car industry analogy, it’s the shift from petrol and diesel to electric.

And in parallel the ‘must have’ latest features; the keyless entry, driver assist, and smartphone integration of the motor world, in the PACS world are PACS based (and interactive) reporting, AI integration, embedded video chat, mobile (App) access, MDT on demand and muti-ology inclusion to name but a few.

Never has it been so important to have a strategic vision and direction with a 5-10 year plan for execution. One wrong decision, can end up costing a lot of money and a lifetime of pain and lost productivity.

For more in-depth analysis go to Choice Health Consulting latest blogs on;

- Imaging Systems strategy, policy shift and future direction
- 11 ‘must-have’ features in your new PACS
- 9 top tips on how to buy a PACS for an Imaging Group or Network
- 5 benefits of Moving Medical Imaging to Cloud

**About the Author**

Pauric Greenan is an experienced PACS consultant that has been PACS lead on several high profile PACS projects in both the UK and Ireland and is internationally available for PACS consultancy.