# CAMRIN

## Diagnostic IT Network

NHS
Cheshire and Merseyside

Cheshire and Merseyside Radiology Imaging Network (CAMRIN) were awarded £10.8m funding in 2021/22 as part of the Digital Diagnostic Capability Programme (DDCP) fund which was used to improve image sharing and home reporting.

The Diagnostic Network will introduce;

- Development of a dedicated link to manage imaging digital traffic
- Establishing a new high-capacity network for the Cheshire and Merseyside area for Diagnostics.
- The network has been designed to give a potential, resilient, and scalable throughput from each Trust in C&M into the data centres

The network will improve connectivity for remote reporting across Cheshire & Merseyside. It will also future proof the diagnostic network by utilising the latest technology.

## PROBLEM STATEMENT

Radiologists/Clinicians are unable to work effectively across the Network due to bandwidth and efficiency issues. Problems can occur with image quality, system speed and connection issues.

Onsite hardware and maintenance for individual systems such as PACs cost the NHS/Trusts large sums per year

Hardware can quickly reach end of life or full capacity and need replacing which is a huge cost on Trusts.

| The Key Drivers for Change |
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| The increasing demand on diagnostic services, expecting an average 7-18% increase across all imaging modalities except plain X-Ray |
| Ensuring images and all other test results is available to the clinician at the point of treatment |
| Significant workforce shortages within CAMRIN |
| Over-reliance on outsourcing due to technological deficits, creating financial inefficiencies which could be better reinvested into diagnostic services |
| Reducing rising backlogs of unreported images by providing the foundations for AI for low-risk reporting |
| With the introduction of CDCs, there is a need to provide a single requesting and reporting provision, and unified patient administration systems to manage the peripatetic population within CAMRIN |
| The need to reduce waste to increase time-to-care (cancer, endoscopy and respiratory care pathways) |
| Providing technologies that will improve patient outcomes, including clinical safety, and reduce waiting times and avoidable delays |

## APPROACH/SOLUTION

The network will underpin the North West Imaging Strategy. It will enable scalable, high capacity, low latency communication between sites across Cheshire and Merseyside whilst also offering regional connectivity into public and private cloud solutions.

This network is intended to allow for improved network performance in current and future solutions such as Other 'Ologies, Collaborative Cardiology System and Digital Pathology.

### Trusts in Scope

- Alder Hey Children's NHS Foundation Trust
- Countess of Chester NHS Foundation Trust
- Liverpool Heart and Chest Hospital NHS Foundation Trust
- Liverpool University Hospitals NHS Foundation Trust
- Liverpool Women's Hospital NHS Foundation
- Mid Cheshire Hospitals NHS Foundation Trust
- Southport and Ormskirk Hospital NHS Trust
- St. Helens and Knowsley Teaching Hospitals NHS Trust
- The Clatterbridge Cancer Centre NHS Foundation Trust
- The Walton Centre
- Warrington and Halton NHS Foundation Trust
- Wirral University Teaching Hospitals NHS Foundation Trust

## FOR MORE INFORMATION

**If you would like more information on the C&M journey to the out of hours reporting hub please contact:**
**CAMRIN@liverpoolft.nhs.uk**

## OVERVIEW

The National Digital Diagnostic Capability Programme (DDCP) was put in place across the country to "accelerate the update of technologies that underpin the formation of regional diagnostic networks".

Cheshire and Merseyside Radiology Imaging Network (CAMRIN) were awarded £10.8m funding in 2021/22 as part of the DDCP fund which was used to improve image sharing and home reporting.

After a thorough fact finding including a proof of concept with a Virtual Desktop Infrastructure (VDI) provider it was decided that the best use of the CAMRIN funding was to develop and implement an IT Diagnostic Network.

This innovative approach to improving image sharing and remote reporting is currently the only one of its type across the country, to establish the network, the technical design will;

- Use firewalls to allow control an autonomy from an individual Trust level.
- Work with three different suppliers who will deliver the WAN (wired area network).
- Provide a minimum of 10Gb capable network links between trust sites and two central Datacentres used for hosting central services.

## BENEFITS

### Clinical:

- **Productivity gains** as a result of time savings using multiple sites/networks.
- **Reduction of** digital interruptions and time taken to solve.
- Cross-Trust reporting services which will provide **service resilience** and reduce health inequalities of access.
- Increase **quality assurance** and reduce paper. Standardise reporting.
- Decrease the % of services/procedures outsourced.
- Reduces **duplication** and **costs**, drive accurate re-imbursement. Shared licences.
- Potential for other **healthcare economies** utilising diagnostic imaging systems.

### System/Operational:

- **Cost savings** associated with reduced on site storage.
- **AI opportunities & machine learning** utilising the central archive.
- Seamlessly view cross site imaging and reporting.
- Sharing of device management **practices.**
- **Increased activity** in home reporting which could have environmental benefits.
- **Reduction of delays** requesting images and information from other sites.