



Case study

West of England Imaging Network image sharing digital architecture

Background



The West of England Imaging Network is one of 22 imaging networks in England. It comprises four Integrated Care Systems (ICS) and seven acute trusts. The network operates a digital infrastructure programme that involves all imaging sites within its geographical footprint, including:

- Acute hospital sites
- · Community and mental health hospital sites
- Primary care
- Urgent Treatment Centres (UTCs), Minor Injury Units (MIUs) and other community urgent care sites
- Community Diagnostic Centres (CDCs)

The overall aim of the digital infrastructure programme is to provide a service for sharing images and associated information between providers and consumers of imaging services in the West of England Imaging Network, which is safe, timely, resilient and efficient, which supports activity growth and increasingly complex clinical care pathways, and which improves patient outcomes.

While image sharing is carried out in significant volumes, the current process is cumbersome and is unable to meet the network's full requirements and deliver the patient benefits of systematic image sharing.

In order to return to the national six-week diagnostic standard and tackle patient backlog resulting from the Covid-19 pandemic, digital diagnostics that can deliver faster diagnosis and shorter waiting times are required.

The need



West of England Imaging Network needed help to understand what its options were and, once understood, required help and guidance to discover and justify what solution would be well supported and affordable.



Ethical Healthcare was asked to join a programme team to support West of England Imaging Network to complete its options appraisal and evaluation. Our four associates provided specialist knowledge and skills focused on business case writing, financial advice, digital expertise and programme management.

This case study looks at the work involved in the technical options appraisal and Strategic Outline Case (SOC) stages of the process.

Technical options appraisal

We conducted a high-level architecture options appraisal for the network that generated a longlist of technical options that could answer its operational problems.

A simplified 'options template' was developed that established a matrix of different 'domains' through which the project could be delivered.

This process helped the network to understand the technical options available and the benefits and challenges of each. A shortlist of four technical options was selected and presented to the Imaging Network Board in December 2022.

SWOT workshops

In January and February 2023, five workshops were held to assess the strengths, weaknesses, opportunities and threats (SWOT) of the four shortlisted technical options.

These workshops provided valuable space to consider each option fully, assessing everything from practical implementation to cost and the likely efficiencies each one could deliver.

The SWOT analysis did not show any of the options emerging strongly but the process allowed the network to consider how it could incorporate elements from more than one technical option, something which will be explored in more detail when the Outline Business Case (OBC) is developed.

Strategic Outline Business Case

Once we had completed the Technical Options Appraisal and SWOT analysis, the network asked Ethical Healthcare to recommend how to proceed.

Due to the complexity of the task and scale of the organisations involved, we recommended following the Government's Green Book Business Case process and helped the trusts involved to define and justify the investment required.

With our support, the network worked together as one joint team to produce a Strategic Outline Business Case (SOC) that set out its approach and investment requirements. The SOC was delivered in April 2023 and agreed by all seven trusts in the network.

Challenges



The key challenges of the project were:

- Funding timescales the Digital Diagnostics
 Capability Programme fund launched before
 the network had everything it needed to bid
 for financial support. It had to prepare a vision
 and full business case quickly in order to apply
 for funding and allocate it by the end of March
 2025 when the fund closes.
- Availability of funding the network knew where it could deliver financial savings through its programme but it required initial investment to do that. It is very difficult to secure funding when NHS budgets are so tight and fraught with competing demands.
- Fragmented digital infrastructure the network's existing infrastructure lacked consistency, particularly in terms of contract end dates for different technologies and suppliers. We helped the network to navigate those timescales while trying to develop a consistent and coherent programme delivery plan.

Impact



The network is still in the process of writing its business cases but it has seen the impact of this work in a number of ways:

- Establish a network brand the image sharing programme is known across the industry and acts like a brand to articulate the network's vision, mission and purpose.
- Tangible progress this project has yielded tangible work packages and deliverables that have created excitement and increased and improved engagement as people see progress being made.
- Build relationships by uniting people around a common project, the network has been able to build effective relationships at every level across the organisations in the network.



Ethical Healthcare integrated seamlessly into our team and built strong relationships across the network and with our stakeholders.

The Ethical team brought a huge amount of knowledge and experience to the project and helped to upskill our in-house team through coaching and mentoring.

I struggle to see a time when Ethical won't be part of our imaging network team.

Leanne Ashmead, Programme Director, West of England Imaging and Pathology Networks



Next steps, sustainability and scaling



The Technical Options Appraisal and SOC will be used to develop an OBC and Full Business Case (FBC) in due course.

Contact us



If you have similar challenges in your area and would be interested in exploring how we could support your business case development, please contact Rob Taylor, Programme Manager, rob@ethicalhealthcare.org.uk.