



Integrated AI Chest X-Ray Reporting Platform in GM

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Background & Introduction

Radiology services in NHS Trusts are facing significant backlogs of unreported chest X-Rays (CXR):

- 97% of NHS Trusts are reporting backlogs with CXRs nationally
- Some GM Trusts are reporting 3-4 week waiting times for GP requested CXRs
- 76% of Trusts are outsourcing radiology work due to reporting delays (including CXRs)

The project is being progressed and implemented as a collaborative approach between GM Cancer, AstraZeneca and Qure AI. Qure AI's qXR solution uses AI triage for early and faster detection of lung cancer. The project forms part of the GM strategy for earlier diagnosis of symptomatic lung cancer: getting the front end of the pathway right and part of the GM response to the National Lung Cancer GIRFT report.

Project Objectives

- Demonstrate the feasibility of deploying an AI software across a regional imaging network of multiple acute care Trusts in GM.
- Improve CXR reporting efficiency.
- Reduce the time from CXR capture to final report across the entire GM CXR service.
- Improve the time from CXR capture to final report in patients with a CXR suspicious for lung cancer.
- Improve the time from CXR capture to CT imagine in patients with a CXR suspicious for lung cancer.
- Implement a system-wide safety net for patients with a normal CXR but high clinical suspicion of lung cancer.
- Reduce the potential for missed diagnoses of lung cancer of CXR double-read reporting (AI + radiologist / radiographer).

Advantages of qXR

- Automated pre-populated CXR report to speed up reporting process e.g. simple one click approval of normal CXR report.
- Editable generic safety netting statement to normal CXR report.
- Identification of abnormal CXRs and prioritisation for radiologist / radiographer reporting to accelerate the lung cancer pathway.
- Enhanced diagnostic accuracy through a double-read CXR reporting pathway which helps mitigate both machine and human error.

Diagnosis Pathway (with qXR)

