

TRUST-WIDE SURVEY EVALUATION OF HARRISON.AI CXR

NHS

University Hospitals
of Leicester
NHS Trust

NHS

Fellowship in Clinical AI
NHS Digital Academy Programme

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INTRODUCTION

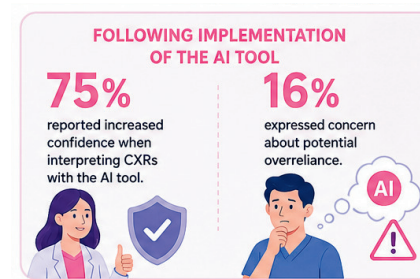
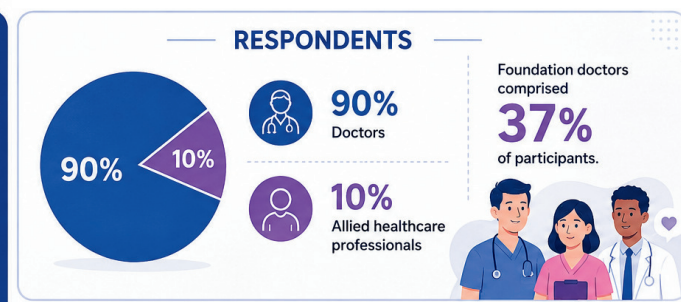
- The Harrison.ai chest X-ray (CXR) tool is a clinical decision support system implemented across a multi-site NHS trust comprising three acute hospitals and approximately 15,000 staff
- This study aimed to evaluate clinician awareness, adoption, and perceptions of the tool during the early phase of its implementation.

METHODOLOGY

- An online questionnaire developed in accordance with **EQUATOR Network guidance** for survey-based research
- Externally reviewed by **Evaluation Researcher**
- Piloted** to assess clarity, completion time, and potential sources of bias
- Distributed via **email**, through **digital champions**, and **face-to-face** engagement.
- Data collection** between **week 6 - 12** following implementation
- Anonymous responses collected electronically** and analysed



RESULTS



CONCLUSIONS

- Early implementation of a CXR AI tool was associated with improved clinician confidence in CXR interpretation. Clinicians retained confidence in overriding AI outputs, regardless of experience level
- Perceived inadequacy of training highlights a key barrier to adoption
- Need for structured education and standardised implementation strategies to support safe and effective integration of AI into clinical practice.

A REVIEW OF CXR'S DISCUSSED IN A QUALITY & SAFETY MEETING

INTRODUCTION

Aims to review historical CXR learning event cases to assess whether an AI CXR tool might have identified abnormalities that were initially missed by clinicians that resulted in delayed/ missed diagnosis for patients and claims and complaints for the trust

METHODOLOGY

Retrospective review of CXR cases was conducted over a 10-year period from a Quality and Safety meeting

19 were classified as relating to a patient-safety event

8 cases were excluded (system errors)

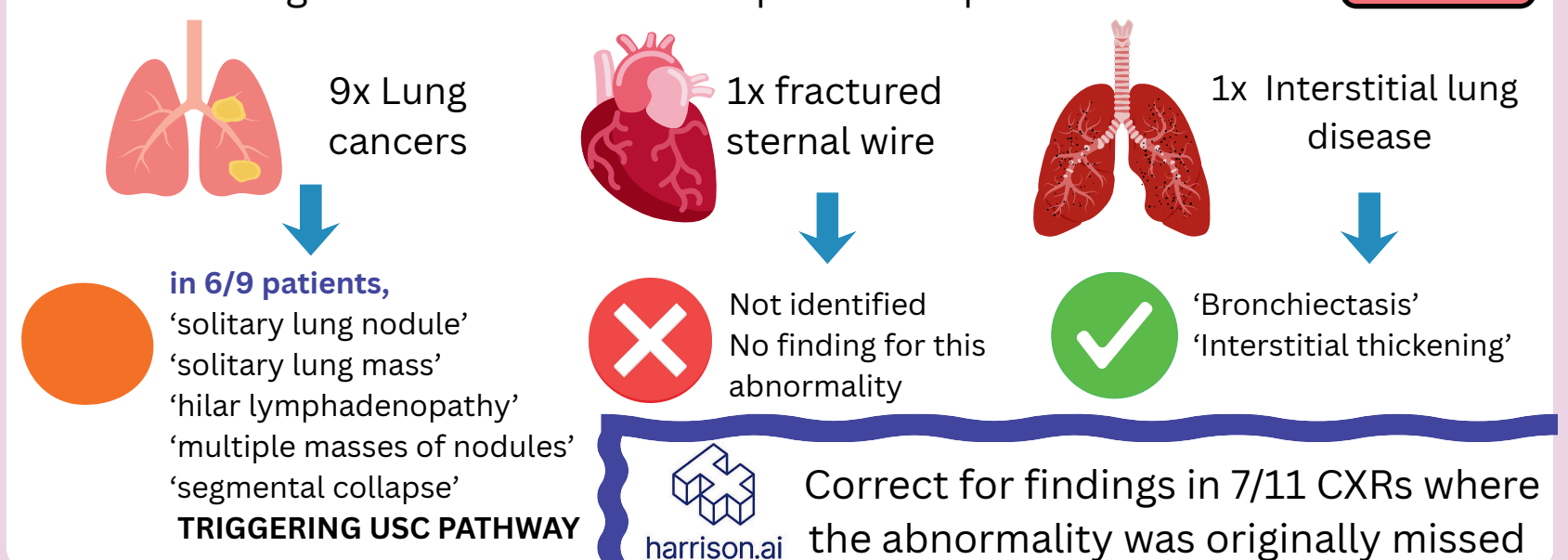
RADIOLOGY MDT GROUND TRUTHING

11 cases were retrospectively analysed using the Harrison.ai CXR software

AI outputs were compared with the consensus findings to determine whether the software would have highlighted the abnormality

RESULTS

Of the 11 cases included, retrospective Radiology Ground truthing concluded they were all **abnormal** and should have undergone further investigation which could have prevented patient harm



CONCLUSIONS

- This evaluation suggests that earlier detection of cancers and other significant pathologies would likely have been achieved had an AI CXR tool been available at the time of imaging.
- Earlier recognition may have improved patient outcomes and, in rarer instances, reduced the financial impact of patient safety events.
- These findings support the conclusion that wider access to CXR AI tools could enhance diagnostic safety and improve patient care across NHS services.