Unlocking Innovation in Healthcare

qure.ai

Better Diagnostic
Pathways with
Artificial Intelligence



Surabhi Srivastava Commercial Lead, UK Qure.ai

# Most Deployed Al Solution Globally

Successfully deployed in

**70+** countries

**1000**+ sites

200M

Images processed annually



### NHS diagnostic Imaging – Status Quo



**Diagnosis/Treatment Delays** 

**Inadequate Quality of Care** 





Increasing Demands for Health Services



**Longer Patient Wait Times** 





**Workforce Constraints** 

- HIGH IMAGING VOLUMES Demand for imaging continues to rise despite the pandemic (34 million in 2019)
- WORKFORCE CONSTRAINTS NHS radiologist workforce short staffed by 29%, expected to rise to 39% by 2026
- BACKLOGS / DELAYS 97% of clinical directors are worried about backlogs and delays for patients
- BURNOUT 98% of CDs worried about declining workforce morale impacting workforce retention and patient safety
- UNREPORTED SCANS 41% of trusts leave imaging examinations as auto-reported or unreported

Source – RCR report 2021 qure.ai

### **Imaging Al Portfolio: Multiple modalities**



qXR

Complete reporting assistance on CXRs

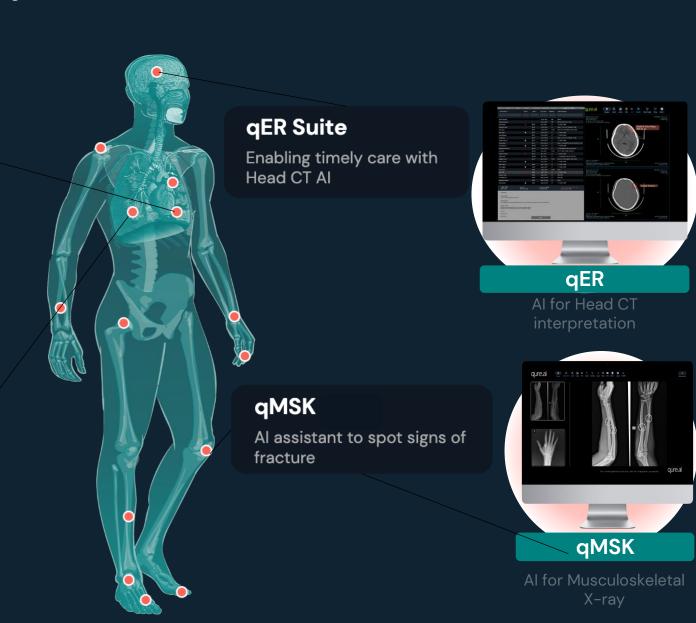
Al for Chest X-ray interpretation



Al for Chest CT interpretation

### qCT: Adaptable Al

Catching lung cancer early



### **Extensive Footprint** Al solutions for the NHS

**EAST** 

**ENGLAND** 



Successfully deployed in

**25+** Sites

150K+

NHS Frimley Health Trust

NHS East Suffolk & North Essex Trust NHS Oxford University Hospitals

Scans

Region	NHS Partner Trusts	Region	NHS Partner Trusts
LONDON	NHS Guys & St Thomas' Trust NHS University College London Trust NHS St George's University Hospital Trust	NORTH ENGLAND	NHS Bolton Foundation Trust NHS Northumbria Healthcare Trust NHS Manchester University Trust NHS Northern Care Alliance Trust NHS The Christie Foundation Trust NHS Stockport Foundation Trust NHS Tameside Hospital Trust
MIDLANDS	NHS University Hospitals Birmingham Trust NHS University Hospitals of Leicester Trust NHS Nottingham University Hospital Trust NHS United Lincolnshire Hospitals		
	NHS Mid Yorkshire Hospitals Trust	SCOTLAND	NHS Greater Glasgow & Clyde Trust
	NHS East Kent Hospitals University Trust		

### qLC-Suite

# Catching Lung Cancer early



#### Al for Chest X-rays

- Incidental detection
- Malignancy risk factoring
- Reduced misdiagnosis
- Fast tracked CTs

qXR



#### Al for Chest CTs

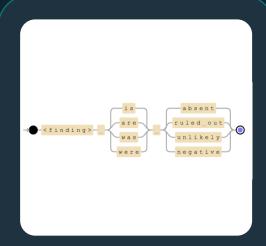
- Opportunistic screening
- Volumetry & Progression
- Malignancy risk assessment
- Fast tracked treatments

qCT



#### **Qure App**

- Hub-spoke for primary care to LCSP
- Intelligent screening
- Follow-up reminders



#### **NLP for reports**

- Identify reported nodules
- Catch missed followups

### **Clinical Evidence - SBRI Award for Lung Cancer from NHS England**

£3.2 million funding

8 Trusts 150,000 Scans

Assessing the Impact of AI enabled patient triage to chest CT on the Lung cancer pathway using qXR

Health - economic evaluation for all the partner sites

#### **PARTNER SITES**





**NHS Trust** 













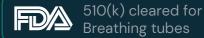


PROF DAVID BALDWIN
Chair, UK Clinical Expert
Group for Lung Cancer,
NHS England

Al solution such as qXR should improve the pathway logistics by flagging abnormalities on chest X-rays as soon as they are undertaken helping patients to progress rapidly through to CT scanning.

### qER: Neuro-Critical Care

Automated Head CT AI interpretation for instant clinician decision support





- Detect 12 different abnormalities on Head CT
- Segregates critical vs non-critical head CT scans
- Triages, prioritizes and notifies critical head CT scans
- Localizes lesions to anatomical structures
- Quantifies reports with volume estimations\*
- Pre-populated templates for normal Radiologist report

#### **Focus Disease Areas**



Bleeds



Cranial fracture



Stroke



Hydrocephalus



Mass Effect



Midline Shift



Pneumocephalus



500k

Scans for Training dataset

7

Countries using

3.2Mn

Scans processed annually

10+

Sites deployed

### Real World Evidence Al for Triage - TBI & Stroke - NHSx Award

1.5 million £ funding

4 Trusts

The AI in Health and Care Award has been instituted by the Accelerated Access Collaborative (AAC) in partnership with NHSX and the National Institute for Health Research (NIHR).











Head of Clinical Scientific Computing Guy's & St. Thomas'

With qER system from Qure we hope to be able to manage critical findings like intracranial hemorrhage even more effectively.

### NHS – Key Engagements

Strong Endorsements from National Bodies

#### Commercial Affiliations

Presence on National Procurement Frameworks for Imaging Al



Provision of Artificial Intelligence (AI), Imaging and Radiotherapy Equipment, Associated Products and Diagnostic Imaging



<u>HealthTrust Europe NHS DPS For The Provision</u> <u>of Artificial Intelligence Solutions Services</u>



<u>Artificial Intelligence Software for NHS Scotland</u> <u>Radiology Imaging – Dynamic Purchasing System</u>

#### Clinical Affiliations

Presence on NICE MedTech Innovation Briefings



Artificial intelligence for analysing chest X-ray images

<u>Artificial intelligence for analysing CT brain scans</u>