

Streamlining Emergency and Radiology CT workflow through proactive vetting

Henry Conchie¹, Farah Bashir², Mariam Pervis², Catharine Taube³, Camilla Lonngren³, Daniel Edwin⁴, Sohib Ali⁵, Natalie Ring⁶, David Shackleton⁶, Suzanne Wakely⁷

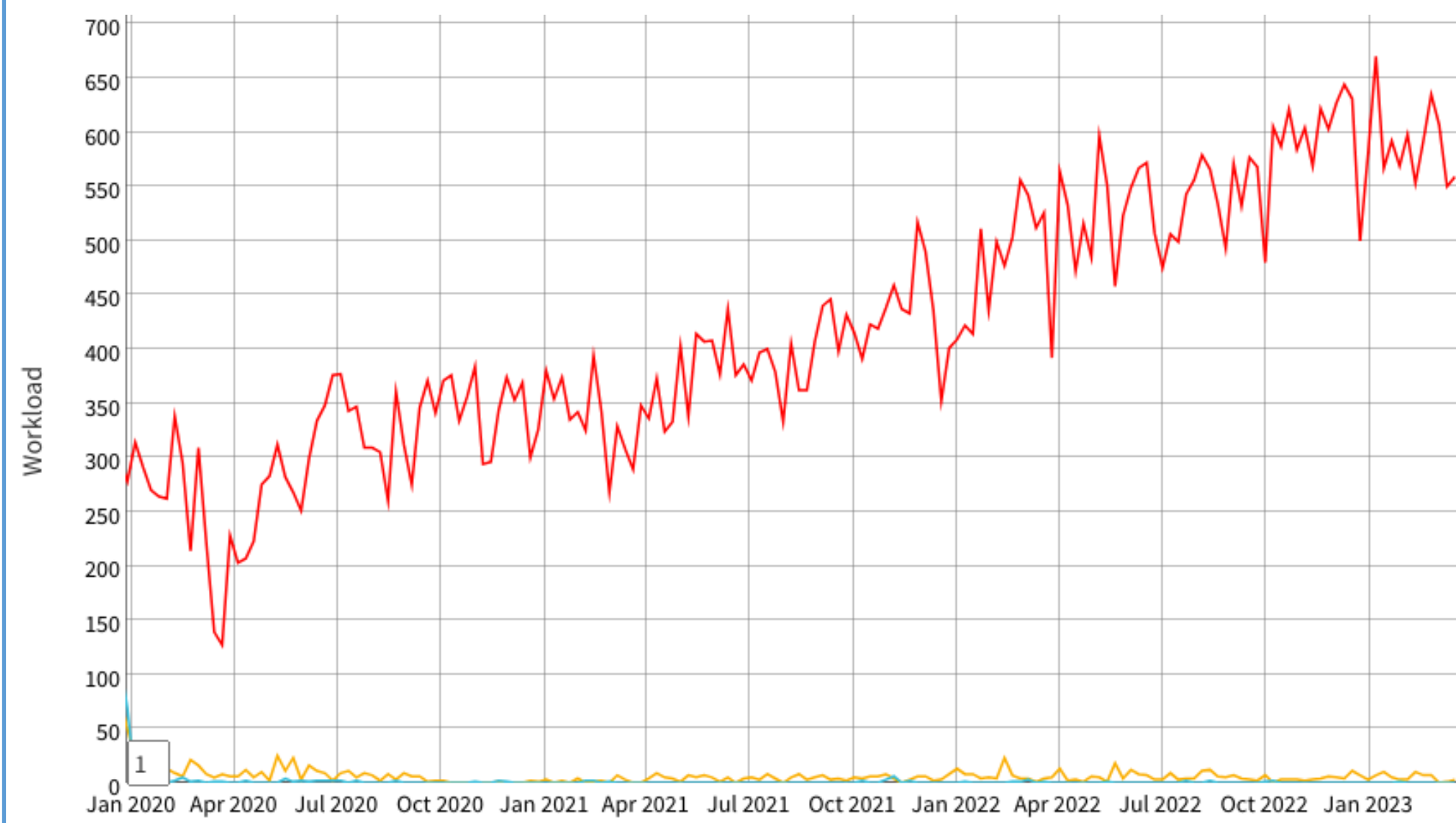
¹Radiology Registrar, ²Emergency Medicine Resident Doctor, ³ General Medicine Resident Doctor, ⁴PACS Manager, ⁵Radiology Service Manager, ⁶Emergency Medicine Consultant, ⁷Radiology Consultant

Chelsea and Westminster Hospital
NHS Foundation Trust



Introduction

- With increasing pressure on Emergency Departments (Graph 1) it is essential to streamline workflow
- Vetting of scan requests is the most common reason for interruption of radiology reporting, and have been proven to increase radiologists' error rates and stress levels
- Many imaging tests have clear guidelines regarding their indications and acquisition protocolling which do not routinely require discussion with a radiologist



Graph 1

Trust ED CT weekly workload since January 2020

Aims

We have developed and implemented a Proactive CT Vetting project in the Emergency Department (ED) at West Middlesex Hospital, with the aim of:

1. Reducing unnecessary interruption for radiologists

2. Improving time-efficiency for the ED requesting clinicians

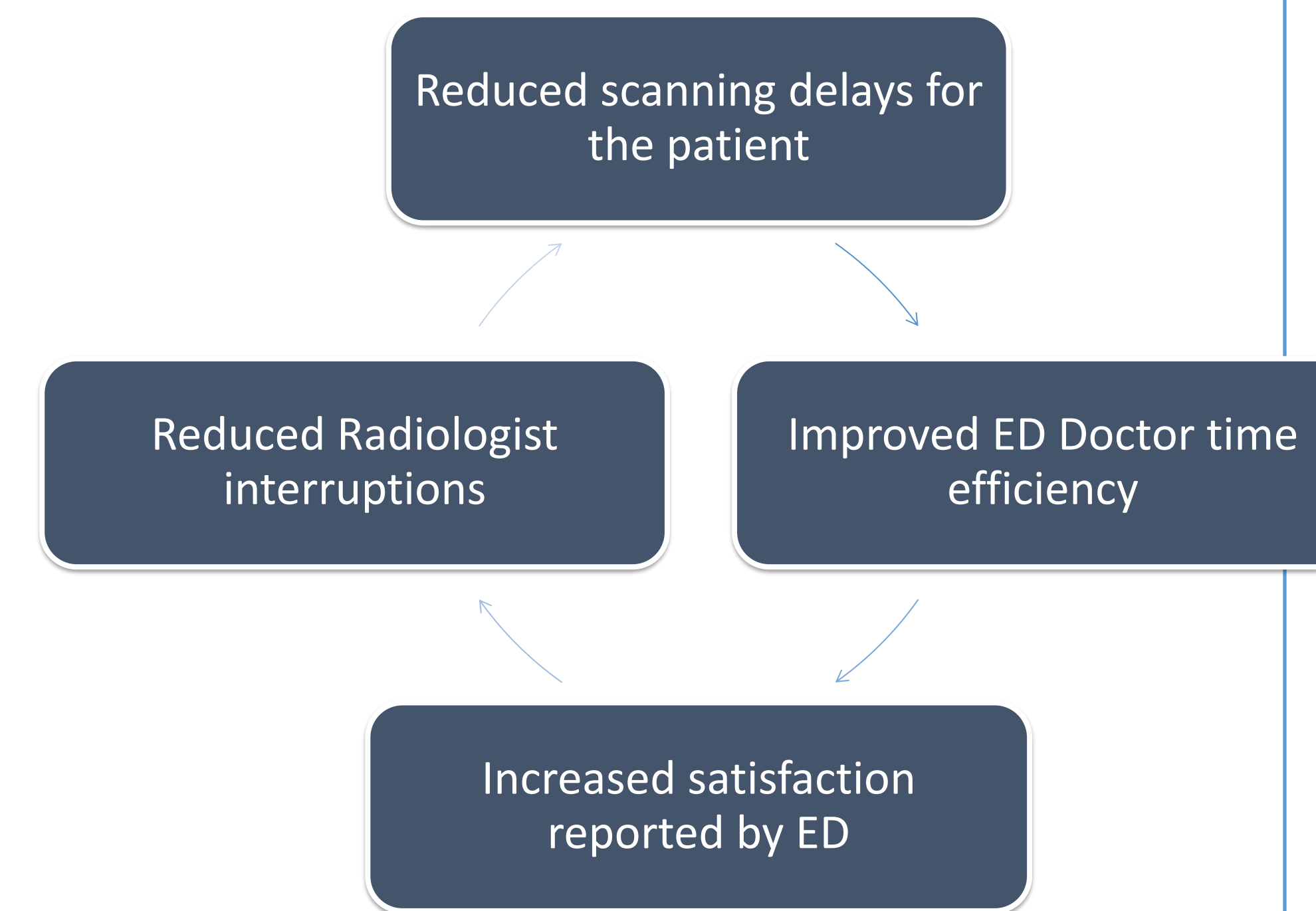
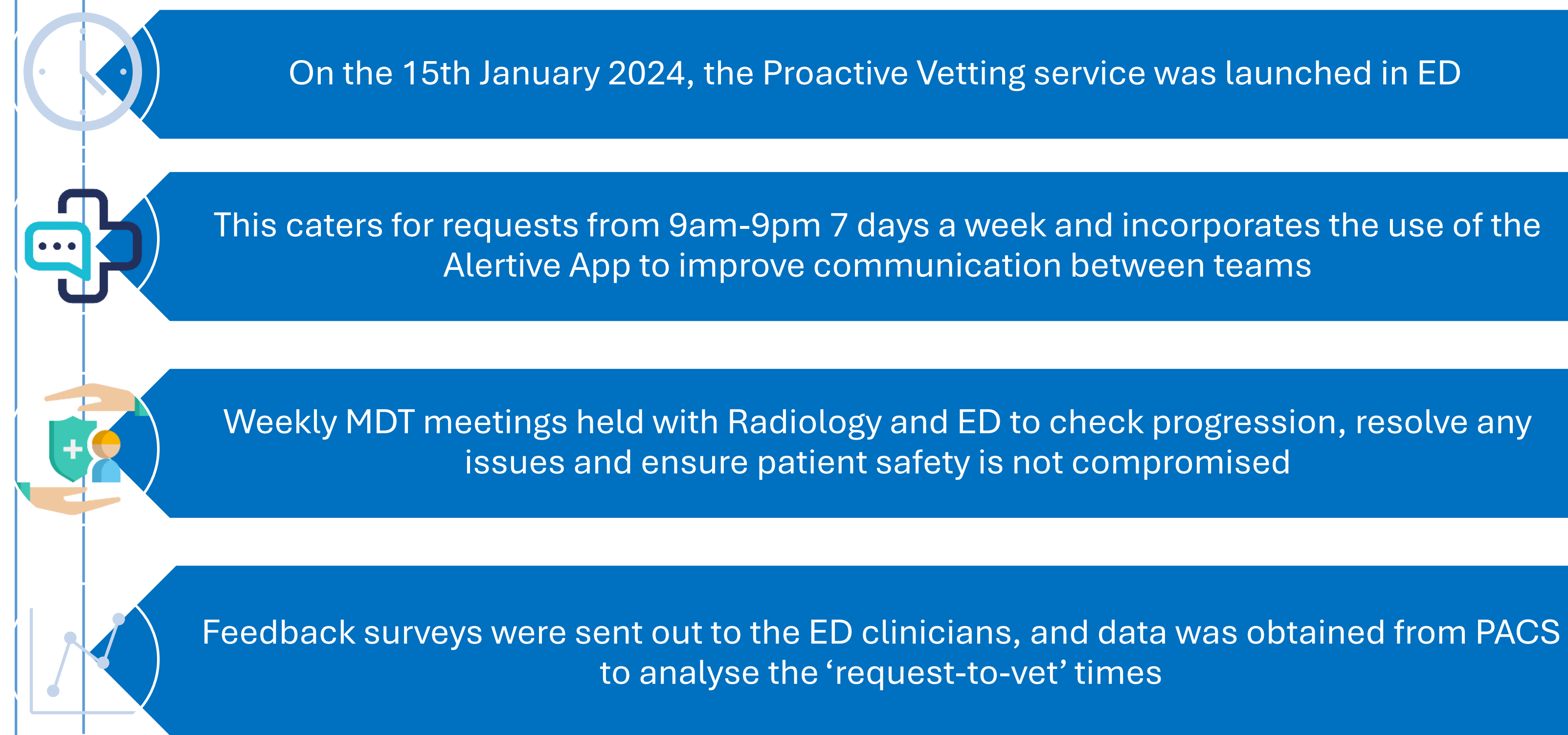
3. Benefitting the patient as they move through the diagnostic process

Figure 1 – QR code

A specially-designed step-by-step guide navigates the ED clinician through the process, highlighting where specific radiologist input is required whilst simultaneously providing a system that is Junior Doctor-friendly.

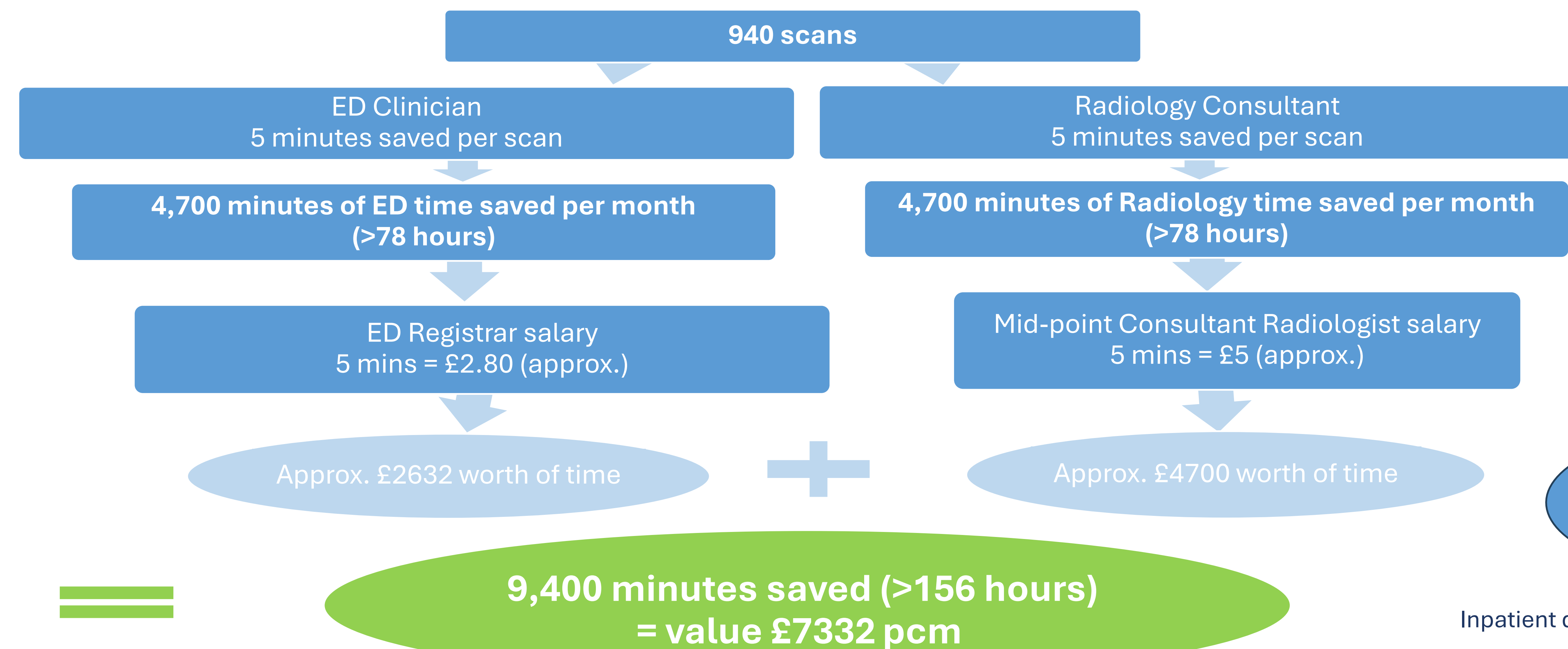


The Change



Time saved in one month

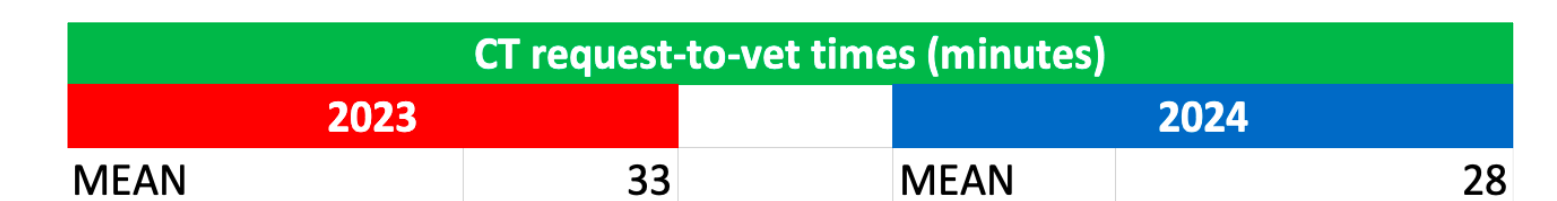
Analysis also showed financial benefits in terms of time saved, with **940 scans proactively vetted** over a one month period (23rd Jan – 23rd Feb 2024)



Results

The implemented Proactive CT vetting process resulted in significant subjective and objective improvements from ED

PACS data analysis comparing post-project implementation 'request-to-vet' times in 2024 with the same period in 2023:



Reduction in vetting times seen

After the extensive positive feedback, the process was extended to the entire inpatient cohort on May 25th 2024

A second data collection was then performed over a 2 week period in 2025, testing the performance of the vetting Radiologists

From the 1235 studies requested over this period:

- 1,219 conversations saved** between requesting clinicians and Radiologists due to proactive vetting
- 7 requests (0.5%)** vetted >1hr from request with no reason documented by the Radiologist
- 9 requests (0.7%)** vetted >1hr due to the Radiologist requiring more clinical information
- 21 minutes** the average time taken to respond proactively when the Radiologist did require more information

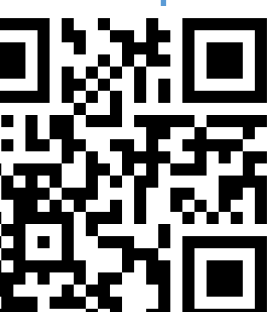
Discussion

- Streamlining vetting bottlenecks improves service effectiveness, including patient experiences and outcomes
- Our Proactive Vetting project has shown quantitative and qualitative benefits in the ED and inpatient CT vetting process
- Radiologists perform well when working with the process, with clinically acceptable proactive vetting timings and numbers

Contact details

Presenter – Dr Henry Conchie

Reference list →



'We really appreciate the proactive vetting process on the wards. It saves us time and significantly improves patient flow'

Inpatient doctor