



REDUCING THE RISK OF MISSED FRACTURES IN EMERGENCY DEPARTMENT

BACKGROUND:

Over a number of years, the Emergency Department (ED) team reported a number of serious patient safety incidents relating to a fracture, which following radiological review, was not recognised by ED staff, leading to the patient receiving delayed or inappropriate treatment. On average, the Trust reported one such serious incident every three months.

The ED team decided to begin a quality improvement project to improve patient safety by the use of a 'ED-RAD' clinical software tool within PACS (Picture Archiving and Communication System) which aids communication between clinicians in ED and the radiology reporters.

The team specifically aimed to improve the communication of reporting discrepancies between the initial ED interpretation and final radiology reported findings. Consistent use of this tool would significantly reduce the risk of ED missing a fracture.

The team also set out to improve communication, education and collaborative working between ED and Radiology teams.

AIM: To reduce the number of missed extremity (appendicular and axial skeleton) pathology in ED, to zero by February 2018.

MEASURES: The team identified both process and outcome measures for the QI project.

Process measures:

- For all extremity x-ray requests generated from ED
- i) % of cases where ED clinicians had commented their findings
- ii) % of cases that had a radiology comment
- iii) % of cases where a discrepancy was acknowledged and acted upon by ED within 3 days of report.

Outcome measures:

- i) Number of pathologies captured by ED RAD
- ii) Number of missed extremity pathology in ED resulting in a serious incident

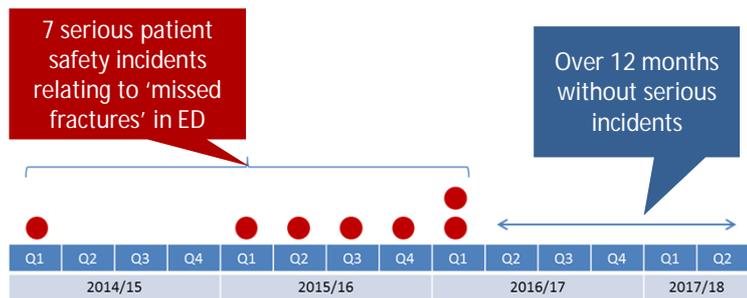
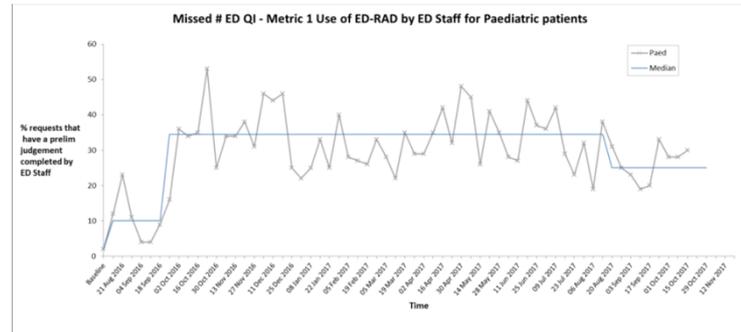
THE CHANGES: Although the intervention was to embed the use of the communication software (ED-RAD) within both ED and Radiology; the main changes were brought about by improving communication and collaborative working between the two departments.

The teams worked together to deliver dedicated training sessions, QASH days, board rounds and ED Assembly and identifying ED and Radiology 'champions'.



The 'ED-RAD' tool in use.

OUTCOMES: Use of 'ED-RAD' tool by ED clinicians has increased from zero to 38% for adult and paediatric patients and team hope to increase this further.



THE TEAM:
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