

## Purpose

To evaluate major/minor discrepancy rates for provisional (initial) and addendum (supplementary senior review) emergency CT reports in patients presenting with non-traumatic abdominal pain.

## Materials and methods

Ethical approval for this type of study is not required in the United Kingdom. All radiology departments with an approved lead for audit registered with The Royal College of Radiologists were invited to participate in this retrospective audit. The first 50 consecutive patients (25 surgical, 25 non-surgical) who underwent emergency abdominal CT for non-traumatic abdominal pain in 2013 were included. Statistical analyses were performed to identify organisational and report/patient-related variables that might be associated with major discrepancy.

## Results

One hundred and nine (58%) of 188 departments supplied data to the study with a total of 4931 patients (2568 surgical, 2363 non-surgical). The audit standard for provisional report major discrepancy was achieved for registrars (target <10%, achieved 4.6%), for onsite Consultants (target <5%, achieved 3.1%) and Consultant addendum (target <5%, achieved 2.9%). Offsite reporters failed to meet the standard target (<5%, achieved 8.7% overall and 12.7% in surgical patients). The standard for patients coming to harm was not met in the surgical group (target <1%, achieved 1.5%) and was narrowly missed overall (target <1%, achieved 1%).

## Conclusion

This study should be used to provide impetus to improve aspects of out-of-hours CT reporting. Clear benefits of CT interpretation/review by onsite and more senior (Consultant) radiologists have been demonstrated.