Purpose

The failure to properly communicate the results of radiologic examinations is the second leading cause of malpractice litigation in the U.S. The communication of radiologic findings in an efficient and effective manner directly impacts clinical management. Our institutional policy is that a “Preliminary Report” is faxed to the Emergency Department (ED) for all CT scans done on ED patients within one hour of the scan, with emergent findings being communicated directly by telephone. The primary purpose of this study was to evaluate and analyze our departmental compliance with the expected one-hour window for preliminary reports. Secondly, we hoped to identify possible causes for noncompliance and implement changes to address these potential causes.

Methods

A record was kept by residents and staff of scans done on ED patients with respect to scan type, time of scan and time of faxed preliminary report. The information was then tabulated to assess whether or not we are within the expected one-hour time frame from CT scan to faxed preliminary report.

Results

A total of 102 preliminary report times were recorded, with an average scan to fax time of 36 minutes. The maximum scan to fax time was 152 minutes, while the minimum was 6 minutes. 13/102 reports were faxed over 60 minutes after the scan was completed.

One major factor in reporting delay is the resident/staff review session, which offers excellent learning opportunities, but can cause a delay in reporting. Being a university affiliated teaching hospital and level 1 trauma center results in very busy Emergency and Medical Imaging Departments which can cause delays in reporting based solely on volume. A third cause of delay is likely technical, secondary to difficulties associated with using a fax machine as a primary means of communication.

Conclusion

The results indicate that our institution is within the expected 60 minutes from scan completion to preliminary report fax nearly 88% of the time, with nearly half of the preliminary reports being faxed within 30 minutes. Though reassuring, there is still room for improvement with respect to efficient and effective communication with the ED. Several possible causes for delay were identified and steps have been implemented to address these causes.

All reports on ED patients are now dictated as “priority” resulting in immediate transcription and report integration on PACS. Positive feedback from the ED has already been received as a result. The fax machine in the CT reading room has been replaced, resulting in decrease in delays due to technical problems. We expect these changes have resulted a positive clinical impact for patients.

References