Red Star reporting system – a simple electronic solution
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Background of audit

The communication of Radiology reports to referring clinicians is an essential part of the diagnostic pathway for imaging departments. This has been highlighted in the National Patients Safety publication NPSA safer practice notice 16 - 2007. The Royal College of Radiologists has also produced a standards document for the communication of critical, urgent and unexpected findings. These publications both advise that imaging departments have a robust system in place to deal with the process of communicating reports to referrers. (2, 3)

A paper based reporting system for ‘significant unexpected findings’ has been used at our hospital since 1995 and called the ‘Red Star Reporting System’ (Figure 1). This paper based system, despite several modifications since its introduction, was labour intensive for administrative staff and a monthly assessment of notification showed inherent delays.

Fig 1

![Red Star Reporting System](image)

Using the paper based system, the number of ‘Red Star’ reports received and an acknowledgment that action had been taken by the referrer was 52%, (Figure 3). There was a significant delay in the acknowledgment of the ‘Red Star’ report being sent back to the Radiology department.

Results of 1st audit round

Using the paper based system, the number of ‘Red Star’ reports received and an acknowledgment that action had been taken by the referrer was 52%, (Figure 3). There was a significant delay in the acknowledgment of the ‘Red Star’ report being sent back to the Radiology department.

Methodology

In 2013 we designed a simple email based format for our ‘Red Star’ reporting mechanism. The process adopted uses the trust ‘Microsoft Outlook’ email server using the voting facility. A ‘Red Star’ report generates an email from radiology which is sent to both the referrer and his/her secretary. They then have to respond to the email by using the ‘Microsoft Outlook’ voting facility to indicate that they have received and acted upon the report. This response is documented and if a response is not received within five working days a second ‘reminder’ email is generated.

We compare the results of our Red Star reporting process over a one-month period before (January 2015) and after (January 2016) introducing our electronic system. The audit included referrals from primary and secondary care, in both the paper based and electronic systems. Secondary care referrers all had access to a named email account. If primary care referrers were unable to receive electronic ‘Red Star’ reports via email then a fax was sent to them that required a response.

Results of 2nd audit round

Using the email based system the number of ‘Red Star’ reports received and an acknowledgment that action had been taken by the referrer was 85% (Figure 4). There was a significant improvement in the acknowledgment of the ‘Red Star’ reports being sent back to the Radiology department with the vast majority (67%) being addressed at the time of the report being issued.

Summary

The introduction of an electronic – email based system in our department has resulted in an improvement both in the percentage of reports acknowledged and the timeliness of action in the management of patients whose Radiology reports indicate a significant unexpected finding.

Further actions

• To improve even further the current electronic system in an attempt to reach 100% response.
• To extend this service to all primary care referrers.

References: