

IMPROVEMENT THROUGH INVESTIGATION

Summary findings

A report for Portsmouth NHS Trust

April 2018

1. Background

- 1.1 Before 2002, radiology films were not digitised and it is estimated that around 50% of all films were sent to radiologists to review. After 2002, the Picture Archiving and Communication system (PAC) was introduced. PAC digitised all films which meant that 100% of scans were instantly available to be reviewed by the clinician, and the radiologist.
- **1.2** Although PAC was a leap forward in digital health, the workforce was not prepared for the increase in reporting demands. Suddenly, radiologists were receiving 100% of the films, to report with the same amount of staff. It is estimated that the increase in films required three extra consultant radiologists per hospital to keep up with the additional plain film demand.
- 1.3 Over the subsequent years, the large and ever-increasing demand on radiologists meant that each NHS Trust had a growing number of films that required reporting. In 2015 the RCR (The Royal College of Radiologists) identified a delay in diagnostic reporting in NHS hospital Trusts across the United Kingdom. The disparity between the number of radiologists and their workload meant that 97% of UK radiology departments were unable to meet their reporting targets in 2016.¹
- 1.4 To cope with this backlog, Trusts began to outsource their reporting demands at significant expense. In 2016, the NHS spent nearly £88 million paying for backlogs of radiology examinations. Today, even the outsourcing companies are struggling to keep pace with demand.

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¹ Clinical radiology UK workforce census 2016 report

2. Clinical aspects

- **2.1** By late 2006, it had become clear that routine reporting on plain films in the trust had reached an untenable position. 250,000 x-rays were taken, but some 125,00 were not reported by a radiologist.
- **2.2** In the 2007 policy, as well as stating what would not be routinely reported, provides range of options for obtaining "Radiological opinion in problem cases".
- 2.3 It is unfortunate that the contemporaneous paperwork mentions only cost as the factor that prevented alternative options to the 2007 policy the recruitment of more consultant radiologists or outsourcing plain film evaluation from being adopted by PHT in 2007. From the (albeit limited) evidence that we have seen, the new policy simply formalised what had effectively been happening prior to the introduction of PACS in 2002.
- **2.4** While the 2007 policy did make PHT something of an outlier, we cannot state that this policy was fundamentally flawed.
- **2.5** We have had compelling testimony that, if requested, the opinion of a radiologist was always available. Users of the radiology service saw no discernible change post-introduction of the new policy.
- 2.6 In March 2011 when the ED reporting backlog was identified on the CSC risk register, the non-compliance with trust policy must have been, even then, a long standing one. This period represented a significant opportunity to address the radiology capacity issue that was missed by the trust. The non-compliance with policy was clear, and should have prompted decisive action. It did not.
- 2.7 The fact that a further three years (from March 2011) elapsed without significant action on the backlog issue is a clear failure of CSC and trust governance. We can only conclude that the 2007 policy had changed to one in which ED plain films would not be routinely reported by a radiologist. It appears that clinicians within radiology had, in effect, assessed the risks of not reporting ED plain films, and concluded that this risk was sufficiently small to allow a de-prioritisation of this activity.

- **2.8** We have not seen any evidence that the radiology department communicated this fact in strong enough terms to the wider trust governance community. Executives were, however, fully aware of the non-compliance with policy, but were not directive in their response.
- **2.9** We believe that, while the issue rested ultimately with the trust board, the radiology department missed an opportunity, which they should have taken, to assist the board in their decision-making. While the decision to 'tolerate' may have been based on sound clinical judgement, a strong response from the radiology department would have been to provide evidence of the level of risk that the trust board would be accepting.
- **2.10** As we have argued, the ED backlog must have been building for a number of years by 2014, so there was the potential to review a statistically significant sample of a large cohort of unreviewed patients in order to determine if any harm had befallen them evidence based medicine.
- **2.11** The NHS operates in a resourced-constrained environment. However much they might want to, healthcare staff cannot give 'all things to all people'. As a result of this, decisions with a potentially huge personal impact are constantly taken. At the systemic level, this may be the authorisation of a new drug by NICE, to local decisions about the treatment of a single patient by Multi-Disciplinary Teams in a trust.
- **2.12** There is a generally accepted error rate in the interpretation of a plain film by a skilled, experienced radiologist of between 3.5 5%.
- **2.13** Unless the conclusions of the Harm Review change radically after this report is finalised, the numbers of patients that can be identified as suffering harm as a result of the failure of PHT to adhere to its Plain Film Evaluation and Reporting Policy fall very significantly within the accepted error rate of a qualified radiologist.
- **2.14** Although we have identified significant issues with the way that the policy was governed, the de facto decision taken by the department not to routinely report on ED plain films would have been justifiable, particularly in light of the huge resource constraints and competing demands on radiologist time.

- **2.15** The situation reached by PHT is regrettable, but the Harm Review can provide a resource that, we strongly believe, should be used to start a national debate about the most sensible utilisation of a scarce resource.
- **2.16** While we have been critical of some aspects of the radiology departments response to their increasing lack of adherence to policy, the facts identified by the Harm Review strongly suggest that the radiology department actually exercised good clinical judgement in how they utilised their resources.

3. Governance

- **3.1** We set out some governance principles that we think should be followed when implementing a new policy:
 - That is properly evaluated beforehand, with risks clearly identified
 - Measures are put in place to mitigate the risks that are identified
 - The implementation of policies is monitored
 - Appropriate changes are identified and implemented.
- **3.2** We reviewed the 2007 radiology policy in this light. Poor record keeping, particularly at board and executive management team level make it difficult to be certain on some points. This itself is a governance failing.
- **3.3** The decision to implement the 2007 policy is well documented. We believe that proper consideration was given to the policy before it was implemented and that risks were considered. Some measures were put in place to mitigate the risks.
- **3.4** Monitoring of the outcome of the policy was weak. This made it difficult to make, or even identify, appropriate changes.
- 3.5 While the risk arising from the failure to follow policy was identified as early as 2011 and repeatedly discussed, no explicit action was taken. The decision to "tolerate" the risk was, in effect, a decision to implement a different policy. For implicit choices to be made about clinical issues without proper evaluation is undesirable.
- **3.6** Auditing of the implementation of the policy is also an area of concern. Despite representation that were made about the robustness of the audit process, it was in fact weak.
- 3.7 We found more general concerns with the risk management processes in earlier years. For example, the Board Assurance Framework was not tied to corporate objectives

and progress was not clearly identified. The reporting of risks to the board was also inconsistent.

4. Trust response

We have considered how the trust has reacted following the identification of the issues in this report - firstly the serious incident reporting and secondly changes to the wider governance system.

Review of serious incident reporting

- **4.1** The NHS England Serious Incident Framework sets out the responsibilities of NHS trusts in managing serious incidents. The National Patient Safety Agency also produced guidance on the root cause analysis of patient safety incidents. Although the agency was dissolved and its functions dispersed through the NHS, the good practice guidance is still in use. We used these documents as our good practice benchmarks.
- **4.2** Portsmouth Hospitals NHS Trust has developed its own a policy for the management of serious incidents. We reviewed the policy to see if it met the standards set out national good practice. It provides guidance on what steps to take to carry out an investigation into a serious incident and ensure that the lessons learned to inform future practice.
- **4.3** We reviewed the three serious incident reports that were written as a result of PHT's backlog of unreported radiology films in order to determine whether they address the systemic issues effectively. For comparative purposes, we also reviewed a random sample of four unrelated SI reports.
- **4.4** Overall, we found that the SI reports were completed to a good standard better than the majority of those that we review.
- **4.5** We found that each SI report was in line with hospital policy and follows the template provided. However, the reports suggest that there is confusion amongst investigators about the difference between the mistakes that staff made at the point of delivering care and the terms root cause and lessons learned. As a result, the root causes could be better identified.
- **4.6** Five out of the seven reports describe the scope of the investigation i.e. the period of care of treatment being investigated. Only two of the investigation reports provide a clear idea of the breath of the investigation i.e. which departments and services are included in the review.

New executives and the new approach

- **4.7** We have been impressed by the governance arrangements that the trust has put in place following the CQC notice and the identified issues of previous boards.
- **4.8** The trust has demonstrated a clear commitment to learning lessons from what happened. Verita were given an open brief to look at what happened, and received excellent cooperation in our work.
- **4.9** From our knowledge of it, the Harm Review has been done well. It is well constructed, comprehensive and open with patients that may have suffered harm. The engagement with the external reviewer has been positive and constructive.
- **4.10** The Trust has been open in providing us with all the information that we need, and open when this information cannot be found.
- **4.11** We fully support the plans for restructuring. The CSC structure had clearly become unwieldy, and appeared to promote a lack of clarity rather than providing it. We believe that a divisional approach will improve management going forward.
- **4.12** The board is now developing an exemplary approach to risk management. The BAF itself is very strong one of the best we have seen. It is well thought through and comprehensive, clearly linking risks to strategic objectives. Each risk is well explained, and progress toward completion well documented. The rationalisation of the number of risks from previous BAF's is positive.
- **4.13** The issues seen in previous decision-making groups the lack of minutes, poor communication, poor filing and retrieval have been identified, accepted and addressed.
- **4.14** Members of staff outside of the senior management group that we have spoken to are aware of, and supportive toward, the new approach. Confidence in the executive team is high. We received a strong message that the direction of travel for the trust is believed to be positive.

5. Overall conclusions

- **5.1** There were clearly problems in the past the trust is open about these and openly wish to learn from these problems. We have confidence in the board, the new governance arrangements and the commitment of staff going forward.
- **5.2** The key issue that, we believe, needs much further debate is whether plain films need to be routinely reviewed by a radiologist in a resource constrained environment?
- **5.3** We entirely understand, given the context under which it has been formed, the revised policy on plain film reporting in PHT.
- **5.4** The Harm Review is, we understand, the first comprehensive study of the effects of not routinely reporting all plain films.
- **5.5** We believe that the study should be considered for publication in a suitable peer reviewed journal, leading to a national debate about how the learning from this case should inform radiology practice in future.