

From root causes to safer systems

## From root causes to safer systems: international comparisons of nationally sponsored healthcare staff training programmes

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### International comparisons of nationally sponsored healthcare staff training programmes

In the UK, the National Health Service (NHS) treats over one million people every day, but international estimates of serious and largely preventable error are around the 10% mark, at least for general hospital care.<sup>1,2</sup> The Chief Medical Officers' report, "An Organisation with a Memory",<sup>3</sup> found that there was a lack of systems for reporting and analysing incidents, and a culture of blame that suppressed learning that is not conducive to developing and implementing safety solutions. The Department of Health's response was to publish "Building a safer NHS for patients",<sup>4</sup> which set the policy context for a new body, the National Safety Agency (NPSA). A central objective of the NPSA was to develop a mandatory risk reporting system, which would enable the agency to analyse and integrate these and other sources of safety information to learn lessons and develop and disseminate solutions. An audit of all acute, mental health and ambulance trusts in the English NHS<sup>5</sup> showed that progress was very variable across trusts on even some basic features of risk reporting. It showed there was little evidence of active measures to assess and address organisational culture issues. A critical report by the House of Commons Committee of Public Accounts<sup>2</sup> precipitated a change in focus at the NPSA, to include greater concentration on the development and dissemination of local safety solutions in NHS trusts.

The House of Commons Committee of Public Accounts' report<sup>2</sup> recommended, in relation to the use of data from the National Reporting and Learning System, that "Learning lessons is most likely to come from the information on contributory factors and currently only a percentage of reports to the National Patient Safety Agency contain this information...". In order for healthcare organisations to identify contributory factors, systematic investigation is

required. In evidence from the NPSA to the Committee it was stated, "The programme we have to support a culture of change is {sic} we have trained 8000 staff in root cause analysis, which is a particular technique which seeks to look at the contributory factors that lie behind an incident..." It is therefore of the highest importance that there are sufficient staff in each local healthcare organisation who are trained and enabled to conduct RCAs on the most serious incidents, and to conduct investigations when patterns of repeated incidents or near misses emerge from local reporting systems, or from organisations with similar services.

The research by Braithwaite *et al* shows,<sup>6</sup> among other findings, that the national programme of RCA training in New South Wales (NSW), Australia, was well received by participants, but that they experienced problems in implementing RCAs in their healthcare organisations (*see page 393*). Importantly, not all participants who had conducted RCAs were aware of whether outcomes were implemented, and whether it impacted on patient safety. This mirrors findings of surveys of participants after attending the NPSA's RCA programme.<sup>7</sup> Simply identifying contributory factors is, therefore, only a first step towards developing solutions. These need to be applied, and their impact on safety monitored, since the possibility of creating unintended consequences from innovation are well known to systems theorists.

Further, conducting RCA is noted to be challenging work by Iedema and colleagues.<sup>8</sup> Braithwaite and colleagues' survey<sup>6</sup> showed there are often significant organisational barriers to overcome. It seems unlikely that skilled practice can be achieved simply by attendance at a two or three day workshop, however well run, and that actions are needed within healthcare organisations to support RCA practice—for example, by ensuring staff are

released to be interviewed and that outcomes are widely disseminated, with evidence of lasting safety improvement. Skilled transfer to RCA practitioners may have to include more than teaching about the RCA techniques, but also to teach a criticality of thinking so that the practitioner has the cognitive tools to address the complexity and novelty of new incidents. Pedagogical models, such as problem based learning<sup>9</sup> may be appropriate to support the building of such competences.

In our research,<sup>7</sup> we examined the application of RCA in eight case study sites, with interviews with staff who conducted RCAs and a critical examination of their nominated "best" or exemplar RCA. Dr Sally Adams, who had been Head of Investigations at the NPSA and an author of the RCA training materials, undertook a blind critique of the submitted RCAs from seven trusts. There was evidence in two of exemplary practice, with less depth of analysis and thoroughness in implementation in three, and scant evidence of recognisable features of RCAs in the reports from two trusts. This would suggest that more needs to be done to support expert practice in RCA. The widespread dissemination of "model" RCAs was a solution that the NPSA suggested in response to this research. The NPSA recognises there is a range of information provision required, and the agency supports the provision of clinically focussed sessions for healthcare practitioners. There are also plans to develop master classes and an accreditation system for RCA practitioners (Suzette Woodward, NPSA, personal communication), which again may help develop competence and confidence in RCA practice. The NSW experience also suggests that there is need to develop additional training for practitioners beyond the initial course.

Since turnover of staff is likely, local healthcare organisations need to plan to train other staff. In the USA and in England, consultancies are offering their training, and in at least one case it is tied to the use of their software. Whether the models and techniques taught are similar and whether they are effective in achieving similar training outcomes to the national programmes is unknown. At a local level, we found about half the trusts expected to send more staff on NPSA training events, while a similar proportion used a cascade model of internal training. Yet we found only a fifth of staff at 6 months after the course were confident they could train others in RCA. The development of skills of RCA trainers has so far been neglected by national programmes in England and Wales, and

NSW Australia, which private consultancies may be well placed to provide.

Braithwaite and colleagues<sup>6</sup> make the point that 46% of their participants welcomed service users as part of RCA teams. The NPSA's seven steps to patient safety ([www.npsa.nhs.uk/seven-steps](http://www.npsa.nhs.uk/seven-steps)) encourages involvement of users in safety investigations. There is no UK evidence that directly bears upon this from the healthcare staff perspective. But, in a survey of 97 patients who had been harmed by recent NHS treatment, only 16% were consulted about how the incident should be prevented from happening to someone in the future, and 20% were told what the hospital were going to do to prevent a similar incident.<sup>5</sup> This may well reflect the systems in use in the NHS, which process most communication from patients about their care as complaints, and these are often managed by other staff than those involved in risk management. Furthermore, trusts must respond to complainants within nationally prescribed timescales. Similarly, incidents that are registered from the outset as complaints are seldom also subjected to an investigation that uses the full RCA approach. Trusts are encouraged to disclose to patients who have been harmed under the NPSA's "being open" guidance, but this may in practice be achieved without actively seeking comment on suggested system solutions. The views of service users in the generation of solutions appears to be an under-used resource.

Finally, it is important to note that the statutory position of RCA differs in both countries. In NSW, it is mandatory for health managers to undertake RCA on the most serious incidents. No such provision exists in the UK, although the Healthcare Commission's (HC) Standard for Better Health (C1a) refers to protecting patients "through systems that identify and learn from all patient safety incidents and other reportable incidents". This is commonly understood to include RCA as this is recommended in the NPSA's seven steps (as above). Yet according to evidence from the Chief Executive of the NHS,<sup>2</sup> private healthcare providers are not required to report incidents to the NPSA, nor are there other than broad requirements that they have clinical governance systems in place. There is no requirement that they meet the Healthcare Commission's standards nor that they conduct and share outcomes from RCAs. As healthcare in many countries moves to pluralistic provision, ensuring common standards of safety and of sharing good practice in methods of RCA and the resulting safety solutions, become paramount.

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