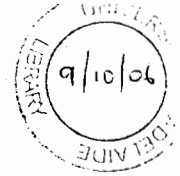


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An intervention to improve voluntary incident reporting in South Australian public hospitals

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Volume I

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SUMMARY

The majority of care provided to patients in Australian hospitals is excellent; however there is evidence that adverse events do occur, mostly due to vulnerabilities in hospital systems. Incident reporting is a tool which enables healthcare workers to disclose errors, so that underlying contributing factors which may have precipitated the event can be analysed, and corrections made to prevent similar incidents recurring. Unfortunately, incident reporting is not widely used for a number of reasons. The aim of this study was firstly to gather information from (1) consumers on their experiences of adverse events in hospitals and general practice and their attitude towards reporting of errors by healthcare workers; (2) doctors and nurses on current reporting practices and barriers to reporting using focus groups and survey techniques; and use this information to construct a study with the aim of improving reporting rates and changing types of incidents reported. The intervention study was then undertaken and evaluated.

Methods

A random, representative household survey (n=2884) was used to determine consumer-perceived adverse event rates in healthcare settings, and a telephone survey (n=2005) ascertained attitudes towards reporting of error. Focus groups were used to determine current reporting practices and barriers to reporting for doctors and nurses, with each discipline and level of seniority represented individually in a separate focus group. Qualitative analysis was undertaken using Triandis' theory of social behaviour. To further explore themes identified in focus groups and to provide baseline data, a questionnaire was distributed to 263 doctors and 799 nurses in 20 clinical units across 6 hospitals in metropolitan and rural South Australia (response rate 73%).

Focus group and survey data was instrumental in designing an intervention, which was designed as a matched controlled study in 20 units across 4 metropolitan and 2 rural hospitals. The aims were to (1) educate staff about reportable events; (2) ease reporting burden through establishment of a Call Centre, a condensed reporting tool and on-line reporting; (3) provide clinicians with tools to investigate/analyse incident reports; and (4) facilitate feedback of incident data to healthcare workers in clinical areas. Incident reporting rates and types of reports generated were compared for inpatient areas (medical units, surgical units and the Intensive Care Unit (ICU) and the Emergency Department (ED) between; (a) baseline and end-of-intervention and between (b) control and intervention

units. For each intervention unit, there was a control unit matched on specialty type and location of hospital. Success of the intervention in changing attitude towards reporting and addressing barriers identified at baseline was measured by re-surveying 273 doctors and 858 nurses across the intervention and control units, replicating some of the questions asked at baseline and eliciting opinion on reporting processes.

Results

Initial qualitative research

Consumers identified that 7% of hospital admissions were associated with an adverse event; 60% of whom rated the adverse event as serious and 48% stated prolonged hospitalisation was required. Most consumers believed that healthcare workers should report errors, with 68% believing that the reporter should be identified on the report and only 29% favouring anonymous reporting.

Focus groups identified cultural differences between doctors and nurses underpinning attitudes to incident reporting. Common barriers to reporting incidents included time constraints, unsatisfactory processes for reporting, deficiencies in knowledge, cultural norms, inadequate feedback, and a perceived lack of value in the process.

The baseline survey (n=773, response rate =73%) identified that most respondents knew of their hospital's incident reporting system, and that doctors were less likely than nurses to understand reporting processes. Overall, major barriers to reporting incidents were lack of feedback (62%), a belief that there was no point in reporting near misses (49%) and forgetting to make a report when the ward is busy (48%).

Intervention study

Compared with the 40-week baseline period, reporting in inpatient intervention units during the 40-week study period increased significantly, with 60 additional reports per 10,000 occupied bed days (OBD), $p < 0.001$) being generated in intervention units compared with control units. In the ED reporting rates increased by an additional 56 reports per 10,000 ED attendances ($p < 0.001$). There was significant improvement in reporting within medical and surgical units; however the intervention was not able to significantly improve incident reporting in ICUs.

The intervention resulted in significantly more doctor-initiated reports in the ED, more nursing reports in inpatient areas and more allied health reports in both inpatient areas and in the ED. Anonymous reporting increased 20-fold in intervention units during the study

period compared to baseline rates. There was a change in incidents reported, with proportionately fewer incidents relating to falls and more documentation, clinical management, patient aggression and environment-related incidents in intervention units compared to control units.

According to analysis of the end of study survey (n=840, response rate 74%), respondents in intervention units at the end of the study were more likely than control units to believe they should report hospital-acquired infections and medication near misses, however they were less likely to believe that they did report certain events. They were less likely to believe that there was no point in reporting near misses (RR 0.63 95% CI: 0.60 to 0.97), that reporting incidents was unlikely to lead to system changes (RR 0.78 95% CI: 0.63 to 0.96) and that if the incident was discussed with the person involved nothing further needs to be done (RR 0.35 95% CI: 0.18 to 0.72).

Conclusions

This intervention incorporating education, simplified methods of reporting, and feedback demonstrated an ability to improve incident reporting and change types of incidents reported in a variety of clinical settings over a sustained period of nine months. Assessment of staff opinion following the intervention in conjunction with evaluation of the heterogeneity in reporting rates between units has been used to develop a blueprint for improving incident reporting.



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Appendices

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