Learning from total 2222 calls and leading to an improvement work for quality patient care: a respiratory experience

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Aims

A large number of respiratory patients are known to have deranged physiology and may deteriorate rapidly during acute episodes. Consequently, early decision making is vital to improve not only outcome, but also patient experience and appreciation of their wishes.

We aimed to improve inpatient care during acute deterioration through clinical leadership, as a part of quality improvement (QI) collaboration.

Methods

Retrospective analysis (January 2013 – September 2014) of all 2222 calls from all respiratory wards (94 beds) showed that fewer events occurred at the weekend (18.9%; 9.4% per day) compared to weekdays (81.1%; 16.2% per day). More events occurred within working hours, 09.00–17.00 (41.1%; 5.14% per hour) compared to out of hours (58.9%; 3.68% per hour). Out of 103 patients (between January 2013 and December 2014), for whom 2,222 calls were made, survival at discharge was 11%, 46% and 51% respectively for cardiac arrest, respiratory arrest and medical assistance call groups. Despite high post-2222 calls mortality among these seriously unwell patients, pre-event resuscitation decisions were made in only 12.2% of patients.

Following initial data analysis, one ward participated in a QI project to identify areas for improvement. The interventions identified by the ward team included staff survey, 'deteriorating patient stamp', post-2222 call debriefing and 'safety huddle'. The effectiveness of these interventions was measured through analysis of ongoing arrest calls and documentation of decision making in case notes.

Results

Reduction in average total number of 2222 calls per month on pilot ward between January and September 2014 and intervention time period (October 2014 to June 2015) was 1.44 versus 0.56.

Total 2222 calls per bed reduced for the pilot ward (62% reduction) compared to non-pilot wards (9% increase) during the intervention phases. Decision making improved through the intervention phase, with 75% of inpatients having DNACPR decisions and 46% of escalation plans recorded.

Conclusions

Early results have shown an overall reduction in total 2222 calls and cardiac arrests alone in the pilot ward compared to the other wards. Furthermore, there has been regular decision making pre-deterioration, which is expected to improve further. Thus, through empowering front-line staff to test for change, an improvement in decision making has been achieved with fewer cardiac arrests on the pilot ward. This has the potential to be scaled up in the other respiratory wards and other specialties to have a greater impact on patient care. ■

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