Peer review to prevent, manage, and learn from catastrophic complications in perioperative medicine

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Background and purpose

Audits, checklists, guidelines, and practice advisories considerably improved safety in the perioperative setting. Yet, given the reality of multi- and multidisciplinary care, and the rapid pace of development in management sciences, the community is still just beginning to recognize the importance of peer review in perioperative medicine.

While the concept of feedback has been institutionalized across various settings over the past decades, peer review takes place on a different level in organizational hierarchy and depends heavily on individual and departmental culture. We aimed to shed light on this crucial activity to prevent, manage and learn from catastrophic complications.1

<table>
<thead>
<tr>
<th>HR Tool</th>
<th>Setting</th>
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<tbody>
<tr>
<td>Traditional (end of year) performance evaluation</td>
<td>Top down tool for evaluating an employee according to job description, expected performance goals and defined measures and goals considering various dimensions. Easy to objectify but difficult to apply for non-standard settings.</td>
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<tr>
<td>Feedback</td>
<td>Established and well recognized teaching tool in clinical training to reinforce good and improve poor performance.</td>
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<td>A conversation on “a view to narrowing the gap between observed and desired performance”2</td>
<td>Depending on the cultural setting and the mindsets of the protagonists involved, feedback might be weakened by confusion between content of the feedback and relationship between the parties.</td>
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<tr>
<td>360° evaluation</td>
<td>Open or anonymous feedback from superiors, colleagues, and subordinates at same hierarchy level considering various dimensions.</td>
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<tr>
<td>Peer review</td>
<td>Open or anonymous feedback from a person of the same age, status, or ability as another specified person, et al. (the Oxford Dictionary)</td>
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Catastrophic perioperative complications

We define catastrophic perioperative complications as consequential, unexpected, unplanned events that should not happen or have happened, and that are or were potentially preventable. When they do happen, they can affect patients, peers, healthcare providers, clinical infrastructure, leadership, and departmental strategy, i.e., for example, being the best performing department with the fewest complications. Catastrophic perioperative complications have myriad causes.

Conclusion

Conclusions: Aiming at reducing perioperative morbidity and mortality, peer review provides a valuable leadership tool to improve in the face of ever increasing complex workplace settings and a key element towards preventing, managing, and learning from catastrophic perioperative complications. Both leadership and peers in perioperative medicine have to be aware that change is not an event but rather a process that requires time, has to follow specific steps, and has to be planned strategically.

Long term perspective

Peer review might be a key element in preventing, dealing with and learning from catastrophic perioperative complications. With a well defined peer review system in place, both individuals and departments involved in perioperative medicine benefit from an additional strategy to improve their effort in preventing, dealing with and learning from catastrophic events.

References and suggested readings


Methods

We searched PubMed, Embase and EBSCO, Web of Science, JSTOR and WISO and reviewed current evidence considering peer review, i.e. the performance assessment by someone of the same status and ability, from both management science and medicine to define, build, and adjust a department's mission, vision, and culture.

No conflicts of interest

No funding involved