

# **BUILDING A PERIOPERATIVE QUALITY & SAFETY PROGRAM: NOW WHAT? TRANSLATING THE DATA INTO ACTION**

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## **SUMMARY**

Anesthesiologists have historically played a leading role in patient safety. Translating safety data into sustained and meaningful quality improvement and behavior change requires a culture of safety. In academic departments, leaders can inspire change with a “learning orientation” where adverse events and near-misses are seen as opportunities for shared learning and improvement rather than triggers for blame. As with other academic aspects of our work, adoption of a learning orientation in the context of Quality and Safety (Q&S) requires understanding of underlying mechanisms, multi-modal teaching and training, support of practitioner-learners, evidence that efforts truly result in improvement, and consistent messaging and modeling about what is valued from leadership. Creation of and commitment to a shared mission and vision allow for sustained and aligned efforts when the challenge of culture change feels insurmountable. This presentation will highlight leadership themes/strategies for culture change in healthcare and also specific examples of initiatives that can be employed by department chairs to advance anesthesiologists’ Q&S visibility and value on the frontlines and in the hospital C-suite.

## **Establishing a Culture of Safety through Learning and Transparency**

While the QA report or Safety Report is the “what”, the root cause analysis (RCA) is the “why”. A mandated tool of the Joint Commission for analysis of sentinel events since 1997, RCAs have been shown to be associated with the development of strong actions to improve safety and lower rates of adverse events (1)

Components of a complete RCA include: (1) What happened? (Often what happened is not the same as originally reported; time is needed to sort this out via development of a detailed timeline with sequence of events); (2) What normally happens? (The events need to be framed within current requirements/ standards of care/ policies and procedures); (3) Why did it happen? (Established tools and techniques are used to identify causal and contributing factors). Methods of RCAs have matured recently so that contributing factors can be more directly linked to actionable process improvements. In 2016 the National Patient Safety Foundation (NPSF) published a new strategy for RCAs, termed RCA2, (“RCA-

squared”), where the second A stands for “Action” (2). Three new areas of focus are (1) being prompt, (2) identifying true contributing factors, and (3) making action plans truly effective.

Algorithms for RCAs focus on systems effects, human factors (interaction of humans with their immediate environment) and human decision-making. Using “just culture” algorithms to decide if an individual’s actions reflect simple slips, at-risk behavior or reckless behavior both requires and contributes to a culture of safety- the important balance of support and accountability is reinforced as workers are consoled, coached and (thankfully rarely) disciplined as appropriate (3, 4, 5)

An important key to success is having a framework and structure to support Q&S activities (6, 7). In our own department, “RCA2” has been accomplished by deliberately linking the work of a Quality Assurance (QA) patient safety committee with the work of a Quality and Safety Improvement Committee (QSIC). Each of these committees has approximately 25 members from all subspecialties and role groups, including faculty members, residents, CRNAs, critical care and PACU nurses, and technicians. Depending on the problem under discussion, pharmacists, engineers and interdisciplinary specialists are included in meetings as well. Because Q&S is a core competency of all anesthesiology trainees, we have also created and supported a “Resident Only” QA committee, open to all residents, under the peer-protection umbrella of the QA committee. Our trainees learn and practice techniques of RCAs, present at M&M conferences, design and implement Quality Improvement (QI) projects and are reporting their results. Our department also has two resident representatives on a hospital-wide resident Q&S committee (with a 2-year term and curriculum).

Efficacy of the Q&S team is facilitated with departmental support. In addition to physician leaders, non-physicians serve as administrative leaders and analysts. Our departmental core Q&S team is comprised of individuals with advanced training, including PhD, MBA, MPH, MS in patient safety, fellowship training in patient safety, RN, and certification in patient safety. The physician leaders of the effort are afforded non-clinical time to do this work (in part supported by an endowed scholarship in Q&S), and are held accountable to accomplish this work in a timely and effective manner. Q&S updates are provided weekly at a meeting of the chair, vice-chairs and division chiefs.

Publication of a monthly “Quality Time Newsletter” disseminates lessons learned and reinforces the idea that the reporting of events, analysis and process improvement are all a part of a commitment to institutional learning. Inclusion of QA statistics and details about reportable events enforces a culture of transparency and normalizes sharing of information. These electronic newsletters are also shared with the hospital vice-president for Q&S who serves as the hospital Chief Q&S Officer. In part because of these deliberate efforts to highlight departmental Q&S work at the highest hospital levels, our anesthesiology leader of Q&S was made a member of the hospital board of directors’ committee on Q&S and serves as a faculty member in the hospital network’s Center for Excellence in Q&S.

Just as interdisciplinary collaboration is needed for optimal clinical care, interdisciplinary analyses of events and collaboration with process-improvement projects enhance learning and foster a team-approach to problem-solving. Shared experiential learning builds bridges across specialties; we have accomplished this through interdisciplinary M&M discussions, joint attendance (with surgeons and/or perioperative nurses) at grand rounds given by national and international experts, and interdisciplinary simulation-based OR team-training sessions.

## **Nurturing a Culture of Safety through Support and Presence**

Efforts directed at improving patient safety and quality of care need to include care of the “second victim”, the care-provider who is involved in an adverse patient event. Stress related to adverse events takes a toll on care providers, and can translate into long-term burnout, and even threaten the safety of subsequent patients cared for by affected clinicians. Suggested methods for providing peer support have been made (8, 9), and we have developed and implemented a peer-support program in our department. Faculty, residents, nurses and technicians who were nominated for this role by their peers, undergo a 6-hour training program that incorporates didactics and role-play. They are deployed to support peers after serious adverse events and the details of their interactions are non-discoverable under our QA umbrella.

Studies have suggested that burnout threatens learning, decision-making during times of uncertainty, and innovation (10). Realizing that these are core elements of a strong safety culture, our Q&S team identified “addressing burnout” as a primary tactic in carrying out our mission and vision. A Wellness Committee was established, with membership open to all department members. Monthly committee meetings have resulted in the organization of departmental activities, including group exercise sessions, meditation classes, cooking classes and winery outings. Publication of a monthly wellness newsletter provides links to primary articles on nutrition, health and fitness.

Leadership walk-rounds have been shown to enhance the visibility of leaders with frontline workers and the two-way engagement has been shown to result in improved quality and safety (11, 12). In our department, leaders of the Q&S team make regular rounds in clinical areas to hear from colleagues about what’s working well and what needs to be improved. Hearing responses to “what keeps you up at night?” and “how will the next patient be harmed?” helps prioritize efforts and sends a message that the departmental leadership is receptive and responsive to clinician concerns.

## **Valuing a Culture of Safety through Celebration**

Sharing “stories” is a powerful tool to engage individuals in Q&S and to illustrate successes. We aim to solicit success stories with each and every anesthetic. At the end of each anesthetic, our electronic medical record links to a “QA page” (a forced function to close the encounter) which not only asks about adverse events and near misses, but also has a free text response box for “Getting it Right” (e.g., “a nurse knew about the patient’s allergy to antibiotics even though it was not on the electronic medical record and she spoke up about it at the time-out”) – these stories are circulated to the department and the hospital leadership in the monthly department quality newsletter.

Q&S awards are tangible ways to show that efforts are valued by the leadership of the department. At our institution the “Jeffrey Cooper Award for Patient Safety” honors the dedication and contributions of Dr. Cooper to patient safety and recognizes the exemplary contributions of a member of the department to the provision of safe patient care, as well as to fostering a culture of safety. Our department chair also recently presented a one-time “Chief’s Award” to our QA senior coordinator for her exemplary contributions to our department; in the awardee’s honor, Dr Lucian Leape came to give a Grand rounds about safety culture and it was a joint presentation for the anesthesia department and the perioperative nursing department.

Increasingly, anesthesiologists can be recognized at the hospital and national level for Q&S efforts and successes. At our institution, an anesthesiologist received the inaugural “Cy Hopkins Patient Safety Leadership Award” and several clinicians have been recognized as MGH “Patient Safety Stars”. On a national level, our residents sought and received the inaugural Anesthesia Patient Safety Foundation (APSF) Resident Quality Improvement Recognition Award (13).

### **Q&S success does not happen by accident; it happens with deliberate leadership**

Department Chairs play an important role in establishing the culture in which Q&S work can flourish. Supporting individuals’ efforts with time, training, mentorship and connections is as helpful as it is with other aspects of our academic work. Having the courage to maneuver towards more transparency is dependent on leaders who reward learning from adverse events and near-misses, who are fair and consistent in their responses, and who support process improvements that result in the wellbeing of patients and the work force.

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