Learning From Others:

A Case Report From the Anesthesia Incident Reporting System

Anesthesia Quality Institute
ANESTHESIA INCIDENT REPORTING SYSTEM (AIRS)

Review of unusual patient care experiences is a cornerstone of medical education. Each month, the AQI-AIRS Steering Committee abstracts a patient history submitted to the Anesthesia Incident Reporting System (AIRS) and authors a discussion of the safety and human factors challenges involved. Real-life case histories often include multiple clinical decisions, only some of which can be discussed in the space available. Absence of commentary should not be construed as agreement with the clinical decisions described. Feedback regarding this article can be sent by email to the AIRS Committee: **airs@asahq.org**. Report incidents or download the AIRS mobile app at **www.aqiairs.org**.

Safety Culture, Disrespect and the Gemba Walk

Case #1

A complex 59-year-old man with CAD, AFib, CRI arrived for removal of infected knee hardware and was assigned to my room at the last minute. Circulating RNs are held responsible for turnover times (with financial penalty) and have no patience for delays. When seen, the patient was actively wheezing; sat was 95 percent. He was on cephalexin for a "cold."

The patient did not want to delay despite potential for respiratory complications; OK with SAB. Last warfarin dose was seven days ago. Rushed assessment finished just as room was ready. Discussed case with surgeon, asked that surgeon get hospitalist to see this complex patient postop; was called a "nervous Nellie."

Femoral nerve block and spinal performed; high-flow oxygen required to keep O_2 sat above 92 percent. With more thorough review of chart found that am INR was 1.89 – we would not have done SAB had we known.

Notice to the hospital organization of this near-miss and potential for spinal cord hematoma would not change care and may risk drastic punitive measures.

Frequent neuro checks postop; no complications. Pulmonary consult re: wheezing – pulmonologist suggested wheezing was likely provoked by use of an endotracheal tube.

Case #2

Patient scheduled for knee arthroscopy. GA induced. During timeout, surgeon asks, "And she has an epidural, right?" She did not. We should move to a TRUE timeout (before the patient receives sedation) not the cursory one we do once the drapes are up. Poor communication. Poor system and culture of safety.

Case #3

Patient for ERCP. Patient sedated and ready for procedure. Waited more than 15 minutes before GI attending arrived to start the case.

Case #4

Patient for AP resection with history of chronic pain. Surgeon said that he didn't have time to wait for an epidural and incision would be too low anyway. Incision was actually high and patient was difficult to control with fentanyl (up to 1 mg), finally needed ketamine. Epidural would have been helpful and surgeon seemed to have fudged the size and location of incision because he didn't want to wait for an epidural.

Case #5

Anesthesia resident informed that there are no radiation protection thyroid shields available for spine case involving extensive fluoroscopy.

Case #6

Patient delays due to backup in admitting, apparently because of lack of staffing. I was then rushed because I couldn't see patients ahead of time and then both arrived at the same time (late). We're going to slow the O.R. down and harass the anesthesia staff because of inadequate staffing in admitting?

Culture of Safety

Nearly every discussion about patient safety at some point includes the concept of "a culture of safety," defined by the nuclear industry as *the collective behaviors and values that influence an organization's ability to identify and mitigate vulnerabilities and unsafe conditions.*[2] This definition carries the implicit recognition that adverse events due to human error cannot be eliminated by eliminating those who err. Improving safety requires a systems approach, which can include implementing forcing functions, writing policies, and establishing checks and balances that can prevent or capture the inevitable errors.[3] Despite much discussion, health care has been slow to move away from the deeply rooted punitive culture that is focused on finding someone to blame and punishing them, an approach long recognized to be useless at best and counterproductive at worst. A more productive approach is that of the "just culture," where human errors are met with a sense of curiosity, to understand what system vulnerabilities exist that allow such an error, but where those who willfully violate are held accountable.

Although "culture of safety" may be interpreted differently, the Agency for Healthcare Research and Quality (AHRQ, lays out the core characteristics of a hospital safety culture in its Hospital Survey on Patient Safety Culture instrument (HSOPS) (Table 1).[4] Central to a culture of safety is the concept of psychological safety of the frontline workers, i.e., that they feel comfortable speaking up when they see something wrong and can do so without ridicule, harassment or punishment. When we feel psychologically safe, we feel comfortable reporting errors that have been made, knowing that administration will approach the mistake as an opportunity to develop a systems remedy, not punishment.[5] The instinct for

self-protection leads humans to avoid looking ignorant, intrusive or incompetent. If reporting an error leads to embarrassment or punishment, individuals will never speak up.

The AHRQ HSOPs instrument has been used widely since 2007. Unfortunately, significant improvement has been elusive: in 2011, the lowest positive response was for a non-punitive culture, with only 44 percent of respondents agreeing that "their mistakes and event reports are not held against them and that mistakes are not kept in their personnel file."[6] In the 2016 report, an equal number (45 percent) stated that a non-punitive approach existed in their institution. There are rays of hope in the HSOPS reports – nearly 80 percent of individuals report that they feel strongly supported by their teammates and that they treat each other with respect. But there are significant issues that have been present for some time and do not appear to be changing.

It is clear that this aspect of safety culture – that individuals feel comfortable speaking up when they see errors or vulnerabilities and in reporting their own mistakes – is critical for improving safety and reducing harm. It is also clear that it is not present in the majority of hospitals. Dr. Lucien Leape and his colleagues postulate that much of this is due to the pervasive culture of disrespect in health care.[1]

"A substantial barrier to progress in patient safety is a dysfunctional culture rooted in widespread disrespect. ... At one end of the spectrum, a single disruptive physician can poison the atmosphere of an entire unit. More common are everyday humiliations of nurses and physicians in training, as well as passive resistance to collaboration and change. Even more common are lesser degrees of disrespectful conduct toward patients that are taken for granted and not recognized by health workers as disrespectful.

Disrespect is a threat to patient safety because it inhibits collegiality and cooperation essential to teamwork, cuts off communication, undermines morale, and inhibits compliance with and implementation of new practices. Nurses and students are particularly at risk, but disrespectful treatment is also devastating for patients. Disrespect underlies the tensions and dissatisfactions that diminish joy and fulfillment in work for all health care workers and contributes to turnover of highly qualified staff. Disrespectful behavior is rooted, in part, in characteristics of the individual, such as insecurity or aggressiveness, but it is also learned, tolerated, and reinforced in the hierarchical hospital culture."[1]

The authors' enumeration of the "everyday humiliations of nurses and physicians in training" foretold the recent "shocking" report of the Royal Australian College of Surgeons (RACS), that the majority of surgeons in training have experienced discrimination, bullying and sexual harassment. The extent of the bullying uncovered led the president of RACS to issue an unprecedented apology, which can be viewed on YouTube (**www.youtube.com/watch?v=Im_YLicg9Sw**). The RACS should be applauded for being the first to publicly acknowledge the issue and vow to eliminate this behavior. Health care is, in large part, a dysfunctional, steeply hierarchical culture that is resistant to change. Although disrespectful behavior can occur between any levels of personnel, physicians tend to be the worst offenders, as they hold positions of power and prize autonomy and personal privilege over collegiality and shared decision-making.[1,7] We physicians have a cherished view of ourselves as "top of the class" and view any challenge as personally destructive to our superiority. When our knowledge, judgment or skill is questioned, anxiety, followed by a vigorous defense, is the common response. This ethos leads us to disrespect and even humiliate those who suggest there is a better way to do things or that we might actually be wrong. The deeply engrained need to be right, and to be seen as infallible, leads us to dismiss not only those "inferior" to us, but also to dismiss guidelines and policies that are different than our preferred management. Thus, we set up a culture that both diminishes our colleagues and resists improvements in care.

Disrespect extends into the relationship with patients as well. Patients are not doctors, cannot know what we know, and their concerns, wishes and viewpoints are often dismissed out of hand, impairing communication and eliminating shared decision-making. There are many instances of highly knowledgeable individuals (including physicians and nurses) who had their concerns dismissed, often with tragic results. Many pediatric cardiac patients died unnecessarily at Bristol, U.K.[9,10] and Winnipeg, Canada,[11] despite multiple attempts by nurses and anesthesiologists to highlight unacceptable mortality rates. In Winnipeg, nurses were told that they were not competent to determine whether care was adequate, a view that was due in large part to a steep hierarchy that discounted nursing skill and ability.[12] The refusal of leadership to acknowledge potential errors led to the unnecessary deaths of 12 infants in Winnipeg and 35 in Bristol. Worse still, patients and family members often hesitate to speak up out of fear of being seen and treated as difficult. The literature is rife with these instances. Once present in a single area (e.g., disrespect of nurses), disrespect will inevitably pervade all aspects of health care. Lack of respect presents a major barrier to a culture of safety.

Lack of respect is also manifested from the "C suite" to the front line workers. As noted in many AIRS reports, including those above, equipment is too often outdated, poorly maintained or missing, and reports up the chain are dismissed or met with delayed response. There are many reports of hazards due to inadequate staff and inadequate equipment. We see an inappropriate punitive response in the first case above. The pay of the circulating nurse was somehow linked to the turnover time of their assigned room, but they often have no control over the primary issue (missing

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consent, missing surgeon, missing equipment). Audits and metrics are critical for improvement and should not be used to punish individuals – but rather in a culture of curiosity, where leaders seek to understand frontline challenges and uncover systems issues that need correction. Despite pleas for developing a "just culture," punitive approaches continue to be widespread. The culture of blame is disrespectful of both the staff that have no authority and patients who may be injured by production pressure. Most concerning, and ultimately demoralizing, is the pervasive unwillingness of leadership to listen to frontline workers.

Experience of highly resilient industries (aviation, nuclear power) is that culture change must begin at the top. No matter the passion, dedication and intelligence of the frontline personnel, it is leadership that must set the tone for the collective values and behaviors that results in a robust safety culture. One critical leadership task is that represented by the "gemba walk." Gemba is the Japanese term used in the Toyota production model, and is literally "the place where value is created." In the automotive industry, it is on the production line; in health care, it is the intersection between care provider and the patient. Central to a safety culture is a C suite where executives adopt a ward, operating rooms or a clinic and spend time on a regular basis watching, listening and understanding what the barriers are to delivering excellent patient-centric care. All too few frontline workers ever meet an executive on a gemba walk.

Executives are also critical to a safety culture by modeling and expecting respectful behavior. Again, from Leape and colleagues: "The responsibility for creating a culture of respect falls on the organization's leader …[8] The five major tasks identified are: 1) motivate and inspire; 2) establish preconditions for a culture of respect; 3) help establish policies regarding disruptive behavior; 4) facilitate frontline worker engagement; 5) create a learning environment." The RACS is to be commended for accepting responsibility for the culture that tolerated and even promoted bullying and harassment and vowing to change it; this model of leadership must be adopted by all health care leadership organizations.

Perhaps even more critical and more difficult to achieve is a deep and abiding respect for the patients who come to us for care; when we opt for a profit margin over investing in equipment, time or more staff, our patients are disrespected and ill-served. One wonders (and worries) whether hospital leaders in each of the institutions from which the cases described above have any idea that these cases occurred or that similar cases likely occur on a daily basis.

We as frontline workers are also critical to our local safety culture. Even when executive support is not optimal, we can each commit to a deep personal respect – for ourselves, for our colleagues and for our patients. In the RACS report, there was a disturbing theme of anesthesiologists not as protagonists, but as bystanders, those who viewed and recognized disrespectful behavior but who did not speak out. We need to be courageous enough to speak up, even if the response is uncomfortable. We need to learn techniques to resist disruptive behavior (and even report or confront), and we must value our own judgment enough to resist production pressure when it puts a patient at risk. The resistance we choose must also be respectful and not passive aggressive (which is in itself disrespectful!) We also must respect and defend those around us who are speaking up or those who are being disrespected, teased, bullied or humiliated. Those of us in leadership positions must model respectful behavior, teach it to our juniors and demand it of our teams. As leaders we must establish a "just culture" and encourage an atmosphere of curiosity that allows our teams to approach problems from an "appreciative inquiry" point of view rather than fear and condemnation.

This seems a daunting task. The causes of a poor safety culture are myriad, complex, ancient, pervasive and big. We must not, however, choose to not fight the good fight. To do so is to repeat the tragedies of Bristol and Winnipeg, where so many babies and children died unnecessarily.[9-12] We must all daily choose to work to a culture of safety, which will put our patients first.

References:

1. Leape LL, Shore MF, Dienstag JL, et al. Perspective: A Culture of Respect, Part 1: The Nature and Causes of Disrespectful Behavior by Physicians. *Acad Med.* 2012;87(7):845-52.
2. *Organising for Safety: Third Report of the ACSNI (Advisory Committee on the Safety of Nuclear Installations) Study Group on Human Factors.* Health and Safety Commission (of Great Britain). Sudbury, England: HSE Books; 1993.
3. Reason JT. *The Human Contribution: Unsafe Acts, Accidents and Heroic Recoveries.* Burlington, VT: Ashgate Publishing Company; 2008.
4. Famolaro T, Yount ND, Burns W, Flashner E, Liu H, Sorra J. *Hospital Survey on Patient Safety Culture: 2016 User Comparative Database Report.* Rockville, MD: Agency for Healthcare Research and Quality; March 2016.
5. Edmondson A. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly.* 1999;44(2): 350-83.
6. Sorra J, Famolaro T, Dyer N, Khanna K, Nelson D. *Hospital Survey on Patient Safety Culture: 2011 User Comparative Database Report.* Rockville, MD: Agency for Healthcare Research and Quality; March 2011.
7. Reinertsen JL. Zen and the art of physician autonomy maintenance. *Ann Intern Med.* 2003;138(12):992-5.
8. Leape LL, Shore MF, Dienstag JL, et al. Perspective: A Culture of Respect, Part 2: Creating a Culture of Respect. *Acad Med.* 2012;87(7):853-8.
9. Aylin P, Bottle A, Jarman B, Elliott P. Paediatric cardiac surgical mortality in England after Bristol: descriptive analysis of hospital episode statistics 1991-2002. *BMJ.* 2004;329(7470):825.
10. Walshe K, Offen N. A very public failure: lessons for quality improvement in healthcare organisations from the Bristol Royal Infirmary. *Qual Health Care.* 2001;10(4):250-6.
11. Davies JM. Painful inquiries: lessons from Winnipeg. *CMAJ.* 2001;165(11):1503-4.
12. Sibbald B. Why did 12 infants die? Winnipeg's endless inquest seeks answers. *CMAJ.* 1998;158(6):783-9.

Table. Patient Safety Culture Composites and Definitions from AHRQ Hospital Survey on Patient Safety Culture	
Patient Safety Culture Composite	**Definition: *The extent to which ...***
1. Communication openness	Staff freely speak up if they see something that may negatively affect a patient and feel free to question those with more authority
2. Feedback and communication about error	Staff are informed about errors that happen, are given feedback about changes implemented, and discuss ways to prevent errors.
3. Frequency of events reported	Mistakes of the following types are reported: (1) mistakes caught and corrected before affecting the patient, (2) mistakes with no potential to harm the patient, and (3) mistakes that could harm the patient but do not.
4. Handoffs and transitions	Important patient care information is transferred across hospital units and during shift changes.
5. Management support for patient safety	Hospital management provides a work climate that promotes patient safety and shows that patient safety is a top priority.
6. Nonpunitive response to error	Staff feel that their mistakes and event reports are not held against them and that mistakes are not kept in their personnel file.
7. Organizational learning—Continuous improvement	Mistakes have led to positive changes and changes are evaluated for effectiveness.
8. Overall perceptions of patient safety	Procedures and systems are good at preventing errors and there is a lack of patient safety problems.
9. Staffing	There are enough staff to handle the workload and work hours are appropriate to provide the best care for patients
10. Supervisor/manager expectations and actions promoting patient safety	Supervisors/managers consider staff suggestions for improving patient safety, praise staff for following patient safety procedures, and do not overlook patient safety problems.
11. Teamwork across units	Hospital units cooperate and coordinate with one another to provide the best care for patients.
12. Teamwork within units	Staff support each other, treat each other with respect, and work together as a team.