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Honesty and Transparency, Indispensable to the Clinical Mission—Part I

How Tiered Professionalism Interventions Support Teamwork and Prevent Adverse Events

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KEYWORDS

• Professionalism • Teamwork • Surgery • Malpractice risk • Patient safety • Quality improvement • High reliability • Business of medicine

KEY POINTS

- Many medical and surgical errors cast as "unavoidable" may be preventable by a central, overriding sense of urgency around patient safety, clinical excellence, and high reliability.
- High reliability—the ability to operate in complex, high-hazard domains for extended periods without serious accidents—requires prioritizing safety over other performance pressures.
- The surgeon-as-captain-of-the-ship concept is an anachronistic relic that is antithetical to high reliability and should be supplanted by a commitment to healthcare-as-a-team-sport.
- Tiered professionalism interventions promote teamwork, improve safety, and reduce litigation risk by systematically identifying, measuring, and addressing unprofessional behaviors.
- Achieving high reliability requires honesty—the starting point to just culture, teamwork, and learning systems for investigating and responding to the system side and human side of errors.

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Honesty and transparency make you vulnerable. Be honest and transparent anyway.

—Saint Teresa of Calcutta (Mother Teresa)

INTRODUCTION

The *Business of Medicine* includes delivery of safe, effective, and compassionate care with honesty and integrity. Health care organizations that prioritize economics (which are inherently transactional) before core values (which are inherently foundational), often lose focus and invite inconsistency of purpose. The most important competitive business advantage is consistent high quality—achieve that and other factors like financial integrity tend to follow.[1] Relative to other enterprises, core values are particularly important in the profession of health care—whose practitioners are often drawn to the field out of a sense of calling or desire to serve; where the stakes are higher than other fields; and where the success of interventions and the prevention of harm—physical and psychological—rely on carefully orchestrated teams.

Clinical excellence across the continuum of care requires a steadfast commitment to *patient centricity*, defined as "Putting the patient first in an open and sustained engagement of the patient to respectfully and compassionately achieve the best experience and outcome for that person and their family."[2] This aspirational goal emphasizes respectful, accountable, and professional care, and success is predicated on honesty and openness with patients and families. There is also growing awareness of our shared humanity and that the social contract is not unidirectional; relational integrity necessitates attention to the well-being of health professionals and care partners, as articulated in the Declaration for Human Experience.[3] Nowhere is our character more tested than in moments of crisis[4] and when a patient suffers unintended harm.[5,6]

Interspersed through this 3-part series is a vignette that illustrates key points about how harm may arise; how to do right by those who have suffered; and how to prevent future harm—both for the health care team and for the next patient who walks in the door. Professionalism is an essential safeguard to the clinical trapeze that swings over the imperfect netting of clinical care delivery systems. Attention to 3 areas can advance the clinical mission: (1) an expectation of professionalism, (2) a commitment to honesty and transparency throughout the continuum of the patient-professional relationship, and (3) attention to the wellness and resilience of the health care team (**Fig. 1**). In this article, Part 1, we examine the first of these pillars of advancing the clinical mission: *promoting professionalism and teamwork*.

Consider the Following Hypothetical Case

Mr Peyshent is a 68-year-old man having surgery under sedation to reconstruct a nasal defect, which remains after a Mohs micrographic excision of a large cutaneous nasal carcinoma. The patient has obstructive sleep apnea, chronic obstructive pulmonary disease, and is on clopidogrel for cardiac stents. After induction of sedation anesthesia, the attending surgeon, Dr Scalpelle, tries to inject the surgical site with a local anesthetic, but the patient winces and withdraws. Dr Scalpelle glares at the anesthesia resident, Dr Lerner, but says nothing. Dr Lerner anxiously tries to deepen sedation, but the patient begins coughing violently. Dr Scalpelle declares sharply, "I need the patient deeper. Please get your attending!" Visibly rattled, Dr Lerner calls his attending, Dr Propofal. Dr Lerner is leery about deepening sedation too quickly given the patient's sleep apnea, but the last thing he wants is to further upset Dr Scalpelle; so, he pushes a bolus of sedative and increases the oxygen flow. Moments later, the patient becomes apneic, and oxygen saturations plummet. Dr Scalpelle's trainee, Dr Resedent

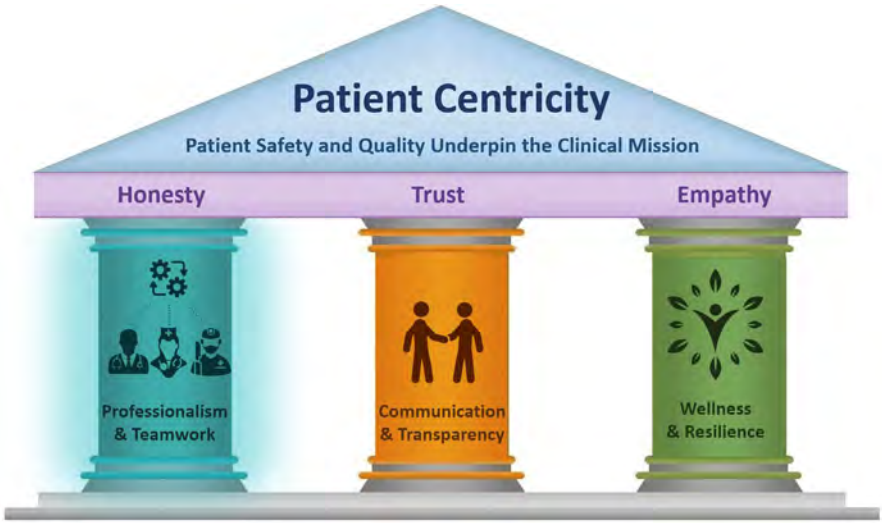

Fig. 1. Values-driven framework for improving honesty and transparency around adverse events. Honesty, trust, and empathy reflect the core values of the health profession promoting safe, high-quality care, and patient centricity. Preventing and responding to patient harm with integrity is supported by 3 pillars.

- *Professionalism and Teamwork (Part 1)* is the focus of the present article. Its touchstones are truth-telling, accountability, and curiosity—pausing to reflect on why unexpected events occur, pinpointing contributing factors, and implementing tiered professionalism interventions tailored to specific needs.
- *Communication and Transparency (Part 2)* offers a principled and comprehensive approach for responding to patient harm. It requires an overriding leadership commitment to honesty and transparency, and it aligns people, organization, and learning systems to achieve just outcomes for patients and families.
- *Wellness and Resilience (Part 3)* is the culmination of the preceding parts. It probes the human dimension of working at the sharp end of care, exploring our shared humanity and relational integrity. After defining the drivers of burnout and moral injury, we describe how leaders can create the path to wellness and resilience.

snaps at Nurse Corage, anxious to gain better access to the patient's airway. The nurse recoils. Dr Resedent performs a jaw thrust to restore breathing and oxygenation.

Reflect on a Few Questions

- How can abrasive interactions undermine patient safety in the operating room?
- Could incivility or unprofessional behavior affect a learner's performance?
- What unspoken lessons are the 2 residents likely to take away from these experiences?
- Whose responsibility is it to identify and address unacceptable behaviors in health care?

The following discussion will examine these questions, explore the link between professionalism and safety, and introduce strategies for supporting professional accountability.

WHAT DEFINES AN ACCOUNTABLE PROFESSIONAL?

Accountability is a willingness to accept responsibility for one's actions, and an accountable professional is one who embodies professionalism—possessing a clear focus on the patient's well-being and that of coworkers, a clear recognition of the importance of culture, and a commitment to technical excellence and staying current in one's specialty. Kirch describes that professionalism engenders, "a culture that is grounded in the values of collaboration, trust and shared accountability…. that encourages transparency and inclusivity, rather than exclusivity…. that is driven equally by our traditional commitment to excellence, and by service to others."[7]

Respect is woven through professionalism—not just for patients and fellow team members but also respect for established practices that improve safety, such as washing our hands, honoring the time out, following established surgical bundles, wearing mask in a pandemic, or getting vaccinated. These seemingly small acts of respect benefit patients and professionals who may otherwise get that infection, which shows up only later after a patient is discharged or a coworker falls ill. Professionalism defines a host of motivational, behavioral, and performance expectations for health care professionals truly committed to patient centricity and clinical excellence. Some of these elements are clinical acumen and technical mastery; pursuit of effective teamwork and communication; and compassion, empathy, and relational integrity for patients, families, and fellow health care team members (**Fig. 2**).

Professionalism is the compass that points true north, allowing us to navigate nuanced ethical dilemmas and moments of crisis. Professionalism is also how we inspire excellence in our learners and confidence in our patients—and it requires intentionality around honesty and transparency. Research finds that when an attending surgeon role models silence, disclosure training has no positive impact on learners' willingness to disclose an error.[8] Professionalism ultimately fosters a culture of patient safety, setting the tone and high baseline expectations for us to embrace surgery-as-a-team rather than surgeon as captain-of-the-ship.

Fig. 2. How accountable professionals promote teamwork. Accountable professionals demonstrate professionalism, which begins with respect for others. The cascading roles of self-awareness, communication, knowledge, and skill allow for effective teamwork and delivery of safe, effective care. *From* Joint Commission Resources.

HOW DO SLIPS OR LAPSES IN PROFESSIONALISM AFFECT PATIENTS AND TEAMS?

After one recognizes the primacy of professionalism, the deleterious and potentially catastrophic effects of unprofessional behavior assume newfound significance. The risk of an emergent airway intervention presented in the case is but one example of how conflict driven by lapses in professionalism can undermine safety. Surgical site infections, stroke, cardiac arrest, and septic shock are all more likely in patients under care of a disruptive clinician.[9,10] Merely witnessing incivility is sufficient to degrade clinical performance and erode trust. Disrespectful behavior is associated with medical error, patient dissatisfaction, and preventable harm. Erosion of team morale also may affect patient and health care professional safety. Team members may experience diminished joy in work, burnout, depression/anxiety, moral distress, and suicidal ideation.[11–13] The latter themes are examined in Part 3 of this trilogy.

Consider again the case of Dr Scalpelle. Did risky acts occur because the microculture was not right in the first place? If the culture had been right, would other team members have been prepared to address the first lapse with a gentle statement ("Dr Scalpelle, let me have a moment to make the patients a bit sleepier," or "Dr Scalpelle, I am concerned…"). These statements are not easily volunteered when they are likely to generate an angry or eye-rolling response. Is it reasonable that Dr Lerner felt compelled to deepen sedation to the point of apnea? When Dr Scalpelle is allowed, day in and day out, to interact in a manner that is dismissive and disrespectful, it dials up the heat on others, who then are prompted to dial up the oxygen—one of the cascading events setting stage for risk of fire today, tomorrow, and the day after that. And it creates a next generation of surgeons who have Dr Scalpelle as a role model.

Medical errors seldom arise from a single point of failure; rather, they usually reflect a complex interplay of how individual medical professionals interact with one another, how they communicate with patients and family members, and how small things can slip through the cracks of imperfect systems. Professionalism affords a baseline of behaviors that create safeguards where imperfect systems cannot always deliver ideal circumstances whenever the unexpected is encountered. Surgeons often expect a team that is well-versed in their specialty and preferences, but what they get often looks closer to pick-up basketball. Amy Edmonson describes "Teamwork on the Fly," observing how diverse specialties increasingly need to come together.[14] In these situations, it becomes even more important to expect professionalism and respect from all members—especially Dr Scalpelle.

Enlightened surgeons recognize that professionalism allows a team to perform safe surgery in less-than-ideal circumstances. A professional graciously accepts the partnership of new, less experienced entrants to the team, showing respect, communicating effectively, and keeping the patient's interest central. Professionalism creates consistency in team performance where it would otherwise not exist. Most surgeons desire a dedicated, highly specialized operating room team—a team that knows the procedure and equipment cold and that can virtually read the surgeon's mind. But this ideal is seldom practical or realistic. Professionalism smooths the jagged edges of erratic care processes, helping to compensate for imperfect systems and to adapt to crises. And safety benefits are not limited to surgery. Professionalism helps navigate complexities of care, ensuring that the patient with cancer does not get "lost in the system."

HOW DO TRAUMATIC LEARNING EXPERIENCES AFFECT PROFESSIONALS?

How faculty and medical leaders interact with learners or new medical group members constitutes an unwritten curriculum whose lessons are taught for a lifetime.[15] When the messaging is to "lay low" and "avoid making waves," open communication and

transparency predictably suffer. Conversely, when the culture fosters trust, structural competency, and cultural humility, learning flourishes.[16,17] Traumatic learning experiences—whether stinging criticism, acts of exclusion, or humiliation—may occur in operating rooms, hospital wards, or morbidity and mortality conferences. Unspoken lessons—to be silent, to not admit to being wrong, to honor the hierarchy—leave an indelible mark on the psyches of learners, often reinforced by cultural cues that extol the virtues of silent stoicism.

Danielle Ofri, M.D.'s reflection on her own reluctance to speak out is revealing:

> *As a third-year medical student, I once assisted on a late-night operation when suddenly the surgeon's needle accidentally pricked my finger…. I couldn't muster the strength to push back against the hierarchy's deafening silence from my lowly perch as a medical student. That I left my wounded finger submerged in blood for the duration of the surgery during the height of the AIDS epidemic… gives you an inkling of just how hard it is to speak up when the system expects you to shut up and not make trouble.*[18]

The lack of psychological safety inculcated during medical school may pervade residency and persist throughout a career. Such was the case for Ofri, who later recounts her reaction to the discovery that she missed the diagnosis of an intracranial bleed on a computed tomography scan. Her reaction was the result of a traumatic learning experience, and though the intracranial bleed was identified by another clinician, it nonetheless took 20 years for her to muster the courage to disclose even a near miss that caused no patient harm. She describes her internal struggle:

> *My error – relying on a verbal report rather than looking at the scan itself–was still an error… I was so ashamed that I had given substandard care that I did not tell a soul… I was so devastated that I could hardly function. As a fledgling physician, I felt I had failed my patients so gravely that I was ready to quit medicine altogether. I was not surprised, years later, to read of a nurse who took her own life after an accidental miscalculation of the medication [resulted in death of] an infant in her care.*[18]

Such reactions are common in a culture that engenders shame and self-doubt to the detriment of learning and growth. Traumatic learning is experienced by all members of the health care team; nurses, physicians, surgeons, and all allied health professionals are often haunted by the chasm between the care they aspire to provide and the harm that they may cause or witness.

Some readers may not recognize their own experiences—instances where they have been either recipients or the deliverers of the trauma. All professionals should pause on occasion to reflect on performance and to recognize those traumatic disturbances that can keep us, or others who have experienced such disturbances at our hands, from reporting events, speaking up, disclosing errors, and sleeping at night. The *Silence Kills* study, a national survey of more than 1500 interprofessional health care workers, identified several areas that health care professionals find difficult to broach: broken rules, mistakes, lack of support, incompetence, poor teamwork, disrespect, and micromanagement—84% of physicians and 62% of nurses or other clinicians reported seeing coworkers take potentially dangerous shortcuts, but *fewer than 10%* confronted their colleagues with their concerns.[19]

HOW DOES PSYCHOLOGICAL SAFETY RELATE TO TEAM PERFORMANCE?

The importance of psychological safety was powerfully illustrated by *Project Aristotle,* a study by Google that dove deep to understand why some teams were wildly

successful, and others languish. The researchers identified 180 teams (115 project teams in engineering and 65 pods in sales) and tested team composition and team dynamics, conducting literally hundreds of double-blinded interviews and aggregating over 250 items from Google's longitudinal study on work and life or engagement surveys. They analyzed the data using 35 statistical models across hundreds of variables to identify what accounts for strong team performance. The most important factor was *psychological safety*, defined as "Team members feel safe to take risks and be vulnerable in front of each other," followed by dependability, role clarity, meaning in the work, and impact (**Fig. 3**).[20] In health care, willingness to take the risk of speaking up is one of the most important ways for teams to improve performance.

A similar conclusion was reached by Lencioni, a renowned expert on organizational health and team management. He is best known as author of *The Five Dysfunctions of a Team,* in which he observes that the most foundational dysfunction is the absence of trust. The bottom of the pyramid of teamwork notes that, "teamwork is founded on vulnerability."[21] Edmondson, a scholar on psychological safety, has been exploring this relationship for more than two decades.[22] Psychological safety needs to be sufficiently embedded in the culture that individuals need not fear retribution if they speak up to raise a concern, ask for help, or identify an opportunity to improve safety. It is imperative that any member of the team can "stop the line." We say that we pursue high reliability and want a learning system; but we cannot get there without making a habit of reporting and recognizing the importance of personal accountability.

Fig. 3. Psychological safety and team performance. Google's Project Aristotle analyzed 180 teams, finding that psychological safety was the characteristic that most separated high-performing teams from low-performing teams. Reproduced with permission. Credit: Google.

While pressures to stay silent after an error persist, just the opposite is needed to uncover what really happened, to correct faulty systems, to address human error, and to do the right thing for patients and their families at every step along the road. A safety culture can foster joy and meaning in work, as discussed more extensively in Part 3 of this series. When team members have confidence that unprofessional behavior will be consistently addressed in a manner that is purposeful and equitably applied across all health care professionals, the team is motivated to report incidents, and everyone derives greater satisfaction from collaboration. Teamwork is protective against burnout and moral trauma. Failure to adopt these practices places patients at risk for errors, increases turnover, and raises the probability that Dr Scalpelle walks into another room and threatens others.

WHAT IS THE LINK BETWEEN PATIENT COMPLAINTS, SAFETY, AND RISK OF LITIGATION?

In the late 1980s, a research team at Vanderbilt seeking to define the malpractice experience of Florida physicians identified that a small subset of physicians by specialty (2%–8%) accounted for a disproportionate share of claims and payouts. A series of studies followed, seeking to define how these physicians differed from their peers and how to improve their performance. The work identified that high-risk claim experience was not related to the complexity of care delivered but rather to how families assessed their experiences within these high-risk practices. One study taking advantage of unsolicited patient observations/complaints documented by a hospital's office of patient relations found a strong link between unsolicited patient complaints and malpractice litigation.[23]

As this work expanded to collect data across hundreds of institutions, a consistent finding was that an unexpectedly small percentage of clinicians account for a preponderance of complaints by patients. Just 5% of professionals are associated with 35% of unsolicited complaints and 50% of claims dollars; in contrast, almost half of professionals are associated with no unsolicited complaints and 4% of claims dollars. This nonrandom distribution raised the possibility of identifying unprofessional behaviors and intervening to alter these behaviors to improve safety and reduce malpractice claims. This work expanded to coworker observations and demonstrated that patients who receive care from surgeons who model disrespect are more likely to experience avoidable outcomes from surgical site infections, returns to an ICU, reintubation, and a host of medical complications including pneumonia, sepsis, embolism, and stroke.[24,25] Unsolicited patient complaints and coworker observations afford insights across all specialties, including otolaryngology,[26] and representative examples are shown in **Fig. 4**.

Consider again the microculture and interactions depicted in our case. What might have changed if a robust reporting system were in place, if the culture normalized coworkers using the system to reporting concerns, and if the reports were consistently shared? Likely, one of the previous contentious exchanges that Dr Propofal observed between Dr Scalpelle and other team members over years would have drawn attention earlier and prompted timely sharing of concerns. This communication would prompt self-reflection and change; or, if Dr Scalpelle appears unwilling or unable to change, it would prompt an appropriate escalation of response that would be to the benefit of Dr Scalpelle, the team, and the patient. Perhaps the very existence of such infrastructure, with its attendant expectations, would improve behavior. Professionals have a commitment to self-regulate and to collaborate in efforts to group regulate. Failure to do increase the risk of untoward events.

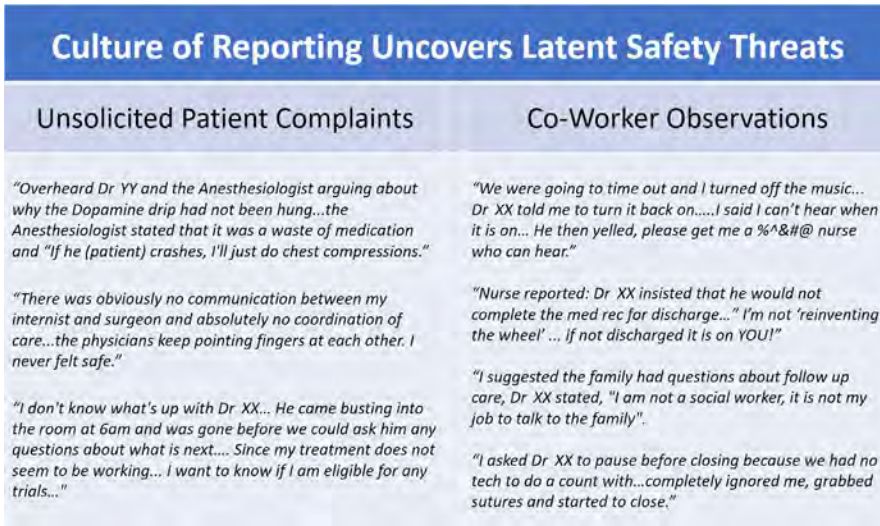

Fig. 4. Role of patient and coworker reports. Unsolicited patient complaints and coworker observations provide valuable data for identifying and responding to potential areas of concern.

HOW DO TIERED INTERVENTIONS PROMOTE SAFETY AND PROFESSIONALISM?

To support professionalism in the workplace requires the pursuit of a safety culture, which cannot be achieved solely based on the courage of team members—there needs to be a plan that is supported by the right *people*, *organization*, and *learning culture* (Fig. 5). While a detailed discussion of this infrastructure is beyond the scope of

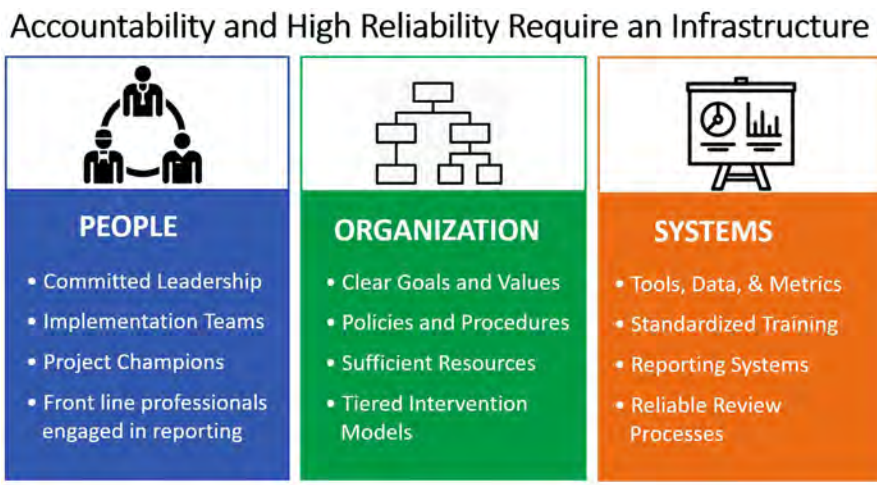

Fig. 5. Structural elements for promoting accountability and high reliability. People, organization, and systems are the building blocks for supporting professional accountability and allow for progress toward high reliability. Leadership, infrastructure, and metrics/tools are critical. *From* Joint Commission Resources.

this article, understanding the rudiments can assist readers in considering what actions they can take in their own practice, hospital, or system.

An example of a tiered intervention model to provide feedback on any kind of performance is the Vanderbilt Promoting Professionalism Pyramid (Fig. 6), which has been successfully used to promote hand hygiene, promote vaccine administration, and address clinical team members who model disrespect.[27–29] The pyramid is based on the knowledge that the vast majority of clinical team members are committed to doing the right thing. That said, medicine is complex and stressful, and all professionals are subject to an occasional lapse in performance. If, for example, a Dr Scalpelle exhibits behavior that intimidates other members of the team or he fails to participate in the time-out process, a team member is encouraged to speak up in the moment or share observations through a safety reporting system.

Reports are reviewed in a timely manner and (if not mandated for investigation due to an assertion of physical contact, sexual boundary violation, or discrimination, as represented by the orange triangle in the lower right corner of Fig 6)[27] are dispatched to a peer messenger for delivery. The peer is trained to share the report with Dr

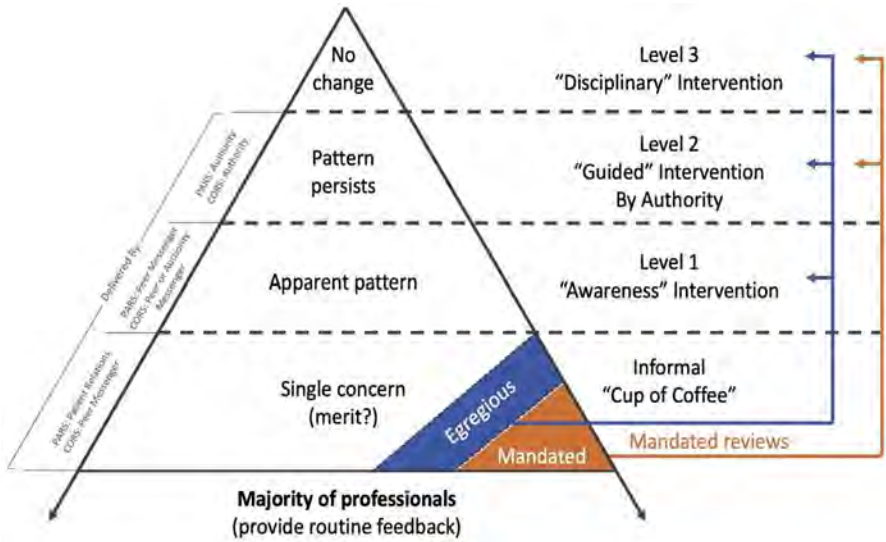

Fig. 6. Promoting professionalism pyramid. The pyramid illustrates a tiered intervention approach that supports the pursuit of professional accountability. Recorded reports are reviewed and can be shared in a respectful, nondirective fashion during an informal conversation such as one might have with a colleague over a cup of coffee.

- When patterns of persistent concerns emerge, a peer-delivered Level 1 Awareness Intervention, with local and national peer comparisons, is performed.
- Clinicians who are unable or unwilling to respond are escalated to Guided Interventions by Authority (Level 2), which includes authority figure (eg, department chair, Chief Medical Officer).
- A very small number may not respond and are elevated to Level 3 disciplinary action as defined by organizational policies, bylaws, contracts, or other governing documents. (*Adapted with permission from* Hickson GB, Pichert JW, Webb LE, Gabbe SG. A complementary approach to promoting professionalism: Identifying, measuring, and addressing unprofessional behaviors. Acad. Med. 2007 Nov; 82 (11): 1040-1048.)

Scalpelle in a nonjudgmental, nondirective meeting, while sharing a cup of coffee. Approximately, 70% of individuals will respond without other reports (over a 3-year audit period).[30] If a pattern emerges (less than 5% of clinicians), an *Awareness Intervention* (Level 1) is delivered. Individuals who are unwilling to change or unable to do so (eg, those whose complaints arise from neurocognitive impairment[31]) are escalated to a *Guided Interventions by Authority* (Level 2), with a written corrective plan by the department chair or Chief Medical Officer (less than 1.5% of clinicians). Rarely, a *Disciplinary Intervention* (Level 3) is needed, invoking organizational policies, bylaws, contracts, or other governing documents.

When single incidents are not addressed, patterns are more likely to emerge, sometimes rippling through the organization.[12,32–36] Unprofessional behavior compromises communication, teamwork, and trust, negatively impacting patient care and safety. These behaviors may have adverse effects for nurses, residents, and patients, who are more likely to suffer preventable medical or surgical complications.[10,37,38] Maintaining professional standards is only possible when structures are in place that support an organized approach to delivering the firsthand accounts of patients and coworkers in a timely fashion, thereby reinforcing a culture of safety. Leaders must hold everyone accountable equally; employ and utilize reporting systems; and invest necessary resources to individuals and teams to build and maintain the efforts.

Fig. 7 illustrates variation in how individuals may reflect and adjust their performance based on feedback. Serving coffee or making someone aware that there appears to be a pattern of unprofessional behavior is about calling on professionals to reflect and self-regulate. In the example of the blue line, the clinician alters her behavior after meeting with a respectful colleague over coffee. She thereby rejoins coworkers in resuming professional behaviors that reinforce patient safety and the well-being of the team. The green line, in contrast, depicts a clinician who

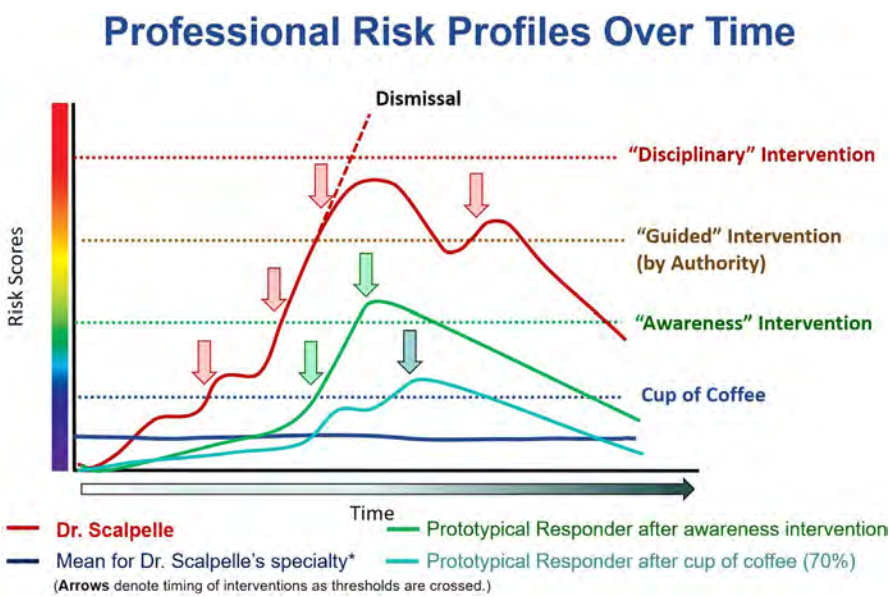

Fig. 7. Professional response to tiered interventions. The hypothetical profiles of clinicians depicted by red, green, and blue lines illustrate how individuals may differ in their responses to feedback provided over coffee or, if required, to subsequent escalating interventions.

does not respond when coffee is served. By his behavior and performance, he exhibits ongoing slips and lapses of self-regulation that separate him from his professional colleagues; however, in response to the awareness intervention, this clinician returns to accepted norms and rejoins colleagues.

Sometimes, albeit rarely, individuals graduate to higher levels of interventions. Dr Scalpelle (red line) is recalcitrant and proceeds to a guided intervention after responding to neither coffee nor an *Awareness* Intervention. The depiction foreshadows professional lapses—and interventions in response to them—that unfold in Parts 2 and 3 of this series. If Dr Scalpelle eventually responds to the interventions (solid line), he rejoins the professional community; in contrast, if he does not, he is among the small number of professionals who requires a disciplinary intervention, and possibly even restriction of privileges, dismissal, or nonrenewal (depicted by dotted line). The goal for all clinicians requiring these interventions is to help them rejoin their professional colleagues, and the pyramid supports them in doing so. Barring organic illness, such as brain tumor, neurodegenerative disease, or cognitive decline, it is their choice. Best practices for referring clinicians for help are shown in **Fig. 8**.

IS PROMOTING PROFESSIONALISM SOUND BUSINESS PRACTICE?

Medical malpractice claims and legal costs account for a substantial portion of expenditures across health care organizations. In recent years, the trend has been one of increasing severity of claims, corresponding to higher payouts.[39–43] Many members of the health care community—particularly physicians and surgeons—have a certain fatalism about malpractice claims—regarding them as inevitable and therefore "the

Fig. 8. Referring clinicians for professional assistance.*(Adapted from* CCPA Roundtable https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fww2.mc.vanderbilt.edu%2Fcppa%2F45373&data=04%7C01%7Cj.surendrakumar%40elsevier.com%7Ce2dd426f9cb2421e8fa308d96657f271%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637653351109775840%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=z4fY5IQYuL3r%2FqByrMwrB4%2FXj7ZNZj298GMc6FrB7WI%3D&reserved=0.)

cost of doing business." To others, litigation is like lightning, striking with tremendous destructive force, without reason or any means of prevention. The data tell a different story, however. Studies into why patients and families pursue claims do not show arbitrariness but rather reveal recurring themes—including concerns around the care delivered, concerns about inadequacy of the explanation for what happened, or concerns for similar incidents happening again.[23,44–46]

The data are clear that some clinicians are litigation lightning rods, and adverse surgical outcomes often can be traced to teams disrupted by unprofessional behavior.[24,25] The risk of adverse events spikes when the surgical team neglects to do a timeout, fails to protect the surgical field, or deviates from best practice—often to avoid criticism or to appease a volatile team member. When a patient gets an infection, the prior disclosure of this risk during informed consent may matter little to the patient who has been shown disrespect at any point during his or her care; suspicion only rises when a disrespected team members intimates to the family that they are not surprised, because the surgeon's patients "seem" to have more infections. Tiered interventions are highly effective in addressing unprofessional behavior, with very few physicians reaching the top tier of disciplinary interventions.

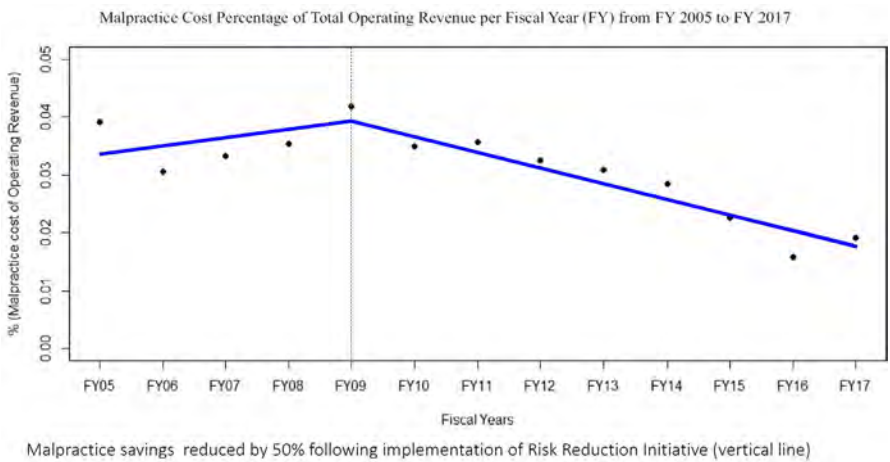

Fig. 9. Reduction in malpractice costs associated with tiered interventions. Malpractice expenditures decreased by 50% over a 7-year period after implementation of a tiered strategy. *(From* Diraviam et. al., Physician Engagement in Malpractice Risk Reduction: A UPHS Case Study, The Joint Commission Journal on Quality and Patient Safety, Volume 44, Issue 10, 2018,Pages 605-612. Available at: https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdoi.org%2F10.1016%2Fj.jcjq.2018.03.009&data=04%7C01%7Cj.surendrakumar%40elsevier.com%7Ce2dd426f9cb2421e8fa308d96657f271%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637653351109775840%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=hrqc%2BDd8X%2FQ5rbPEy0pBRl%2Bh6%2BqUZls93MIHl0k2jJM%3D&reserved=0.(https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.sciencedirect.com%2Fscience%2Farticle%2Fpii%2FS1553725017304749&data=04%7C01%7Cj.surendrakumar%40elsevier.com%7Ce2dd426f9cb2421e8fa308d96657f271%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637653351109785837%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=%2F%2B8O8pBAM8oRzILZ9m9tyIIoI%2B9itBXFbCqxXO58Euw%3D&reserved=0)

In response to a high number of malpractice claims and payouts, the University of Pennsylvania Health System (UPHS) implemented a risk reduction strategy that incorporated the Vanderbilt Patient Advocacy Reporting System (PARS)[26] including the tiered intervention model, and actively engaged physicians in addressing unprofessional behaviors.[47] Using data captured by their office of patient relations and coded and aggregated by the Vanderbilt team, the institution identified their physicians at high malpractice claims risk. Physicians at 1.5 to 2 standard deviations above the mean for their specialty underwent tiered professionalism interventions, beginning with awareness and, only if required, escalation to authority-based interventions.[28] The strategy resulted in halving of malpractice costs, from approximately 4% to 2% of total UPHS patient service revenues during the 7-year study period (**Fig. 9**).

BRINGING IT ALL TOGETHER: PURSUIT OF HIGH RELIABILITY

Worldwide, innumerable patients suffer injuries, permanent disabilities, and death from patient safety events that might have been prevented. While the modern safety movement has ushered in prodigious efforts to encourage improvement, the evidence of progress remains limited. Is care measurably safer than it was two decades ago? The answer is likely mixed. Much more is understood about medical errors,[48] and there is heightened awareness of human factors engineering and root cause analysis and actions[49]—areas explored in Part 2. Nonetheless, reluctance or inability to hold individuals accountable may partially explain the challenge of achieving transformative change in health care. System considerations are important, but limiting case reviews solely to system issues can dilute personal accountability—leaving the door open for a Dr Scalpelle to walk in and immediately impact individual and team performance; discounting the importance of individual behaviors may make it nearly impossible to identify contributing factors that led to a tragic event.[50]

The practice of medicine is inherently dangerous, and the ideal is "failure-free operation… safe, effective, patient-centered, timely, efficient, and equitable." The

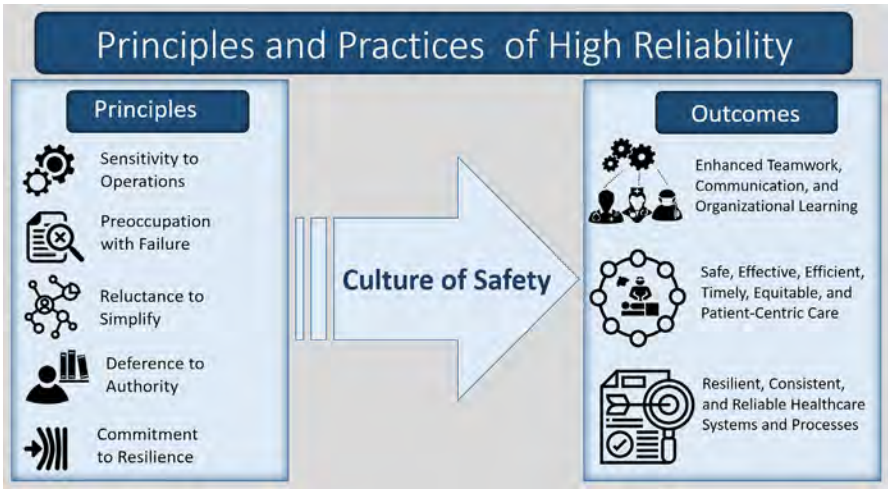

Fig. 10. Pursuit of high reliability. Safe, effective, patient-centered care requires that embracing the principles of high-reliability organizations, which involve a combination of curiosity, rigor, and resilience in correcting sources of failure and promoting optimal teamwork.

characteristics of high-reliability organizations are shown in Fig. 10. In academic discussions of high reliability, the emphasis is often on the hard-headed perseverance necessary to drill down to the proximate cause of failure and to eradicate it, but in practice, there is another ingredient that is critical—curiosity. Without a deep sense of inquisitiveness, one does not trouble to turn over the stones necessary to uncover the cause of unexpected outcomes. Behaviors that undermine safety can evade detection far more readily than clinical metrics or laboratory values, especially when team members hesitate to speak up for whatever reason.

The pursuit of high reliability requires alignment of vision, goals, and core values. Leadership is indispensable in this journey,[51] and a safety culture must afford psychological safety and trust. Health care professionals have a solemn duty to provide the highest quality care possible, which requires reinforcing accountability across *all* health care professionals. Historically, this principle of consistent accountability has not always been honored. Casting a blind eye on unprofessional behavior shields clinicians who threaten teams and outcomes.[52] Most of the time, the team manages to achieve a heroic rescue—often by a nurse, anesthesiologist, or learner who has the courage to speak up—but sometimes nobody speaks up, and the journey toward high reliability is derailed. Hope is never a plan. That is why an infrastructure is needed.

Team training and champions play an important role in promoting a safety culture. Medical team training improves outcomes of surgical care, reducing surgical mortality in a large, multi-institutional study.[53] A professional champion can be tremendously valuable for developing and sustaining plans. The champion has influence by virtue of energy, a sense of humor, and an ability to promote change. Effective project champions have capital within the organization, and they are willing to use their influence to benefit the project. They also may be nontraditional or entrepreneurial, going well beyond expected and traditional job responsibilities.[54] Examples of these nontraditional side qualities are depicted in Fig. 11. Champions can be instrumental in efforts to balance individual accountability with system-based effforts.[50]

Fig. 11. Project champions. In supporting professionalism, project champions play a vital role and often differ from conventional project managers in having an orientation toward a nontraditional side.

Some of the questions that frontline professionals and leaders should contemplate are as follows:

- What people or systems within your organization are contributing to a culture of silence or transparency?
- How can reporting be encouraged and become the norm?
- Is there a defined and fair plan to address disrespectful/unprofessional behavior, including a plan to escalate as needed?
- Is the plan sturdy enough to withstand pressures, such that leaders will not blink because of the perceived special value of a clinician?

Reporting systems coupled with a tiered accountability plan support the institutional journey to professional behavior. The *people* are critical for leadership commitment; the *organization* supports the values, policies, and interventions; and the *system* allows for data capture and structures to sustain the efforts. Only when these elements are integrated can transformative change be achieved. The culture of reporting is critical, as is response to these reports. A first-rate cup of coffee is delivered hot—ideally within 48 hours so that professionals receive swift, timely feedback—and it is offered in a spirit of collegiality. Coffee served cold, stale, or acidic is far less effective. The worst cup of coffee, however, is the cup not served at all.

SUMMARY

Patients place their lives in the hands of their health care team, and every member of that team is beholden to professionalism in service of patients' best interest. The pursuit of high reliability is predicated on not only individual technical and cognitive competence but also the self-regulation, self-awareness, respect, and effective communication necessary for effective teamwork. The Promoting Professionalism Pyramid is a proven framework for identifying areas in need of improvement and then addressing unprofessional behaviors through tiered interventions. Successful implementation requires leadership commitment, use of consistent standards, and investment in necessary infrastructure. These efforts translate into improved patient experience, enhanced safety, and reduced risk of litigation. Despite best efforts, however, medicine is not entirely predictable; the next article in this series, *Communication and Transparency (Part 2),* offers a principled and comprehensive approach for responding to patient harm.

DISCLOSURES

Dr Hickson is an employee of Vanderbilt University Medical Center; is a member of Medtronic's speakers bureau. He receives royalties from Cognitive Institute; and has received payment for the development of educational presentations from numerous health care institutions. Dr Hickson is also a member of the USC Health System Board and Vice Chair of the Institute for Healthcare Improvement (IHI) Board.

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