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Developing Leaders in Anesthesiology

A Practical Framework

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THE call for more effective leadership in medicine, and specifically in anesthesiology, is not new. In 1999, Dr. Francis M. James III, in his Rovenstine lecture, outlined both the importance of leadership in medicine as well as the breadth of leadership opportunities available both inside and outside anesthesiology.[1] Eleven years later, Dr. Peter J. Pronovost, also in his Rovenstine lecture, turned up the volume by setting out an agenda focused on accountability, performance measurement, teamwork, peer-to-peer reviews, and the need for participation from anesthesiologist-leaders in change initiatives within and outside the specialty.[2]

Driven by a heightened focus on cost reduction, quality improvement, patient safety, performance measurement, and technological innovation, anesthesiology is going through a period of upheaval. Effective leadership is essential to the success of this transformation, because leadership is all about envisioning and guiding people through change. If anesthesiology is to continue to thrive as a medical specialty within a rapidly evolving healthcare system, anesthesiologists will need to envision and manifest change beyond simply providing efficient care.

The specialty is confronting what has been coined an "adaptive" challenge, *i.e.*, a challenge for which there is no preexisting solution.[3] Furthermore, there is evidence both inside and outside of medicine that organizations that focus exclusively on cost reduction and efficiency during times of rapid change ultimately do not fare well.[4–6] As a result, anesthesiologists need to become change agents who envision, lead, and implement initiatives that ultimately result in greater patient safety, better patient outcomes, improved quality, and sustainable finances.

Medicine, however, as a whole underinvests in leadership development because, according to Dr. Wiley W. Souba, a surgeon and a prolific writer about leadership, the profession is not sure where to invest or how to "prepare people for the practice of leadership."[3] He points out that although leadership training is available, the focus on "managerial skills" fails to get at the heart of leadership.[3] More recently, a qualitative study of emergency medicine residents at a major academic center found that the approaches to learning leadership are underdeveloped, resulting in a narrow view of leadership.[7] What is still missing is a roadmap for cultivating leadership behaviors in clinicians and relevant tools to guide their actions. In this article, with the help of a case scenario, we propose a practical framework for turning anesthesiologists into leaders.

Case Scenario

The anesthesiology department of a large academic medical center has recently implemented a series of operating room and anesthesia efficiency measures designed to improve on-time starts, reduce turnover, and manage patient preoperative times. These measures will be used to set targets and to measure the performance of providers.

A junior anesthesiologist, now in her second year as an attending, views achieving the targets as important in meeting her aspirations to become a leader in the department. She

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is very focused on being as efficient as possible when running her cases. She feels that during her first year as an attending she was able to establish herself as a good clinician and an effective teacher. But during the last several months, she has begun to struggle with supervising and teaching residents. For a period of a few months, this attending notices that some of the residents she oversees demonstrate less initiative than she would expect, appear unenthusiastic about their work, and do not seem to take the newly implemented efficiency initiatives seriously. Her reviews from residents who had been very good have fallen below average, which is causing her to feel disappointed in her relationship with residents. She has always seen herself as a good mentor and teacher, and despite the added pressures toward efficiency, she still has a strong desire to have a positive impact on the next generation of anesthesiologists.

Becoming more and more frustrated with the situation, she begins to blame this dynamic on "the new generation," a group of younger residents who, to her mind, are much less dedicated and hard-working than when she was a resident. Reflecting on her own residency, she believes herself to have been the exact opposite: She was extremely enthusiastic and respectful of her superiors, and was always interested and engaged.

Taking no action to address the situation, get feedback, or to question her own assumptions, over time this attending becomes more alienated and disengaged from her students, and finally reaches a point where she is always on the lookout for clues in resident behavior that will reinforce her stance. She knows she is "right": Residents are simply not as good as they were when she was one.

Discussion

Leadership Starts with the Individual

This situation might not immediately appear to be an issue of leadership. After all, the attending is relatively junior and has no formal leadership position in the department, and supervising/teaching residents is traditionally not viewed as a formal leadership role. Leadership is normally viewed as a top-down function, where a department head or division chief is responsible for change efforts that result in improved quality, effectiveness, and performance of an organization. Yet, where do these so-called change efforts begin? Whether directed from the top or empowered from within, all leadership starts with the individual.[8]

Evolution in Leadership Theory

During the past four decades, the traditional locus of activity for most organizational leaders was on the abstract – mission, strategy, processes, and policies, conceptual frameworks that undergird an organization. This emphasis upon process and structure evolved within the fields of management science and organizational development as a result of research that had a specific goal: to control the mechanics and reduce the vagaries of the human enterprise. This reductionist and linear view of organizational practices attempted to improve quality and efficiency by automating processes wherever possible and circumscribing workers' span of control down to repeatable, repetitive activities.

Yet, given the need for creativity, flexibility, and rapid adaptability, this rigid, hierarchical, paradigm from earlier, more stable, and slower periods of human enterprise is increasingly becoming obsolete. The problem for leaders in the fast-paced, rapidly changing context of today's world is that the so-called "human element" that management theorists initially dismissed as inherently messy, hard to corral, or difficult to control turns out to be an essential component of organizational success. Dealing with humans as creative, generative, and emotionally alive beings is often referred to as the "soft" stuff, but it is truly the "hard" stuff.

Disciplines such as cognitive psychology, social psychology and neuroscience are extending our knowledge about how people make decisions, regulate behavior, create mental maps, and divine meaning within fast-changing environmental contexts. For example, the work of Damasio and Dodge points to the critical role of emotions in behavior regulation, information-processing, and decision-making.[9,10] This is a radical departure from the traditional management science, where rational, logical thinking was king, and emotions were viewed as something to eliminate from behavior and decision-making. In addition, Goleman and Boyatzis are exploring the linkage between neural circuit activity and effective interpersonal competencies.[11] These findings are starting to validate within scientific circles what is emerging in the business literature: The recognition that mental reflexivity, self-awareness, and emotional flexibility, not just stoic rationality and charisma, are crucial components of successful leadership behavior.

Recent research into high-performing organizations has shown a consistent shift away from top-down, authoritarian environments toward leadership cultures where everyone, at all levels, is required to be a role model and an agent of change. No longer will it suffice for a clinician leader to wait until he or she has been promoted to a formal position of power to start developing leadership skills. Leadership is now consid-

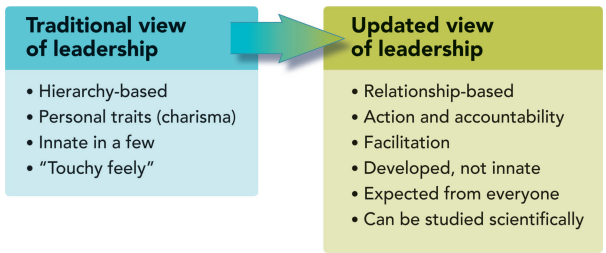

Fig. 1. A new view of leadership. During the last 20 yr, leadership theory has evolved to reflect the need for organizations to meet the challenges of a fast-changing environment requiring adaptability, flexibility, and innovation. Today, leadership is less about hierarchy and power and much more about relationships and facilitation. Leadership in organizations starts with and is expected of each person at every level.

ered by most experts to be a collaborative, interpersonal endeavor that often takes place outside hierarchical lines and exists as a potential within everyone: male or female, junior or senior, titular boss or underling (fig. 1). In fact, there is now considerable evidence that effective leaders are not always grand visionaries but are just as likely to be humble, self-effacing, emotionally stable, diligent, and resolute, and that leadership is needed at every level of an organization.[12,13]

These updated and evolving theories of leadership provide new ways to understand – and ultimately, to optimize – the potential of human collective action. What is at the foundational level of any group context turns out to be more complex and subtle than any defined set of processes or neatly mapped organizational chart. Today, leaders must emerge from within all levels of an organization. They should reach beyond the organization charts, process maps, prescribed roles and titles, and seek to connect real problems with real people in real time. Leadership itself then becomes a set of multi-dimensional, relational, and innovative behaviors accessible to and even expected from everyone.

In this case, our attending's inability to shift her relationship with subordinates into something more productive represents a failure of leadership at the most basic level. She is in a classic leadership bind: Asked to routinize and accelerate anesthesia-related tasks for the purpose of cost and efficiency, she must simultaneously supervise and help junior professionals practice and develop their clinical skills – which takes time. Reconciling these seemingly contradictory goals – achieving efficiency, control, and speed while optimizing learning and practice – is inherently problematic. It can be a setup for failure, or perhaps a formative opportunity for leadership development.

In addition, this attending's difficult relationship with residents is fundamentally inconsistent with the vision she has of herself as a clinical role model and an effective teacher. If she cannot tackle this basic leadership challenge, how can we expect her to tackle more complex issues later in her career? Despite her poor interaction with residents, she might still attain an official leadership position in her department – a role for which she may not be adequately prepared.

Leadership Development Is about Changing Behaviors

In light of the critical and growing importance of leadership competency in anesthesiology, our case scenario presents a key question: What kind of intervention is likely to help our junior attending overcome this basic leadership challenge?

One common approach would be to send her to a "leadership course," where she could gain appreciation for key leadership attributes – communication, vision, and strategic thinking – and learn more about interpersonal skills and teamwork. But although such courses provide useful information, they may not be enough to change her attitude or behavior toward the residents because their focus is not on generating new behaviors in a specific context.

Potential leaders, especially when facing challenging situations, require more than just "business management skills" or "off-the-shelf" training; they need opportunities to break through unproductive belief systems and to experiment with new behaviors and practices in a safe and nurturing context.[14,15]

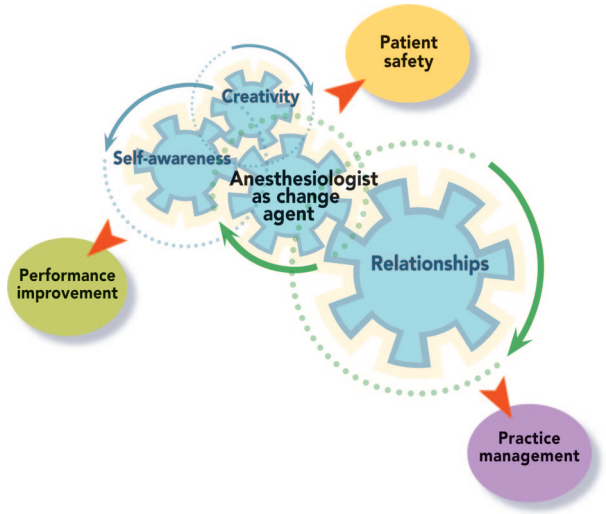

Fig. 2. A practical leadership framework for anesthesiology, and anesthesiologists as change agents. Anesthesiologists have an opportunity to act as change agents both within and outside the traditional boundaries of their specialty. Operating at the intersection of many different medical specialties, anesthesiologists typically have less at stake in the current silos of medical practice and are therefore uniquely positioned to help redesign quality-focused and patient-centered care processes. To become change agents, anesthesiologists need to become leaders. One practical way for anesthesiologists to start developing their leadership is (1) to expand their self-awareness by, for example, seeking candid feedback; (2) to ignite their creativity by, for example, developing a personal vision and reframing how they perceive the challenges they face; and (3) to build strong relationships of trust and collaboration with others.

A Practical Framework for Leadership Development: Self-awareness, Creativity, and Relationships

When faced with a leadership challenge like the one described in our case scenario, or when attempting to structure a leadership development program, a simple and practical way to organize the foundational elements of effective leadership can be framed around three central themes: self-awareness, creativity, and relationships (fig. 2). The use of this framework can facilitate and accelerate the development of leadership capabilities, as detailed in the rest of this article.

Leadership and Self-awareness. The first step in meeting her leadership challenge is for our attending to ask herself a fundamental question: What if the untenable dynamic has something to do with me? Accepting personal accountability for the failed relationship – even if the residents' behaviors and attitudes are contributing factors – and dropping the "blame game" is the first step required to potentially turn this negative situation into an opportunity for learning and growth. Not coincidentally, this shift in mindset, away from projection onto others toward ownership of results both pos-

itive and negative, also represents a cornerstone moment in leadership development.

The link between leadership and self-awareness can be traced back to Socrates, whose famous adage "know thyself" has been recognized as a foundational tenet of human wisdom for centuries. More recently, the subject of self-knowledge – and conscious awareness of self – has been investigated extensively in the context of effective leadership. In particular, Goleman has demonstrated that emotional intelligence, the core of which is self-awareness, is associated with effective leadership and measurably improved business results.[11,16] Although there are now variations in the definition of emotional intelligence, Salovey and Mayer first defined it as the ability to accurately appraise and express one's and others' emotions, to effectively regulate emotions in self and others, and to use emotions to guide one's thinking and actions.[17] Preeminent groups such as the Stanford Graduate School of Business's Advisory Council have identified self-awareness as the most important capability for leaders to develop.[18] In medicine, two recent studies have shown a significant correlation between personal growth and self-reflection.[19,20]

If encouraged by a mentor, trusted colleague, or a coach to reflect and explore her own role in the strained relationship with residents, the attending in our case study may be motivated to seek feedback from senior faculty or from the residents themselves. She might come to recognize the benefit of exploring her own assumptions about her role, her expectations of residents, and her fears or insecurities about supervising, teaching, or meeting efficiency targets, all of which may be coloring her judgment. She may realize that she is struggling to strike a balance between meeting her efficiency targets and being a teacher. If she seeks feedback directly from the residents, she may discover that she has a tendency to micromanage, something not uncommon for junior attending physicians, especially when under production pressure. Yet, rather than sinking into a reactive, defensive stance, or becoming overly self-critical, she might use this information as an opportunity to illustrate a common career maxim: What makes someone successful at one career juncture can become a liability at the next.

In this case example, characteristics and strategies that served the physician well during her residency are not necessarily ideal in her role as an attending. Being perceived as detail-oriented and precise during her residency was a strength; yet, in contrast, as an attending physician and developing leader, her job is to step back at times, to mentor and guide, and not to insert herself in every detail of patient management. This attending's failure to provide the right level of involvement and autonomy may very well be the underlying cause for trainees' negative reaction to her supervision.

Identifying the Gap: Self-perception *versus* Perception of Others. An initial step in the transition from any professional identity to leader is becoming aware of the difference between how we perceive ourselves and how others perceive us. Identifying the gap between how physicians "believe" they come across to others and how they are truly perceived, although sometimes initially shocking, is an important component of self-knowledge. Just this vital feedback, mirrored within a safe and supportive context, can provide the motivation to learn, change, and practice new ways of working.

By receiving useful and accurate feedback on her performance, the attending can potentially reinvent her communication style, come across differently in the operating room, and experiment with different teaching approaches. If this process is facilitated within a supportive and safe environment, where she can learn about her strengths and weaknesses without fear of recrimination, this attending's belief system may shift, such that creativity, instead of blame, rises up to face down adversity.

Leadership and Creativity. Although becoming self-aware will launch our attending on to the path of leadership, in order to effect change, she will need to change her perspective, adopt new behaviors, and "risk" practicing new ways of working. Therefore, in our leadership framework, the second pillar is a broad category we call "creativity." Creativity – the willingness to experiment, to break through barriers in relating to others, and to be open to innovative ideas – has been shown to be an important and requisite capacity that needs to be nurtured if physicians are to grow into effective leaders.[21,22] Because of their focus on facilitating change, leaders must be adept, open, and nurturing of their own creative talents, as well as the creativity in others.[23]

The Link between Leadership and Creativity Starts with Beliefs. The link between effective leadership and organizational creativity has been extensively researched, but there has been less focus on the need for leaders themselves to be creative. Mumford *et al.* were the first to demonstrate, through experimental studies, how the leader's own creative acts improve the output of the group.[24] They found that the creative contribution of leaders is not only related to their own ability to generate original ideas but also to their ability to evaluate, refine, and adapt the original ideas of others to the specific organizational context. Similarly, in a study of 193 research engineers, Tierney *et al.* demonstrated a positive correlation between the leader's creative skills and the organization's creative output.[25] In order to take creative actions, leaders need to overcome an inherent competition between habitual behaviors and potentially novel activity. In this competition, the emergence of individual creative actions is highly influenced by factors such as goals, personal beliefs, knowledge, and ability.[26–28] The research points to the importance for a developing leader to examine and potentially discard underlying beliefs that hinder her creative output.

In the wake of greater self-awareness, a developing leader will seek to catalyze the "teaching moment," when our attending begins reframing rather than blaming. Reframing, much like viewing the world through a kaleidoscope or prism, denotes a creative shift in perspective, away from "tried-and-true" attachments to the past over to consideration of fresh vistas of possibility.

The Creative Shift: Cultivating Personal Vision. In developing leaders, this creative shift is crucial because it marks the path toward an inner exploration of a physician's own vision and mission. For example, as the attending in our case scenario begins to see the situation with fresh eyes, she might explore with a mentor or a coach questions such as: What motivates me to do what I do? Why do I want to teach residents? What is my vision for how the education process should look? How do I assign priorities within an environment of seemingly competing agendas, such as implementing creative approaches to teaching, providing quality patient care, and practicing efficiently? How do I work with residents so that together we can better address the tension between production pressure and teaching? How might I express this vision in such a way that residents are inspired to participate?

A trainee in a leadership course may come to learn about the importance of "vision" as a leader, but only by going through the intimate and deeply personal process of exploring his or her own true convictions – as this attending might be moved to do in the wake of reframing her negative situation – can a leader hope to have a vision that actually impacts other people in a profound way. Hence, the process of articulating a vision within our leadership development framework must start with self-awareness and continue with creativity, from the inside out.

Leadership and Relationships

Much may be debated about the theories that explain why one leader succeeds while another may fail, but one thing is always true: successful leaders impact others. Leadership is not an isolated enterprise but an interpersonal and intrapersonal dynamic in which someone inspires, directs, or influences a group of people to move in a particular direction or to act in specific ways together.

The relationship component of leadership has gained considerable attention during the last 25 yr both in academia and the business world. It is widely accepted and validated that effective leaders must be adept at interpersonal skills, such as listening, speaking, and creating emotional and empathic connections that engender trust, confidence, and reliability.[16] A successful relationship dynamic is not just attributable to what the leader may think about her own behavior, but also how her beliefs, values, and actions are actually received and translated into the world of "other." It is the relationship – the interactive, reciprocal dynamic between a leader and follower – that determines the competency of a leader.[29]

High-performing Leaders Engage in High-quality Relationships. The leader-member exchange leadership theory developed by Graen was the first to focus on the dyadic interaction between a leader and a follower as the primary source of leadership.[30] In this theory, leaders and followers need to develop high-quality relationships characterized by mutual trust, respect, influence, and support. The link between high-quality relationships and organizational performance has been validated in numerous studies.[31,32] Relationships are also critical in supporting the other two pillars of our leadership development framework: Trusting relationships allow feedback to be received in a safe and developmental, not punitive, manner, thus engendering self-awareness. Likewise, a positive and supportive dynamic between leaders and followers has been shown to enhance creative performance.[25]

As a result, more useful than a "communications training course" will be interventions that provide a feedback loop, a direct and honest assessment of a physician's personal communication "style" – *e.g.*, how they interact through writing, speaking, listening, presenting and physical presence – such that they come to recognize and understand their unique gifts and liabilities in making connections with others.

It is not sufficient to "teach" someone writing, speaking, or presentation skills because there is no single right way to communicate. Rather, each physician must come to "know themselves" – to acknowledge and take accountability for their strengths and weaknesses – and feel supported, safe, and willing to experiment and hone their portfolio of relational skills. Only within the context of self-knowledge will they benefit from training that endeavors to augment specific skills and assists them to "subtract" bad habits that undermine their effectiveness.

Returning to our junior attending, what if she comes to recognize that more than just being "liked" by her students, she truly wants to connect with, impact, and even learn together with them? What if she is able to drop the label "resident" or "student" in the midst of her learning journey and instead begins to view residents as colleagues? They may be "junior" in terms of experience and training, but at a more profound, human level, they are partners in the same journey: They both desire to manifest their life purpose and to find meaning in being an anesthesiologist.

Self-awareness, Creativity and Relationships – in Action

As this example demonstrates, self-awareness, creativity, and relationships work synergistically to manifest effective leadership. Self-awareness provides the opportunity to see how one is being perceived from a self-reflective stance, to eliminate the victim energy of blame and projection, so that space can open up for new and creative choices. Then, by nurturing collaborative and supportive relationships, whether with so-called "superiors" or "subordinates," physician leaders can enable an environment of enthusiasm, trust, and optimal performance to emerge. At each level of responsibility, different components of this framework become more or less important to the success of a leader.

If this developmental framework is applied early in a physician's career – during the time when their responsibility as a leader is still narrowly scripted, as in the case scenario presented in this article – they will be more likely to remain agile and adept at self-assessment when taking on broader leadership responsibility. They will be able to quickly hone in on the perception/awareness, creativity, or relational gap they need to address in order to optimally lead change within their department or organization.

Inside and outside of the operating room, on a daily basis, anesthesiologists are confronted with situations like the one presented in our case scenario. Hence, this framework is not pie-in-the-sky leadership theory or a purely conceptual model, but a roadmap for leadership development in an anesthesiology department. In fact, workplace challenges like the push for greater efficiency and time and cost savings present precious opportunities to start developing leadership, one anesthesiologist at a time. The leadership development process and the application of this framework can be supported in many different ways, with the assistance of mentors, coaches, workshops, or training sessions. While reviewing and discussing the benefits and drawbacks of these developmental modalities is beyond the scope of this article, the key to success is straightforward: Building leadership competency requires a safe and supportive space where individuals can reflect, learn, and practice new skills and behaviors.

Our hope is that the leadership framework discussed in this article can serve as a foundation for encouraging senior departmental leaders and anesthesia chiefs to begin to address, head-on, the strategic imperative for leadership heralded by James and Pronovost. Woven together, self-awareness, creativity, and relationships are the developmental cornerstones upon which high performing physicians can step up to their "growing edge" and take the leap to become leaders.

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