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Professionals



Models, Attributes, and Styles

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In the context that leadership matters and that leadership competencies differ from those needed to practice medicine or conduct research, developing leadership competencies for physicians is important. Indeed, effective leadership is needed ubiquitously in health care, both at the executive level and at the bedside (eg, leading clinical teams and problem-solving on the ward). Various leadership models have been proposed, most converging on common attributes, like envisioning a new and better future state, inspiring others around this shared vision, empowering others to effect the vision, modeling the expected behaviors, and engaging others by appealing to shared values. Attention to creating an organizational culture that is informed by the seven classic virtues (trust, compassion, courage, justice, wisdom, temperance, and hope) can also unleash discretionary effort in the organization to achieve high performance. Health care-specific leadership competencies include: technical expertise, not only in one's clinical/scientific arena to garner colleagues' respect but also regarding operations; strategic thinking; finance; human resources; and information technology. Also, knowledge of the regulatory and legislative environments of health care is critical, as is being a problem-solver and lifelong learner. Perhaps most important to leadership in health care, as in all sectors, is having emotional intelligence. A spectrum of leadership styles has been described, and effective leaders are facile in deploying each style in a situationally appropriate way. Overall, leadership competencies can be developed, and leadership development programs are signature features of leading health-care organizations. CHEST 2021; 159(3):1147-1154

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Leadership matters. Consider our recent history with the coronavirus disease 2019 pandemic. In general, states whose governors acted both early with full awareness of the epidemiology and risk, and definitively (eg, by closing schools, mandating masks, advocating social distancing, implementing testing and contact tracing), experienced flattened curves while states with more laissez

faire leadership bore greater disease burden and sequelae. Recognizing that leadership and followership are complementary attributes and are intertwined, and that organizational performance also reflects the strength of organizational culture, effective leadership is characterized by discrete, teachable competencies coupled with formative experience.1

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The current article first reviews the rationale for great leadership and then discusses a leadership paradox in medicine; that is, that the predominant leadership styles—commanding and pacesetting—that have been traditionally celebrated in health care are actually antithetical to best leadership practices. Attention then turns to a brief summary of various leadership models, emphasizing that despite using widely varying vocabularies, these models all converge on some core principles and attributes of effective leaders, including the classical virtues. Finally, leadership styles and the model of situational leadership are reviewed, emphasizing the need to pivot one's leadership style to the context and to the characteristics of those being led. The discussion focuses on the applicability of leadership principles for the chest physician, whether practicing as a clinician leading a team of caregivers or serving in a formal, titled leadership role.

This article is the first of a four-part series²⁻⁴ that discusses essential leadership competencies for the chest physician. Subsequent articles address emotional intelligence and its primacy as a leadership competency,² change management,³ and teambuilding.⁴ Another important leadership competency (conflict and negotiation strategies) has been previously nicely discussed by Nguyen et al.⁵

The Ubiquity of the Need for Leadership

The need and opportunities for leadership are ubiquitous. Bohmer⁶ has framed the concepts of "small l" and "big L" leadership to cement the idea that leadership is needed broadly throughout health care. The concept of "small l" leadership emphasizes the importance of leading in clinical "microsystems"; for example, solving a care delivery challenge on a ward with the ward team or improving reporting on "nearmiss" events to enhance patient safety. "Small I" leaders can be the bedside nurse, the pulmonary consultant, the nurse clinician, or the medical student. "Small I" leaders may lack a formal leadership title but articulate a vision for providing high-quality care that goes beyond the transactional steps of writing orders and reviewing test results. They lead by "being and doing." Like all leaders (both "small l" and "big L" leaders [ie, those with formal leadership roles and titles]), "small l" leaders envision a better future state and create a culture; they act in ways that are consistent with their espoused values. They also manage, by establishing accountability and monitoring performance. "Small 1" leadership emphasizes that leadership is not limited to "big L" leaders (eg, those

with formal leadership titles such as department chair, dean, hospital president, or chief executive officer).

Characterization by Bohmer⁶ of the "small l" leader also invites considering the difference between leading and managing. Leading and managing are complementary^{7,8} and share some common attributes; both encompass deciding what needs to be done, creating networks of people to accomplish the stated goals, and establishing accountability to assure that the work gets done. At the same time, leading and managing differ in that managing is about predictability and order and leadership is about envisioning a future state that disrupts the status quo. Similarly, Schein⁸ has characterized the distinction between managing and leading: "If one wishes to distinguish leadership from management or administration, one can argue that leadership creates and changes cultures, while management and administration act within a culture." Table 1 summarizes the difference between leading vs managing.⁷

Evidence that Physician Leadership Matters in Health Care

Beyond the importance of "small I" leadership in health care, leadership by physicians also matters at higher organizational levels (eg, at the executive level). Several observational lines of evidence support this view.9-11 As part of her "theory of expert leadership," Goodall^{9,10} has shown that top-ranking US News and World Report hospital status is significantly associated with having a physician (vs a non-physician) chief executive officer. Similarly, in an analysis of the 115 largest US hospitals in 2015, Tasi et al¹¹ showed that the only significant correlates of high-quality ratings and of hospital efficiency (ie, inpatient days per bed per year) ratings were having a physician chief executive officer. Although these data are correlational and therefore cannot establish causality, widely recognized benefits of hospital physician leadership regard the "street credibility" that physicians may uniquely enjoy, the enhanced followership that may result from this "street cred," and an enhanced understanding of the clinical quality issues that are core to organizational mission and success. Further evidence supporting Goodall's "theory of expert leadership" includes concordant observations from other sectors. For example, universities in which the president is an accomplished research scholar have higher degrees of scholarship. Formula 1 racing teams in which the principal was a driver himself or herself with at least 10

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TABLE 1 Attributes of Managing vs Leading

Managing	Leading
Aim is predictable, orderly results	Aim is to produce change
Involves planning and budgeting	Involves vision and setting direction
Involves organizing and staffing	Involves aligning people
Involves controlling and solving	Involves motivating and inspiring

After Kotter.7

years of driving experience were 16% more likely to gain a podium position than those without a driver principal. In short, when organizational leaders have "walked the walk," organizations tend to perform better.

The Paradox of Leadership in Health Care

Health care is beset by a paradox of leadership. On the one hand, as discussed in the article in this series on teamwork,⁴ outstanding clinical outcomes in health care depend on the caliber of teamwork and collaboration among caregivers. 12-14 Furthermore, patients judge their care on the human (not technical) aspects of that care, especially on how well they perceive their caregivers function as a team in service of their getting better. However, hospitals are traditionally and characteristically siloed organizations. As an example, the traditional organization of hospitals by "guilds" into departments of medicine, surgery, pediatrics, and so forth, with subspecialties subsumed within the departments reflects longstanding organization around the pedigrees and traditional training trajectories. Of course, silos notwithstanding, even in the predominant traditional structure, in the ideal situation, physicians across disciplines work in a "matrixed" fashion 15 (eg, in service lines, in which care is directed to specific clinical needs). Alternative structures that are organized around the patient include models which couple surgeons and internal medicine specialists together in a single institute; for example, a heart and vascular institute that includes both cardiac surgeons and cardiologists (who frequently overlap in their care of patients with cardiac needs), a genitourinary/kidney institute that includes both nephrologists and urologists, or a dermatology/ plastic surgical institute that couples dermatologists and plastic surgeons.

Silos in hospitals of any sort (eg, department structures, separation of research from clinical care, separation of education from clinical care) can pose unintended but formidable barriers to collaboration among physicians. The final element of the aforementioned health-care

leadership paradox involves the fact that traditional medical training has cultivated physicians as staunchly independent "heroic lone healers," 16 sometimes likened to gladiators or Viking warriors. However, gladiators and Viking warriors can be "collaboratively challenged" 16-18 or handicapped in working easily with others over perceived senses of hierarchy. Weisbord¹⁷ cogently made this observation in an article entitled "Why hasn't organizational developed (so far) in medical centers," noting "Science-based professional work differs markedly from product-based work. Health professionals learn rigorous scientific discipline as the 'content' of their training. The 'process' inculcates a value for autonomous decision-making, personal achievement, and the importance of improving their own performance, rather than that of any institution."

The net effect of this paradox is that traditional selection and training produce physicians who may carry their "heroic lone healer" phenotype to their leadership roles, whether "small l" or "big L," thereby potentially undermining their leadership performance. Simply put, the paradox is that although teamwork is crucial to produce the best health-care outcomes, 4,14 physicians have not been traditionally selected nor trained to be team players. Clearly, change is required here³ and thankfully change is occurring, both in undergraduate and graduate medical curricula, which increasingly recognize how important collaboration is for clinical success. Furthermore, physicians who aspire to leadership are increasingly seeking and receiving formal leadership training, whether within their organizations, from professional societies, or from business schools.¹²

Leadership Models and Attributes

Many different leadership models have been described, each model offering a distinctive lens and vocabulary. As a tiny sample of the myriad models and their vocabularies or leadership taxonomies, there is "servant leadership" proposed by Greenleaf, "technical" vs "adaptive" leadership proposed by Heifitz and

TABLE 2 Replication of the Five Leadership Commitments of Kouzes and Posner by President Abraham Lincoln

Leadership Commitment (From Kouzes and Posner ²³)	Lincoln on Leadership (From Phillips ²⁷)
Challenge the process Search out challenging opportunities to change, grow, innovate, and improve Experiment, take risks, and learn from the accompanying mistakes	"Choose as your chief subordinates those people who crave responsibility and take risks" "If you never try, you'll never succeed"
Inspire a shared vision Envision an uplifting and ennobling future Enlist others in a common vision by appealing to their values, interests, hopes, and dreams	"You must setfundamental goals and values that move your followers." "When you extinguish hope, you create desperation"
Enable others to act Foster collaboration by promoting cooperative goals and building trust Strengthen people by giving power away, providing choice, developing competence, assigning critical tasks, and offering visible support	"Delegate responsibility and authority by empowering people to act on their own"
Model the way Set the example by behaving in ways that are consistent with shared values Achieve small wins that promote consistent progress and build commitment	"One of the most effective ways to gain acceptance of a philosophy is to show it in your daily actions"
Encourage the heart Recognize individual contributions to the success of every project Celebrate team accomplishments regularly	"Remember, everyone likes a compliment"

Linsky,²⁰ the five levels of leadership proposed by Maxwell,²¹ and "level 5" leadership proposed by Collins.²² Although each of these models and the many others unnamed here highlight distinctive attributes of effective leaders, this author's "lumping" tendency suggests that all these models converge on several core features of effective leaders. These core features have been succinctly captured in five leadership commitments reported by Kouzes and Posner in their seminal work The Leadership Challenge²³ and in the seven classical virtues²⁴: trust, compassion, courage, justice, wisdom, temperance, and hope. The classical virtues provide a time-honored common vocabulary that undergirds strong character, great leadership, and the strong organizational culture that invites engagement and discretionary effort. Simply put, who wouldn't want to be led by or live in a culture in which trust and compassion, wisdom, justice, and hope were the prevailing values?

Consider the alternatives. Without trust, all human relationships deteriorate. We spend more time defending ourselves than flourishing. Without compassion, we are all alienated from one another. Our goals and our lives are empty and incomplete. Without courage, we wilt in the face of challenge. We choose the "easy wrong" rather than the "hard right," and we live in

a Machiavellian world in which the ends justify the means. Without justice, our relationships suffer and commitments decline because people feel they are treated unfairly. Consider what happened to everyone's life when a Minneapolis policeman killed George Floyd by leaning on his neck. Without wisdom, we make flawed decisions. Apathy goes up and so does risk. Without wisdom, our life is devoid of meaning and purpose. Without temperance, we rush to judge, and we take unnecessary risks. We abandon our convictions, and we lose credibility. Finally, without hope, despair, cynicism, and fragility define who we become. How can we be effective as doctors without conferring hope? We recall the famous quote from the late 19th century TB physician, Edward Livingston Trudeau, "To cure sometimes, to relieve often, to comfort always."²⁵ Hope provides comfort.

Consider some examples of practicing the classical virtues in Pulmonary/Critical Care. Courage, trust, and its corollary psychological safety allow the first-year Pulmonary/Critical Care fellow to interrupt the attending's participating in a central line placement when she observed that the attending's gloves were inadvertently soiled. Psychologic safety, as discussed by Edmondson in the book *The Fearless Organization: Creating Psychological Safety in the Workplace for*

TABLE 3 Leadership Competencies for Health Care

Technical knowledge and skills	
Operations	
Finance and accounting	
Information technology and systems	
Human resources (including diversity)	

Strategic planning

Policy

Knowledge of health care

Reimbursement strategies

Legislation

Regulation

Quality assessment and management

Problem solving

To resolve organizational challenges and manage projects

Communication

Leading groups

Negotiation

Conflict resolution

Commitment to lifelong learning (in context of rapidly changing environment and need for new skills to cope and manage)

Emotional intelligence

After Stoller. 18

Learning, Innovation, and Growth, ²⁶ is the ability to speak up without fear of retribution or humiliation. Every health-care organization seeks psychologic safety in pursuit of the highest possible quality and patient safety. Without it, no one calls near-misses, we lack a just culture, and we do not get better.

Another virtue, compassion, hopefully underlies everything we do in Pulmonary/Critical Care practice and is surely in evidence when an intensivist engages in a thoughtful and caring discussion with a nonagenarian about end-of-life choices. Similarly, both justice and wisdom underlie how we optimally and holistically select incoming Pulmonary/Critical Care fellows for our programs. These virtues are leadership competencies that create character; when we are good at who we are (ie, our actions and informed by and abide by the virtues), we become better at what we do. Furthermore, when organizational culture is crafted around the virtues, engagement and discretionary effort blossom and high performance follows, including in health care.²⁴

The robustness of the concept that the seven classical virtues²⁴ and the five leadership commitments of Kouzes and Posner²³ are core to leadership lies in their being

independently validated by great thinkers and great leaders over time.^{27,28} For example, the five leadership commitments that Kouzes and Posner²³ derived in their grounded theory research—challenge the process, inspire a shared vision, enable others to act, model the way, and encourage the heart (Table 2)—are uncannily similar to observations made a century earlier by one of America's great leaders, President Abraham Lincoln.²⁷ Similarly, Aristotle and philosopher Will Durant's comments about the virtues ("We are what we repeatedly do. Excellence then is not an act but a habit" and "moral excellence is the result of habit or custom" 29) replicates Heraclitus' observation that "Character is destiny,"30 Plutarch's comment that "What we achieve inwardly will change outer reality,"31 and Confucius' statement that "All people are the same: only their habits differ."32 None knew one another but all converged on common truths about excellence and about what makes great leaders.

Leadership Competencies for Health Care

Just as there are multiple models of generic leadership competencies, so too are there many constructs for specific leadership competencies in health care. For example, the National Center for Healthcare Leadership model³³ bundles 26 individual competencies into three domains: transformation, execution, and people. At the author's institution, the Cleveland Clinic,^{34,35} the leadership model and curriculum is organized around four pillars: leading change, developing self and others, fostering teamwork, and demonstrating character and integrity. A more granular construct of leadership competencies for health care suggests that six competencies are critical (Table 3).

Leading effectively in health care requires satisfying socalled "threshold" competencies; that is, in addition to clinical/scientific competence that commands the respect of one's peers, having technical knowledge of operations, strategy, finance, and human resources. Health-care leadership also requires understanding the regulatory and reimbursement environment of health care, including: quality and process improvement strategies; having a problem-solver and growth mindset of continuous learning³⁶; and knowing how to negotiate and to communicate in multiple forums (to large groups and one-on-one in difficult conversations). These "threshold" competencies establish one's candidacy to be considered for leadership positions. They "bring you to the table" for consideration to be a leader, and these threshold competencies complement what have been

TABLE 4 Leadership Styles

Style Type	Leadership Style	Features, Impact, and Exemplars of This Style
Resonant	Visionary	Moves people toward shared dreams Examples: Martin Luther King, Jr.; Mahatma Gandhi
Resonant	Coaching	Connects what a person wants to do with the goals of the organization Example: Green Bay Packers coach Vince Lombardi
Resonant	Affiliative	Creates harmony by connecting people with each other, emphasizing people's emotional needs to garner commitment and engagement; emphasizing culture of empathy Example: Barack Obama as community activist
Resonant	Democratic	Values people's input and gets commitment through participation; especially helpful when the leader is uncertain and needs to harvest the wisdom of the group Example: Louis Gerstner, Jr., Chairman of IBM during its turnaround
Dissonant	Pacesetting	Leaders who expect excellence and exemplify it; can work when all members of the team are highly competent and motivated. Can also de-motivate when others feel belittled by the constant showcasing of the leader's talent Example: The surgeon doing a case with trainees who has them retract throughout while she or he does the whole case, showing the trainees how to do the surgery
Dissonant	Command and control (commanding)	"Do it because I say so"; the exercise of pure power Examples: Military commander in a moment of great urgency; physician running a code

After Goleman et al.38

called "differentiating competencies" (ie, the attributes that distinguish capable leaders from remarkable leaders). These differentiating competencies, the attributes that cause leaders to be selected and to perform superbly, are those of emotional intelligence.^{2,3} In brief, emotional intelligence comprises four broad competencies: self-awareness; the ability to self-manage; to be aware of one's relationship with others; and to manage those relationships in service of greater effectiveness.^{2,37}

Leadership Styles

Beyond the common attributes that effective leaders largely share, effective leaders may also exhibit situationally different leadership styles, depending on the context in which they are leading and the characteristics of those they are leading. Put simply, effective leaders adopt one of a range of leadership styles to be most impactful in a specific context. Goleman et al³⁸ have proposed a taxonomy of six distinctive styles, what they call a repertoire of leadership styles (Table 4). These styles include: visionary, coaching, affiliative, democratic, pacesetting, and commanding. Recognizing that effective leaders must know how and when to deploy each of these styles, Goleman et al characterize the styles in default as being "resonant" (being "attuned to people's feelings and moving them in a positive emotional direction") or alternatively as "dissonant" (being "out of touch with the feelings of

people in the room and driving the group in a downward spiral from frustration to resentment, rancor to rage"). Although each style has its place in specific conditions, leaders with primarily pacesetting and commanding styles (otherwise called "command and control") tend to produce dissonance, whereas those with the other four styles tend to create resonance. Being keenly aware of the various styles, and which one to use when, is a requirement for the emotionally intelligent leader.

The notion that leaders should adapt their leadership style to the context in which they are leading has also been developed in a model called "situational leadership."39 Hersey and Blanchard framed a situational leadership model in which the leader should adopt one of four styles (telling, selling, participating, and delegating) based on the willingness and capability of the individual being led. For the unable but willing follower, the leader should adopt a participating style: encouraging, coaching, incenting, with a high relationship focus. Put in a medical context, imagine you are the attending on July 2 and helping a newly minted intern perform an arterial blood gas test. If, as would be usual, the new intern had relatively little prior experience with this procedure, you as an attending would be hovering, watching, and coaching throughout the procedure. On the other hand, when the follower is highly capable and willing, the situational leadership model recommends a "delegation" style; that is, one in

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which the follower is entrusted and empowered to act with a high degree of independence. The medical analog of a "delegation" style would be your approach as an attending in seeing a consult with a fifth year pulmonary fellow. The patient needs a thoracentesis, and the fellow has performed hundreds of thoracenteses and is deemed to have achieved entrustable professional activity status by her clinical competence committee. In this circumstance, the fellow would likely be entrusted to perform the procedure with little oversight.

Conclusions

In the context that leadership matters but that traditional medical training generally does not teach or confer leadership skills, leadership development is ever more important for physicians. Effective leadership is characterized by clear attributes, including acting in ways and promoting cultures that are informed by the classical virtues of trust, compassion, courage, justice, wisdom, temperance, and hope. Developing leaders consists of three key components: offering curriculum regarding leadership competencies, including emotional intelligence,² teambuilding,⁴ and change management³; cultivating coaching and mentoring around leadership; and experiential leadership (ie, offering emerging leaders successive roles of increasing responsibility to cultivate growth and to assess success, which begets further opportunities). 40 Best-in-class leadership development programs in health-care organizations offer all three elements.41-43

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