

Physician Leadership: The Competencies of Change

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COMPETENCY: Patient Care, Professionalism, Interpersonal and Communication Skills

INTRODUCTION

The U.S. health-care industry has exploded into 1 of the largest and fastest growing economies in the world. Currently, it is larger than the Gross National Product of all countries except for the United States, Germany, and Japan. Unfortunately, it is debatable whether the quality and the delivery of patient care have kept pace with the economic growth rate of this gargantuan entity. As the complexity and the scope of the health-care industry have grown, the physician's role as a leader in the marketplace has been marginalized. Without formal training in leadership skills, many physicians are not equipped to lead in this marketplace. Leadership training in other industries is grounded in the science of behavioral and developmental theory. Currently, an effective leader in the health-care marketplace must possess a working knowledge of this science. Leaders should cultivate skill sets in finance, self-assessment, behavioral management, and personnel analysis, regardless of their clinical field of expertise. This 2-part series serves to review fundamental leadership theories and skills (excluding finance) that are necessary for physicians to lead in the expanding health-care system of the future.

Theories regarding effective leadership are crucial for understanding what skills a leader must possess. These theories have evolved and are transitioning from theories that emphasize leadership toward strategies that emphasize the necessity of understanding and of nurturing workplace culture in which individuals can both learn and develop to their fullest potential; this entity is often termed a "learning culture." In other words, when it comes to leadership, facilitation is more effective than charisma; in fact, although the former builds workplace culture, the latter may destroy it. Because a similar evolution has occurred in education, the educational process is an apropos model. Current educational strategies emphasize understand-

ing how students learn rather than simply how teachers teach. Similarly, leadership theory emphasizes that the leader is essentially a teacher who must understand the culture he leads; leadership is about instigating and instituting necessary change. Because change is painful for both individuals and cultures, leadership requires a definite set of skills and attitudes to be successful. The organization is at the heart of effective leadership, whereas the leader is secondary. This theory is supported by research that indicates charismatic leaders alone do not build sustainable organizations.¹ The skill sets covered in this discussion reflect an important shift in leadership strategy. This 2-part series provides physicians with a focused perspective on the importance of leadership principles as they relate to the practice of medicine that includes interaction as it relates to both patient care and the institution.

THE SCOPE OF THE PROBLEM

A multitude of challenges currently face the delivery of health care in the United States. For instance, health-care costs are quickly becoming 1 of the greatest financial burdens that faces families, employers, and the federal government. In 2004, projected health-care spending totaled \$1.9 trillion, which represents 16% of the nation's Gross Domestic Product.² Although these figures are significantly greater than those of other industrialized countries, healthcare outcomes in the United States do not provide a comparably higher level of medical care.³ Although staggering, costs are not the only challenges that face our medical system. Medical errors account for between 44,000 and 98,000 unnecessary deaths in U.S. hospitals.⁴ To date, the outside influence and direction of managed care, third-party payers, state/federal bureaucracy, and legislation have not ameliorated these financial and clinical windfalls. As physicians, for the most part, we remain equipped only to interact in individual health-care delivery situations, which represent a major limitation. Therefore, physician leaders who can participate in the administrative and clinical decision-making process must emerge at the collective level to allow for the advances needed to provide optimal health care in America. In other words, physicians usually work only at the microeconomic level of health

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care; to truly lead the health-care system, physicians must function on the macroeconomic level.

Today, no formal curriculum exists in medical education that cultivates the development of an effective organizational and behavioral leadership skill set. Physicians who serve in administrative positions often assume the role with little experience or formal training.⁵ Physicians, health-care educators, and health-care providers, heretofore, have disregarded the importance of these skills; it is our premise that the entire health-care system suffers from the lack of physician contribution in organizational management. Therefore, physicians at all levels of the health-care system need to cultivate leadership skills to guide decision making and to ensure the success and viability of private practices, hospitals, and government health-care programs.

THE PHYSICIAN'S ROLE AS A LEADER

For some physicians, becoming a "formal" leader in the health-care community may not be a desired role. However, in reality, all physicians are leaders, regardless of the size of private practice or the interest in the larger health-care economy. Astute clinicians objectively evaluate their own strengths and weaknesses to optimize their role in each patient's care plan. Through a similar assessment process, physicians define an appropriate role for themselves in the larger health-care industry. In a small practice, the physician leader can motivate employees, reduce turnover, improve patient satisfaction, and reduce costs. A physician leader who operates within the framework of a large health-care system can share ideas and concerns effectively; promote a culture of understanding and knowledge-sharing among physicians, management, and other employees; and guide the development of organizational goals and initiatives. Finally, a physician leader can help direct policy initiatives from within an inter-agency team, political party, or lobbying group. However, if formally trained leaders do not emerge, the physician community will miss the opportunity to help define the future of the health-care system.⁶

PART 1: LEADERSHIP THEORIES

Part 1 of this series will review the evolution of leadership theory from its autocratic beginnings to the more recent culture-based theories. The theories discussed are outlined in Table 1.

Autocratic Theory

Scientific management, which is a prototype of autocratic theory, focuses on improving processes and ignores worker knowl-

edge; workers are viewed as automatons who must be told exactly what to do and how to do it. Fredrick Taylor, who was the founder of scientific management theory, stated, "In almost all the mechanic arts, the science which underlies each act of each workman is so great and amounts to so much that the workman who is best suited to actually doing the work is incapable of fully understanding this science."⁷ Autocratic theory eliminates the possibility of worker innovation and makes it easy to train and replace workers. At the time of its introduction, its implementation increased productivity dramatically by 300% to 400% in manufacturing settings, as well decreasing accidents and injuries.⁸

Despite these results, the value of this type of management is currently waning, even in manufacturing settings. For instance, the Toyota Production System, the benchmark manufacturing system, which emphasizes knowledge and innovation of its employees to achieve even greater levels of quality and efficiency. The Toyota website states, "An environment where people have to think brings with it wisdom, and this wisdom brings with it *kaizen* (continuous improvement)."⁹ Autocratic management has minimal application in the health-care industry because knowledge and decision making of employees is vital. Employees cannot handle each patient or procedure in exactly the same way. They must rely on their knowledge and understanding to provide appropriate care. Using the cultural approach, Toyota sets the paradigm in this management model.

Human Relations Theory

Cultural theories focus on the value of the employee or the follower. Examples of cultural theories include human relations theory, situational leadership, emotional intelligence, and adaptive leadership. Central to each theory is the premise that when making important decisions, autocratic leadership is needed only in specific situations, and most certainly, it does not lead to sustainable organizational change and/or productivity. Human relations theory essentially contends that to achieve the highest levels of productivity, a leader must fulfill the workers' desire for participation, responsibility, security, and social recognition. The role of management is to optimize workers' capabilities by doing so. Because workers are regarded as knowledgeable entities about their specific position, their abilities are resources that are wasted if not used fully.¹⁰

Situational Leadership Theory

Situational leadership theory recognizes that workers need a certain level of autonomy and motivation. In situational leadership, 4 types of leaders exist: directing leaders (S1), coaching leaders (S2), supporting leaders (S3), and delegating leaders (S4). Directing leaders are most effective at dealing with untrained or low-skilled workers. They make the decisions and give instructions, which is a management style akin to autocratic leadership. Coaching leaders are best suited for workers with some skill but who still cannot work alone. They not only make the decisions and give instructions, but also they seek input and suggestions. Supporting leaders provide support and

TABLE 1. Leadership Theories

- Autocratic theory
- Human relations theory
- Situation leadership theory
- Emotional intelligence
- Adaptive leadership

motivation to highly skilled individuals. They give control to the worker but remain involved in decision making. Delegating leaders are best suited to staff with high competence and commitment. These leaders need to delegate decisions and to participate only at the discretion of the staff. In each situation, a different leadership style is necessary. Therefore, leaders must identify their dominant style, which all individuals possess, and they must be willing to reorient themselves based on the situation.¹¹ In reality, the distinctions between these situations and the accompanying styles can become blurry and comingled.

Emotional Intelligence

Building on the concept of situational leadership is the theory of emotional intelligence. Goleman describes emotional intelligence as a set of 4 domains in which include self-awareness, self-management, social awareness, and relationship management, each with associated competencies. It theorizes that most effective leadership is emotionally compelling, that an intelligent leader is attuned to his followers' emotions and, therefore, can move them in a positive direction. In doing so, a leader can create resonance and rally people around a worthy goal. One can cultivate emotional intelligence through the development of competencies within the specific domains. Goleman's description of the 4 domains is summarized in Table 2.¹²

It is Goleman's premise that if a leader understands his own emotions and the emotions of those around him, then he can lead others in the right direction while maintaining a positive and caring atmosphere. Obviously, physicians work in a particularly demanding emotional climate. Therefore, a keen understanding of emotional intelligence is necessary to lead coworkers, to create resonance, and to provide the highest level of care with the fewest mistakes.

Adaptive Leadership

Adaptive leadership incorporates and amplifies several important behaviors previously mentioned. Simply put, this theory maintains that the leader's role is to guide others through prob-

lem solving, rather than dictating a solution. Its developer, Ronald Heifetz, states, "Leadership is engaging people to make progress on the adaptive problems they face. It consists of choreographing and directing learning processes in an organization or community."¹³ And "[a]utocratic decision making assumes that authorities have little to learn."¹³ Leaders do not simply provide the answers; they help the followers solve problems through empowerment and motivation. In doing so, the instigated change is more likely to be sustainable as opposed to mandated solutions, which are usually transient in their efficacy. Heifetz, who is a psychiatrist by profession, breaks down leadership into 5 strategic principles outlined in Table 3.¹³

By following these steps, a leader can guide those around him to address adaptive problems. Simply put, a technical problem (ie, a light bulb needs to be replaced) requires a technical solution; it does not require a change in the organizational culture. In marked contrast, an adaptive problem requires organizational change, which is always difficult, time consuming, and lengthy. In fact, most problems of significance are adaptive in nature. In addition, most leaders attempt to implement technical solutions for adaptive problems (for the most part, because on the surface technical solutions are both easier and quicker). However, a technical solution for an adaptive problem only magnifies the problem because the real issue, which is needed cultural change, is ignored, and it amplifies the "pathology" of the situation even more.

In sharp contrast to autocratic leadership strategies, a leader's role in culture-based strategies is to use the knowledge, expertise, and problem-solving abilities of his staff to tackle important and challenging problems. This strategy is especially applicable in the health-care arena in which a leader cannot succeed with an underlying foundation of science alone. The ultimate goal of a successful leader is sustainable cultural change. We will continue this discussion in part 2 of this leadership series. In part 2, we will discuss the skills necessary for a cultural leader to be successful.

PART 2: LEADERSHIP SKILL SETS

Part 2 of this series will identify and explore skills important to serve as an effective leader. These skills deal with both the management of organizational behavior and the more personal, detail-oriented analytical skills. This discussion will focus on the organizational behavior-based skills because they are the most important for culture centered leadership strategies. Without understanding organizational behavior-based skills, it would be difficult to use the ideas, passions, and goals of all stakeholders to tackle the most challenging problems that face the health-care organization. In addition, physicians are less likely to acquire these skills through medical education and practice. Doctors use analytical skills daily to formulate differential diagnoses, to evaluate laboratory and test results, and to choose treatment strategies. Other than the physician-patient relationship, interpersonal leadership skills are rarely emphasized to the same degree as analytical thinking. Nevertheless, interpersonal

TABLE 2. Emotional Intelligence

Self-awareness	"Having a deep understanding of one's emotions, as well as one's strengths and limitations and one's values and motives."
Self-management	"The component of emotional intelligence that frees us from being a prisoner to our feelings" "Keeps disruptive emotions from throwing us off track."
Social awareness	"Empathy"—the ability to read how someone is responding.
Relationship management	"Friendliness with a purpose: moving people in the right direction."

leadership skills are necessary to implement desired goals or objectives using culture-centered approaches. For example, rather than simply analyzing a decision quantitatively, a leader must work with and motivate others to identify challenges and to drive problem solving, efficiency, knowledge sharing, and commitment to the organization. The skill sets are organized in Table 4.

ORGANIZATIONAL BEHAVIOR SKILLS

Motivation

Motivational skills, which are the skills that serve to motivate staff, are designed to get the most productivity from individuals, groups, and resources. They are an invaluable resource for a physician leader. Within the framework of a human relations management strategy, motivation is a key component of stimulating worker potential. Theories on motivation consist of content-based and process-based theories. Content-based theories focus on motivating others by fulfilling their needs. Maslow's *Hierarchy of Needs*, which is a content-based theory developed by Abraham Maslow, defines the 5 basic levels of needs as physiology, security, social, ego, and self-actualization. Physiologic needs are the most basic and include nutrition and survival. Security needs include safety and shelter. Social needs reflect a desire for interpersonal relationships, affiliation, and belonging. Ego includes the need for recognition, praise, and achievement. Clearly, the highest need is self-actualization or the fulfillment of one's potential. Maslow contends that individuals must fulfill the more basic needs before they can focus on the higher ones. Therefore, if management can identify and fulfill needs, it can motivate employees in order to help them reach their highest potential.¹⁴ Although no empiric evidence exists to support Maslow's theory, it continues to be regarded as 1 of the most important content-based theories.

Another content-based theory that builds on Maslow's *Hierarchy of Needs* is McClelland's *Socially Acquired Needs Theory*. It identifies 3 basic needs that humans have; over time, the influence of

TABLE 4. Skill Sets

Organizational behavior-based skills
● Motivation of followers
● Effective communication
● Team building
● Conflict management
● Culture development
Analytical skills
● Risk analysis
● Quality control
● Financial expertise

each need will vary. The needs are achievement, power, and affiliation. Achievement-motivated people gain satisfaction and motivation from pursuing and attaining goals. Power-motivated people view each situation as an opportunity to take control. Affiliation-motivated people enjoy socializing and strive for acceptance by others. Therefore, management can motivate others by identifying and fulfilling the needs of each worker. Scientific evidence has supported McClelland's theory; consequently, one can conclude that effective motivation depends on identifying and cultivating these needs.¹⁵ Although multiple needs-based theories exist, all theories maintain that motivating personnel requires addressing the essential needs of those who are lead.

Process-based theories, such as the expectancy theory, focus on the relationship between increased effort, performance, and outcomes. The expectancy theory relates motivation to 3 factors: expectancies, instrumentalities, and valences. Expectancies reflect the theory that increasing effort will lead to an increase in performance. Instrumentalities reflect the idea that increasing performance will lead to a particular outcome. Valences reflect the perceived value of an outcome. A leader can motivate others by ensuring that increased effort leads to better performance, increased performance leads to a better outcome, and that such outcome remains valuable. This technique is performed by reducing the impact of outside influences and designing systems that reflect the importance of expectancies, instrumentalities, and valences.¹⁶

Effective Communication

Effective communication is the ability to convey feelings, ideas, concerns, and directions to others. It requires that one can understand and appreciate the ideas and the concerns of others. Schwartz and Pogge⁵ contend that effective communication "revolves around an individual's ability to uncover the important issues of other stakeholders and to tailor communication patterns accordingly so that favorable (win-win) course of action follows." To participate actively in any decision-making process, collaborative activity, or motivational strategy, one must be able to communicate. A "strategic agenda counts for scarcely a thing until it is communicated to others and becomes operative for them."¹⁷ Content alone is not enough. A good message means nothing if people do not understand and interpret it correctly. It is therefore important to understand one's audience and communicate in a language that can be understood.¹⁷

TABLE 3. Strategic Leadership Principles

Identify the adaptive challenge	Unbundle the issues and diagnose the situation in light of the values at stake.
Keep the level of distress tolerable	An appropriate level of distress is necessary for adaptive work but too much will thwart efforts.
Focus attention on ripening issues	Identify and focus on issues that engage attention and not on distractions.
Give the work back to the people	Allow the people to solve the problem, but at a rate they can handle.
Protect voices of leadership	An authority should protect even those whom he wants to silence.

True communicators not only verbalize thoughts and intentions clearly, but also they facilitate the communication between themselves and others. A successful organization fosters a welcome environment for knowledge sharing. A leader should share information actively in a thoughtful, measured manner for the best decisions to be made; the same guideline holds true for an organization. Knowledge sharing builds trust, cooperation, an influx of new information, and ultimately, higher levels of performance. However, both cognitive and motivational barriers hinder knowledge sharing. Cognitive barriers include varying levels of expertise between parties. These barriers can be overcome by using people with an intermediate level of knowledge to transfer information and by encouraging 2-way communication. Motivational barriers are more complex; they include competition, status hierarchies, lack of trust, and lack of incentives. These barriers can be overcome by encouraging people to focus on organizational goals, de-emphasizing status distinctions, and increasing incentives.¹⁸ For instance, de-emphasizing status differences in hospitals could empower nurses to share important patient information with physicians and to voice concerns about questionable decisions.

Team Building

Team building is the ability to organize and nurture a collective group of people effectively in a way that develops synergy between individual performance attributes. Effective teams facilitate the sharing of knowledge and criticism to develop more refined ideas for implementation, and they set the stage to tackle increasingly complex issues. Team building requires the ability to understand the importance of team performance, to invest in the idea of teamwork, and to participate actively in such a team.⁵ The development of effective teams is fundamental to achieving the goals of an organization because most important decisions require the input of multiple parties with different ideas and perspectives. Goleman¹² states that leaders who are team players “draw others into active, enthusiastic commitment to the collective effort, and build spirit and identity.” This sentiment is especially true in large medical organizations in which physicians, management, and employees are often separated and stratified by status, goals, and expertise. Team leaders play a critical role in team development not only by engaging members to commit to the team concept, but also by developing trust and laying the foundation of ideals by which the team will function.

To develop the skills necessary to build and participate in teams, one must understand how they develop. The traditional model of group development formulated by Tuckman states that groups go through 5 stages: forming, storming, norming, performing, and adjourning. Forming is characterized by orientation, storming by conflict, norming by cohesion, performing by decision-making, and adjourning by dissolution. Understanding the process can help to maintain focus and commitment.¹⁹ For instance, if team members recognize that the conflict associated with storming is a normal part of group development, then they

can focus on team goals and move past the initial distractions. In addition, one must understand the importance of roles and status when participating in a group. Roles can be both formal and informal. Formal roles are often established during the formation of a group. Informal roles develop over time. Perceptions of status can also influence roles and the effectiveness of groups. Status characteristics can include expertise, race, or gender. If status is improperly linked to competence, it can negatively affect a group's performance and therefore must be avoided.²⁰

Conflict Management

Conflict can develop within a group, between individuals, or within an organization as a whole; conflict is both inevitable and necessary for cultural change, adaptation, and success. It can be divided into 2 groups: task conflict and affective (relationship) conflict. Task conflict (or creative tension) is a necessary component of problem solving that drives decision making and change. Heifetz writes that “Conflict and heterogeneity are resources for social learning. Although people may not come to share one another's values, they may learn vital information that would ordinarily be lost to view without engaging the perspectives of those who challenge them.”¹³ This type of task conflict ensures that all aspects of a problem are explored, and no unforeseen consequences are ignored. It stimulates the best performance at moderate levels when enough conflict exists to enhance problem solving but not so much that it stifles discussion. Conversely, affective conflict is always negative. Affective conflict centers on personality differences and personal attacks rather than the task at hand. Therefore, any level of affective conflict should be identified and resolved. Conflict resolution strategies focus on the ability to manage task conflict and eliminate affective conflict, which includes focusing on the issue and not on the person, focusing on data and not on opinions, and putting the goals of the group above the goals of individuals.²¹

However, excessive cohesion can be as detrimental as conflict. When everyone agrees about a particular decision, they are likely to overlook important details, which leads to a condition known as “groupthink.” Irving Janis describes groupthink as “a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action.”²² Former Israeli Foreign Minister Abba Eban once stated, “Consensus is what everyone agrees to say collectively . . . and, no one believes individually.” Patrick Lencioni describes the desire for harmony as 1 of the 5 temptations of a CEO, “Harmony is like cancer to good decision making.”²³ Leaders must be careful to identify the signs of groupthink and be prepared to consider unpopular alternatives. For a physician, it can mean disagreeing with the recommendation of a colleague, encouraging a patient to get a second opinion, or empowering those with lower status to confront their supervisors when they may be wrong.

Culture Development

Hill and Jones²⁴ define organizational culture as “the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization.” Therefore, the underlying culture of an organization can be enough to control how individuals respond to specific situations and how they interact with one another. A strong culture will include values such as trust, openness, and cooperation. Lencioni²³ explains that an effective leader must be the first one to show vulnerability. In fact, by making vulnerability an acceptable attribute, the stage is set for the development of trust. “They know that the best way to get results is to put their weaknesses on the table and invite people to help them minimize those weaknesses.”²³

Developing this type of culture is vitally important for patient care. For example, an important problem that plagues patient care is the fact that physicians, hospitals, and other health-care providers fear admitting mistakes. The culture of fear prevents people from analyzing mistakes and making improvements. Fear of malpractice lawsuits and other repercussions actually encourages medical professionals to hide mistakes rather than to identify them.²⁵ Therefore, a physician leader should understand the cultural values that will most benefit those he leads and those he treats. Developing a strong organizational culture will direct the actions of people positively within the organization and help identify areas in need of improvement.

Analytical Skills

Despite the emphasis placed on organizational behavior skills in this article, one cannot underestimate the importance of decision-based analytical skills. Although many physicians consider this skill set intuitive, the context of analytical thinking changes dramatically as the clinician becomes an organizational leader. Evaluating the possible outcomes of a decision, comparing decision alternatives, evaluating risks, and allocating resources are fundamental to patient care. It should be no surprise that this skill is fundamental to leadership in general. Without analytical skills, one cannot make educated decisions about crucial policy changes, investments, or restructuring. Currently, the labor and statistical evaluation associated with these activities is outsourced easily and most often relegated to consultants, accountants, and engineers. Therefore, mastery of these skills is not necessary. Nevertheless, the physician leader should understand the analysis, interpret the information, and share the information to direct necessary actions. Physician leaders can deliberately co-apply the skills gained from clinical expertise to address not only diagnosis and treatment but also decision analysis, quality control, risk management, and financial expertise. We will briefly outline several important analytical skills.

Quality Control and Risk Management

Quality control and risk management work in concert to address the pendulum that swings between quality loss and system failure. Quality control serves to identify areas in which quality is lost, to quantify the loss, and to make changes to improve quality. A strong culture is necessary for quality control, as observed with the Toyota Production System’s concept of *kaizen*. *Kaizen* represents constant improvement through identification and correction of inefficiency and mistakes.²⁶ Covering up problems leads to additional costs. Inefficiency and error present an opportunity for improvement. The tools important for quality control include statistical analysis such as testing, sampling, and surveying. It is important to recognize that quality control is as applicable to patient care as to an assembly line. Risk management is a way to evaluate the probability and the mechanism of system failure, to quantify the impact of such a failure, and to determine the most effective actions to reduce the likelihood and severity of such a failure. Given the dramatic impact that medical error has on both patient well-being and health-care costs coupled with American society’s ever-growing litigious nature, risk management has become an invaluable tool for medical leadership. As observed with the research of Elisabeth Paté-Cornell et al,²⁷ patient injury during surgery represents a system failure. The impact of the failure ranges from injury to death and includes all associated costs, both monetary and emotional. Simulation-based training is 1 potential preventative action that could be used to reduce the likelihood of such a system failure.

Financial Expertise

Obviously, with any important investment or decision, one must understand the financial implications. Doing so requires understanding elements of accounting and finance including financial statements, taxes, interest rates, budgets, billing, and profit margins. This understanding is particularly important for a member of a team whose role lies outside of the financial domain and who must still communicate with financial experts. For a physician leader, it is necessary when dealing with managers and administrators whose focus is on the bottom line. Physicians must accept that this task requires learning a new language, the language of finance, and realize that they cannot direct this aspect of health care until they speak the language. As stated by Schwartz et al,⁵ “Financial skills are important because negotiating a project is facilitated if the financial realities of a project can be portrayed as beneficial to decision makers and other stakeholders.”

CONCLUSION

For health-care delivery and patient care to keep pace with the health-care economy, physicians must assume leadership roles. All physicians, to some degree, are leaders; they do not lack the qualities of, or the capacity to become, productive leaders. In

fact, they possess the intellect, courage, discipline, and ethical background to become superb leaders. Because leadership skill sets are not emphasized during training and practice, physicians, whose education is rooted in quantitative science, tend to address most problems with technical solutions. However, in most critical situations, adaptive leadership is necessary to guide staff and cultures through problems and their solutions to which no quick answer exist. The Latin root of doctor, *doc(ere)*, means to teach²⁸; successful leaders do exactly that. Physician leaders can acquire the skills to teach and to empower others to confront the challenges that face them. Although these skills are not innate, they can be learned and are vital components of business school curriculums across the country. Physician leaders must adapt analytic capabilities to negotiate through more than just daily patient care. If physicians expect to exert influence on any aspect of health-care development in years to come, capable leaders who understand these skills must emerge.

It is, therefore, the responsibility of academic medical centers, health-care organizations, and physicians to take the necessary steps to cultivate leadership skills. Acknowledging their importance is a first step. Continuing education programs, conferences, and seminars can provide opportunities for physicians to become introduced to such skills. For example, the American College of Physician Executives provides accredited CME courses in physician leadership.²⁹ However, these courses alone are not nearly enough. Systematic training and ongoing use of these skills are necessary to develop competent physician leaders. Hospital administrators can encourage strong physician leaders by ensuring their exposure to all elements of decision making, management, and leadership. Several institutions have implemented internal leadership programs to achieve these goals, and the programs can be modeled at other locations. One example is the medical leadership program at Columbus Children's Hospital. The program has provided participating physicians a fundamental understanding of leadership concepts and has encouraged physicians to participate actively within the institution.³⁰ Physicians must be proactive to procure and to use leadership skills; in such a manner, both the physician and the organization will progressively learn the most effective ways to lead.

Ultimately, medical schools and residency programs must recognize the importance of developing leaders and incorporate leadership skills into the curriculum. This is beginning to happen at certain medical centers. The University of Kentucky has created an Inter-professional Education Committee that is working to cultivate team-building and collaboration into medical education.³¹ However, it is just a beginning, and such programs must continue to expand so that all students and residents are exposed to the concepts. Those who are motivated to pursue leadership roles can move forward and cultivate more advanced leadership skills. Clinical leaders of tomorrow must possess a strong background of medical and managerial expertise to develop and to shape policies in ways that ensure the highest level of patient care in years to come. If this does not occur, ultimately, physicians will become technical consultants

in a dysfunctional health-care community that they have inadvertently helped to create and to sustain.

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