Section 1

Leadership and strategy

Chapter

Leadership principles

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Evolution of leadership

What is leadership?

As individuals move up within an organization and accept more responsibility, their interest in leadership rises as they have more people reporting to them. Leadership is about leading people, or the *capacity to lead*; specifically the behavior of an individual when directing the activities of a group toward a shared goal [1]. Akin to a conductor of an orchestra, a leader has a capacity to direct and motivate multiple professionals to perform to their peak ability while minimizing uncoordinated advances.

In our own experience, leadership is about making sure everyone feels a sense of purpose and is engaged in the future outcome of the organization. Among many other things, leaders: are role models for the values of the organization; set the optimal course; and establish priorities. Making people connect and collaborate as well as finding the appropriate style and amount of communication are formidable, but central, tasks for health-care leaders. Yet, just because a person is in a leadership position, this does not make him or her a leader [2].

The goals of this chapter are to review what is known from the published literature about leadership in general and in the context of health-care organizations, to illustrate the operating room (OR) suite as a challenging work place where different parties must cooperate or thwart each other to achieve success, and lastly, to Summary 12 Appendix A. Characteristics of leadership 12

identify the challenges inherent to an OR leadership position.

Leadership styles

Multiple differing leadership styles have been described. Some aspects of each leadership style overlap with one another [3–6] (Table 1.1).

The mix of the health-care workforce and the complexity of the medical workplace demand a team approach to problem solving. This requires a leader who is comfortable "sharing power" by empowering people and can make decisions with a balance of idealism and pragmatism – a leadership style described as "leading from behind" [7]. This type of leader understands how to create an environment or culture in which other people are willing and able to lead. For example, the image of the shepherd behind his herd is based on Nelson Mandela's autobiography *Long Walk to Freedom* and acknowledgment that leadership is a collective activity in which different people act at a different time.

This image of leadership is backed by the idea of "Theory Y people," as described in McGregor's *The Human Side of Enterprise* [8,9]. According to McGregor, people can be divided into the two groups, Theory X and Theory Y. Theory X assumptions are:

- people are inherently lazy and will avoid work if they can;
- most people have little desire for responsibility and prefer to be directed;

Operating Room Leadership and Management, ed. Kaye A.D., Fox C.J. and Urman R.D. Published by Cambridge University Press. © Cambridge University Press 2012.

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Table 1.1 Leadership styles

Authoritarian (coercive, commanding) leaders employ coercive tactics to enforce rules and to manipulate people and decision making

- Derived from the Prussian military, the command and control model is the primary management strategy.
- Believe in a top-down, line-and-staff organizational chart with clear levels of authority and reporting processes.
- Demand immediate compliance to orders and accomplish tasks by bullying and sometimes even demeaning the followers.
- Used in situations where the company or group requires a complete turnaround.
- May be effective during catastrophes or dealing with under-performing employees, as a last resort.

Pacesetting leaders set high performance standards for themselves and their followers and exemplify the behaviors they are seeking from other group members.

- Give little or no feedback on how the followers are doing except to jump in to take over when the followers lag.
- Work best when followers are self-motivated and highly skilled.
- May be effective to get quick results from a highly motivated and competent team.

Transactional leaders balance and integrate the organizational goals and expectations with the needs of the people doing the work.

- Work through creating well-defined structures, clear goals and distinct rewards for following orders.
- Motivate workers by offering rewards for what the leaders need to be done.
- Offer the appeal of employment and security in return for collaboration and assistance.

Authoritative (visionary) leaders mobilize people toward a compelling vision.

- Most effective when a new vision is needed, or when the path to that vision is not always clear.
- Although the leader is considered an authority, this type of leader allows their followers to figure out the best way to accomplish their goals.
- May be effective when changes require a new vision, or when a clear direction is needed.
- Coaching leaders are genuinely interested in helping others succeed, and hence develop people for the future.
- Help employees identify both their strengths and weaknesses, provide feedback to their subordinates on their performance.
- By delegating tasks they give employees challenging assignments.
- May be effective to help employees improve their performance or develop long-term strengths.

Democratic (participative) leaders build consensus through participation.

- Give members of the work group a vote, or a say, in nearly every decision the team makes.
- A collaborative process brings a family atmosphere to the workplace and creates respect for the contributions by each member.
- When used effectively, the democratic leader builds flexibility and responsibility. This helps identify new ways to do things with fresh ideas.
- The level of involvement required by this approach (e.g., decision making), can be time-consuming.
- · Appropriate for building buy-in or consensus, or for receiving input from valuable employees.

Affiliative leaders often are more sensitive to the value of people than reaching goals.

- Pride themselves on their ability to keep employees happy, and create a harmonious work environment.
- Attempt to build strong emotional bonds with those being led, with the hope that these relationships will bring about a strong sense of loyalty in their followers.
- May be appropriate to resolve tensions in a team or to motivate people in difficult situations.

Authentic leaders use a deep self-awareness to engage followers, to shape organizational environments, and eventually allow the organization to achieve persistently high performance.

- Authenticity involves both owning one's personal experiences (values, preferences, thoughts, emotions, and beliefs) and acting in accordance with one's true self.
- The ability of a leader to behave authentically as a person (authenticity of the person) positively affects his/her leadership efficacy (leadership multiplier).

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Table 1.1 (cont.)

Transformational leaders care about human understanding – they transform and motivate followers through their idealized influence (or *charisma*) and role model, intellectual stimulation, and individual consideration.

- · Aim at creating an environment where every person is empowered and motivated to fulfill his or her highest needs.
- Each member becomes a part of a collective identity and productive learning community of the organization.
- See themselves as servants to others and guide them in creating and embracing a vision for the organization. This inspires and brings forth top performance and creates a belief system of integrity. Servant leadership demands that a leader places company goals and values first, the management team and employees second, and the leader's own welfare third. In this paradigm, leaders exist to permit production and to obliterate obstacles, not acquire power, glory, wealth, or fame.

Table 1.2 Five main components of emotional intelligence

Self-awareness	Understand one's own emotions, strengths, weaknesses, needs, drives, and their effect on others
Self-regulation	The ability to control and manage feelings and moods so they are appropriate
Motivation	A passion to work for reasons that go beyond money and status
Empathy	The ability to understand the emotional makeup of other people
Social skill	A proficiency in managing relationship, building networks, and working with others

• people must be coerced, controlled, or threatened with punishment to get them to perform.

On the other hand, Theory Y postulates:

- work is as natural as play and rest;
- people are ambitious, self-motivated, and will readily accept greater responsibility;
- people will use their creativity, ingenuity, and imagination to solve problems.

In reality, a person's beliefs will fall somewhere between Theory X and Theory Y. Whereas Theory X leaders enforce the rules of behavior and punish those who violate the standards, Theory Y leaders function as a "coach" encouraging their team. They focus on developing and facilitating the team through nurturing, encouragement, support, and positive reinforcement.

Situational leadership

Goleman suggests that successful leaders employ multiple leadership styles and should be able to move between leadership styles according to a specific situation (situational leadership) [4]. Leadership in the OR requires this adaptive style because of the personalities encountered in a highly trained and demanding workplace. For example, during a cardiac resuscitation an authoritarian or coercive leadership style may be appropriate to making sure all code team members receive clear instructions. In contrast, an affiliate style may be appropriate to resolve a conflict between two surgeons disputing over a certain OR time slot.

Goleman's situational leadership model suggests that although leaders may have a preferred style, they must identify and select the appropriate mix of various leadership behaviors in a given situation.

"Emotional intelligence" may be a better predictor of leadership effectiveness than intellectual intelligence (IQ) or technical skills [10]. Emotional intelligence is a person's ability to be aware of, manage, and use emotions appropriately in dealing with people in various situations (Table 1.2). Emotionally intelligent, personoriented leaders may have more satisfied and committed staff members, who better attend to patient-care needs. These concepts are discussed further in Chapter 2.

Difference between management and leadership

A notion often heard is that managers are people busy with operational tasks (command and control) whereas leaders engage in strategic endeavors (vision and mission, change management). To quote Naylor, most persons have worked "with leaders who were not particularly skilled at management, but who had an ability to win loyalty and carry others with them through their clarity of vision, generosity of spirit, and 'people skills.' Ironically, then, leadership may be most obviously exerted when others follow a person who has no direct authority over them, and may be less important

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in strictly hierarchical organizations where managerial discipline prevails" [11].

The differences between managers and leaders then may simply be attributed to different leadership styles (e.g., transactional and transformational leadership style), or different leader positions (top executive versus middle-management position).

Significance of leadership for health-care organizations

Governments around the globe are increasingly searching for cost-containment practices to counteract mounting health-care expenditures. This has led to shrinking fees for physician and hospital services, the replacement of fee-for-service payments with prospective payment systems using case-based lump sums based on diagnosis-related groups (DRGs), and capitation and other compensation systems that shift financial risk from the payer to the service providers.

Such rapid reimbursement and technological, policy, and procedural changes intensify the challenges of health-care leadership [12].

There are unique leadership challenges inherent to health care [13]:

- health-care leaders face inconsistent, conflicting, and dynamic external (i.e., regulatory and other) demands;
- as a "human" service rendered directly by providers, health care is prone to natural variability;
- health care is a technology-intensive sector with a high frequency of innovation – such advances exacerbate tensions in balancing cost, quality, and access to health-care services;
- health-care leaders must interact with powerful and dominating professionals (e.g., physicians) who may not be employees of the organization.

The following factors contributed to the growing need for a dedicated professional as a perioperative leader:

- growing surgical caseload, exceeding regular workday shift hours;
- medical consumables included in case-based lump sum payment, which cannot be charged separately to the payer;
- multiple lines of authority causing a lack of continuity and a lack of ownership for decisions;
- increasing variety of professionals working in the OR suite;

- difficulties in recruiting health-care professionals;
- increasing number of ORs and creation of different OR suites within the same facility;
- increasing number of nonsurgical interventions outside the surgical suite with growing need for hospital-wide provider scheduling;
- lack of physician involvement in OR leadership.

Leadership in the health-care literature

In 2002, an extensive review of 6628 articles revealed that most of the health-care and business literature on leadership consisted of anecdotal or theoretical discussion [14]. Only a few articles include correlations of qualities or styles of leadership with measurable outcomes on the recipients of services or positive changes in organizations. It is still unclear which leadership attributes are important in improving either patientcare outcomes or team and organizational outcomes.

There are, however, some specific studies of leadership in health care that are noteworthy [13]. Transformational leadership style is more likely to be used by leaders in not-for-profit organizations than by leaders in for-profit organizations. In the hospital setting, transformational leadership style has been shown to be positively and significantly associated with staff satisfaction, extra effort from staff, perceived unit performance, and staff retention. Some weak evidence indicates that leadership matters more for nonprofessionals (e.g., nursing assistants, clerks, secretaries) than for professionals.

Managers with higher ranks demonstrate more transformational behavior than those lower in the hierarchy. Of note, health-care leaders may perceive the use of rewards as transformational leadership behavior, whereas in surveys among nonhealth-care leaders the use of such systems is linked to a transactional leadership style. Physician executives with management degrees are more likely to provide transformational leadership than those without training [15]. Despite evidence that supports transformational leadership theory for the health-care setting, leadership style is but one important factor in successful organizational change. Organizational structure and culture matter just as much. Participative and person-focused leadership styles are positively associated with nursing staff job satisfaction, retention, and organizational commitment.

In the health-care and hospital setting, leaders must take into account their followers' expectations

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 Table 1.3
 Differences between clinicians and the manager/leader

Clinicians	Manager/leader
Clinical competence	Interpersonal competence
1:1 interaction	1:N interaction
Doers	Planners
Value autonomy	Value collaboration
Reactive	Proactive
ldentification with profession	Identification with company
Patient advocate	Organization advocate
Lay IT/information skills	IT/information skills power user
Informal communication	Formal communication
Leadership skills optional	Leadership skills essential
Member of a "brother-/ sisterhood"	Member of the "dark side"
Micromanaging a must	Overmanaging a sure way to fail
Independent	Adaptation to a boss
Pursuit of self-interest	Trustworthiness

and understand how and why professionals respond (or not) to different leadership styles.

There exist seven recognized competency areas for effective leadership in health-service management:

- interpersonal relationship;
- communication;
- finance and business acumen;
- clinical knowledge;
- collaboration and team building;
- change management;
- quality improvement.

Managers with advanced education may be more effective in leadership roles. Junior nurse managers value clinical and communications skills more than senior managers, who value more negotiation skills and business knowledge [13]. There is, however, little evidence that more educational preparation leads to improved physician leaders' effectiveness, in particular when the authority and power from their clinical roles is factored in. Various barriers exist for physicians to take leadership roles [16]:

- identity issues leadership roles may threaten the physicians' view of themselves as clinical professionals;
- deep-rooted skepticism about the value of spending time on leadership;
- lack of career development or financial incentives;
- lack of leadership and management training;
- risk of losing credibility with clinical colleagues and others;
- greater risk of unemployment as a leader/manager than as a clinician;
- loss of popularity as a result of tough decisions;
- the need to learn to being accountable to their organization rather than their colleagues;
- the need to overcome an "us-versus-them" mentality in physicians and health administrators.

A common myth is that a physician successful in clinical practice can easily transfer to leading an organization [17]. Physicians in the midst of the transition between clinical and managerial/leadership positions start to realize the substantial differences between clinical and managerial/leadership positions (Table 1.3).

Health care in general has been slow to adopt systematic organizationally based leadership development programs. Instead, responsibility for leadership development has been left to individuals and the profession.

Leadership is crucial in the management of perioperative services

The OR suite is a complex working environment, with different groups of individuals involved in a coordinated effort to perform highly skilled interventions. This is analogous to high-reliability organizations such as aviation, the military, and nuclear industries, in which the importance of a wide variety of factors in the development of a favorable outcome has been long stressed [18]. These include ergonomic factors, such as the quality of interface design, team coordination and leadership, organizational culture, and quality of decision making.

The role of a leader and manager is central for forming high-performance inter-professional teams. Underlying key principles for successful team building are a shared vision and mission. To align the goals of employees and physicians, the leader must convey the vision and strategies [19].

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Predispositions for leaders

Trait theory, which suggests that leadership abilities depend on the personal qualities of the leader, is controversial. On the one hand, some traits are related to leadership emergence and effectiveness. Leadership emergence refers to whether and to what degree an individual is viewed as a leader by others within a work group. On the other hand, leadership effectiveness is a between-group phenomenon, and refers to a leader's performance in influencing and guiding the activities of his or her unit toward the achievement of its goals.

Five dimensions can be used to describe the most prominent aspects of personality: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. This five-factor model of personality was also shown to be a reasonable basis for examining dispositional predictors of leadership [20]. Extraversion and conscientiousness are the most important traits of leaders, and these dimensions are more strongly related to leadership emergence than to leadership effectiveness.

The following traits are associated with successful leaders [21]: humility, courage, integrity, vigilance and passion, inspiration, sense of duty and dedication, compassion, discipline, generosity, dedication to continuous learning, a collaborative approach, and competitiveness. Personality traits of OR directors/leaders are also described in Chapter 2.

Appendix A, on page 12, has a checklist that may be a way for leaders to self-assess some of their own strengths and weaknesses as a leader. In addition, it could be used by people working in a surgical suite to evaluate the OR director.

Game theory in the OR context

The OR suite's stakeholders

A stakeholder is any group or individual who can affect or is affected by the achievement of an organization's purpose [22]. For the perioperative leader, it is important to identify the relevant stakeholders and their specific needs, expectations, and preferences. This will allow the leader to engage the various parties for common goals and to give priority to competing stakeholder interests and claims (stakeholder salience). Various individuals or groups have a specific interest in the OR suite and can affect (or can be affected by) their actions:

- patients suffer from sickness or injury and expect high-quality medical services at no additional risk (patient safety);
- surgeons expect maximum convenience and service, easy and fast access to OR time (especially for add-on and emergency cases), and state-ofthe-art equipment – the surgeons are powerful stakeholders, as they assign the medical priority, which determines the urgency of a case;
- anesthesiologists the OR provides a place to practice – they prefer predictable working hours;
- nurses expect predictable working hours and an enjoyable workplace without disruptive behavior or harassment;
- suppliers surgical support services and housekeeping – the OR must consider the concerns of its suppliers;
- executives, administrators want efficient use of OR time, high utilization, and low staffing cost and little capital expenditure in equipment;
- owners want to maximize the quality and reputation of their health-care organization and their return on investment as applicable.

Knowing the stakeholder's needs and expectations allows a leader to manage them better. The tools required to manage stakeholder expectations include good communication, active listening, building trust, negotiating skills, addressing concerns, and quickly resolving issues. They will, as the common refrain goes, not be able to make everybody happy. An OR leader will have to make some decisions that will make one or more parties satisfied and others less so. Depending on the combination of power, legitimacy, and urgency, the OR leader will assign priority to a specific stakeholder (stakeholder salience) [23] (in this context, power has been defined as the ability of those who possess power to bring about the outcomes they desire, legitimacy as a generalized perception that the actions of someone are desirable, proper, or appropriate within some socially constructed system of values and beliefs, and urgency as the degree to which stakeholder claims call for immediate attention, respectively). Urgency is directly related to the medical priority of a case, which is usually determined by the surgeon. Regardless of whether the information about urgency is reliable or not, high urgency of a case combined with the surgeon's power will benefit the surgeon with any decision making. Each stakeholder may attempt to manipulate the priorities of the manager, who must persistently

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stand by their established principles to maintain order and fairness.

Game theory concepts

Leaders in the perioperative setting should understand essential game theory concepts in order to understand and influence the interactions between individuals and groups to achieve a cohesive team with mutual goaloriented benefits.

In game theory, players can be team players (same goals) or opponents (different or opposing goals) [24]. Players in a game can choose either to cooperate or to fail ("defect"), but none of the players is aware of the other's choice. If every player chooses to cooperate, all gain. However, if one chooses to defect, that person's individual gains are usually much bigger. If all defect, everybody loses or gains very little.

There are several dilemmas hindering participants from cooperating.

- Prisoner's dilemma: a situation in which two parties would each gain more by cooperating with each other. Instead, they each act independently, and "defect," betraying the other party. This ultimately results in a lesser gain for each of them. It also undermines any momentum toward an alliance.
- Tragedy of the commons: a situation similar to the prisoner's dilemma except that it involves more than two parties.
- Free rider: a situation that can lead to the loss of shared resources. Individuals may be able to enjoy a community resource without paying for it, but if no one voluntarily pays and everyone chooses instead to be a free rider, they all exhaust the resource.
- Stag hunt: in this situation, a group can win a massive reward if all the members cooperate with each other. However, members may elect to defect for chasing smaller but surer individual rewards.

Several outcomes of games can be observed: the zerosum game, also known as the win-lose game, reflects a situation in which a fixed pie must be divided among participants. In this situation, the "payoff," or reward, to one player is charged to his or her opponent; thus the sum of the reward and loss is zero. In other words, if one of the participants gets more of the pie, the other loses by an according amount. In nonzero-sum games, cooperative behavior leads to a net increase in the value of the system.

Rewards and punishments depend on whether both cooperate, both choose to betray, or one player

cooperates and the other betrays. The greatest reward is given to a player who betrays his or her opponent when the opponent chooses cooperation. If both players cooperate, the individual rewards are lessened. Reward diminishes further if both players defect and is least for the player who cooperates when his or her opponent defects. If one player cooperates and one defects, the combined reward for both players is less than if they had both cooperated. No player can reliably predict what his or her opponent will do, and both will have to play the game again.

In various sciences, game theory is used to model tactical situations (games), in which an individual's success in making choices depends on the choices of others. Game theory provides a way to understand various kinds of confrontation and offers an explanation of why cooperation may be the ideal response in some situations. Individuals and groups can avoid some traps in game theory by cooperating instead of allowing destructive competition.

Game theory applied to the OR suite

All parties working in the OR generally share common goals (such as maximizing the health of the patient), although conflicting goals may occur. In the OR, iterative prisoner dilemmas can be observed – a series of games in which participants can choose to cooperate or defect with another participant [25].

Understanding the types of interactions (games) helps the participants better predict outcome and adapt their own behavior to optimize that outcome. Types of games seen in the OR suite include the following [26,27].

- Zero-sum (win-lose) game for example, OR time is often allocated across surgeons from a fixed amount of staffed OR time: if surgeon A is allotted more time, this amount of time must be deducted from one or more of his or her colleagues.
- Nonzero-sum games for example, cooperative interaction and synergies between surgeons, anesthesiologists, OR nursing staff, and the hospital administration can improve efficiency and throughput, and hence productivity.

Numerous examples exist of selfish actions in the OR suite:

• anesthesiologists being inflexible in the required preoperative evaluations, unreasonably limiting their work hours, unnecessarily canceling or

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delaying cases, obstructing the OR schedule and inconveniencing patients, or taking a passive role in the turnover and flow of cases;

- surgeons by making unreasonable demands on access, providing inaccurate information about the case (e.g., duration, medical information, urgency, etc.), demanding immediate compliance with their wishes, and defecting through disruptive behavior or gaming to get their cases done at night;
- hospital administration not providing adequate space or support personnel (e.g., concentrating on short-term budget issues).

A poorly running OR is comparable to "mutual defection." This can be illustrated by comments from staff such as "Why should I do this-or-that when soand-so won't do his job?" In such a situation, it is not clear whether the players cooperate until one player defects and then defect forever or whether they have deduced that in a finite series of games the one strategy that minimizes unfair gain by others is for both players to defect. For salaried employees, working quickly in an OR is "rewarded" with additional cases but no increase in compensation. Once observed, they may appear to be people not working as efficiently.

In cooperative games, a good leader gathers the best players to win the game and makes OR nurses understand that it is their job to help the surgical team – for example by helping to make sure there are no retained sponges [28]. Understanding game theory helps a leader recognize the interdependence of all players in the game, the need to become allocentric, and the need to think ahead, considering all possible consequences.

Challenges of OR leadership

Organizational structures of OR leadership

Hospitals have always been in search of the optimal OR leadership structure. For example, in the literature of the 1950s, a textbook contained descriptions of the ideal OR structure and recommended that "the administration of the surgical department shall be under the direction of a competent registered nurse who has executive ability and who is specially trained in operating-room management" [29]. In 1983, an article about OR management delineated eight managerial measures to improve OR management efficiency and effectiveness. One of these measures was the identification of a clear line of authority and appointment of an individual with far-reaching responsibilities, including

policy making, running the daily schedule, and disciplining people [30]. The article pointed out that not only would this person have to be a senior physician with institutional authority but also be recognized as being in charge.

There is no perfect organizational structure. The organizational structure of an OR suite must be individually tailored to its internal and external needs.

Small organizations often feature a flat hierarchy and do not require many formal organizational structures. These organizations benefit from close relationships between the people working in the OR suite. This allows quick and informal problem solving. An OR charge nurse or nursing director as the sole formal leader may be sufficient in small OR suites, as ad hoc problem-solving groups form spontaneously and dissolve naturally.

Large organizations with several surgical subspecialties require a more complex organizational and leadership structure because cooperation and coordination of tasks between departments is a challenging task. The OR suites of large medical centers often feature several complementary leadership structures (Table 1.4).

Outside the United States, OR management is a relatively young science and leadership literature a relatively new phenomenon. In Germany, OR management appeared in the scientific literature in 1999 for the first time. The fact that this topic produced interest there much later than it did in the United States may be explained by the introduction of the German Diagnosis Related Groups reimbursement, a prospective payment system (PPS) for inpatient hospital services in 2003. In the United States, PPS was introduced in the 1980s. With the introduction of governmentmandated health-care cost-containment measures as PPS, hospital revenues declined and hospital and physician executives started to find new ways to increase OR efficiency (see Chapter 6).

The appearance of the OR management in the hospital, medical management literature, and scientific literature parallels the introduction of PPS. In the German OR management literature, a team-oriented (or transformational) leadership style has been discouraged for OR suites with more than 20 people working in them, because it is believed that only a transactional leadership style with a formal distance between the OR manager and the "team" allows the former to pursue the agreed-upon targets [34]. In a 2002 survey from Switzerland, 49% of responding hospitals indicated

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Table 1.4 Leadership positions and structures for the surgical suite

Physician OR leadership position (e.g., OR Medical Director)	May be a facilitator, mediator, and negotiator position to balance the priorities of each group in the OR (surgeons, anesthesiologists, nurses, hospital administrators, etc.).
Alternatively, the OR Medical Director may be positioned to be a distinct authority	A position frequently recommended by the German OR management literature ("OR manager") [31,32]. This may be explained by the fact that in Germany, as in many other European countries, most physicians are employed by the hospital. Wherever there are many independent, powerful physicians (especially surgeons), a tall or centralized organization with a top decision-making leader may be an ineffective leadership structure.
Standing OR Committee with strategic and oversight responsibilities (e.g., "OR oversight committee,""OR board").	This committee may consist of the chairs of surgical services and/or departments, the chief of the anesthesia department and nurse managers of the perioperative area, and representatives of the hospital administration. The role of this committee is to provide fair and balanced OR governance [33].
Additional smaller OR management teams may be formed with operational responsibilities (e.g., OR executive committee).	A typical formation includes a senior surgeon and anesthesiologist (who may be the medical co-directors of the OR suite), the director of surgical services, and a senior hospital executive.
Administrative Executive Physician	This position may be labeled Chief Medical Officer (CMO) or Vice President of Medical Affairs (VPMA), and refers to a position often used as third-party mediator to facilitate finding solutions between two conflicting parties (e.g., between two different surgical departments or between the hospital administration and anesthesia department).

that their OR suite did not have a formal OR director [35]. Fifty-two percent of the OR leadership respondents had responsibility for strategic planning, 11% for finances, 89% for day-to-day operations, and 63% for human resources.

Lonely at the top

Leaders are often alone with their thoughts because they need to keep an emotional distance and avoid a conflict of interests in their professional environment [34]. Leaders are able to develop a relationship with people based on respect, not on friendship [36]. In addition, leaders are often surrounded by people with completely opposite opinions on a certain topic for valid reasons. Decision making in uncertainty is a task that exacerbates the leader's loneliness. Making decisions unpopular with some stakeholders and being attacked for those decisions may increase isolation for the leader.

One of the interesting observations by leaders is to see how streams of information dry up when a person becomes the head of an organization or a group. People are less comfortable speaking freely with a leader and communicate more formally, as if they were talking to the institution rather than to the leader. For the leader, the risk then is that the ability to figure out what is really going on decreases. A leader in the surgical suite needs to work hard to get people to share their views, and must proactively develop positive relationships so that colleagues feel comfortable providing their honest opinions.

Culture and informal organization

Understanding the organizational culture of the OR suite is key to successful and effective leadership. For example, change management and implementing patient safety initiatives are hard to accomplish without knowing the values, assumptions, preferences, unwritten rules, and behaviors of a workplace. If leaders do not become conscious of the culture in which they are embedded, those cultures will manage them [37]. The leadership needs to perceive the functional and dysfunctional elements of the existing culture and to manage cultural evolution and change in such a way that the group can thrive.

Organizational culture is the essence of the informal organization [38]. In addition to the formal relationships shown on organizational charts, in every OR suite information relationships exist and there may be an informal network, coalitions of people, and

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even hierarchy. For example, a powerful surgeon may be able to exert his or her influence on the scheduling process and circumvent official scheduling rules. These informal affiliations shape the organization's culture, and they can either facilitate or impede change. An important aspect of perioperative leadership is understanding and accepting these relationships, managing the informal chain of command, and even leveraging these affiliations.

People alignment and change

Tensions between the different professional groups working in the OR have probably existed since the first surgeries were performed. A nursing report from Australia in the early twentieth century noted that the "disaccord between nurses and physicians often led to troubles in the OR because the physicians would never announce the beginning of surgeries in a timely fashion, but would then suddenly appear in the OR where they would have to wait for the nurses to be finished with their preparatory work" [39].

A core issue for leaders of the OR suite is that the goals of the various professions are not well aligned with those of the hospital and the OR suite. This dilemma is known in economics as the "principalagent problem," where difficulties arise under conditions of incomplete and asymmetric information when a principal hires and motivates an agent to act on his or her behalf [40]. One of various mechanisms that may be used to try to align the interests of the agent in solidarity with those of the principal is performance measurement. In the OR environment, well-designed reporting systems must report relevant performance measures (key performance indicators). This feedback is provided to those owning the critical processes and should be gauged relative to the OR suite's goals and its most important stakeholders. The OR environment with conflicting goals requires strong leadership to enforce hospital and OR suite strategies.

In US hospitals, the shift toward employment of physicians continues to grow, becoming the dominant alignment model. There will be less emphasis on solitary leaders and more on teams of leaders. There will be broadened leadership communities inside and outside the organization [21].

How can a leader assess his or her individual impact on culture and perimeter of control in the organization? Covey and Gulledge encouraged leaders to work within their smaller circle of influence, in which they can make a difference, rather than spending time in their circle of concern, in which they have little ability to contribute [41]. Effective leaders recognize two primary types of change: from the outside in (structural) and from the inside out (cultural/behavioral). A focus on cultural change is core to sustaining structural change.

However, for leaders it is difficult to simultaneously tackle all "soft" issues (such as culture and motivation) that are relevant for transforming organizations. Sirkin *et al.* have found that focusing on these issues alone may not bring about change because companies also need to consider the "hard" factors, such as the time it takes to complete a change initiative, the number of people required to execute it, etc. [42]. There is a consistent correlation between the outcomes of change programs (success versus failure) and the following four variables.

- D The *duration* of time until the change program is completed if it has a short life span; if not short, the amount of time between milestones.
- I The project team's performance *integrity*; that is, the capabilities of project teams.
- C *commitment* to change the senior executives and staff.
- E The *effort* over and above the usual work that the change initiative demands of employees.

The "DICE" framework comprises a set of simple questions that help executives score their projects on each of the four factors. Companies can use DICE assessments to force conversations about projects, to gauge whether projects are on track or in trouble, and to manage project portfolios.

Social capital

Waisel described social capital as an overall indicator of the quality of the relationships within a community and applied it to the OR suite [25]. Increasing social capital improves communication and trust, which in turn improve most cooperative undertakings. In the OR suite, the social capital benefits of expectations of trust, robust norms, and better communication help to achieve community goals.

The norm should be that medical professionals seek flawless behavior, particularly with regard to interacting with others and respecting operational guidelines. Other than small teams, large groups of people are less likely to have developed personal histories of successful interactions. In the absence of a personal history of trust, the expectation of trust from social capital permits