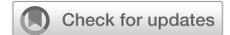


The Physician Leader: Teaching Leadership in Medicine



Amy A. Yau, Priscilla Cortez, and Bourne L. Auguste

An integral part of a physician's practice includes being a leader, especially as there is a strong need for skilled leaders to advocate and navigate patient-centered and organizational outcomes. Nephrologists undertake multiple leadership roles, but dedicated leadership training is lacking in medical and postgraduate education. Given the growing need for physician leaders, practitioners in nephrology and beyond must become better equipped in understanding the role of leadership skills in medical practice. Nephrology and the medical community as a whole should focus on intentional and dedicated leadership in medical education training to better groom physicians for leadership roles. In this paper, we define and discuss the components and styles of leadership. We further propose cognitive models that allow one to apply leadership theory in common practice.

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Physicians are often recognized as natural leaders by members of the health care team and promoted to leadership roles within a variety of health care settings. With growing emphasis on medical subspecialization and new initiatives in the health care field and care models, more physician leaders will be needed. In many health care organizations, the experiences and inputs from physicians and important stakeholders are integral to development of quality improvement initiatives aimed at improving patient outcomes. Although many physicians possess leadership qualities, this does not innately make all physicians effective leaders. Earlier implementation of leadership training allows trainees and junior physicians to observe a variety of leadership styles and lay the foundation for effective leadership development.¹⁻³ Leadership training can equip all physicians including nephrologists with requisite skills that places them on a path to become more effective and successful leaders. In this editorial, we discuss the need for physician and nephrology leaders and provide a guide on how to incorporate leadership into medical education for the trainee and training programs.

WHY DO WE NEED PHYSICIAN LEADERS?

Physicians are already engaged in leadership roles every day through the supervision of treatment teams (ie, advanced practice practitioners or medical trainees), leading patient cardiac and pulmonary resuscitations, and facilitating effective communication among patients, families, and other consulting physicians. Beyond direct patient care scenarios, a skillful physician leader may have indirect effects on patient care through improved team leadership, communication, and morale.⁴ Many physicians are asked to fill roles as health care supervisors, chief medical officers, and more. Health care facilities with physician leaders demonstrate "Index of Hospital Quality" scores 25% to 33% higher than those of non-physician-led health care facilities.⁵ The Index of Hospital Quality serves as a measure of various aspects of care including clinical effectiveness, patient outcomes, and patient-reported experiences. Hospitals with physician leaders also report lower hospital infection and readmission rates, greater patient satisfaction, and improved

financial margins.⁶ Additionally, accountable care organizations with physician leaders are more likely to receive Centers for Medicare and Medicaid Services bonuses with a larger margin of savings than their minimum savings rate.⁶ Effective health care supervisors also have positive effects on physician retention, reducing the rates of burnout, and improving patient safety, satisfaction, and overall patient care-related outcomes.^{7,8} Although outcomes cannot with certainty be attributed to the presence of a physician leader, physicians in direct leadership roles can bridge the gap between administrative goals and physician/care teams.^{9,10} They can help to identify, inspire, and support change and collaborate with other stakeholders. It is unclear how many current physician leaders have undergone dedicated leadership training, but cultivating leadership skills is presumed to be advantageous to the physician leader to help achieve personal and organizational goals.

Nephrologists are well poised to take on leadership positions. Patients cared for by nephrologists are often confronted with many comorbidities which demand strong collaboration to optimize care plans and pathways. The very nature of nephrology requires that nephrologists regularly communicate with different medical and surgical subspecialties to achieve common goals in mutual patients.¹¹ Many nephrologists also have direct leadership experience through their role as a dialysis medical director

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or dialysis unit chief medical officer. This experience gives nephrologists an intricate understanding of administrative and regulatory forces within medicine and an opportunity to lead a multidisciplinary team.¹¹ In addition, the nephrology community already has a strong history of leadership. Nephrologists led the way to show that chronic kidney disease and end-stage renal disease are survivable conditions that can be treated with life-sustaining treatments. More recently, transformational leadership in nephrology led to the removal of race-based estimated glomerular filtration rate in many institutions that resulted in significant disparities in care along with advocacy of prescription coverage for kidney transplant recipients.¹²⁻¹⁴

Specifically in nephrology, more formal and informal leaders will also be needed. As the burden of cardiovascular disease and diabetes continues to increase around the globe, the number of patients with chronic kidney disease and those who progress to needing renal replacement therapy will rise. As a result, the nephrologist will be expected to lead and advocate for this growing vulnerable population in various capacities ranging from dialysis medical directors to close communication with industry and community partners. As institutions and physicians continue to value subspecialization, leaders will be required to lead initiatives in their own institutions and collaborate on multidisciplinary care teams such as onconephrology clinics, nephropalliative care clinics, glomerular disease programs, nephrolithiasis/uro-nephrology clinics, pediatric to adult transitions clinics, and more. In light of the Advancing American Kidney Health initiative, nephrology leaders are needed to help spur new research initiatives, advancing home dialysis modalities, and focusing on preemptive kidney transplantation.

LEADERSHIP TRAINING IN PRACTICE

Leadership training can occur through a formal curriculum or informal self-directed process. Learning leadership is mostly experiential and not driven by data or large studies. However, a proposed roadmap is provided which starts with a basic background on fundamentals of leadership theory and a focus on the experiential learning model which is a continuous cycle that emphasizes practice and reflection (Fig 1).

The first challenge of any program is to define leadership and understand leadership theory. This is critically important given the overlapping roles of leadership, mentorship, management, and coaching. Leadership is defined as the ability to inspire and motivate organizations and/or a group of people toward a shared vision or mission.^{6,15-17} Leaders have the effect of driving change. *The Leadership Challenge* mentions 5 important practices and commitments of exemplary leadership (Table 1).¹⁸ It is essential to recognize that 1 practice includes setting a good example, which includes being a good follower

when appropriate.^{9,16,19} The LEADS framework was developed by Canadian health care practitioners with leadership experience and is now widely adopted in practice in Canada.²⁰ The framework consists of 5 domains (Lead self; Engage others; Achieve results; Develop coalitions; System transformation) and 20 capabilities that provide aspiring leaders with an understanding of what good leadership entails and that application of those skills should be adaptable to context (Fig 2). These practices, commitments, domains, and capabilities highlight the qualities of leaders and leadership to develop a vision and empowering followers and helping to create connections for collaboration and allowing their team to be successful.¹⁷ Managers focus on the implementation of a leaders' vision through organization, staffing, and identifying problems and solutions. Mentors are seen as those who teach through example and guide others, whereas coaches help to nurture and cultivate skills to help their players achieve their own personal goals.^{21,22}

An important step in understanding leadership theory is understanding qualities of effective and ineffective leaders. Understanding one's own qualities and comparing to qualities associated with effective leaders, mentors, and coaches can help trainees identify what skills to cultivate. But it should be noted that there is not 1 set of

qualities that make a person an effective leader. Some situations require a different set of qualities and leadership style; this is called situational leadership.¹⁷ This is also why a basic understanding of leadership styles and levels of leadership is fundamental (Tables 2 and 3). In medicine, the most common

leadership styles are servant, transformative, collaborative, and shared.²⁶ Exercises to identify leadership styles and qualities include identifying leaders in the learners' day-to-day life or throughout history, what makes people respond positively or negatively to them, and if this influences their success or effectiveness.

Next, structured educational programs should develop a vision for their program and create a mission/goal for their program. This will help when developing concrete learning objectives. An interview of undergraduates in medical training mentioned their desire to learn team dynamics and leadership styles; develop communication, research, business, and self-management skills; and the role of physicians in regard to quality improvement, managed care, use of resources and health care cost, and patient safety.^{17,27} The majority of medical leadership programs (over 60%) did focus on leadership fundamentals, change agency which includes application of leadership skills, and teamwork.²⁷ Institutions can conduct needs assessment surveys to identify areas in which curricula can be improved to meet the needs of trainees in enhancing leadership training.

After identifying a vision, mission, and objectives, learning activities and experiences should be thoughtfully

CLINICAL SUMMARY

- Dedicated leadership training is integral to nephrology physicians' development.
- There are multiple leadership opportunities either in formal leadership roles or as part of a team which nephrologists are adeptly suited to fill.

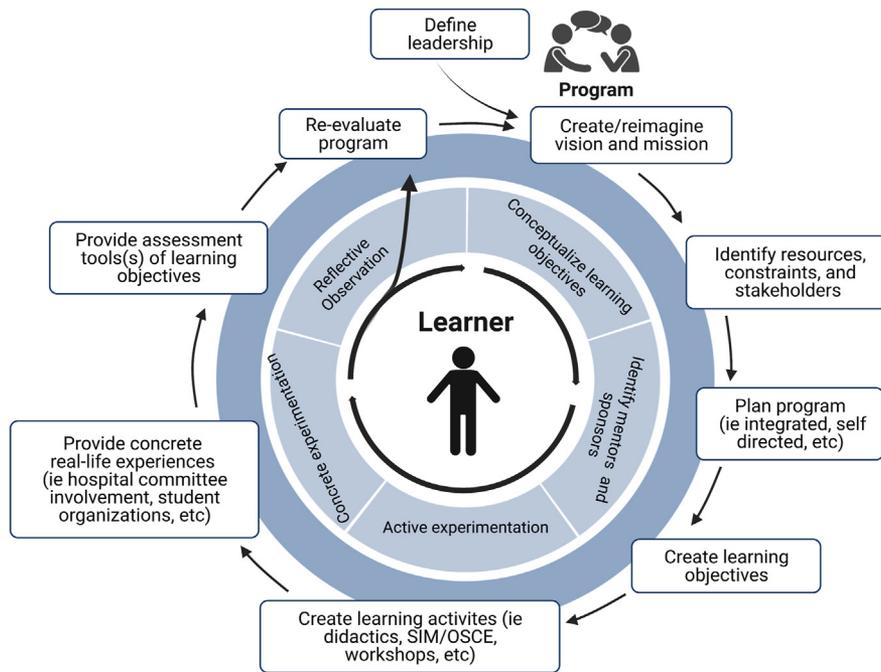


Figure 1. Roadmap for developing a leadership program. Abbreviations: OSCE, objective structured clinical examinations; SIM, simulation learning. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

selected to allow learners meet objectives. Many leadership educational programs varied on the type of interventions offered, and it will vary based on available resources

Table 1. Five Practices and 10 Commitments of Exemplary Leadership From "The Leadership Challenge"¹⁸

Practices	Commitments
Model the way	Clarify values by finding your voice and affirming shared values. Set the example by aligning actions with shared values.
Inspire a shared vision	Envision the future by imagining exciting and ennobling possibilities Enlist others in a common vision by appealing to shared aspirations
Challenge the process	Search for opportunities by seizing the initiative and looking outward for innovative ways to improve. Experiment and take risks by generating small wins and learning from experience.
Enable others to act	Foster collaboration by building trust and facilitating relationships. Strengthen others by increasing self-determination and developing competence.
Encourage the heart	Recognize contributions by showing appreciation for individual excellence. Celebrate the values and victories by creating a spirit of community

and constraints at individual institutions. In fact, only 25.71% of medical education leadership programs have a stand-alone curriculum, and only 8.57% have a fully integrated curriculum.²⁷ Many leadership programs placed emphasis on experiential learning via simulation learning and objective structured clinical examinations.^{28,29} Other learning methods employed by medical leadership educational programs included involvement in student organizations, hands on training via workshops, seminars, service projects, and volunteer and teaching opportunities.²⁷ Real-life experience can come from participating on hospital committees such as quality improvement and patient safety committees, and organizations should allow opportunities to have students and trainees participate to gain more experience and understand the impact medical administration has on direct patient care and outcomes.

To help guide learners, programs with a leadership curriculum should provide mentors and coaches. Expanding opportunities for trainees to participate in different committees and organizations allows students, residents, and fellows to find role models outside their primary field of study including pharmacy, nursing, as well as other medical disciplines. These mentors and coaches are valuable assets for learners to discuss leadership, encourage and guide trainees through their leadership development, and aid in self-reflection on their individual abilities or experiences. If no formal mentors or coaches are provided, learners can seek them out. Some local and national programs, such as the American Society of Nephrology, have mentorship match programs (Table 4). Additionally, learners can take a self-directed approach and connect



Figure 2. The 5 keys domains of the LEADS framework.

with individuals to seek out mentorship. Mentors and coaches should display an interest in leadership, a good history of leadership, and be good communicators and honest toward mentees. Mentees should be forthcoming about their goals and meet with mentors regularly. Mentors can also be peer-to-peer if there is no senior mentor or coach identified. Sponsors can also prove useful in formal and informal leadership programs. Program directors and division chiefs should be natural sponsors and advocate for learners to gain experiential training by recommending them and supporting their endeavors to get involved in different committees and tasks. In addition, learners should be willing to accept more responsibilities when required or when opportunities arise.¹⁷

Leadership programs should also determine how to assess learners. Most programs utilize self-assessment or peer-to-peer assessments.²⁷ Self-assessment and mastering specific leadership skills such as communication can be integrated through existing evaluation platforms such as New Innovations or Accreditation Council of Graduate Medical Education core competencies.³⁰ Other more formal assessments exist through the Leadership Practice Initiative from *The Leadership Challenge*, Medical Leadership Competency Framework, Kirkpatrick's Four Levels of Evaluation, and others.^{18,27} Informal assessment can occur "on the spot," such as after a rapid response or code event or after a difficult family meeting. The military

offers a nice framework for these "After Action Reviews" for educators interested in leading similar discussions. The importance of character development and self-reflection cannot be understated. Whatever manner the assessment is done, learners should be given ample time to complete it, and there should be an emphasis on reflection and improvement. In turn, learners should be given the opportunity to assess the program so it can work on continuous improvement and restructure as appropriate.

As many programs do not have a structured or integrated curriculum, leadership education can be self-defined and self-directed. The self-directed learner should follow the same roadmap as above and create a written program for themselves to stay on track. Leadership is a lifelong skill, so whether having completed a formal training course or not, it is important to continually reassess leadership competency and develop these skills. There are multiple books on leadership and journals within and outside medicine. Learning leadership in any discipline can build useful insights and be carried into a medical career. For example, as of 2016, the United States Army's Medical Corp's Captain's Career Course used *The Leadership Challenge* to instruct on fundamentals of leadership skills and attempted to cultivate those skills for future leadership roles through small workshops and team-building activities. Leadership roles in the military are many and varied based on needs of the army. Although

Table 2. Common Leadership Styles^{23,24}

Leadership Styles	Description
Authoritarian (autocratic)	Provide clear and precise direction on what needs to be done and how it should be done, focusing on power and control with clear division between leader and follower. Can be effective in crisis situations or when quick decisions are needed, but can be considered aggressive.
Affiliative	Focus on creating emotional bonds and rapport with team members, believes team always come first and focuses on building trust and sense of belonging
Bureaucratic	Listens to input of employees, but depend on themselves to make decisions, similar to authoritarian. Can stifle innovation and respond to change
Coaching	Focus on identifying and nurturing individual strengths and establish deep connections through understanding members' personal values, beliefs, and goals. Similar to democratic and affiliative, but more emphasis is on growth and success of individual employees.
Laissez-Faire (delegative)	Hands-off approach and trust and expect employees to complete tasks and projects delegated to them, which can empower employees, but limit those that require more structure or limit employee development/organizational growth and has the potential to devolve into absentee leadership
Pace setting	Lead through example by setting high standards for themselves in hopes others will follow. Can be effective with a team of self-motivated high performers and runs the risk of team members feeling as though expectations are too high.
Participative (democratic)	Lead others, but also involved in groups' activities focusing on leading by example and considering input from others. Typically, excellent listeners and empower lower-level employees to exercise authority and prepare them for more senior positions. Can be less effective in emergency situations.
Transactional	Focus on order and structure with emphasis on rewarding and disciplining on input and output (ie, sales teams). Roles and responsibilities are clearly defined, however can be demotivating depending on reward structure.
Transformational	Focuses on change through motivation, growth, and continuous improvement. Often put company objectives before employees and can lead to burning out team members through high expectations. Usually are persuasive and charming.
Servant	Focus on serving those you are leading with collective decision-making and team members/communities well-being; opposite of authoritarian leaders. More concerned about society's well-being rather their own responsibilities
Visionary	Builds a culture of innovation, natural problems solvers, and "big picture" thinkers.

The Leadership Challenge and leadership roles in the military are not specific to medicine, their principles and learned experiences can be applied to medicine.

The largest limitation to leadership training is time.³¹⁻³³ Medical school training in most North American universities is typically 4 years, and more and more is often asked of students and trainees to be viewed as "successful." This is further compounded by the fact that many trainees have other priorities outside of medicine such as starting or supporting a family. There are also additional demands for advancing clinical expertise beyond residency and subspecialty training which may impose time constraints to pursue or participate in formal leadership training. Programs should seek to incorporate and integrate leadership training into established curriculums as best possible or see if other requirements can be minimized to accommodate dedicated time for leadership education. A flexible longitudinal curriculum in leadership training during medical school or residency can also provide trainees with an early foundation in leadership. The Institute of Health Policy Management and Evaluation at the University of Toronto in Canada successfully launched a Master of Science degree program in 2016 that offers trainees formal training in system leadership and innovation. This program runs parallel with medical school, residency, and fellowship training and includes course-based sessions along with immersive practicums

in various health care settings that allow for a better understanding of organizational behavior and how to lead. Organizations interested in developing a leadership program can start with small groups to pilot ideas, then expand as appropriate to meet the needs of their local environment.³⁴

Finding educators, mentors, and sponsors can also be a challenge not to mention giving them the time to be successful. Many physicians are already asked to complete multiple nonclinical and clinical tasks outside of the work day. Many academic physicians may be burdened with completion of scholarly work or research endeavors. A widespread call that details a realistic time commitment needed to participate may help to recruit dedicated faculty. Surveying faculty who are interested but not yet involved in mentorship may provide invaluable insight into possible barriers limiting engagement within your institution. It may be essential to broaden faculty recruitment pool and consider other health care providers apart from

Table 3. Classification of Leaders²⁵

Level 1	Position	Highly capable individual
Level 2	Permission	Contributing team member
Level 3	Production	Competent manager
Level 4	People development	Effective leader
Level 5	Pinnacle	The executive

Table 4. Leadership Programs for Physicians

Program	Website
American Association for Physician Leadership	https://www.physicianleaders.org
Association of American Medical Colleges (AAMC) Leadership Development Programs	https://www.aamc.org/professional-development/leadership-development
American Journal of Kidney Disease (AJKD) Editorial Internship	https://www.ajkd.org/content/edinternshipprogram
American Society of Nephrology (ASN) Internships on various committees (Diversity and Inclusion, Policy and Advocacy, Workforce and Training)	https://www.asn-online.org/g/blast/files/ASN%20Committee%20Nephrology%20Fellow%20Internship%20Application%202021.pdf
American Society of Nephrology (ASN) Mentorship Program (apply to be a mentor or mentee)	https://www.asn-online.org/education/training/mentors/
Drexel University Executive Leadership in Academic Medicine (ELAM)	https://drexel.edu/medicine/academics/womens-health-and-leadership/elam/
Harvard Leadership Development for Physicians in Academic Health Centers	https://www.hsph.harvard.edu/ecpe/programs/leadership-development-for-physicians/
International Society of Nephrology Emerging Leaders Program	https://www.theisn.org/in-action/grants/emerging-leaders/
International Society of Nephrology Kidney International Editorial Internship	https://www.theisn.org/blog/2021/05/11/apply-now-for-an-isn-ki-editorial-fellowship/
Journal of American Society of Nephrology (JASN) Editorial Internship	https://jasn.asnjournals.org/content/editorial-fellowship-application-process
Kidney 360 Editorial Internship	https://kidney360.asnjournals.org/content/kidney360-editorial-training-program
Nephrology Social Media Collective (NSMC)	https://www.nsmc.blog/application-2022
Nephrology Business Leadership University (NBLU)	https://nbluniv.org
Renal Fellow Network Editor	https://www.renalfellow.org/2018/10/30/wanted-rfn-editor-asn-media-communications-committee-fellow/
Renal Physician Association (various programs to include a Medical Director Workshop)	https://www.renalmd.org/page/Education
Physician Leadership Academy	https://www.physiciansleadershipacademy.org/home
Stanford Physician Leadership Certificate Program	https://stanfordcme.thinkific.com/courses/physicianleadershipcertificate
University of Chicago School of Business Physician Leadership Program	https://www.chicagobooth.edu/executiveeducation/programs/leadership/physician-program
University Hospitals Leadership Programs	https://www.uhhospitals.org/medical-education/faculty-development/leadership-programs
Women in Nephrology Leadership Conference	https://www.womeninnephrology.org/meetings/event.aspx?ID=32

physicians. Programs and institutions should also be proactive about developing leadership skills not just in educators directly involved in the leadership program but also in all faculty that interact with trainees. Institutions should focus on reducing full-time-equivalent and clinical and administrative duties to accommodate educators if leadership education aligns with organization strategic priorities and career advancement in the form of academic promotion.

CONCLUSION

As our health care system continues to change, future physician leaders must be equipped with skills required for success. We must move away from a culture of “on the job training” for leadership among physicians and make a deliberate effort in nurturing leadership skills with formal training in the formative years of medical training. There are numerous opportunities and resources that are available for leadership training (Table 4), and nephrology training programs should encourage current

trainees to explore these opportunities. In the future, more leadership opportunities for nephrologists will arise especially with progress of new advances in kidney care and the Advancing American Kidney Health initiative, and in the absence of effective training, we may set up future generations for failure.

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