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COMMENTARY

The Significance of Leadership for Advancing Clinical Practice and Improving Patient Outcomes in Athletic Training

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Context: Leadership has become a recognized contributor to improved patient outcomes. As such, there is increasing pressure on leadership development to include content above and beyond what is needed for administrative or supervisory roles.

Objective: To provide key considerations for leadership development within athletic training and address why leadership is critical to the advancement of athletic training's reputation and improved patient outcomes.

Background: Changes in health care, including increased complexity and movement away from a disease-oriented approach to care toward a patient-oriented approach, is drastically changing how care is perceived and delivered. These changes require addressing the assumptions we hold about development of leadership required for administrative roles (ie, management) and leadership required for navigating complexity, effective clinical practice, and reputation management.

Synthesis: Leadership is something every athletic trainer can practice regardless of career ambition, and demonstrating leadership provides a meaningful contribution toward improved patient outcomes and clinical reputation.

Results: Patients, the profession, the association, peers, and individuals all benefit when leadership is demonstrated effectively. Leadership development that is accessible and relevant to the different needs of clinicians adds value that ultimately contributes toward an enhanced reputation and quality care.

Recommendation(s): Educational programs, educators, and preceptors must consider ways to identify, recruit, and develop athletic training leaders. Leadership programming that addresses leadership beyond preparation for management or administration is imperative. Leadership development must include soft skills that enable clinicians to lead in different situations and with diverse people.

Conclusion(s): Leadership behaviors must become an overt expectation of professional practice, and athletic trainers must begin to practice those behaviors in outside of job responsibilities.

Key Words: Soft skills, contextual intelligence, clinical leaders, complexity

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The Significance of Leadership for Advancing Clinical Practice and Improving Patient Outcomes in Athletic Training

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KEY POINTS

- Practicing leadership is a professional responsibility of all AT's regardless of experience or job title.
- Soft-skill development is an important way to begin to introduce and reinforce leadership.
- Practicing leadership may contribute toward improved patient outcomes.

INTRODUCTION

As clinical practice continues to move away from a disease-oriented approach to health care, the significance of leadership drastically increases.[1] Leadership in health care is reaching critical importance. The patient-oriented nature of care is requiring intentional leadership from every provider due to the impact it is having on patient outcomes.[2,3] Specifically, 2 systematic reviews[2,3] that collectively reviewed 38 qualified manuscripts reported that leadership styles were strongly correlated with quality care and associated patient outcomes (eg, lower mortality, fewer medical errors, lower infection rates, safety climate). Clinician leadership needs to be brought to the forefront of the leadership dialogue. That dialogue must include refusal to follow the path of other health care professions that now lament that leadership seems to have been reserved for (or only sought by) academics or productive researchers.[1,4] The knowledge and experience required to lead in today's health care system is radically different from what it once was, and opening up the leadership pipeline is imperative.[1,4] Opening that pipeline begins with conceptualizing leadership for an increasingly complex patient-oriented health care system.

Leadership and management, although both necessary, are no longer synonymous. The pipeline that develops leaders is not the same as the one that develops administrators and managers. Athletic training needs clinical leaders with people-oriented expertise, and that goes well beyond facility management, staffing, budgeting, and supervisory roles. It is possible that if leadership is not reconceptualized to include people-oriented skills, we will be in danger of failing to meet the needs of patients and our communities.[4]

Richard Ray[5(p6)] once wrote that without leadership the organizations that employ athletic trainers (ATs) would "stagnate and cease to be effective." Today, if our athletic training programs fail to equip all athletic trainers to be leaders, the profession may, to use Dr Ray's phrase, *stagnate and cease to be effective*. The contribution of leadership to positive outcomes is well documented.[2,3] The reality that leadership is essential to athletic training is growing. For example, leadership content and behaviors important for athletic training have been identified.[6–8] The importance of those leadership behaviors and related educational content have been established.[7–9] Furthermore, the frequency with which those leadership behaviors are practiced has been reported.[9] Whereas the reported frequency of practice supports these behaviors' perceived importance, it is unfortunate that frequency tends to decrease when ATs are not in a formal athletic training role.[9] In other words, ATs know what leadership behaviors are important to their jobs but demonstrate those behaviors less frequently outside of their jobs. This could have tragic consequences. In order for ATs to continue to develop, our patients' outcomes to improve, and professional reputation flourish, all ATs, all the time, should strive to practice leadership.

WHERE TO NEXT?

The leadership conversation within athletic training is evolving, and that conversation needs to include how leadership contributes to advancing the reputation of athletic trainers (among peers and in the community) and improving patient outcomes. To do that we must first clarify any confusion with regard to the related concepts of leadership, management, supervision, and administration. In a disease-oriented paradigm these terms are used interchangeably, or it is assumed that leadership only requires satisfying organizational obligations, such as budgeting, scheduling, record-keeping, facility maintenance, and staff performance appraisals. In a patient-oriented paradigm, leadership offers more benefits than traditional outcomes (eg, job satisfaction, motivation, morale, productivity) and is certainly distinct from management. Distinguishing between disease-oriented and patient-oriented paradigms is necessary to facilitate leadership (as opposed to management) within health care. A disease-oriented paradigm often ignores the complex interaction among the physical, psychological, contextual, social, and cultural aspects that form a patient's identity and focuses on the disease as the patient's defining characteristic. On the other hand, a patient-oriented paradigm assumes the patient's identity is more than the disease. Athletic trainers must be vocal advocates for moving away from disease-oriented paradigms and transitioning toward patient-oriented paradigms. Once that transition is under way, it is necessary to reintroduce leadership. In case the rationale for that reintroduction is not obvious, leadership within a patient-oriented paradigm, one that includes the complexity of the patient's identity, requires a completely different skill set than what traditional management supposes. Therefore, the aim of this article is to introduce how leadership can be a significant contributor to promoting the reputation of athletic trainers as expert clinicians and helps to improve patient outcomes.

CLARIFYING THE MEANINGFUL TERMS

Leadership is not only about influence. Leadership improves attitudes, behaviors, and effectiveness,[10] as well as many meaningful patient outcomes.[2] It is a myth to think that leadership is only practiced in certain settings, under certain conditions, by certain people. It is true that not everyone can be the "boss" (ie, the manager, administrator, or supervisor). However, the same thing is not true of leadership. That is not to imply that everyone can be the leader, but everyone can

Table 1. Differences Between Management and Leadership.

Leadership	Management
Externally focused	Internally focused
Solves by asking better or new questions and innovating	Solves by giving answers and referring to policy
Encourages calculated risks	Discourages risk taking
Shares information freely and across boundaries	Shares information only on a need-to-know basis
Person or patient centered	Plan or objective centered
Motivates, equips, and inspires	Budgets, schedules, and organizes
Works within chaos (embraces it as an opportunity)	Avoids chaos (considers it a threat)
Is opportunity focused	Focuses on obstacles
Power or influence comes from building others and inspiring loyalty	Power or influence comes from formal authority or position

practice leadership. Similarly, not everyone can be the manager, but everyone can demonstrate time management, stress management, live on a budget, and so on. Consider the subtle but significant difference between being *the* leader and being *a* leader. Only one of us can be *the* leader (eg, director, head AT*)*, but each of us can be *a leader* (eg, influencer, morale booster, passion creator). Within a patient-oriented paradigm, failing to be a leader may have severe consequences, especially related to patient outcomes, which rely heavily on understanding the complexity of the patient's identity.

The confusion comes when an individual uses the title *leader* exclusively for those in management, administrative, or supervisory roles and fails to recognize the term refers to a role rather than a person or skill set. When the terms *leader* or *leadership* are used to describe a management position or function, it is correct to assume there are contextual restrictions to when, where, and how a person acts in that capacity. However, when *leadership* is used to describe a nonmanagerial role, those contextual restrictions are removed. This involves *contextual intelligence*, which is the skillful application of leadership in different situations and settings. Practicing leadership should not be a switch that ATs turn on and off. The research seems to indicate that there is some level of confusion among ATs about when and where leadership can be demonstrated.[9] The simplest explanation is that ATs think of leadership as fulfilling management duties. Table 1 lists key differences between management and leadership. Practicing leadership is the responsibility of every AT regardless of position, experience, setting, or role. This sentiment goes as far back as 1998 when the Pew Health Professions Commission recommended that all health care providers should practice leadership "whether they seek management positions or not."[11(p40)] This is especially true in patient-oriented health care organizations because it is the practice of leadership that contributes to ATs' ability to connect with the patients beyond their diseases.

The Board of Certification (BOC)[12(p61)] indicates that athletic trainers must have skills in providing "leadership appropriate to situations and people." This implies an application of leadership that is not restricted to a specific context and requires discretion on the basis of changing situations and people. Providing this type of leadership requires contextual intelligence[13] and is described in the literature as the ability to interpret and react to changing surroundings.[14] Athletic training research has concluded that ATs need a high level of contextual intelligence,[13] which has been said to distinguish leaders from nonleaders[14] and is reported to be needed by physicians for navigating clinical complexity.[15] Empirical research on behaviors of health care executives recommends that leadership development for navigating turbulent environments should include contextual intelligence.[16] Introducing contextual intelligence to ATs may help to alleviate some of the confusion between management and leadership and, more important, provides a model for practicing leadership within a patient-oriented framework that is appropriate for changing situations and people.

ADDITIONAL RATIONALE FOR LEADERSHIP

Leadership has been reported to be a significant dimension of what any profession does.[17,18] The ability to practice leadership is an "essential component of both administrative and clinical practice."[17(p5)] Because it is considered an essential component, it is easy to conclude that without the regular practice of leadership by all of a profession's members, the profession suffers. Likewise, when the members of an association practice leadership, it is easier for that profession to grow. If the practice of leadership apart from and outside of formal job duties is not expected of every AT, regardless of position or experience, hope for athletic training to be a viable and contributing health care profession is at risk. Therefore, leadership must be introduced and evaluated early in professional education and continue to be developed and recalibrated throughout an AT's career.

ATHLETIC TRAINING AND LEADERSHIP

Leadership within athletic training is certainly not absent. Since the founding of the profession, individual members have answered the call to lead! In addition, with programs like the National Athletic Trainers' Association Leadership Academy, iLEAD student conferences, and Master of Athletic Training and Doctor of Athletic Training programs including leadership-based curriculum, more progress is being made. Leadership scholarship is also growing: There have been 14 doctoral dissertations dedicated to athletic training leadership published in the ProQuest database since 2000, and a growing number of leadership publications in scholarly journals have been written by ATs. Table 2 is a list of athletic training literature on leadership. Despite growth, there is little consistency on what leadership looks like, how it is practiced, who can practice it, how much experience (if any) is needed to practice it effectively, and when and where it can be learned.

Table 2. Leadership Literature in Athletic Training.[a]

Date	Author(s)	Journal	Title
1994	Nellis[19]	*Journal of Athletic Training*	Leadership and management: techniques and principles for athletic training
2002	Platt-Meyer[20]	*Journal of Athletic Training*	Athletic training clinical instructors as situational leaders
2002	Platt-Meyer[21]	*Athletic Therapy Today*	Leadership characteristics as significant predictors of clinical teaching effectiveness
2007	Laurent & Bradney[22]	*Journal of Athletic Training*	Leadership behaviors of athletic training leaders compared with leaders in other fields
2008	Kutz[6]	*Athletic Therapy Today*	Leadership factors for athletic trainers
2008	Kutz & Scialli[7]	*Journal of Allied Health*	Leadership content important in athletic training education with implications for allied health care
2009	Peer & Schlabach[23]	*Athletic Therapy Today*	Professional values in athletic training: building tomorrow's leaders.
2009	Herzog, Zimmerman, & Lauber[24]	*Athletic Therapy Today*	Transformational leadership in building relationships with clinical instructors
2010	Kutz[8]	*Journal of Allied Health*	Leadership in athletic training: implications for practice and education
2011	Raab, Wolfe, Gould, & Piland[25]	*Journal of Athletic Training*	Characterizations of a quality certified athletic trainer
2012	Kutz[26]	*Athletic Training Education Journal*	A review and clinical framework for integrating leadership into clinical practice
2012	Kutz[27]	*Athletic Training Education Journal*	Leadership is positively related to athletic training students' clinical behaviors
2013	Katch, Tomczyk, Shinkle, & Berry[28]	*Athletic Training Education Journal*	Students perspectives of leadership development
2013	Hazelbaker[13]	*Journal of Athletic Training*	Perceived skills and abilities required by athletic trainers in hospital and clinical management positions: a Delphi study
2015	Mazerolle, Burton, & Cotrufo[29]	*Journal of Athletic Training*	The experiences of female athletic trainers in the role of the head athletic trainer
2016	Pagnotta, Mazerolle, Pitney, Burton, & Casa[30]	*Journal of Athletic Training*	Implementing health and safety policy changes at the high school level from a leadership perspective
2016	Peer & Webster[31]	*Athletic Training Education Journal*	Bystanders to upstanders: using the social change model of leadership to embrace educational reform
2016	Mazerolle & Eason[32]	*Journal of Athletic Training*	Barriers to the role of the head athletic trainer for women in National Collegiate Athletic Association Division II and III settings.
2018	David & Larson[33]	*Journal of Sport Rehabilitation*	Athletes' perception of athletic trainer empathy: how important is it?
2018	Kutz & Doherty-Restrepo[9]	*Athletic Training Education Journal*	Frequency of leadership behaviors among athletic trainers in university settings

[a] This list does not include dissertations, theses, and published abstracts.

CHANGING HEALTH CARE: CLINICAL LEADERSHIP AND PATIENT OUTCOMES

According the National Academy of Medicine, the needed changes in health care will require transformative leadership.[34] That level of change calls for leadership to filter all the way to the clinical level. Transformative leadership should not be confused with transformational leadership. The former requires conscious awareness of social and cultural paradigms and encourages the transition into new practice paradigms. If clinicians do not have access to ongoing leadership development that encourages transformative behaviors or worse, abdicate leadership, changes may not occur. Transformative leaders tactfully call to question the status quo and actively advocate for new practice models. The National Academy of Medicine goes on to say, "Clinical leaders could provide value by coaching [peer clinicians] into new practice paradigms that they might not pursue on their own."[34(p383)] Transformative leaders at the clinical level foster change in those around them. Some of those changes to practice paradigms include safer conditions for patients and better patient outcomes. Therefore, purposefully developing clinical leaders fosters desirable changes within health care. Stanley[35(p111)] describes a clinical leader as

A clinician who is an expert in their field, and who, because they are approachable, effective communicators and empowered, are able to act as a role model, motivating others by matching their values and beliefs . . . to their practice.

Clinical leadership certainly demands technical competence, but that technical competence is the foundation to establishing critical nontechnical skills. These nontechnical skills have been described as *soft skills*, or skills that do not depend on acquired technical knowledge.[36] Not only must clinical leaders be competent clinicians, they must also effectively demonstrate these nontechnical or soft skills. A systematic review of 22 studies conducted by Gordon, Darbyshire, and Baker[37] concluded that nontechnical skills directly improve patient safety. David and Larson[33] found that clinical ATs who display empathy through advocacy, communication, and approachability improve the patient-clinician relationship and promote better patient-centered care. Raab and colleagues[25] found that quality ATs can improve health care delivery; these researchers define *quality* as a product of soft skills (ie, leadership behaviors) such as care, communication, commitment, integrity, and knowledge. Perhaps most significant are the conclusions of Wong, Cummings, and Ducharme's[2] systematic review on leadership and patient outcomes: They concluded that leadership increased several measures of patient satisfaction. Specifically, they found[2] that leadership contributed to decreased patient mortality and increased patient safety (including reductions of complications from medical errors and fractures, fewer patient falls, fewer infections, shorter length of hospital stay, and increased patient compliance). Their systematic review has since become a landmark report that connects specific leadership behaviors directly to improving meaningful patient-oriented outcomes. McNeese-Smith[38] reported that patient satisfaction was positively affected by leadership and even the leadership motivation of nurses. Furthermore, research within medical social work describes how leadership contributes to patient compliance.[39] The benefit of leadership on patient compliance for athletic trainers is obvious. One useful recommendation to improving patient compliance, and ultimately adherence, is the development and practice of leadership behaviors. Notably these leadership benefits work for clinicians who may not have any formal organizational authority.

Multiple studies[40,41] have documented patients' ability to distinguish among technical competence, a good bedside manner, and concern of staff. Patients are able to distinguish between the clinical versus nonclinical skills that are used during their care. Patient satisfaction may depend on nonclinical skills just as much as clinical skills. Patients notice the difference between clinicians with good clinical skill and those with good clinical skill and leadership ability; it shows in better outcomes and higher levels of satisfaction. Athletic training educators and preceptors should be intentional about developing leadership (and related soft skills) early and often. There is a plethora of data on leadership (nontechnical soft skills) that are reported to improve patient outcomes. Therefore, it is imperative for ATs to embrace leadership beyond what is required for personal, organizational, or association advancement.

Embracing leadership beyond traditional organizational roles has profound implications for athletic training education. Not only is health care extremely complex and becoming even more so,[42,43] it is also changing dramatically. One of the most significant contributions to that change is the advent of interprofessional practice or collaborative models of care. Working in closer collaboration with other expert-level providers raises the bar for leadership. Zimmerman and Dabelko[39] discussed the distinction being made in medicine between curing (disease oriented) and caring (patient oriented). They described *curing* as a medical model that focuses on physical health and is bureaucratic and physician-centric with limited patient involvement. On the other hand, *caring* is a collaborative model that focuses on holistic health (physical, mental, and emotional) and is cooperative (includes a team of health care professionals) and intimately involves patients and their families in care decisions. Understanding health care as a complex adaptive system requiring collaboration, and a patient-oriented focus is a game changer. Many ATs still practice with the assumption that the curing model dominates health care and that health care is a complicated system; they either do not know that it is a complex system or do not know the difference between a complicated system and a complex system. Table 3 is a description of the differences between complicated and complex systems and the implications. In a caring (patient-oriented) environment, leadership that is prepared for complexity and collaboration is the new normal. Below is a list of the key ideas presented in this article that can be beneficial to clinicians and educators as they grapple with the future of leadership development within athletic training.

KEY SUMMARY POINTS

1. Leadership needs to be conceptualized with an "every member can" assumption.
2. To accurately advance the leadership dialogue, it is important to distinguish between being *the* leader and *a* leader.
3. Athletic trainers need to develop the skills associated with contextual intelligence.
4. Leadership development should be less self-serving and designed for the end user regardless of the organization's or institution's return on investment.
5. Athletic trainers must practice leadership as a lifestyle that transcends the workplace.
6. Developing nontechnical skills (ie, soft skills) can be a significant contribution toward improving meaningful patient-oriented outcomes.
7. Practicing leadership regardless of role advances the profession's reputation.

It is more important than ever that athletic trainers be prepared to collaborate to navigate the complexity of a patient-oriented health care system. A major component of that preparation must include an accurate picture of leadership. More specifically, it must include intentional leadership development, intentional practice, and ongoing evaluation of personal leadership behaviors. Leadership is no more the sole domain of those who occupy formal roles or positions: It is the domain of every athletic trainer. Refusing to be a leader or failing to practice leadership may be an act of negligence or, at the very least, have a negative consequence on patient care and the profession. In a similar fashion, diligently pursuing leadership and taking leadership respon-

Table 3. Complicated Versus Complex Systems.

Complicated Systems	Complex Systems	Implications
Requires Newtonian thinking	Requires quantum thinking	Effects how "reality" (perspective) is interpreted and defined
Based on the rules of *finite* games (clear winners and losers, keeps score, established rules, competitive)	Based on the rules of *infinite* games (everybody can win, no scores, rules unfold as you go, collaborative)	Generational: This difference is mostly seen between Baby Boomers (1944-1964) and Gen X'ers (1965-1979) versus Millennials (1980-1994) and Gen Z (1995-2012) and can explain much of the tension between generations
Decisions are driven by corporate values	Decisions are driven by personal values	Emphasizes the source of ethics and morality
Emphasizes technical competency and expertise	Emphasizes nontechnical skill and adaptability	Effects performance appraisals and "first impressions" Affects organizational longevity
Measures and assesses independent parts	Considers the whole and integrated parts	Effects problem-solving strategies and how and to whom problems are communicated
Evaluates success on present-day ability	Evaluates success on probability of potential	Failing to articulate expectations for the present and future results in low morale and frustration
Seeks to give answers to questions	Seeks to ask better questions	Determines preference of leadership style
Avoids chaos	Accepts chaos	Influences response to ambiguity and uncertainty
Is organized externally	Is self-organizing	Determines how long uncertainty or unknown is tolerated
Problems need immediate intervention	Problems can wait to be solved	Effects the sense of urgency around problem solving
Patterns and trends are observable or easily predicted	Patterns and trends cannot be seen or predicted	Affects what is given attention and deemed actionable data
Efficiency is the metric defining success	Meaning is the metric defining success	Effects ambition, satisfaction, and contentment

sibility seriously is a significant value added to the profession and the patients.

IMPLICATIONS FOR ATHLETIC TRAINING EDUCATORS

Athletic training educators must be intentional about introducing leadership within a patient-oriented framework. Developing opportunities for students to collaborate with health care professionals and patients outside of traditional care settings should be a priority for clinical coordinators and faculty. However, faculty should be careful not to promote the value of interprofessional practice exclusively on the basis of gaining diverse clinical experiences. Faculty should be cognizant of promoting the practice of athletic training outside of traditional care settings for the diversity of organizational, cultural, and social exposures as well. Clinical coordinators and faculty can reinforce contextual intelligence after nontraditional care settings by debriefing on different types of leadership that were observed and needed within organizational decision-making and hierarchy, dynamics of teamwork and collaboration of team members from different professional groups, and so on. Finally, leadership must be reconceptualized and introduced within athletic training (to students at all levels, Master of Athletic Training, residents, and Doctor of Athletic Training) as something that transcends traditional management functions. Athletic training educators who refuse to embrace the evolution of leadership as a new paradigm emerges are at risk of becoming irrelevant; or worse, they may fail to prepare their students for success in a complex system (ie, health care and life). Likewise, educators who offer continuing education to practicing clinicians must develop programming that helps navigate complexity and facilitates continuous quality improvement or risk inadvertently sabotaging their careers and the profession. One way to ensure a bright future for athletic training is for educators, administrators, clinicians, and students to engage in patient-oriented leadership that takes into account the physical, psychological, contextual, social, and cultural identity of the patient.

REFERENCES

1. Lee A, Hoyle E. Who would become a successful dean of faculty of medicine: academic or clinician or administrator? *Med Teach*. 2002;24(6):637–641.
2. Wong CA, Cummings GG, Ducharme L. The relationship between nursing leadership and patient outcomes: a systematic review update. *J Nurs Manage*. 2013;21(5):709–724.
3. Sfantou DF, Laliotis A, Patelarou AE, Sifaki-Pistolla D, Matalliotakis M, Patelarou E (eds.). Importance of leadership style towards quality of care measures in healthcare settings: a systematic review. *Healthcare*. 2017;5(4):73. doi:10.3390/healthcare5040073

4. White SJ. Leadership: successful alchemy. *Am J Health Syst Pharm*. 2006;63(16):1497–1503.
5. Ray R. *Management Strategies in Athletic Training*. 3rd ed. Champaign, IL: Human Kinetics; 2005.
6. Kutz MR. Leadership factors for athletic trainers. *Athl Ther Today*. 2008;13(4):15–20.
7. Kutz MR, Scialli J. Leadership content important in athletic training education with implications for allied health care. *J Allied Health*. 2008;37(4):203–213.
8. Kutz MR. Leadership in athletic training: implications for practice and education in allied health care. *J Allied Health*. 2010;7;39(4):265–279.
9. Kutz MR, Doherty-Restrepo J. Frequency of leadership behaviors among athletic trainers in university settings. *Athl Train Educ J*. 2017;12(3):165–178.
10. Hiller NJ, DeChurch LA, Murase T, Doty D. Searching for outcomes of leadership: a 25-year review. *J Manage*. 2011;37(4):1137–1177.
11. O'Neil EH; and Pew Health Professions Commission. *Recreating Health Professional Practice for a New Century*. San Francisco, CA: Pew Health Professions Commission. December 1998. https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/3.1%20%28Report%29%201998-12_Recreating_Health_Professional_Practice_for_a_New_Century_The_Fourth_Report_of_the_Pew_Health_Professions_Commission.pdf. Accessed August 22, 2019.
12. Henderson J. *The 2015 Athletic Trainer Practice Analysis Study*. Omaha, NE: Board of Certification; 2015.
13. Hazelbaker CB. Perceived skills and abilities required by athletic trainers in hospital and clinical management positions: a Delphi study. *J Athl Train*. 2013;48(1):87–91.
14. Kutz MR. *Leadership and Management in Athletic Training*. Burlington, MA: Jones & Bartlett Learning; 2018.
15. Bolwell BJ. Contextual intelligence. *Oncol Times*. 2018;40(9):26.
16. Kutz MR, Ball DA, Carroll GK. Contextual intelligence behaviors of female hospital managers in the United States. *Int J Healthcare Manage*. 2018;11(3):155–163.
17. Miles JM, Scott ES. A new leadership development model for nursing education. *J Prof Nurs*. 2019;35(1):5–11.
18. Curtis E, de Vries J, Sheerin F. Developing leadership in nursing: exploring core factors. *Br J Nurs*. 2011;20(5):306–309.
19. Nellis S. Leadership and management: techniques and principles for athletic training. *J Athl Train*. 1994;19(4):328–335.
20. Platt-Meyer L. Athletic training clinical instructors as situational leaders. *J Athl Train*. 2002;7(5):34–39.
21. Platt-Meyer L. Leadership characteristics as significant predictors of clinical teaching effectiveness. *Athl Ther Today*. 2002;37:(4S):261-265.
22. Laurent TG, Bradney DA. Leadership behaviors of athletic training leaders compared with leaders in other fields. *J Athl Train*. 2007;42(1):120–125.
23. Peer K, Schlabach G. Professional values in athletic training: building tomorrow's leaders. *Athl Ther Today*. 2009;14(4):35–39.
24. Herzog V, Zimmerman E. Transformational leadership in building relationships with clinical instructors. *Athl Ther Today*. 2009;14(30):39–41.
25. Raab S, Wolfe BD, Gould TE, Piland SG. Characterizations of a quality certified athletic trainer. *J Athl Train*. 2011;46(6):672–679.
26. Kutz MR. A review and clinical framework for integrating leadership into clinical practice. *Athl Train Educ J*. 2012;7(1):18–29.
27. Kutz MR. Leadership is positively related to athletic training students' clinical behaviors. *Athl Train Educ J*. 2012;7(3):95–102.
28. Katch R, Tomczyk K, Shinkle B, Berry DC. Students' perspectives of leadership development. *Athl Train Educ J*. 2013;8(1):23–28.
29. Mazerolle SM, Burton L, Cotrufo RJ. The experiences of female athletic trainers in the role of the head athletic trainer. *J Athl Train*. 2015;50(1):71–81.
30. Pagnotta KD, Mazerolle SM, Pitney WA, Burton LJ, Casa DJ. Implementing health and safety policy changes at the high school level from a leadership perspective. *J Athl Train*. 2016;51(4):291–302.
31. Peer KS, Webster MC. Bystanders to upstanders: using the social change model of leadership to embrace educational reform. *Athl Train Educ J*. 2016;11(4):170–172.
32. Mazerolle SM, Eason CM. Barriers to the role of the head athletic trainer for women in National Collegiate Athletic Association Division II and III settings. *J Athl Train*. 2016;51(7):557–565.
33. David S, Larson M. Athletes' perception of athletic trainer empathy: how important is it? *J Sport Rehabil*. 2018;27(1):8–15.
34. Dzau, VJ, McClellan M, McGinnis JM, Finkelman EM (eds). *Vital Directions for Health and Health Care: An Initiative of the National Academy of Medicine*. Washington, DC: National Academy of Medicine; 2017.
35. Stanley D. Recognizing and defining clinical nurse leaders. *Br J Nurs*. 2006;15(2):108–111.
36. Davlin-Pater C, Rosencrum E. Promoting soft skill development in professional athletic training students. *Athl Train Educ J*. 2019;14(1):73–79.
37. Gordon M, Darbyshire D, Baker P. Non-technical skills training to enhance patient safety: a systematic review. *Med Educ*. 2012;46(11):1042–1054.
38. McNeese-Smith DK. The relationship between managerial motivation, leadership, nurse outcomes and patient satisfaction. *J Organ Behav*. 1999;20(2):243–259.
39. Zimmerman J, Dabelko HI. Collaborative models of patient care: new opportunities for hospital social workers. *Soc Work Health Care*. 2007;44(4):33–47.
40. Rubin HW, Ware JE, Hays RD. The PHJQ Questionnaire: exploratory factor analysis and empirical scale construction. *Med Care*. 1990;28(suppl 9):S22–S29.
41. Willson P, McNamara JR. How perception of a simulated physician-patient interaction influences intended satisfaction and compliance. *Soc Sci Med*. 1982;16(19):1699–1704.
42. Sturmberg J, Lanham HJ. Understanding health care delivery as a complex system. *J Eval Clin Pract*. 2014;20(6):1005–1009.
43. Lipsitz LA. Understanding health care as a complex system: the foundation for unintended consequences. *JAMA*. 2012;308(3):243–244.