Ten Leadership Principles from the Military Applied to Critical Care

Jessica L. Bunin¹, Kevin K. Chung¹, and Cristin A. Mount^{1,2}

¹Uniformed Services University of the Health Sciences, Bethesda, Maryland; and ²Madigan Army Medical Center, Joint Base Lewis-McChord, Washington

ORCID ID: 0000-0002-2781-3787 (K.K.C.).

ABSTRACT

Core military leadership principles associated with success during wartime have previously translated to success in the civilian business and healthcare sectors. A review of these principles may be particularly valuable during times of increased and sustained stress in the intensive care unit. In this perspective paper, we provide an overview of 10 of these principles categorized under the following three essential truths: *I*) planning is crucial, but adaptability wins the day; *2*) take care of your people, and your people will take care of everything else; and *3*) communication is the key to success. We reflect on these three truths and the 10 key principles that fall under them. As critical care physicians who have served in the military health system across two decades of war, we believe that internalizing these key leadership principles will result in optimized performance at multiple levels when crisis condition are encountered.

Keywords

leadership; military; crisis; critical care

The coronavirus disease (COVID-19) pandemic has been the greatest healthcare challenge of our lifetime, resulting in the declaration of a state of emergency in nearly every country on the globe while testing the limits of our capacity on

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Correspondence and requests for reprints should be addressed to Kevin K. Chung, M.D., Department of Medicine, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814. E-mail: kevin.chung@usuhs.edu.

ATS Scholar Vol 2, Iss 3, pp 317–326, 2021 Copyright © 2021 by the American Thoracic Society DOI: 10.34197/ats-scholar.2020-0170PS multiple levels as a critical care specialty. As such, numerous military and wartime analogies have been used to describe the impact of the crisis on our healthcare system. It is likely that many of the elements that lead to success on the "battlefield" might also apply during these times of crisis. We believe that leadership is among the most important elements critical to success. The purpose of this article is to describe and reflect on 10 key principles agreed on by the authors, who have "grown up" as critical care attending physicians during nearly two decades of war. These principles are the most translatable to the practice of medicine during times of crisis, large or small, and fall under the following three essential truths: 1) planning is crucial, but adaptability wins the day; 2) take care of your people, and your people will take care of everything else; and 3) communication is the key to success (see Table 1).

We sincerely hope that these key leadership principles will be embraced by critical care clinicians across every level of training and experience and practiced habitually, resulting in optimized intensive care unit (ICU) and hospital performance.

PLANNING IS CRUCIAL, BUT ADAPTABILITY WINS THE DAY

Be an Adaptive Leader

Plans alone will not win the day. Moltke the Elder, a well-known German field marshall, is credited with the phrase, "no plan survives contact with the enemy" (1). This general concept has been further stratified into a frequently cited acronym for volatility, uncertainty, complexity, and ambiguity ("VUCA") to characterize the unpredictable nature of military conflict and later translated into any scenario in which

organizations are facing turbulent times (2). The most obvious corollary to the VUCA concept is what we are all experiencing with the COVID-19 pandemic. This pandemic has been characterized by "volatility" with constantly changing conditions, "uncertainty" with the inability to reliably predict the future, "complexity" with so many internal and external variables influencing the pandemic's natural history, and "ambiguity" with the constant challenge confronting misinformation (real or perceived). As such, critical care leaders must be able to adapt and modify plans as new information comes online or conditions evolve. Blindly forging down a path without taking into consideration the VUCA elements often leads to a predictably poor outcome. Adaptive leadership requires sensitivity to these signals and a selfawareness that initial assumptions may be incorrect or that conditions have changed. A dose of humility may be necessary to acknowledge these evolving assumptions, and courage may be needed to order a change in direction. In short, be open to the possibility that you might be wrong or that things may have changed and adjust fire as necessary.

Maintain a Perpetual State of Team Readiness

As Dwight D. Eisenhower once said, "Plans are worthless, but planning is essential." It should already be well accepted that optimal performance requires the entire critical care team to be in a perpetual state of readiness. From the first days of boot camp, training and readiness are interrelated concepts indoctrinated into the military mindset. This same mindset can easily be extrapolated into the critical care setting, where crisis-like events occur frequently at the patient level. Leaders of most ICUs already spend a great deal of time and effort maintaining individual competencies for a variety of clinical skills. This principle of maintaining a perpetual state of readiness should extend beyond individual skill readiness and into team and organizational readiness. Regular simulation and training exercises should be integrated into any continuing education activities, particularly for lowfrequency events such as mass casualty scenarios. When possible, these exercises should integrate multidisciplinary teams and incorporate other units in the hospital. Planning and preparing for worst-case scenarios as a team will yield significant dividends in the long run. However, be prepared to adapt on the basis of the realities of VUCA.

TAKE CARE OF YOUR PEOPLE, AND YOUR PEOPLE WILL TAKE CARE OF EVERYTHING ELSE

Taking care of your team members is a foundational principle for any leader. This concept has many layers, including creating a safe environment for your people, focusing on wellness, developing team members, and practicing delegation.

Create a Safe Environment

Psychological safety, the perception among individuals that it is safe to speak up, to act, and to take risks, is critical in team success during times of crisis (3). This principle is at the root of a common phrase in the military and one of the first lessons taught in officer training: "leaders eat last." It is an officer's responsibility to place the needs of her soldiers first. Soldiers' safety, including psychological safety, is paramount. In psychologically safe environments, individuals are more creative, more engaged, and more likely to share information (4). Task uncertainty

and resource scarcity, which are experienced in crisis conditions such as the COVID-19 pandemic, inherently threaten psychological safety (4). As such, it is essential for emotionally intelligent leaders to engender trust and to practice empathy for all team members. Emotional intelligence is an overarching concept that describes the following five domains: selfawareness, self-regulation, social skill, empathy, and motivation (5). Each of these domains can be further developed and practiced to develop climates of trust, which improve team effectiveness, effort, and overall performance (5). In crisis situations, a leader who can understand and examine her values, strengths, weaknesses, and errors while effectively managing her emotions will calm a chaotic environment. If that self-aware and self-regulating leader can also express empathy for team members and maintain the motivation to ensure team success, she can maintain a psychologically safe environment, even in frightening conditions. Creating an environment that allows for empathic discussion among team members and encourages speaking up will allow all team members to excel.

Monitor for Burnout and Build Resilience

Burnout is an all too frequent occurrence in war (i.e., combat fatigue), as it is in critical care. Correlations have been identified between stressors in the deployed military environment and levels of burnout, which, in turn, lead to negative impacts on self-care, team care, and leadership (6). The predisposing factors at the individual, social, and organizational level in the military mirror those in medicine. Individual feelings of being unable to live up to expectations of others, being underappreciated, and being unable to balance professional and personal responsibilities collide with excessive workload, lack of control, administrative burden, and lack of autonomy (7). All of these factors are exacerbated in times of crisis, when discouraging outcomes are compounded by the uncertainty of what comes next. More than ever, we must be on the lookout for burnout in those we lead. This may be as simple as asking, "Do you feel burned out from your work?" or "Are you feeling more callous toward others?" (8). We cannot know who is struggling if we do not ask, and often burnout strikes those in whom we least expect it. The good news in this scenario is that, although burnout is commonplace, so is resilience. Furthermore, there are simple interventions that we, as leaders, can perform to increase resilience, decrease burnout, and support our teams. To start with, understanding our teammate's passions and preferences can help us guide them in making changes to their daily schedules. Discovering what they love about their job allows us to help them incorporate more of this into their work schedules. As an example, if a resident is passionate about innovation, connecting him with an innovation committee may change his outlook. If a faculty member is passionate about mentoring, encouraging her to make one mentoring appointment weekly may provide rejuvenation. Small changes can reap significant rewards.

Develop Your Team (Coaching and Mentoring)

In the words of General of the Army Douglas MacArthur, "A general is just as good or just as bad as the troops under his command make him." Developing our critical care teammates in the ICU is as important as developing our soldiers on the battlefield. Holding career development conversations, offering coaching, and developing talents and skills are as important (or more so) in times of crisis as they are in times of stability. We cannot allow the development of our subordinates to fall by the wayside when clinical responsibilities become more demanding and potentially even overwhelming. Coaching and mentoring in this context are force multipliers.

As stated by Dr. Atul Gawande, "Coaches are not teachers, but they teach. They're not your boss ... but they can be bossy ... Mainly, they observe, they judge, and they guide" (9). The value of taking the time to observe those around us and guide them through challenging times cannot be overstated. As leaders, we can fill that role for those around us with only minor changes to the way we function. We must be present, we must observe, and we must provide clear guidance about how to perform more efficiently and effectively. This should include encouraging reflection, goal setting, and development of action plans for improvement. A coaching model such as this may increase the self-efficacy, independence, sense of personal accomplishment, and professional development of those we lead.

Mentorship also plays a role in the development of our subordinates. Serving as mentors is not only our professional responsibility but also our honor. Mentorship has been defined as "the dynamic, context dependent, goal sensitive, mutually beneficial relationship between an experienced clinician and junior clinicians that is focused upon advancing the development of the mentee" (10). Mentorship provides career enhancement for mentees in the form of academic productivity, job satisfaction, and professional promotion but also personal improvement with respect to identity formation, sense of self-worth, and wellness (11). As a bonus, mentoring also advances the career and wellness of the mentor. As a leader, it is not your responsibility to mentor all subordinates, but it is your responsibility to ensure that the benefits of mentorship are understood and that opportunities are available. Whether through coaching or mentoring, you will never regret time spent developing your team.

Practice Delegation

While developing your team through coaching and mentoring, you are maturing individuals to whom you can confidently delegate responsibilities. Looking through the lens of situational leadership, as one develops subordinates over time with increasing amounts of competence and commitment, one should also shift leadership style from a coaching style that is highly directive and supportive to a delegating style that is less directive, less supportive, and more reliant on the skills of a highly competent and committed team member (12). In the military, as a means of delegation, we designate a formal chain of command and issue orders to our subordinates. Delegation in medicine may be less formalized, but it is no less important. Effective delegation will allow a leader to focus on more complicated, essential tasks that require higher amounts of expertise while building job satisfaction, responsibility, and productivity in other members of your team (13). Although delegation is often considered a managerial task, in crisis situations in which medical units are undermanned, delegation becomes a crucial leadership responsibility that requires judgment, confidence, and trust. Some key elements to successful delegation include choosing the correct tasks to delegate, choosing trustworthy assistants, inspiring commitment, and remaining engaged at an appropriate level (not

micromanaging but not neglecting) (14). Finally, consistent, effective communication is required, which leads us to the final truth.

COMMUNICATION IS THE KEY TO SUCCESS

Military operations rely on effective communication at all levels, from soldiers on the ground to strategic decision makers. So too does critical care medicine rely on every member of the ICU team having a clear understanding of what needs to happen to care for the patient and appropriately manage resources. Although many would say that you cannot overcommunicate in a crisis, that approach only applies if your communication is meaningful. Meaningful communication is clear, concise, and direct, and uses closed-loop techniques and feedback for confirmation that the message was received. Without those guiding qualities, communication can quickly degrade to noise, noise contributes to confusion, and confusion can lead to failure. In a crisis, teams are working to the upper limit of their capacity, and the duration of the crisis may be unclear. A mass casualty situation can be short lived, a few hours at most, or prolonged, depending on your ability to evacuate casualties. In the current pandemic crisis, many healthcare teams have been in a chronic mass casualty situation with no clear end in sight. Under these conditions, meaningful communication will make or break even the best-trained teams. In the fog of battle, simple tasks become difficult. Meaningful team communication will help clear the fog and move the team forward together. There are several tenets a leader must consider if she is to enhance meaningful team communication.

Truths	Principles	Examples
Planning is crucial but adaptability wins the day	1. Be an adaptive leader	"I was tracking two planned surgical admissions today, but there are several critically ill COVID patients in the emergency department. Can we manage our current census and accommodate the surgical patients, or do we need to cancel procedures? What information must I obtain, and who do I need on the team to make the best decisions under these rapidly changing conditions?"
	2. Maintain a perpetual state of team readiness	Large scale: Code airway practice. How does your hospital respond to an airway emergency? Do any policies or procedures require revision? Are there team members who should be present but are not currently included?
		Team or individual scale: "Today, let's talk our way through proning procedures for an intubated patient. What extra equipment do we need? Who is assigned to what roles? What medication orders need to be written?"
Take care of your people and they will take care of everything else	3. Create a safe environment	Psychological safety: "You did the right thing by correcting my error on rounds. Thank you for speaking up in that moment. That was a great learning point for the whole team"
		Climate of trust: "I know that our census has run higher than usual, with more critically ill patients. I understand that you're tired and uncertain and may feel a bit overwhelmed. Let's keep rounds focused on the following issues today. Remember, I want to hear your ideas and suggestions for the care plan."
	4. Monitor for	"Do you feel burned out from your work?"
	burnout and build resilience	"Are you feeling more callous toward others?"
		"Can we each bring up one great interaction we had today with another team member?"
		"Who should we acknowledge today for a job well done?"
	5. Develop your team (coaching and mentoring)	Coaching: "Times of intense clinical care can reveal areas of your practice where you are less confident. Have you noticed an area or skill where I can offer you some guidance? I'd love to sit down with you to determine a clinical goal."
		Mentoring: "You are an outstanding clinician. Are you planning on pursuing critical care? I would be happy to connect you with a mentor, or even be a mentor to you, if you don't already have one."
	6. Practice delegation	"Dr. Lopez, please grab an intern and go to the emergency department to evaluate the new consult. I'm going to round with the night-float resident to get her out of here on time."

 Table 1. Leadership truths and supporting principles for practicing medicine in times of crisis

Truths	Principles	Examples
		"I need to break the team into a "procedure group" and a "rounding group;" there are too many patients to delay procedures until after rounds. Dr. Smith, you lead the procedure group, and Dr. Lee, you lead the rounding team. I'm going to the emergency department to meet with the attending to plan for the rest of the day. Let's regroup in two hours"
Communication is the key to success	7. Share your goals	SMART: "By Friday, we need to simplify our sedation protocol."
	8. Start with why	Golden circle: why, how, and what. "We take the best care of our patients with the resources we have. We are going to assist our nurses by simplifying their tasks. By Friday, we need to simplify our sedation protocol to make more efficient use of our nurses' time"
	9. Master feedback (giving and receiving)	Giving: "I'd like to give you some feedback on the central line insertion I just observed"
		Receiving: "It has been a long week in the ICU, with a high census. Can we do a check-in and see if I am communicating our goals and priorities in a way that everyone can follow?"
	10. Practice conflict resolution	"I understand that we missed a spontaneous breathing trial on Mr. S again this morning, car we get nursing and respiratory therapy representatives to discuss what the issues are and how we can overcome them?"
		"I just overheard your conversation after rounds, it sounded heated. Can we find a quiet place to talk so I can help you two figure out how to work together to care for this patient?"

Table 1. Continued

Definition of abbreviations: ICU = intensive care unit; SMART = simple, meaningful, attainable, resourced, time-sensitive.

Share Your Goals

A leader must have a sense of where they want the team to go and how they want the team to function. The good news is that your goals do not have to be sweeping, grand, or profound. They must get your team from point A to point B with the resources you have at hand. This is equally true on the battlefield and in a busy ICU. In a crisis, you need your team to move together toward the same goal, and using the SMART construct to create and communicate your goal can help facilitate action (15). The terms associated with each letter of the acronym have changed over time and can easily be modified for a crisis care situation in the ICU: S (simple), M (meaningful), A (attainable), R (resourced), and T (time-sensitive) (16). For example, "By Friday, we need to simplify our sedation protocol to make more efficient use of our nurses' time." Setting your goals is only the first step; if

Table 2. Recommended resources for further exploration of leadership

Broad leadership concepts

- Sinek S. Why good leaders make you feel safe. New York, NY: TED; 2014. Available from: https://www.ted.com/talks/simon_sinek_why_good_leaders_make_you_feel_ safe?language=en.
- McChrystal S. Listen, learn ... then lead. New York, NY: TED; 2011. Available from: https:// www.ted.com/talks/stanley_mcchrystal_listen_learn_then_lead?language=en.

Uniformed Services University. USU-WRNMMC department of medicine grand rounds with GEN Martin Dempsey. Bethesda, MD: Uniformed Services University; 2020. Available from: https://www.youtube.com/watch?v=Qim56EouAog&t=1s.

Walter Reed Bethesda. Duke University's Coach K on leadership, joint USU/Walter Reed grand rounds. Bethesda, MD: Walter Reed Bethesda; 2020. Available from: https://www.youtube.com/watch?v=iKRFJw4JEa8&t=41s.

Leadership constructs

- Goleman D, Boyatzis RE, McKee A. Primal leadership: realizing the power of emotional intelligence. Brighton, MA: Harvard Business School Press; 2002.
- Blanchard A, Zigarmi P, Zigarmi D. Leadership and the One Minute Manager: Increasing Effectiveness Through Situational Leadership II. New York, NY: HarperCollins; 2013

Teamwork and resiliency

Edmonson A. How to turn a group of strangers into a team. New York, NY: TED; 2018. Available from: https://www.youtube.com/watch?v=3boKz0Exros.

Long D. An ER doctor on how to triage your busy life. New York, NY: TED; 2019. Available from: https://www.ted.com/talks/darria_long_an_er_doctor_on_how_to_triage_your_busy_life?language=en.

you fail to adequately communicate your goals, you'll find yourself standing alone wondering where the rest of your team is. How do you communicate your goals?

Start with Why

If you cannot explain why you want to move your team in a certain direction, your team will not buy into your vision, and you will not succeed. The ability to explain your thought process in simple terms is key to onboarding skeptics, encouraging hesitant team members, and engaging everyone to use their talents to get the team to the desired end. In his book *Start With Why*, Simon Sinek uses "the golden circle" to explain how communication that focuses on "why" first, before "how" and "what," can more effectively build collaborative teams (17). "We are here to provide the very best care we can to as many patients as we can with the resources we have" (why). "We are going to assist our nurses by simplifying what we're asking them to do in the routine course of their shift" (how). "By Friday, we need to simplify our sedation protocol to make more efficient use of our nurses' time" (what). The investment of minimal extra time to communicate your intent more clearly will pay dividends when your team meets your goals in a collaborative manner with minimal distraction and confusion. Ensuring your team understands the why also gives them an opportunity to achieve the end state of your goal using innovative and creative means that you may not have thought of, particularly if you have used delegation as a tool.

Master Feedback (Giving and Receiving)

In the military, we often pause for huddles, debriefs, and after-action reviews. The leader has the opportunity to solicit input from every team member on what is going well, what is not going well, and what should be changed or improved immediately or in the future. The leader can correct the course or alter the operational goals and objectives as needed. Applying that concept to clinical leadership, we can measure progress toward achieving a goal with feedbackboth giving and receiving. Checking in with your ICU team (formally and informally) and offering them your perspective on their performance sets them up for success. Pointers on how they are hitting or missing the designated targets for the hour, day, or week and how they can measure improvement until the next feedback session are crucial. For all leaders, feedback is a gift. A feedback session with your team is an opportunity for you to learn if your goals are still viable, if your team understands your "why," if they are all working toward the same end goals, and how you, the leader, are helping them or how you are creating barriers that impact capability and efficiency. Feedback is a key mechanism that enables continuous improvement and optimized team performance during crisis scenarios.

Practice Conflict Resolution

All teams move through conflict as they progress along a charted path, and that conflict will come faster and hotter and potentially have more significant consequences during a time of crisis. All team members are operating under stressful and often novel conditions. In the ICU, the stakes are high because mortality is often the feared outcome. A leader must be

quick to recognize building conflict and equally quick to resolve the conflict when it flares. This is a skill that must be practiced during noncrisis times. (see BE AN ADAPTIVE LEADER). Given the multidisciplinary and multi-experience-level environment of most ICUs, daily conflict is as routine as daily rounds. Although daily conflict usually does not reach dramatic levels, it offers an opportunity for leaders to intercede and practice their conflict resolution skills. How do you handle an argument between a respiratory therapist and a nurse as to the proper timing for a spontaneous breathing trial? What do you do when there is an interpersonal conflict between your resident and your intern? What do you do when you disagree with another attending on a plan of care? These small conflicts are commonplace in the ICU and provide opportunities for leaders to practice different styles of conflict resolution. Smiley offers a discussion of different tools that can be used to aid teams with conflict resolution, as well as leader behaviors such as receptivity, accountability, and clarity (18). If you practice on a daily basis when the consequences of the conflict are small, you will be infinitely more adept at resolving conflict during crisis conditions. Although not all inclusive, we believe these 10 military leadership principles are highly relevant to critical care medicine, particularly during the COVID-19 pandemic. These principles may serve as important anchors to help you conquer some challenges you face currently in your ICU and prepare you to overcome leadership hurdles you might face in the future. We have also included recommendations to further your leadership education in Table 2.

<u>Author disclosures</u> are available with the text of this article at www.atsjournals.org.

REFERENCES

- Kenny G. Strategic plans are less important than strategic planning. *Harvard Business Review*. 2016 June 21 [accessed 2020 Dec 21]. Available from: https://hbr.org/2016/06/strategic-plans-are-lessimportant-than-strategic-planning.
- 2. Bennis W, Nanus B. Leaders: strategies for taking charge. New York, NY: Harper & Row; 1985.
- 3. Edmondson A. Psychological safety and learning behavior in work teams. Adm Sci Q 1999;44:350-383.
- 4. Edmondson AC, Lei Z. Psychological safety: the history, renaissance, and future of an interpersonal construct. *Annu Rev Organ Psychol Organ Behav* 2014;1:23–43.
- 5. Goleman D. Emotional intelligence. New York, NY: Bantam Books; 2005.
- 6. De Jong BA, Elfring T. How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. *Acad Manage J* 2010;53:535–549.
- Adler AB, Adrian AL, Hemphill M, Scaro NH, Sipos ML, Thomas JL. Professional stress and burnout in U.S. military medical personnel deployed to Afghanistan. *Mil Med* 2017;182:e1669–e1676.
- Ironside K, Becker D, Chen I, Daniyan A, Kian A, Saheba N, et al. Resident and faculty perspectives on prevention of resident burnout: a focus group study. *Perm J* 2019;23:18–185.
- West CP, Dyrbye LN, Sloan JA, Shanafelt TD. Single item measures of emotional exhaustion and depersonalization are useful for assessing burnout in medical professionals. *J Gen Intern Med* 2009;24:1318–1321.
- Gawande A. Personal best. *New Yorker*. 2011 Oct 3 [accessed 2020 Dec 21]. Available from: https://www.newyorker.com/magazine/2011/10/03/personal-best.
- Radha Krishna LK, Renganathan Y, Tay KT, Tan BJX, Chong JY, Ching AH, et al. Educational roles as a continuum of mentoring's role in medicine - a systematic review and thematic analysis of educational studies from 2000 to 2018. *BMC Med Educ* 2019;19:439.
- Hersey P, Blanchard KH, Natemeyer WE. Situational leadership, perception, and the impact of power. Group Organ Stud 1979;4:418–428.
- Johnson WB. The intentional mentor: strategies and guidelines for the practice of mentoring. Prof Psychol Res Pr 2002;33:88–96.
- Kærnested B, Bragadóttir H. Delegation of registered nurses revisited: attitudes towards delegation and preparedness to delegate effectively. Vard Nord Utweckl Forsk 2012;32:10–15.
- Sostrin J. To be a great leader, you have to learn how to delegate well. *Harvard Business Review*. 2017 Oct 10 [accessed 2020 Dec 21]. Available from: https://hbr.org/2017/10/to-be-a-great-leader-you-have-to-learn-how-to-delegate-well.
- Doran GT. There's a S.M.A.R.T. way to write management's goals and objectives. *Manage Rev* 1981;70:35–36.
- Goals SMART. SMART goals: how to make your goals achievable. London: Mindtools; 2020 [accessed 2020 Dec 21]. Available from: https://www.mindtools.com/pages/article/smart-goals.htm.
- Sinek S. Start with why: how great leaders inspire everyone to take action. New York, NY: Penguin Group; 2009.