

# The necessary leadership skillsets for the high-reliability organization framework adoption within acute healthcare organizations

Amanda L. Logan-Athmer DHA, RDN, LD

College of Health & Public Administration,  
Franklin University, Columbus, Ohio, USA

## Correspondence

Amanda L. Logan-Athmer, 3775 Lincoln Road,  
Cincinnati, Ohio 45247, USA.  
Email: [logana01@email.franklin.edu](mailto:logana01@email.franklin.edu)

## EARN ASHRM CE FOR THIS ARTICLE

This article is ASHRM CE eligible.  
Earn 1.0 credit hours of Continuing Education  
by passing an online quiz based on your reading at  
[ASHRM.org/JournalCE](https://www.ashrm.org/JournalCE).

[This article is updated on June 23, 2022, after first  
online publication, to identify it as a CE article.]

## Abstract

This research explores the necessary leadership skills for the successful adoption of the High-Reliability Organization (HRO) framework within acute healthcare organizations. Using a qualitative research design, organization leaders and experts at the executive, mid-level, and front-line levels were interviewed. The results were analyzed to correlate specific leadership skillsets and components to the most successful adoption strategies. In total, 20 skillsets were identified with seven representing data saturation. The seven vital skillsets include non-hierarchical leadership, transparent and continuous communication, deference to expertise, ability to innovate, motivation through recognition, reflective of self, and commitment to visibility.

## INTRODUCTION

Millions of individuals are harmed by healthcare-associated infections and medication errors each year, with some of these errors resulting in permanent disability and death.<sup>1,2</sup> It is further estimated that, within the United States, 10% of all deaths are due to medical error.<sup>3</sup> These errors are believed to be under-recognized and have taken the third-highest spot for the cause of death within the United States.<sup>2,3</sup> Errors are thought to occur due to systemic concerns such as inadequate care coordination, including communication, deficient clinical practice patterns, minimal accountability, and an absence of safety nets and protocols.<sup>2,3</sup>

High reliability involves an organization's capability to consistently deliver high-risk services, such as those found within healthcare, with low injury rates.<sup>4</sup> With the progressively large number of errors occurring daily, achieving high reliability in healthcare has become more of a priority than ever before. In this setting, the risk potential is high, and failures in processes have proven to be catastrophic to patients, employees, and the organization itself.<sup>5</sup> Adopting a high-reliability mindset in this field is believed to be the best way to minimize or eliminate these risks and subsequently hasten patient

safety.<sup>4</sup> Usual improvement frameworks are grounded on scientific methods and focus on incremental changes.<sup>6</sup> Alternatively, the high-reliability approach focuses on cultural transformation that leads to consistency in responding to unforeseen events.<sup>4</sup>

Leadership is thought to be one of the most critical components to attaining a highly reliable organization.<sup>6,7</sup> Optimal leadership must be present to create the environment needed for change and maintain a culture of safety.<sup>6,7</sup> Although leadership has been identified as a vital component of the high-reliability organization (HRO) model, very few studies have directly identified the necessary leadership traits for HRO adoption within the healthcare environment.

## RESEARCH QUESTION

This study sought a theory in answer to the research question: What are healthcare leaders' perspectives on necessary leadership skills to successfully adopt the HRO framework within acute care hospitals? Organizations often overlook the importance of necessary leadership skills and strategy integration into highly reliable organizations' success. Therefore, this research sought

**TABLE 1** Identified skillsets

Skill	Importance of trait <sup>a</sup> (n = 10)
Nonhierarchical leadership	100%
Transparent, continuous communication	90%
Deference to expertise	80%
Ability to innovate	80%
Motivation through recognition	60%
Reflective of self	60%
Commitment to visibility	60%
Encouraging staff to speak up	50%
Focus on process versus people	50%
Follow through	50%
Humble	50%
Inspiration/inspire	50%
Collaboration	40%
Listening	40%
Setting the overall direction	40%
Sincerity	30%
Commitment to organization	20%
Flexibility and adaptability	20%
Integrity	10%
Resiliency	10%

<sup>a</sup>The percentage is based on the total percent of participants that recognized the trait as being necessary for high-reliability organization (HRO) adoption.

to determine the critical leadership skills that are necessary to adopt the HRO model to the greatest extent possible.

## DEMOGRAPHICS

For this qualitative research, 10 heterogeneous participants were interviewed. Among the participants, the average number of years in a leadership role is 16.5 years and the average number of years implementing the HRO model in healthcare is 8.7 years. The participants were employees of various organizations throughout the country, and their organizational alignment while implementing the HRO framework included front-line lead/supervisor (20%), midlevel leader (20%), and executive leader (60%). Within the alignment, a number of roles were held including Organization Director, Organization Administrator, Program Lead, Vice President of Patient Safety, Vice President of Practice Management and Process Improvement, Chief Quality Officer, Chief Diversity Officer, Compliance Officer, Chief Medical Officer, and Department Administrator/Manager.

## RESULTS

The 10 participants identified 20 total skillsets that are critical to the HRO model adoption in acute healthcare organizations (see Table 1). Seven emerging themes include nonhierarchical lead-

ership, transparent and continuous communication, deference to expertise, innovation, recognition, reflective, and visibility. Additional themes identified include the need to encourage staff to speak up, focus on processes versus people, following through, humility, inspiration, collaboration, listening, setting the overall direction, sincerity, commitment to the organization, flexibility, integrity, and resiliency.

## DISCUSSION OF FINDINGS

This research found seven themes relating to the necessary leadership skillsets for HRO adoption in acute healthcare organizations. These findings suggest that, perhaps there is not one style that should be employed in order to successfully adopt the HRO model in healthcare.

### Theme 1: Nonhierarchical leadership

All participants indicated the importance of leaders incorporating a nonhierarchical approach. Leaders that practice this skill involve their team in decision-making as partners, rather than subordinates. The nonhierarchical leadership trait is one that allows a leader to decentralize both work processes and decision-making, and instead enables a circular approach. As an alternative to the top-down or bottom-up method, nonhierarchical leadership is continuous and shared between both the identified leaders and frontline staff. Through this skill, leaders provide employees with higher levels of responsibility and allow them to be involved in organizational decisions. With this approach, employees are able to take accountability for their work.

The nonhierarchical leadership trait conflicts with skillsets that are thought to be critical to the trait and transactional theories. The trait theory requires command and control with a focus on intelligence, initiative, and self-assurance.<sup>8,9</sup> In addition, policies, procedures, and standards are considered to be vital with the transactional style, and followers are discouraged from developing or implementing new approaches.<sup>8</sup> The identified trait of nonhierarchical leadership conflicts with both of these previous styles as this trait encourages shared decision making with all individuals in the organization contributing to process improvement.

Alternatively, the nonhierarchical leadership trait is the most relevant to the transformational and servant leadership theories, and has been found to be successful in the aviation industry.<sup>10</sup> The transformational style requires partnership and collaboration.<sup>11</sup> Similarly, the servant leader aids by placing others' interests first and ensures that their needs are fulfilled.<sup>12</sup> Previous research has further suggested that organizations should focus on developing leadership skills in all personnel, regardless of their position.<sup>13,14</sup> This finding stresses this notion as the nonhierarchical approach requires ongoing partnership and support in a two-way manner from both the formal supervisor and direct-line employees. These leaders obtain input from their staff and allow them to identify areas for improvement, ultimately enabling shared leadership.

## Theme 2: Transparent, continuous communication

Open and ongoing communication was identified as a critical trait, and has previously been identified as a critical skill for the successful adoption of the HRO model.<sup>15–17</sup> Thus, this research emphasizes the importance of this previously identified skill. Former research has found that organizations must maintain continuous contact with staff that describes the big picture to all employees.<sup>17,18</sup> Previous research has also found that communication between personnel has been successful with the use of internal safety websites and visual management boards, where staff may navigate to report near misses and adverse outcomes, and learn about safety-related events and progress.<sup>19–21</sup> While participants of this research did not discuss the importance of websites and visual boards, the use of group discussions and “live” updates were stressed. Other research has stressed the need to increase communication, not only with employees, but also with patients and their families.<sup>2,19</sup> While there was not an identified need to include patients and their families when communicating across the organization, one participant emphasized the importance of having patients on work teams for success.

## Theme 3: Deference to expertise

Deference to expertise appeared to have a two-way connection and was recognized as a necessary skillset by 80% of the participants. This trend indicated the need that leaders need to, not only be able to have the ability to allow their staff to make decisions and act on those, but also be reflective to such a degree that they take ownership in not having or knowing all of the solutions. Deference to expertise is a vital pillar of the HRO framework and remains as a previously identified necessary trait among successful healthcare leaders.<sup>10,15,17,22</sup> This leadership skill differs from the traditional command and control (trait theory) style as it, instead, encourages that all employees share responsibilities in controlling situations. Research has found that, in general, leaders who incorporate deference to expertise tend to be the most successful in adopting the HRO framework.<sup>17,23</sup> The identification of this necessary skillset was expected and is not novel when compared to previous research. Instead, this research contributes to the idea that this skillset is critical among acute healthcare leaders in order for their organization to be successful in HRO model adoption. Further, the participants of this research did not indicate ill effects in utilizing deference to expertise among their healthcare teams.

## Theme 4: Ability to innovate

This research identified the need for leaders to practice ongoing innovation. Nearly all participants expressed the importance of continuous innovation and improvement. While innovation itself may not be considered a direct skill, this concept relates to

a leader's ability to understand basic improvement techniques and the aptitude to use those tools in order to improve processes and systems. Previous research has found that organizations must repeatedly reinvent themselves and their processes to be successful.<sup>24</sup> Similarly, the integration of improvement techniques has been found to be vital to successful HRO adoption in healthcare organizations.<sup>19,25</sup> This research emphasizes this notion.

Previous research has suggested that, while preceding improvement frameworks are grounded on scientific methods that focus on incremental changes, the high-reliability approach focuses on cultural transformation that leads to consistency in responding to unforeseen events.<sup>4,6</sup> Participants in this research did not express the same notion as the overall theme emphasized the importance of having a continuous mindset and being able to prioritize systemic problem prevention. Transforming the culture in order to stress this focus was not an identified necessary factor in this research. However, that is not to say that transforming the culture is not necessary; further research would need to be conducted to determine if leaders perceive this to be essential to continuous innovation.

## Theme 5: Motivation through recognition

This research identified the need for leaders to recognize employees through celebrations, rewards, praising, and certificates of appreciation. The transactional theory indicates that individuals are motivated by rewards and punishments; when employees are successful, their supervisor rewards them.<sup>8</sup> This research emphasizes the concept that rewards can be used as motivating factors to succeed in HRO model adoption. However, employing punishments was not identified to be necessary and, according to one participant, could even be considered harmful. Previous research has identified the importance of recognizing staff by offering financial rewards, advancement opportunities, and other incentives based on performance relating to quality and safety.<sup>1,19,21,26,27</sup> Interestingly, this research found that leaders can employ more simple rewards with reduced financial needs such as celebrations, praising, and simple certificates of appreciation. Thus, organizations and leaders may use more recognition skillsets due to the identification that even simple notions can make a large impact in successfully adoption within acute healthcare.

## Theme 6: Reflective of self

This research found that the ability for a leader to self-reflect and subsequently adapt in order to obtain the optimal employee response is vital for HRO model adoption. Reflection involves the leader's ability to understand different generations and personalities, and be able to lead a team so that they can successfully work together. Some experts have indicated that previous leadership theories should be used in coordination with one another, depending on the culture, values, and capabilities of the organization.<sup>28</sup>

Neither previous research nor this research indicated that communication errors result from leaders lacking the ability to self-reflect and alter their approach based on differences. However, the lack of a leader's ability to self-reflect may be the root cause of this concept. The contingency theory believes that a leader's success depends on if they are placed in a situation that aligns with their skillsets.<sup>29</sup> While self-reflection relates to the contingency theory, the identification of this specific skill appears to be novel when compared to previous research. Contingency theories indicate that there is no specific leadership style that is successful in all situations and environments, which is consistent with this finding.<sup>8</sup> The contingency theory indicated the need for leaders to be placed in a situation that is best suited for their skillsets. Alternatively, the ability to be reflective of self indicates that leaders must have the ability to self-reflect and take ownership of their own traits, then alter them to meet the needs of their employees.

### Theme 7: Commitment to visibility

The majority of participants feel that a leader's commitment to being visible among their front-line staff is a vital leadership trait. Visibility may encompass huddles or physical rounding. Previous research has indicated that leadership must identify what is occurring at the frontline in order to maintain sensitivity to operations.<sup>19</sup> The same research indicated that monthly safety rounds with a member of the executive board and frontline staff was a key driver in promoting safety governance.<sup>19</sup> In addition, research has indicated that huddles are only successful when all service lines, support areas, frontline, and administrative staff are present.<sup>19</sup> This concept is strengthened by this research as a leader's commitment to visibility was identified as a necessary trait among leaders for HRO adoption within acute healthcare organizations.

### LIMITATIONS

This research confines itself to interviews with leaders that are employed within acute healthcare organizations. The individuals self-identified to have leadership experience within an acute healthcare organization and in implementing the HRO model for at least 1 year. The individuals provided input on their experiences, which may have been influenced by other, related experience outside of acute healthcare.

Due to the use of purposive sampling, the findings represented in this research cannot be generalized to all areas of the healthcare sector. Instead, this research aims to provide a basis of information that additional studies can expand upon as HRO adoption in healthcare progresses. In addition, this research is subject to other interpretations due to its qualitative nature. Finally, the literature on this topic remains limited. Implementing the HRO framework within healthcare is relatively novel. Thus, the outcomes of this research must be expanded upon in future qualitative and quantitative studies.

## RECOMMENDATIONS TO LEADERS AND PRACTITIONERS

While not a key focus of this research, 100% of the participants felt that formal education was necessary to be successful in leadership, and 70% indicating that observing other leaders is critical. Thus, it is recommended leaders and practitioners commit to lifelong learning relating to the HRO model and related leadership skillsets.

Nonhierarchical leadership was noted to be vital by 100% of the participants. To maintain this skill, it is recommended that leaders involve employees from every level of the organization in decision-making and avoid terms that create a hierarchy. This may include involving staff in strategic planning, leadership huddles and rounding, safety forums, and policy and procedure development.

To maintain transparent communication, it is recommended that leaders engage in this as often as daily, and no less than weekly. In the same forums, employees should be afforded the opportunity to speak up about "near misses" and mistakes without the fear of reprisal. Similarly, organizations must ensure that leaders have the time and resources to practice visibility. Some leaders may have a need to travel to various locations where their employees work; thus, the organization should provide the time and commuting resources that are necessary to maintain this skill. In addition, organizations may require that leaders regularly engage in two-way communication through ongoing forums, huddles, and rounds as part of their performance measures.

Deference to expertise has been identified as critical both in previous research and the current study. Leaders must be willing to embrace the notion that they cannot, nor should not, have the solution to all issues that arise. To stress this, supervisors must remind leaders of this and perhaps encourage them to present updates based on their specific employees' accomplishments, rather than their department or section accomplishments. In addition, policies and procedures should be written at a level that sets the overall direction based on the goals of the organization, but clearly defers decision-making at the lowest possible level. With deference to expertise, employees must believe that retaliation will not result if an unintended poor decision is made. Rather, the organization and leader should focus on how to improve the processes to avoid the same concern in the future. Relating to the same, employees should be recognized when they make an appropriate decision and speak up. Therefore, it is recommended that organizations and leaders have the necessary tangible and intangible resources to recognize direct-report employees, such as certificates of appreciation.

To embrace innovation, the organization and employees must have a basic understanding of process improvement tools and how to use them. Employees must continually seek to improve the new processes through ongoing improvement. In addition, leaders should be reflective of their styles, and know how to manipulate their style to achieve the desired outcomes among their staff. Organizations must provide leaders with the right information. For example, organizations should continually



educate their staff on process improvement tools, encourage the use of these tools when seeking improvement, and regularly engage in self-assessment tools. In addition, organizations should provide ongoing education regarding generational differences, and review how leaders might respond to the unique styles in order to obtain the best response.

## RECOMMENDATIONS FOR FUTURE RESEARCH

This research employed a qualitative design with 10 participants in order to identify the necessary skillsets. Previous research has not specifically evaluated this need within acute health-care organizations. In total, seven key themes were identified; however, these skillsets were hypothetical in nature and hinged on healthcare leaders' perspectives. Thus, future research must expand on these specific skillsets as they relate to outcomes. Qualitative research should be conducted with front-line healthcare employees in order to obtain their perceptions regarding their leaders' styles and impact in successfully implementing the HRO model. In addition, supplementary qualitative studies should be designed with observation designated as the primary data collection source. Further insight could have been obtained through observing the leaders in their daily work and when interacting with all levels of the organization. Finally, it is recommended that quantitative research be completed on this topic. As seven specific traits have been identified, future research may review how the specific skillsets positively or negatively impact the mitigation of preventable errors and risks and how these skillsets correlate to The Joint Commission's Oro 2.0 High Reliability Organizational Assessment results.

## CONFLICT OF INTEREST

There are no identified conflicts of interest.

## REFERENCES

- Chassin MR, Loeb JM. High-reliability health care: getting there from here. *Milbank Q*. 2013;91(3):459–490.
- Rodziewicz TL, Houseman B, Hipskind JE. Medical error reduction and prevention. January 4, 2021. <https://www.ncbi.nlm.nih.gov/books/NBK499956/>. Accessed June 1, 2021.
- McMains V, Nelson L. Study suggests medical errors now third leading cause of death in the U.S. Johns Hopkins Medicine website. May 3, 2016. [https://www.hopkinsmedicine.org/news/media/releases/study\\_suggests\\_medical\\_errors\\_now\\_third\\_leading\\_cause\\_of\\_death\\_in\\_the\\_us](https://www.hopkinsmedicine.org/news/media/releases/study_suggests_medical_errors_now_third_leading_cause_of_death_in_the_us). Accessed June 1, 2021.
- Weick KE, Sutcliffe KM. *Managing the Unexpected: Sustained Performance in a Complex World*. 3rd ed. Jossey-Bass; 2015.
- Farnese ML, Zaghini F, Caruso R, Fida R, Romagnoli M, Sili A. Managing care errors in the wards: the contribution of authentic leadership and error management culture. *Leadersh Organ Dev J*. 2019;40(1):17–30.
- Polonsky MS. High-reliability organizations: the next frontier in healthcare quality and safety. *J Healthc Manag*. 2019;64(4):213–221.
- Oster C, Braaten J. *High Reliability Organizations: A Healthcare Handbook for Patient Safety & Quality*. Sigma Theta Tau International; 2016.
- Malos, R. The most important leadership theories. *Annals of Efiimie Murgu University Resita*. 2012;413–420. <https://eds-a-ebcsohost-com.links.franklin.edu/eds/pdfviewer/pdfviewer?vid=1&sid=5ec608b-1f2-46bf-8109-0581e0b8ac11%40sessionmgr4008>. Accessed June 1, 2021.
- Walsh K, Smith J. *Healthcare Management*. Open University Press; 2006. <http://ndl.ethernet.edu.et/bitstream/123456789/49549/1/260.pdf#page=348>. Accessed June 1, 2021.
- Passmore G. High reliability in radiation oncology. *Radiation Therapist*. 2020;29(1):37–53. <https://eds-a-ebcsohost-com.links.franklin.edu/eds/pdfviewer/pdfviewer?vid=2&sid=d66da1de-fec5-41d9-ad5d-0e41ef043102%40sessionmgr4008>. Accessed June 1, 2021.
- Jasper M, Jumaa M. *What Is Leadership? A Critical Overview of Frameworks, Models and Theories*. Blackwell Publishing; 2005. <https://ebookcentral-proquest-com.links.franklin.edu/lib/franklin-ebooks/reader.action?docID=351096>. Accessed June 1, 2021.
- Greenleaf RK. *The Servant as a Leader*. Greenleaf Center; 1970.
- Kumar RD. Leadership in healthcare. *Anesth Intensive Care Med*. 2013;14(1):63–65. <https://www.vumc.org/faculty/sites/default/files/leadership%20in%20healthcare.pdf>. Accessed June 1, 2021.
- Ward ME, Brún AD, Beirne D, et al. Using co-design to develop a collective leadership intervention for healthcare teams to improve safety culture. *Int J Environ Res Public Health*. 2018;15(6):1182. <https://eds-a-ebcsohost-com.links.franklin.edu/eds/pdfviewer/pdfviewer?vid=8&sid=421b0958-4ef4-4407-802a-a33a78a386c8%40sessionmgr4007>. Accessed June 1, 2021.
- Christianson MK, Sutcliffe KM, Miller MA, Iwashyna TJ. Becoming a high reliability organization. *Crit Care*. 2011;15:1–5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3388695/pdf/cc10360.pdf>. Accessed June 1, 2021.
- Martínez-Córcoles, M. High-reliability leadership: a conceptual framework. *J Contingencies Crisis Manag*. 2018;26(2):237–246.
- Roberts KH, Bea R. Must accidents happen? Lessons from high-reliability organizations. *Acad Manag Executive*. 2001;15(3):70. <https://search-ebcsohost-com.links.franklin.edu/login.aspx?direct=true&db=edb&AN=5229613&site=eds-live>. Accessed June 1, 2021.
- Middleton LP, Phipps R, Roubort M, et al. Fifteen-year journey to high reliability in pathology and laboratory medicine. *Am J Med Qual*. 2018;33(5):530–539. [https://journals-ohiolink-edu.links.franklin.edu/pg\\_99?306288143345528::NO::P99\\_ENTITY\\_ID,P99\\_ENTITY\\_TYPE:276929673,MAIN\\_FILE&cs=3KFU-9ErWEuTZP8dYKKdEYdb\\_v\\_fwIXGVsTVBa3XortWbFCguFDOmlwFbpK0mI3F-Zgp8e6ZX9PIKZfGUgYg](https://journals-ohiolink-edu.links.franklin.edu/pg_99?306288143345528::NO::P99_ENTITY_ID,P99_ENTITY_TYPE:276929673,MAIN_FILE&cs=3KFU-9ErWEuTZP8dYKKdEYdb_v_fwIXGVsTVBa3XortWbFCguFDOmlwFbpK0mI3F-Zgp8e6ZX9PIKZfGUgYg). Accessed June 1, 2021.
- Hilliard MA, Scudlo R, Scaffidi L, Cady R, Villard A, Shah R. Our journey to zero: reducing serious safety events by over 70% through high-reliability techniques and workforce engagement. *J Healthc Risk Manag*. 2012;32(2):4–18.
- Karalis, E., Barbary, G. The common barriers and facilitators for a healthcare organization becoming a high reliability organization. *Asia Pac J Health Manag*. 2018;13(3):1–13. <https://eds-b-ebcsohost-com.links.franklin.edu/eds/pdfviewer/pdfviewer?vid=3&sid=ef66d48a-2aa6-4f42-a944-722fe901158c%40pdc-v-sessmgr04>
- The Joint Commission Sentinel event alert: The essential role of leadership in developing a safety culture. The Joint Commission. March 1, 2017. [https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/sentinel-event/sea\\_57\\_safety\\_culture\\_leadership\\_0317.pdf](https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/sentinel-event/sea_57_safety_culture_leadership_0317.pdf). Accessed June 1, 2021.
- McAuliffe E, DeBrun A, Cunningham U. Collective leadership and safety cultures: developing an alternative model of leadership for healthcare teams. *Int J Integr Care*. 2019;19(4):1–8. <https://eds-a-ebcsohost-com.links.franklin.edu/eds/pdfviewer/pdfviewer?vid=1&sid=51d18bd4-7967-49d8-b1ff-76cc290339f1%40sessionmgr4006>. Accessed June 1, 2021.
- Martínez-Córcoles M, Schöbel M, Gracia FJ, Tomás I, Peiró JM. Linking empowering leadership to safety participation in nuclear power plants: a structural equation model. *J Saf Res*. 2012;43(3):215–221.
- Roberts KH. HRO has prominent history. *J Anesth Patient Saf Found*. 2003;18(1). <https://www.apsf.org/article/hro-has-prominent-history/>. Accessed June 1, 2021.

25. Veazie S, Peterson K, Bourne D. Evidence brief: implementation of high reliability organization principles. National Center for Biotechnology Information website. May, 2019. <https://www.ncbi.nlm.nih.gov/books/NBK542883/>. Accessed June 1, 2021.
26. Kapec, L. G. *Organizing for High Reliability in Army Medicine: An Assessment of Barriers to Facilitators for Implementation* (Publication No. 10641062). Doctoral Dissertation. University of Pennsylvania. ProQuest Dissertations Publishing; 2017.
27. Stock, G. N., McFadden, K. L. Improving service operations: linking safety culture to hospital performance. *J Serv Manag.* 2017;28(1):57–84. <https://www.emerald-com.links.franklin.edu/insight/content/doi/10.1108/JOSM-02-2016-0036/full/pdf?title=improving-service-operations-linking-sety-culture-to-hospital-performance>
28. Al-Sawai, A. Leadership of healthcare professionals: Where do we stand? *Oman Med J.* 2013;28(4):285–287. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3725246/>. Accessed June 1, 2021.
29. Landis EA., Hill D, Harvey MR. A synthesis of leadership theories and styles. *J Manag Policy Pract.* 2014;15(2):97–100. [http://www.m.www.na-businesspress.com/JMPP/LandisEA\\_Web15\\_2\\_.pdf](http://www.m.www.na-businesspress.com/JMPP/LandisEA_Web15_2_.pdf). Accessed June 1, 2021.

## AUTHOR BIOGRAPHY

**Dr. Amanda L. Logan-Athmer** is an experienced clinician and healthcare administrator with over 10 years of experience. Dr. Logan-Athmer has a passion for optimal leadership skillsets and applies them in her daily professional life. Dr. Logan-Athmer recently obtained her Doctorate in Healthcare Administration from Franklin University located in Columbus, Ohio.

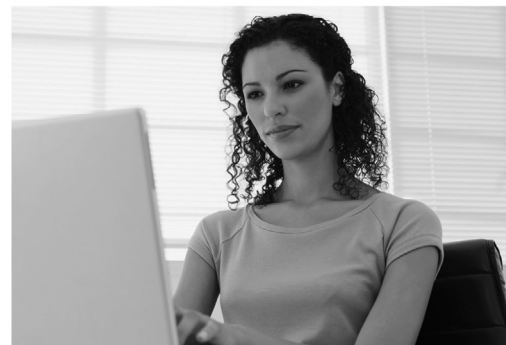
**How to cite this article:** Logan-Athmer AL. The necessary leadership skillsets for the high-reliability organization framework adoption within acute healthcare organizations. *J Healthc Risk Manag.* 2022;42:31–36. <https://doi.org/10.1002/jhrm.21500>

# You've Read the Article – Now Claim Your Credit



Purchase one ASHRM CE Credit Online  
 \$19 members/\$99 non-members

- Convenient online quiz-based format
- Track your CE credits earned in ASHRM University
- Credits eligible towards your CPHRM renewal



Look for further instructions at the end of this issue's CE-eligible article

**Purchase and track your CE credits at [ASHRM.org/Journalce](https://www.ashrm.org/Journalce)**