

Alternative Approaches to Mentoring

Joni L. Dirks, MSN, NPD-BC, CCRN-K

TOPIC Various approaches facilitate mentoring for critical care nurses.

CLINICAL RELEVANCE Mentoring is an important strategy to help recruit, retain, and develop nurses with critical care expertise. Mentoring benefits nurses at all career stages, from novice to expert. Effective mentoring programs benefit not only mentors and mentees but also organizations and patients by ensuring adequate numbers of nurses with critical care knowledge and skills.

PURPOSE Mentoring programs require careful planning to ensure that the objectives of the program align with the needs of the target audience, and that adequate resources are available to support the mentor-mentee relationship. This article identifies opportunities for mentoring in critical care nursing and provides recommendations from the literature for developing an effective program.

CONTENT COVERED Various objectives for mentoring programs are described, including supporting retention, providing clinical development, and planning succession. Program logistics are explored, such as selecting mentors, matching mentors with mentees, setting goals and expectations, and evaluating the program. In addition, the article identifies strategies for overcoming common barriers to mentoring, which include a lack of time and poor access to qualified mentors. (*Critical Care Nurse*. 2021;41[1]:e9-e16)

The current nursing shortage is expected to increase as the population of Baby Boomers ages and the demand for health care grows. The impact of this shortage will be amplified in specialty areas such as critical care, where staff require advanced training to manage technology and high-acuity patients.¹ Mentoring is an effective strategy to help maintain adequate staff with expertise in critical care to address the growing need. Benefits of mentoring include retention of new staff, development of experienced nurses, and succession planning for advanced roles.² Although the concept of mentoring is widely supported in health care, creating and sustaining mentoring

CE 1.0 hour, CERP C

This article has been designated for CE contact hour(s). The evaluation tests your knowledge of the following objectives:

1. Discuss organizational and individual benefits obtained from mentoring programs.
2. Describe logistics that should be considered when planning and implementing a mentoring program.
3. Identify 2 common barriers and possible solutions to mentoring.

To complete evaluation for CE contact hour(s) for activity C2112, visit www.ccnonline.org and click the "CE Articles" button. No CE fee for AACN members. This activity expires on February 1, 2023.

The American Association of Critical-Care Nurses is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation, ANCC Provider Number 0012. AACN has been approved as a provider of continuing education in nursing by the California Board of Registered Nursing (CA BRN), CA Provider Number CEP1036, for 1 contact hour.

©2021 American Association of Critical-Care Nurses doi:<https://doi.org/10.4037/ccn2021789>

Table 1 Mentor roles

Role	Behaviors	Examples in critical care
Advisor	Suggest opportunities for development	Alert mentee to CCRN or PCCN certification preparation courses
Teacher	Share clinical expertise; facilitate application of knowledge to practice	Answer questions about newly acquired skills when managing, for example, an IABP or patients receiving CRRT
Coach	Provide feedback on how to improve in specific areas	Share strategies for improving communication with families
Protector	Foster socialization; provide guidance in setting limits	Encourage limiting extra shifts to maintain a work-life balance
Sponsor	Introduce to others in network; assist in navigating workplace politics	Introduce to clinical experts on the ICU team and organizational leaders
Resource	Share information about organizational and external resources	Suggest attendance at ethics rounds; show how to access AACN website
Sounding board	Create a safe environment to share concerns and ideas	Offer to debrief after stressful experiences such as a patient code or clinical safety event
Challenger	Encourage reflection and problem-solving	Ask clarifying questions; ask mentee to identify alternative options
Role model	Model professional standards and values	Use evidence to support practice; join AACN; obtain certification

Abbreviations: AACN, American Association of Critical-Care Nurses; CRRT, continuous renal replacement therapy; IABP, intra-aortic balloon pump; ICU, intensive care unit.

programs can be challenging.^{3,4} This article describes opportunities for mentoring critical care nurses throughout their career, discusses important considerations when developing a mentor program, and proposes alternatives to overcome common barriers to successful mentoring.

The term *mentoring* is sometimes used interchangeably with *precepting*, but the 2 concepts are significantly different.^{2,3,5} Preceptorship typically involves an experienced nurse who functions as a clinical resource and evaluator for a new employee. This relationship usually occurs in specific clinical settings and for a defined period of time. Mentorship, on the other hand, is a collaborative partnership between a more experienced person and a less experienced person who share accountability for mutually defined goals.^{6,7} The mentoring relationship may evolve over time and often continues as long as the participants find it valuable. A mentor shares more than

just clinical expertise—they also identify opportunities, stimulate reflection, and serve as a role model for the mentee.⁸ Mentors can also provide psychosocial and emotional support for mentees who are managing stress and conflict.⁹ The various roles and activities a mentor may assume, with examples of how they could be applied in a critical care setting, are described in Table 1.

Mentoring can occur informally or through participation in a structured program. Although many critical care nurses can identify role models who have influenced their practice, formal mentoring programs can greatly enhance opportunities for a mentee's individual growth and help them sustain professional engagement.^{4,5,10,11} Magnet programs encourage mentoring across all levels of nursing, and a culture that supports mentoring is considered an important component of a healthy work environment.^{12,13} Critical care nurses are exposed to stress from numerous sources, such as dealing with patient suffering and death, verbal and physical abuse, and staffing shortages.¹⁴ Moral distress and burnout are common among critical care clinicians, and mentoring may be 1 strategy to help mitigate the psychosocial impact of work in this intensive setting.¹⁵ In a study of pediatric intensive care units, staff believed that one-on-one discussions with colleagues had a significant impact on promoting staff resilience.¹⁶ Mentoring offers benefits

Author

Joni L. Dirks is the manager of professional development at Providence Health Care, Spokane, Washington.

Corresponding author: Joni L. Dirks, MSN, NPD-BC, CCRN-K, Department of Professional Development, Providence Health Care, 20 W 9th Ave, Spokane, WA 99204 (email: jdirks@centurytel.net).

To purchase electronic or print reprints, contact the American Association of Critical-Care Nurses, 27071 Aliso Creek Rd, Aliso Viejo, CA 92656. Phone, (800) 899-1712 or (949) 362-2050 (ext 532); fax, (949) 362-2049; email, reprints@aacn.org.

for both individual participants and their organization (Table 2), and it can serve as a powerful tool to attract and retain critical care nurses at different stages of their career.⁷

Opportunities for Mentoring

In response to the increased turnover of new graduate nurses, numerous mentoring programs have been developed to support nurses during their first year of practice.¹⁷⁻²⁰ These programs are often timed to begin at the end of the precepted clinical experience and continue through the first 1 or 2 years of practice. In a recent review of the literature describing mentoring programs for new graduates, the authors revealed improved retention in various clinical settings, but comparisons were difficult because of wide variation in program design.¹⁹ The authors suggested that successful programs should include rigorous selection and training of mentors and organizational support that would reduce barriers such as time constraints and scheduling conflicts.

Other mentoring programs have found benefit in including as mentees experienced staff who are moving into a new specialty area.^{5,21,22} For example, Schroyer et al²¹ provided mentors to all new hires without previous critical care experience—whether those staff were new graduates, staff transitioning from another specialty area, or nurses reentering practice. They reported a 25% reduction in 6-month turnover after the implementation of a mentorship program in their critical care units.²¹

Mentoring can also be implemented to enhance the professional development and engagement of experienced critical care nurses. Training and education have been linked to retention across all career stages, and mentoring for experienced staff can help them map their career and identify new opportunities within a unit or organization.^{7,23} Informal mentoring can occur spontaneously as staff seek advice from an identified expert, but programs with more structure promote intentional connections to accelerate professional development.^{10,17} These programs generally focus on helping nurses acquire additional clinical expertise in a specific area or encouraging staff to transition to a new role in leadership, education, or advanced practice. Rather than assigning participants, the programs may recruit interested staff to work with mentors who have recognized expertise as managers, educators, or researchers.^{8,24-26}

Mentoring was endorsed as a method to help nurses prepare for leadership roles in the Institute of Medicine's

Table 2 Benefits of mentoring

Mentors/mentees	Organization
Professional growth and development	Clinical expertise to support quality care Improved patient outcomes
Increased self-confidence	Healthy work environment Culture of safety
Psychosocial support and increased resiliency	Staff retention
Career advancement	Increased engagement Succession planning

2010 report entitled *The Future of Nursing*.²⁷ Organizational support is needed to connect critical care staff with skilled leaders who can highlight the importance of their role.²⁸ Canadian research involving nurses who provide direct care suggested that guided opportunities to develop leadership skills could encourage staff to consider a management role.²⁹ This type of mentorship has been linked to increased confidence and leadership self-efficacy, which in turn could support manager succession planning for critical care units.³⁰ Mentorship is also an important component of development as new leaders assume their roles.³¹

Program logistics should support both program goals and needs of the target audience.

Another application for mentoring experienced critical care nurses is to expand their use of evidence to improve clinical practice. Spiva et al³² recruited nurse leaders, clinical nurse specialists, and educators to serve as mentors for evidence-based practice projects. These staff received training to enable them to better support staff engaged in implementing clinical improvement plans. The American Association of Critical-Care Nurses' Clinical Scene Investigator program uses a similar model, providing a roadmap to assist organizations in implementing and sustaining staff-led practice changes.³³ The Clinical Scene Investigator program's national faculty mentor nursing teams as they conduct projects to improve outcomes among critical care patients, such as reducing the incidence of hospital-acquired infections, pressure ulcers, or delirium.³⁴ Mentoring by research scholars who are employed by the hospital or an affiliated university has facilitated the implementation of research projects by critical care staff within their units.^{24,25}

Table 3 Mentoring program logistics

Phase of program	Essential tasks	Considerations
Planning	Define program objectives Identify resources Recruit/train mentors Advertise the program	Organizational and staff needs based on career stage Personnel support; funding Required skills; number needed Requirements for participation; target audience
Implementation	Match mentors/mentees Set goals and expectations and define criteria for goals and timeline for completion Agree on frequency and methods of communication	Assigned or self-selected Alignment with individual and program objectives Minimum frequency to meet goals; structures to support in-person interactions
Evaluation	Review outcomes: Accomplishment of goals Feedback from participants Other relevant metrics Identify next steps: Program revisions if needed Timeframe for next program	Both individual and program Satisfaction, supports, and barriers Retention rates, ability to fill roles Opportunities to share success Frequency required to meet needs and sustain program

Mentoring has also been recognized as a strategy to help experienced staff increase competency in advanced practice roles such as clinical nurse specialist or nurse practitioner.^{26,35} Staff transitioning into these roles may feel isolated, especially in facilities where they have limited access to other practitioners in a similar role or specialty area. In these situations, a mentoring program could facilitate the development of a mentor network that connects new staff with regional or national practitioners who have expertise in their clinical area.³⁶

Mentoring Processes

Mentoring programs designed for novice nurses may look different than those developed for experienced staff, but both benefit from intentional planning, organized implementation, and periodic evaluation to ensure success.^{5,10,11} Logistics may vary on the basis of the objectives of the program, the target audience, and available resources.

Effective mentoring programs benefit health care organizations, staff, and patients.

Various resources to support program development are available in the literature and through national organizations. For example, the American Association of Medical-Surgical Nurses provides online access to their mentoring program, and the materials can be customized to meet organizational needs.³⁷ The Society of Critical Care Medicine also offers an online toolkit to support mentoring.³⁸ The essential tasks for each phase of developing a mentorship program are listed in Table 3.

The literature on mentoring provides guidance regarding both features that are considered critical for a program's success and barriers that may impede the mentoring relationship. Successful mentoring programs include a matching process that ensures a good fit between the mentor and mentee, criteria for establishing clear goals and timelines, communication options to support the relationship, and adequate time for assessing progress and providing feedback.^{5,9,17} Participants and program administrators identified time constraints and access to qualified mentors as common barriers^{8,19,36,39} (Table 4).

Mentor Selection

In general, mentors should have the necessary skills to perform the role, including general characteristics such as good communication skills, accountability, and a desire to help others grow and develop, as well as expertise in the desired area.^{2,4} Mentoring is about developing an intentional long-term relationship with a mentee, so it requires the mentor to commit both time and energy to the process.⁷ Self-assessment tools are available to help staff who are interested in mentoring, allowing them to evaluate whether they have the skills they would need to perform in the role of mentor.³⁷ Ideally, the mentor should not be the mentee's supervisor, as this could create conflicts in the relationship. For example, concerns might arise about performance appraisals or the supervisor's need to support the unit's goals rather than those of the mentee.⁴⁰

Table 4 Barriers to mentoring

Barrier	Possible solutions	Examples
Time constraints	Organizational support for mentor-mentee interaction Scheduled events to bring mentor and mentee together	Facilitated meetings with a coordinator Paid time for meetings Monthly educational sessions Networking nights or dinner meetings Support for both to attend a conference or other professional event
Access to a qualified mentor	External mentors Group mentoring	Partner with others to create mentor “pools” (eg, specialty organizations such as AACN, STT, ONE, and local or regional nursing schools) Link mentors from different facilities within a health care network Individual mentor supports a project team Local mentor paired with distance mentor who can support different mentee needs

Abbreviations: AACN, American Association of Critical-Care Nurses; ONE, Organization of Nurse Executives; STT, Sigma Theta Tau.

For programs designed to support career development or succession planning, a pool of mentors could be recruited on the basis of an identified area of expertise. For example, successful leaders or advanced practice nurses may be asked to participate as mentors for new leaders or to guide staff in implementing a practice project.^{32,41} In some roles, such as that of nurse educator, mentoring may be a required component of the job description.

Lack of access to a mentor is often cited as a significant obstacle to a mentoring relationship.^{3,42} In some situations, a lack of local mentors with the desired skill set may present a barrier. This issue may occur more frequently in small facilities that employ staff with limited expertise in a particular specialty or that lack staff in a certain professional role.³⁹ For example, nurses working in critical access hospitals may struggle to find mentors with expertise in caring for high-acuity patients. One option to address this is distance mentoring, whereby the mentor and mentee are in different institutions or geographic locations.⁴³ In larger health care systems, multiple institutions could share a mentor pool that supports both the system’s larger urban facilities and its rural critical access sites. Another option for finding an external mentor is connecting with local chapters of organizations such as the American Association of Critical-Care Nurses or Sigma Theta Tau. These organizations might be willing to recruit volunteer mentors from among their members. To be successful, an organization needs to develop a structured process to connect mentees with potential mentors—a process based on their specific needs, goals, and expectations.^{44,45}

Mentor-Mentee Matching

A good fit between mentor and mentee is critical and has been recognized as one of the most important factors in a program’s success.^{19,37,45} Mentoring is a relationship, and as such it requires a certain amount of compatibility and commitment. To be successful, the mentor’s communication style, professional skills, and expectations for the role must align with the mentee’s goals and expectations.³ Some programs suggest using personality assessments such as the Myers Briggs Type Indicator or learning style inventories to identify compatible styles.^{2,17,22}

Programs can use various processes to match mentees with mentors; these processes may be influenced by the degree of structure, the number of available mentors, and the goals of the program.^{3,4,9} Mentors and mentees can be paired through assignment by a third party such as a mentor program coordinator or a unit manager, or through an individual request initiated by the mentor or mentee on the basis of an identified need or desire. Assignment may be more common in programs that have been developed to meet organizational goals such as recruitment or retention.^{20,22} In those situations, considerations might include pairing staff who work similar shifts or in the same clinical unit.²²

When feasible, it is preferable to allow mentees an opportunity to have some input in the selection process.⁴⁰ Programs have used several creative strategies to introduce mentees to possible mentors. For example, some programs have mentors create a written biography describing their interests and area(s) of expertise, which is then shared with potential mentees.^{22,42,45} Another program offered mentees an opportunity to review

video-recorded vignettes of potential mentors before meeting with them.¹¹ Face-to-face selection could be achieved by hosting an open house where mentees and mentors spend a short time together, meeting each other in a “speed dating”-type process, before the mentee selects a mentor.⁴⁵ Software programs similar to match.com are also available in some industries, but their use has not been widely reported in the literature on mentoring in health care.

In many cases, mentoring will be a one-on-one relationship, but triad or group mentoring can also be productive.^{42,43} It may be helpful to have more than 1 mentor so each can address different aspects of development. For example, in rural settings, a local mentor could help support socialization to the facility and community while a distant mentor could address questions regarding specialized skills.⁴²

Setting Goals and Expectations

Both the mentor and mentee need to understand the expectations for their respective roles and what resources are available to support their work. This information may be provided through in-person classes, online modules, or written materials so participants understand and are willing to commit to working together. Content usually addresses the objectives of the program, suggested goals and activities, an anticipated time frame, and organizational resources such as funding or a program coordinator.^{17,19}

During their initial meeting, mentors and mentees should identify specific goals for the relationship and a time frame for completion.¹⁰ Goals might focus on increasing knowledge or acquiring skills in a clinical setting, or

they may be more personal, such as

maintaining a work-life balance. For experienced staff, goals may expand beyond their clinical setting to trying out a new role, developing a professional network, participating on a project team, presenting at a conference, or cowriting an article for publication.⁴¹ The discussion should also address general expectations for the relationship, including confidentiality, accountability, and how potential conflicts will be addressed.⁵

Although mentoring is meant to be a positive experience for both the mentor and mentee, the literature does

describe potential pitfalls. For example, toxic mentoring may occur if goals or expectations are unrealistic, if confidentiality is violated, or if there exists a conflict of interest that places the mentor’s needs over the mentee’s.^{2,5,42} Other negative experiences could arise if the mentee becomes too dependent on the mentor or the mentor exerts too much control over the mentee.⁴ Not every mentoring relationship will be successful, so both the mentor and mentee should agree at the start to an option to terminate the partnership if it does not work.⁶

Another important part of the planning process is to decide on a feasible plan to ensure regular communication.^{3,45} This element can be challenging, especially when mentors and mentees have different schedules or work in different locations. Communication strategies can include face-to-face interactions (in-person or virtual meetings), phone calls, emails, or text messages.^{19,36} Email communication provides 1 option for sharing information, but discussions via phone or an online communication platform such as Skype offer enhanced opportunities for robust discussion. Relationship building also benefits from in-person meetings, which can occur both formally and informally (eg, over lunch or coffee), but in either case they should be scheduled to provide some consistency.

Although the frequency of connections may vary, a regular schedule is important to maintain the relationship and ensure progress toward goals.^{18,22,43} Goals may need to be revised over time as the mentee acquires experience or as their perspective changes. Mentors may need to reframe expectations for mentees to help them realize that success (“productivity”) also comes from lessons learned from setbacks or by overcoming barriers.⁴¹ Having a coordinator or liaison who periodically meets with the mentor-mentee pair can also help facilitate communication and the accomplishment of goals.⁴⁶

Both mentors and mentees frequently cite as a barrier a lack of time for mentoring activities.^{8,19,39} Mentoring may be perceived as valuable, but finding time for it while at work can be burdensome. Structured time for mentoring activities can help increase opportunities for mentors to connect with their mentees. Such time could include monthly lunch meetings, social networking nights, classes or continuing education sessions, or attendance together at a local or regional conference. Organizational funding for meeting time has been noted as a significant benefit.³¹

Mentor-mentee compatibility is essential to program success.

Evaluation

Periodic evaluation is required to sustain a successful mentoring program. Such evaluation includes an assessment both of outcomes for the individual goals of both the mentor and the mentee, and of the organizational objectives for the program.^{2,3,10} Metrics may include completion of the program, number of meetings, goals accomplished, and mentor-mentee satisfaction.²¹ Feedback from participants can identify barriers to success and opportunities to improve the program. Positive individual outcomes provide an opportunity to celebrate a mentee's successes and recognize the mentor's contributions. These experiences can be shared with others to sustain momentum for the program. Research and anecdotal reports support the concept that having a good mentor creates in a mentee a desire to mentor others.^{47,48}

Conclusion

Mentoring is important to critical care nursing in that it helps to recruit and retain staff, promotes continued professional growth, and preserves the precious commodity of expertise in caring for critically ill patients. Various programs should be developed to support mentoring opportunities that align with a critical care nurse's career trajectory. Novice nurses feel supported and valued through mentoring, and experienced clinicians can be renewed and energized by the experience. Organizations and patients benefit from an engaged workforce and improved quality of care. **CCN**

Financial Disclosures
None reported.

See also

To learn more about mentoring, read "Role of the Clinical Nurse Specialist in Supporting a Healthy Work Environment" by Ulit et al in *AACN Advanced Critical Care*, 2020;31(1):80-85. Available at www.aacnconline.org.

References

1. Howley EK. Is there a coming shortage of nurses? US News & World Report. Published November 28, 2018. Accessed March 25, 2019. <https://health.usnews.com/health-care/patient-advice/articles/2018-11-28/is-there-a-coming-shortage-of-nurses>
2. Race TK, Skees J. Changing tides: improving outcomes through mentorship on all levels of nursing. *Crit Care Nurs Q*. 2010;33(2):163-174.
3. Lin J, Chew YR, Krishna LKR. Mentoring in nursing: an integrative review of commentaries, editorials, and perspectives papers. *Nurse Educ*. 2018;43(1):E1-E5. doi:10.1097/NNE.0000000000000389
4. Geraci SA, Thigpen SC. A review of mentoring in academic medicine. *Am J Med Sci*. 2017;353(2):151-157.
5. Funderburk AE. Mentoring: the retention factor in the acute care setting. *J Nurses Staff Dev*. 2008;24(3):E1-E5. doi: 10.1097/01.NND.0000320652.80178.40
6. Hnatiuk CN. Mentoring nurses toward success. *Minority Nurse*. Published March 30, 2013. Accessed March 26, 2019. <https://minoritynurse.com/mentoring-nurses-toward-success/>
7. Jakubik LD, Weese MM, Eliades AB, Huth JJ. Mentoring in the career continuum of a nurse: clarifying purpose and timing. *Pediatr Nurs*. 2017;43(3):149-152.
8. Florczak KL, Collins E, Schmidt L. The mentor-mentee relationship: an intricate dance. *Nurs Sci Q*. 2014;27(2):103-107.
9. Gazaway SB, Schumacher AM, Anderson L. Mentoring to retain newly hired nurses. *Nurs Manage*. 2016;47(8):9-13.
10. Tourigny L, Pulich M. A critical examination of formal and informal mentoring among nurses. *Health Care Manage*. 2005;24(1):68-76.
11. Latham CL, Ringl K, Hogan M. Professionalization and retention outcomes of a university-service mentoring program partnership. *J Prof Nurs*. 2011;27(6):344-351.
12. American Nurses Credentialing Center. Magnet model – creating a Magnet culture. Accessed March 26, 2019. <https://www.nursingworld.org/organizational-programs/magnet-model/>
13. American Association of Critical Care Nurses. *AACN Standards for Establishing and Sustaining Healthy Work Environments: A Journey to Excellence*. 2nd edition. Executive Summary. Published 2016. Accessed March 26, 2019. <https://www.aacn.org/~media/aacn-website/nursing-excellence/healthy-work-environment/execsum.pdf?la=en>
14. Ulrich B, Barden C, Cassidy L, et al. Critical care nurse work environments 2018: findings and implications. *Crit Care Nurse*. 2019;39(2):67-84.
15. Johnson-Coyle L, Opgenorth D, Bellows M, Dhaliwal J, Richardson-Carr S, Bagshaw SM. Moral distress and burnout among cardiovascular surgery intensive care unit healthcare professionals: a prospective cross-sectional survey. *Can J Crit Care Nurs*. 2016;27(4):27-36.
16. Lee KJ, Forbes MI, Lukasiewicz GJ, et al. Promoting staff resilience in the pediatric intensive care unit. *Am J Crit Care*. 2015;24(2):422-430.
17. Fox KC. Mentor program boosts new nurses' satisfaction and lowers turnover rate. *J Contin Educ Nurs*. 2010;41(7):311-316.
18. Cottingham S, DiBartolo MC, Battistoni S, Brown T. Partners in nursing: a mentoring initiative to enhance nurse retention. *Nurs Educ Perspect*. 2011;32(4):250-255.
19. Zhang Y, Qian Y, Wu J, Wen F, Zhang Y. The effectiveness and implementation of mentoring program for newly graduated nurses: a systematic review. *Nurse Educ Today*. 2016;37:136-144.
20. Chant KJ, Westendorf DS. Nurse residency programs: key components for sustainability. *J Nurses Prof Dev*. 2019;35(4):185-192.
21. Schroyer CC, Zellers R, Abraham S. Increasing registered nurse retention using mentors in critical care services. *Health Care Manage*. 2016;35(3):251-265.
22. Shermont H, Pignatoar S, Moonan M, Memmolo S, Murphy JM. Transitional Mentor Education Program pilot: preparing nurses to adapt to changing acute care settings. *J Nurses Prof Dev*. 2019;35(1):32-38.
23. Lobo WM, Fisher A, Bauman A, Akhtar-Danesh N. Effective retention strategies for midcareer critical care nurses: a Q-method study. *Nurs Res*. 2012;61(4):300-308.
24. Swenson-Britt E, Reineck C. Research education for clinical nurses: a pilot study to determine research self-efficacy in critical care nurses. *J Contin Educ Nurs*. 2009;40(10):454-461.
25. Johantgen M, Weiss M, Lundmark V, et al. Building research infrastructure in Magnet hospitals: current status and future directions. *J Nurs Adm*. 2017;47(4):198-204.
26. Garcia MG, Watt JL, Falder-Saeed K, Lewis B, Patton L. Orienting and onboarding clinical nurse specialists: a process improvement project. *Clin Nurse Spec*. 2017;31(3):163-168.
27. Institute of Medicine. *The Future of Nursing: Leading Change, Advancing Health*. National Academies Press; 2011.
28. Montavlo W, Veenema TG. Mentorship in developing transformational leaders to advance health care policy: creating a culture of health. *Nurse Lead*. 2015;13(1):65-69.
29. Wong CA, Spence Laschinger HK, Macdonald-Rencz S, et al. Part 2: nurses' career aspirations to management roles: qualitative findings from a national study of Canadian nurses. *J Nurs Manage*. 2013;21(2):231-241.
30. Cziraki K, Read E, Spence Laschinger HK, Wong C. Nurses' leadership, self-efficacy, motivation, and career aspirations. *Leadership Health Serv (Bradford Engl)*. 2018;31(1):47-61.
31. Ramseur P, Fuchs MA, Edwards P, Humphreys J. The implementation of a structured nursing leadership development program for succession planning in a health system. *J Nurs Adm*. 2018;48:25-30.
32. Spiva L, Hart PL, Patrick S, Waggoner J, Jackson C, Threatt JL. Effectiveness of an evidence-based practice nurse mentor training program. *Worldviews Evid Based Nurs*. 2017;14(3):183-191.
33. American Association of Critical-Care Nurses. AACN Clinical Scene Investigator (CSI) Academy. Published January 30, 2017. Accessed March 26, 2019. <https://www.aacn.org/nursing-excellence/csi-academy?tab=Nurses%20Leading%20Innovation>

34. Lacey SR, Goodyear-Bruch C, Olney A, et al. Driving organizational change from the bedside: the AACN Clinical Scene Investigator Academy. *Crit Care Nurse*. 2017;37(4):e12-e25. doi:10.4037/ccn2017749
35. Jnah AJ, Robinson CB. Mentoring and self-efficacy: implications for the neonatal nurse practitioner workforce. *Adv Neonatal Care*. 2015;15(5): E3-E11. doi:10.1097/ANC.0000000000000227
36. McBride AB, Campbell J, Woods NF, Manson SM. Building a mentoring network. *Nurs Outlook*. 2017;65(3):305-314.
37. Academy of Medical-Surgical Nurses. Mentoring. Published 2012. Accessed March 26, 2019. <https://www.amsn.org/professional-development/mentoring>
38. Society of Critical Care Medicine. Connecting the critical care team through mentorship. Critical Connections, May 2019. Accessed September 12, 2019. <https://www.sccm.org/Communications/Critical-Connections/Archives/2019/Connecting-the-Critical-Care-Team-Through-Mentorsh>
39. Rohatinsky NK, Jahner S. Supporting nurses' transition to rural health-care environments through mentorship. *Rural Remote Health*. 2016; 16(1):3637.
40. Green J, Jackson D. Mentoring: some cautionary notes for the nursing profession. *Contemp Nurse*. 2014;47(1-2):79-87.
41. Hadidi NN, Lindquist R, Buckwalter K. Lighting the fire with mentoring relationships. *Nurs Educ*. 2013;38(4):157-163.
42. Scott ES, Smith SD. Group mentoring: a transition-to-work strategy. *J Nurses Staff Dev*. 2008;24(5):223-238.
43. Lach HW, Hertz JE, Pomeroy SH, Resnick B, Buckwalter KC. The challenges and benefits of distance mentoring. *J Prof Nurs*. 2013;29(1):39-48.
44. Peltzer JN, Ford DJ, Shen Q, et al. Exploring leadership roles, goals, and barriers among Kansas registered nurses: a descriptive cross-sectional study. *Nurs Outlook*. 2015;63(2):117-123.
45. Cellini MM, Serwint JR, D'Alessandro DM, Schulte EE, Osman C. Evaluation of a speed mentoring program: achievement of short-term mentee goals and potential for longer-term relationships. *Acad Pediatr*. 2017; 17(5):537-543.
46. Grossman S. Using collaborative mentoring in critical care. *Nurs Crit Care (Ambler)*. 2011;6(3):38-41.
47. Weese MM, Jakubik LD, Eliades AB, Huth JJ. Mentoring practices benefiting pediatric nurses. *J Pediatr Nurs*. 2015;30(2):385-394.
48. McBride AB, Campbell J, Deming K. Does having been mentored affect subsequent mentoring? *J Prof Nurs*. 2019;35(3):156-161.