

Using Learning Style Assessments to Effectively Match Preceptors and Orientees



2.0 ANCC
Contact
Hours

Heather Pena, BSN, RN, CCRN-CSC ○ Kelly Kester, MSN, RN, CCRN, NE-BC ○
Stacey O'Brien, MSN, RN

Ineffective pairings between preceptors and orientees can lead to decreased job satisfaction and burnout. This article describes the results of a study using a learning style assessment tool to pair preceptors and orientees in an intensive care unit for newly hired registered nurses between February 2017 and December 2019 ($n = 173$).

In the United States in 2018, 17.2% of nurses left their organization or workplace, and 27.7% of those were within the first year of practice (NSI Nursing Solutions, Inc., 2019). New graduate nurses (NGNs) are leaving the profession within 2 years because of workloads, unhealthy work environments, poor working relationships, and lack of managerial support (Hunsberger et al., 2013). The association between patient outcomes and appropriate nursing staffing is well documented. In 2014, Aiken et al. identified that higher nursing workloads increased the risk of patient death within 30 days of admission. Other studies have produced similar results identifying increases in patient readmission rates, infection rates, and failure to rescue (Blegen et al., 2011; Cimiotti et al., 2012; Needleman et al., 2011; Tubbs-Cooley et al., 2013). Nursing turnover is also impactful to an organization financially. In 2018, the average cost of nursing turnover was \$52,100 per nurse, and for every 1% increase in turnover, an organization may lose approximately \$328,400 (NSI Solutions, Inc., 2019). Satisfaction with orientation has a significant impact on nurse retention, particularly for NGNs (Anderson, 2017; Poradzisz et al., 2012; Willemsen-McBride, 2010).

The relationship between a preceptor and orientee is understudied yet thought to be critical to the rate of turnover of a registered nurse (RN) within 1 year and is thought to be closely associated with the orientation process (Poradzisz et al., 2012). Thus, development of an orientation program that fosters a positive experience for both the orientee and the preceptor is imperative (Sorrentino, 2013). Personal characteristics and learning styles have been shown to influence the success of education (Bastable, 2008; Willemsen-McBride, 2010). Individuals learn in different ways, and ideally, their preferred methods of learning are taken into consideration when developing and implementing learning activities (Dickerson, 2017).

In 2015, our cardiothoracic intensive care unit (CTICU) had a large spike in nursing turnover. To address this concern, a task force comprised of nursing leadership and administration surveyed team members to better understand opportunities for improvement. One consistent theme recognized as needing improvement was orientation. The theme of “consistency with orientees” was reflected on by multiple respondents. The unit orientation coordinator partnered with the CTICU leadership team to develop strategies to resolve these preceptor concerns. The purpose of this quality improvement project was to determine if utilizing learning style assessments to pair preceptors and orientees would improve success with orientee and preceptor pairing as evidenced by a decrease in preceptor and orientee change requests, decrease the number of preceptors an orientee would have during the orientation period, and improve overall satisfaction with orientation for both orientees and preceptors.

METHODS

In collaboration with a service line-based nursing professional development specialist, the nursing leadership team of a large CTICU began using a learning style assessment tool to pair preceptors with newly hired nurses in February 2017. Of the 173 nurses who were hired within the subsequent 3-year period, 81.2% were NGNs. Previous to this intervention, pairings were made using a “warm body” approach. This practice consisted of pairing newly hired nurses with a preceptor based on scheduling or preceptor availability (Baltimore, 2004). This sometimes resulted

Heather Pena, BSN, RN, CCRN-CSC, is Strategic Services Associate, Duke University Hospital, Durham, North Carolina.

Kelly Kester, MSN, RN, CCRN, NE-BC, is Clinical Operations Director, Duke University Hospital, Durham, North Carolina.

Stacey O'Brien, MSN, RN, is Nursing Program Manager, Duke University Health System, Durham, North Carolina.

The authors have disclosed that they have no significant relationship with, or financial interest in, any commercial companies pertaining to this article.

ADDRESS FOR CORRESPONDENCE: Heather Pena, Duke University Hospital, DUMC 3943, Durham, NC 27710 (e-mail: heather.pena@duke.edu).

DOI: 10.1097/NND.0000000000000697

in a new hire having as many as 10 preceptors on orientation because of other scheduling demands, such as assigning them in the charge nurse role.

To begin improving this aspect of the CTICU orientation process, unit preceptors were surveyed to identify focus areas in July 2016. This survey, composed of Likert scale and open-ended questions, was adapted from a preceptor satisfaction survey developed by a nursing professional development specialist (see Table 1). Of the 68 preceptors, 38 (55.8%) responded to the survey. The common stressors identified were having multiple orientees, precepting without a break between orientees, and not always “meshing” with their orientees. Specifically in the responses, two preceptors noted that knowing the “learning styles of new staff” and “knowing how best my orientee learns” would be helpful. Also, it was noted that “having too many orientees in a short period of time makes it difficult to develop rapport and confidence.” The theme of “consistency with orientees” was also reflected on by multiple respondents. The unit orientation coordinator partnered with the CTICU leadership team to develop strategies to resolve these preceptor concerns.

To measure orientee satisfaction with the orientation process, orientees were also surveyed using a self-made tool between July 2016 and December 2016. The survey was administered to 49 orientees who had completed their orientation in 2016. Of the 49 orientees, 40 (81.6%) responded to the survey. The respondents were predominantly female NGNs. Specifically, the individuals assessed their overall satisfaction with the orientation process using a Likert scale (see Table 2). In addition, open-ended questions were asked to gain feedback on the support and education

TABLE 1 Preceptor Survey Questions	
Preceptor Feedback on Orientation Process	
<i>Likert scale</i>	
I enjoy being a preceptor.	
I am clinically ready to be a preceptor.	
I receive the education I need to be a good preceptor.	
I receive the support I need to be a good preceptor.	
The leadership team listens to my feedback about orientees and the orientation process.	
<i>Open-ended</i>	
What education would be helpful to you as a preceptor? Or, in other words, what do you struggle with as a preceptor?	
What resources would be helpful for you as a preceptor?	
What can the leadership team do to better support you as a preceptor?	
How long have you been precepting for?	

TABLE 2 Orienteer Survey Questions	
New Nurse Feedback on Orientation Process	
<i>Likert scale</i>	
I was supported by the leadership team during the orientation process.	
I was supported by my preceptors during the orientation process.	
I received helpful feedback throughout orientation.	
Overall, my preceptors were knowledgeable about our patient population and care delivery.	
Overall, my preceptors were approachable and willing to share their knowledge and answer my questions.	
Overall, my preceptors practiced the “married state,” meaning we did everything together throughout our shifts.	
My preceptors provided me with resources, such as organization tools, learning tools, or articles.	
My preceptors taught me what, why, and how we do things. For example, I was taught why we ambulate our patients before transferring to Stepdown.	
<i>Open-ended</i>	
How could the leadership team and preceptors better support new nurses during orientation?	
What education do you think would be helpful for our preceptors?	
How long have you been a nurse?	
Please let us know if you have any other feedback that would help us improve our orientation process.	

orientees needed to be successful. One respondent noted, “It was hard being with different preceptors throughout the entire orientation process. It became difficult when the preceptor did not know your skill level or how you learn.” Another comment stated, “Changing preceptors made the shift harder. The nurse and preceptor have to build a trusting relationship to create a great learning environment.”

Using CINAHL, a literature search was performed to gain understanding of the current evidence associated with the use of a learning style assessment tool for preceptor and orientee pairings. We performed a comprehensive search for literature describing concrete methods to effectively pair preceptors and orientees published between January 2007 and March 2018. Initially, the search was limited to the previous 10 years, but because of the low number of relevant articles, the search was expanded to the previous 15 years. Very little evidence was found related specifically to effective methods to pair preceptors and orientees.

Walter Burk Barbe (1979) and his colleagues discovered that matching an instructor with a student of the same modality strength would result in higher performance of the student. Recent studies have further emphasized that tailoring teaching methods to a medical student's learning style will result in greater understanding and performance than utilizing traditional teaching methods (Anbarasi et al., 2015). The team chose to use an objective method to determine the best preceptor to pair with each orientee. This strategy addressed the numerous concerns brought forward by staff regarding the need to enhance the preceptor and orientee relationship. The Learning Styles Inventory (LSI) tool (Mucci, 2010) was provided to the CTICU leadership team by the organization's Clinical Education and Professional Development department as a publically available objective method for preceptors to evaluate their own learning style. The leadership team also chose to use the LSI to evaluate the learning style of each new hire in an effort to optimize preceptor and orientee relationships. This LSI focuses on the way learners send and receive information identifying their tendency toward visual, auditory, or kinesthetic learning styles. The LSI defined the learning style categories as visual (V), kinesthetic (K), and auditory (A). The tool measured which style is the primary, secondary, and tertiary learning styles of the individual. We chose to represent an individual's learning style from their primary to tertiary learning style using a combination of V, K, and A. For example, an individual represented by VKA is a primarily visual (V) learner, followed by kinesthetic (K), and then auditory (A) as their least favored learning preference.

The CTICU unit orientation coordinator led the efforts to obtain a completed LSI from each of the unit's 159 preceptors (from February 2017 until December 2019). To ensure an adequate volume of preceptors and accounting for turnover, 91 new preceptors were added between July 2016 and December 2019 to the 68 preintervention preceptors, totaling 159. The LSI was converted to an electronic survey and sent via e-mail to each preceptor. One hundred fifty-five (97.5%) preceptors completed the LSI. The preceptor group has largely less than 3 years of experience, is mostly female, and represents numerous racial/ethnic backgrounds (see Figure 1). Beginning on February 20, 2017, each newly hired nurse was sent an LSI via e-mail to complete approximately 1 month prior to their start date. This cohort consisted of NGNs (81.2%) and experienced nurses (18.8%). On receipt, the unit orientation coordinator scored the survey to determine the individual's learning style preferences. The unit orientation coordinator aligned the orientee LSI results with the preceptor results to find the best match. If the full learning style combination was not able to be matched, the primary learning style was always aligned.

Identifying strategies to improve the logistics of scheduling preceptors consistently was also important to this

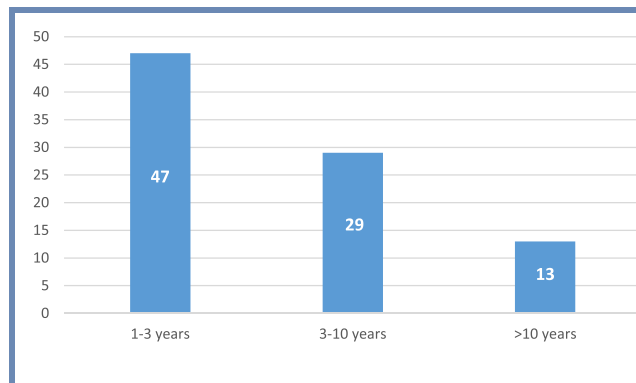


FIGURE 1. Preceptor years of experience. This figure is available in color online (www.jnpdonline.com).

practice change. To operationalize the pairing of preceptors and orientees, the leadership team focused on creating the orientation schedule using the LSI results in advance of the overall unit schedule being made, which promoted preceptor consistency and also gave nurses notice that they were scheduled to precept. The leadership team partnered with the staff-led unit scheduling committee to prioritize the orientation schedule. For example, many preceptors are also charge nurses, and the scheduling committee members would be aware of the preceptor requests from the unit orientation coordinator prior to creating the charge nurse schedule.

In addition to consistency, we prioritized preceptor time away from orientees, which was important to their job satisfaction and risk of burnout. The literature noted that repeatedly precepting NGNs may lead to burnout, which was also a consideration for the unit orientation coordinator when matching preceptors and orientees (Greene & Puetzer, 2002). In seeking feedback from preceptors, an individual commented, "A break from precepting is needed for my well-being." The CTICU leadership established a goal to provide preceptors a 4-week break between precepting during nonpeak times of year and a 2-week break during peak times, which included July through September. Having an objective tool to pair orientees and preceptors enhanced the ability of the unit orientation coordinator and the scheduling committee to prioritize the needs of the preceptor and orientee relationship.

RESULTS

Prior to the intervention, 190 pairings were used, and 10 (5.26%) changes were requested between January 2016 and January 2017, representing ineffective pairings. Effective pairings result in no request for preceptor/orientee change. Table 3 reflects the full results. In this group, 139 (80.3%) were NGNs. The majority (70%) of these preceptor change requests were initiated by the orientee. Frequently cited reasons for change requests included "they aren't a good fit," "they do not teach in a way that works for me,"

TABLE 3 Pre-Post Comparison of Preceptor Outcomes		
Date	1/2016–1/2017	2/2017–12/2019
Number of orientees	76	173
Number of preceptor pairings	190	346
Preceptor change requests	10	4
% Effective pairings	94.7	98.8

and “we do not learn the same way.” The reasons for preceptor change requests were similar. Lastly, in the preintervention group, the average number of preceptors per orientee was eight, split equally between day and night shifts. This large number was due to multiple scheduling demands. For example, at our hospital, NGNs are scheduled to work five 8-hour shifts for their first 2 weeks of hire on the unit. Also, orientees attend several unit-based classes. Postintervention, the average number of preceptors per orientee was four, split equally between day and night shifts.

The LSI was administered to 155 preceptors and 173 orientees between February 2017 and December 2019. In this time frame, the 173 individual new hires generated 346 pairings (two preceptors per new hire), and of these, only four (2.31%) new hires required a change in preceptor. For both the preceptor and orientee groups, the top two learning styles were VKA and VAK. This allowed us to pair preceptors and orientees with the exact learning style combination consistently. One hundred percent of preceptors and orientees were matched with their primary learning style. Figure 2 demonstrates the learning style

inventory assessments results. We found that there was no significant difference in learning styles for NGNs compared to experienced nurses.

At the conclusion of orientation, each orientee completed a postorientation survey to measure satisfaction and to share ideas for improvement. Survey results received postimplementation represented an improved satisfaction with orientation. One orientee wrote, “My preceptors were fantastic for my learning style and I had an incredible orientation experience,” and a second orientee commented, “The [CTICU] team did an excellent job supporting the novice nurse and matching the preceptor.” In addition to improving new hire satisfaction, it also improved preceptor satisfaction. One preceptor noted, “Creating more consistency with the orientees really helps develops the novice nurse,” and a second preceptor stated, “It is so much easier to teach someone who learns like you do!” Lastly, all preceptors noted that consistency in orientation and standard break times improved their satisfaction with precepting. The use of LSI results led to enhanced relationships and created a more positive orientation process.

DISCUSSION

Use of the LSI as a tool to objectively pair preceptors and orientees has improved overall satisfaction with the orientation process. During the study period, overall unit turnover was largely stable, with a 0.55% decrease in RN turnover between February 2017 and December 2019, though an increase in tenure was seen postintervention. The average tenure preintervention was 3.14 years (median = 1.76 years). Postintervention, the average turnover was 3.42 years (median = 1.90 years). Satisfaction with orientation impacts the preceptor, orientee, institution, and patients. Each category of impact is discussed in the sections below.

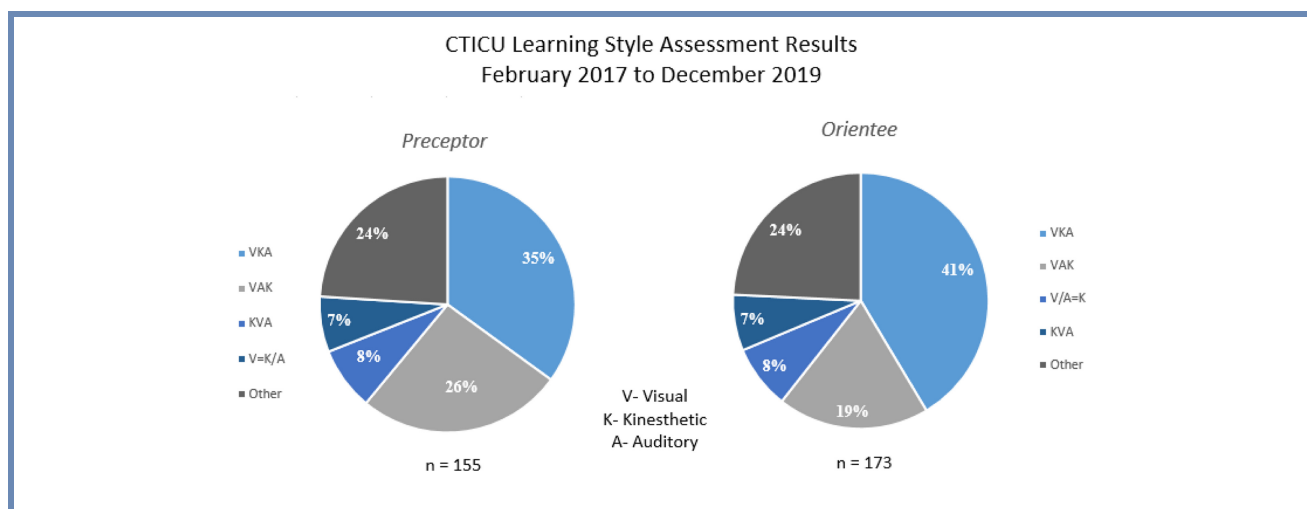


FIGURE 2. Results of the cardiothoracic intensive care unit learning style assessments. This figure is available in color online (www.jnpdonline.com).

Preceptor

An instructor or educator must be in touch with a learner's way of processing information and thinking. Learning styles refer to the ways that a learner most effectively processes new information. There is potential for educators to gravitate to educating in the manner in which they learn; however, this does not mean that the learner wants or can learn in the same way. In addition, learners need to have an opportunity to learn through their preferred style. It is reasonable to be concerned that preceptors, which often can be novice educators, may be more likely to lean toward teaching in methods in which they are comfortable learning. Use of a learning style assessment tool can provide validation that an educator will have a similar learning style to the learner, thus providing more personalized instruction.

Other factors impact preceptor success. Preceptors often have increased workloads and stress, which could influence their job satisfaction and increase their risk for burnout. Ensuring more consistency in their precepting schedule and creating effective learning pairs can help decrease these risk factors.

Orientee

Satisfaction with orientation is critical to the retention of nurses. NGNs are particularly impacted by satisfaction with orientation, which is improved by the relationship with their preceptor (Poradzisz et al., 2012). NGNs are reliant on the relationship and consistency with their preceptor, and supporting this relationship is critical to orientee and preceptor satisfaction (Dyess & Sherman, 2009). Preceptors tend to teach using their own learning preferences, and orientees who have a similar learning style to their preceptor have an enhanced satisfaction with their orientation leading to improved job satisfaction, quality of patient care, and intent to stay (Baltimore, 2004; Willemsen-McBride, 2010).

Institution

Staff retention is a priority for all organizations. Decreased satisfaction with orientation for both the preceptor and orientee can contribute to poor retention rates (Baltimore, 2004; Lockwood-Rayermann, 2003). Facilitating a positive relationship between preceptors and orientees can prevent negative outcomes, including poor retention and decreased job satisfaction (Willemsen-McBride, 2010).

Patients

The number of NGNs hired into increasingly complex patient environments with little clinical experience is on the rise (Rush et al., 2019). Preceptors are responsible for providing bedside teaching, socialization to the unit, and validating the new nurse's skills (Mann-Salinas et al., 2014). The relationship between the preceptor and orientee is

critical to establishing the foundation of the new nurse's skill set, in addition to influencing the new nurse's intent to stay. Strong preceptor and orientee relationships lead to better knowledge acquisition and enhanced clinical competence of NGNs (Mann-Salinas et al., 2014). If the relationship between a preceptor and orientee is poor, it can lead to increased turnover, which is associated with poor patient care and outcomes (Willemsen-McBride, 2010).

Use of a Learning Style Assessment tool can help guide leaders to more appropriately match an orientee with a preceptor. Learning Style Assessment tools help ensure optimal preceptor and orientee pairings by identifying the learning styles of preceptors and orientees (James, 1995). This strategy is a critical factor in achieving satisfaction with onboarding and orientation.

Studies evaluating pairing of preceptors and orientees are limited, and results are mixed (Mann-Salinas et al., 2014; Rush et al., 2019). Often, the sample sizes are small, and their methodologies (i.e., type of matching such as learning styles or personality types) vary greatly. Some studies have demonstrated no impact with utilizing learning styles (Mann-Salinas et al., 2014; Rush et al., 2019). The practice of using the LSI has been applied to a second ICU within our hospital, but satisfaction has not been measured yet. Utilizing the LSI in departments outside the CTICU can support validation of the strategy to enhance the orientation experience and learning environment. Additional research focusing on the pairing of preceptors and orientees as it relates to orientation experience and retention is needed.

Limitations

Although the LSI shows promise, the authors were unable to confirm validation studies were completed for the tool. The study is limited to one department, which prevents our ability to know if it can be translated successfully to other departments. Furthermore, the required 8-hour shifts and didactic time result in a minimum number of preceptors needed per orientee.

CONCLUSION AND RECOMMENDATIONS

Orientation has a significant impact on the success of a new hire and the likelihood of retention. Preceptor programs must include elements of adult learning principles and learning styles (Rush et al., 2019). Using the learning styles of a preceptor and orientee provides an objective method to creating successful pairings. This objective pairing supported priority scheduling for preceptors and orientees to promote consistency, which is also critical to providing a positive and productive orientation experience. On-boarding and retaining nurses are challenges nurse leaders and educators face, and using the LSI to promote relationships and consistency is a strategy to improving overall satisfaction and could promote retention.

References

- Aiken, L., Sloane, D., Bruyneel, L., Van den Heede, K., Griffiths, P., Busse, R., Diomidous, M., Kinnunen, J., Kózka, M., Lesaffre, E., McHugh, M. D., Moreno-Casbas, M. T., Rafferty, A. M., Schwendimann, R., Scott, P. A., Tishelman, C., van Achtenberg, T., Semeus, W., & RN4CAST Consortium (2014). Nurse staffing and education and hospital mortality in nine European countries: A retrospective observational study. *Lancet*, *383*(9931), 1824–1830. 10.1016/S0140-6736(13)62631-8.
- Anbarasi, M. R., Rajkumar, G., Krishnakumar, S., Rajendran, P., Venkatesan, R., Dinesh, T., Mohan, J., & Venkidusamy, S. (2015). Learning style-based teaching harvests a superior comprehension of respiratory physiology. *Advanced Physiology Education*, *39*(3), 214–217.
- Anderson, J. K. (2017). Orientation with style. *Journal for Nurses in Staff Development*, *14*(4), 192–197.
- Baltimore, J. J. (2004). The hospital clinical preceptor: Essential preparation for success. *The Journal of Continuing Education in Nursing*, *35*(3), 133–140.
- Barbe, W. S. (1979). *Teaching through modality strengths: Concepts and practices*. Zaner-Bloser.
- Bastable, S. B. (2008). *Nurse as educator*. Jones and Bartlett.
- Blegen, M., Goode, C. J., Spetz, J., Vaughn, T., & Park, S. H. (2011). Nurse staffing effects on patient outcomes: Safety-net and non-safety-net hospitals. *Medical Care*, *49*(4), 406–414. 10.1097/MLR.0b013e318202e129
- Cimiotti, J. P., Aiken, L. H., Sloane, D. M., & Wu, E. S. (2012). Nurse staffing, burnout, and health care-associated infection. *American Journal of Infection Control*, *40*(6), 486–490. 10.1016/j.ajic.2012.02.029
- Dickerson, P. S. (Ed.) (2017). *Core curriculum for nursing professional development* (5th ed.). Association for Nursing Professional Development.
- Dyess, S. M., & Sherman, R. O. (2009). The first year of practice: New graduate nurses' transition and learning needs. *The Journal of Continuing Education in Nursing*, *40*(9), 403–410. 10.3928/00220124-20090824-03
- Greene, M. T., & Puetzer, M. (2002). The value of mentoring: A strategic approach to retention and recruitment. *Journal of Nursing Care Quality*, *17*(1), 63–70.
- Hunsberger, M., Baumann, A., & Crea-Arsenio, M. (2013). The road to providing quality care: Orientation and mentorship for new graduate nurses. *The Canadian Journal of Nursing Research*, *45*(4), 72–87. 10.1177/084456211304500407
- James, W. (1995). Learning styles: Implications for distance learning. *New Directions for Adult and Continuing Education*, 19–32.
- Lockwood-Rayermann, S. (2003). Preceptor leadership style and the nursing practicum. *Journal of Professional Nursing*, *19*(1), 32–37. 10.1053/jpnu.2003.7
- Mann-Salinas, E., Hayes, E., Robbins, J., Sabido, J., Fedier, L., Allen, D., & Yoder, L. (2014). A systematic review of the literature to support an evidence-based precepting program. *Burns*, *40*(3), 374–387. 10.1016/j.burns.2013.11.008
- Mucci, J. (2010). *Learning style inventory*. <https://www.middlesex.mass.edu/ace/downloads/lsi.pdf>
- Needleman, J., Buerhaus, P., Pankratz, V., Leibson, C. L., Stevens, S. R., & Harris, M. (2011). Nurse staffing and inpatient hospital mortality. *New England Journal of Medicine*, *364*(11), 1037–1045. 10.1056/NEJMsa1001025
- NSI Nursing Solutions, Inc. (2019). *2019 National health care retention & RN staffing report*. <http://www.nsinursingsolutions.com/files/assets/library/retention-institute/nationalhealthcaremretentionreport2018.pdf>
- Poradzisz, M., Kostovich, C. T., O'Connell, D. O., & Lefaiver, C. A. (2012). Preceptors and new graduate nurse orientees: Implications of psychological type compatibility. *Journal for Nurses in Staff Development*, *28*(3), E9–E15. 10.1097/NND.0b013e31825515ec
- Rush, K., Janke, R., Duchscher, J., Phillips, R., & Kaur, S. (2019). Best practices of formal new graduate transition programs: An integrative review. *International Journal of Nursing Studies*, *94*, 139–158. 10.1016/j.ijnurstu.2019.02.010
- Sorrentino, P. (2013). Preceptor: Blueprint for successful orientation outcomes. *Journal of Emergency Nursing*, *39*(5), 83–90. 10.1016/j.jen.2012.05.029
- Tubbs-Cooley, H., Cimiotti, J., Silber, J. H., Sloane, D. M., & Aiken, L. H. (2013). An observational study of nurse staffing ratios and hospital readmission among children admitted for common conditions. *BMJ Quality and Safety*, *22*(9), 735–742. 10.1136/bmjqs-2012-001610
- Willemsen-McBride, T. (2010). Preceptorship planning is essential to perioperative nursing retention: Matching teaching and learning styles. *Canadian Operating Room Nursing Journal*, *28*(1), 8.

For 58 additional continuing professional development articles related to nursing professional development topics, go to www.NursingCenter.com/ce.

Lippincott®
NursingCenter®

TEST INSTRUCTIONS

- Read the article. The test for this nursing continuing professional development (NCPD) activity is to be taken online at www.NursingCenter.com/CE/JNPD. Tests can no longer be mailed or faxed.
- You'll need to create an account (it's free!) and log in to access My Planner before taking online tests. Your planner will keep track of all your Lippincott Professional Development online NCPD activities for you.
- There's only one correct answer for each question. A passing score for this test is 7 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
- For questions, contact Lippincott Professional Development: 1-800-787-8985.
- Registration deadline is December 2, 2022.

NCPD Nursing Continuing Professional Development

PROVIDER ACCREDITATION

Lippincott Professional Development will award 2.0 contact hours for this nursing continuing professional development activity. Lippincott Professional Development is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation. This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 2.0 contact hours. Lippincott Professional Development is also an approved provider of continuing nursing education by the District of Columbia, Georgia, and Florida, CE Broker #50-1223. Your certificate is valid in all states.

Payment: The registration fee for this test is \$21.95.