

**Supporting Nurse Preceptors Through Evidence-Based Restructuring  
of the Preceptorship Process**

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### **Abstract**

According to many respected organizations and associations, it is the responsibility of the hiring organization to transition nurses into practice properly to ensure the provision of safe and high-quality care. The nurse preceptor is vital in guiding practice and validating the competence of newly hired nurses, enabling organizations to comply with these recommendations. As such, organizations must acknowledge the importance of investing in these leaders through proper training and ongoing support to develop and maintain competent and confident preceptors.

However, the current non-evidence-based preceptorship process utilized on three adult inpatient care units at a small inpatient care facility provided insufficient training, guidance, and ongoing support to preceptors. Nurse preceptors, who do not feel adequately trained and supported, are less confident in carrying out critical responsibilities. Low confidence levels have been shown to negatively impact the quality-of-care preceptors, and their preceptees provide. The purpose of this project was to restructure the nursing preceptorship process using the Tiered Skills Acquisition Model (TSAM™) to provide consistency, structure, and guidance for preceptors; thereby, bolstering preceptor confidence levels. Confidence levels were measured using the Modified C-Scale before and after online and in-person education. Preceptor confidence levels increased after receiving education on the TSAM™ process. Processes that improve preceptor confidence levels are significant for organizations, as higher confidence levels can positively impact outcomes for patients, the organization, and the nursing profession.

*Keywords:* Preceptor, Preceptorship, Onboarding, Orientation, New Hire, New Graduate Nurse, Tiered Skills Acquisition Model, TSAM™, Confidence, C-Scale

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## **Section I. Introduction**

Irrespective of experience, all newly hired nurses must progress through a transition period to properly integrate into their new role and the organization's culture. In acute care nursing, staff nurses are called upon to facilitate this transition by functioning as nurse preceptors. Preceptors are tasked with training and evaluating the competence of the preceptee. However, without providing preceptors with evidence-based processes, content, or tools, each preceptor will carry out this role differently, leading to inconsistencies in nursing practices. Variability in nursing practices leads to unpredictable outcomes for patients, thereby threatening the quality, safety and cost-effectiveness of the nursing care provided throughout the organization.

### **Background**

Precepting is a method used to build clinical skills and integrate newly hired nurses into the culture of the unit and organization (Bodine, 2019; Harper et al., 2021; Nash & Flowers, 2017; Ulrich, 2019). Preceptors are foundational to organizations as the initial educators and evaluators of safe and high-quality care, impacting immediate and future patient outcomes (Bodine, 2019; Nash & Flowers, 2017). As such, the literature identifies the importance of training and supporting preceptors to ensure the continued delivery of high-quality care (Smith et al., 2022). Furthermore, investing in preceptors has been shown to have positive returns for organizations, including improving nurse satisfaction, advancing nurse performance, and decreasing turnover rates (Kennedy, 2019; Nash & Flowers, 2017; Smith et al., 2022). Nonetheless, nurses have reported an unwillingness to function as preceptors based on the lack of support and preparation, thus decreasing their level of confidence to function effectively as a preceptor (Jönsson et al., 2021).

### **Organizational Needs Statement**

The importance of healthcare organizations providing safe, high-quality, and cost-effective care has been evident in the literature over the last two decades. Starting in 2000, the Institute of Medicine (IOM), now the National Academy of Medicine (NAM), was instrumental in bringing healthcare safety into the spotlight with research, reports, and initiatives (Ulrich, 2019). Insight from IOM's work led to the development of the Quality and Safety Education for Nurses (QSEN) initiative. Initially, QSEN outlined competencies to guide nursing schools, later moving these competencies into the clinical setting to guide bedside practice. Under the QSEN competency of safety, a nurse "minimizes risk of harm to patients and providers through both system effectiveness and individual performance" (QSEN Institute, 2020, Safety section). In response to QSEN's directive for safe nursing care, the IOM and the Robert Wood Johnson Foundation (RWJF) provided recommendations for the future of nursing (Ulrich, 2019). These recommendations implore the federal government, nursing boards, and health organizations to take specific actions that support nurses in their transition into practice and new specialties (Institute of Medicine, 2011).

The Institute for Healthcare Improvement (IHI) continued the work towards improving the US healthcare system by creating the triple aim (Berwick et al., 2008). Subsequently, the quadruple aim was developed based on the belief that the elements of the triple aim; improved quality care, population health, and healthcare cost, can be best achieved by addressing the needs of healthcare workers (Tuazon, 2019). Within this fourth aim is the need for a healthy work environment, including a work setting where organizational leaders ensure the advancement of professional practice (American Nurses Association [ANA], n.d.). Organizations can achieve this aspect of the fourth aim by providing education, training, and facilitating effective transitions

into and within the nursing practice (Bowles et al., 2019; Harris et al., 2016; Mabona et al., 2022). A nursing preceptorship process is an evidence-supported approach for organizations to realize this aim, as well as the recommendations delineated by the NAM, RWJF, QSEN, and ANA.

Precepting, according to Ulrich (2019), “is an organized, evidence-based, outcome-driven approach to ensuring competent practice” (p. 16). The literature shows that the nurse preceptor's various roles in guiding practice and validating the competence of newly hired nurses are crucial aspects of the organization's ability to provide safe and high-quality care (Bodine, 2019; Harper et al., 2021; Nash & Flowers, 2017; Ulrich, 2019). Based on these critical responsibilities, preceptors should be classified as informal leaders (Bodine, 2019). As such, organizations must acknowledge the importance of investing in these leaders through proper training and ongoing support to ensure the development and maintenance of competent and confident preceptors (Bradley et al., 2019). However, it was identified that the process used to transition newly hired nurses into three adult inpatient units within a 123-bed acute care facility was not supported by evidence and did not meet the recommendations of the NAM, RWJF, QSEN, and ANA. Furthermore, the limited organizational support for nurse preceptors was leading to low levels of confidence among preceptors, threatening the safety and quality of care provided by the organization (Nursing Unit Director, personal communication, June 15, 2022).

The organization's preceptorship process consisted of an online course to prepare preceptors and a skills checklist to provide the preceptor with the required content to be covered during the preceptorship period (Director of Education, personal communication, June 20, 2022). However, the scope of educational content was limited within this online preceptor course. While knowledge of adult communication and learning styles are essential, they are only two

aspects relevant to mastering preceptor role responsibilities. Moreover, the nursing directors were either unaware of or are not requiring this education (Nursing Unit Director, personal communication, June 15, 2022). Finally, while the skills checklist provided the preceptor with some content, it lacked evidence-based guidance on the order in which to present the content and the means to measure the competence of new hires quantifiably.

According to Ulrich (2019), reducing the process and assessment of competence to the act of checking off competencies on a checklist undermines the true level of work required to achieve and maintain competency. Furthermore, Bradley et al. (2019) frankly state that “checklists or passive education modalities cannot measure competency” (p. 128). Compounding these issues was the need to utilize nurses with less than one year of experience as preceptors due to turnover. As a result, varying levels of clinical experience, coupled with limited preceptor training and guidance, led to inconsistencies in the training and assessment of competence among new hires. The threats these issues posed to patient safety, in addition to other observations concerning the unit orientation and preceptorship process, were voiced by department leaders and ancillary staff.

The organization's Infection Prevention Specialist and Quality Manager identified that there was “a lack of hands-on education for infection prevention and patient safety topics during new employee orientation. Currently, the new employee orientation utilizes the visual and auditory learning styles of the VAK learning system, but there is a lack of the kinesthetic learning style. In addition, the hospital does not have a formal preceptor education program, which has shown positive results in the retention of new employees” (Infection Prevention Specialist, personal communication, July 13, 2022). Therefore, it was unclear what information



on safety measures, national benchmarks, and nursing-sensitive indicators preceptors understood and taught to their preceptees.

Additionally, the regional registered dietitian voiced concerns regarding the adequacy of content delivered by preceptors, considering observed critical errors and inconsistencies in practice related to tube feeding and parenteral nutrition administration (Registered Dietitian, personal communication, May 20, 2022). The respiratory therapist (RT) shared that newly hired nurses were no longer shadowing a therapist during unit orientation (RT, personal communication, May 24, 2022). The RT felt this was why many nurses were unaware of the RT's role and responsibilities, thereby impacting the nurse's ability to properly coordinate patient care with RTs.

For preceptors to be successful in their role, expectations must be clearly identified and communicated to them (Ulrich, 2019). The comments from nursing colleagues delineated their concerns regarding the preceptorship process. Nonetheless, expectations of preceptors and content deemed crucial by these ancillary departments were not being communicated to nurse preceptors.

The recommendations from national and professional organizations, coupled with insights from organizational leaders and ancillary staff, identified the need to restructure the current preceptorship process to ensure preceptors have a clear understanding of role expectations and the proper tools to guide their training and assessment of newly hired nurses. The interim Chief Nursing Officer (CNO) believed that investing in a quality transition-into-practice program is something organizations "cannot afford not to do" (CNO, personal communication, July 13, 2022). Furthermore, the CNO shared that ensuring a positive onboarding experience fosters a healthy work environment, improves retention, positively

impacts nurse satisfaction, and leads to the ongoing provision of safe, high-quality, and cost-effective care. Recruitment and retention were crucial components of organizational initiatives. Considering these initiatives and that the provision of safe and high-quality care were the foundational aspects of national recommendations and the organization's mission, the need to improve the preceptorship process in the three adult care units was necessary.

### **Problem Statement**

The organization's non-evidence-based preceptorship process on three adult inpatient care units provided insufficient training, guidance, and ongoing support to preceptors. Research findings and organizational leaders have identified that nurse preceptors, who do not feel adequately trained and supported, are less confident in carrying out the critical responsibilities of the preceptor role. Low confidence levels have been shown to negatively impact the quality of care provided by preceptors and their preceptees (Wilburn et al., 2018; Wu et al., 2022). According to recommendations from the NAM, RWJF, QSEN, and the ANA, it is the organization's responsibility to provide a healthy work environment that promotes the advancement of professional practice and proper transition into practice, enabling the provision of safe and high-quality care (Ulrich, 2019). The organization's limited investment in preceptors and the preceptorship process was a barrier to these recommendations.

### **Purpose Statement**

The purpose of this project was to restructure the nursing preceptorship process based on evidence-based practices (EBP). Research-supported new-hire training methods were to be used to provide consistency, structure, and guidance for preceptors. As a result, preceptors would be more confident in their ability to train and assess the competence level of newly hired nurses. Furthermore, the organization's newfound investment in preceptors and the preceptorship

process would foster an environment that supported and enabled the advancement of professional nursing practice. Subsequently, preceptors and preceptees would be better equipped to continue the provision of safe, high-quality, and cost-effective care.

## **Section II. Evidence**

### **Literature Review**

A preceptorship/ orientation process that is not evidence-based creates the problems of insufficient structure and support for preceptors. The literature search was focused on finding information on the frameworks/programs used to transition newly hired nurses into practice, as this is where preceptors are utilized, as well as the strategies employed to prepare and support nurse preceptors in their roles. Database searches were conducted with access granted to students via the East Carolina University's online Lopus Library. For all searches, three databases were used; Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest Central, and PubMed. For all searches the following steps and constructs were used to save the most relevant articles. Once duplicates were removed, abstracts were reviewed to identify the population, purpose and interventions used. Articles that focused on the nursing students or preceptors of students were eliminated. Additionally, articles focused on preceptorship in the outpatient setting were not retained as the interventions were not applicable for the inpatient setting. The remaining articles were reviewed further for interventions that were applicable to the partnering organization. Articles that were found to be utilizing interventions that were very specific to a nursing specialty or to a foreign country's rules and regulations, were removed. Preceptor selection processes and preceptor competence are aspects of the preceptorship process yet were not the focus of this project; therefore, articles that focused solely on these facets were eliminated. Lastly, while the preceptor's perception of their experience is an important indicator

for change, articles that did not provide evidence of how to improve the shared experiences of preceptors provided little support for the project and were removed.

For the initial search, the following search strategy was used (nurse-preceptor\*) AND (program\* OR evaluat\* OR course\* OR develop\*) NOT (nursing student\*) NOT (physician\*) with the limiters of five years, academic journals, peer-reviewed articles, and English language. From the three databases, a total of 176 articles resulted, and 21 were initially saved. After further review of these articles five were kept. To capture information more focused on the process of transitioning nurses into practice, a second search utilized the search strategy of (“nurse preceptor” OR “nursing preceptor”) AND (orientation OR “orientation process” OR “orientation period” OR “preceptorship period” OR preceptorship OR “onboarding process” OR “onboarding” OR “onboarding period” OR “transition into practice” OR “nurse residency”). The same databases and limiters were utilized, resulting in a total of 168 articles, and 18 were initially saved. After further review of articles, three were kept. Lastly, the search strategy of (preceptor\*) AND ("professional development") was used within the three databases and with the same limiters to find literature focused on the processes used to prepare and support preceptors. This search yielded many articles, which were then limited based on subject matter and journals that focused on nursing. A total of 407 articles were found, and 42 were initially saved. Further review of these articles resulted in 13 being kept. With all three searches, duplicates were removed, as well as those focused on advanced practice nurses, nursing students, or specialty care areas that could not be applied to other areas of care. Ancestral searches of the reference lists of included articles resulted in five additional articles.

Melnik and Fineout-Overholt's (2019) “Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions” was used to systematically assign levels of evidence to all

articles that were retained (p.18). All levels of evidence, including quality improvement initiatives, were reviewed to ensure a broad understanding of current information. Furthermore, as per the nature of evidence-based practice, the organization's needs were considered in conjunction with the evidence found in the literature. While there may be stronger evidence to support alternative interventions, the interventions chosen were based on the best evidence with respect to the given constraints of the organization. These include limited financial and professional resources to implement and monitor a certified transition-into-practice program, and the executive decision that an in-person preceptorship training class was not feasible or appropriate for the organization at this time (see Appendix A).

### *Current State of Knowledge*

**Background.** Properly transitioning newly hired nurses into practice is essential for patient safety, quality of care, and retention of nurses (Aldosari et al., 2021; Eckerson, 2018; Halfer & Benedetto, 2020; Hall et al., 2019; Hampton et al., 2021; Laflamme & Hyrkas, 2020; Perron et al., 2019; Shinnars et al., 2021). Methods to properly transition new graduate nurses, as opposed to experienced nurses, into practice was more prevalent in the literature (Chicca, 2019). The imbalance in the literature may be due to the IOM's recommendations to health care organizations to implement and evaluate a transition-to-practice program (IOM, 2011). In response, the Commission on Collegiate Nursing Education (CCNE; 2021) developed accreditation standards for entry-to-practice nurse residency programs in 2008 with the latest revision published in 2021. Additionally, the American Nursing Credentialing Center (ANCC; n.d.) developed criteria for accreditation for transition-to-practice programs. Actions by both national organizations underscored the importance of using a standardized, evidence-based

approach to transition nurses into practice, prompting organizations to implement and evaluate program framework options.

**Frameworks.** The literature was dense with studies evaluating frameworks used to transition new graduate nurses (NGNs) into practice (Aldosari et al., 2021; Eckerson, 2018; Halfer & Benedetto, 2020; Hall et al., 2019; Hampton et al., 2021; Laflamme & Hyrkas, 2020; Perron et al., 2019; Shinnars et al., 2021). While the ANCC offers credentialing for programs that transition experienced nurses into new clinical settings, literature on such frameworks within organizations was not found. Nonetheless, a competency-based, structured program was cited as best practice when building frameworks for experienced nurses (Chicca, 2019). Considering this limitation in the literature, prebuilt frameworks aimed at transitioning the NGN were reviewed to identify best practices.

Over the last two decades, the use of nurse residency programs (NRPs) increased dramatically in an effort to improve nurse retention by easing the transition period for the NGN (Aldosari et al., 2021; Cochran, 2017; Eckerson, 2018; Hampton et al., 2021; Perron et al., 2019; Shinnars et al., 2021). Cochran (2017), in a literature review to identify best practices of NRPs, concluded that there was evidence to support the use of NRPs based on their positive impact on NGN development and retention rates resulting in significant cost savings. An evidence-based literature review of one-year NRPs in the US found similar results reporting that NRPs improved satisfaction and retention rates resulting in cost savings (Eckerson, 2018). Perron et al. (2019) reported similar findings in their review of the literature on the effectiveness and best practices among NRPs; however, the authors did not indicate how they selected or analyzed the included articles. To this end, a scoping review of nursing transition programs from 1974 to 2019 reported inconclusive evidence that these programs positively impact the transition experience of NGNs

(Aldosari et al., 2021). Therefore, while more rigorous and standardized research should be conducted; currently, there is insufficient evidence to justify all organizations implementing a transition-into-practice program. Similarly, a scoping review of new graduate orientation best practices found that there is a need for additional research to rectify the lack of strong evidence on best practices for evaluating readiness to practice, including more resources and tools (Laflamme & Hyrkas, 2020).

Despite the current lack of evidence to support the widespread implementation of prebuilt transition into practice programs, the transition period was consistently identified as a crucial point for NGNs (Aldosari et al., 2021; Laflamme & Hyrkas, 2020). During this period, NGNs either embrace their new role or develop an intention to leave (Aldosari et al., 2021). Therefore, ongoing research to mitigate turnover during this transition period is warranted as the global nursing shortage is linked to a decline in healthcare quality and increased patient mortality. Interestingly, despite the framework used, the literature consistently identified the positive aspect of support and mentorship by a preceptor during this transition period (Cochran, 2017; Eckerson, 2018; Halfer & Benedetto, 2020; Hall et al., 2019; Hampton et al., 2021; Laflamme & Hyrkas, 2020; Perron et al., 2019; Shinnars et al., 2021). Furthermore, using an experienced preceptor was cited as an evidence-based practice for transitioning experienced nurses into a new practice setting (Chicca, 2019).

**Preceptors.** A preceptor is defined as “an individual with demonstrated competence in a specific area who serves as a teacher/coach, leader/influencer, facilitator, evaluator, socialization agent, protector, and role model to develop and validate the competencies of another individual” (Ulrich, 2019, p. 16). A literature review of NRPs from 2011-2014 found that the most effective programs included a strong focus on preceptor support (Cochran, 2017). An integrative review of

transition to practice programs, found that NGNs attributed their professional growth, facilitation of learning, and the fostering of competence and confidence to their preceptors (Hampton et al., 2021). Perron et al. (2019) state that the research on best practices for developing NRPs includes attention paid to the value of ensuring a strong preceptor and NGN relationship. Halfer and Benedetto (2020) describe the preceptor as the linchpin between the NGN and their ability to transition into practice successfully. Hall et al. (2019), in their study aimed at identifying the most effective components in establishing and sustaining a healthy work environment, shared that any interventions would be futile if there were a lack of high-quality precepting. Lastly, in their retrospective review of Versant's NRPs from 2009-2019, Shinnars et al. (2021) frankly state that "one of the many lessons learned has been the critical role preceptors play in the transition of RNs" and that the successful NRPs were those that had a strong preceptorship program (p. 241). This realization by Versant, one of the first organizations to establish an NRP in 1999, prompted the development of Versant's Preceptor Role Development Program™ in 2016, signifying the need for and importance of an evidence-based means to prepare, guide and support preceptors (Shinnars et al., 2021).

***Preceptor Development.*** An integrative review of literature from 2010 to 2020 sought to identify evidence-based practices for developing and sustaining preceptors (Smith et al., 2022). Recommendations include using an evidence-based standardized curriculum presented through several different teaching modalities. Mirroring the ANA's expectations for the proficiency of soft skills, as noted within their code of ethics, preceptor development must include education on critical thinking, prioritization, conflict management, and teamwork (ANA, 2015, as cited in Smith et al., 2022, p. 3). To ensure preceptor development interventions are in accordance with the needs of the staff and organization, surveying stakeholders was frequently recommended



(Darcy, 2020; McKinney & Aguilar, 2020; Nash & Flower, 2017). Additional recommendations for optimal outcomes included using a preceptor selection tool, ongoing educational support, and personal and professional recognition of preceptors (Smith et al., 2022).

Offering a blended mix of teaching modalities, including in-person and online training modules, is recommended for flexibility with busy schedules and varying shifts (Smith et al., 2022). The recognition of limited time, as well as the need to use novice nurses as preceptors, has led to "just-in-time" training as well as the use of an abbreviated five-minute preparation plan, modeled after the 1-Minute Preceptor education used for physicians (Nelson et al., 2019; Bagioni et al., 2020). However, additional preceptorship/orientation models, which provide more comprehensive interventions to guide preceptors through the transition process, were found in the literature.

***Preceptorship/ Orientation Models.*** The traditional preceptor model involves patient layering, where the preceptor's assignment is divided between the preceptor and the preceptee (Cantrell et al., 2022; Shinnars et al., 2018). The preceptee is responsible for one patient's complete care, and slowly additional patients are added to their care. The preceptor is available for support and guidance yet is not necessarily with the preceptee at all times. It is often close to the end of the preceptorship period when the preceptee assumes care of an entire patient assignment. No evidence to support this model was found in the literature. However, the use of a task-layered orientation strategy, a relatively new alternative to a patient-layered orientation, has been supported in the literature (Beamer et al., 2020; Cantrell et al., 2022; Joswiak, 2018; Kjelland et al., 2021; Nelson et al., 2019; Nelson & Joswiak, 2020).

The Tiered Skills Acquisition Model (TSAM™) was first noted in the literature in 2018 and utilized the strategy of task-layered learning to transition 188 NGNs into practice on eight

clinical units within a teaching hospital (Joswiak, 2018). Qualitative surveys revealed positive experiences for preceptors and preceptees, as well as an 18% reduction in the length of the orientation period. Additionally, Beamer et al. (2020) cited a 25% reduction in budgeted orientation time for experienced nurses and a 38% reduction for NGNs when the TSAM™ was utilized. As a result, the cost savings per nurse were \$2,050 and \$5,300, respectively. In March of 2022, TSAM™ was trademarked by the Mayo Clinic (E. Joswiak, personal communication, September 15, 2022).

For a facility to claim to be following the TSAM™ for their orientation/preceptorship process, three components must be included; the movement of skill acquisition from simple to complex, the continuous partnership between the preceptor and preceptee, and dedicated resource time (E. Joswiak, personal communication, September 15, 2022). The first component of the model requires categorizing skills into tiers, then organizing tiers from simple to complex (Joswiak, 2018). Adherence to the second component requires that from day one of orientation, the preceptor will work side-by-side with the preceptee. They will work as a team completing all patient care for each patient in the preceptor's assignment. The key aspect of this model is that the tiers will dictate which patient-care tasks will be completed by the preceptee, in that the preceptee will complete only those tasks in their current tier or below. More advanced patient-care tasks, those that are within a higher tier, will be completed by the preceptor, and the preceptee will observe. This format is then followed for each patient within the preceptor's assignment.

As the preceptee gains more knowledge and experience, the preceptor will validate the preceptee's competence of all skills within the current tier and sign off on their progression to the next tier until the preceptee manages all aspects of each patient's care. This final stage is when

the preceptor first steps away from the bedside, yet they are available for support. While the side-by-side partnership is critical to the success and integrity of this model, it is not unique to this model. Termed the married state approach, this strategy of having the preceptor and the preceptee work alongside each other for each patient and every shift has been identified in the literature as a successful strategy since 2013, and the concept was noted in the literature as far back as 1998 (Shinners et al., 2018). Additionally, Versant recognized the great value of this strategy and, as a result, chose the married state as the model to implement when designing the Versant Preceptor Role Development Program (Shinners et al., 2021).

The third component of the model, the dedicated resource time, must be provided throughout the orientation period; however, there is no standardized content, delivery method, or frequency (E. Joswiak, personal communication, September 15, 2022). The preceptor should base resource time on the needs of the preceptee, taking into account their current tier and the nature of the unit (Joswiak, 2018; Nelson & Joswiak, 2020). Nonetheless, the purpose is to provide valuable supplemental education to bedside care, such as case scenarios and debriefings of clinical experiences.

Tools that provided guidance during resource time and throughout the progression of orientation using the TSAM™ were found to be beneficial to preceptors by ensuring accuracy and consistency when teaching preceptees (Nelson & Joswiak, 2020; Nelson & Zimmerman, 2021). The consistency and accuracy afforded by the tools ensured more effective learning for preceptees, thereby improving the quality and safety of patient care. Additionally, preceptors' confidence in teaching nursing concepts improved as a result of having access to high quality resources via the tools (Nelson & Joswiak, 2020). The need for easily accessible and accurate tools throughout the preceptorship process was readily cited in the literature (Bagioni et al.,

2020; Beamer et al., 2020; Knippa et al., 2022; Nelson et al., 2019; Nelson & Joswiak, 2020; Nelson & Zimmerman, 2021; Smith et al., 2022; Wilburn et al., 2018).

***Preceptorship Tools.*** In their integrative review from 2010-2020, Smith et al. (2022) found 24 professional nursing tools that aimed to guide the development of preceptors and provide preceptors with ongoing support during the preceptorship process. The tools were divided into preceptor education, preceptor development and support, and preceptor selection. Many of these tools did not apply to the identified problem. However, the following were reviewed as possible interventions to address the need for a tool that provides initial and ongoing guidance, structure, and support for preceptors, both new and novice.

Knippa et al. (2022) reimagined their paper orientation checklist into an electronic document, which served as a worksheet and guide to preceptors and preceptees as they progressed through the preceptorship period. The worksheet also housed hyperlinks to the most up-to-date and evidence-based resources. It was found that by harnessing technology, the organization could provide a more streamlined, efficient, and standardized orientation process.

The Orientation Record tool was developed as part of a quality improvement project (Nelson & Zimmerman, 2021). The project goals were to guide preceptors, enabling a consistent means to assess the competence of preceptees and improve communication. Used in conjunction with the TSAM™ model, the Orientation Record tool was designed to provide shift objectives, align objectives with TSAM™ tiers, and provide methods to enhance communication between preceptee and preceptors. By providing structure with the TSAM™ model and guidance with the Orientation Record tool, the project successfully enhanced communication, increased satisfaction among preceptees, and decreased orientation length.

Lastly, Nelson and Joswiak (2020) implemented the use of Orientation Toolkits, in conjunction with the TSAM™, to improve the consistency of preceptors as they trained novice nurses. Each toolkit focused on a specific clinical topic, and contained a list of key concepts, activities, and resources. The contents of the toolkits enhance consistency in teaching preceptees by providing access to evidence-based resources that standardize the teaching process. Additionally, a toolkit template was developed to provide consistency and logic to the toolkit layout. Implementing the Orientation Toolkits led to increased confidence among preceptors, which promotes more effective learning for preceptees.

### ***Evidence to Support the Intervention***

The lack of an evidence-based preceptorship/orientation process results in an insufficient structure and support for preceptors, leading to poor outcomes for newly hired nurses, patients, and the organization. The search to identify interventions to rectify this problem began with a broad focus, which was then narrowed based on literature findings and stakeholder input. The following summarizes the methods and evidence used to select the appropriate project interventions. A discussion on confidence and self-efficacy follows this as they relate to the selected interventions. Lastly, a theory-based approach to support the chosen interventions is discussed.

**Intervention Selection.** Certified NRPs provide guidance, structure, and tools for the transition into practice period (Cochran, 2017; Eckerson, 2018; Hampton et al., 2021; Perron et al., 2019; Shinnars et al., 2021). However, these frameworks only apply to NGNs, and there is insufficient evidence justifying their benefits (Aldosari et al., 2021; Laflamme & Hyrkas, 2020). Moreover, the targeted organization did not have the financial or professional resources to implement and monitor such programs. Nonetheless, there was substantial evidence that

preceptors are critical to any successful transition-into-practice program or process (Chicca, 2019; Cochran, 2017; Eckerson, 2018; Halfer & Benedetto, 2020; Hall et al., 2019; Hampton et al., 2021; Laflamme & Hyrkas, 2020; Perron et al., 2019; Shinnars et al., 2021). Furthermore, properly developing, supporting, and recognizing preceptors are essential to an effective and efficient preceptorship/ orientation process (Darcy, 2020; McKinney & Aguilar, 2020; Nash & Flower, 2017; Smith et al., 2022). Lastly, the need for easily accessible and evidence-based tools throughout the preceptorship process was readily cited in the literature (Bagioni et al., 2020; Beamer et al., 2020; Knippa et al., 2022; Nelson & Joswiak, 2020; Nelson et al., 2019; Nelson & Zimmerman, 2021; Smith et al., 2022; Wilburn et al., 2018). Therefore, in light of the evidence, coupled with organization constraints, the focus was shifted towards free, evidence-based models and tools that could be used to develop, guide, and support preceptors during the preceptorship/orientation process of all newly hired nurses.

Based on the evidence reviewed and the organizational needs, it was determined that the most successful way to improve the preceptorship/ orientation process was to implement the evidence-based TSAM™ model and support this structure with electronic toolkits for each tier. Per the director of education, the toolkits could be housed on the facility's intranet site, accessible to all staff at any time (Director of Education, personal communication, August 31, 2022). Embedded hyperlinks to resources within the toolkits would enable easy access to evidence-based resources. Additionally, as resources were updated at their original sites, this would be captured automatically within the toolkits, thereby decreasing inconsistencies and the need for extensive oversight. As a result, the TSAM™ model would provide an evidence-based framework for the preceptorship process (Joswiak, 2018). The toolkits would provide a standardized format in which evidence-based resources could be used to guide preceptors and

preceptees as they follow the TSAM™ model during and after the transition period (Nelson & Joswiak, 2020). Lastly, as noted by Knippa et al. (2022), by harnessing technology in conjunction with the toolkits, the organization would be able to provide a more streamlined, efficient, and standardized preceptorship process by providing easy access to up-to-date resources.

**Confidence.** Nurses have reported an unwillingness to function as preceptors based on the lack of support and preparation; thus, decreasing their level of confidence to function effectively as a preceptor (Jönsson et al., 2021). Low confidence levels have been shown to negatively impact the quality of care provided by preceptors and their preceptees (Wilburn et al., 2018; Wu et al., 2022). While the assessment of skills is important, the impact of confidence on the proper performance of these skills should not be overlooked (Grundy, 1993).

Bandura first described the concept of self-efficacy in 1977 as the extent to which a person believes they can successfully carry out a specific action or task (Carey & Forsyth, 2009). Scales that assess confidence levels have been used to measure self-efficacy (Grundy, 1993). Therefore, by measuring the confidence of preceptors, it can be ascertained how well they believe they can carry out the role responsibilities in order to meet the needs of the preceptee, patient, and organization. Additionally, self-efficacy encompasses the level of confidence a person has in controlling internal and external circumstances or variables while attempting to achieve the desired action or task (Carey & Forsyth, 2009). For this reason, it is postulated that self-efficacy changes with respect to the given circumstances and environment. Applying this to precepting, a confident nurse does not necessarily equate to a confident preceptor, and this should be reflected in preceptor assessment, preparation, and support.

Confidence levels can be assessed using the confidence scale (C-Scale), initially developed by O'Neil, to measure nursing students' confidence levels while performing dressing changes (O'Neil, 1985, as cited in Grundy, 1993, p. 6). Due to the C-Scale having an internal consistency with a Cronbach's alpha of .93 to .94, additional psychometric properties of the scale were desired in order to provide the nursing profession with a valid and reliable instrument (Grundy, 1993). Therefore, the C-scales internal consistency, test-retest reliability, construct validity, and concurrent validity were measured. The Cronbach's alphas were .84 to .93 for student nurses and .85 for staff nurses. The test-retest reliability and both the construct and concurrent validity of the C-scale were supported by study findings, deeming the C-scale as a "valid and reliable instrument to measure confidence" (Grundy, 1993, p. 6). The scale has since been modified to assess the confidence of preceptors, with modifications approved by the original author (S. Wilburn, personal communication, August 29, 2022). The modified C-scale was used to assess confidence levels among preceptors when they had access to evidence-based evaluation tools for their NGN preceptees (Wilburn et al., 2018). A high internal consistency with a Cronbach's alpha of .83 was maintained for the modified C-Scale. Therefore, the Modified C-Scale is a strong tool to provide relevant data on preceptor confidence levels and to assess the changes in these levels with respect to the structure and support that the chosen project interventions will provide.

**A Theory-Based Approach.** Adult learning theories provide frameworks on how adults put together information. Cognitive load theory (CLT) is a viable approach to successfully transition new nurses into their complex roles. Long-term memory changes as the result of accumulating knowledge are how the CLT defines learning (Sweller et al., 1998, as cited in Cantrell et al., 2022, p. 15). However, the amount of learning is limited by the capacity of human



memory. Furthermore, the information acquired moves through the brain from short-term to long-term memory and will only be stored in the long term if it is quickly used again. More specifically, there is both sensory and working memory within short-term memory (Peterson and Peterson, 1959, as cited in Cantrell et al., 2022, p. 16). If what is to be learned is not repeated, this information in the sensory memory will be lost within 20 seconds. If, however, it is repeated, the information is deemed essential and moved to the working memory.

Nonetheless, the brain limits how many pieces of information can be processed at one time within the working memory. This number is estimated, on average, to be five to nine items, thus providing the basis for the term and concept of cognitive load (Miller, 1956, as cited in Cantrell et al., 2022, p. 16). For this reason, learning will likely be hindered if a nurse is given too much to learn at once (Cantrell et al., 2022).

On the contrary, the storage capacity of long-term memory is not limited (Cantrell et al., 2022). The brain codes and categorizes information in long-term memory, enabling quick recall. Additionally, schema construction is the process by which the brain more quickly and efficiently stores information by attaching it to similar information previously stored. Learning is enhanced and hastened by connecting new information to previously learned foundational information, facilitating information growth. Additionally, if similar information is grouped together, it enhances the brain's ability to store that information. Known as chunking, this technique is used to enhance schema construction.

The total cognitive load of a given circumstance is determined by adding two components: the intrinsic cognitive load and the extraneous cognitive load (Cantrell et al., 2022). Concerning nursing, the complexity of what a nurse needs to learn (the intrinsic cognitive load) is naturally high and cannot be changed. However, according to the CLT, how this information is

presented to the nurse (the extraneous cognitive load) is not fixed and can be changed. That said, layering tasks to enable chunking and the subsequent schema development is a practical means to lower the extraneous cognitive load. Accordingly, by using task-layered learning, the total cognitive load will be lessened. As a result, the nurse will experience more effective and efficient learning, thereby supporting the use of the TSAM™ framework. On the contrary, continuing to present too much information at one time, as in the patient-layered learning framework, will likely lead to slower learning and poor retention. Consequently, orientation periods are extended, and the nurses become overwhelmed and fatigued.

### **Evidence-based Practice Framework**

#### ***Framework for Change***

Kurt Lewin has been referred to as the leading psychologist of his day, and his work has been credited with its profound impact on the area of change management (Burns & Cooke, 2013; Cummings et al., 2016). However, there is an ongoing debate over the origin of the change theory that is credited to Lewin (Bozak, 2003; Burns & Cooke, 2013; Cummings et al., 2016). It has even been postulated that his change theory, sometimes referred to as “changing as three steps” (CATS), was developed after his death (Cummings et al., 2016). As a result, there was ambiguity in the literature, with varying names used for his theories and the interchanging of words within theories. Furthermore, and possibly compounding the confusion, is that authors continue to cite work other than Lewin’s original work. Nonetheless, it was not debated that his research and insight led to the current process of change, or theory, which is most often credited to Lewin (Blais & Hayes, 2016; Bozak, 2003; Burns & Cooke, 2013; Cummings et al., 2016). For clarity, within this paper, Lewin’s work, or theory of change, will be referred to as CATS.

Lewin initially provided insight on the concept of change in the physical sciences and later applied this to psychology (Blais & Hayes, 2016; Burns & Cooke, 2013). This insight was based on an operational framework in which forces impact the motivation to change within the environment (Blais & Hayes, 2016; Bozak, 2003; Burns & Cooke, 2013; Cummings et al., 2016). The environment, also called field or life space includes everything in the current space that can impact the person mentally or physically (Burnes & Cooke, 2013). Forces are categorized into two opposing forces, driving, and restraining, with driving forces moving towards change and restraining forces maintaining the status quo (Blais & Hayes, 2016; Bozak, 2003; Burns & Cooke, 2013; Cummings et al., 2016). To ensure that change occurs, it is essential first to identify all potential forces within the environment. At this point, to create change, work must be done to mitigate restraining forces and enhance driving forces.

Another aspect of CATS is the progression through three phases: unfreezing, moving, and refreezing (Blais & Hayes, 2016). The movement through these phases is dependent on driving forces being stronger than restraining forces in each phase. The process of change, per CATS, is complete when the new change is solidified (frozen) within the environment. The following provides details on each phase and insight into the phases and their forces for this project.

**Unfreeze.** The first phase, unfreezing, is where the motivation to make a change must occur (Blais & Hayes, 2016). Motivation is created by awareness of the need to change due to the negative aspects of the current situation, the positives of a new prospect, or a combination of both. No matter the reasoning for the motivation, it must be stronger than the motivation to keep the status quo, or change will not occur. Therefore, identifying what forces have the potential to

restrict motivation and which will enhance motivation will assist in the unfreezing of the current situation so that change can begin.

To motivate preceptors toward a new preceptorship process, they must first assess the current process and their current confidence level in carrying out these role responsibilities. The initial restraining force is the lack of awareness that there is either a problem with the current preceptorship process or with their ability to effectively and efficiently precept. Completing the pre-intervention C-Scale enabled preceptors to reliably evaluate their current confidence in their role responsibilities as a preceptor. Additionally, multiple modalities of education allowed preceptors to understand the deficiencies of the current process and the benefits of the new process. Essentially, clearly explaining the “why” behind the need for change is critical to start the unfreezing process by lessening the restraining force of unawareness. Teaching and learning are driving forces as they provide the reason for the changes and benefits the change will produce.

Resistance to any education and change are additional expected restraining forces at this phase. Specifically, it was expected that there would be resistance to changing from a patient-layered approach to the TSAM™ approach as this model requires more work and interaction on the part of the preceptor. Identifying resistant preceptors and engaging in open dialogue regarding their personal and specific concerns may help lessen the resistance. It is crucial that these individuals are identified as early as possible, as their resistance can counteract the driving forces of their coworkers, thereby impacting the entire environment. While unfreezing is an individual decision and action, for the project to be successful, there needed to be buy-in by the majority to ensure change happens collectively. Those that stay behind and do not change will

impact fellow preceptors and all newly hired nurses that they precept, threatening the progress of change for the organization.

**Moving.** The moving phase is where the change happens as specific interventions are implemented (Blais & Hayes, 2016). This builds on the awareness that the status quo is no longer desirable, and there is an openness to assist with the necessary interventions to move towards the more desirable method. With respect to the project, this is where the selected interventions were put into place.

Education on the interventions was used in the first phase to motivate and prepare the preceptors, yet it was more theoretical in nature. Education was still a driving force in this phase; however, it was in the form of applied education as the preceptors began to practice using the TSAM™ model and toolkits. As more details were brought to light, a re-emergence of restraining forces based on the unwillingness to change was expected. The counteractive driving forces remained the same, as open communication and feedback were still necessary for the preceptors to understand and buy-in to the need for change. A functioning feedback loop added support to the driving force. The loop included active listening by those implementing the process change, followed by clear and complete feedback to explain why their suggestions were or were not implemented. The closed feedback loop acknowledged preceptors as valued stakeholders.

This phase is termed moving, not move, as it took time to ensure that preceptors were comfortable with the new process and support tools. Ongoing in-person support, education, and encouragement were provided. Additionally, per literature recommendations, recognition of the preceptors' efforts began in this stage. Actions that promote the progression and integration of

the new preceptorship process are driving forces, therefore positive recognition of these actions by preceptors gave support to driving forces.

**Refreeze.** The last phase, refreezing, is where change is solidified and integrated into the organization's culture (Blais & Hayes, 2016). With respect to the identified process change, this last phase was reached when preceptors embraced the new preceptorship process, as evidenced by following the TSAM™ model, guided by the proper use of the toolkits. Preceptors were able to identify the new process as evidence-based to their preceptees and other stakeholders. Additionally, repeating the C-Scale survey provided evidence to all stakeholders that the evidence-based interventions have improved role confidence among preceptors. Improved confidence after receiving education on the new preceptorship process was a driving force toward ongoing commitment to change. It also helped to deter preceptors from reverting to previous preceptorship methods.

### **Ethical Consideration & Protection of Human Subjects**

No overt ethical issues or risks of harm were identified for this project. While the literature points to a systematic way to select preceptors, management preferred to select preceptors based on their discretion. Therefore, the inclusion or exclusion of staff that would function as preceptors was not an aspect of this project. Furthermore, preceptors were paired with newly hired nurses by the leadership team, and leadership did not wish to change this process. Therefore, this project and process change did not impact how preceptor-preceptee teams were selected. Conflicts and concerns regarding these matters would continue to be handled by the unit directors, as was the usual process.

In preparation for this project, CITI modules were completed. The organization was not affiliated with an Institutional Review Board (IRB). Therefore, approval was sought through East

Carolina University's IRB. The IRB proposal and self-certification checklist were submitted on August 29, 2022. Approval was received on November 7, 2022 (see Appendix B).

### **Section III. Project Design**

#### **Project Site and Population**

The project was implemented on three adult inpatient units within an acute care facility. The population of interest was bedside nurses who had experience in precepting newly hired nurses. The three units were selected based on their patient populations and staff similarities. Specialty areas, including maternal services, the operating room, and the emergency department, were excluded due to the vast differences in the requirements to transition new staff to these care areas.

#### ***Description of the Setting***

The project was conducted in a 123-bed hospital in central North Carolina. The for-profit facility is one of over 80 acute care facilities within an organization that spans 16 states. The three adult (18 years and over) units used for the implementation of the project included the; medical services unit (MSU), orthopedic/neuro/stroke unit (ONS), and critical care unit (CCU). The director of MSU and ONS, as well as the director of CCU, were both in support of restructuring the unit-based preceptorship/ orientation process. Furthermore, the network Chief Executive Officer (CEO) and the CNO felt the planned interventions would have positive outcomes and were willing to assist as needed. The positive support from the midline and senior leadership was a driving force toward change.

#### ***Description of the Population***

**Staff Nurses.** The partnering organization requires all staff nurses to be registered and possess an active NC license; however, no minimum degree or experience is required to be hired.

Therefore, nurses on each unit ranged in age, experience, and education levels. The inpatient staff nurses are hired to a specific unit or to the float team. Nevertheless, every Registered Nurse (RN) is expected to assist on any of the three units as dictated by staffing needs. The smaller size of the organization makes it more susceptible when census fluctuates, resulting in the need to move staff between units more regularly. The frequent movement of staff was a potential barrier to implementing changes effectively and efficiently.

**Nurse Preceptors.** The partnering organization did not have a formal process for selecting preceptors (Nursing Unit Director, personal communication, June 15, 2022). Instead, preceptors were selected based on the unit director's discretion, current needs, and staff schedules. A self-study preceptor-training course focusing on adult learning styles was available to staff. However, to access the course on the organization's online education platform, the course had to be assigned by the director of education (Director of Education, personal communication, June 20, 2022). Furthermore, the director of education only assigned the course when notified by unit directors to do so. Not all preceptors had completed this course. Moreover, the director of ONS/MSU was not aware of the online course. The lack of a clear communication process between unit leaders and the director of education was identified as a barrier.

Additionally, while some staff identified the need for process improvements and additional education and support to meet the role responsibilities of being a preceptor, others did not. These staff members were identified as potential barriers to change.

### **Project Team**

The project team consisted of the project manager (PM), the director of education, and the hospital-based educator. The PM developed all educational materials and tools. However, content pertaining to specialty areas (i.e., respiratory, quality, and infection prevention) were



collaborative efforts between the PM and department leaders. The CNO, director of education, and the three-unit directors reviewed all educational material and tools before implementation. Lastly, the information technology department provided support and insight pertaining to intranet use for toolkits.

### **Project Goals and Outcome Measures**

The project's aims were to implement EBPs that would provide consistent, effective, and efficient guidance and support to preceptors; thereby, bolstering their confidence in their ability to transition newly hired nurses into practice successfully. These goals were met by implementing an evidence-based framework, the TSAM™, to guide the preceptorship period, and tools that compiled evidence-supported resources to facilitate training and education. Preceptors' confidence levels in their ability to carry out their role responsibilities were used as intervention outcome measures.

### ***Description of the Methods and Measurement***

A survey was constructed to collect RN demographic data and their confidence level in their ability to carry out the role responsibilities of a preceptor to newly hired nurses. Demographic data included the nurses' age, years of experience, previous preceptor training, the highest level of nursing education, and formal education outside of nursing. Confidence was measured using a modified version of the C-Scale, which focused on nursing preceptors (Wilburn et al., 2018). The scale consists of five questions, answered on a Likert-type scale (Grundy, 1993). Each question can range from one to five, with one being low confidence and five indicating the highest confidence level. The numbers are totaled for the five questions resulting in a final score ranging from five to 25, with five being the lowest level of confidence and 25 being the highest possible level. The tool does not provide any further delineations of

confidence based on the total score. Permission to use the preceptor C-Scale was granted by the creator of the original C-scale (S. Grundy, personal communication, September 16, 2022) as well as from the author of the modified preceptor C-Scale (S. Wilburn, personal communication, August 29, 2022) (see Appendix C).

### ***Discussion of the Data Collection Process***

The demographic data and baseline/ pre-intervention confidence levels of preceptors working on the three adult inpatient care units were collected prior to the education and the introduction to the new framework and resources. The surveys were created using Google Forms, a web-based survey software (Google, 2022). To ensure that those with preceptor experience from another facility were included in data collection, all RNs working on the three units were sent a link to the survey. However, by using the built-in survey logic capabilities of the software, only those who responded that they had experience as preceptors could complete the entire survey.

Google Forms allows the editor to turn off the collection of emails from respondents, and no other tracking or identifiers are built into Google Forms; thereby, ensuring anonymity. To connect respondents' pre- and post-surveys, a unique identifier, the last four digits of respondents' social security number, was requested on all surveys, including those that did not have preceptor experience. Google Forms' data results are displayed in summary form, by each question, and by individual respondents. The latter enabled proper scoring of the C-Scale.

The surveys were sent to staff through the organization's web-based scheduling and communication platform, ShiftWizard. Upon hire, staff select the email and phone number they wish to share with the organization for work-related communication. Permission to use ShiftWizard for data collection by the PM was granted by the director of education and the CNO

(Director of Education and CNO, personal communication, October 31, 2022). Both email and text messages were sent to ensure all staff received participation requests. The functionality of the ShiftWizard messaging allows the receiver to see who sent the message, yet the sender cannot track who opened the message or any included links.

### **Implementation Plan**

Prior to the initiation of the project, the PM met with senior leadership, unit directors, house supervisors, and charge nurses to educate them on the project's goals, implementation plan, and project timeline. The pre-intervention survey was sent to all RNs on the three units after this meeting. Google Forms allows the editor to control when responses can be collected. Therefore, this function was turned on prior to education and training and remained on until the end of the 25th day.

Immediately following the closing of the pre-surveys, the online educational video was activated, in-person education commenced, and an email was sent to organization stakeholders as a reminder that the project's next phase had started. Online education was provided via the organization's online education platform, Advanced Learning Center (ALC). The director of education assigned the learning to all nurses working on the three units. While not all RNs would be included in the data collection, it was determined that providing education to all RNs was in the organization's best interest. This reasoning was based on the belief that having all staff updated on organizational initiatives enhances cohesion and compliance with changes. Furthermore, most nurses are asked to precept at some point during their tenure at LNRMC. Therefore, excluding staff at the inception of change would not serve the staff or the organization now or in the future.

Posters placed in all three-unit breakrooms, and flyers placed in breakrooms and nursing stations served to inform staff of the upcoming process change, provide a brief summary of the process change, promote the completion of online training, and to inform staff of the upcoming in person training (see Appendix D). Unit schedules were used to create a rounding schedule for day, night, and weekend shifts. The rounding schedule remained flexible, as at no point was the education to interfere or take precedence over patient care. Times and dates were added as needed to account for shifts that were too busy to accommodate education time. A rounding record was maintained to track interactions and to document suggestions, questions, or concerns.

### **Timeline**

The leadership and stakeholder meeting took place on November 7, 2022. The preceptor pre-survey links were sent out on January 7, 2023, and responses were accepted until January 31, 2023 (25 days). Through the ALC, the director of education assigned the online educational video on February 1, 2023, with a due date of March 31, 2023. In-person education and rounding by the PM were completed over five weeks (March 1, 2023- April 5, 2023). Preceptor post-survey links were sent out on April 6, 2023, and responses were accepted until April 30, 2023, allowing for an equal collection time (25 days) for both preintervention and postintervention surveys (see Appendix E).

### **Section IV. Results and Findings**

Responses to pre- and post-surveys were anonymous, and staff were not required to complete any questions other than the last four digits of their social security number for survey matching. The pre-survey was open for 25 days, and two reminders were sent via ShiftWizard (email and text messaging) during this time. Of the 77 surveys sent, a total of 29 surveys were returned. The exact timeframe and process were followed for the post-survey, with 20 surveys

returned. Of these, 12 surveys could be matched to the pre-survey. While these 12 were used for formal analysis, all surveys were retained and reviewed for general organizational knowledge and insight.

### **Demographics**

All participants completed demographic questions on the pre-survey (N= 12). However, three respondents did not fill in the years of experience section correctly (months or years were not specified). From the information provided, it was inferred that the average number of years of experience was 22, the shortest being 1.5 and the longest being 28. Six respondents were from the CCU, and two each from ONS, MSU, and Float team. There were 11 female (92%) and one male respondent, with an average age of 42, the youngest being 30 and the oldest 54. Seven (58%) were working under a per diem status, and the remaining five were full-time employees. The majority, seven (58%), had a Bachelor of Science (BS) degree in nursing, and the remaining five held an associate degree in nursing. Participants were asked to share any additional education outside of nursing, with two responding that they held an additional BS, one in finance and the other in biology. Only three respondents had received formal preceptor training despite all confirming they had previous precepting experience. Of these three, none had received this training at the project site. Each received training differently, including in person, online, and in a hybrid setting (online and classroom mix), and provided a satisfaction rating of five, four, and three, respectively (one being lowest satisfaction and five highest).

### **Results**

Per the original developer of the C-Scale, the answers to all five questions are totaled, resulting in a score that can range from five (*low confidence*) to 25 (*high confidence*) (Grundy, 1993). As shown in Table 1, there was an increase in the preceptors' median confidence levels

from the pre-survey to the post-survey after receiving education on the TSAM. While the C-scale was designed to be analyzed by computing a final total score, answers to individual questions were assessed for general information (see Table 1). The median scores for questions one and two improved ( $Mdn= 3$  to  $Mdn= 4$ ), questions three and four remained the same ( $Mdn =4$ ), and question five improved ( $Mdn =4$  to  $Mdn = 4.5$ ). Of the 60 paired pre- and post-responses, 38 (63%) of the responses were higher on the post-survey, 21 (35%) stayed the same, and one (0.02%) was lower. Question one had the greatest number of respondents ( $n= 9$ , 75%) that reported a higher score on the post-survey. Question two was the only question where one respondent selected a lower-level response in the post-survey.

**Table 1.***Preceptor Pre- and Post-Intervention C-Scale Survey Results and Findings***Survey Results: Totals**

<b>N=12</b>	<b>Pre- Survey</b>	<b>Post Survey</b>
<i>Mdn</i>	17.50	21.50
Range	7 (min=14, max=21)	6 (min=19, max=25)
Mode	16 and 21	20

<b>Survey Results: Individual Questions</b>		<b>Pre-Survey</b>		<b>Post-Survey</b>	
<b>Questions</b>	<b>Possible Answers</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
#1. I am certain that my evaluation of the preceptee is correct:	Not at all certain	0	0	0	0
	Certain for only a few steps	1	8.3	0	0
	Fairly certain for a good number of steps	6	50	1	8.3
	Certain for almost all steps	5	41.7	7	58.3
	Absolutely certain for all steps	0	0	4	33.3
#2. I feel my evaluation of the preceptee performance was completed without hesitation:	I have much hesitation	0	0	0	0
	A fair amount of hesitation	1	8.3	0	0
	A good part of it without hesitation	6	50	1	8.3
	Almost completely without hesitation	3	25	7	58.3
	Absolutely no hesitation	2	16.6	4	33.3
#3. I feel that my evaluation would convince the	Not at all	0	0	0	0
	Agree, a little	0	0	0	0
	For much of it	3	25	0	0
	For almost all of it	9	75	7	58.3

preceptee that I am competent:	For absolutely all of it	0	0	5	41.7
#4. I feel sure of myself as I evaluate the preceptee:	Not at all	0	0	0	0
	Very little	0	0	0	0
	For much of it	4	33.3	0	0
	For almost all of it	8	66.7	8	66.7
	For absolutely all of it	0	0	4	33.3
#5. I feel satisfied with my evaluation of the preceptee:	Not at all	0	0	0	0
	Very little	0	0	0	0
	For much of it	5	41.7	0	0
	For almost all of it	6	50	6	50
	Absolutley satisfied with all of it	1	8.3	6	50

*Note.* The C-Scale is a five-item questionnaire with a 5-point Likert scale for each question

(scored 1-5). The total score is used to determine level of confidence (5= *lowest confidence*; 25 *highest confidence*). Individual questions are not scored. Response rates are shown as percentages.

### Discussion of Major Findings

Illustrated in Table 1, there was an improvement in preceptors' perceived confidence to successfully carry out their role responsibilities after receiving education on the use of the TSAM™. The evidence found in the literature supports these findings as it was found that the use of the TSAM™ increases confidence and satisfaction for new hires and preceptors (Beamer et al., 2020; Joswiak, 2018; Kjelland et al., 2021). These results are attributed to the foundational task-layering structure of the model that focuses on the progression of skill development from simple to complex, providing structure and guidance (Beamer et al., 2020; Cantrell et al., 2022; Joswiak, 2018; Kjelland et al., 2021).

## Section V. Interpretation and Implications

### Cost and Resource Management

Expenses were nominal, with a total project cost of \$186.59 that covered printing costs, art supplies, and refreshments for meetings and staff education sessions (see Appendix F). The greatest resource needed was time, yet most of the work was and can be completed by one person. Nonetheless, the time commitment to assess and rework an organization's new hire orientation process is proportional to the size and complexity of the organization. The more units and specialty units within the organization increases the number of unit-specific tiers that need to be created. Additionally, the time needed to compile the resources to support preceptor teaching and dedicated resource time depends on how well the organization currently handles resources. Those organizations with resources online would require less time dedicated to this aspect of model development and implementation.

Despite the significant time commitment during the development and implementation phase of the process change, once the process is in place, there is minimal time required for maintenance. Personnel would need only to assess for barriers and adjust tiers and education as needed. This can be accomplished as a team approach by engaging unit leaders and staff champions who meet on a regular schedule. Moreover, the structure of the TSAM™ leads to a standardized training process across all included care areas. Therefore, when new initiatives need to be implemented system-wide, the TSAM™ provides a streamlined framework enabling the initiative to be added to the same tier in all care areas, thereby decreasing time and work in the future, irrespective of the organization's size. The ease of model maintenance and the cost savings noted from shorter orientation periods prove that the TSAM™ is a viable option for organizations with limited financial resources (Cantrell et al., 2022).

### **Implications of the Findings**

#### ***Implications for Patients***



Preceptors are foundational to organizations as the initial educators and evaluators of safe and high-quality care, impacting immediate and future patient outcomes (Bodine, 2019; Nash & Flowers, 2017). Therefore, the quality of patient care is impacted by the quality of nurse training. The TSAM™ provides evidence-based structure and guidance to enable high-quality training of new hires. Moreover, improving the consistency in training leads to improved quality and safety of care. The consistency and accuracy afforded by the TSAM™ tools facilitate more effective learning for preceptees, thereby improving the quality and safety of patient care (Nelson & Joswiak, 2020).

Nurses have reported an unwillingness to function as preceptors based on the lack of support and preparation, thus decreasing their level of confidence to function effectively as a preceptor (Jönsson et al., 2021). Low confidence levels have been shown to negatively impact the quality of care provided by preceptors and their preceptees (Wilburn et al., 2018; Wu et al., 2022). On the contrary, preceptors' confidence in teaching nursing concepts improved due to having access to high-quality resources (Nelson & Joswiak, 2020). Using the TSAM™ and supplemental resources improves the confidence of preceptors, thereby positively impacting the quality of patient care and subsequent patient outcomes.

Lastly, the global nursing shortage is linked to a decline in healthcare quality and increased patient mortality (Aldosari et al., 2021). During orientation, NGNs either embrace their new role or develop an intention to leave and, therefore, “preceptors are in the best position to decrease the 30%–57% newly licensed RN turnover rate” (Bodine, 2019, p. 112). As a result, improving preceptor and preceptee satisfaction during the orientation period, as the TSAM™ has been shown to do (Beamer et al., 2020), is a practical approach to mitigating the global nursing shortage.

### *Implications for Nursing Practice*

**Impact on Transition.** Transition periods can either lead to positive or negative outcomes for nurses, the organization, and or the patients (Chicca, 2019). The use of structured transition programs as well as competency-based, verses time-based orientation models are all evidence-based strategies that are valuable to transitioning nurses, despite their experience level. Furthermore, the need for easily accessible and accurate tools throughout the preceptorship process was readily cited in the literature (Bagioni et al., 2020; Beamer et al., 2020; Knippa et al., 2022; Nelson & Joswiak, 2020, Nelson et al., 2019; Nelson & Zimmerman, 2021; Smith et al., 2022; Wilburn et al., 2018). In line with these findings, the TSAM™ is a competency-based approach to precepting with tools to provide guidance during resource time and throughout the progression of orientation (Nelson & Joswiak, 2020; Nelson & Zimmerman, 2021). The tools were found to be beneficial to preceptors by ensuring accuracy and consistency when teaching preceptees, thereby leading to a positive transition period for preceptees.

**Evidence-based Precepting Approach.** The style of the preceptor- preceptee relationship is an important aspect of the transition period, impacting the success of the new hire. The married state approach to precepting has been identified in the literature as a successful strategy since 2013 (Shinners et al., 2018). This approach enables the preceptee to be involved with more patient care as they are taking on the full assignment from day one; however, they are focusing only on the skills indicated by the tiers. Through observation of their preceptor, they are able to observe the remainder of care needed; thereby, exposing them to more skills, procedures and time management. Positive outcomes through this approach include improved safety, decrease in stress, and role satisfaction for both the preceptee and preceptor. Therefore, the

married state approach is an essential evidence-based component of the TSAM™ that greatly impacts the nursing profession and patient outcomes.

**Theory Supported Learning.** According to the CLT, long-term memory changes as the result of accumulating knowledge is the definition of learning (Sweller et al., 1998, as cited in Cantrell et al., 2022, p. 15). However, since the capacity of human memory limits the amount of learning, if what is to be learned is not repeated, this information in the sensory memory will be lost within 20 seconds (Peterson and Peterson, 1959, as cited in Cantrell et al., 2022, p. 16). If, however, it is repeated, the information is deemed essential and moved to the working memory. Nonetheless, the brain limits how many pieces of information can be processed at one time within the working memory. This number is estimated, on average, to be five to nine items, thus providing the basis for the term and concept of cognitive load (Miller, 1956, as cited in Cantrell et al., 2022, p. 16). For this reason, learning will likely be hindered if a nurse is given too much to learn at once (Cantrell et al., 2022).

On the contrary, the storage capacity of long-term memory is not limited (Cantrell et al., 2022). The brain codes and categorizes information in long-term memory, enabling quick recall. Learning is enhanced and hastened by connecting new information to previously learned foundational information, facilitating information growth through schema construction. Therefore, when similar information is presented in a grouped format, this approach enhances the brain's ability to store that information and construct schemas.

Given that the intrinsic cognitive load of nursing is naturally high and cannot be changed, managing the extraneous cognitive load is beneficial (Cantrell et al., 2022). Layering tasks to enable chunking and subsequent schema development is a practical means to lower the extraneous cognitive load. As a result, the nurse will experience more effective and efficient

learning, thereby supporting using the TSAM™ as CLT principles validate it. On the contrary, continuing to utilize teaching methods unsupported by theory will likely lead to slower learning and poorer retention. Consequently, orientation periods are extended, and the nurses become overwhelmed and fatigued.

### *Impact for Healthcare System(s)*

**Decreasing Turnover.** Implementing a standardized nurse preceptor program can positively impact nurse retention and costs (Smith et al., 2022). New nurses that feel unprepared and under-supported in properly developing their nursing skills often leave their position (Joswiak, 2018; Perron et al., 2019). Nurse residency programs have been shown to decrease turnover (Perron et al., 2019). However, if this is not feasible for organizations, implementing aspects of the NRP, such as those found with the TSAM™, including structure, outcome-focused goals, and the use of the married state approach to precepting, have been shown to be likely factors in a decreased turnover rate (Cantrell et al., 2022; Shinnars et al., 2018).

**Improved Communication.** The evidence to support using only one preceptor for each new hire was inconclusive (Smith et al., 2022). Moreover, there are many circumstances where an organization may find it beneficial or necessary to utilize more than one preceptor for each new hire. Irrespective of the reason, when multiple preceptors are used, there will be confusion for the preceptor and delays in learning for the preceptee if the orientation model does not provide a clear path for progression. For a preceptor to continue the work of a previous preceptor effectively and efficiently, they must determine where the last preceptor's teaching concluded. The TSAM™ removes the guesswork. The preceptee can definitively state what tier they are currently working in, as well as what tasks within that tier are their current focus.

**Cost Savings.** The use of the TSAM™ and supplemental resources have been shown to shorten orientation periods, resulting in cost savings for the organization (Beamer et al., 2020; Joswiak, 2018; Nelson & Zimmerman, 2021). The decrease in the number of orientation shifts was attributed to the model's defined structure, the ability to tailor orientation to the needs of the preceptee, and the ability to objectively identify struggling new hires sooner. As for structure, the TSAM™ succinctly delineates the skills that need to be mastered by new hires, as well as the order in which they are to be taught by the preceptor (Kjelland et al., 2021). The precise format of progression coupled with defined expectations enables preceptors to hold preceptees accountable for preparation prior to clinical time. More prepared preceptees enabled more effective and efficient orientation shifts.

The tailoring of orientation training is possible for both experienced and NGNs. Each comes to the new position with a certain level of understanding and previous educational and professional experiences. The TSAM™ format enables the preceptor and preceptee to examine the entire orientation period, with all required skills and the progression of these skills mapped out. Together they can customize training of skills within each tier based on the preceptee's unique needs. The focused training plan and roadmap result in fewer shifts needed to acquire all skills (Beamer et al., 2020; Joswiak, 2018; Kjelland et al., 2021).

Lastly, the TSAM™ facilitates the identification of struggling new hires sooner and based on more objective criteria (Nelson & Zimmerman, 2021). The literature points to the limitations of unstructured preceptorships in that the preceptor could not clearly articulate why they felt their preceptee was not progressing. Moreover, this assessment would often be shared with leadership at the end of an orientation period. As a result, additional shifts would be added to their orientation period. The TSAM™ provides preceptors with clear objectives organized in a

specific order with expected completion dates. If their preceptee is not meeting these objectives by the predetermined completion date, the preceptor and leaders can intervene sooner.

Additionally, the objective nature of the model, which focuses on skill acquisition, enables preceptors to more definitively identify which skills are not being mastered. This granular focus facilitates the selection of the most effective and efficient supplemental training, decreasing wasted time on unfocused or unnecessary additional training and shifts.

### **Sustainability**

The three components that, together, make up the TSAM™ are all easily sustainable with oversight (Joswiak, 2018). The first part, ensuring skills are obtained in a specified progression from simple to complex, is easily sustained by ongoing assessment and feedback from preceptors and preceptees. This team approach between preceptors and leadership ensures that their tiers are relevant and realistic for staff and promotes ongoing preceptor buy-in and support.

The second model component, the married state approach to precepting, also requires ongoing input from staff to ensure sustainability. While the approach is nonnegotiable, barriers or apprehension to the approach should be addressed as soon as possible to prevent preceptors from resorting back to previous methods of precepting. Leadership commitment to educating on the benefits of the married state approach is necessary to ensure sustainability.

Lastly, the dedicated resource time is a moving target as this will be different for each new hire. That said, providing sufficient time and high-quality resources for preceptees to learn skills that cannot be taught during regular shifts are essential in preparing new hires. To ensure sustainability, feedback from staff and subsequent adjustments or additions to the preceptor's resources will help to ensure that each preceptor continues to have the tools needed to provide autonomous education. Moreover, open lines of communication between preceptors, unit leaders,

and educators will sustain the feasibility of resource time by ensuring that leaders and educators are aware of each preceptee's needs. If needed, additional education time can then be scheduled with educators or unit leaders, to ensure the positive aspects of the dedicated resource time are maintained, while preventing the overburdening of preceptors.

### **Dissemination Plan**

Project findings were formally shared with unit leaders, the education department, and senior leadership. Additionally, staff were provided with a written summary of the project as well as the plans for ongoing work and improvements. Per request, a project summary was provided to the developer of the C-Scale and the developer of the TSAM™. A formal manuscript was submitted to East Carolina's internal repository, The ScholarShip. The project findings were also presented at a formal poster presentation on July 11, 2023, at East Carolina's School of Nursing. Additional submissions and presentations may be considered at a later date.

## **Section VI. Conclusion**

### **Limitations and Facilitators**

#### *Limitations*

**Electronic Toolkits.** While uploading electronic toolkits for each skill and tier to the facility's intranet site is still planned, this has been delayed for numerous reasons. For safety reasons, there are limitations as to who and when content can be uploaded to the intranet. While this was known during the planning stages, it was not known that the content to be included in the toolkits would require numerous changes based on recent policy changes. This has resulted in substantially more time and effort to compile information that will provide sufficient and accurate guidance to preceptors and preceptees. Moreover, there have been inconsistent results when embedding links to facility policies, resulting in the need to write out the path to each

policy in addition to embedding the link. Lastly, upgrades to the intranet were announced by the organization's corporate information technology group. Final upgrades will not be completed until the fall of 2023. In light of these constraints, the PM and informatics nurse felt uploading such a large amount of information should be delayed until all content is complete and the intranet is functioning properly.

The purpose of the electronic toolkits was to allow preceptors and preceptees to have quick and easy access to teaching material, outside references, and hospital policies, thereby providing the support, guidance and consistency to unit orientation. Considering this aim, the PM continued to compile the content for each toolkit; however, this was then placed into a large document and printed for preceptors to review, one per unit. While the document serves as a resource as planned, an online version would be more easily accessible from any computer. Moreover, staff may find the online version more user-friendly when searching for specific content. While this is a current limitation, it is one that can be rectified, and ongoing work will continue.

**Time Restraint.** Project time limitations resulted in a project plan that based post-surveys on preceptors' perception of improved confidence after being educated rather than on the actual use of the TSAM™. Measuring confidence after preceptors had used the new model may have provided a different level of confidence based on actual application versus perception. Furthermore, more time would have allowed for confidence levels to be measured at set intervals (i.e., 3, 6, and 12 months) and for adjustments to be made to the process that may have further bolstered subsequent confidence levels. Moreover, the C-scale tool questions are worded in a way that focuses the surveyor to reflect on their actual past experiences. This may have caused confusion in the post-survey as the new process had yet to be used.



Online education was to be completed in the first month, with in-person education starting in the second. The online educational video provided staff with foundational information on the process change and the project timeline. Posters and flyers were used to introduce the planned process change and encourage staff to view the video before the commencement of in-person education. However, several staff members did not complete online education. As a result, the in-person education sessions took longer as the staff needed more foundational knowledge regarding the planned process change. Additional project time would have enabled the flexibility of the PM to wait to complete in-person education until the staff had viewed the online video.

**Leadership Turnover.** Throughout the project, there was turnover in leadership in all three implementation units, and four people held the CNO position. Two CNOs were interim and uncomfortable with making future decisions, especially those requiring financial backing. This limited the project's direction as process changes could not involve costs.

### *Facilitators*

**Leadership Support.** The support provided by the fourth CNO, unit directors, and managers were significant facilitators for the process change. There was no resistance to change, as there was a consensus among all stakeholders that improvements in the unit onboarding process were greatly needed. Additionally, the smaller facility size enabled the PM to meet in person with almost 100% of the staff on the three implementation units. While online education provided a general overview and foundational information for the process change, the in-person education and discussions were valuable to the final buy-in by staff. In-person education and conversations enabled time for the staff to ask specific questions that likely would not have been voiced if the PM did not engage the staff.

**Framework for Change.** The first phase of unfreezing within the CATS is where the motivation to make a change must occur (Blais & Hayes, 2016). Motivation is created by awareness of the need to change due to the negative aspects of the current situation, the positives of a new prospect, or a combination of both. This motivation must be stronger than the motivation to keep the status quo, or change will not occur. It was postulated that through the self-assessment of the pre-intervention C-scale, coupled with multiple modalities of education, the preceptors would become more aware of the deficiencies in the current process. This learned awareness would lead to unfreezing and be the initial driving force toward the need for change. However, instead, the strongest driving force in the unfreezing phase was the personal perceptions of the negative aspects of the current situation from their own experiences. During in-person education sessions, many staff provided accounts of their own onboarding experiences and experiences as a preceptor. Overwhelmingly the accounts were extremely negative. The willingness to let go of the status quo and move towards change resulted from their awareness of the current negative state and a strong desire for improvements.

Moreover, as their understanding of the new process grew, the positives of the new prospect became the second driving force or facilitator towards change. Lastly, there was a noticeable shift in the demeanor of many during in-person education as they began to understand how this process was aimed at assisting them in their role as preceptors. Therefore, education on the new process did work as a facilitator in the movement toward change and the refreezing phase, yet it was not a strong aspect of the unfreezing phase.

### **Recommendations for Others**

#### ***Well-Structured Transition Program***

As with any EBP intervention, the realities of the implementation site need to be considered. The implementation site for this project did not have the resources to invest in costly programs such as an NRP. Moreover, with an education department of one and a half full-time employees, the sustainability of any process changes needed to be considered. That said, there was consistency in the literature that the best practice for onboarding new nurses requires a well-designed transition program that provides substantial structure and guidance to the onboarding process (Bagioni et al., 2020; Chicca, 2019; Joswiak, 2018; Kjelland et al., 2021; Nelson & Joswiak, 2020; Nelson & Zimmerman, 2021). Specifically, the most successful of these programs defined goals and utilized EBP educational tools to guide the preceptor along a path that assisted in objectively determining the preceptee's readiness for independent practice (Nelson & Zimmerman, 2021; Petiwi & Hariyati, 2019). Therefore, while the TSAM™ is a viable option for any healthcare system or setting seeking to implement an evidence-based transition program (Joswiak, 2019; Kjelland et al., 2021), the key recommendation is simply that the organization has a well-structured program in place that effectively transitions newly hired nurses into the practice setting, irrespective of their past experiences (Chicca, 2019; Kjelland et al., 2021; Petiwi & Hariyati, 2019).

**Formal Preceptor Training.** Regardless of the orientation model selected, it is necessary to heed the EBP recommendations for preceptors. One of the most prominent and impactful recommendations found in the literature is the need for formal preceptor training. To effectively prepare new hires, preceptors must feel confident in their ability to consistently teach necessary concepts (Nelson & Joswiak, 2020). When preceptors are formally educated, there is greater success for the preceptor and preceptee (Bagioni et al., 2020). Piccinini et al. (2018) found several studies that attribute positive outcomes for preceptees, such as enhanced critical

thinking skills, to the fact that the preceptor received training for their role. Moreover, these new hires were more likely to stay with the organization. Considering these findings, recommendations are aimed at nurse leaders and educators to recognize the value and importance of investing in preceptor training and development, a sentiment that is echoed throughout the literature (Bagioni et al., 2020; Joswiak, 2018 Nash & Flowers, 2017; Smith et al., 2022).

### ***Partnership with Preceptors***

Lastly, while stakeholders are often considered in the planning and development of process changes, the literature specifies that staff nurses and preceptors are to be well-represented within the stakeholder group (McKinney & Aguilar, 2020; Nelson & Zimmerman, 2021). While this partnership is vital to the success of any EBP change, the developer of the TSAM™ attributes the successful outcomes with this model to that of the preceptors taking active roles from inception to revisions (Joswiak, 2019). Moreover, when leaders enable this partnership, there is more ownership and subsequent buy-in by those using the model.

### **Recommendations for Further Study**

#### ***Outcomes of Preceptor Training***

As noted, the literature supports preceptor training. However, there is limited evidence that isolates preceptor training and the outcomes of newly hired nurses (Piccinini et al., 2018). Therefore, to clearly identify the type of training and training content that would lead to the best outcomes, more studies need to be conducted where preceptor training is an independent variable.

#### ***Preceptor Selection Tool***

Preceptors possess other characteristics that may or may not improve the quality of training they provide to new hires, and the literature consistently identifies the importance of proper preceptor selection (Smith et al., 2022). To ensure proper preceptor selection, leaders and educators are called to go beyond skill and training and assess a nurse's desire and dedication to the role responsibilities of a preceptor (Bodine, 2019). To this point, in their scoping review, Smith et al. (2022) conclude that "a comprehensive and reliable preceptor selection tool should be used to ensure that the most suitable nurses serve as preceptors, thereby meeting both clinical and non-clinical standards" (p. 5.). This information can assist in not only proper and consistent preceptor selection but also be used to inform the content needed in preceptor training programs. To that end, additional studies on the validity and reliability of preceptor selection tools must be conducted.

### **Final Thoughts**

Preceptors are informal leaders caring the responsibility of the organization to prepare newly hired nurses to provide safe, high-quality and cost-effective care. In the absence of an evidence-based process to guide and support preceptors, their confidence to carry out this heavy responsibility will be low. Low confidence levels have been shown to negatively impact the quality of care the preceptor provides, as well as that of those they precept (Wilburn et al., 2018; Wu et al., 2022). Not all organizations have the resources to purchase or provide ongoing oversight to onboarding programs such as NRPs. Nonetheless, this does not change the responsibility bestowed on organizations to properly transition nursing into the practice setting, irrespective of their experience.

The concepts used within the TSAM™ are supported by the CLT and work to provide logical structure, guidance, and support to preceptors and preceptees while also decreasing the

external cognitive load. This then facilitates more effective and efficient orientation periods bolstering the confidence levels of preceptors while decreasing the orientation length, thereby saving the organization money. Moreover, there has been increased satisfaction among preceptors and preceptees when the TSAM™ has been implemented in organizations (Beamer et al., 2020; Joswiak, 2018; Kjelland et al., 2021). Increased satisfaction can help mitigate turnover within organizations and the nursing shortage at large. Lastly, the evidence-based TSAM™ can be implemented and adjusted to fit any organization and care area with minimal initial and ongoing resources. These model features, coupled with shortened orientation periods, make the TSAM™ a cost-effective, highly effective process suitable for organizations aiming to properly transition nurses into the practice setting; thereby, heeding the recommendations of the NAM, RWJF, QSEN, and the ANA.

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Appendix A  
Literature Matrix

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analyses/Level of Evidence	IV, DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Aldous, Pymachuk, S., Cooke, H.	2021	Newly qualified nurses' transition from learning to doing: a scoping review	N/A	<i>International Nursing Studies</i>	To review stakeholders' perceptions of nursing transition programs. Limited evidence to support widespread implementation of programs	Scoping Review, V	Theme 1: newly qualified nurses' confidence. Theme 2: Perceived benefits of nursing transition programs. Categories in theme 2: Benefits for academic, professional, personal, and social. Theme 3: Academic, managerial challenges with NTP, mandatory participation	Utilized the Arksey and O'Malley framework	60 articles retained from 1823 found	1974-2019	N/A	It is evident that the transition time period is critical for new nurses and can determine if they have intentions to stay or leave. Few studies reviewed used validated measures of outcomes. Valid and reliable outcome measures of programs need to be developed. As well as an agreement between researchers as to which outcomes should be measured. This lack of consistency in what was measured, coupled with poor research methodology led to the conclusion that there is a lack of evidence to support the wide spread implementation of transition programs.
Bugioni, D., Brecht, K. L., Eichler, S. H., & Karl, C. A	2020	Enhancing preceptor preparation for new 5-Minute Preceptor.	N/A	<i>Nursing</i> 2020	Loss of experienced nurses and preceptors has resulted in a need to prepare new preceptors quickly and effectively.	VI; one descriptive study	Adapted from the 1 Minute Preceptor education plan for Physicians	Evaluation tool. Likert scale used	15	Convenience sample of preceptors at healthcare facility	2-13 yrs. experience; all had been preceptors only 80% received formal training	SMP is clinical teaching tool using 5 steps aimed at " builds on knowledge gained from experience and challenges learners to think critically and rationally about clinical observations and skills" p15. evaluated favorably by preceptors with 90% "strongly agreeing" that they would use the SMP as a preceptor and 100% agreed that providing nurse preceptors with ongoing education "including tea and useable teaching strategies" would improve preceptor satisfaction p17
Bramer, J. C., Kramer, R. S., & Jeffrey, A. D	2020	Maintaining an orientation built on trust	Not specified	<i>Journal for Nurses in Professional Development</i>	To implement a nurse streamlined competency assessment documentation in orientation through a three phased plan	VI one descriptive study	Donna Wright Model of Competency Assessment, TSAM	Systems Usability Scale ( valid and reliable tool)	Not specified	Not specified	frontline inpatient medicine acute care RNs	Three phases: formal skills acquisition model, entrustable professional activities, electronic Progression Tool. The use of the TSAM in phase one resulted in altered orientation rates: 35% for NGN; 38.8% for expedited nurses. Cost savings of 20640 and 53400. NO CREDIT given to Jowank as creator of TSAM
Cunreel, F., McKenzie, K., Hessler, K	2022	Task-layered clinical orientation for new graduate registered nurses	Benner's novice-to-expert model & cognitive load theory (CLT)	<i>Journal for Nurses in Professional Development</i>	Description of CLT theoretical perspective to support its use of task-layered learning	VI	Concepts: Task-layered learning, CLT, Benner's Novice-to-expert	N/A	N/A	N/A	N/A	Provides a theory to support the use of task-layered learning; TSAM is task-layered learning
Chicca, J.	2019	The new-to-setting nurse: Understanding and supporting clinical transitions.	Benner's novice to expert	<i>American Nurse Today</i>	There is limited amount of research on the transition of experienced nurses into a new care setting. This is as much a crucial time for them as it is for a NGN	VII opinion on EBP	EBP for the transition process and resources for an experienced nurse	N/A	N/A	N/A	N/A	There is a lack of literature on the transition of experienced nurses yet there are best practices per the author: structured programs, experienced preceptors, use competency-based vs time based model; offer structured support after orientation period is over
Cochran, C	2017	Effectiveness and best practices of nurse residency programs: A Literature review	N/A	<i>Medburg Nursing</i>	A literature review from Jan 2011- Sept 2014 on effectiveness of NRP on reducing turnover, and to identify best practices in supporting NGN during the transition into practice	Literature review; V	N/A	Critical Appraisal Skills Programme tools to analyze articles	22 articles	Databases: Medline, CINAHL, OvidSP, Cochrane Collaborative	US only; peer reviewed. Focus was employed RNs with less than one yr. experience in US. Inpatient facilities only	NTPs are cost-effective method proven to reduce attrition rate of NGNs. Effective programs were 12 months, NGN's ability to critical thinking, their knowledge, and confidence increased significantly after the completion of a one-year NTP. Better preparation needs to be considered when developing an NTP. The educational background of new nurse may have different needs from a program. However, to A's point, the cost savings was based on retention after completion of NRP, computed to rates before the use of the programs. this does not take into account other variables that may have impacted this increase in rate like contracts. Also this assessment of cost savings is not longer than post program
Darcy, A.G.	2020	Allowing education to be learner-driven: Evaluation of a preceptor program	N/A	<i>Journal for Nurses in Professional Development</i>	Obtain input from participants before each preceptor workshop to ensure participant-specific topics are addressed	Quality improvement	Improve confidence among preceptors	Survey- types not specified; used Likert scale	91	All those who attended the preceptorship workshop	Preceptors within the organization that participated in workshop	Confidence after adjusting workshop to include participant specific topics improved. While confidence was measured, a valid and reliable tool was not used.

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analyses/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/method GAPS
Eckerson, C. M	2018	The impact of nurse residency programs in the United States on improving retention and satisfaction of new nurse hires: An evidence-based literature review	N/A	<i>Nurse Education Today</i>	To address the impact of one year NRPs on BSN graduates in respect to turnover and satisfaction, compared to traditional orientations	Evidence based literature review V	N/A	John Hopkins EBP appraisal Tools	12 articles	Databases Used: Medline; CINAHL, Nursing & Allied health; 2012-2017	One year programs, only those that addressed NRP retention and/or satisfaction; Only US	NRP were shown to increase satisfaction and retention of NGN over 1 yr. Retention rates improved and cited as a positive financial impact. Some evidence to support an increase in satisfaction rates
Grundy, S.E.	1993	The confidence scale: Development and psychometric characteristics	Self-efficacy	<i>Nurse Educator</i>	Confidence scale (C-scale) is a valid and reliable instrument to measure confidence	VI	Confidence levels can be measured to assess self efficacy	C-Scale	35 and 22	Convenience; first year BSN student nurse volunteers; RNs with >= 1 year of experience at local hospital; Medical-surgical	Mean age 31.2 for students; 34 female 1 male; 40.1 mean age RNs; all female	Scale found to have high internal reliability ( Cronbach's alpha .84 to .93 for students; .85 for RNs; test-retest reliability, construct validity and concurrent validity supported by results. Can be used for all tasks in nursing.
Halfer, D., & Benedetto, C.	2020	Evolution of a newly licensed RN transition-to-practice program: Theory and development supporting accreditation	Kramer's Reality Shock, Bandura's Social Learning Theory	<i>JONA: The Journal of Nursing Administration</i>	It is essential to utilize theory, research and evidence in the development of and evolution of transition into practice programs	VII	Concept: how an organization used theory and evidence to build content for a transition into practice program; an sought credentialing of this program	N/A	N/A	N/A	N/A	With respect to precepting, Bandura's theory focuses on importance of role models. "The preceptor plays a linchpin role for successfully transitioning NLRNs to practice" p. 30 Use of two preceptors was recommended: one with less experience that is used in the beginning of the orientation process so that there is a closer understanding of what the preceptee is going through ( these preceptors went through program within the last 2 years). Then an expert preceptor is used for remainder of orientation
Hall, S., Taylor, S., & Altobar, C	2019	Transition to practice: Onboarding components for establishing and sustaining healthy work environments	N/A	<i>AACN Advanced Critical Care</i>	Several aspects of onboarding impact a healthy work environment; high quality precepting is one of these	VII	Healthy work environment is an aspect of the Quadruple aim	N/A	N/A	N/A	N/A	"Perhaps the most essential element for successful role transition is an organization's preceptor program. Time spent with preceptors represents approximately 75% of the RN Residency and Transition RN Fellowship programs, and we recognize that without consistent and supportive precepting, all other interventions to promote a healthy work environment in our transition-to-practice programs would be in vain" p. 418. Preceptors must receive adequate training, support and recognition.
Hampton, K. B., Smeltzer, S. C., & Ross, J. G.	2021	The transition from nursing student to practicing nurse: An integrative review of transition to practice programs.	N/A	<i>Nurse Education Today</i>	Integrative review of qualitative studies to explore the transition into practice experience of novice nurses who took part in transition programs at their institution	Integrative review V	N/A	Thematic analysis; used Braun and Clark's six phases of thematic analysis to guide	7713, limited to 7; 6 added from ancestral; ProQuest Nursing & Allied Health, no date range limitations, search term "transition to practice"	Database: CINAHL, PubMed, Central, Google Scholar, and ProQuest Nursing & Allied Health, no date range limitations, search term "transition to practice"	Focused on novice nurse's experiences; Studies on specialties and APN were removed	seven themes found: socialization, professional growth, feeling supported, transition challenges, reflections, transition shock, and feelings. The transition period has unique aspects for each novice nurse, common feelings and needs; nurse educators and organizations need to ensure novice nurses are prepared and given the tools to successfully transition to professional nursing practice
Joswiak, M.E.	2018	Transforming orientation through a novice to expert tiered skills acquisition model	Benner's novice to expert	<i>Journal for Nurses in Professional Development</i>	Introduction to a new model for preceptorship and orientation	VI, one descriptive study	Tiered learning ; move from simple to complex, work side by side with preceptor for full assignment on day one	Survey- type not specified	Not specified	Not specified	Orientees, preceptors and charge nurse	TSAM is an Evidence based, effective method to transition newly hired nurses into practice. 18% reduction in length of orientation time. Increased the patient experiences for NGN by 45%

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods/GAPS
Kjelland, K., Allen, M., Holder, K., Jenny, A., Roe, C., Troutman, H., Nieves, H., Voils, T., Monroe, M.	2021	The tiered skills acquisition model: Orientees' perception of confidence	Benner's novice-to-expert model	<i>Nursing Management</i>	Used the TSAM	VI	Implemented a new process for orienting new nurses into the NICU following the TSAM	Baptist Health Lexington Preceptor Performance and Proficiency Assessment (BHLPPPA)	8	Convenience sample of NICU newly hired nurses in one NICU	No information	The authors claim to follow the TSAM, yet all three components of this model are not addressed, only the use of a "tiered orientation". When researching the BHLPPPA instrument, the study used to assess for validity and reliability indicated that there are three versions of the instrument; for the preceptor, the preceptor and administrator. This article only mentions the instrument was given to the preceptors. While the article is evidence that nurses are becoming more aware of TSAM, and this is why it is included in project lit search, the poor design and seemingly improper use of TSAM, decreases the value of discussing the findings in paper.
Krippas, S., Staubli, L., & Waterman, K.	2022	Paperless preceptor: Development of an electronic competency assessment tool	N/A	<i>Journal for Nurses in Professional Development</i>	Using technology to improve structure and consistency in the orientation process	Quality improvement	Technology can improve consistency and compliance	N/A	N/A	N/A	N/A	Reimagined paper orientation checklist into an electronic orientation worksheet with embedded hyperlinks to web-based resources: <i>Initial competency assessment tool (ICAT)</i> . "The template contains line items for performance criteria with space in each criterion for hyperlinks to standardized content, a section for the orientee to track their learning, and a section for preceptors to document competency validation", p. E44
Lufthans, J., & Hykas, K.	2020	New graduate orientation evaluation: Are there any best practices out there?: A scoping review	N/A	<i>Journal for Nurses in Professional Development</i>	Asses the if there are best practices for how to assess NGNs' readiness to practice	A scoping review V	Concepts: 1. Goals of orientation orientation 3. methods for initial and ongoing evaluation 4. Tools for monitoring progress	N/A	4912 narrowed to 14 (from databases)	Databases: CINAHL, PubMed, Cochrane Database of Systematic Reviews, MEDLINE, Nursing and Allied Health Collection and Ovid Nursing Database Webster: AACN, ROM, AACCN, ANA, National council of state boards of nursing, WHO	Within 5 yrs. of search (1/17/2018); <b>Key words:</b> clinical competence, competency, employee orientation, employee performance appraisal, evaluation, in-service training, nurse, nursing orientation, performance appraisal, staff development, and transitional programs. <b>Inclusion:</b> empirical articles (qualitative and quantitative), English, focused on innovations with orientation evaluation (i.e., initial, ongoing, and completion), expectations of nurse ready to transition to practice, the new graduate experience, new graduate retention, and methods of knowing. <b>Exclusion:</b> studies not pertaining to inclusion criteria and non-English	There is a need for additional research to rectify the lack of strong evidence on best practices for evaluating readiness to practices, including more resources and tools . While competencies of health care providers are agreed upon by national professional organizations, how these are evaluated are not a benefit of using frameworks and tools is that they can provide an standardization based in evidence while also being flexible enough to be tailored to the individual preceptor. Preceptors positively impact constructive practice and retention; this role is need of formal training.



Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analyses/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods/GAPS
McKinney, S., & Aguilar, M.	2020	Implementing a comprehensive preceptor development program through professional governance	Benner's novice-to-expert relationship based care. Therapeutic practices	<i>Journal for Nurses in Professional Development</i>	Inconsistencies in preceptor selection, training, evaluation and recognition - need for a comprehensive evidence based preceptor development program-- enlisted institutions shared governance to develop	Quality improvement; implement EBP	Shared governance use for program development	Not specified	Not specified	Not specified	Preceptors within the organization that participated in the course	The idea that programs should be built on evidence, yet this needs to be in respect to the needs and constraints of the organization. Enlisting Shared Governance ( if this is in place) can be one avenue to accomplish this. In respect to the selected program: 12 hr. in person course with additional toolkits as resources to be used at the point of care, and a preceptor webpage to facilitate communication and resources access. Recognition enhanced. Program resulted in significant increase in skill attainment and confidence to be successful in their role
Nash, D. D., & Flowers, M.	2017	Key elements to developing a preceptor program	N/A	<i>The Journal of Continuing Education in Nursing</i>	Important to develop and implement a preceptor program in order to ensure newly hired nurses provide high quality care, and can impact retention	Quality improvement. review of the literature, yet no information on criteria and survey used was not a valid and reliable	Essential components of a successful preceptor program	Electronic survey based on the RN Preceptor Learning Needs Assessment	402 surveys sent, 197 received (49%)	All RNs within organization that fit education criteria	BSN or higher; all care areas within organization	Article uses review of literature, RN surveys to determine preceptor program curricula and best practices for programs. No indication of how the literature was searched. Survey was not a valid and reliable tool.
Nelson, D. M., & Joswiak, M. E.	2020	Preceptor teaching tools to support consistency while training novice nurse	Benner's novice-to-expert model	<i>Journal for Nurses in Professional Development</i>	Structured approach to guide and support preceptor teaching of specific concepts creates consistency and accuracy	Quality improvement	Concept: lack of consistency in preceptor teaching	N/A	N/A	N/A	N/A	While details on how feedback was not discussed, it is stated that confidence in teaching on concepts, among preceptors, increased as a result of the access to the standardized resource. This results in more effective learning for the preceptee. Authors note that feedback from preceptees and preceptors was essential to improving interventions.
Nelson, D.M., Joswiak, M. E., Brake, K.	2019	"Just in time" training for novice preceptors	Concepts of adult teaching and learning	<i>Journal for Nurses in Professional Development</i>	Not all preceptors can be trained prior to being needed as preceptors, need a way to systematically prepare and support new preceptors	Quality improvement	Use of adult teaching and learning can provide support and best practices to the development of "just in time" training	N/A	N/A	N/A	N/A	Provides insight on the more prominent issue of nurse being asked to precept without any prior training or planning. COVID and the subsequent turnover of experienced nurse has exacerbated this issue. QJ project outlines steps and consent to address this ongoing and expected issue
Nelson, D. M., Zimmerman, A.	2021	Empowering Preceptors: Implementation of an orientation record	Benner's novice-to-expert model	<i>Journal for Nurses in Professional Development</i>	Three gaps in clinical orientation identified and rectified with use of an "orientation record"	Quality improvement	Concept: lack of EBP for evaluation of preceptee readiness	organizational specific survey to assess orientation	all preceptees and preceptors over one year	N/A	N/A	while only a QJ project, the implementation of the orientation tool resulted in a shorter orientation period, and increased satisfaction of preceptees and preceptors. Decreased length led to cost savings, and increased satisfaction contributed to nurse retention
Perron, T., Gaooyne, M., Kallakavunkal, T., Kelly, M., & Demagistris, N.	2019	Effectiveness of nurse residency programs	N/A	<i>Journal of Nursing Practice Applications &amp; Reviews of Research</i>	Purpose was to identify effectiveness of programs in respect to job satisfaction, performance, retention and financial impact on organization	Review of literature (details not specified) VI	N/A	N/A	N/A	N/A	N/A	Appears to be a review of literature yet there is no indication of how the literature was selected and appraised. From the literature selected they concluded that NRP increase retention within the first year post program, improve job satisfaction and perceived clinical decision making. Cost savings attributed to improved retention
Shimmers, J., Africa, L., Deasy, P., Franquero, T.	2018	The married state approach to precepting	Not stated	<i>The Journal of Continuing Education in Nursing</i>	Preceptor role development, support and recognition are ways to improve the transition period for both preceptor and preceptee. The Married state approach to precepting can improve this experience for both	VII	Married State Approach for precepting	N/A	N/A	N/A	N/A	The married state stresses the use of a side-by-side approach with a full assignment where care is done in tandem. Three phases are worked through as the preceptee takes on more care responsibilities

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analyses/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods/GAPS
Shimmers, J., Africa, L., Mallory, C., & Durham, H.	2021	Versant's Nurse Residency Program: A Retrospective Review	N/A	<i>Nursing Economic\$</i>	Review of the program revisions that took place from 2009-2019	Retrospective analysis; VI	Impact of Versants NRP on satisfaction, commitment and effectiveness	N/A	6700 NGNs	Those that completed Versants NRP between 2009-2019	Nurse residents	Organizational commitment, nurse-work satisfaction, and conditions of work effectiveness have the greatest impact on turnover intent which has a strong correlation with actual turnover. NRPs valued and supported by organizational leadership have the most successful programs and retention of NGNs. "One of many lessons learned has been the critical role preceptors play in the transition of RNs", p 241. Information on married state approach to precepting discussed; used for the development of the Versant Preceptor Role Development Program™ (VPRDPR™)
Smith, L.C., Watson, H., Fair, L., Carter, G., Mackay, P., Lykens, K., Bradstock, J., Arnold, K., and Whalen, M.	2020	Evidence-based practices in developing and maintaining clinical nurse preceptors: An integrative review	N/A	<i>Nurse Education Today</i>	Integrative review of best practices for establishing and maintaining a hospital-based nurses preceptor program	Integrative review V	Best practices for preceptor programs	John Hopkins EBP appraisal Tools	115	Databases: PubMed, CINAHL and Cochrane	Articles: <b>Inclusion:</b> English, 2010-2020 focused on precepting new and experienced nurse into direct patient care. <b>Exclusion:</b> pre-licensure preceptors (nursing students), nursing academic faculty, advanced-practice providers, precepting in the context of transition	The evidence supports implementation of an evidence-based, standardized curriculum that features diverse teaching modalities, critical thinking, and clinical reasoning. This is crucial in order to prepare preceptors with the necessary knowledge and training successfully perform role responsibilities. A comprehensive and reliable preceptor selection tool should be used. Preceptors need ongoing education, training, and support to improve nursing satisfaction, retention, and the quality of nursing care
Williams, S., Jones, S., Hamilton, B.	2013	Implementation of a standardized evaluation tool to improve preceptor confidence	Benner's novice-to-expert model	<i>Journal for Nurses in Professional Development</i>	Preceptor confidence in their role responsibility to assess NGN competence is improved when they have access to an evidence-based tool	VI	The evidence-based tool assist in preceptors assessment of NGN in respect to Benner's stages	Modified Cessale	15	Convenience sample of preceptors at two urban medical centers	Mean of 7.47 years experience, all female, mean age of 34.13, 53.3% had previous preceptor training	Small, homogenous sample. C-scale was modified slightly to focus on preceptor role confidence.

**Appendix B**

## Institutional Review Board Approval

East Carolina University's IRB response to answers provided on the *Quality*

*Improvement/Program Evaluation Self-Certification Tool*:

“Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 11/7/2022”

## Appendix C

### Permission to use Confidence Scale (C-Scale) and Modified C-Scale

Re: [EXTERNAL] DNP project/ Modified C-Scale

Ms. Shunda Lanett Wilburn

Mon 8/29/2022 9:54 PM



Mrs. DeLucia,

Good evening. I appreciate your interest in wanting to use the modified Confidence Scale. You have my permission to use the modified Confidence Scale tool for your DNP Project. However, I am not the original author of the instrument. I have copied Mrs. Grundy on the email, who is the original author of the tool, so you may ask her permission as well.

I look forward to reading your research!

Dr. Wilburn

Permission to use C-Scale: Rebecca Ann DeLucia, DNP Student, East Carolina University, NC



1 attachments (47 KB)  
CScaleform.headtotoe.doc;

This email originated from outside ECU.

Dear Rebecca: (Rebecca Ann DeLucia, DNP Student, East Carolina University, NC)

You have my permission to use the C-Scale (Grundy, 1993) I developed to use in your DNP project, "Supporting Nurse Preceptors through Evidenced-based Restructuring of the Preceptor Process." The copy I am sending to you has "head-to-toe assessment" listed as the skill. It is very easy to change the skill, the type of patient (pediatric versus adult), or the setting. Please feel free to modify the C-Scale as necessary for your research activity that will include the measurement of confidence.

The C-Scale is under copyright protection, and you credit me as the developer of the original instrument. There is no fee attached to using the instrument. This permission to use the C-Scale is limited to your study described in this email.

When the subject completes the scale - just add the numbers circled on each of the 5 statements. An individual's score can range from 5 (low confidence) to 25 (high confidence). Do not add the 5 numbers and then divide by 5.

The correct citation of the publication discussing the C-Scale is *Nurse Educator* (1993), Vol. 18, No. 1, pp 6-9. (The 1992 issue of the article lacked all the information that I had edited.) The 1993 article contains the information you need on validity etc. If you have difficulty getting the 4-page article, email me a physical mailing address (work, university, or personal) and I will snail mail a copy to you - no charge and no problem. This professional courtesy includes international addresses.

If you have any questions, feel free to email me. If you need a formal letter granting permission to use the C-Scale, let me know. A formal permission letter might be required by some academic institutions, publishers, or others who will not accept a professional email from the holder of material protected by copyright.

I wish you the best of luck with your research. I would love to have an abstract of your findings when you are done. Thank you for adding to the body of nursing science / education.

Sincerely,

Susan Grundy, EdD, RN

Professor Emeritus

California State University, Sacramento

**Modified C-Scale Survey Questionnaire**

1. I am certain that my evaluation of the preceptee is correct:

1	2	3	4	5
----- not at all certain	----- certain for only a few steps	----- fairly certain for a good number of steps	----- certain for almost all steps	----- absolutely certain for all steps

2. I feel my evaluation of the preceptee performance was completed without hesitation:

1	2	3	4	5
----- I have much hesitation	----- a fair amount of hesitation	----- a good part of it without hesitation	----- almost completely without hesitation	----- absolutely no hesitation

3. I feel that my evaluation would convince the preceptee that I am competent:

1	2	3	4	5
----- not at all	----- agree, a little	----- for much of it	----- for almost all of it	----- for absolutely all of it

4. I feel sure of myself as I evaluate the preceptee:

1	2	3	4	5
----- not at all	----- very little	----- for much of it	----- for almost all of it	----- for absolutely all of it

5. I feel satisfied with my evaluation of the preceptee:

1	2	3	4	5
----- not at all	----- very little	----- for much of it	----- for almost all of it	----- absolutely satisfied with all of it

Appendix D

Project Pamphlet and Posters

Tri-fold Pamphlet

*Introducing the...*

## Tiered Skills Acquisition Model- TSAM™

*TSAM™ utilizes Tiers of Skills to guide preceptors in the training of new hires*

**QUESTIONS?**


*Send to:*

Becky Delucia, MSN, RN, RD/LDN  
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**A PROCESS CHANGE IS HAPPENING!!**



**A New Process to Support Preceptors!**

© 2023, Transforming practice through a tiered skills acquisition model. Journal for Nurses in Professional Development, 37(2), 118-122. https://doi.org/10.1016/j.nnpd.2022.09.002

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TSAM is a Mark Christensen® trademark with the United States Patent and Trademark Office.

**The New Preceptorship Process using the Tiered Skills Acquisition Model- TSAM™ for unit orientation on MSU, ONS, & CCU begins April 2023**

**Process Change Purpose:**  
To provide nurse preceptors with more evidence-based guidance & resources while training new hires on MSU, ONS, & CCU to help improve:

- Preceptor's Experience & Satisfaction
- Preceptee's Experience, Satisfaction, & Learning
- Patient Outcomes

**How TSAM™ relates to preceptorship:**  
TSAM™ is a 3 part model that provides structure, guidance, & support to preceptors leading to:

- Improved consistency & accuracy of new hire training
- Enhanced preceptor confidence \*

**Organization's Role:**

- Provide education & resources for process change
- Answer questions on TSAM™ process
- Listen to and use your feedback to improve process

**Preceptor's Role:**  
A/C video was assigned to you:

- Watch as soon as possible, Due by March 31, 2023
- In person training on units begins March 2, 2023.
- Have ready: Your Questions, Concerns, & Ideas

\*User confidence in work done from classes is negatively impacted the quality of care provided by preceptors and their preceptees. (O'Brien et al., 2019; Wu et al., 2022)

**Overview of TSAM™**  
Tiered Skills Acquisition Model (TSAM™)  
3-Part Model

1. Info Absorbed, Shared to Preceptor



2. Shared to Preceptor, Works in Tandem



3. Dedicated Resource Time



**Skills are now in tiers; Tiers move from Simple to Complex**

1. Skills Progress from Simple to Complex



Current Skills



Skills Checklist

To Preceptor



Skills in Tiers, From Simple to Complex

**How the "Married State" style of precepting and Tier Progression works...**

- Preceptor & Preceptee work as a team starting on day one of orientation
- Complete all patient care for each patient in assignment together
- Tiers dictate which patient-care tasks completed by the preceptor
- Preceptee completes only tasks listed in their current tier and below
- Substitutes in higher tier(s) completed by preceptor, & preceptee observes
- Form followed for each patient in the preceptor's assignment
- When competency of all skills in tier are met, tier signed off & progress to next tier
- Experienced nurses can move through tiers more quickly

**How "Dedicated Resource Time" works...**

Not everything can be experienced and taught at the bedside

- Dedicated time starting in week one to debrief or expand on experiences
- Hands-on training & mock set up with training (i.e., chest tubes, A-lines, PCA)
- Resource Time topics reflect skills in current tier
- Resources to guide preceptors found in Preceptor Resource Book

(January, 2023)




Project Posters

**A New Process to Support Preceptors**  
*Introducing the...*

## Tiered Skills Acquisition Model

### TSAM™

**3- Part Model**

<p><b>1</b> Skills Move/Build: Simple to Complex</p> 	<p><b>2</b> ALWAYS Work in Tandem</p>  <p>Preceptor Preceptee</p>	<p><b>3</b> Dedicated "Resource Time"</p> 
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Process Change Purpose:

To provide preceptors with more evidence-based guidance & resources to improve

Preceptor's Experience & Satisfaction  
Preceptee's Experience, Satisfaction, & Learning  
Patient Outcomes

**Appendix E**

## Project Timeline

November 7, 2022:

Presentation of project plans to organizational stakeholders and senior leadership

January 7, 2023:

1. Project Timeline and “Reminder” Email to Unit Directors, House Supervisors and Charge Nurses
2. Pre-Intervention Survey sent to All RNs on MSU, ONS and CCU via ShiftWizard

January 31, 2023:

Pre-Intervention Survey closes

February 1, 2023:

1. ALC’s “LNRMC Preceptorship” education video assigned to all RNs on MSU, ONS, and CCU (Due date March 31, 2023)

March 1, 2023

2. In-person education/ rounding commences (March 1,2023- April 5, 2023)
3. Project update/ Commencement of education email to Unit Directors, House Supervisors and Charge Nurses

April 6, 2023

Post-intervention survey sent to all RNs on MSU, ONS and CCU

April 30, 2023

Post-intervention survey closes



## Appendix F

### Project Budget

Event/ Activity	Event/Activity Details	Cost	Running Total
<b>Educational Video</b>	Created on personal computer; Uploaded to organization's learning platform by Director of Education	0	<i>0</i>
<b>Creation of Tiers and New Checklists</b>	Skills reorganized into tiers; Tiers and Checklist printed with organization's approval	0	<i>0</i>
<b>Stakeholder Meeting 11.7.22</b>	PowerPoint color handouts	51.19	<i>51.92</i>
	Coffee/ Food	41.02	<i>92.21</i>
<b>Process Change Announcements</b>	Posters (3)	13.67	<i>105.88</i>
	Flyers – printed with organization's approval	0	<i>105.88</i>
<b>In-person/ Rolling unit education</b>	Food Cart	80.71	<i>186.59</i>
<b>Preceptor Resource Books</b>	Complied educational material, internal and external links: Printed with organization's approval; Repurposed binders (3) from organization	0	<i>186.59</i>
<b>Resource Room</b>	Created hands-on learning stations in unused patient room: Organization's unused manikin and bed placed in room, expired supplies collected, instructions and/or QR codes linked to educational videos posted. No new equipment was bought, QR codes and instructions printed with organization's approval.	0	<i>186.59</i>
<b>Project Total Cost</b>			<b>\$186.59</b>