ORIGINAL RESEARCH

Implementation of a tiered, competency based orientation program

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Received: April 26, 2022 **Accepted:** May 17, 2022 **Online Published:** May 26, 2022
DOI: 10.5430/jnep.v12n10p1 **URL:** https://doi.org/10.5430/jnep.v12n10p1

ABSTRACT

Background and objective: Orientation programs for new graduate nurses in acute-care hospital settings aim to guide the transition from student to practicing nurse. Typically, these programs incrementally increase the workload of the new graduate nurse while providing clinical guidance. While effective, the model is time consuming and costly. The objective of this educational study was to 'flip' the model and determine the benefit of new graduate nurses initially providing specific care that aligned with their clinical skills and increased their clinical responsibilities as their skill set expanded. Clinical progression and orientation satisfaction scores were used to determine the program's success.

Methods: Guided by experiential learning theory and the skills acquisition model, competency was assessed by mastery. Thus, rather than exposing new graduate nurses to a single patient and moving toward providing care to an expected workload, orientation was holistic in nature and focused on the acquisition of clinical skills, from simple to complex.

Results: Data from the seven participants reveal that none required additional orientation time or supplemental instruction. All seven new graduate nurses remained employed on the units of their orientation and successfully transitioned into professional nursing roles.

Conclusions: Outcomes from this study included increased new graduate retention and a decrease in the time required to achieve clinical competency. Both outcomes resulted in a financial benefit to the acute-care facility. New graduate nurse and preceptor satisfaction with the study demonstrate the ability to mitigate the stress and anxiety associated with transiting to clinical practice.

Key Words: Nursing orientation, Competency, Acute care, Experiential learning theory, Skills acquisition model

1. BACKGROUND

Orientation programs, in acute care settings, are routinely provided to new graduate nurses (NGNs) and are aimed at mitigating the stress and anxiety associated with transitioning to clinical practice.[1] Initially identified as reality shock by Kramer in 1975,[2] the failure to successfully navigate the four transitional phases (honeymoon, shock, recovery, resolution) increases the risk for exiting the profession. Experiential learning theory, as defined by Kolb,[3] is "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming the experience" (p. 41). This theory emphasizes learning is influenced by cognition, environmental factors, and emotions. The four elements within this theory are (1) concrete experience, (2) reflective observation, (3) abstract conceptualization, and (4) active experimentation. Each of these elements are critical for an NGN to transition to an independent clinician. Applying this theory to Joswiak's[4] tiered skills acquisition model (TSAM) provides a framework toward clinical competency. Progress, as

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described in Joswiak's model,[4] is determined through mastery of specific skills rather than by time. Skills in this model are labeled simple, medium level, and complex. Thus, the NGN concentrates initially on simple skills and progresses through the model as mastery is demonstrated. A plethora of interventions have been designed and implemented to support and guide the new graduate through this process. These include orientation programs, preceptorships, residency programs, and nurse transition programs.[5] While the format of each program varies, the desired outcomes are clinical competency and retention of the new graduate.

Prior to the COVID-19 pandemic, Joswiak[4] estimated a national first-year nurse attrition rate of 18% and the cost of replacing a single nurse between $37 and $58K. Results from a review of the literature[6] concluded that attrition rates among nurses increased significantly as a result of COVID-19. In addition to the recruitment costs, there are financial costs associated with providing any type of orientation program. Retrospective financial data at the study site revealed that the present nurse orientation program was costing an average of $100K per NGN. The challenge was to reduce the expenses associated with the orientation program while not altering the experience or the outcome.

Guided by Kolb's theory[2] and framed by Joswiak's model,[4] NGN orientation was provided using experiential learning theory, with competency determined by mastery. Rather than exposing the NGN to a single patient and moving toward providing care to an expected workload, orientation was holistic in nature and focused on the acquisition of skills, from simple to complex. Despite the pivot to a tiered, competency-based model for orientation, the priority remained assessing, developing, and validating the care provided. These variables, as described by Kavanagh and Sweda,[7] "...safeguard our patients, improve patient outcomes, and mitigate preventable errors and never events" (p.60). While the outcomes remained unchanged, the clinical experiences for the NGN changed. The Tiered, Competency-Based Orientation Model is depicted in Figure 1. Working with their preceptor, the NGNs received an entire patient assignment on their first day of orientation and continued throughout the orientation period. This increased both exposure to clinical experiences and the opportunity to perform skills compatible with their level of competency. The skills performed by the NGNs, either fundamental, intermediate, or advanced, aligned with their previous experience, critical thinking skills, and clinical judgement.

Altering the present orientation program, which uses an incremental productivity format, to a tiered, competency-based model changed the dynamics of orientation, the timeframe required to achieve clinical competency, and decreased non-recoverable costs. The onset of COVID-19 restricted the ability for academic nursing programs to provide clinical experiences, resulting in NGNs who had limited opportunities to develop clinical competencies.[4] Thus, this study examines satisfaction and retention when an orientation model is based on competencies, rather than productivity goals. The aim of the study was to provide a clinically and financially responsible method to transition the NGN to clinical practice.

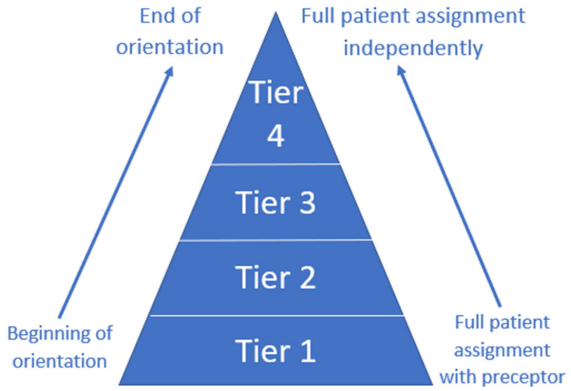

Figure 1. Tier model

As an educational study, the activities described here align with an exception from institutional research approval. The Federal Registry rule 45 CFR 46.104[8] describes specific educational activities that do not require research approval. Normal educational practices were followed, and activities were not likely to adversely impact learning opportunities.

2. METHOD

As a descriptive educational study, assessment, observations, and survey data results were used to evaluate the intervention. The Nursing Professional Development Department at the study site adapted, with permission, Donna Wright's competency assessment method[9] to evaluate NGN progress. This assessment method focuses on the development of knowledge, skills, and abilities necessary for clinical competency. Competency evaluation methods for the tool are available through UCLA Health.[10] Tiers one and two focus on clinically based fundamental competencies, while tiers three and four, which include medication administration, patient/family education, recognizing and responding to deteriorating patients, and critical thinking are labeled intermediate and advanced competencies. Competencies of one tier are met before moving to the next tier, and movement through the tiers is dictated by skill attainment and competency, not by time. Once all tiers are completed, orientation ends. At this juncture, the NGN is providing independent care to a full assignment of patients and transitioning to a focus on professional development and engagement opportunities. Table 1 displays the tiers and associated competencies.

ISSN 1925-4040 E-ISSN 1925-4059

Table 1. Orientation levels and associated competencies

Tier Level	Competencies
One	Maintain basic infection control procedures, including the use of personal protective equipment
	Use evidence-based assessment techniques, instruments, tools, available data, information, and knowledge when providing care
	Prioritize data collection based on the patient's immediate condition or anticipated needs
	Relate assessment and diagnostic findings to the pathophysiology of specific disease processes
	Analyze assessment data, diagnostic findings, and clinical decision support tools to identify the plan of care
	Document relevant data accurately and in a timely manner
	Interact in a professional manner with internal and external customers
	Adhere to organizational policies and procedures and utilize appropriate resources as needed
Two	Correctly utilize and maintain treatment and patient care devices
	Ensure appropriate infection control measures with the handling of specimens
	Ensure safe passage of patients from admission through discharge by using best practices for healthcare-acquired infection prevention (invasive devices)
	Accurately enter provider orders in the electronic medical record
	Safely transfuse blood product(s)
	Identify signs and symptoms of hypoglycemia and provide care according to protocol
	Communicate effectively and collaboratively with the patient, family, physicians, and interprofessional clinicians
	Demonstrate caring behaviors to develop therapeutic relationships
	Document all care, treatments, and interventions accurately and in a timely manner
	Adhere to organizational policies and procedures and utilize appropriate resources as needed
Three	Obtain an accurate medication history
	Safely administer medications utilizing clinical reasoning and data assessment along with proper administration techniques
	Initiate effect treatment(s) to relieve pain considering patient values and expressed needs
	Provide evidence-based education to patient and family utilizing primary language and preferred teaching method
	Use the teach-back method to assess patient understanding of education provided and reteach or modify teaching if comprehension is not demonstrated by the patient
	Manage restraint usage to protect the health and safety of the patient and others while preserving the patient's dignity, rights, and well-being
	Maximize patient safety and minimize harm to self and others by providing the safest environment possible for the psychiatric, suicidal, homicidal, unsafe patient
	Demonstrate respect for individuals and consider multiple factors when planning and providing care by using the ethical principles of beneficence, nonmaleficence, autonomy, justice, veracity, fidelity, and integrity
	Document care, treatments, and interventions accurately and in a timely manner
	Adhere to organizational policies and procedures and utilize appropriate resources as needed
Four	Coordinate admission, transfer, and discharge processes with a focus on throughput efficiency and responsible stewardship of resources
	Adapt routines to demonstrate appropriate time management, prioritization, and delegation
	Display proficiency in the use of nursing skills, including medication administration
	Manage the care of a full patient assignment
	Use effective interpersonal communication skills
	Document care, treatments, and interventions accurately and in a timely manner
	Follow organizational policies and procedures and utilize appropriate resources as needed

Orientation using the new model was implemented on one clinical unit during the summer of 2020. This unit had seven NGN hires and ample knowledgeable preceptors. Observational data were collected throughout the orientation process and documented on the Orientation Progress Tool. Beginning with day one, each NGN worked in tandem with their selected preceptor. Initially, the NGN was responsible for Tier One, or fundamental clinical responsibilities, as described in Table 1, for all patients assigned to the preceptor. Once competencies for these skills were demonstrated, the NGN progressed to Tier Two, which are additional fundamental skills, technical in nature, and built upon competencies attained in Tier One. The orientee continued to perform Tier One skills in which they were deemed competent, while performing Tier Two skills they were learning to perform. Tier Three, which consists of intermediate competencies, began upon successful completion of Tier Two. Skills within Tier Three are advanced and require clinical reasoning and critical thinking. Tier Four's advanced competencies describe the skill set needed to be a competent clinician at the end of the orientation period. As the NGN progresses through the tiers, the clinical assignment reflects the increase in skill competencies. Thus, during the initial tiers, the NGN is providing a limited amount of direct patient care as defined by the specific skills of each tier. The amount and intensity of care increases as the NGN progresses, culminating with the ability to independently provide full and complete patient care.

Inherent in the tiered, competency-based orientation model is reflection time for the NGN, along with scheduled access to the preceptor, director, and clinical education specialist. Reflection time provides time for the NGN to process experiences with supportive personnel available. The goal of reflection time is for the NGN to begin to put the pieces of nursing skills together and develop a holistic perspective of competent care. There is also time for self-reflection and self-evaluation, along with feedback, evaluation of goals, and setting of new goals. Survey data were collected at the end of the orientation process, which documented satisfaction with the activities and feedback on the process.

3. RESULTS

Demographically, the seven participants in the orientation program who initially implemented the Tiered, Competency-Based Orientation Model were primarily female (n=6), ranged in age from 22 to 26 years, were graduates of a bachelor's degree in nursing (BSN) program, and had successfully passed the NCLEX® exam. Five were employed on a day-shift schedule (0700-1900) and two were assigned night shift positions (1900-0700). All preceptors hold a BSN in nursing, were employed at the study site for at least two years, and had successfully completed the on-site preceptor program. All preceptors volunteered to oversee an orientee, receive education about the Tiered, Competency-Based Orientation Model, and complete all assessment surveys.

Progress for each NGN was documented on the Orientation Progression Tool. The use of a paper format provided access to the document throughout the hours worked each shift, allowing the preceptor to document an ongoing evaluation as events occurred rather than at the end of the shift. Documentation of NGNs' progress was shared with their directors, patient care supervisors, other preceptors, and clinical education specialists. The format provided real-time, 360-degree capability to receive input from multiple sources. Upon completion of the orientation program, the document is shredded in compliance with confidentiality procedures at the study site.

Program feedback was obtained from the NGNs and preceptors using online Orientee and Preceptor Surveys. The content of items was edited for the Preceptor version to reflect appropriate descriptors. The time required for successful completion of the tiered, competency-based orientation program reduced the total orientation time for two NGNs by one week. This decision was made by agreement among the NGN, the preceptor, and the director. The tiered, competency-based orientation program also improved orientation satisfaction among both NGNs and preceptors. Mean scores among the NGNs and the preceptors were four which correlates to an agreement that the orientation process was satisfactory.

Responses to open-ended items on the survey allowed both populations to describe the benefits of this program. Responses from the NGNs described the ability to focus on specific tasks, exposure to a variety of patients, gaining better time management, and having a dedicated preceptor. Responses from the preceptors included the power to match the clinical task to the NGN skill set and the ability to guide them toward clinical competence. Preceptors also mentioned the ability to create a safe environment in which there are no "dumb" questions and the professional satisfaction in guiding an NGN toward success. While the NGNs lacked previous exposure to other orientation programs, they described this model as encouraging success in a stair-stepped fashion. Preceptors also remarked this model individualized the clinical experience and tailored the progress to the specific NGN, and they noted the clarity of the tasks and the desire to continue to use this model.

At the conclusion of orientation, each orientee completed the Orientee Survey. Responses on this survey described an

overall satisfaction with the orientation process. Orientees either agreed or strongly agreed their orientation prepared them to provide care independently. These data also reveal that sufficient time was provided to complete each tier and support from all persons involved in the process was noted as always present. An overall rating was described as excellent by six of the orientees, with the seventh reporting an overall ranking of good. Benefits were described by the NGNs as the ability of having orientation personalized, thus respectful of their strengths and weaknesses. The opportunity to develop a relationship with a 'seasoned' nurse was also noted as a benefit. An awareness that the orientation program could be extended if additional time was needed was described as a 'comfort' by two orientees.

4. Conclusion

One of the benefits of this model, to the NGN, include the use of one preceptor, which provides consistency to the assessment processes and the potential for a bonding relationship to develop. The use of short-term goals offers a sense of accomplishment and satisfaction which decreases the stress and anxiety associated with reality shock. For preceptors, this model assigns them one NGN and eliminates the need to be an interim preceptor or provide an assessment for an NGN of which they are unfamiliar. The experience of guiding an NGN, from orientation to a clinically competent nurse, is professionally rewarding, while offering the opportunity to directly impact the care provided at the study site. For the healthcare organization, job satisfaction among the preceptors improved, as was related to clear expectations and acknowledgement of their contribution to the nursing profession. The ability to process the NGNs through orientation, without the need to extend the orientation period, decreased the non-recoverable costs when employees are not working to the level of their job description.

The role of the preceptor is crucial to the success of any orientation program. Careful selection of preceptors, along with educating them on the theoretical base and conceptual format of the orientation process, provides consistency for the NGN. Preceptors must have a vested interest in assuring NGNs have a positive experience. Zero tolerance policies with respect to workplace incivility or bullying must be present and addressed.

Routine assessment and evaluations should occur throughout the process. Initially, NGN evaluations were performed by the preceptor daily, which was cumbersome. Moving to a weekly schedule and including data from the NGN provided an opportunity to compare perceptions. Clarification of progress and realignment of goals became an on-going process.

Despite efforts to assure the work schedules of the NGNs and their preceptors were in sync, variances did occur. When these situations happened, the NGN was provided the opportunity to take the day off, without pay, or work with another preceptor. Uniformly, each NGN preferred to work with another preceptor, providing the rationale of wanting to progress. These instances occurred when the number and acuity of patients increased as a result of COVID-19 with the organization's desire to not assign this patient population to NGNs until orientation was complete. When reassignment was required, the NGN was assigned to a nurse with preceptor experience, and the Orientation Progress Tool identified the NGN-specific goals for that shift.

Each of the seven NGNs remained employed on the unit of their orientation and successfully transitioned into a professional nursing role. Upon completion of their orientation, each expressed an interest in committee work and the requirements for implementing the organization's career ladder program.

Since its inception, this model has been implemented throughout all inpatient clinical settings at the study site. While there are no study data, the overall retention rate is 79% for all Winter 2021 NGNs and increased to 94% for Summer 2021 NGN hires.

Conflicts of Interest Disclosure

The authors declare there are no conflicts of interest to disclose. If access to the Orientation Progression Tool or the Orientee or Preceptor Survey is desired, please contact the corresponding author.

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