

# The Development of an Oncology Clinical Nurse Specialist Fellowship Program

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## Abstract

New graduate clinical nurse specialists (CNSs) face many challenges when starting their new role. To address this, a CNS fellowship program was developed to mentor new CNSs during their first year of practice. This CNS fellowship program would provide opportunities to increase skills related to each of the CNS spheres of influence, including nursing practice, patient care, and systems and organization. Experienced CNSs mentored CNS fellows and identified learning opportunities. The fellows completed an online self-assessment based on the National Association of Clinical Nurse Specialists CNS Competency Checklist during week one of orientation and again at months 3, 6, 9, and 12. The CNS fellows completed and presented three projects designed to explore the spheres of the CNS role, along with a formal onboarding. The results of the fellowship depicted significant competency development within all three CNS spheres at program completion. The CNS fellowship program provided structure and guidance to the newly graduated CNSs and clearly transitioned staff nurses to advanced practice nurses. The fellowship has demonstrated a positive effect on both the new CNSs and the organization in which it was developed.

With the increasingly complex needs of patients with cancer and the nurses caring for them, the clinical nurse specialist (CNS) is in an ideal position to positively affect care, nursing practice, as well as health-care systems and organizations. There are differences in the advanced practice roles between CNSs and nurse practitioners (NPs); specifically, the roles of the CNS include clinical expert, consultant, educator, leader, and researcher (Fulton, Lyon, & Goudreau, 2014).

In the past decade, there has been a decrease in the number of practicing CNSs and an increase in the number of NPs. Today in the United States, there are approximately 70,000 CNSs, compared with over 234,000 NPs (American Association of Nurse Practitioners, 2018; National Association of Clinical Nurse Specialists, n.d.). While there has been a decrease in the number of CNSs, numerous organizations and specialties (like oncology) utilize CNSs successfully as an important part of the health-care mission.

In Ohio, where this project occurred, there are 606 CNSs and 9,075 NPs currently practicing (Ohio Board of Nursing, 2017). In Central Ohio, some advanced practice graduate programs have merged portions of the education curriculum of CNSs with those of NPs, which can sometimes lead to the perception of variable and ambiguous role transitions for new CNSs. In the past, at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC–James; or “The James”), when a CNS was hired, a hybrid registered nurse (RN) and NP orientation curriculum was used for onboarding. Yet, this fragmented orientation proved challenging for even the experienced CNS, and required each CNS to independently acclimate to their role and self-discover their resources.

The James’s Associate Chief Nursing Officer (ACNO) challenged the CNS professional practice group to develop a proposal for a CNS fellowship that would create and provide an orientation for new CNSs who would begin employment at The James. For the purpose of this article, we defined a fellowship as a short-term opportunity for our organization to expand the knowledge of the fellow.

All CNSs hired at The James previously completed graduate education as an advanced practice registered nurse (APRN). This CNS fellowship was a natural next step to prepare these CNSs for practice and was intended to guide new CNSs through the challenges of onboarding and orienting to a new, large enterprise. A CNS fellowship Task Force (TF) was formed, consisting of four experienced CNSs to lead this fellowship project.

## LITERATURE REVIEW

As a first step in the process of developing the fellowship, the CNS TF conducted a literature re-

view, searching specifically for research from a 5-year time period and focusing on information pertaining to an orientation of advanced practice nurses with an emphasis on CNSs. The TF found limited recent research on CNS orientations, and most of the literature written about the role and orientation of CNSs came from the late 1990s and early 2000s. The TF found that the National Association of Clinical Nurse Specialists (NACNS) CNS Core Competencies from 2017 was frequently referenced throughout the literature.

## BARRIERS

The TF found that several current articles describe a number of barriers to CNS orientation. Ares (2018) addressed the barriers that new graduate CNSs encounter as they transition to this specialty advanced practice role. These barriers may include confusion regarding the CNS role and new CNSs experiencing imposter phenomenon and unclear job expectations, all of which compound the anxiety and difficulty of acclimating to a new role (Ares, 2018, p. 73). Bath, Lucas, and Ward (2017) discussed challenges of the new CNS, including finding a place in the organization, and establishing credibility and prioritization of projects. In a systematic review of research studies looking for barriers and facilitators of CNS role development, six categories were identified and included: individual characteristics, previous experience, professional or educational issues, organizational issues, relationships with others, and resources (Jones, 2005). A lack of orientation and clear role definitions can sometimes be viewed as barriers to a successful role transition.

According to Miga, Rauen, and Srsic-Stoehr, “...It is imperative that the CNS orientation be a structured program with identified goals and clearly defined expectations” (2009, p. 48). The authors noted that if a formal orientation does not exist, the new CNSs should develop their own structured orientation plan (Miga et al., 2009). One important component of the orientation is having a consistent CNS preceptor or mentor who has strong communication and organizational skills (Miga et al., 2009). The CNS preceptor should assist with introductions to key stakeholders and other CNS peers during formal onboarding. During this process, the new CNS will con-

tinue to learn about organizational structure, strategic plan, goals, and resources. An orientation log should be used to provide weekly focus and goals, record accomplishments, as well as identify knowledge deficits or needs. Miga and colleagues (2009) suggest that the beginning phase of orientation should focus on learning about the organization and key personnel, while the next phase should focus on developing knowledge and skills related to the CNS role.

The CNS TF reviewed the NACNS Clinical Core Competencies (NACNS, 2010). According to the NACNS's competency task force, "The Core CNS Competencies are comprehensive, entry-level competencies and behaviors expected of graduates of master's and post-master's programs that prepare CNSs" (NACNS, 2010). Since there are many specialties within the CNS practice, the Core Competencies were designed to reflect CNS practice across all specialties, populations, and settings. The CNS still remains responsible for maintaining appropriate clinical credentials and certifications (if applicable) by their state and institution (NACNS, 2010).

The CNS TF also used the NACNS listserv to inquire what other institutions were using for a CNS orientation, specifically other large cancer hospitals that are similar to The James. Approximately five hospital systems, a few that are similar to The James, replied and were eager to share their processes and paperwork, which included orientation checklists. The TF concluded that most institutions had no specific CNS orientation. Most institutions used a modified RN version and added the NACNS competency checklist. One respondent requested that once we created a CNS fellowship that we share the program with them. One hospital staff member stated that The James has "planted a seed" about CNS fellowship. The purpose of this overview of the CNS fellowship at The James is to assist other institutions that are challenged with the similar problem of how to provide a meaningful orientation to CNSs.

The CNS TF reviewed orientation processes for all advanced practice providers (i.e., NPs and PAs) at The James. Clinical nurse specialists at The James were somewhat familiar with an NP fellowship program since The James had established one in 2013. In the end, the TF decided that the CNS

role is too different to mirror orientation programs from other advanced practice roles, but there were some good ideas from other programs that could be integrated into the CNS fellowship program. Based on our review of the literature, it was evident that a structured and intentional CNS orientation was necessary to successfully acclimate and promote the autonomous practice of CNSs.

## OVERVIEW AND IMPLEMENTATION

Therefore, the CNS TF created a 1-year CNS fellowship program. Upon hire, three new graduate CNSs, referred to as CNS fellows, were contacted by The James advanced practice provider (APP) educator. The APP educator provided information regarding hospital orientation, which is required for all staff. Each CNS fellow was paired with an experienced CNS preceptor with whom they scheduled a time to meet either in person or by phone.

During the first in-person meeting between the CNS fellow and their preceptor, the CNS fellow was provided a CNS fellowship manual (Table 1) developed by the TF. It includes phone numbers, maps, references, computer instructions, and other information. The manual also includes a CNS Competency Checklist (Table 2) similar to the validated tool from Urden and Stacy (2011) that is evidence based and used for novice and experienced CNSs. The tool provides a place to document progress throughout orientation and clearly defines responsibilities. The manual ends with CNS competency project assignments that are to be completed within the first year.

For the first 3 months, the CNS preceptor met at least weekly and as needed with the CNS fellow. The preceptor helped with the fellow's day-to-day schedule to ensure appropriate meet-and-greets and onboarding. The fellow shadowed key team members during orientation, including other CNSs, charge nurses, nurse managers, social workers, and other appropriate team members. Clinical shadowing with providers as appropriate was also required. At weekly intervals, the preceptor reviewed the competency checklist. This allowed the CNS fellow to be aware of long-term expectations of their role.

The CNS fellow and preceptor also met with the ACNO on a weekly basis for the first month to discuss the orientation, progress, and any ad-

**Table 1. Table of Contents of Clinical Nurse Specialist Fellowship Manual**

<p><b>I. Introduction</b></p> <ul style="list-style-type: none"> <li>Job Description</li> <li>Verification of Certifications (placeholder)</li> <li>Credentialing Information (packet from cred. office)</li> <li>Phone Numbers and List of James CNSs</li> <li>James Expert Clinical Resource List</li> <li>Finding Your Way (parking, OSU maps, shuttle information)</li> <li>James Map and OSU Map</li> <li>Disease Line-Specific Information (added later)</li> <li>Baseline Survey Monkey Instructions</li> </ul> <p><b>II. Orientation</b></p> <ul style="list-style-type: none"> <li>Orientation Schedule</li> <li>CNS Competency Checklist</li> <li>CBL Instructions</li> <li>Disease Line-Specific Education (add per CNS)</li> <li>CITI Training (human subjects training)</li> <li>Quality Information (placeholder)</li> <li>RBC Packet (hard copy)</li> </ul> <p><b>III. Who We Are</b></p> <ul style="list-style-type: none"> <li>CNS Brochure</li> <li>CNS Annual Report</li> <li>James Strategic Plan</li> <li>Organizational Chart</li> <li>OSU CNS-Related Articles</li> <li>CNS Tracking Tool/Log Instructions</li> <li>CNS SharePoint Site Instructions</li> <li>Top 10 Reasons to Call Consult Pager</li> </ul> <p><b>IV. ONS CNS Competencies</b></p> <ul style="list-style-type: none"> <li>Patient/Client Sphere of Influence</li> <li>Nurse/Nursing Practice Sphere of Influence</li> <li>Organization/Systems Sphere of Influence</li> </ul> <p><i>Note.</i> CNS = clinical nurse specialist; OSU = Ohio State University; CBL = computer-based learning; CITI = Collaborative Institutional Training Initiative; RBC = relationship-based care.</p>
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ditional needs. After this time period, the CNS fellow met with the ACNO on a monthly basis or as needed to ensure that professional needs were being met. Although each new CNS had one specific identified preceptor, shadowing time during orientation was spent with each of the other CNSs depending on their specialty and interests. The implementation of a CNS fellowship program provided new CNSs the opportunity to increase skills related to each sphere of influence: nursing practice, patient care, and systems and organization.

**Sphere Projects**

According to the NACNS Statement on Practice and Education (NACNS, 2004), the CNS practice is based on three spheres: patient care, nurse prac-

tice, and system. After the initial 3 months of orientation, the CNS fellow began working on their three CNS sphere projects, focusing on a different sphere quarterly. The CNS fellow chose a different mentor for each of the three sphere projects, which helped develop relationships with members of the CNS professional practice group. This provided the CNS fellow the opportunity to develop and succinctly present results-oriented projects in front of a group, further developing presentation skills. Sphere projects were tracked on a CNS Sphere Projects Competency Report document (Table 3), which required the CNS fellow to develop projects directly from CNS competency statements, hypothesize a resolution to an issue, review the current evidence-based literature, and interact with key stakeholders related to the project. Projects were shared during 5- to 10-minute presentations at CNS staff meetings with the ACNO in attendance.

A patient sphere project was conducted by a benign hematology CNS fellow and examined the readmission rate for patients with sickle cell disease (SCD). Highlights of this process included frequent reasons for admission of patients with SCD, current evidence regarding care of patients with SCD, and the development of relationships with key players (quality data managers, the director of case managers, and the medical director of the SCD program) in other departments that the fellow would work with in the future. During this sphere project, the fellow discovered evidence that the primary reason for readmission shortly after hospital discharge of these patients was related to poor pain management. In working through this issue within the organization, a proposal for an SCD day hospital was created, which subsequently was approved and is now open. This patient sphere project is an example of how a patient problem became a CNS role systems project.

Another CNS fellow addressed chest syndrome recognition in patients with SCD in a nursing practice sphere project. The CNS fellow was able to utilize evidence to show staff the importance of incentive spirometry (IS) in this patient population as a preventative measure. The CNS fellow held presentations and education for the staff caring for patients with SCD. By educating

**Table 2. Clinical Nurse Specialist Competency Checklist® for The James Cancer Hospital and Solove Research Institute**

*Sphere of Influence: Patient*

Self-assessment				Performance validation			
I	S	Ne	Skill	Description	Date	SV	SD
CNS practice							
Assessment							
			1. Conducts comprehensive patient assessments.				
			2. Obtains data about patient context, such as disease and treatment, culture, age-related factors, psychosocial, and spiritual factors.				
Diagnosis							
			1. Synthesizes assessment data, draws conclusions, and implements nursing interventions.				
			2. Describes patient issues in context, including patient symptoms, functional problems, or risk behaviors inherent in disease.				
			3. Investigates clinical issues systematically and with resolution.				
Intervention							
			1. Selects evidenced-based nursing interventions for patient care.				
			2. Collaborates with interdisciplinary team to integrate nursing interventions into a comprehensive plan of care.				
Evaluation							
			1. Applies appropriate methods to evaluate nursing interventions.				
			2. Monitors patient progress toward outcomes.				
Patient sphere discussion/assignment					<b>Date comp</b>	<b>Preceptor initials</b>	
1. Quarterly DPU Meeting							
2. CNS Consult Pager							
3. ERT Reviews							
4. Clinical Trials							
5. Quality: Falls							
6. Quality: CAUTI							
7. Quality: CLABSI							
8. Psychosocial Grand Rounds							

*Note.* I = independent; S = supported; NE = no experience; SV = skill validated; SD = skill discussed; HAPI = hospital-acquired pressure injury; ERT = emergency response team; CAUTI = catheter-associated urinary tract infection; CLABSI = central line-associated bloodstream infection; WON = wound ostomy nurse; IHIS = integrated health information system; CNE = continuing nursing education; APP = advanced practice provider; RN = registered nurse; ANM = assistant nurse manager; PE = performance evaluation; RBC = relationship-based care; AV = audio visual; VPN = virtual private network; AA = administrative assistant; PCRM = Physicians Committee for Responsible Medicine; MH = mental health; Ed = education; EBP = evidence-based practice; DMC = disease management coordinator. Adapted from Urden & Stacy (2011).

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**Table 2. Clinical Nurse Specialist Competency Checklist® for The James Cancer Hospital and Solove Research Institute (cont.)**

<i>Sphere of Influence: Patient (cont.)</i>							
Patient sphere discussion/assignment (cont.)						Date comp	Preceptor initials
9. Schwartz Rounds							
10. Evidence-Based Practice							
11. Tumor Boards							
12. WON							
13. Disease-Line Orientation							
14. Patient Education							
15. JamesCare for Life, Bonnie Trail							
16. IHiS Personal Patient List							
<i>Sphere of Influence: Nursing</i>							
Self-assessment				Description	Performance validation		
I	S	Ne	Skill		Date	SV	SD
CNS practice							
Assessment							
			1. Assesses patterns of outcomes related to nursing practice and identifies gaps.				
			2. Assesses knowledge, skills, and practice competencies of nurses.				
Diagnosis							
			1. Anticipates intended and unintended consequence of change.				
			2. Considers resource management when weighing benefits of changing practice.				
Intervention							
			1. Anchors nursing practice to evidence-based outcomes.				
			2. Mentors nurses in development.				
			3. Implements educational programs that target staff needs.				
Evaluation							
			1. Documents outcomes in a reportable manner.				
			2. Disseminates results of change.				
Nursing sphere discussion/assignment						Date comp	Preceptor initials
1. CNE Website							
2. Learning Management System							
3. Clinical Ladder							

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**Table 2. Clinical Nurse Specialist Competency Checklist® for The James Cancer Hospital and Solove Research Institute (cont.)**

<i>Sphere of Influence: Nursing (cont.)</i>		
Nursing sphere discussion/assignment (cont.)	Date comp	Preceptor initials
4. PowerPoint		
5. CNS Presentation at James Nursing Orientation		
6. Attend Central Nursing Orientation		
7. Attend James Nursing Orientation		
8. Attend APP Orientation		
9. Nursing Grand Rounds		
10. CNS Lending Library		
11. Policies/Procedures/Clinical Practice Guidelines		
12. Review Educational Needs Assessment		
13. Collaborator on Event Reports		
14. RN Planner for Continuing Education		
15. Quarterly Education Meeting		
16. Literature Search		
17. Support of Nursing Internship/Residency		
18. James Nursing Strategic Plan		
19. CNS Annual Report		
20. IHiS Unit Review, including Care Plans and Pt Education w/ ANM		
21. Inpatient and Ambulatory Unit Shared Drives		

<i>Sphere of Influence: Organization/System</i>							
<b>Self-assessment</b>		<b>Performance validation</b>					
<b>I</b>	<b>S</b>	<b>Ne</b>	<b>Skill</b>	<b>Description</b>	<b>Date</b>	<b>SV</b>	<b>SD</b>
CNS practice							
Assessment							
			1. Uses system-level assessment to identify organizational structures and functions that impact nursing.				
			2. Assess the professional climate and interdisciplinary collaboration of disease line.				
			3. Identifies effects of organizational culture.				
Diagnosis							
			1. Diagnoses facilitators and barriers to achieving desired outcomes.				
			2. Plans for achieving intended system-wide outcomes.				

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**Table 2. Clinical Nurse Specialist Competency Checklist® for The James Cancer Hospital and Solove Research Institute (cont.)**

*Sphere of Influence: Organization/System (cont.)*

Self-assessment				Description	Performance validation		
I	S	Ne	Skill		Date	SV	SD
CNS practice							
Intervention							
			1. Mentors nurses to critique and apply research evidence to practice.				
			2. Develops and implements educational programs that target the needs of staff to improve nursing practice and patient outcomes.				
			3. Develops or influences system-level policies that will affect innovation and programs of care.				
Evaluation							
			1. Evaluates organizational policies for their ability to support and sustain outcomes of programs of care.				
			2. Evaluates and documents the impact of CNS practice on the organization.				
Organization/System sphere discussion/assignment					<b>Date comp</b>	<b>Preceptor initials</b>	
1. Shared Governance and Councils							
2. Professional Picture							
3. Committee Assignments							
4. Email							
5. CNS Tracking Tool							
6. Annual P3/Yearly Goals/Peer Review							
7. Reconnecting to Passion and Purpose							
8. CNS Meetings							
9. Innovation and Research Council							
10. Development and Recognition Council							
11. Patient Care Council							
12. Open Forums							
13. CNS Council							
14. Staff Meetings, Inpatient and Ambulatory							
15. RBC Intensives							
16. Orientation to AV in Conference Rooms							
17. RN Planner Orientation							
18. Yammer							

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**Table 2. Clinical Nurse Specialist Competency Checklist® for The James Cancer Hospital and Solove Research Institute (cont.)**

<i>Sphere of Influence: Organization/System (cont.)</i>			
Organization/System sphere discussion/assignment (cont.)		Date comp	Preceptor initials
19. Jabber			
20. SharePoint			
21. VPN access			
22. Lab Coats			
23. Business Cards			
24. Colleague Meetings			
a. Manager			
b. Director			
c. AA			
d. Inpatient RNs			
e. Ambulatory RNs			
f. NPs			
g. MDs			
h. Social Workers			
i. PCRMs			
j. Clinical Trials Staff			
k. Pharm			
l. Educators			
m. Infection Control Practitioner			
n. MH CNS			
o. Program Manager RBC			
p. Director James Nursing Ed and EBP			
q. Quality			
r. Health Science Librarian			
s. Chaplain			
t. DMC or Navigator in Ambulatory			
u. Event Reporting			
v. Safety Pharmacist			
w. Each CNS			
Primary preceptor initials	Primary preceptor signature		
Other preceptor initials	Other preceptor signature		

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**Table 3. Clinical Nurse Specialist Competency Report**

<b>Patient sphere (Goal: 3 months)</b>	
CNS competencies chosen	<p>A. Assessment of health status</p> <ul style="list-style-type: none"> <li>Analyzes data from target groups and populations to design new programs to improve patient outcomes</li> </ul> <p>B. Diagnosis of health status and plan of care</p> <ul style="list-style-type: none"> <li>Integrates interventions into the plan of care to prevent, remediate, modify, or resolve expected and unexpected outcomes in patients with SCD</li> </ul> <p>C. Intervention</p> <ul style="list-style-type: none"> <li>Facilitates transitions between health-care settings to provide continuity of care</li> </ul> <p>D. Evaluation</p> <ul style="list-style-type: none"> <li>Evaluates the overall effect of interventions on patients, based on synthesis of the data</li> <li>Documents patient care outcomes in a reportable manner</li> </ul>
Specific issue of focus	Why are the readmission rates for patients with SCD so high?
What is anticipated/hypothesized resolution of issue?	SCD patient readmission rates are increasing; recognizing the reasons for readmission would facilitate a plan to initiate interventions to decrease readmission rates and improve patient quality of life.
List 3 key articles from EBP literature review	<ul style="list-style-type: none"> <li>Ballas, S. (2007). Current issues in sickle cell pain and its management. <i>ASH Education Book, 2007</i>, 97-105.</li> <li>Leschke, J., Panepinto, J., Nimmer, M., Hoffmann, R., Yan, K., &amp; Brousseau, D. (2012). Outpatient follow-up and rehospitalization for sickle cell disease patients. <i>Pediatric Blood Cancer, 58</i>(3), 406-409.</li> <li>Tanabe, P., &amp; Ogunseitan, A. (2011). Understanding and meeting the hospitalist's challenge: Caring for adults with sickle cell disease. <i>Journal of Hospital Medicine, 6</i>(5), 245-247.</li> </ul> <p>Attached is Literature Review Matrix</p>
List key colleagues interviewed	_____
Brief summary of issue findings	The number-one reason for readmission was unresolved sickle pain or increased pain after d/c; this is related to pain management post d/c. The data for The James shows increasing admission post d/c. A plan and interventions are being discussed to open a day hospital and an observation unit to decrease readmission d/t pain and frequent ER visits post d/c.
Brief summary of issue status/resolution	Patients with SCD have a high rate of readmission. The articles suggest that improving pain management after d/c will decrease hospital readmission. It is suggested to have outpatient follow-ups 2 weeks after d/c. At The James, a quality review has been executed. It was found that readmission rates have increased over the last year. Currently, a plan is being composed to open a day hospital and observation unit at The James to decrease admission rate and improve patient outcomes.
Brief report to CNS group (5-10 min) date	CNS meeting on May 25
CNS signature: _____	Date: ____/____/____
Preceptor signature: _____	Date: ____/____/____

*Note.* SCD = sickle cell disease; EBP = evidence-based practice; d/c = discharge; d/t = due to.

the nurses, patients are receiving more education as well. The patients have increased the use of IS since this educational rollout.

As a final example of sphere projects, an oncology CNS fellow was interested in timely patient education for patients with leukemia for a systems sphere project. The CNS fellow's evidence-based practice literature review produced minimal results with respect to an interest in developing a time-point structured interdisci-

plinary education process for the 6-to-8-week initial hospital stay for a new patient with leukemia. This project led the CNS fellow to organize and lead interdisciplinary team meetings with key physicians, nurses, case managers, and social workers to develop a time-point education plan. The CNS applied quality improvement principles to brainstorm and developed a swim lane diagram which guided time-point education by each discipline. This education template was ap-

proved by the Acute Leukemia Quality Committee and has been trialed on several patients thus far with outstanding results. The fellow's learning opportunities included leading an interdisciplinary group to solve a clinical issue and applying quality techniques to transform data into a usable process for improvement.

### Important Resources for the CNS Preceptor

Several of the primary CNS preceptors further developed their skills to guide new CNSs by completing the online CNS Preceptor course, jointly offered by Indiana University School of Nursing and the NACNS (Indiana University-Purdue University Indianapolis, n.d.). Objectives for this course were to provide CNS preceptors tools to organize new CNSs' learning experiences, foster engagement, and provide useful and timely feedback. The course included informative videos that depicted CNSs and their personal experiences in guiding new CNSs. Organizational leadership at The James (ACNO) supported the CNS preceptors' development by paying for the course tuition. The course was completed within 30 days of purchase and required approximately 4 hours for each CNS preceptor to complete.

### EVALUATION

The CNS TF designed a self-evaluation for CNS fellows using the NACNS Core Competencies (NACNS, 2010), as well as the Oncology Nursing Society's CNS Core Competencies (Oncology Nursing Society, 2008). The Oncology Nursing Society has developed core competencies for the CNS based off of the NACNS Core Competencies; they are very similar but geared more toward the oncology population. The TF used the competencies as a foundation and designed a 28-question self-evaluation that uses a scale ranging from novice to expert and is given to the CNS fellow upon starting and again at months 3, 6, 9, and at the end of the first year. This approach, based on Benner's Novice to Expert Theory to Self-Assessment, allows the fellow to identify growth over time and opportunities for building his or her skill set (Benner, 2001). The evaluations that have been completed thus far have consistently shown development and growth in each competency sphere.

The CNS fellows' total competency scores increased at each measured interval, with the greatest total competency score increase between months 9 and 12. The CNS fellowship program resulted in self-assessments demonstrating development and growth in all competency spheres of the new CNSs. Although only three CNSs have completed the fellowship, the self-evaluation at the end suggests that the self-assessment competencies of the CNS fellow group nearly matched the self-assessment competencies of the experienced CNS group.

### SUMMARY, LESSONS LEARNED, AND FUTURE DIRECTIONS

The overarching goal of the CNS fellowship program was to help develop an inexperienced CNS into becoming a competent, more confident, and high-functioning advanced practice nurse. Although we have had only three fellows complete the program and currently have a fourth in orientation, the fellowship has demonstrated a positive effect on both the new CNSs and the organization.

Clinical nurse specialists inspire and encourage the academic career development of all RNs. Currently at The James, 92% of the direct care nurses have a bachelor's degree or higher in nursing. Clinical nurse specialists positively impact the recruitment, retention, and staff satisfaction of our frontline nursing staff through education, mentoring, and coaching. Some examples of this include CNS support of staff who seek advancement through the clinical ladder program and attainment of professional certification. Additionally, the number of The James clinical ladder nurses has grown by 74% since 2010, totaling 134 nurses today. The current percentage of certified frontline James nursing staff is 52%, as compared to the benchmark of 37% for Magnet hospitals (American Nurses Credentialing Center, 2017).

There were some lessons learned from this program that will help guide our future use. First, the nature of a structured orientation helped to protect the new CNS from the overwhelming demands of constituents within the organization. It is prudent to note that investment into this formal training program may be more cost effective, as it can decrease position turnover due to the rigors

and stresses resulting from inadequate onboarding (Opperman, Liebig, Bowling, & Johnson, 2018). More inquiry is needed to determine the return on investment regarding the implementation of a CNS fellowship program.

Another lesson learned was that we need to better assess the background, experience, and needs of each CNS and not make the assumption that they all need the exact same fellowship program. For example, does an experienced CNS who is new to our organization differ from a brand-new CNS who recently completed graduate education? We plan to perform a better assessment of the needs of the CNS prior to and during the fellowship and adjust the experience towards the needs of each CNS.

We have discussed developing a student internship program to provide the CNS student with experiences to complement their education. This could potentially serve to provide succession planning for a vacant position within the organization and would allow for development towards the role while also providing employment opportunities. As we continue to experience the high demand for complex cancer care, combined with an increasing shortage of nurses and an ever-changing health-care environment, CNSs play a crucial role in ensuring excellent nurse-sensitive clinical outcomes for our patients. Clinical nurse specialists, like all health-care providers, strive to achieve optimal patient care, which also has a direct impact on the financial well-being of the organization (Duffy, Dresser, & Fulton, 2016).

The James Cancer Hospital has been fortunate to observe minimal turnover of CNSs due to job dissatisfaction. In part, this minimal turnover can be attributed to a centralized structure, created in 2010, where the CNSs report directly to the ACNO. An annual CNS job satisfaction survey conducted most recently in July 2017 indicated that The James CNSs are highly satisfied in their current positions.

## CONCLUSION

Clinical nurse specialists have the expertise to significantly impact patient care and professional nursing practice, as well as the financial health of the organization. Providing a formal

education program to guide CNSs who transition from being a new graduate to a highly functional advanced practice nurse is critical to positively impacting patient outcomes, as well as ensuring the job satisfaction of CNSs. The development of the CNS fellowship with a more structured orientation has been beneficial to new graduate CNSs at The James. Clinical nurse specialists continue to help support the mission of the James to become one of the top cancer hospitals and comprehensive cancer centers in the nation and provide excellent care to patients with cancer. ●

## Disclosure

The authors have no conflicts of interest to disclose.

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