Developing a program to address gaps in practice

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The number of new cancer cases in the United States is expected to increase from 14 million in 2012 to 22 million in the next two decades (National Cancer Institute, 2017). However, shortages of healthcare professionals, numerical growth in the population of older adults, additional treatment options, increases in cancer survivorship, and expanded access to health care through the Patient Protection and Affordable Care Act have resulted in the proliferation of oncology nurse practitioner (NP) roles and responsibilities as oncologists struggle to handle the increasing demand for oncology services (Erickson, Salsberg, Forte, Bruinooge, & Goldstein, 2007). Oncology NPs are now commonly tasked with handling clinic visits, inpatient care (including admissions, discharges, and coordination of care), symptom management, chemotherapy and treatment orders, prescription refills, prior authorizations, new patient consultations, transition to hospice care, and miscellaneous paperwork, among other roles and responsibilities.

Many NPs enter oncology with limited training in this specialty. Results of a 2008 Oncology Nursing Certification Corporation survey suggest that the majority of oncology NPs complete a graduate program focused on primary care and feel prepared to treat patients with general medical conditions. However, in a 2009 Oncology Nursing Society survey, participants described oncology-specific procedures as areas they felt not at all prepared for (Nevijon et al., 2010). These mounting challenges led to the development of an oncology NP fellowship program at Sylvester Comprehensive Cancer Center (SCCC) in 2016. This article reviews the program’s development within an academic medical center, along with barriers encountered and anticipated benefits.

The Value of Nurse Practitioner Fellowships

Advanced practice nurses deliver high-quality, cost-effective care while improving healthcare access (Elliott & Walden, 2015). The role has evolved since its development in the 1960s to meet the ongoing demands of the healthcare environment (American Academy of Nurse Practitioners, n.d.), resulting in an increased presence of NPs in specialty-based practices. However, graduate nursing education does not offer specialized training in any particular area (Harris, 2014). The lack of specialized training results in NPs learning via on-the-job training.

The advent of specialty-focused NPs has resulted in the development of formal fellowship programs aimed at bridging the gap between graduate education and specialized practice (Harris, 2014). The Institute of Medicine (2010) reported that the development of formal orientation or residency programs offers NPs the opportunity to transition successfully into new care settings.
New Nurse Practitioner Integration

SCCC is a university-based cancer center in South Florida with more than 60 NPs on staff. Historically, most new NPs hired at SCCC in the past one to two years have had minimal oncology experience; at most, some NP hires have had a few years of experience as RNS in oncology inpatient and/or ambulatory settings. The majority are either hired internally or participated in a clinical preceptorship at SCCC for their advanced degree. NP hires are provided with hospital and nursing orientation, which includes a course on chemotherapy and oncology basics prior to placement with a collaborating physician; they are expected to achieve competency through on-the-job training.

During a time of high NP turnover, formal discussions conducted one-on-one and as part of the institution’s advanced practice council revealed the need for a fellowship program. Consequently, a fellowship program was contemplated as a retention strategy and a way to attract individuals who want to dedicate their careers to providing quality oncology care and advancing the role of the oncology NP (Norwich, 2016). Components of the fellowship program are listed in Figure 1.

Development of a Fellowship Program

A first essential step was determining the resources available and understanding the training models already offered at other cancer centers; this helped the program developers at SCCC (NP leaders) in the development of a fellowship program offering valuable skills tailored to any oncology subspecialty. Institutions with fellowship programs were contacted to learn more about applicant qualification criteria, clinical rotations offered, length of programs, compensation, and benefit packages. A review of the literature was conducted with the aim of understanding the gaps in knowledge of new oncology NPs. A limited number of oncology fellowship programs are available nationwide (see Figure 2), so current standards from other certifying bodies (e.g., Oncology Nursing Society, Oncology Nursing Certification Corporation, Accreditation Council for Graduate Medical Education, American Society for Blood and Marrow Transplantation) contributed to the design of the program. These guidelines provided a foundation for competency expectations related to clinical and professional development for the fellows.

Adapting the Oncology Nursing Society’s advanced practice nursing competencies into the fellowship program curriculum was critical (Gobel, Triest-Robertson, & Vogel, 2009; Oncology Nursing Society, 2007). Obtaining advanced oncology certified nurse practitioner (AOCNP®) certification and developing skills through active involvement in quality improvement projects were set as fundamental objectives of the fellowship program.

The next steps involved (a) identifying NPs who would serve as preceptors and (b) determining how the fellowship program committee would educate preceptors about and reinforce the role of the fellow, as well as provide tools to guide preceptors in training. The fellowship program committee consisted of program leaders, NPs specializing in hematology and oncology, a quality project manager, a collaborating physician, a cancer support administrator, and a nurse educator; most committee members were involved in fellowship program development. Evaluations were created to allow preceptors and fellows to evaluate each other. Checklists outlining expectations for the preceptors were developed; these checklist evaluations were designed to be reviewed with fellowship program leaders prior to each rotation. Analysis of information collected during the first year of the fellowship program was planned to standardize preceptor training.

Once the foundation was set, an NP fellow position was opened by human resources, and fellow recruitment began. A three-step process was established: telephone interview, panel interview, and individual interview with a collaborating physician. A scorecard was used to identify potential fellows who aligned with the university culture and mission; this was assessed via the use of behavior-based questions that focused on diversity, integrity, responsibility, excellence, compassion, creativity, and teamwork. The scorecard also took into consideration each potential fellow’s previous

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clinical experience, certifications held, publications, and research or quality improvement experience.

**Importance of Preceptor Role**

A 2009 Oncology Nursing Society survey identified that, 81% of the time, collaborating or supervising physicians served as primary preceptors for most new hires. NP preceptors were reported by only 35% of 609 NP participants (Nevidjon et al., 2010).

The foundation of the preceptor process is Benner’s (1984) novice to expert theory, which is based on the Dreyfus model of skill acquisition with its five levels of proficiency development: novice, advanced beginner, competent, proficient, and expert. The fellowship program is designed to expand the knowledge and skills necessary for NPs to transition from entry-level abilities to those that demonstrate proficiency and expertise (Thabault, Mylott, & Patterson, 2015).

Preceptor selection was based on expertise, willingness to participate, and coaching skills. There were no minimum criteria for selection, and priority was placed on the individual’s clinical experience and willingness to serve as a preceptor. Preceptors’ participation in the fellowship program helped them to develop their expertise and reinforced their commitment to professional teamwork.

**Challenges and Future Outlook**

The initial challenge to obtain adequate financial support to run the fellowship program was overcome. Funding was needed for the following items:

- NP fellow compensation or salary and fringe benefits
- Onboarding costs (e.g., credentialing and background checks, Chemotherapy Biotherapy Certificate Course, electronic health record training)
- Time dedicated to fellowship program administrative support (directors and clinical program coordinator)

The program was expected to decrease costly turnovers in NP staff. Duffield, Roche, Homer, Buchan, and Dimitrelis (2014) quoted an average loss of $26,652 for nurse turnover, which is likely an underestimation for NP turnover, considering the loss of revenue. For instance, an open NP position could conservatively cost a clinic $1,500 per day or more in lost revenue potential (MidlevelU, 2018).

Surmounting internal barriers (e.g., time to credential the fellow, which involves medical committee approval of the fellow to practice within the cancer center and the assigning of a start date; this takes about three months) required flexibility and persistence. Other areas that took time and effort to resolve were obtaining a workspace and acquiring funds for the cost of benefits. The time required for credentialing remains a major challenge in the development of a structured program.

In the future, fellowship program accreditation may be obtained through the American Nurses Credentialing Center Practice Transition Accreditation Program. The accreditation process involves evaluation of the fellowship program to ensure that it includes practice-based experience and supplemental activities to promote professional development. Securing the accreditation will allow the fellowship program to be recognized as one of excellence in transitioning oncology NPs into their new roles, as well as to establish national standards for training.

**Implications for Practice and Conclusion**

A structured fellowship program for oncology NPs facilitates appropriate training and mentorship, along with retention. Institutions should evaluate their needs and the needs of new NP hires to provide opportunities that will enhance the NP work structure for specialty-trained professionals. Having a fellowship program will elevate the institution as a supporter of NP education and training, as well as help to attract highly qualified candidates. Although the fellowship program at SCCC is in its first year of implementation, anecdotal reports from preceptors, new NP hires, physicians, and oncology leadership indicate satisfaction with the program’s meeting the needs of the institution and of new NPs. Improvements in patient care delivery

**FIGURE 2. ONCOLOGY NURSE PRACTITIONER FELLOWSHIP PROGRAMS IN THE UNITED STATES**

- **FLORIDA**
  - University of Miami Sylvester Comprehensive Cancer Center
    - No degree offered; 1 year long
  - Loyola University Chicago, University of Chicago
    - Degree offered; 4 years long (part-time)
- **ILLINOIS**
  - Children’s Mercy Kansas City, Pediatric Hematology Oncology Fellowship for Advanced Practice Nurses
    - No degree offered; 3 years long
  - University of Illinois Chicago
    - Subspecialty program degree offered only to those enrolled in a Master of Science or Doctor of Nursing Practice program
- **NEW JERSEY**
  - Rutgers Cancer Institute of New Jersey, Oncology Nursing Fellowship
    - No degree offered; 6 months long
  - Columbia University
    - Degree offered; 1 year long
- **NEW YORK**
  - Subspecialty program degree offered only to those enrolled in a Master of Science or Doctor of Nursing Practice program
- **OHIO**
  - The Ohio State University Comprehensive Cancer Center–Arthur G. James Cancer Hospital and Richard J. Solove Research Institute
    - No degree offered; 1 year long
  - University of Texas MD Anderson Cancer Center
    - Degree offered; 1 year long
- **TEXAS**
  - University of Texas MD Anderson Cancer Center
    - No degree offered; 1 year long
  - Texas Children’s Hospital
    - No degree offered; 3 months long
have also been noted; on the whole, the fellowship program has increased NPs’ skills and led to improved overall job satisfaction for NP fellows and the NP workforce (Hill & Sawatzky, 2011).

**REFERENCES**

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