The Process of Oncology Nurse Practitioner Patient Navigation: A Grounded Theory Approach, Carving the Role

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Abstract

Purpose: The role of oncology nurse practitioner patient navigator and process is not well delineated. To address this problem, a grounded theory study was designed to answer the question: What processes do oncology nurse practitioners use in caring for cancer patients?

Methods: To be eligible for the study the nurse practitioner should be: 1) certified as a nurse practitioner in their respective state, 2) have a certification to practice in oncology nursing, 3) entitled as an oncology NP navigator in their respective institution, 4) at least 5 years work experience in caring for cancer patients. Recruitment strategies consisted of word of mouth snowball sampling, posting on websites, bulletin boards, and blogs of professional organizations; telephone soliciting, and e-mailing. The sample consisted of N=20 nurse practitioners. Data was collected via an open ended interview questionnaire. It was coded utilizing NVivo software. This manuscript details responses of the candidates pertaining to role function which is a subcomponent of the larger data set.

Results: Oncology nurse practitioner navigators are frontiersman in the cancer arena in that they are carving unique novel roles and partnerships. A core category and basic social navigation process was defined as well as challenges. Conclusions: Program development is evident and ongoing in the navigation process and in all partnerships; evolving to manifest a navigation system Suggestions for practice and research as well research methodologies to further the navigation knowledge base have been suggested.

Keywords: Oncology program development; Oncology navigation process; Oncology navigation system; Oncology nurse practitioner navigation role; Utilization of oncology nurse practitioner prescriptive authority

Introduction

The Institute of Medicine (IOM) maintains that the health delivery system is in crises due to the growing demand for cancer care, shrinking workforce, rising cost of care, and complex treatment programs for patients with cancer [1]. The American Nurses Association (ANA) stresses the need for navigation programs to address this current fragmentation in the health care system. As corroborated by the ANA, navigators are needed at all levels of the organization. Studies indicate that nurse practitioners (NPs) have drastically reduced costs and improved the care-coordination process. NP navigators, in general, have been shown to achieve cost effective quality care, while saving millions of dollars [2].

To address the disparities in cancer care the American College of Surgeons Commission on Cancer issued Accreditation Standard 3.1 [3]. This requires that a navigation process be in place in order for cancer programs to receive accreditation.

Established theory validation has determined that processes influence outcomes and vice versa [4]. Additionally, some evidence exists showing that NP navigators expedite cancer care and patient satisfaction [5]. However a literature search showed that the process of ONP navigation is not well defined [5]. According to the American Association of Colleges of Nursing [6], it is important to define processes as relates to outcomes, as there is a thrust in our profession to document outcomes based nursing management as a central focus for practice.

Defining outcomes based practice is of paramount importance for our profession. According to Grainne et al. [7], defining what NPs do professionally promotes nursing in the global context, and helps raise the profile of nursing as a profession.

To elicit information pertaining to the lack of definition of the oncology nurse practitioner navigation process, a study was conducted to answer the following question: What processes do oncology nurse practitioner navigators us in caring for cancer patients [8]?

This article serves to describe a segment of the data pertaining to the oncology nurse practitioner process called: "carving the role". For purposes of this study oncology NP (ONP) navigators are nurse practitioners with a certification in oncology who utilize navigation processes to care for cancer patients along any aspect of the cancer care continuum. Navigation processes are defined as "a systematic series of actions directed to some end" [9].

Methods

The settings for the study included telephone interviews in a location convenient to the participant in any area of the United States. For the most part, the researcher conducted the telephone interviews from her private study behind closed doors from her home. To be eligible for the study, the nurse practitioners were required to be working as navigators and meet the following criteria: 1) license to practice as an NP in their respective state; 2) certification to practice as an oncology nurse; 3) minimum of 5 years full time experience in oncology nursing; and 4) English speaking. These criteria were used in order to recruit a sample of experienced NPs that would provide a detailed description of the navigation process. A convenience sampling framework was utilized to recruit 20 oncology NPs who worked in in-patient and/or out-patient settings. The recruitment strategies were diverse and included: 1. word of mouth networking with peers; 2. soliciting volunteers through public announcements at professional nursing conferences; 3. contacting authors of oncology NP navigation articles or convention pamphlets via telephone or e-mail; 4. posting information soliciting oncology NP volunteers on blogs or websites of professional organizations with organizational director approval; and, 5. recruiting by snowball sampling. **Table 1** depicts the sample in detail. The research protocol involved an interview script, and interviews were conducted until theoretical saturation occurred.

Protection of human subjects

Four major risks for participants were: 1. loss of confidentiality; 2. coercion; 3. fatigue; and 4. discomfort and/or embarrassment with any of the questions asked during the interview. Steps to minimize these risks were taken as indicated below:

Loss of confidentiality: A log of participant names and contact information was kept separate from transcribed interviews. Only code numbers were used on transcripts. All study materials were kept in the PI's secure and locked office. Interviews were conducted via telephone behind closed and locked doors. Only the PI and the dissertation committee had access to the interviews. Tapes were destroyed utilizing a degaussing process.

Coercion: Participant could withdraw consent at any time and was reminded of this right at the beginning of the telephone contact.

Fatigue: Participant was informed of the right to stop the interview at any time and not to finish the interview or finish at a later time.

Discomfort and/or embarrassment with any questions asked during the interview: Participant was informed of right to refuse to answer any question that created discomfort or embarrassment. The PI continually monitored the participant's verbal cues for potential discomfort/embarrassment. The PI was willing to stop the interview if a participant was distressed, in which case the participant would be encouraged to contact her personal health care provider, if needed.

Data collection procedures and analysis

Data collection procedures: Data collection procedures were generated by the emerging theory and mutually agreed upon by student and committee chair. Memoing was utilized during the interview process which was included as part of the data for analysis.

Data analysis: In grounded theory, data collection and analysis occur simultaneously [10]. The goal of data collection in accordance with Social Interaction Theory was to learn the meaning that the NP navigators ascribe and internalize from the situation, and to determine the social construct of navigation formulated through this social interaction. Basic analytic techniques used in grounded theory include sampling, memoing, constant comparison, and coding [10].

Sampling types

In the beginning of the research open sampling was used. The researcher began the interviews and viewed the information through a lens open to all possibilities. The script was examined for events that explained the emerging concepts. In the later phase, the researcher went back to the next interviewee and delved deeper to find answers to the questions to which the previous data alluded [10]. This is theoretical sampling, which is the process of selecting "incidents, slices of life, time periods, or people on the basis of their potential manifestation or representation of important theoretical constructs".

Memoing

Memos were recorded beginning with the first interview and continuing throughout the data analysis. The purpose of memos was to explore data, identify properties of the concepts, make comparisons, determine relationships between conditions, and develop the story [10]. These memos were included in the data analysis process.

Constant comparison

As an incident was noted in the research process, it was constantly compared for ways in which it was the same or different from previous incidents. The concepts were labeled and grouped according to the noted variations [11] through the use of NVivo for Windows and regular review with committee chair.

Data analysis and coding

Line by line coding: Data analysis used line by line coding; each line of the manuscript was coded for concepts, using NVivo for Windows software. Line by line coding is a technique developed by Glaser [12]. This method works well with detailed data involving processes as in this case. Line by line coding allowed the researcher to remain open about the data and its individual parts, defining the actions of the process, identifying the tacit assumptions, and comparing the data amongst the participants. This led to the development of categories and processes.

Open coding: The data was next analyzed by "breaking data apart and delineating concepts to stand for blocks of raw data" [10]. It involved "…the process of breaking down, examining, comparing, conceptualizing, and categorizing data" [11]. This was done for each question through the use of NVivo for Windows software. Seventy-two concepts emerged from coding 16 interviews.

Axial coding: The next step involved axial coding, the development and linking of concepts into conceptual families [12]. After interview ten, the concepts were separated into eleven thematic categories, and it was believed that theoretical saturation had been achieved.

Axial coding specifies the properties and dimensions of a category [10]. The goal is to link categories with subcategories, and to define interrelationships [12]. Though this is listed separately from open coding, the two go hand in hand as they occur simultaneously. As this researcher worked with the data, relationships between concepts and their overall connectedness to each other was sought. Interview questions were tailored to elaborate on the concepts and interrelationships. Questions such as who, why, when, how, and with what consequences were proposed prior to the next interview [10].

Selective and theoretical coding: The outcome of selective coding was the formalization of the relationships between concepts into theoretical frameworks [12]. All categories were explained around a core category or central phenomenon. An explanation surrounding the variations of the categories was sought [11]. Selective coding uses constant comparison and memoing, and results in further refined categories which were described, theorized, and cross-referenced with the literature. This resulted in a description of the basic social process, as well as processes that were occurring within the codes.

Scientific rigor

Credibility, transferability, dependability, and confirmability are four established criteria for evaluating qualitative research [13]. Credibility refers to the veritability of the findings [13]. One method of achieving this is through triangulation. Triangulation is taken into consideration in the data collection process and refers to using more than two data sources and methods. This study utilized data collected from researcher memoing and published studies, as well as taped interviews. Additionally, when indicated, various sampling strategies were used. For example, parallel sampling involves two or more cases, pairwise sampling involves comparing one case to others in the sample, and multilevel sampling involves the comparison of two or more subgroups taken from different levels [14]. These sampling techniques were implemented. This ensured data triangulation which involves data collection through different sampling methods to represent data from different time periods and social situations as well as different people [15].

To address reflexivity, the researcher examined her own feelings regarding navigation prior to entering the field to prevent bias in interpretation [5]. Transferability refers to applicability of the findings in other contexts [13]. To ensure transferability, the researcher strove to look at navigation in both inpatient and outpatient settings until the thematic categories were saturated with a rich description of the phenomenon of navigation. Dependability refers to showing that the findings can be replicated and consistent. The researcher tracked the research process by documentation of an audit trail, which was reviewed by the committee chair. Additionally, a reflexive journal detailing the researcher's self-appraisal as well as ethical, social, and political views [16] was included as part of the data collection.

Results

Sample

The sample was female with a mean age 52 years. For The average years worked in nursing were 25, oncology nursing 19, navigation 7. **Table 1** describes the sample.

Core category: The basic social process (BSP) centers on a core category [17] which integrated the theory. This was "expediting care along the cancer continuum." This was the NP navigation goal, as failure to expedite care along the cancer continuum would result in treatment delays, and patients being "stuck in the system."

Basic social process (BSP): A BSP in grounded theory centers on the core category [17]. The BSP was that of connectivity and defined as "staying connected to the patient and to the system." Through interfacing with the system, the navigator was a pivot point for care for all those involved in the patient's cancer journey. A participant stated "we're the glue that holds things together".

Lack of a job description

The navigators indicated that there was the lack of a job description, and it there was it did not accurately reflect what it takes to carry out the job.

"…when I first started I was a general navigator and that got to be so crazy…I had everything from solid tumors to liquid tumors…so now what I am going to do is focus on GI and thoracic and carry these patients all the way through to that survivorship process…" (#2)

"…when I was hired there, there was a job description…but like a lot of navigators it really didn't describe what you do…and they didn't know what I would be doing…" (#4)

"…but when I went into my role as a nurse navigator, it was a brand-new position, and the job was posted as an Oncology Nurse Practitioner. They asked me, and I said that I would love to do it, but the program wasn't developed so I had to start from scratch…" (#18).

Table 1 Sample.

Demographics	
Total	20
Gender	Female
Average Age	52
Nursing School Graduation Year Average	1989
NP License State	
Arkansas	1
California	5
Florida	2
Illinois	5
Kentucky	1
Massachusetts	1
Michigan	1
New York	2
New Jersey	1
South Dakota	1
Highest Degree Earned	
AD	1
MS	14
MSN	2
Post Masters	1
No Response	2

Importance of key contacts

Key contacts are instrumental in facilitating the definition of the ONP navigator role. The most frequently mentioned source of support and/or resistance was from physicians and administrative supervisors.

Physicians: "Well I am qualified to do history and physicals, so there are navigators that have their role set up that way and that would be an option probably more so than in an academic setting because it is just a matter of physicians accepting what you are able to do as an advanced practice nurse…" (#4)

"…you walk into a place with an established referral pattern of physicians that have worked together for many years, then you come in and you say…I can help you…and I am willing to

work hard at it…will you help me?…and it does not happen overnight. I think that was the biggest challenge for me professionally, was to prove my worth, and let them know I am not going to go away." (#5)

"…I'm coming into it in gang busters about taking care of these patients and what happened was some of the other primary care physicians, family practice people were a bit uncomfortable and thought that I was going to take their patient…" (#18)

Administrative supervisor: "of course with the survivorship, the advanced practice nurse can do management and interventions where an undergraduate nurse could not…I don't know, I have to get my administrators to cooperate. Sometimes it helps to let them see the big picture because they have to focus so much on the bottom line…you have to understand what your role is going to be…" (#4)

"…not having a physician, that is the head of the breast center…not really having a physician that is the head of the oncology program…not really having an administrative person that coordinates all of that…so yeah, it's a challenge. I have so much support though from our administrators here, you know, my boss, you know and the physicians. There are physicians that work for us and are affiliated with us, you know, are just super as far as working with me, they trust me they know that I am going to take good care of their patients. (#7)

"…Right now, there are meetings with about integration of tomosynthesis mammograms into our facility. So there are meetings with the radiologists who do breast imaging, to show them the plans for the scanner, because we are going to have to build more space…A lot of liaison work between the administration and the radiologists and the radiologists and the technologists, the radiologists, and the breast surgeons. (#16)

Partnerships

The establishment of partnerships took place between the NP navigator synergistically between the patient, facility, and community.

Patient partnerships: "I had an intern that was a nurse that was a lay navigator. I have had her as an intern for a semester, and she followed with me for probably the first few days and she would come in with me, and I would do the NP part and she was very good with coming up with a plan for helping them with their anxiety, pre-op fears, she would do a stress reduction session with them for maybe 10 minutes or something, and that was unique to her because that was her kind of specialty." (#1)

"So anyway, we developed a program; I worked together with a cardiac pulmonary nurse which I think is the perfect marriage, if you call it that. She develops the cardiac pulmonary end which is very much smoking related, all the things that happen there, and I the cancer, end so we work together with classes, support groups; there were no support groups in the area before we started it, we do two…we even

moved one to (--) recently, so that we could get people closer to that area…” (#6)

“Sometimes what happens in my facility since we are a screening facility is that if a patient comes in for a screening mammogram and doesn't have a physician, then I will become their provider.” (#17)

Facility partnerships: “…I kept a log, and then it was set up with me to meet every month with my administrator, who is now my director and I showed it to him and I said look, you are paying me a lot of money, you recruited me to come here, you are paying me a lot of money…do you really want to pay me this much money to do this stuff when you can hire a Social Worker that is making half of my salary to take care of these problems. They hired her, first she was part time, then I got her job bumped up to full time because I had her keep a log.” (#4)

“cancer community group has a navigation matrix that you can follow and do assessments on, just on your navigation program. So that's something that we have developed recently…so we can set goals for navigational programs, and how each one of us navigators in our own cancer type can see that we can improve? How can we get to a level five?”. (#11)

“Yeah, in the past the nurse practitioner is the one who would return the phone call and interview the person who's making a second opinion request. But we've actually, sort of become too busy to make that initial contact. Now we just actually started. We hired a nurse navigator. She's not a nurse practitioner; she's a nurse navigator who might be doing that first call. Now if she identifies somebody who is appropriate for my multidisciplinary clinic she will let me know and either I will contact her or she will contact her”. (#13)

Community partnership: “I came on board, and I think that with the nurse practitioner skills and knowing all of the providers in the area…now I am so busy …I can't think straight…LAUGH…” (#2)

“So we actually wrote a grant to the Coleman Foundation and were able to hire a –she's a lay outreach coordinator. You could almost call her a navigator…she actually goes out into the community, you know, teaches about, the importance of -- screening mammography…She's from Mexico, she's a native Spanish speaker, but she teaches—she taught Spanish in the public school here for years. So she is very bilingual and has a lot of contacts in the community. So we've been able to reach, you know, a considerably more, larger group of our Hispanic population. (#7)

“We help to facilitate the child to either transition back into the school or work with getting them home instruction, so we triage phone calls with the schools. If there's a - a question that if for example, the child was given an exposure to some kind of communicable illness or if they - if the child needs to come back to school, we have-we meet with the faculty - we talk about the educational needs, the physical needs and the social needs of that student.” (#15)

Program development

Program development is evident and ongoing in all steps of the navigation process and in all partnerships, evolving to manifest a navigation system.

“…have to tell you that part of my role now is with a survivorship clinic… and beginning the end of October the beginning of November I actually have a set schedule like I would in a regular clinic for survivorship patients…so eventually these patients that I have been navigating will end up being in my survivorship clinic, so I am working on the survivorship care plans right alongside from the day of diagnosis…” (#2)

“…they are getting ready to hire an outpatient palliative care provider; I think that is going to be an NP, that's going to be really good. I am looking forward to that. That's going to help me, because they can help with getting their medications, you know, with their symptom management, let's see…that they get good care, and that we do the best for them that we can. (#18)

“Yeah it will be a combination of ADN's with OCN's with MSN's as nurse practitioners who will be…I guess it could be called a patient navigator who can be an ADN or a BSN as long as they have an OCN, and then they will be working as a nurse practitioner who will be doing a lot of the follow-up care of that patient.

So that once they leave the diagnostic division they will go into the cancer division: and the navigator from diagnostics will be handing that on to the navigator from cancer, and I will be handing them off from me to the nurse practitioner over in the cancer side...and then they will be working very closely with those patients in getting them to all the right places. (#9)

“…only one in a lead position. Although there are some places where more managers are involved in the navigation program that may be doing-you know, have their broader perspective and the program evaluation pieces…but I think mostly it's nurses or nurse practitioners doing the actual navigation and not the lead or more strategic positions…my Excel spreadsheets, my PowerPoint tools, and my business perspective… looking at growing the program, and marketing.”

“I make a picture perspective of how the program fits at the medical center…I do the assignments for the team, and a little supervision. I'm the resource person for any questions. I do the statistics, program evaluations, plan the meetings, set the agendas…marketing and things like health questionnaires, the cancer forums that we have monthly for the community education. I also carry a case load that's a smaller one than the other two navigators.” (#14)

Support for utilizing APN skills a challenge in some cases

In carving the ONP navigation process, navigators seek to practice to the highest level of their licensure, possible in some cases and not in others. As mentioned previously, alliances with key contacts were essential for program success. The ONP

navigator continued to refine the program by incorporating the unique APN skillset.

"and if you are looking at the standard for accreditation from the Commission on Cancer…and I caught big gaps…and so that's why my role has evolved and with my particular skill set…they are looking at the fact that they could be probably be billing for a number of the things that I am doing…and hire an undergraduate nurse to actually function as a navigator, so although on paper my duties as a navigator mean that you are there to identify barriers to care for patients and address those barriers to care for patients…that's probably going to be turfed over…as it should be, so that I can do the other things that my skill set allows me to do…history and physical and getting all the records together and checking to see what other tests need to be done prior to meeting with the medical oncologist for example who would develop the treatment plan…the genetics risk assessment…with the survivorship, the advanced practice nurse can do management and interventions where an undergraduate nurse could not…I have to get my administrators to cooperate." (#4)

"So part of our role I think is teaching the fellows how to do chemo well too. You know they come in and they haven't done that, and they're suddenly writing chemo orders where we've been doing it…they are learning about surgery too, so they have to be skilled both surgically and pick up all the MED ONC stuff, and sometimes they're stronger surgically than they are at like getting people through treatment. So it's a nice model to where the nurse practitioner could help to really get those fellows up to speed so they will be good attending's…a nice role" (#10)

"…because our role as a nurse practitioner is-I don't want to say all-inclusive and very comprehensive, but for lack of terms, we are sought out to not only do direct patient care, but also help facilitate everything involved in patient care, whether it is coordinating home care, working with people who provide medications, working with the insurance…I talked with you about the involvement that I have with the schools. I work in palliative care bereavement program-I started a survivorship program…there are so many roles that we have and the opportunities are endless." (#14)

Discussion

Lacking a well-defined job description, and/or one that entailed what it would take to do the job, these navigators were pioneers in the field as they seemed to triage the patient/facility/community issues that they were faced with as they expedited care while staying connected to the patient and to the systems. The systems component to the navigation role has corroborated in the oncology nurse navigation role delineation study. According to Lubejko et al. [18] "…the clinical or staff nurse usually focuses on meeting patients' clinical needs in one setting whereas the ONN most often provides care coordination, guidance, education, and advocacy across care settings ".

As they prioritized the needs across care settings, these navigators realized that the care coordination tasks could not be carried out by a sole navigator. This ensured the development of navigation systems which consisted of various alliances tailored to the patient/facility/community to expedite and coordinate patient care. Thus, they began to forge the way for a navigation system; the most common of which was the RN/NP alliance. Other strategies included dividing the navigation duties by disease state which required the hiring of other navigators. Central to the development of the navigation system was the necessity to distinguish between RN navigator duties, and ONP navigator duties. This was the most frequently used alliance that was documented in this study.

They recognized that the responsibilities of the RN navigator were more supportive; and that the NP navigators were centered on those which utilized prescriptive authority privilege's. Triaging phone calls and reducing ER admissions are well cited in the literature as clinical outcome of the advanced practice nurse [19]; as are symptom management [20], survivorship clinics [21], and genetic counseling [22]. **Table 2** depicts other ONP navigators functions performed by the nurses in the study.

Table 2 ONP navigator functions cited in study.

Care Coordination	Administrative Duties
Reduce ER/hospitalizations by managing post treatment side effects	Collaborate with administration to identify quality metrics for process improvements
Improve access to care such as provide management of primary care needs, and order and co-ordinate referrals	Build and expand the cancer program
Decrease stress	Community assessments and outreach
Telephone counselling	Clinic set up for appointments with billing system
Test result notification of pathology reports	Look for navigation gaps along the cancer continuum and develop an action plan
Review outside records	
Streamline care for physicians by seeing the patient ahead of time then giving MD report	
See walking patients with needs and questions	
Symptom management	
Survivorship clinics.	
Genetic counselling.	
Gather information for multidisciplinary meetings.	

The ONP navigators identified administrative and physician support as vital to the role; and that lack of thereof presented challenges in the utilization the prescriptive authority components of the role. These issues were not only inherent in this sample of ONP navigators but have been identified as challenges for implementation of the advanced practice role in general [22-25].

Most of the ONP navigators did not have structured clinic time, but would see patients on an as needed basis. As their role began to solidify around the needs of the institution, they looked at ways in which they could capitalize on the prescriptive authority aspects that they were licensed to do. As aforementioned this necessitated that they distinguish the ONP navigator duties from the RN navigator duties. Utilizing their unique skills and talents they looked for ways in which they could utilize their prescriptive authority to meet accreditation standards. This resulted in an inventory of the institution cancer continuum as it presently existed as they searched for ways to utilize and develop their unique skills to close patient care gaps. Vitally important to role delineation was the necessity of distinguishing between the ONP and physician role.

In summary program development is evident and ongoing in all steps of the navigation process and in all partnerships, evolving to manifest a navigation system. Key contacts are instrumental in facilitating the definition of the ONP navigator role. In carving the ONP navigation process, navigators seek to practice to the highest level of their licensure, possible in some cases and not in others.

Implications for practice

The core category identified in this study, which can be translated as the major navigation metric is "expediting cancer along the cancer continuum". Thus a reasonable approach to integrating an ONP navigator into the system; would be to first do any inventory of impediments that interfere with timely patient care. A game plan can then be implemented utilizing QA approaches. Two examples of quality assurance strategies are process mapping [26], and six sigma [27].

The majority of the navigators in this study served as consultants in collaboration with administration for identifying gaps along the cancer continuum in reference to "staying connected to the patient and to the system". They then assisted in development of a plan of action for the necessary changes [28]. Braun et al. researched a variety of tasks that cancer patient navigators perform across the cancer care continuum from education/outreach through end-of-life care. This can serve as a valuable source for change strategies.

In order to integrate the ONP navigator into the system administrations must be utilized as a key alliance for support [29]. A clear definition of the nurse practitioner (NP) role is important especially as relates to leadership positions. Health care organizations need to prioritize building and incorporating NP's into the facility infrastructure [30]. This contributes to practice development within an organization [31], and places the NPs' in an advantageous position to promote outcomes based care. **Table 3** depicts areas in which the ONP navigator can work with administration to maximize the potential components of the role and position the ONP in an advantageous position to spear head outcomes based care [32-34].

Implications for research

It is apparent from this study that the duties required to deliver "seamless and timely care" require a navigation system. Because this study is qualitative and on the lower end of the evidenced based practice triangle, verification of the findings are in order through the use of quantitative methodologies. Questions for further research include but are not limited to: what is the best mix of skill set that can be used to facilitate seamless care for your patient/institution/community? The RN/NP partnership is a logical first step in answering this research question, as this partnership was frequently utilized in this study. The quasi-experimental research design is well suited for this study [32].

How much time does the ONP navigator spend in non-nursing duties? Time studies can answer this question. The information obtained can assist the navigator in further defining the placement of personnel in the navigation system.

What is the impact of process improvement measures on timely care? Time studies can be designed to answer this question. It would be important to define this metric for each disease state via literature search [33].

What are the different role functions of the ONP navigator? Survey research can answer this question. Once the role functions are verified, a job description can be formatted [34,35].

Table 3 ONP navigator role functions/actions for the facilitation of outcomes based care.

Outcome	Role
Financial Productivity	Determine how you can be get the highest return for investment [25].
	Build in a billing system for time spent in the bundled activity [32].
	Build into the cancer continuum clinic slots in areas that incorporate your unique skills which can be of benefit to the institution [25].
Staying Connected to the Patient and to the System	Negotiate for an administrative component to the role [30].
	Perform time studies to keep tract of non-NP duties to rationalize more support staff and build a navigation system [34].
	Make a list of key contacts that can help you facilitate timely care and continually add contacts/stakeholders to your list that can help you grow your program [24].
	Identify gaps along the continuum in reference to "staying [28].
Role Development	Make periodic revisions of jobs description as your role evolves [21].

Conclusion

It has been determined that program development is evident and ongoing in all steps of the navigation process and in all partnerships, evolving to manifest a navigation system.

Fundamental to this process is the formation of key contacts which are instrumental in facilitating the definition of the ONP navigator role. In carving the ONP navigation process, navigators seek to practice to the highest level of their licensure, possible in some cases and not in others. Suggestions for practice and research have been suggested to better define the ONP navigator role and the process of program development.

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