## RESEARCH



# Training cancer caregiver navigators: experiences from implementing the eSNAP and caregiver navigator intervention

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# Abstract

Patient navigation is increasingly common in cancer care. While navigation programs often involve informal family caregivers, few navigation interventions specifically target the family caregiver. We developed the eSNAP and Caregiver Navigator Intervention to help cancer family caregivers identify and capitalize on informal and formal social support resources. While the skill set for patient navigators may be adequate for supporting caregivers, other skills and areas of knowledge expertise are needed. In addition, sparse documentation of navigator training best practices creates further challenges for dissemination and implementation. Our goal is to describe the education and training of cancer caregiver navigators within key competencies used to prepare and support navigators to deliver our manualized intervention. Nationally recognized navigation competencies, related to developing a sensitivity to ethical, cultural, and professional issues, knowledge development, skills development, and practice-based learning, were identified and adapted. Performance goals were identified within each competency. Training activities were selected to support competency development. Based on adult learning theories, we emphasize multiple learning strategies, including experiential learning and critical reflection. Two caregiver navigators engaged in initial training between December, 2019 and February, 2020. Initial training was supervised by study leadership, who coordinated with experts and stakeholders. Navigators completed initial training programs that include navigation and protocol-specific competencies are needed. Given the lack of detailed training programs in the literature, we created a flexible, multimodal learning approach that other teams may adopt.

Keywords Navigation · Caregivers · Oncology · Community health · Training · Competencies

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# Introduction

Patient navigation (PN) is increasingly common in cancer treatment and survivorship to assist patients to overcome barriers to achieving cancer-related care [1]. Research suggests that there are favorable outcomes associated with PN including better adherence to screening, diagnostic care, and treatment, and increased satisfaction with care [1–5]. With the increase in PN programs, there are now descriptions of training and education programs for navigators [6, 7]. Several professional organizations have adopted accreditation standards which require that PN be delivered as part of cancer care [8, 9], resulting in significant growth. Effective national PN training programs have been established in the USA [6, 7], but most patient navigators in the USA receive only site-specific training or a combination of site-specific and national training [6].

There are a growing number of nationwide studies describing common activities of oncology and other PN [10-13], but there

is no consensus yet in the field regarding expectations for the PN role. Thus, it is not surprising that oncology navigator training practices vary widely, and are not well documented [6], and may depend on the professional certification of navigators [14]. A narrative review of 59 PN efficacy studies that described training practices identified five key domains to be outlined in descriptions of training programs [6]. These include content of material (both topics and skills), frequency or duration of training, occupation of trainer, location and format of training, and learning strategy. While 80% of studies described training content, the key skills of communication, professionalism, and assessment were infrequently addressed. There was also a lack of description of general topics such as patient care or health education. The other four key domains were described much less frequently (27-53%), and no studies described all domains. This lack of information can create challenges in dissemination and implementation of existing navigation programs, as well as challenges in design of new programs in which a training curriculum must be adapted to the specific population.

PN was originally designed to address barriers to timely cancer care among individuals with fewer resources [15]. The model has spread to other populations and health conditions. Whereas navigation programs often involve caregivers-family members (or "chosen family") who provide unpaid help and support [16]—in facilitating care for cancer patients and survivors, few programs are designed to support cancer caregivers specifically in identifying and coordinating resources to meet their unique needs [17, 18]. For example, in addition to emotionally supporting patients, assisting with medical/nursing tasks, and coordinating patient care, many cancer caregivers must manage competing roles and responsibilities and their own emotions around providing care [19]. Whereas many PN skills (e.g., problem solving, providing emotional support [10, 20]) translate well to caregiver navigation, other skills and new areas of knowledge expertise are needed. To meet this need, our team has developed an intervention which uses a web-based tool (eSNAP) to help caregivers identify and visualize existing informal social support resources, and offers caregiver navigator sessions to help caregivers capitalize on these resources and connect to existing formal services [21].

In this paper, we describe the education and training of cancer caregiver navigators within key competencies to prepare and support them to deliver the manualized eSNAP and Caregiver Navigator Intervention.

# Methods

# Overview of eSNAP and Caregiver Navigation Intervention

The eSNAP and Caregiver Navigator Intervention provide caregivers of patients with a primary brain tumor with tools

to identify and capitalize on existing support resources, while also making caregivers aware of relevant and available formal services, such as social work services [22]. Neurooncology caregivers were chosen based on their high levels of burden [22, 23]. The primary outcome is caregiver wellbeing, and secondary outcomes include patient well-being and caregiver and patient healthcare utilization.

As part of the intervention, caregivers are guided to create a visualization of their informal social support resources in the web-based tool, eSNAP [24]. Next, they are offered 8 weekly individual caregiver navigation sessions delivered by phone, video conferencing, and/or email. Each session was designed to begin with a brief assessment of a caregivers' existing support resources based on eSNAP and discussions with the caregiver. Navigators develop a caregiver-specific plan to address social support needs. The navigator may provide social support directly (e.g., emotional, informational) or may assist caregivers in obtaining support from their network or from formal resources through motivational interviewingstyle communication and problem solving. Each planned module concludes with an activity for the caregiver to complete or topic to think about throughout the week to practice what is discussed in the module. Because navigator sessions are needs-driven, the amount of time is variable. A session averages about 40 min. The 8-week intervention is currently being tested in caregivers of patients with a newly-diagnosed or recurrent primary brain tumor; study details are available elsewhere [21]. Our primary focus in this manuscript is on the caregiver navigator training.

# Model of navigation

There have been three proposed staffing models of patient navigation which consider familiarity with a community or patient population as well as professional background and training [25, 26]. One model includes navigation provided by non-clinical navigators who often are community health workers, peers, and professionals with non-health care degrees who serve as "cultural brokers and interpreters," "natural helpers," or "change agents." A second model has navigation provided by social workers, nurses, and others with medical training who are collectively referred to as clinical navigators. A third staffing model includes a multi-disciplinary team and has been championed by the founder of patient navigation, Dr. Harold Freeman [27]. We selected a multi-disciplinary team model for our caregiver navigation intervention.

## **Navigator recruitment**

A key factor in success of a navigation intervention is identifying, recruiting, and retaining qualified candidates for the navigator role. We began the recruitment process by identifying knowledge, skills, and abilities needed to successfully accomplish navigator responsibilities. These were then used to craft a job description. Key navigation skills were identified based on previous research [10]. Our ideal candidate would also have some background in an oncology setting and have skills suited to interacting with participants under stress as well as research and clinical team members.

Candidates were interviewed first by the lead author/project principal investigator (PI, a social psychologist) to determine general fit with qualifications and interest in the position. Successful candidates then progressed to a panel interview with the entire research team. The panel interview used competency and behavioral/situational approaches to identify candidates' previous experiences and probable approaches to hypothetical scenarios. Additionally, the panel interview offered the opportunity to assess the candidate's ability to interact with diverse team members. Team members debriefed after each interview.

# Development of Caregiver Navigation Training Program

Our training program was designed to both socialize and convey new knowledge and skills to the caregiver navigators. Key navigation competencies were identified, which map to nationally recognized navigation competencies [12]. Competencies were adapted by combining the original communication and team interaction competencies to focus more broadly on communication and interpersonal skills. A research knowledge competency was also added to ensure that navigators understood the importance of key research methodology features (e.g., standardization, documentation) in navigation.

#### Onboarding

An onboarding process was developed for implementation prior to role-specific training to create clear performance expectations and to engage the navigators as members of the research team. Introductory meetings were set up among team members to encourage collaboration and enhance informal learning [28]. For example, existing team members would serve as mentors, role models, or resources for information, and help set expectations for team dynamics and culture. The onboarding process also included developing navigation documentation and identifying software to capture navigator and caregiver interaction notes. The expectations and documentation process were communicated to navigators.

### Training

As shown in Table 1, goals were identified within each competency, and training activities were selected to

support competency development. Training was based on adult learning theories to address these competencies and provide this knowledge base, emphasizing experiential learning and critical reflection [29]. To facilitate engagement, training activities across competencies were offered via multiple modalities that used both passive and active learning. While some topics were covered using scholarly material, such as directed readings of academic book chapters and the study protocol, we also used blogs, video lectures, meetings with stakeholders and experts (both inperson and via video-conference), shadowing, and roleplay. All activities occurred locally, but we also leveraged video-conferencing to expand our reach; several stakeholders and experts leading specific training activities were located across the country.

Training activities within each competency were prioritized to build on each other. Establishing sensitivity to ethical, cultural, and professional issues was first, followed by knowledge-building within research, health and caregiving competencies. Next was skill-building within communication/interpersonal skills and caregiver coordination competencies, followed by experiential practice in practicebased learning and systems-based practice competencies. Interactive aspects of training reinforced traditional passive training strategies and were designed to contextualize information and build relationships and empathy. For example, navigators reviewed written scholarly material about cancer symptoms, blog posts about individual experiences, and institutional lists of resources. Navigators then met with stakeholders, including clinicians, navigation experts, patients, and caregivers, to ask questions and refine their understanding. Finally, navigators engaged in experiential practice, role playing caregiver encounters, practicing documentation, and conducting their own search for additional resources to meet specific emerging caregiver needs.

Training was designed to be iterative and flexible to meet the needs of navigators with different backgrounds and prior training. In other words, navigators and supervisors worked together to address individual needs and provide additional opportunities for training when needed or requested.

### Supervision

Navigators were provided a checklist of training activities organized by priority (i.e., required onboarding activities and safety/ethics training were listed first, but navigators could choose the order of activities within each competency based on interest/time) and were able to self-direct learning, moving through the training activities at their own pace. The PI and Lab Manager coordinated introductions and meetings with stakeholders and experts, and helped schedule practice sessions. The PI provided ongoing supervision in coordination with content experts, especially in later phases of

Competency (based on Valverde et al. [12]	Performance goals	Training activities	Learning strategy	Format/supervising role	Approximate duration
Initial training and continuing e Sensitivity to ethical, cultural, and professional issues	ducation				
	Understand performance expectations and understand the role of the caregiver navigator	Meeting to review expecta- tions and evaluation criteria	One-on-one discussion #	In-person meeting with Prin- cipal Investigator (PI) and Lab Manager	Initial training: 1 h (Yearly continuing education)
	Understand and respect prin- ciples of safety, confidential- ity, and ethics	CITI research basics training Discuss policies regarding high-risk caregiver referral	Lectures and written materi- als +	Independent review of written and online materials In-person meetings with PI and social work staff	Initial training: 3 days (Yearly continuing education)
	Understand and follow institu- tional rules and regulations	Institutional health and safety training Review of institutional website, available resources, campus tours	Lectures and written materi- als +	Independent review of written and online materials Staff-directed in- person tours	Initial training: 3 days (Yearly continuing education)
Research knowledge					
	Understand rationale for the study and general research methodology Apply research knowledge to study procedures	Review of study protocol and caregiver navigation manual Review of all study resource documents Meetings with PI and study staff	Written materials + In-person group meetings #	Independent review of written and online materials One-on-one and team meet- ings, coordinated by PI	Initial training: 2 weeks (Continuing education as needed)
Health and caregiving knowl- edge					
)	Demonstrate knowledge of the caregiving and neuro-oncol- ogy biopsychosocial experi- ence, including barriers to caregiver social support, patient clinical experiences, and end-of-life issues	Directed readings from the Handbook of Psycho- Oncology Review of national cancer organization websites Watch recorded lectures on the effects of a brain tumor on the patient and implica- tions for caregivers (UCSF resource)	Written materials, web-based materials, video lectures +	Independent review of written and online materials, videos	l week l week

 Table 1
 Caregiver Navigator Competencies

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Table 1 (continued)					
Competency (based on Valverde et al. [12]	Performance goals	Training activities	Learning strategy	Format/supervising role	Approximate duration
Communication/interpersonal skills					
	Demonstrate effective and professional communication with caregivers based on their needs, goals, strengths, barriers, solutions, and resources	Readings and discussion regarding documentation, confidentiality, communica- tion, boundaries, profession- alism, and ethics Presentation and discussion of situational navigation vignettes Shadowing patient navigator	Written materials + Group meetings, shadowing #	Independent review of written and online materials Virtual discussion with team members, coordinated by PI In-person patient navigator shadowing, coordinated by PI	Initial training: 3 h
	Foster trust and collabora- tion between the caregiver, research, and clinical teams in meetings and informal communication	Shadowing and meeting with clinic oncologist, social worker, nurse Review of patient/caregiver blogs Group interview with neuro-oncology patient and caregiver Bimonthly all-team project meetings	Written materials (blogs) + Individual and group meet- ings, shadowing #	Review of written and online materials In-person and group inter- views, clinical shadowing, coordinated by PI	Initial training: 3 days (Continuing education: 1 h/ month)
	Develop and demonstrate empathic and culturally- competent communication to maintain positive inter- personal interactions	Role-play assessment, problem-solving, empathy, active listening, difficult conversations, with feedback	Role play and feedback #	In-person role-play with navigation expert & clinical psychologist, coordinated by PI	Initial training: 1 day
Initial training and ongoing sup Caregiver coordination	ervision				
	Conduct caregiver assess- ments (i.e., assess needs, goals, self-management, behaviors, and strategies for improvement) using theory-based techniques, documentation, confidenti- ality/privacy, professional boundaries, and ethics Demonstrate knowledge regarding resources avail- able to address caregiver needs	Role play protocol sessions with feedback Review and discuss partici- pant sessions and documen- tation	Role play and feedback #	In-person role-play with PI, clinical psychologist, anthropologist, other team members, coordinated by PI and Lab Manager Ongoing PI supervision, navi- gation expert consultation	Initial training: 2 weeks Ongoing intensive quarterly review and weekly check-ins (1 h)

Competency (based on Valverde et al. [12]	Performance goals	Training activities	Learning strategy	Format/supervising role	Approximate duration
Practice-based learning	-		- - - - - - - - - - - - - - - - - - -	:	-
	Optumize navigator practice through continual profes- sional development and the assimilation of scientific evi- dence, based on individual patient navigator gaps in knowledge, skills, attitudes, and abilities, to continuously improve in the role	Log training and lessons learned Debrief about own comfort, emotions, and connections around material Request additional support/ resources	Individual reflection, Debriet- ing #	Independent diary writing In-person and virtual one- on-one meetings with PI, Lab Manager, or staff; coordinated by PI and Lab Manager (or by navigator request)	1-2 h/week, as needed
Systems-based practice					
	Monitor and evaluate resources for caregivers to meet needs and ensure quality	Independently verify and identify unique caregiver resources	Web- and phone-based searches #	Independent web and phone research, reviewed by PI	1–2 h/month
	Monitor and cultivate relation- ships within the broader research and clinical system to identify potential resources for caregivers and ensure program effective- ness	Engage in ongoing collabora- tive dialogue with institu- tional research and clinical staff	Individual/ group meetings #	Independently-initiated inter- actions; meetings may be coordinated by PI	1–2 h/week

+ indicates passive learning strategy; # indicates active learning strategy

Table 1 (continued)

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training. This supervision was provided during weekly 1-h in-person or virtual meetings along with additional support as needed in-person, via phone, or via email.

In addition to direct supervision, opportunities for reflection and peer supervision were also built into the training structure. Navigators were asked to complete a training log as they worked through onboarding and training activities. Navigators recorded duration and completion of each activity, including any independent activities, and were asked to note "lessons learned". Lessons learned included both positive and negative experiences that could help improve future training. Navigators were also asked to share any reflections at weekly individual or group meetings with different team members. There were daily informal in-person check-ins in the first several weeks, followed by formal weekly in-person or virtual meetings were held weekly to assess progress, the need for additional support, and provide opportunity for reflection. Socialization with the broader research team and debriefing with each other was also emphasized to enhance team cohesion and peer mentorship and prevent burnout.

# Results

## Characteristics of navigators and training timeframe

Two navigators were desired to share workload and provide coverage. Both began onboarding and training in December, 2019. One navigator had prior experience in the institution's patient library, and one had social work training (not yet licensed). Initial training activities were completed in February, 2020. Research is currently ongoing to evaluate caregiver and patient outcomes related to eSNAP and caregiver navigation [21].

# **Initial training**

Initial training was generally done independently, but was directed and supervised by the PI and Lab Manager. Navigators had weekly debriefing sessions with each other to share knowledge, and weekly meetings were held with navigators, PI, and Lab Manager to discuss progress and potential refinements to the training schedule. Our goal was to address each competency in the order outlined in Table 1. However, we found that offering time to reinforce most topics was important to develop stronger proficiency. Often, practicing a skill would uncover a need for more knowledge. For example, while navigators had some interpersonal experience with cancer patients, neither had research experience. Thus, additional resources were provided regarding the importance of standardizing sessions for research purposes, followed by role-playing to practice strategies to follow the manualized session guide.

## Supervision for practice and research

After initial training, navigators engaged in ongoing supervision within caregiver coordination, practice-based learning, and systems-based practice competencies. Navigators discussed each case in-depth through ongoing weekly meetings and frequent communication between navigators and the PI, as well as clinical and research staff. Navigators discussed barriers caregivers are encountering and the techniques navigators used to address these in each session, as well as how that process went. Supervision also includes practice and corrective discussion to maintain study fidelity and ensure best practices. Additionally, navigators monitored for new caregiver resources and identified ways to maintain relationships with clinic staff, especially in response to ongoing events, such as the COVID-19 pandemic and changes in the service landscape.

# **Continuing education**

Caregiver navigators engage in continuing education on a yearly basis, primarily within the sensitivity to ethical, cultural, and professional issues competency to maintain research and institutional safety certifications and engage in performance reviews. Continuing education also occurs within the research knowledge competency when the protocol changes or protocol deviations are identified. Additional training relevant to their interests and needs is also available, including seminars on the cancer patient/caregiver experience or enhancing skills using the electronic medical record or data management software.

# Evaluation

Upon completion of all primary training activities, navigators began navigation sessions, which were all initially supervised and reviewed by the PI to provide feedback. After the first three participants completed the intervention, sessions were randomly reviewed by the PI on a quarterly basis. Feedback is provided during ongoing supervision sessions, through constructive, corrective discussion, in which navigators and the PI point out what is working well and what could be improved. Issues identified during supervision led to developing new guidelines or resources, such as more guidance regarding the level of detail in session documentation or additional scripts for calls with bereaved caregivers.

Data from the navigator "lessons learned" journals indicated that the most memorable training content came from stakeholder interactions. Navigators appreciated the ability to ask questions and gain insight about the patient's cancer journey and the caregiver's experience. Meeting with clinicians not only helped navigators build relationships and better understand clinic operations, but also helped navigators identify methods to build rapport with caregivers and combat compassion fatigue. Navigators also reflected that multiple training mediums (e.g., blogs, journal articles, shadowing) were helpful to convey information in different ways and provide a more thorough picture. Navigators appreciated being able to review materials and being encouraged to find resources to meet their own learning needs, even after "official" training was completed.

# Discussion

While PN interventions are increasingly common, navigator training varies widely and is not thoroughly documented in the research literature [6]. Previous work indicates a strong need for consistency in navigator training curricula, designed to teach and evaluate specific proficiencies [30, 31]. Though national basic training programs exist (e.g., Harold P. Freeman Patient Navigation Institute; Colorado Patient Navigator Training), access to these centralized inperson trainings may be difficult for some navigators due to time and/or cost. Further, while research has demonstrated core tasks that many patient navigators perform, there is less agreement in the field on the core competencies of navigators [10, 13, 30]. Additional specialty training is likely required to acknowledge the variation and wide scope of needs to be addressed by different navigation programs in oncology or other settings [10]. Thus, there is a need to demonstrate how independent navigation programs can implement structured, yet flexible training.

We report a novel training program for caregiver navigators that builds general and protocol-specific content and skills [10, 21] in key competencies [12] using multiple strategies, ranging from traditional didactics to interviewbased learning to role-playing. Based on adult learning theories [29], our training encouraged self-reflection and allowed navigators to direct their own learning to meet their specific needs, while scaffolded by the research team. Our training resulted in successful implementation of the caregiver navigation intervention and long-term retention of our navigators.

Our training program takes advantage of multiple modalities, including interviews and shadowing experiences with stakeholders both in-person and through virtual technology. Case studies and simulations have been shown to be more effective for learning than lectures [32]. Similarly, shadowing has been shown to enhance engagement with learning and promote better insights in healthcare contexts [33]. Our training also included stakeholder interviews as a key form of experiential learning. In addition to the ability to hear directly about stakeholder experiences and ask questions, providing more tailored and informal transfer of knowledge (e.g., "tips and tricks"), this interpersonal interaction may help navigators develop relationships and increase empathy [34], important for communication/interpersonal competencies, but also systems-based practice.

Supervision has not often been described in previous research, yet is a key factor in successful training [35]. Successful supervision often begins with identifying clear expectations and providing regular feedback on knowledge and skill-based competencies, but also requires positive ongoing relationships [36]. Beyond providing constructive, corrective discussion, the additional opportunity to debrief with supervisors and peers is also important for navigators. Navigators are often confronted with difficult situations and may need to process emotions around those encounters. This can be especially true in situations where navigators feel unable to help, which may occur more frequently in protocolized research than standard clinical practice. Although professional boundaries are important and can be conveyed during training, non-clinical navigators with less experience or navigators working in high-need areas may need additional support throughout their time in their role [37]. Regular, supportive supervision can help navigators and other staff maintain proficiency in their role, process stress, and identify and address signs of potential burnout [33].

Despite a lack of national certification or definitive guidelines, there is some consensus regarding key skills for navigators, including identifying barriers and addressing needs and supportive communication [10, 38-40]. However, different ancillary skills may also be essential depending on particular research protocols and goals of navigation [31]. Additionally, though recruitment should reflect the specialization required for the intended role, each potential navigator enters training with different strengths [10]. Unique program requirements and training needs will impact training. A flexible schedule that relies on collaborative supervision and navigator reflection is important. In this way, a supervisor can work together with a navigator to identify strengths and shore up weaknesses with additional training opportunities and navigators can move at their own pace and revisit material as needed. This flexibility ultimately ensures that navigators are not only competent but comfortable in their roles.

# Limitations

Our novel caregiver navigation training program has been limited to two navigators providing services to a narrow sample of neuro-oncology family caregivers. Data are not yet available on the effectiveness of navigation to improve outcomes. The diverse roles, required competencies, and goals for navigators and navigation preclude development of a one-size-fits-all training program. Future work could compare the impact of specific training strategies, activities, and supervision on both employment outcomes (e.g., retention) and navigation outcomes (e.g., competency in delivering intervention, burnout).

# Conclusion

Although caregiver-centered navigation is a shift from established patient-centered navigation programs, the navigator role of coordinating resources and addressing emotional burdens may be essential to address barriers and improve outcomes in caregivers and the patients they care for [31]. To ensure that navigators are wellequipped to provide effective services, evidence-based training programs that include navigation and protocol-specific competencies are needed. Given the lack of detailed training programs in the literature [6], we offer a flexible, multimodal learning approach that other teams may adapt for their own navigation programs.

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**Data availability** Data is available upon reasonable request from the corresponding author.

## Declarations

Ethics approval and consent to participate This study was approved by the Advarra Institutional Review Board (Pro00029204). The authors certify that the study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

Competing interests The authors declare no competing interests.

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