JOURNAL OF PALLIATIVE MEDICINE
Volume 20, Number 3, 2017

DOI: 10.1089/jpm.2016.0321

A Community Needs Assessment for the Development of an Interprofessional Palliative Care Training Curriculum

Heather Coats, PhD, MS, APRN-BC,[1] Tia Paganelli, BSN, MPH,[2] Helene Starks, PhD, MPH,[3]
Taryn Lindhorst, PhD, LICSW,[4] Anne Starks Acosta, MSc,[5]
Larry Mauksch, Med,[6] and Ardith Doorenbos, PhD, RN, FAAN[2,7]

Abstract

Background: There is a known shortage of trained palliative care professionals, and an even greater shortage of professionals who have been trained through interprofessional curricula. As part of an institutional Palliative Care Training Center grant, a core team of interprofessional palliative care academic faculty and staff completed a state-wide palliative care educational assessment to determine the needs for an interprofessional palliative care training program.
Objective: The purpose of this article is to describe the process and results of our community needs assessment of interprofessional palliative care educational needs in Washington state.
Design: We approached the needs assessment through a cross-sectional descriptive design by using mixed-method inquiry.
Setting/Subjects: Each phase incorporated a variety of settings and subjects.
Measurements: The assessment incorporated multiple phases with diverse methodological approaches: a preparatory phase—identifying key informants; Phase I—key informant interviews; Phase II—survey; and Phase III—steering committee endorsement.
Results: The multiple phases of the needs assessment helped create a conceptual framework for the Palliative Care Training Center and developed an interprofessional palliative care curriculum. The input from key informants at multiple phases also allowed us to define priority needs and to refine an interprofessional palliative care curriculum.
Conclusions: This curriculum will provide an interprofessional palliative care educational program that crosses disciplinary boundaries to integrate knowledge that is beneficial for all palliative care clinicians. The input from a range of palliative care clinicians and professionals at every phase of the needs assessment was critical for creating an interprofessional palliative care curriculum.

Keywords: educational design; interprofessional curriculum; needs assessment; palliative care

Background

Nationally, palliative care practice programs began in the early 1990s in the United States.[1] Since then, the field has seen extensive growth,[1] which is built on the knowledge that palliative care delivery does improve quality of care for patients and families with serious illness.[2] However, there is a shortage of palliative care specialists across the United States compared with the growing number of patients facing serious and life-threatening illnesses.[1] The Institute of Medicine's (IOM) 2014 report *Dying in America* highlights the need for quality palliative care training

[1]UW/Cambia Palliative Care Center of Excellence NIH/NHLBI Post-Doctoral Fellow (T32), University of Washington, Seattle, Washington.
[2]Department of Biobehavioral Nursing and Health Systems, School of Nursing, University of Washington, Seattle, Washington.
[3]Department of Bioethics & Humanities, University of Washington, Seattle, Washington.
[4]School of Social Work, University of Washington, Seattle, Washington.
[5]Valora Consulting, Seattle, Washington.
[6]Department of Family Medicine, School of Medicine, University of Washington, Seattle, Washington.
[7]Anesthesiology and Pain Medicine, School of Medicine, University of Washington, Seattle, Washington.
Accepted October 10, 2016.

programs, specifically those that ''emphasize improved clinician-patient communication around providing care that aligns with a patient and family's goals and values, as well as providing palliative care education in the context of interprofessional teams.''[3]

Locally, in July 2013, the Palliative Care Training Center (PCTC) at the University of Washington was established through a three-year grant from the Cambia Health Foundation. The goal was to develop, pilot test, and evaluate an interprofessional curriculum for palliative care clinicians seeking specialty training in palliative care. As part of an institutional PCTC grant, a core team of interprofessional palliative care academic faculty and staff began the process of completing a state-wide palliative care educational assessment to determine the needs for the palliative care training program. Conducting a state-wide community needs assessment was a necessary step in a larger project to design and develop an interprofessional palliative care curriculum based on input from the local community of experts in palliative care.

Palliative care is based on interprofessional practice

One of the tenets of the National Consensus Project for Quality Palliative Care is that palliative care should be delivered via an interprofessional and collaborative palliative care practice.[4] However, despite the recommendation for interprofessional palliative care teams, there is a known shortage of trained palliative care professionals, and an even greater shortage of professionals who have been trained through interprofessional curricula.[5]

There are many definitions currently used for the terms *interprofessional* and/or *interdisciplinary*. This article will use the World Health Organization (WHO) definition of interprofessional education (IPE) and interprofessional collaborative practice (IPCP):

> IPE: ''Interprofessional education occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. Once students understand how to work interprofessionally, they are ready to enter the workplace as a member of the collaborative practice team. This is a key step in moving health systems from fragmentation to a position of strength.''[6]
>
> IPCP: ''Interprofessional Collaborative Practice is defined as when multiple health workers from different professional backgrounds work together with patients, families, carers [sic], and communities to deliver the highest quality of care.''[6]

Many organizations are now advocating for IPE curricula. The IOMs 2003 report, *Health Professions Education: A Bridge to Quality*,[7] suggests that professional health education should be delivered in an interprofessional fashion, with interprofessional skills listed as one of the five competencies that are necessary for healthcare clinicians. Since that report, many other organizations have supported this focus on the delivery of healthcare clinical education via interprofessional curricula. In February 2011, the Health Resources and Services Administration, the Josiah Macy Jr. Foundation, and the Robert Wood Johnson Foundation—in partnership with the Interprofessional Education Collaborative—held a conference on ''Team-Based Competencies: Building a Shared Foundation for Education and Clinical Practice.''[8] The conference created a foundation for efforts to increase the number of interprofessional faculty in health education, increase resources for training, strengthen funding and research efforts to identify techniques that work effectively, and develop standards to evaluate new models and techniques for teaching team-based care.

Research is needed to validate palliative care teaching methods and approaches that improve teamwork and interprofessional collaboration. Although palliative care services are provided in an interprofessional manner, much of the literature on palliative care workforce training is discipline specific and focuses on particular discipline-specific fellowship training programs. There is a scarcity of literature on the role of interprofessional training programs in palliative care.

Objectives

The purpose of this article is to describe the process and results of our community needs assessment of interprofessional palliative care educational needs in Washington state. The first goal of the needs assessment was to determine what palliative care clinical services were already being provided in Washington state, and how these clinical services were being delivered. The second goal was to learn about current educational needs from the perspectives of interprofessional palliative care clinicians. With these goals in mind, the aims were to identify the primary audience needing training (e.g., clinicians from which professions and level of practice), to determine priorities and optimal instructional methods for the interprofessional curriculum, and to explore approaches to developing the interprofessional curriculum.

Design

We approached the needs assessment through a cross-sectional descriptive design by using mixed-method inquiry.[9] The assessment incorporated multiple phases with diverse methodological approaches: a preparatory phase—identifying key informants; Phase I—key informant interviews; Phase II—survey; and Phase III—steering committee endorsement. Later, the methods and results for each phase are described together.

Methodology and Results

Preparatory phase: Identifying key informants

In September 2013, we began compiling a list of potential key informants who could represent the diverse palliative care professionals or stakeholder groups that the training program might serve. This list was developed in collaboration with the Washington State Medical Association and the Washington State Hospital Association. In addition, the PCTC faculty provided input on the final list. A database was created with names of 88 identified Washington state key informants. Table 1 lists the professions identified in this preparatory phase.

Phase I methods: Key informant interviews

Phase I of the needs assessment process occurred from October to November 2013. Drawing from the list of potential key informants, four members of the PCTC core team

Table 1. Distribution of Participants in Palliative Care Training Center Training Needs Assessment, by Profession and Phase

	Medicine	*Nursing*	*Social work*	*Spiritual care provider*	*Healthcare admin/leadership*	*Pharmacy*	*Other*	*Total*
Preparatory Phase	35	22	6	5	17	1	1 Lawyer 1 Community activist	88
Phase I	10	3	1	0	4	0	0	18
Phase II	31	23	6	2	8	1	2 Complementary therapy (music, massage) 1 Physician's assistant 2 Psychology	76
Phase III	6	4			3			13

identified candidates from each interprofessional group who could serve as key informants in interviews. During the interviews, key informants were asked about their views on what care settings the training program should focus on, and what types of providers at what level of training (e.g., undergraduate, graduate, practicing professionals) should be targeted to receive this training (see Appendix 1 for the key informant interview guide). Each interview lasted ~20–30 minutes. Each core team member conducted 1–2 interviews. After each interview, the interviewer and observer(s) would debrief and provide feedback to the core team. Data saturation was achieved after 18 key informant interviews were completed. A conventional content analysis[10] of the interviews was completed by two members of the core team and then discussed and validated by all members of the core team.

Phase I results

Telephone interviews were conducted with a total of 18 key informants, representing four different professional groups (see Table 1 for the professions of the key informants). The interview data indicated that the interprofessional palliative care training curriculum should be oriented to both primary palliative care and specialty palliative care providers. Primary care was defined as care provided by all clinicians caring for patients with serious illness. Speciality care was defined as care provided by palliative care specialists, including physcians, nurse, social workers, and spiritual providers.[11] The providers to be included in the training should consist of the following: nurses, nurse practitioners, physician assistants, physicians, social workers, and spiritual care providers. These providers might practice in either inpatient or outpatient settings. Educational methods suggested by participants included using mostly online modalities with intensive in-person workshops as the preferred delivery method. This type of delivery method would allow practicing clinicians to enroll in the course.

The key informant interviews also identified four central content areas that should be addressed in the interprofessional curriculum:

- Patient and family communication
- Symptom management
- Communication for care coordination: interprofessional/team skills, and coordination of care over time and across settings
- Organizational and cultural change: advocating for patients' and families' voices, choice, and dignity

The conceptual framework was crafted from the results of the key informant interviews (Fig. 1). This framework informed us that we needed to train an interprofessional group of providers representing primary and specialty palliative care who practice in a variety of settings. This framework illustrates the variety of palliative care professional roles, the multiple levels of training, types of providers, and types of care settings as described by the key informants. The arrows depict the broad range of each of the areas included in the framework. At this point in the needs assessment, the core team realized that there was a need to make specific decisions about the focus of the specific interprofessional curriculum to be created by the PCTC.

Phase II methods: Survey

For the second phase in our needs assessment, we organized three groups of palliative care professionals to weigh in on the findings from the Phase I interviews. The participants in these groups were recruited from the initial key informant list created in the preparatory phase. The purpose of this phase was to validate the conceptual framework that emerged from Phase I and to help prioritize audiences (potential trainees) and content areas for the training program by using survey methods.[12] To accomplish this, the core team created a survey and administered the survey to each group participant. The group sessions were conducted through two online

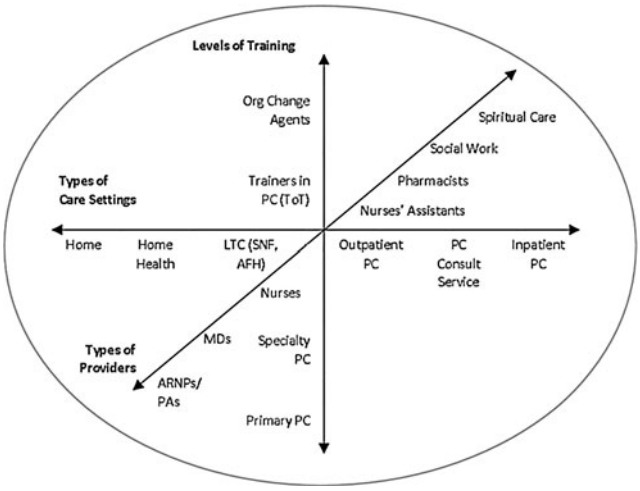

FIG. 1. Conceptual framework.

Table 2. Survey Results

Q No.	Question asked	Average rating
1	In the context of your organization's healthcare quality goals, how high a priority is strengthening PC service?	4.0
2	How well does this range of care settings capture the diversity of PC provision (from home to inpatient)?	4.21
3	How well does this range of care provider types capture the diversity of PC provision?	4.37
4	How well do these levels of training needs reflect the diversity of PC training needs (basic PC to change agent)?	4.07
5	Does this outcomes oriented definition of palliative care help clarify the meaning?	2.55
6	How important is it to your organization/staff that having ''the conversation'' is done well?	4.49
7	On average, how well do you think having ''the conversation'' is performed in your organization?	2.55
8	How important is it to your organization/staff that symptom management is done well?	4.59
9	On average, how well do you think symptom management is performed in your organization?	2.86
10	How important is it to your organization/staff that inter-provider communication and coordination is done well?	4.57
11	On average, how well do you think inter-provider communication and coordination is performed in your organization?	2.62
12	How much recognition is there in your organization for the need for pro-PC culture?	3.26
13	On average, how well do you think PC is integrated into your organization?	2.77
	Prioritization of training components	*% of respondents ranking*
14	Which of the four training components described is the highest priority? Patient and family communication	42
15	Which of the four training components described is the second highest priority? Communication for care coordination	39
16	Which of the four training components described is the third highest priority? Organizational and cultural change	25
17	Which of the four training components described is the lowest priority? Symptom management	49

webinars and one in-person session. The online groups were conducted in November 2013 by using Adobe Connect. The in-person group was conducted during a one-day palliative care retreat in December 2013, which was attended by academic and community-based palliative care clinicians.

Each group began with a member of the core team making a short presentation of the findings from the key informant interviews. Core team members then facilitated a discussion with group participants. These discussions were structured around the following topics: (1) findings of the key informant interviews, (2) input on any additional palliative care educational needs, (3) defining and validating a set of skills for an interprofessional palliative care training curriculum, and (4) prioritization of these skills. The discussion in the online groups was audio-recorded, and each attendee completed an online survey. For the in-person group, the core team members who attended kept written notes, and each group participant completed a survey. The survey data from all three group sessions were reviewed and discussed by the core team.

Phase II results

A total of 76 individuals participated in groups, and 76 surveys were completed. The first group was attended by 20 participants; the second group by 18 people; and the third group by 38 people. See Table 1 for the distribution of group participants by profession.

The combined survey results from the online and in-person groups prioritized these top three training components: (1) patient and family communication, (2) communication for care coordination, and (3) organization and culture change. The respondents rated each item on a Likert-like scale from a range of low to high (1–5). The results of the survey questions can be seen in Table 2. Symptom management was not a top priority. The majority of participants recognized the need for symptom management content, but agreed that since many excellent resources already exist, this topic should not be a primary focus of the PCTC curriculum. Similarly, participants recognized that organizational changes are needed to support and sustain palliative care. Combining the results of Phase I conceptual framework and Phase II survey, the major curriculum content was designed around three domains. The focus of the content covered before Phase III included the following three: (1) palliative care communication; (2) interprofessional team practice; and (3) systems, metrics, and integration.

Phase III methods: Steering committee

The final phase of the needs assessment included a review by the PCTC project's steering committee of the outcomes

Table 3. Major Curriculum Content Areas

Palliative care communication	*Interprofessional team practice*	*Systems metrics and integration*
1. Narrative and patient-centered communication	1. Stages of team development	1. Palliative care providers as clinical systems consultants
2. Introducing palliative care and what it offers patients and families	2. Building trust	2. Stakeholder analysis to identify champions and blockers to supporting palliative care
3. Eliciting goals of care and creating a plan based on those goals	3. Disciplinary training, roles and responsibilities in palliative care	3. Challenges and opportunities for integrating palliative care across the continuum
4. Facilitating family meetings and care conferences	4. Effective team functioning	4. Documentation and billing for palliative care consultations
5. Managing requests for Death with Dignity	5. Shared decision making	5. Palliative care metrics
6. Discussing palliative care interventions across the continuum of illness	6. Conflict management	6. Quality and process improvement cycles
7. Working with an interpreter	7. Self-care strategies	7. Capstone project proposal presentations on a future quality improvement project
8. Preparing/supporting patients and families for imminent death	8. Prevention of burnout and compassion fatigue	
9. Supporting grief and bereavement	9. Giving and receiving feedback	
10. Cultivating the observer self		

of the needs assessment process and of the first draft curriculum (Table 3). The purpose of this article was to garner input from a selected community of palliative care experts. The steering committee was chosen by the core PCTC faculty and was composed of palliative care professionals in Washington state whose role was to provide ongoing expertise and oversight of the curriculum development process. The committee met with the core team in person in December 2013. Each steering committee member was invited to participate.

Phase III results

The steering committee included 13 members (see Table 1 for professions represented on the committee). The proposed curriculum outline, structure, and framework—based on the prior phases of the needs assessment—were presented to the committee, which then provided valuable adjustments with regard to teaching method delivery, length of training, number of courses, and topics of importance. For example, the core team presented a 15-month curriculum to the steering committee, but after input from the committee, the curriculum was adjusted to 9 months (three quarters).

Lessons Learned

Across all phases, there was difficulty in recruiting enough participants. Due to the small number of palliative care community members and experts, some of the same participants were included in more than one phase of the needs assessment. Due to the interprofessional nature of the training, there were challenges to determine how to co-list the courses so that a group of interprofessional students could enroll. Currently, the course is co-listed in both nursing and medicine with plans for co-listing in other schools.

Conclusion

The multiple phases of the needs assessment helped us create a conceptual framework for the PCTC and develop an interprofessional palliative care curriculum. The input from a range of palliative care clinicians and professionals at every phase of the needs assessment was critical to creating an interprofessional curriculum.

The input from these key informants at multiple phases also allowed us to define priority needs and to refine the interprofessional curriculum before implementation. This curriculum will provide an interprofessional palliative care education that crosses disciplinary boundaries to integrate knowledge that is beneficial for all palliative care clinicians.

After the needs assessment, the next steps were to implement the interprofessional curriculum with a pilot cohort as well as to continue evaluating the curriculum. A pilot cohort of 24 interprofessional students were recruited, and the interprofessional palliative care training curriculum was successfully implemented during spring quarter 2015. Our next goal is to develop a sustainable program by establishing an interprofessional graduate certificate in palliative care through the University of Washington Schools of Medicine and Nursing.

Acknowledgments

The authors would like to acknowledge the following: Cambia Palliative Center of Excellence; J. Randall Curtis, MD, MPH; Tony Back, MD; and Stu Farber, MD (deceased). Research reported in this article was supported by the Cambia Health Foundation, the National Institute of Health, the National Institute of Nursing Research under award number K24 NR015340, and the National Heart, Blood, and Lung Institute under award number T32 HL125195. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Author Disclosure Statement

No competing financial interests exist.

References

1. Morrison R, Meier D: A state-by-state report card on access to palliative care in our nation's hospitals. Center to Advance Palliative Care and the National Palliative Care Research Center. 2011. Available at www.capc.org (Last accessed July 17, 2015).
2. Schenker Y, Arnold R: The next era of palliative care. JAMA 2015;314:1565–1566.
3. Institute of Medicine: Dying in America: improving quality and honoring individual preferences near the end of life. 2014. Available at http://iom.nationalacademies.org/Reports/2014 (Last accessed June 12, 2016).
4. National Consenus Project for Quality Palliative Care: *Clinical Practice Guidelines for Quality Palliative Care, 3rd ed.* Pittsburgh, PA: National Consensus Project for Quality Palliative Care, 2013. Avaliable at: www.nationalconsensusproject.org/ (Last accessed April 22, 2016).
5. American Academy of Hospice and Palliative Medicine; Center to Advance Palliative Care; Hospice andPalliative Nurses Association; Last Acts Partnership; National Hospice and Palliative Care Organization: National Consensus Project for Quality Palliative Care: Clinical Practice Guidelines, executive summary. J Palliat Med 2014;7:611–627.
6. World Health Organization: *Framework for Action on Interprofessional Education & Collaborative Practice.* Geneva, Switzerland: World Health Organization Department of Human Resources, 2010. Avaliabe at: http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf (Last accessed April 22, 2015).
7. Institute of Medicine: *Health Professions education: A bridge to quality*. Washington, DC: National Academies Press, 2003. Avaliable at: www.nationalacademies.org/hmd/Reports/2003/Health-Professions-Education-A-Bridge-to-Quality.aspx (Last accessed on June 12, 2016).
8. Team Based Competencies: Buidling a Shared Foundation for Education and Clinical Practice Conference Proceedings February 16–17, 2011, Washington, DC. Available at: www.aacn.nche.edu/leading-initiatives/IPECProceedings.pdf (Last accessed on June 12, 2016).
9. Creswell J: *Research Designs: Qualitative, Quantitative and Mixed Method Approaches, 4th ed.* Thousand Oaks, CA: Sage Publications, Inc., 2014.
10. Hsieh H, Shannon S: Three approaches to qualitative content analysis. Qual Health Res 2005;15:1277–1288.
11. Quill T, Abernathy A: Generalist plus specialist palliative care-creating a more sustainable model. N Engl J Med 2013;368:1173–1175.
12. Schaefer K, Chittenden E, Sullivan A, et al.: Raising the bar for the care of seriously ill patients: Results of a national survey to define essential palliative care competencies for medical students and residents. Acad Med 89:1024–1031.

Address correspondence to:
Ardith Doorenbos, PhD, RN, FAAN
Department of Biobehavioral Nursing and Health Systems
University of Washington
Health Sciences Building
1959 NE Pacific Street
Office Box 357266
Seattle, WA 98195-7266

E-mail: doorenbo@uw.edu

Appendix 1. Key Informant Interview Guide

(1) Please describe for me how palliative care is currently organized in your organization.
   (a) What is the current role of palliative care in your institution?
   (b) Currently, what are your palliative care staffing resources? (numbers and professions)
(2) Do you have a future vision for palliative care in your organization? If yes, please describe it for me.
(3) What training content will help you to realize that vision?
(4) What knowledge, attitudes, and behaviors does a newly hired palliative care clinician need to have to perform optimally?
   Sample list of knowledge, attitudes, and behaviors:
   (a) Basic management of pain and other symptoms
   (b) Management of refractory pain or other symptoms
   (c) Basic management of depression, anxiety, grief, and existential distress
   (d) Management of more complex depression, anxiety, grief, and existential distress
   (e) Basic discussions about
      • Prognosis • Goals of care • Suffering
      • Code status • Grief • Legacy building
   (f) More advanced communication skills to facilitate resolution of conflicts regarding goals of care or methods of treatment
      • Within families • Between treating teams and families • Among treatment teams
   (g) Assistance in addressing cases of near futility
(5) How would you like to see training delivered to your staff?
   (a) What educational methods has your organization used that worked best?
   (b) Are there educational methods that you'd like to use with your staff but have not yet tried?
   (c) In your experience, what educational methods are the most likely to fail?