Special Section: Report from a Conference on the State of the Science of Spirituality and Palliative Care Research

State of the Science of Spirituality and Palliative Care Research Part II: Screening, Assessment, and Interventions



Tracy A. Balboni, MD, MPH, George Fitchett, BCC, DMin, PhD, George F. Handzo, BCC, Kimberly S. Johnson, MD, Harold G. Koenig, MD, Kenneth I. Pargament, PhD, Christina M. Puchalski, MD, Shane Sinclair, PhD, Elizabeth J. Taylor, RN, PhD, and Karen E. Steinhauser, PhD

Department of Psychosocial Oncology and Palliative Care (T.A.B.) and Department of Radiation Oncology (T.A.B.), Dana Farber Cancer Institute, Boston, Massachusetts; Harvard Medical Department of Religion, Health and Human Values (G.F.), Rush University Medical Center, Chicago, Illinois; HealthCare Chaplaincy Network (G.F.H.), New York, New York; Department of Population Health Sciences (K.E.S.), Division of General Internal Medicine (K.E.S.), Division of Geriatrics (K.S.J.), Department of Medicine (K.E.S., K.S.J., H.G.K.), Department of Psychiatry (H.G.K.), Center for the Study of Aging and Human Development (K.E.S., K.S.J., H.G.K.), Center for Spirituality, Theology and Health (H.G.K.), Duke University School of Medicine, Durham, North Carolina; Geriatric Research, Education and Clinical Center (K.S.J.), Center of Innovation in Health Services Research (K.E.S.), Durham Veterans Affairs Medical Center, Durham, North Carolina, King Abdulaziz University (H.G.K.), Jeddah, Saudi Arabia; Department of Psychology (K.I.P.), Bowling Green State University, Bowling Green, Ohio; University of Calgary (S.S.), Calgary, Alberta; School of Nursing, Loma Linda University (E.J.T.), Loma Linda, California; George Washington Institute for Spirituality and Health (C.M.P.), George Washington School of Medicine and Health Sciences, Washington, D.C.

Abstract

The State of the Science in Spirituality and Palliative Care was convened to address the current landscape of research at the intersection of spirituality and palliative care and to identify critical next steps to advance this field of inquiry. Part II of the SOS-SPC report addresses the state of extant research and identifies critical research priorities pertaining to the following questions: 1) How do we assess spirituality? 2) How do we intervene on spirituality in palliative care? And 3) How do we train health professionals to address spirituality in palliative care? Findings from this report point to the need for screening and assessment tools that are rigorously developed, clinically relevant, and adapted to a diversity of clinical and cultural settings. Chaplaincy research is needed to form professional spiritual care provision in a variety of settings, and outcomes assessed to ascertain impact on key patient, family, and clinical staff outcomes. Intervention research requires rigorous conceptualization and assessments. Intervention development must be attentive to clinical feasibility, incorporate perspectives and needs of patients, families, and clinicians, and be targeted to diverse populations with spiritual needs. Finally, spiritual care competencies for various clinical care team members should be refined. Reflecting those competencies, training curricula and evaluation tools should be developed, and the impact of education on patient, family, and clinician outcomes should be systematically assessed. J Pain Symptom Manage 2017;54:441–453. Published by Elsevier Inc. on behalf of American Academy of Hospice and Palliative Medicine.

Key Words

Spirituality, outcomes, assessment, interventions, design

Introduction

As discussed in Part I of the State of the Science of Spirituality in Palliative Care (SOS-SPC), there are notable relationships between spiritual domains and palliative care outcomes among patients and family members. The recommendations outlined in the summary in Part I, highlight the critical methodological challenges together with key gaps in outcomes research. By using definitional and methodological rigor, the field of palliative care can address these

Accepted for publication: April 4, 2017.

Address correspondence to: Karen E. Steinhauser, PhD, 411 W. Chapel Hill Street Suite 500, Durham, NC 27701, USA. E-mail: Karen.steinhauser@duke.edu

Type of Clinical Inquiry	Clinical Context	Length	Mode	Clinician
Spiritual screening	Initial contact, ongoing reassessment	Brief	Open-ended questions or items with scaled response, goal is to identify patients in need of spiritual care referral	Any clinical care provider
Spiritual history-taking	Initial contact	Brief	Open-ended questions	Clinical medical care provider (e.g., physician, nurse, or chaplain)
Spiritual assessment	Initial contact, ongoing reassessment	Extensive	Conceptual framework guides interview and development of spiritual care plan	Board-certified chaplain or spiritual care professional with equivalent training

 Table 1

 Levels of Clinical Inquiry About Spirituality and Religion

gaps and further the understanding of how spirituality, in its multidimensional complexity, relates to palliative care outcomes.

Knowledge regarding how spiritual domains influence outcomes, even if elevated in rigor and depth, is fruitless without research that informs application to the care of seriously ill patients and families. To meaningfully inform how clinicians, clinical teams, and institutions interface with spirituality in the care of patients and families requires addressing key practical questions: 1) How do we assess spirituality? 2) How do we intervene on spirituality? And 3) how do we train healthcare professionals to address spirituality in palliative care. Hence Part II of SOS-SPC addresses the current state of the science, noting key gaps, and makes critical next step recommendations regarding these three domains of inquiry.

How Do We Assess Spirituality?

Spiritual Screening, History-Taking, and Assessment Within Palliative Care. A recent survey of 807 palliative care providers ranked spiritual screening tools as the number one priority for spiritual care research.¹ When reviewing the state of the science, tools can be grouped into three categories of inquiry: 1) spiritual screening, 2) spiritual history taking, and 3) spiritual assessment.² Table 1 summarizes each level of spiritual inquiry in terms of context, length, mode of delivery, and the clinician involved.

<u>Spiritual Screening</u>. Spiritual screening evaluates the presence or absence of spiritual needs and/or distress with the goal of identifying those in need of further spiritual assessment and care. Table 2 shows the published models designed specifically for spiritual screening. Given that spiritual screening fits conceptually within the larger umbrella of psychosocial screening, a number of instruments developed for general psychosocial screening include one or more spiritual items (Table 2).^{3–9} Likewise, many needs assessment tools contain items assessing spirituality, with tools developed and used largely within cancer patient populations as described in a review by Carlson et al.¹⁰

There is some evidence to inform the utilization of screening tools in palliative populations. For example, the Rush Spiritual Screening Protocol has been tested among 173 medical rehabilitation patients, among whom 7% tested positive for possible religious or spiritual struggle; 92% were confirmed by chaplain assessment.¹¹ Steinhauser's "Are you at peace?" single-item assessment tool has been tested among 248 patients with advanced illnesses and found to have significant, positive associations with measures of emotional and spiritual well-being.¹² Mako's "Do you have spiritual pain?" screening tool was tested among 57 advanced cancer patients and found to be significantly related to patient-reported depression.¹³ This tool has also been tested among patients (n = 91) and family caregivers (n = 43) seen at a palliative care outpatient clinic.¹⁴ Among patients, 44% reported spiritual pain, which was associated with lower spiritual well-being. Among caregivers, 58% reported spiritual pain, which was associated with greater anxiety and depression, and worse quality of life (QOL). The Spiritual Injury Scale was examined in 96 medical rehabilitation patients, with higher scores positively associated with depression and negatively associated with QOL on admission and at four month follow-up.¹⁵ Although these tools show promise as screening tools, key gaps include the absence of data providing guidance regarding optimal spiritual screening methods (e.g., content, timing, frequency), and comparison of how screening methods might differ for different settings, trajectories of illness, and religious or cultural contexts.

<u>Spiritual History-Taking</u>: Spiritual history-taking uses a broad set of questions to capture a patient's spiritual characteristics, resources, and needs. It is typically conducted within an initial, comprehensive evaluation by a clinician. Spiritual history taking is based on expert-derived models. The primary models for spiritual history-taking and their descriptions are shown in Table 2, and include Puchalski and Romer's FICA model,¹⁶ Maugans'¹⁷ SPIRIT model, Anandarajah and Hight's¹⁸ HOPE model, and Frick et al.'s¹⁹ SPIR model. The FICA model has undergone testing, with

Tools by Level of Inquiry	Domains of Assessment	
Dedicated spiritual screening tools		
Rush Religious/Spiritual Screening Protocol ¹¹	- Importance of religion/spirituality in coping with illness - Strength/comfort from religion/spirituality	
11	- Desire for chaplaincy visit	
"Are you at peace?" ⁹³	- Peacefulness	
"Do you have spiritual pain?" ¹³ Spiritual Injury Scale ^{94–97}	- Spiritual pain - Guilt	
Spintuai injury Scate	- Anger or resentment	
	- Sadness/grief	
	- Lack of meaning	
	- Feeling God/life has treated one unfairly	
	- Religious doubt - Fear of death	
Spiritual history-taking tools	- Fear of deam	
FICA ¹⁶	- Patient faith/spirituality	
	- Importance of spirituality	
	- Patient spiritual community	
SPIRIT ¹⁷	- Addressing spiritual needs/referral to chaplaincy	
SPIRIT	- Spiritual belief system - Personal spirituality	
	- Integration with spiritual community	
	- Ritualized practices and restrictions	
	- Implications for medical care	
wopp18	- Terminal events planning	
HOPE ¹⁸	- Sources of hope, strength, meaning, peace, love, connection	
	 Role of organized religion for the patient Personal spirituality and practices 	
	- Effects on medical care/end-of-life decisions	
SPIR ¹⁹	- Patient spirituality	
	- Place of spirituality in one's life and illness	
	- Integration in spiritual community	
Spiritual screening embedding in psychosocial screening tools	- Role of care provider in meeting spiritual needs	
Canadian Problem Checklist ³	- Meaning/purpose in life	
	- Faith	
The James Supportive Care Screening ⁴	- Concerns about relationship with higher being	
	- Concerns about spiritual practices	
Support Screen ⁵	 Concerns about meaning/purpose in life [intrapersonal] Assessment of spiritual or religious concerns 	
Electronic Self-Report Assessment – Cancer (ESRA-C) ⁶	- Uses modified Rush Religious/Spiritual Screening Protocol	
Distress Inventory for Cancer (version 2) ⁷	- Religious activities	
	- Faith and coping with illness	
	- Miracles	
Advanced Cancer Patients' Distress Scale ⁸	- Unresolved religious/spiritual questions	
Distress Thermometer ⁹	 Afterlife Spiritual/religious concerns (possible item to select in a problem list 	
Spiritual assessment tools	spintaal, rengious concerns (possible teni to select in a problem ist	
Pruyser Spiritual Assessment Model ⁹⁸	- Awareness of the Holy	
	- Providence	
	- Faith	
	- Grace - Gratefulness	
	- Repentance	
	- Communion	
00	- Sense of Vocation	
7×7 Spiritual Assessment Model ⁹⁹	- Holistic assessment	
	- Multidimensional R/S assessment	
	beliefs and meaning	
	vocation and consequencesexperiences and emotion	
	• doubt	
	• rituals and practices	
	• community	
Dissipling for Bestevel Care City 100	• authority and guidance	
Discipline for Pastoral Care Giving ¹⁰⁰	- Concept of the holy - Meaning	
	- Meaning - Hope	

Table 2 Spiritual History, Screening, and Assessment Tools

ools by Level of Inquiry	Domains of Assessment	
MD Anderson Spiritual Assessment Model ²²	- Despair vs. hopeful	
1	- Wholeness vs. brokenness	
	- Courage vs. anxiety/dread	
	- Connected vs. alienated	
	- Meaningless vs. meaningful	
	- Grace/forgiveness vs. guilt	
	- Empowered vs. helpless	
Spiritual AIM ²³	- Meaning and direction,	
	- Self-worth and belonging	
	- Reconciliation/to love and be loved	
Spiritual Distress Assessment Model ^{24,26}	- Need for life balance	
	- Need for connection	
	- Need for values acknowledgment	
	- Need to maintain control	
	- Need to maintain identity	

Table 2 Continued

findings supporting its feasibility and concurrent validity with quantitative measures of spirituality,²⁰ although in a single, small sample of U.S. cancer patients. There is limited research on the application of spiritual history-taking models in palliative care populations,^{19,20} and further research is required to evaluate current and develop and test new spiritual history-taking tools among diverse palliative patient populations.

Spiritual Assessment. Spiritual assessment is an indepth, on-going process of evaluating a patient's spiritual needs and resources completed by chaplains or other individuals possessing advanced training in spiritual care.²¹ Traditionally, chaplaincy and other professional spiritual care providers have relied on narrative-based and less quantifiable assessment approaches. Realizing its limitations, the field is encouraging efforts to standardize assessments that systematically evaluate spiritual care, allow chaplains to more fully communicate patients and family needs, demonstrate intervention efficacy, and recommend supportive strategies to the health care team. The MD Anderson Spiritual Assessment Model²² and Spiritual Assessment and Intervention Model²³ are both framed around standardized qualitative assessments of domains of spiritual need. However, neither has undergone validation or reliability testing. Within palliative care, the availability of quantifiable, valid, reliable, and relevant assessment tools is weak. Published models, including core domains of assessments, are shown in Table 2.

Two research teams have led efforts to develop and validate two quantifiable spiritual assessment tools. First, the Spiritual Distress Assessment Tool (SDAT) was developed to assess the experience of older adults, using narrative interviews followed by the chaplain quantifying patient responses in domains of spiritual need.^{24,25} The SDAT has criterion validity with the FACIT-Sp (a validated research tool for meaning, faith

and purpose), and with the one-item "Are you at peace?" This measure also has concurrent validity with the Geriatric Depression Scale and clinicianreported need for family discharge meetings and predictive validity in terms of length of stay and discharge to a nursing home.²⁶ The Grupo de Espiritualidad de la SECPAL (GED) questionnaire is a tool developed for the palliative care setting that includes questions quantitatively evaluating spiritual needs along core domains, together with open-ended questions qualitatively assessing concerns and supports.²⁷ Factor analysis of the quantitative component demonstrated a three-factor structure model of spiritual needs: intrapersonal, interpersonal, and transpersonal (e.g., divine). Both SDAT and the GES have limitations. For example, the SDAT addresses concerns about illness, but not the existential needs related to legacy, sense of burden, or concerns about dying many patients face when dealing with life-limiting illness. The GES is not fully quantifiable. Both tools make significant advances by quantifying spiritual assessment, having established psychometric properties, and using language that is inclusive and actionable.

Research Priorities in Spiritual Screening, History-Taking, and Assessment. Palliative care spiritual history, screening, and assessment tools must be applicable to life-limiting illness; be empirically derived; be quantifiable, valid, and reliable; be inclusive; yield clinically relevant information; be feasible and acceptable to patients and caregivers; and inform an interdisciplinary spiritual care plan. To meet these goals, key research gaps must be addressed. First, many tools have been developed primarily for research purposes and further study is needed to evaluate their usefulness in clinical settings. Second, the limitations of published models for spiritual screening, history-taking, and assessment suggest both the need for rigorous testing of existing instruments as well as the development of new, more comprehensive tools. Finally, there is a need for greater conceptual clarity regarding dimensions used for spiritual inquiry and their relationship with assessments of emotional and psychological well-being.

How Do We Intervene in Spirituality?

The SOS-SPC provides an overview of interventions to address patient and family spiritual well-being in palliative care. These include care provided by chaplains as well as spiritual care interventions conducted by interdisciplinary team members. Finally, we address how to intervene in professional education to advance spiritual care for patients and families facing serious illness.

Chaplaincy Care. Care provided by spiritual care professionals (e.g., chaplains and other professionally trained providers of spiritual care, heretofore termed "chaplains") in medical settings includes spiritual care to patients and their families, hospital administration, and staff. Chaplains use many interventions, such as empathic listening, religious rituals, and prayer. Chaplaincy research in palliative care includes studies informing the content of chaplains' spiritual care; chaplains' roles, including requisite training and skill sets within palliative care; and chaplaincy's impact on patient, family, and medical staff outcomes.

The current landscape of chaplaincy research has been well-outlined by important reviews of the chaplaincy literature.^{28–30} The reviews largely conclude that there is insufficient evidence to guide chaplaincy practice, but four important themes are emerging from research on chaplaincy care in the palliative care setting.

<u>Theme 1.</u> Patient and/or family needs for chaplaincy care in serious illness. Related studies show: 1) religion and spirituality are important to large majorities of seriously-ill patients;^{31,32} 2) religious and/or spiritual coping with illness is common among patients and their families;³³⁻⁴⁰ 3) spiritual needs and spiritual struggles are frequent among those facing illness;^{32,41,42} 4) attention to spiritual needs in palliative care settings is often inadequate;^{31,43} and 5) large majorities of seriously-ill patients desire spiritual care to be included in their medical care.⁴⁴⁻⁴⁶

<u>Theme 2.</u> The distribution and function of chaplains in the hospital setting. Limited data inform this theme, but focus on three concerns: 1) *The distribution* of chaplaincy services. For example, one study of hospital chaplains found that only 31% of small hospitals (25–100 bed) have chaplaincy services compared with 94% of large (>400 bed) hospitals,⁴⁷ 2) *Chaplains roles in hospitals.* For example, a survey of hospital administrators indicated that they view chaplains as playing key roles within hospitals, particularly in end-of-life (EOL) care and in providing emotional support to patients and families, ⁴⁸ 3) Usage of chaplaincy in hospitals, including characteristics of referrals. One study of chaplaincy referrals⁴⁹ found that nurses referred patients to chaplains far more often than other staff, and did so for primarily for patient emotional issues. Another study indicated that patients and families most often request a chaplain for spiritual or religious needs, whereas medical staff were most likely to make referrals for patient emotional needs or EOL issues.⁵⁰

<u>Theme</u> 3. What chaplains do. This research body includes the aforementioned data informing spiritual screening and assessment. Other data include observational studies examining chaplaincy interventions. One study found that the most frequent chaplaincy interventions are prayers, blessing, faith affirmation, empathic listening, life review, and emotional support.⁵¹ Data also indicate that chaplains frequently provide care for patients' families, with 29%-40% of chaplaincy referrals being for family needs.^{52,53}

<u>Theme 4.</u> Outcomes associated with chaplaincy care. A small number of studies suggest that chaplaincy care is associated with greater patient and family satisfaction with care during serious illness.^{54,55} For example, a study of 275 family members of patients who died in the intensive care unit found that spiritual care provision by chaplains was associated with greater family satisfaction with care.⁵⁴

Research Priorities in Chaplaincy and Palliative Care. Chaplaincy research is in its infancy, with limited data suggesting: needs for chaplaincy care are frequent in palliative settings; chaplain resources vary across and are often limited in hospital settings; chaplains play key roles in hospitals in providing EOL support to patients and families; they perform a diversity of interventions to patients and families; needs for chaplaincy care are primarily assessed by nursing; and chaplaincy care is associated with greater patient and/or family care satisfaction. However, most studies have used methods that are descriptive or cross-sectional in design, have used inadequate measures (e.g., chaplain self- report), and were mostly performed in single-site, acute care hospitals in the U.S. Research about chaplaincy care within palliative care settings is particularly lacking. Studies are needed among patients, families, and palliative care staff that identify 1) key resources and needs for spiritual care, 2) critical content of chaplaincy spiritual care in serious illness, and 3) how specific chaplaincy care influences outcomes. Such research is required across a variety of cultural and disease settings.

Spiritual Care Intervention	Description of Interventions	Examples
Psychotherapeutic interventions	Psychotherapeutic interventions addressing domain of meaning, based on Frankl's existential logotherapy ⁵⁶	 Brietbart et al.'s^{57,58,61} meaning-based psychotherapy Kang et al.'s¹⁰¹ Logotherapy Lo et al.'s⁶⁰ Managing Cancer and Living Meaningfully
	Spiritually/religiously-focused psychotherapeutic interventions	 Cole and Pargament's¹⁰² spiritually focused psychotherapeutic intervention Koenig et al.'s⁶² religious cognitive
Life review interventions	Psycho-spiritual interventions involving integrating life experiences to preserve and enhance dignity	 behavioral therapy Chochinov et al.'s^{63–68} Dignity Therapy or interventions based Dignity Therapy Steinhauser et al.'s⁶⁶ Outlook Life Review Intervention
Multidisciplinary palliative care interventions	Palliative care interventions incorporating spiritual care as a key domain of a palliative care intervention model	 Rabow et al.'s⁷¹ Multidisciplinary Palliative Care Intervention Brumley et al.'s⁷² Interdisciplinary Home- Based Palliative Care Intervention Rummans et al.'s⁷³ Structured Multidisciplinary Intervention for Advanced Cancer Patients Ferrell et al.'s⁷⁶ Interdisciplinary Palliative Care for Patients with Lung Cancer Sun et al.'s^{77,78} Interdisciplinary Palliative Care for Family Caregivers in Lung Cancer
Spiritual care interventions	Interventions specifically targeting patient spiritual well-begin and/or needs	• Kristeller et al.'s ⁷⁹ Oncologist-Assisted Spirituality Intervention Study
Mind-body interventions	Mind-body interventions such as meditation, massage, and healing arts	 Williams et al.'s⁸⁰ Randomized Controlled Trial of Meditation and Massage Downey et al.'s⁸¹ Efficacy Trial of Guided Meditation and Massage Garland et al.'s⁸² Comparison of Mindfulness-based Stress Reduction and Healing Arts Program in Cancer Outpatients Cole et al.'s⁸³ Randomized Trial of Spiritually Focused Meditation in Metastatic Melanoma

 Table 3

 Spiritual Care Interventions in Palliative Care Populations

Spiritual Care Interventions. Spiritual care interventions are models of care developed to address spiritual QOL and other palliative care outcomes. They include psychotherapeutic, life review, multidisciplinary, and mind body interventions (Table 3).

Psychotherapeutic Interventions. Most spiritual intervention studies investigate the efficacy of psychotherapeutic interventions to address spiritual concerns, such as meaning or forgiveness. Many interventions focus on meaning, including interventions based on Viktor Frankl's existential logotherapy⁵⁶ such as Brietbart's⁵⁷ meaning-based psychotherapy. Studies testing these interventions have, in general, demonstrated positive associations on various outcomes, including patient QOL and spiritual well-being.⁵⁸⁻⁶¹ In a pilot randomized trial of Breitbart's manualized, semi-structured, eight-session psychotherapeutic intervention among 120 advanced cancer patients, improvements in spiritual well-being, QOL, symptom burden, and symptom-related distress were seen.⁶¹ A prospective study of the Managing Cancer and Living Meaningfully intervention—a three to eight session

manualized psychotherapy intervention—demonstrated improvements in spiritual well-being, depression, and anxiety at three and six months compared with baseline.⁶⁰

A pilot randomized trial of Koenig's religious cognitive behavioral therapy versus cognitive behavioral therapy (CBT) was implemented in 132 patients with major depression and chronic medical illness and showed no difference between the two groups, although there was a suggestion that among religious patients, religious cognitive behavioral therapy was more effective than standard CBT.⁶²

<u>Life Review Interventions.</u> Life review is a psychospiritual intervention involving a process of recalling, evaluating, and integrating life experiences to preserve and enhance personhood. These typically result in a generativity document to enhance a personal sense of legacy in the face of terminal disease. Models for life review include Chochinov's Dignity Therapy or interventions based on the Dignity Therapy model which address psychosocial, existential, and spiritual issues at the EOL through the construct of dignity.^{63–68} A recent systematic review of Dignity Therapy⁶⁹ showed that patients and family members consistently report benefits to the EOL experience. However, dignity therapy's effects on emotional and physical symptoms show mixed results within general palliative care populations. Among patients with higher rates of baseline distress, it has also shown to mitigate depression, desire for hastened death, and demoralization. Steinhauser et al.⁶⁶ developed Outlook, a manualized, three-session, life review intervention that additionally addresses legacy and negative life experiences such regrets, with the aim of facilitating reconciliation. Life review interventions have demonstrated positive associations with patient and family outcomes, including patient-reported QOL, dignity, spiritual well-being, and preparation.

<u>Multidisciplinary Team Interventions.</u> A number of studies, including three of the five RCTs identified in a recent Cochrane Review,⁷⁰ have investigated multidisciplinary palliative care interventions that involve a spiritual care component, typically delivered by a chaplain.

Descriptions of the spiritual care content provided in these interventions are limited, and spiritual care was tailored to each patient and family. Furthermore, these studies embedded spiritual care within a larger intervention, making it unclear which aspects of the intervention (or combinations) influenced outcomes.

Despite limitations, these studies have shown positive associations with outcomes, including reduced symptoms, improved QOL (or subdomains), and decreased healthcare utilization.⁷¹⁻⁷⁸ Rabow et al.⁷¹ in a randomized trial of an interdisciplinary team intervention (including chaplains) involved assessment and recommendations to the patient's primary care provider in five domains: physical, psychological, social support, spiritual, and advance care planning. This study of 90 patients with advanced illnesses found decreased anxiety and dyspnea, improved sleep quality and spiritual well-being, and decreased primary care physician and urgent care visits in the intervention compared with the control group. Another randomized trial examined the impact of an interdisciplinary home-based healthcare program (delivered by an interdisciplinary team, including chaplains) that assessed and addressed physical, psychological, social, and spiritual needs of patients and their families.⁷² This study of 298 seriously-ill patients found greater satisfaction with care, greater home deaths, less emergency room visits, less hospitalizations, and reduced costs in the intervention compared with the control group. A randomized trial of an eightsession educational intervention focusing on strategies to improve QOL in five domains-cognitive, emotional, social, physical, and spiritual-was performed among 115 advanced cancer patients receiving palliative radiotherapy.⁷³ This study demonstrated better maintenance of QOL (including the spiritual subdomain) among intervention patients. A prospective study of 491 patients with lung cancer tested the effectiveness of an interdisciplinary palliative care intervention addressing patient well-being in four domains-physical, psychological, social, and spiritual-and found better QOL (including spiritual well-being), lower psychological distress, better symptom control, and greater completion of advance directives in the intervention as compared with the congroup.⁷⁶ А prospective trol study of an interdisciplinary palliative care intervention for 366 family caregivers of patients with lung cancer that addressed caregiver physical, psychological, social, and spiritual well-being found better social and psychological wellbeing as well as less caregiver burden in the intervention group as compared with the usual care group.^{77,78}

Finally, one intervention examined the impact of a dedicated spiritual care intervention delivered by physicians, where chaplaincy resources were also available to patients within the intervention structure.⁷⁹ This study alternately assigned 118 consecutive cancer patients to a brief, semi-structured inquiry about spiritual and/or religious concerns by trained oncologists; with 76% of patients receiving the intervention reporting that it was useful. At three weeks postintervention, the intervention group had greater reduction in depressive symptoms, better QOL, and better patient ratings of interpersonal caring from their physician.

Mind-Body Interventions. The final category of spiritual interventions includes mind-body interventions such as massage and meditation. There are mixed findings regarding its benefits to patient well-being in the palliative care setting. Two randomized trials^{80,81} of mindfulness-based stress reduction (MBSR) were evaluated in a recent Cochrane review,⁷⁰ which reported no difference between intervention and control groups. A pilot randomized trial reported no significant treatment effects of either massage or guided mediation in palliative care patients over a 10-week period when compared with the control group.⁸⁰ An additional non-randomized study compared cancer patients participating in an MBSR program and a healing arts program on measures of post-traumatic growth, spirituality, stress, and mood disturbance.⁸² In comparison with the healing arts group, MBSR participants showed more improvement on measures of spirituality, anxiety, anger, overall stress symptoms, and mood disturbance. A randomized trial among 83 metastatic melanoma patients compared the effects of spiritually-focused meditation and secularly-focused meditation, and reported that participants spiritually-focused meditation had reduced depression and increased positive effect compared with the control group.⁸³

Table 4

Research Priorities in Spirituality and Palliative Care-Spiritual Screening/History-Taking/Assessment, Chaplaincy, Interventions, and Education

Balboni et al.

Spiritual screening, history-taking, and assessment	- Conduct research that applies existing instruments to the palliative setting and tests their validity, reliability, and clinical usefulness, resulting in model refinement and emergence of what are standardized models for screening, history-taking, and assessment.
	- Adapt models of inquiry to unique populations, cultural, spiritual, and religious contexts, with sensitivity to the unique manifestations of spirituality in specific contexts (e.g., pediatrics, certain disease settings, particular religious/spiritual traditions or cultures, etc).
	- Conduct research to develop and validate and establish gold standard palliative care spiritual assessment tool.
	- Conduct research to determine how screening, history-taking, and assessment function within the context of interdisciplinary spiritual care, such as determining the interfacing roles of spiritual screening, history taking, and assessment.
Chaplaincy	 Conduct research to determine the religious and spiritual resources and needs informing professiona spiritual care.
	 Define key elements of professional spiritual care practice in palliative care. Define professional spiritual care structure within palliative care, including training/credentialing, roles within interdisciplinary palliative care teams, and characterization of chaplaincy workforce and workforce needs within palliative care.
	 Define the outcomes related to professional spiritual care provision to patients, families, and staff in the palliative care settings using robust research designs (e.g., prospective designs that minimize confounding) and across diverse disease and cultural settings.
Interventions	- Include rigorous conceptualization of the spiritual care interventions, including the domains of spirituality being targeted and conceptually-related outcome measures, with robust methods to evaluate the impact of spiritual interventions over time.
	- Ground the development of spiritual interventions in real world clinical practice and on the identified spiritual domains related to key patient outcomes in the literature.
	In intervention research, identify and address those individuals most in need of a spiritual care intervention, and target those domains of need.
	- In piloting and evaluating spiritual interventions, use patient, family, and health care team input to determine utility and face validity and to ensure that interventions are clinically relevant and patient centered.
	 Using intervention research, refine clinical models for spiritual care delivery and translate these models to clear clinical roles for palliative care providers and training models to practically guide the integration of spiritual care within palliative care.
Education	 Perform research that further refines the requisite spiritual care competencies relevant to each of the disciplines involved in providing palliative care.
	- Develop evidence-based spiritual care training curricula.
	 Develop evaluation tools specific to testing spiritual care competencies. Test spiritual care training models using rigorous methods, including assessing impact on clinical spiritual care provision, patient outcomes as well as clinician outcomes, such as burnout.

Limitations and Research Priorities in Spiritual Care Inter*ventions.* A fundamental limitation in the literature is the frequent lack of conceptual clarity regarding what constitutes spirituality, and hence a spiritual care intervention. Furthermore, many studies lacked a conceptual model of how the spiritual intervention is hypothesized to be related to the outcome(s) of interest, examined a myriad of outcomes with varying measures, and few studies used rigorous testing methods. Despite the prevalence of spiritual distress in palliative care populations and its known relationship to poorer outcomes,^{22,84} including its recognition as a "diagnosis" by the National Comprehensive Cancer Network,⁸⁵ and acknowledgement by palliative care clinicians as a research priority,¹ current intervention research is largely not targeting spiritual distress. Furthermore, spiritual interventions have largely been performed without targeting a specific group for whom the intervention is potentially most useful, reducing the likelihood that an intervention effect will be found.

Despite the observation that spirituality is highly individualized and culturally informed, the integration

of patient and family input into the design, implementation, and evaluation of spiritual interventions was largely absent in these studies. In addition, such an approach can aid in addressing a related gap in the literature, the validation of spiritual measures and interventions in diverse patient populations and cultures. Finally, the transfer of intervention research into clinical practice has been identified as an overarching research gap,⁸⁶ which is particularly true for research on spiritual interventions. To fill this gap, researchers may consider interventions developed for other health conditions, such as post-traumatic stress disorder,⁸⁷ that include a spiritual component and could be extending to palliative care.

How Do We Train Healthcare Professionals to Address Spirituality in Palliative Care?

The final spirituality and palliative care research domain addressed by SOS-SPC team was education research in spirituality and palliative care. The 2009 Spiritual Care Consensus Conference identified key competencies for providers of spiritual care in the palliative care setting.²¹ These include that all members of the palliative care team should: 1) have training in spiritual care commensurate with their scope of practice, 2) be aware of the basics of spiritual screening and history taking, 3) be aware of spiritual resources available to patients (e.g., chaplaincy), 4) be trained in the tenets of different faiths and cultures to provide spiritually and culturally sensitive care, 5) have basic training in how spiritual values and/or beliefs can influence patient and family medical decisions, 6) have awareness of the varying spiritual care roles of different providers and when to refer to each, 7) have training in compassionate presence and active listening, and 8) have training in spiritual self-reflection and self-care.

Despite these recommendations, and the presence of spiritual care as one of eight key domains of quality palliative care within the National Consensus Project Guidelines,⁸⁸ spiritual care in the palliative care setting remains infrequent.^{31,43,44} Although clear strides have been made in spirituality education in the medical school setting,^{21,89} such training in the post medical school setting is limited. This paucity of education is illustrated by a survey-based study of 339 physicians and nurses caring for advanced cancer patients, with only 12% of nurses and 14% of physicians reporting receiving any spiritual care training.⁴⁴ In this same study, training was the strongest predictor of spiritual care provision to patients.

The recommendations set forth by the Spiritual Care Consensus Conference call for research that targets methods of meeting those competencies; however, there is a paucity of such research.²¹ Outcomes of a large demonstration project on integrating spiritual care within palliative care at nine healthcare settings in California identified the need for spiritual care education to a wide range of staff as well as the need for identification of appropriate spiritual care roles of various disciplines as key to spiritual care integration.90 Two small studies reported on the experiences of clinical pastoral education adapted for healthcare practitioners with a suggestion that these programs improved spiritual care compentency.^{91,92} Key limitations include that these are small studies of participants who were self-selected, and the clinical feasibility of these programs is doubtful because of the time-intensive nature of these programs.

Key Gaps and Research Priorities in Healthcare Training Spirituality and Palliative Care. There are notable limitations to the current body of research informing training at the intersection of spirituality and palliative care. Major gaps include a dearth of evidence-based development of curricula to train in the identified spiritual care competency areas, as well as the lack of standardized methods of assessing those competencies. Furthermore, research is needed to determine and further refine each of the spiritual care competencies identified at the Spiritual Care Consensus Conference. Spiritual care interdisciplinary roles and skill sets (e.g., clinical care providers, social workers) need to be defined to guide training for varying specialties. Finally, data are needed to assess best training practices for achieving the identified spiritual care competencies for health care providers.

Conclusions

Based on the current research landscape, priorities for spirituality research in palliative care within the domains of spiritual screening/history-taking/ assessment, chaplaincy, interventions, and education have been identified (Table 4). Such research efforts will advance evidence-based methods for the integration of spirituality into palliative care practice and promote integrated care of the physical, emotional, social, and spiritual well-being of patients and families with serious illness.

The field of spirituality and palliative care is at a critical juncture. By rigorously and comprehensively addressing the spectrum of spiritual expressions within illness, from spiritual pain to spiritual flourishing and across religious and cultural contexts, palliative care will advance whole-person care of patients and their families. Spiritual care provision relies on a strong evidence base that includes consistent terminology, clear concepts, systematic inquiry, and tested interventions. Furthermore, it relies on approaches, measures, and interventions developed and tested within populations diverse in beliefs systems (religious and non-religious) and cultural expression of those beliefs and practices. Researchers and clinicians may embrace this opportunity to bring expertise to this area so fundamental to patient and family preferences, beliefs, and QOL.

Disclosures and Acknowledgments

This project was supported in full by a grant from the National Palliative Care Research Center (NPCRC). In addition, Dr. Balboni received support from the Templeton Foundation. Dr. Steinhauser was supported by the Center of Innovation for Health Services Research in Primary Care (CIN 13-410) at the Durham VA Medical Center and the VA Mental Health and Chaplaincy Program (XVA 21-150 VA-DOD Integrated Mental Health Strategy Action #23). Drs. Johnson and Steinhauser received support from the National Institutes of Health (R01 AG042130 and the Greenwall Foundation). Dr. Sinclair was supported by a Cancer Care Research Professorship from the Faculty of Nursing, University of Calgary. Dr. Koenig was supported by the Duke Center for Spirituality, Theology and Health. Dr. Puchalski received support from the Templeton Foundation, Fetzer Institute, Archstone Foundation, and Arthur Vining Davis Foundation. The views herein are those of the authors and do not reflect the views of the funding organizations.

References

1. Selman L, Young T, Vermandere M, Stirling I, Leget C. Research Subgroup of European Association for Palliative Care Spiritual Care T. Research priorities in spiritual care: an international survey of palliative care researchers and clinicians. J Pain Symptom Manage 2014;48:518–531.

2. Massey KF, Roberts PA. Assessment and diagnosis in spiritual care. In: Mauk KL, Schmidt NK, eds. Spiritual care in nursing practice. Philadelphia, PA: Lippincott, Williams and Wilkins, 2004:209–242.

3. Bultz BD, Groff SL, Fitch M, et al. Implementing screening for distress, the 6th vital sign: a Canadian strategy for changing practice. Psychooncology 2011;20:463–469.

4. Wells-Di Gregorio S, Porensky EK, Minotti M, et al. The James Supportive Care Screening: integrating science and practice to meet the NCCN guidelines for distress management at a Comprehensive Cancer Center. Psychooncology 2013;22:2001–2008.

5. Loscalzo M, Dillehunt J, Rinehart R, Strowbridge R, Smith D. SupportScreen: a model for improving patient outcomes. J Natl Compr Canc Netw 2010;8:498-504.

6. Wolpin S, Berry D, Austin-Seymour M, et al. Acceptability of an electronic self-report assessment program for patients with cancer. Comput Inform Nurs 2008;26:332–338.

7. Thomas BC, Thomas I, Nandamohan V, Nair MK, Pandey M. Screening for distress can predict loss of followup and treatment in cancer patients: results of development and validation of the Distress Inventory for Cancer Version 2. Psychooncology 2009;18:524–533.

8. Fischbeck S, Maier BO, Reinholz U, et al. Assessing somatic, psychosocial, and spiritual distress of patients with advanced cancer: development of the Advanced Cancer Patients' Distress Scale. Am J Hosp Palliat Care 2013; 30:339–346.

9. Tuinman MA, Gazendam-Donofrio SM, Hoekstra-Weebers JE. Screening and referral for psychosocial distress in oncologic practice: use of the Distress Thermometer. Cancer 2008;113:870–878.

10. Carlson LE, Waller A, Mitchell AJ. Screening for distress and unmet needs in patients with cancer: review and recommendations. J Clin Oncol 2012;30:1160–1177.

11. Fitchett G, Risk JL. Screening for spiritual struggle. J Pastoral Care Counsel 2009;63:4-1-12.

12. Steinhauser KE, Clipp EC, Bosworth HB, et al. Measuring quality of life at the end of life: validation of the QUAL-E. Palliat Support Care 2004;2:3–14.

13. Mako C, Galek K, Poppito SR. Spiritual pain among patients with advanced cancer in palliative care. J Palliat Med 2006;9:1106–1113.

14. Delgado-Guay MO, Parsons HA, Hui D, De la Cruz MG, Thorney S, Bruera E. Spirituality, religiosity, and spiritual pain among caregivers of patients with advanced cancer. Am J Hosp Palliat Care 2013;30:455–461.

15. Fitchett G, Rybarczyk BD, DeMarco GA, Nicholas JJ. The role of religion in medical rehabilitation outcomes: a longitudinal study. Rehabil Psychol 1999;44:333–353.

16. Puchalski C, Romer AL. Taking a spiritual history allows clinicians to understand patients more fully. J Palliat Med 2000;3:129–137.

17. Maugans TA. The SPIRITual history. Arch Fam Med 1996;5:11–16.

18. Anandarajah G, Hight E. Spirituality and medical practice: using the HOPE questions as a practical tool for spiritual assessment. Am Fam Physician 2001;63:81–89.

19. Frick E, Riedner C, Fegg MJ, Hauf S, Borasio GD. A clinical interview assessing cancer patients' spiritual needs and preferences. Eur J Cancer Care 2006;15:238–243.

20. Borneman T, Ferrell B, Puchalski CM. Evaluation of the FICA tool for spiritual assessment. J Pain Symptom Manage 2010;40:163–173.

21. Puchalski C, Ferrell B, Virani R, et al. Improving the quality of spiritual care as a dimension of palliative care: the report of the Consensus Conference. J Palliat Med 2009;12:885–904.

22. Hui D, de la Cruz M, Thorney S, Parsons HA, Delgado-Guay M, Bruera E. The frequency and correlates of spiritual distress among patients with advanced cancer admitted to an acute palliative care unit. Am J Hosp Palliat Care 2011;28: 264–270.

23. Shields M, Kestenbaum A, Dunn LB. Spiritual AIM and the work of the chaplain: a model for assessing spiritual needs and outcomes in relationship. Palliat Support Care 2015;13:75–89.

24. Monod SM, Rochat E, Bula CJ, Jobin G, Martin E, Spencer B. The spiritual distress assessment tool: an instrument to assess spiritual distress in hospitalised elderly persons. BMC Geriatr 2010;10:88.

25. Monod S, Rochat E, Bula C, Spencer B. The spiritual needs model: spirituality assessment in the geriatric hospital settting. J Religion Spirituality Aging 2010;22:271–282.

26. Monod S, Martin E, Spencer B, Rochat E, Bula C. Validation of the spiritual distress assessment tool in older hospitalized patients. BMC Geriatr 2012;12:13.

27. Benito E, Oliver A, Galiana L, et al. Development and validation of a new tool for the assessment and spiritual care of palliative care patients. J Pain Symptom Manage 2014;47:1008–1018.e1.

28. Mowat H. The potential for efficacy of healthcare chaplaincy and spiritual care provision in the NHS (UK): A scoping review of recent research 2008. National Health Service, United Kingdom. Available from http://www.ukbhc. org.uk/sites/default/files/The%20potential%20for%20effii cacy%20for%20healthcare%20chaplaincy.pdf. Accessed June 28, 2016.

29. Jankowski KR, Handzo GF, Flannelly KJ. Testing the efficacy of chaplaincy care. J Health Care Chaplain 2011; 17:100–125.

30. Pesut B, Sinclair S, Fitchett G, Greig M, Koss SE. Health care chaplaincy: a scoping review of the evidence 2009-2014. J Health Care Chaplain 2016;22:67–84.

31. Balboni TA, Vanderwerker LC, Block SD, et al. Religiousness and spiritual support among advanced cancer patients and associations with end-of-life treatment preferences and quality of life. J Clin Oncol 2007;25:555–560.

32. Alcorn SR, Balboni MJ, Prigerson HG, et al. "If God wanted me yesterday, I wouldn't be here today": religious and spiritual themes in patients' experiences of advanced cancer. J Palliat Med 2010;13:581–588.

33. Phelps AC, Maciejewski PK, Nilsson M, et al. Religious coping and use of intensive life-prolonging care near death in patients with advanced cancer. JAMA 2009;301: 1140–1147.

34. Vallurupalli M, Lauderdale K, Balboni MJ, et al. The role of spirituality and religious coping in the quality of life of patients with advanced cancer receiving palliative radiation therapy. J Support Oncol 2012;10:81–87.

35. Kristeller JL, Sheets V, Johnson T, Frank B. Understanding religious and spiritual influences on adjustment to cancer: individual patterns and differences. J Behav Med 2011;34:550–561.

36. Hebert RS, Dang Q, Schulz R. Religious beliefs and practices are associated with better mental health in family caregivers of patients with dementia: findings from the REACH study. Am J Geriatr Psychiatry 2007;15:292–300.

37. Tarakeshwar N, Vanderwerker LC, Paulk E, Pearce MJ, Kasl SV, Prigerson HG. Religious coping is associated with the quality of life of patients with advanced cancer. J Palliat Med 2006;9:646–657.

38. Fitchett G, Murphy PE, Kim J, Gibbons JL, Cameron JR, Davis JA. Religious struggle: prevalence, correlates and mental health risks in diabetic, congestive heart failure, and oncology patients. Int J Psychiatry Med 2004;34: 179–196.

39. Boscaglia N, Clarke DM, Jobling TW, Quinn MA. The contribution of spirituality and spiritual coping to anxiety and depression in women with a recent diagnosis of gynecological cancer. Int J Gynecol Cancer 2005;15:755–761.

40. Sherman AC, Simonton S, Latif U, Spohn R, Tricot G. Religious struggle and religious comfort in response to illness: health outcomes among stem cell transplant patients. J Behav Med 2005;28:359–367.

41. Winkelman WD, Lauderdale K, Balboni MJ, et al. The relationship of spiritual concerns to the quality of life of advanced cancer patients: preliminary findings. J Palliat Med 2011;14:1022–1028.

42. Moadel A, Morgan C, Fatone A, et al. Seeking meaning and hope: self-reported spiritual and existential needs among an ethnically-diverse cancer patient population. Psychooncology 1999;8:378–385.

43. Astrow AB, Wexler A, Texeira K, He MK, Sulmasy DP. Is failure to meet spiritual needs associated with cancer patients' perceptions of quality of care and their satisfaction with care? J Clin Oncol 2007;25:5753–5757.

44. Balboni MJ, Sullivan A, Amobi A, et al. Why is spiritual care infrequent at the end of life? Spiritual care perceptions among patients, nurses, and physicians and the role of training. J Clin Oncol 2013;31:461–467.

45. Ehman JW, Ott BB, Short TH, Ciampa RC, Hansen-Flaschen J. Do patients want physicians to inquire about their spiritual or religious beliefs if they become gravely ill? Arch Intern Med 1999;159:1803–1806.

46. Piderman KM, Marek DV, Jenkins SM, et al. Predicting patients' expectations of hospital chaplains: a multisite survey. Mayo Clin Proc 2010;85:1002–1010.

47. Flannelly KJ, Handzo GF, Weaver AJ. Factors affecting healthcare chaplaincy and the provision of pastoral care in the United States. J Pastoral Care Counsel 2004;58:127–130.

48. Flannelly KJ, Galek K, Bucchino J, Handzo GF, Tannenbaum HP. Department directors' perceptions of the roles and functions of hospital chaplains: a national survey. Hosp Top 2005;83:19–27.

49. Vanderwerker LC, Flannelly KJ, Galek K, et al. What do chaplains really do? III. Referrals in the New York Chaplaincy Study. J Health Care Chaplain 2008;14:57–73.

50. Galek K, Vanderwerker LC, Flannelly KJ, et al. Topography of referrals to chaplains in the Metropolitan Chaplaincy Study. J Pastoral Care Counsel 2009;63:6-1-13.

51. Handzo GF, Flannelly KJ, Murphy KM, et al. What do chaplains really do? I. Visitation in the New York Chaplaincy Study. J Health Care Chaplaincy 2008;14:20–38.

52. Flannelly KJ, Weaver AJ, Handzo GF. A three-year study of chaplains' professional activities at Memorial Sloan-Kettering Cancer Center in New York city. Psychooncology 2003;12:760–768.

53. VandeCreek L, Lyon M. The general hospital chaplain's ministry: analysis of productivity, quality and cost. Caregiver J 1995;11:3–10.

54. Johnson JR, Engelberg RA, Nielsen EL, et al. The association of spiritual care providers' activities with family members' satisfaction with care after a death in the ICU*. Crit Care Med 2014;42:1991–2000.

55. Marin DB, Sharma V, Sosunov E, Egorova N, Goldstein R, Handzo GF. Relationship between chaplain visits and patient satisfaction. J Health Care chaplain 2015; 21:14–24.

56. Frankl VE. The doctor and the soul: From psychotherapy to logotherapy. New York: Vintage Books, 1986.

57. Breitbart W. Spirituality and meaning in supportive care: spirituality- and meaning-centered group psychotherapy interventions in advanced cancer. Support Care Cancer 2002;10:272–280.

58. Breitbart W, Gibson C, Poppito SR, Berg A. Psychotherapeutic interventions at the end of life: a focus on meaning and spirituality. Can J Psychiatry 2004;49:366–372.

59. Kang KA, Im JI, Kim HS, Kim SJ, Song MK, Sim S. The effect of logotherapy on the suffering, finding meaning, and spiritual well-being of adolescents with terminal cancer. J Korean Acad Child Health Nurs 2009;15:136–144.

60. Lo C, Hales S, Jung J, et al. Managing Cancer And Living Meaningfully (CALM): phase 2 trial of a brief individual psychotherapy for patients with advanced cancer. Palliat Med 2014;28:234–242.

61. Breitbart W, Poppito S, Rosenfeld B, et al. Pilot randomized controlled trial of individual meaning-centered psychotherapy for patients with advanced cancer. J Clin Oncol 2012;30:1304–1309.

62. Koenig HG, Pearce MJ, Nelson B, et al. Religious vs. conventional cognitive behavioral therapy for major depression in persons with chronic medical illness: a pilot randomized trial. J Nerv Ment Dis 2015;203:243–251.

63. McClement S, Chochinov HM, Hack T, Hassard T, Kristjanson LJ, Harlos M. Dignity therapy: family member perspectives. J Palliat Med 2007;10:1076–1082.

64. Ando M, Morita T, Miyashita M, Sanjo M, Kira H, Shima Y. Effects of bereavement life review on spiritual well-being and depression. J Pain Symptom Manage 2010; 40:453–459.

65. Chochinov HM, Hack T, Hassard T, Kristjanson LJ, McClement S, Harlos M. Dignity therapy: a novel psychotherapeutic intervention for patients near the end of life. J Clin Oncol 2005;23:5520–5525.

66. Steinhauser KE, Alexander SC, Byock IR, George LK, Tulsky JA. Seriously ill patients' discussions of preparation and life completion: an intervention to assist with transition at the end of life. Palliat Support Care 2009;7:393–404.

67. Xiao H, Kwong E, Pang S, Mok E. Effect of a life review program for Chinese patients with advanced cancer. Cancer Nurs 2013;36:274–283.

68. Chochinov HM, Kristjanson LJ, Breitbart W, et al. Effect of dignity therapy on distress and end-of-life experience in terminally ill patients: a randomised controlled trial. Lancet Oncol 2011;12:753–762.

69. Fitchett G, Emanuel L, Handzo G, Boyken L, Wilkie DJ. Care of the human spirit and the role of dignity therapy: a systematic review of dignity therapy research. BMC Palliat Care 2015;14:1–12.

70. Candy B, Jones L, Varagunam M, Speck P, Tookman A, King M. Spiritual and religious interventions for well-being of adults in the terminal phase of disease. Cochrane Database Syst Rev 2012CD007544.

71. Rabow MW, Dibble SL, Pantilat SZ, McPhee SJ. The comprehensive care team: a controlled trial of outpatient palliative medicine consultation. Arch Intern Med 2004; 164:83–91.

72. Brumley R, Enguidanos S, Jamison P, et al. Increased satisfaction with care and lower costs: results of a randomized trial of in-home palliative care. J Am Geriatr Soc 2007; 55:993–1000.

73. Rummans TA, Clark MM, Sloan JA, et al. Impacting quality of life for patients with advanced cancer with a structured multidisciplinary intervention: a randomized controlled trial. J Clin Oncol 2006;24:635–642.

74. Piderman KM, Johnson ME, Frost MH, et al. Spiritual quality of life in advanced cancer patients receiving radiation therapy. Psychooncology 2014;23:216–221.

75. Kao CY, Hu WY, Chiu TY, Chen CY. Effects of the hospital-based palliative care team on the care for cancer patients: an evaluation study. Int J Nurs Stud 2014;51:226–235.

76. Ferrell B, Sun V, Hurria A, et al. Interdisciplinary palliative care for patients with lung cancer. J Pain Symptom Manage 2015;50:758–767.

77. Sun V, Grant M, Koczywas M, et al. Effectiveness of an interdisciplinary palliative care intervention for family caregivers in lung cancer. Cancer 2015;121:3737–3745.

78. Sun V, Kim JY, Irish TL, et al. Palliative care and spiritual well-being in lung cancer patients and family caregivers. Psychooncology 2015;25:1448–1455.

79. Kristeller JL, Rhodes M, Cripe LD, Sheets V. Oncologist Assisted Spiritual Intervention Study (OASIS): patient

acceptability and initial evidence of effects. Int J Psychiatry Med 2005;35:329–347.

80. Williams AL, Selwyn PA, Liberti L, et al. A randomized controlled trial of meditation and massage effects on quality of life in people with late-stage disease: a pilot study. J Palliat Med 2005;8:939–952.

81. Downey L, Diehr P, Standish LJ, et al. Might massage or guided meditation provide "means to a better end"? Primary outcomes from an efficacy trial with patients at the end of life. J Palliat Care 2009;25:100–108.

82. Garland SN, Carlson LE, Cook S, Lansdell L, Speca M. A non-randomized comparison of mindfulness-based stress reduction and healing arts programs for facilitating post-traumatic growth and spirituality in cancer outpatients. Support Care Cancer 2007;15:949–961.

83. Cole BS, Hopkins CM, Spiegel J, TIsak J, Agarwala S, Kirkwood JM. A randomised clinical trial of the effects of spiritually focused meditation for people with metastatic melanoma. Ment Health Relig Cult 2012;15:161–174.

84. Pargament KI, Koenig HG, Tarakeshwar N, Hahn J. Religious struggle as a predictor of mortality among medically ill elderly patients: a 2-year longitudinal study. Arch Intern Med 2001;161:1881–1885.

85. National comprehensive cancer network clinical practice guidelines in oncology: Palliative care 2017. Available from NCCN.org. Accessed August 1, 2016.

86. Graham IDLJ, Harrison MB, Straus SE, Tetroe J, Caswell W, Robinson N. Lost in knowledge translation: time for a map? J Contin Educ Health Prof 2006;26:13.

87. Harris JI, Erbes CR, Engdahl BE, et al. The effectiveness of a trauma focused spiritually integrated intervention for veterans exposed to trauma. J Clin Psychol 2011;67: 425–438.

88. National consensus project for quality palliative care: Clinical practice guidelines for quality palliative care, 2nd ed. 2009. Available from http://www.nationalconsensusproject. org. Accessed June 28, 2016.

89. Koenig HG, Hooten EG, Lindsay-Calkins E, Meador KG. Spirituality in medical school curricula: findings from a national survey. Int J Psychiatry Med 2010;40: 391–398.

90. Otis-Green S, Ferrell B, Borneman T, Puchalski C, Uman G, Garcia A. Integrating spiritual care within palliative care: an overview of nine demonstration projects. J Palliat Med 2012;15:154–162.

91. Zollfrank AA, Trevino KM, Cadge W, et al. Teaching health care providers to provide spiritual care: a pilot study. J Palliat Med 2015;18:408–414.

92. Todres ID, Catlin EA, Thiel MM. The intensivist in a spiritual care training program adapted for clinicians. Crit Care Med 2005;33:2733–2736.

93. Steinhauser KE, Voils CI, Clipp EC, Bosworth HB, Christakis NA, Tulsky JA. "Are you at peace?": one item to probe spiritual concerns at the end of life. Arch Intern Med 2006;166:101–105.

94. Balk DE. Bereavement and spiritual change. Death Stud 1999;23:485–493.

95. Berg GE. The use of the computer as a tool for assessment and research in pastoral care. J Health Care Chaplain 1994;6:11–25.

96. Berg GE. A Statement on clinical assessment for pastoral care. Chaplaincy Today 1999;14:42–50.

97. Berg G. The relationship between spiritual distress, PTSD and depression in Vietnam combat veterans. J Pastoral Care Counsel 2011;65:6. 1–11.

98. Pruyser P. The minister as diagnostician. Philadelphia: Westminster Press, 1976.

99. Fitchett G. Assessing spiritual needs: a guide for caregivers, 2nd ed. Augsburg: Academic Renewal Press, 2002. **100.** Lucas AM. Introduction to the discipline for pastoral care giving. J Health Care Chaplaincy 2001;10:1–33.

101. Kang KA, Shim JS, Jeon DG, Koh MS. [The effects of logotherapy on meaning in life and quality of life of late adolescents with terminal cancer]. J Korean Acad Nurs 2009; 39:759–768.

102. Cole B, Pargament K. Re-creating your life: a spiritual/psychotherapeutic intervention for people diagnosed with cancer. Psychooncology 1999;8:395–407.