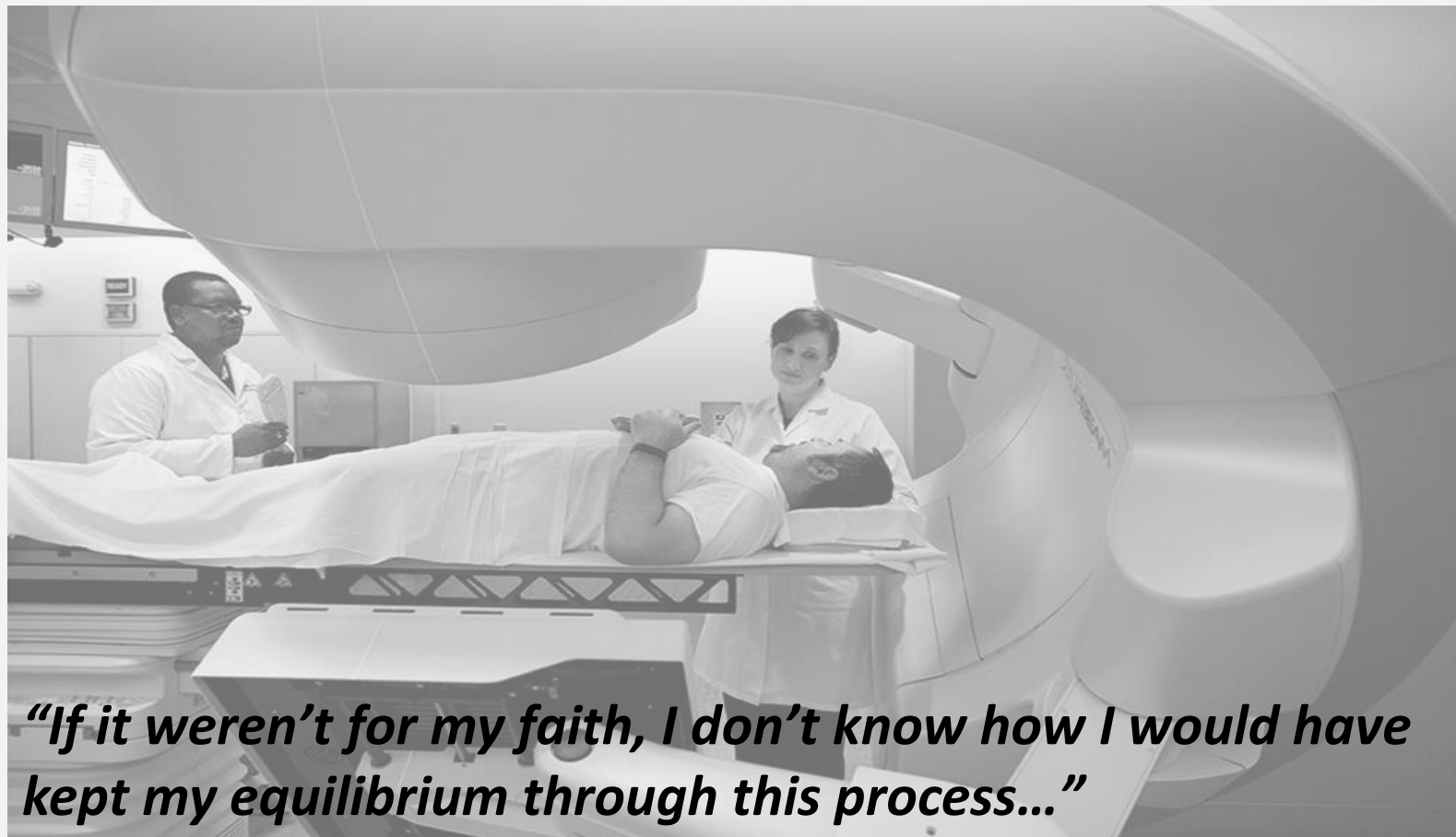


Spirituality in Serious Illness & Health

Tracy A. Balboni MD, MPH, FAAHPM
May 30, 2023

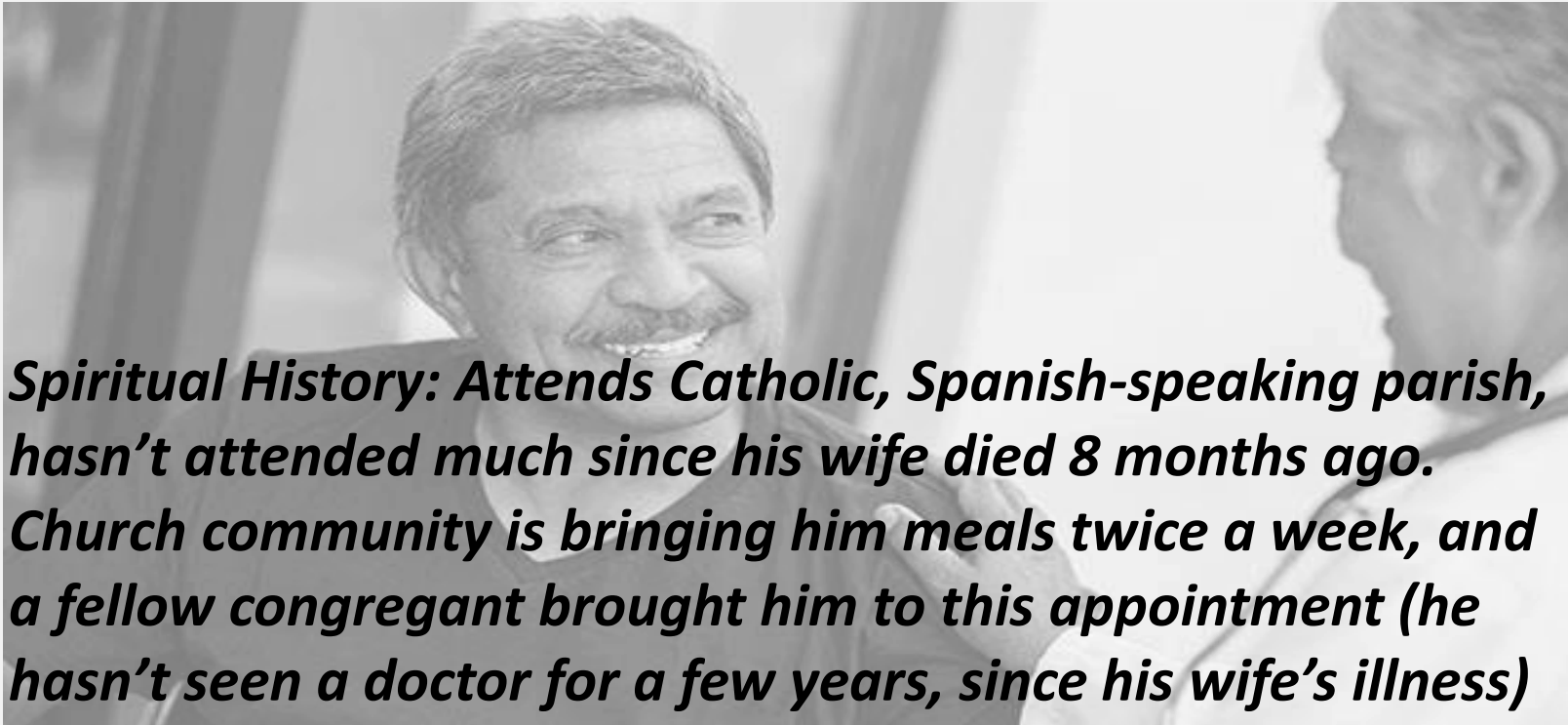






“If it weren’t for my faith, I don’t know how I would have kept my equilibrium through this process...”



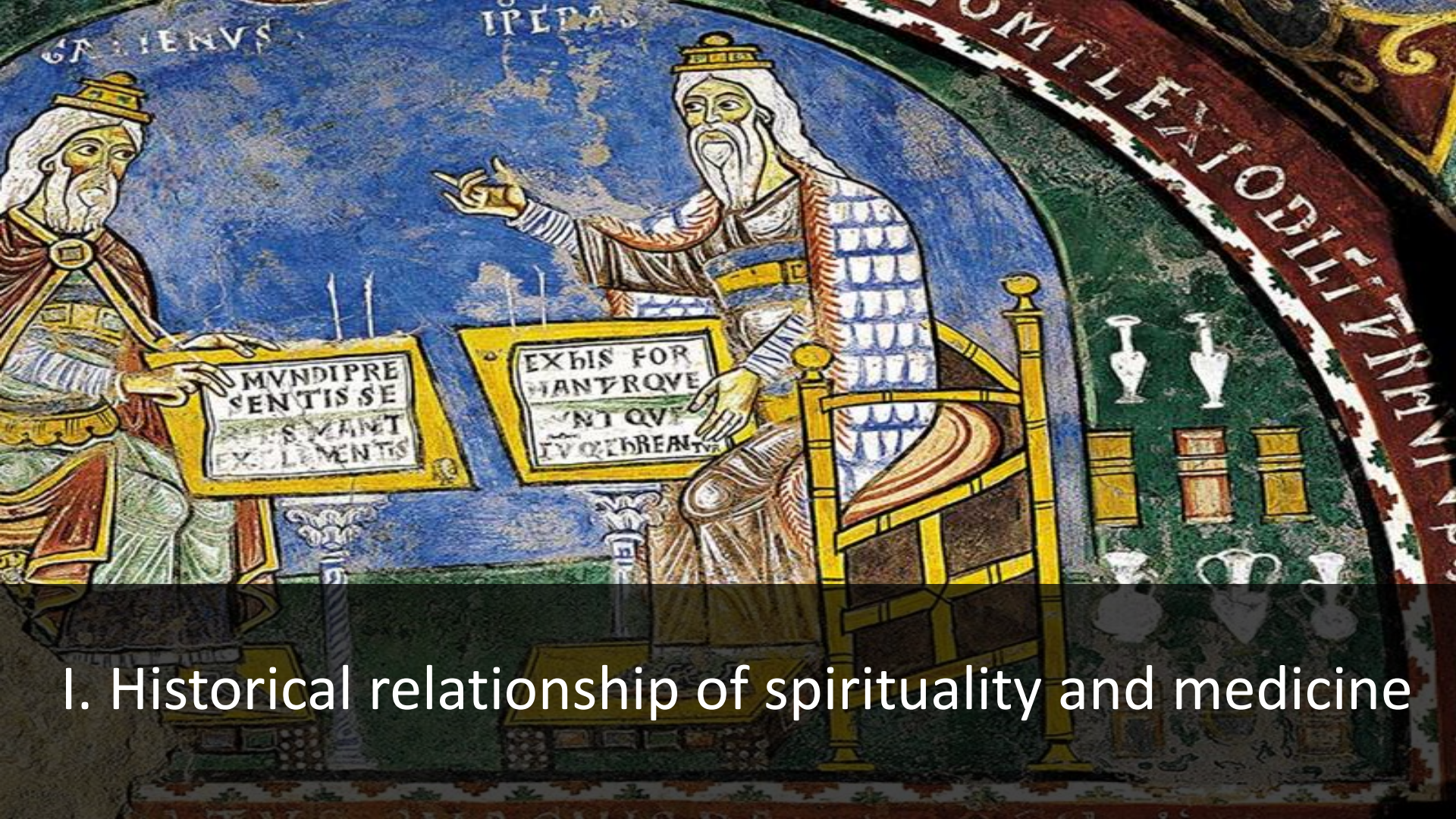


Spiritual History: Attends Catholic, Spanish-speaking parish, hasn't attended much since his wife died 8 months ago. Church community is bringing him meals twice a week, and a fellow congregant brought him to this appointment (he hasn't seen a doctor for a few years, since his wife's illness)

Outline: *Spirituality in Serious Illness and Health*

- I. Historical relationship of spirituality and medicine
- II. Implications of this relationship for patients, practitioners, institutions
- III. Evidence regarding spirituality in serious illness and health





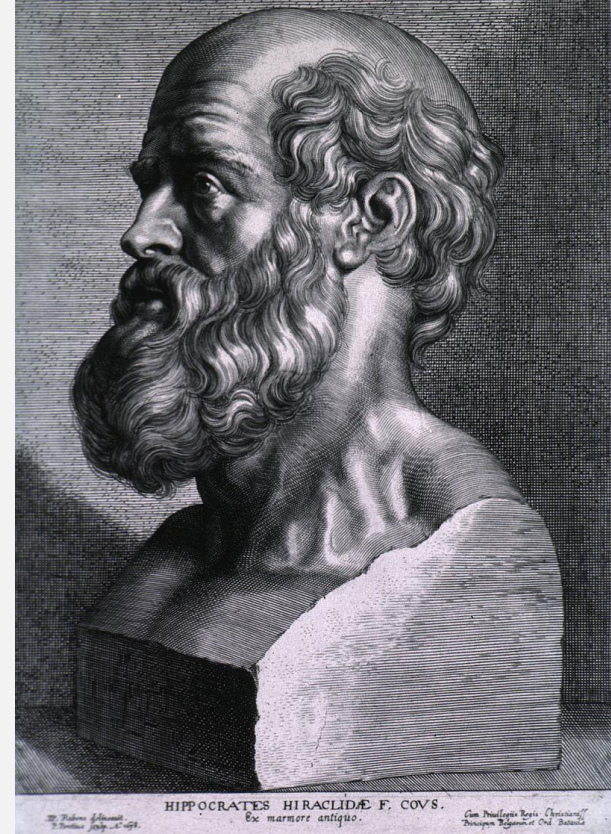
I. Historical relationship of spirituality and medicine



John William Waterhouse. "A Sick Child brought into the Temple of Aesculapius" 1877


Spirituality and Medicine: Classical Antiquity (800BC-600AD)

- Asclepian and Hippocratic medicine concurrently practiced
- Hippocrates: natural origin of disease – balance of four humors
- Physician practice grounded in spirituality of Greek/Roman culture



Hippocrates, engraving by Peter Paul Rubens, 1638

Hippocratic Oath



I swear by Apollo, Asclepius, Hygieia, and Panacea, and I take to witness all the gods, all the goddesses, to keep according to my ability and my judgment, the following Oath and agreement...

Rod of
Asclepius



**World Health
Organization**

Care of Body and Spirit

- Middle Ages: Rise of first hospitals within spiritual communities
- Bodily care: Studied, practiced, transmitted medical knowledge (e.g., Hippocrates, Galen)
- Bodily care centered on spiritual care



Spirituality and Medicine: High Middle Ages to Renaissance (1300-1600s)

- Rise of empirical inquiry, growth of sciences
- Cartesean dualism with dichotomization of material and spiritual

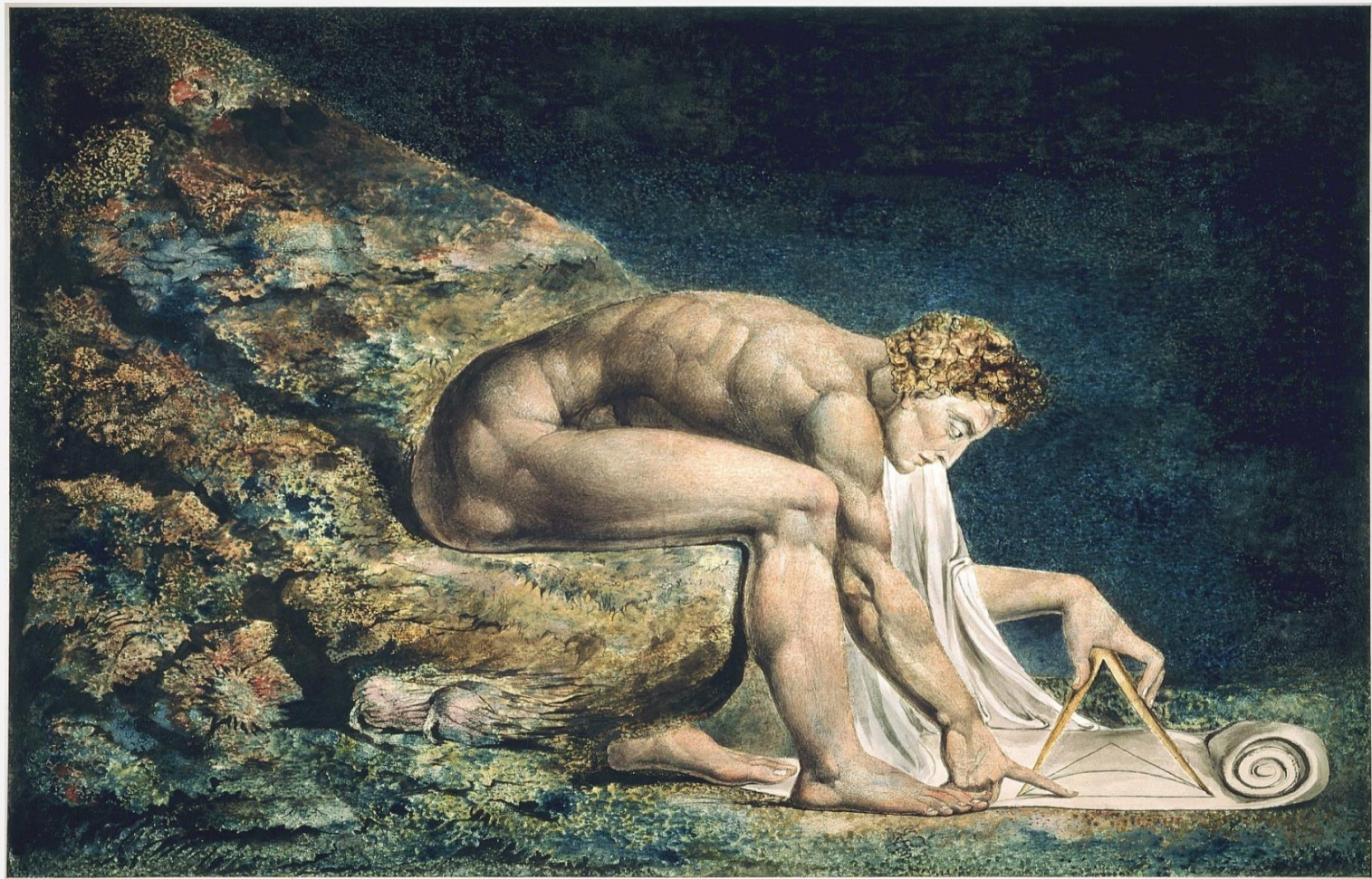


Raphael. The School of Athens. 1509-1510.

Spirituality and Medicine: Enlightenment to Post- Modernism (1700s-present)

- Growth of materialism and reductionism
- Empirical method is the primary source of truth for humanity
- Medicine grows in material focus





William Blake. Newton. 1795

The background of the slide is a reproduction of Michelangelo's famous fresco, "The Fall of Man," from the ceiling of the Sistine Chapel. It depicts Adam reclining on the left, his body arched and reaching toward the right, while the serpent-woman Eve sits on the right, leaning over him. The scene is set against a dark, rocky background. Two horizontal white lines frame the central text.

II. Implications for Patients, Caregivers, and Medical Institutions

Implications for Patients: Patient Story



- 58 yo F w/ met cancer
- Multiple admissions to hospital
- Seen for possible pall RT

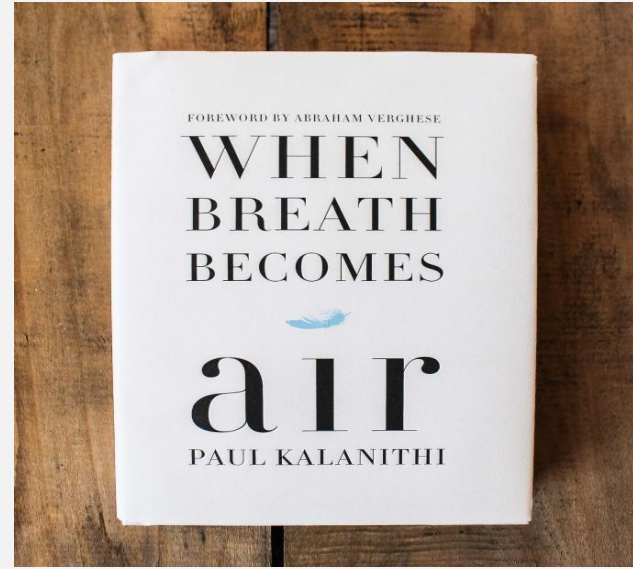
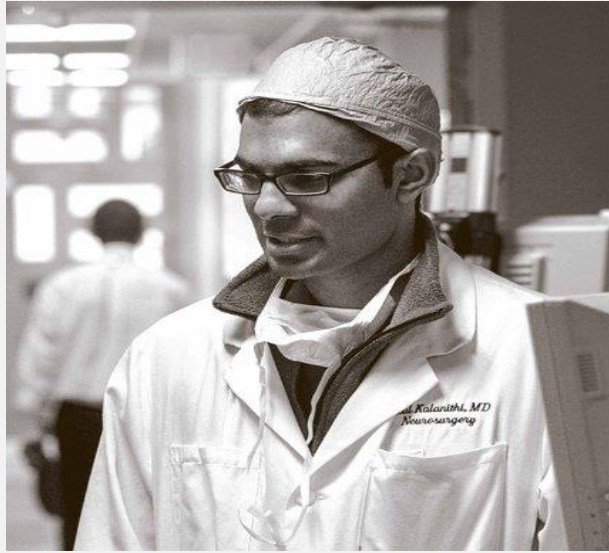


Implications for Patients: Patient Story



"I can almost hear this place telling me that all I am is a body full of tumors that are killing me."





Paul Kalanithi MD, neurosurgeon and author





Some days, this is how it felt when I was in the hospital: trapped in an endless jungle summer, wet with sweat, the rain of tears of the families of the dying pouring down.... I was losing sight of the singular importance of human relationships, not between patients and their families, but between doctor and patient.





Implications for the Relationships of Patients and Medical Caregivers



When Too Much is Too Little

*R. Sean Morrison, M.D., Diane E. Meier, M.D., and
Christine K. Cassel, M.D. 1996*

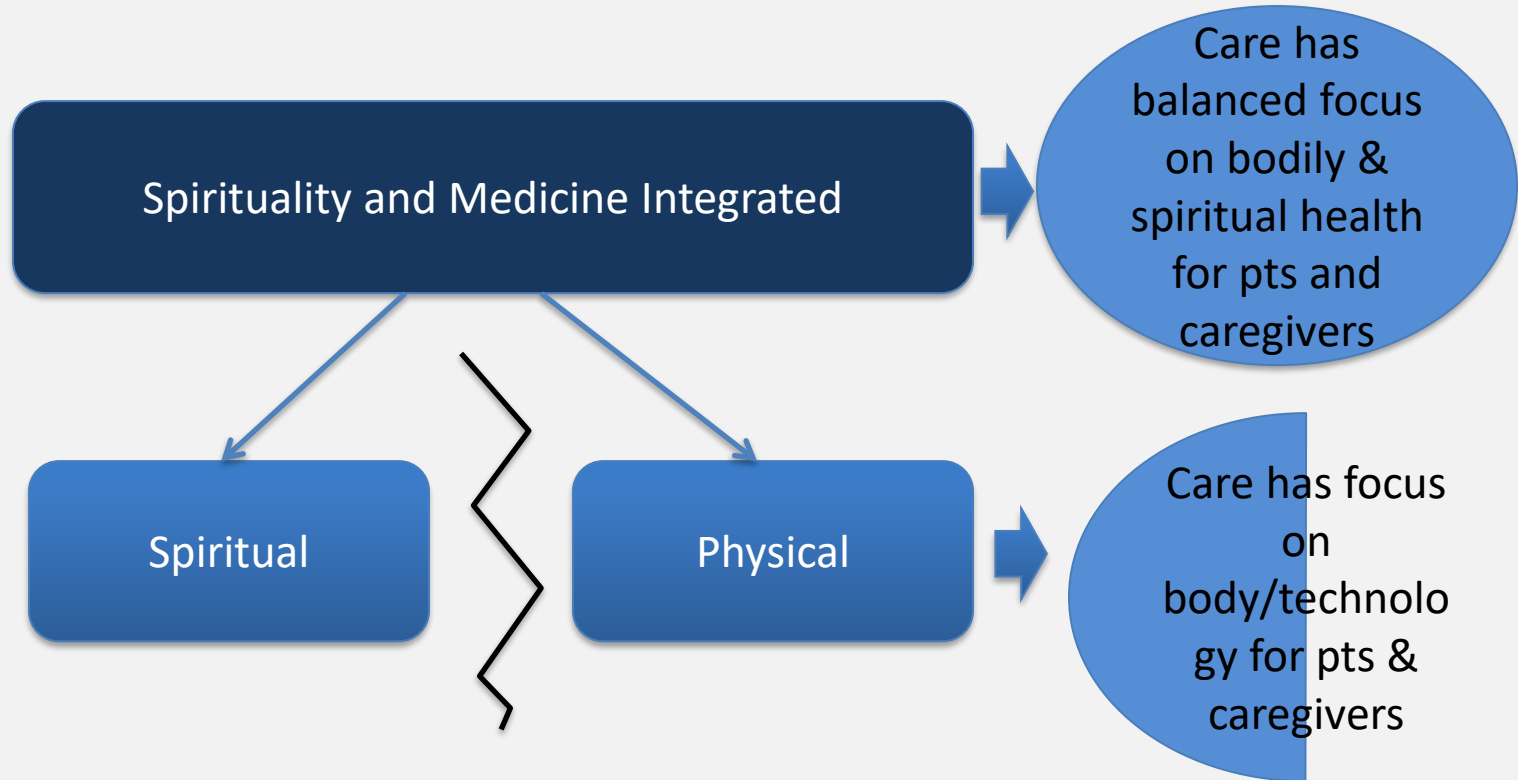
“The experience with this patient is a disturbing illustration of the care received by many terminally ill patients in U.S. hospitals... Despite repeated requests that he receive no further life-prolonging treatment and that he be allowed to return home to die, the patient underwent a lung biopsy, three CT studies, daily phlebotomies, and insertion of multiple nasogastric tubes, as well as a gastrostomy tube... and he spent the last month of his life in the hospital. Recent reports suggest that his case, unfortunately, is not unusual.”

Integrated Care of Body and Spirit

First, the dying person confessed and then received the sacrament of extreme unction from the cleric who had heard confession and had absolved him. The administration of holy oil occurred on the...bodily areas considered to be suffering... Some brethren remained with the dying inmate throughout the day and night, praying and reading from the Scriptures by candlelight. The point of this vigil was to ensure “proper passing”; nobody should be left to die alone. If death became imminent, the whole monastic community was summoned and the monks congregated around the sick on both sides of the bed alternately to pray and sing.

Risse, Guenther. *Mending Bodies, Saving Souls: A History of Hospitals*. (Oxford UnivPress 1999): 105.

Historical Model: Spirituality and Medicine





III. ROLE OF SPIRITUALITY IN SERIOUS ILLNESS AND HEATH

JAMA Special Communication Report

- Growing research on spirituality in illness/health, with little uptake into health care due to:
 - Research often doesn't get into high impact journals
 - Though improving, some bias against recognition of spirituality in health
- Increasing recognition of spirituality as part of health
 - 1948 WHO definition health as “state of complete physical, mental, social well-being, not merely the absence of disease or infirmity”
 - 2002 WHO definition of palliative care as “approach that improves...pain and other problems, physical, psychological and spiritual”

Balboni et al. Spirituality in Serious Illness and Health. *JAMA* 2022

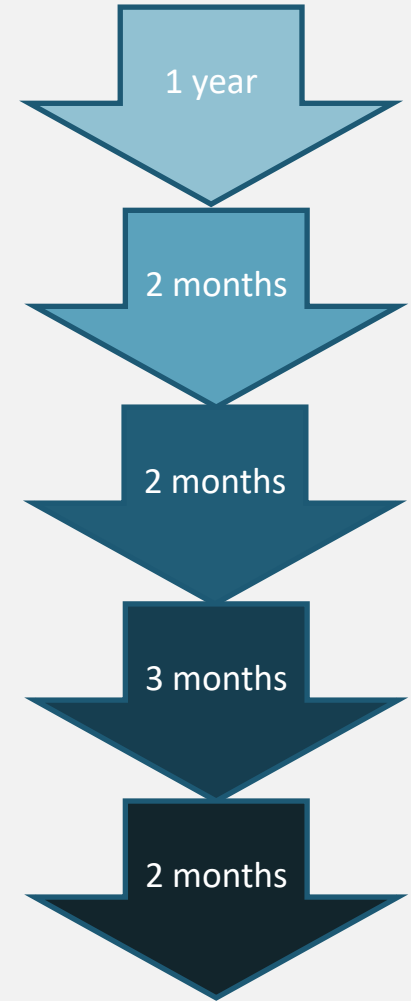
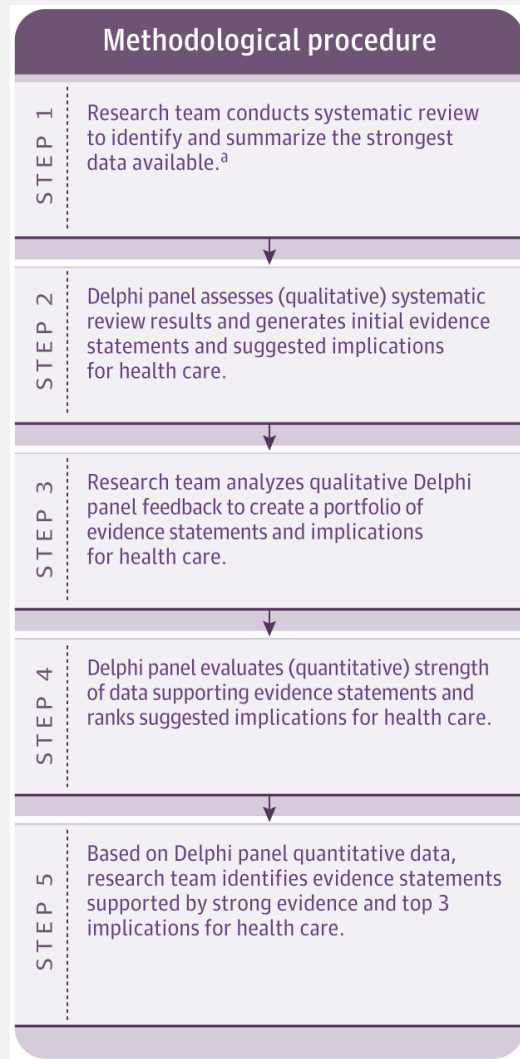


Project Goal

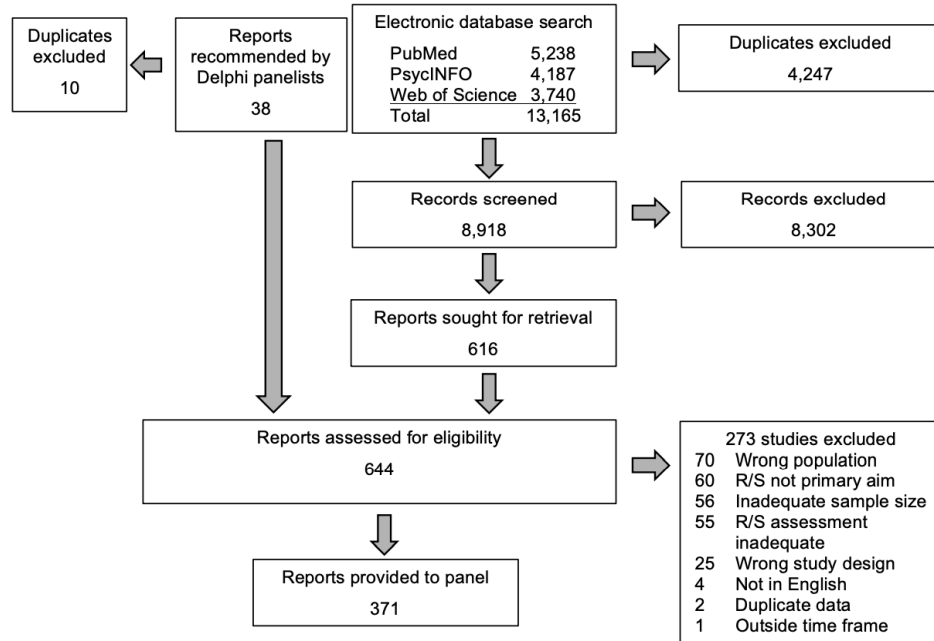
*Provide **comprehensive assessment** of the literature in **spirituality in health** for ill and healthy populations, naming **implications for the practice of medicine**, by **experts** in medicine, public health, health systems, policy, and religious/spiritual communities*



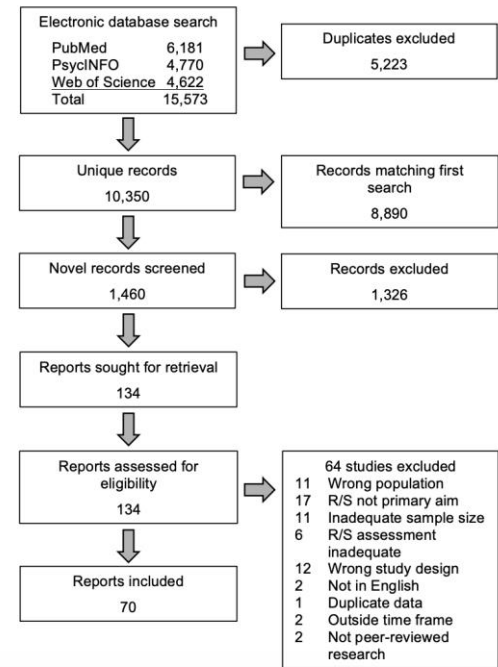
Project Methods



Systematic Review: 371 + 70 Serious illness papers

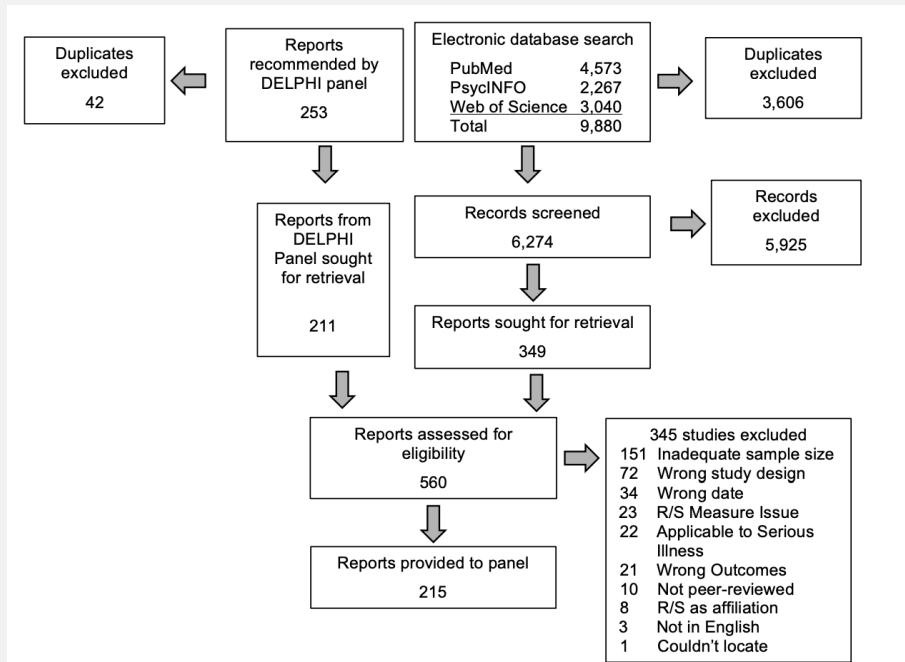


January 2000 – April 2020

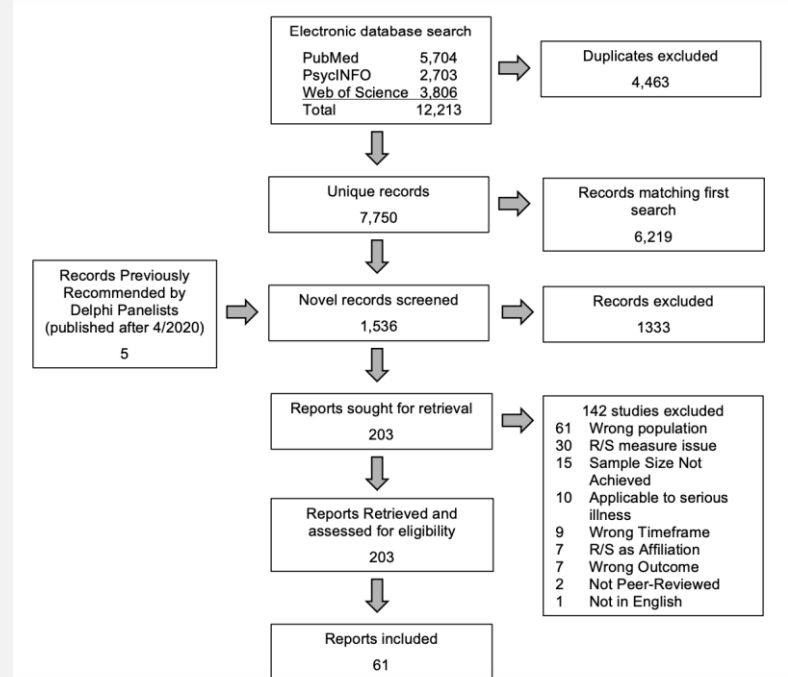


April 2020 – May 2022

Systematic Review: Health Outcomes 215 + 61



January 2000 – April 2020



April 2020 – May 2022

Multidisciplinary Expert Delphi Panelists

Public Health

Carolyn Clancy MD
George Fitchett PhD, MDiv
Gary Gunderson DMin, DDiv
Dennis Heaphy MDiv
Ellen Idler PhD
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Howard Koh MD, MPH
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Aasim Padela MD
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Dan Sulmasy MD PhD
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Presenters/Facilitators:

Tracy Balboni MD, MPH
Stephanie Doan MPH
Jennifer Wortham DrPH

Notetakers:

Erin Cleary
Emily Damon
Cynthia Larocque
Penny Sun



Delphi Project Definitions

Box. Definitions of Terms in Spirituality in Health Research and Practice^a

Spirituality (spiritual): Spirituality is a dynamic and intrinsic aspect of humanity through which persons seek ultimate meaning, purpose, and transcendence and experience relationship to self, family, others, community, society, nature, and the significant or sacred. Spirituality is expressed through beliefs, values, traditions, and practices (International Conference on Improving the Spiritual Dimension of Whole Person Care definition).¹

Religion (religiosity): Religion is the search for significance that occurs within the context of established institutions that are designed to facilitate spirituality.⁶

Spiritual needs (spiritual concerns, spiritual distress, spiritual struggle, spiritual pain, existential distress): Needs related to a person's spirituality, including spiritual questions, concerns, practices, and struggles.⁷

Spiritual care: Recognition of and attention to spirituality within health care. Spiritual care relies on a multidisciplinary team (eg, chaplains, physicians, nurses, social workers) and requires standard inclusion of a spiritual history as part of a comprehensive medical history.^{1,8}



Results

Spirituality and Serious Illness: 5 Topic Areas

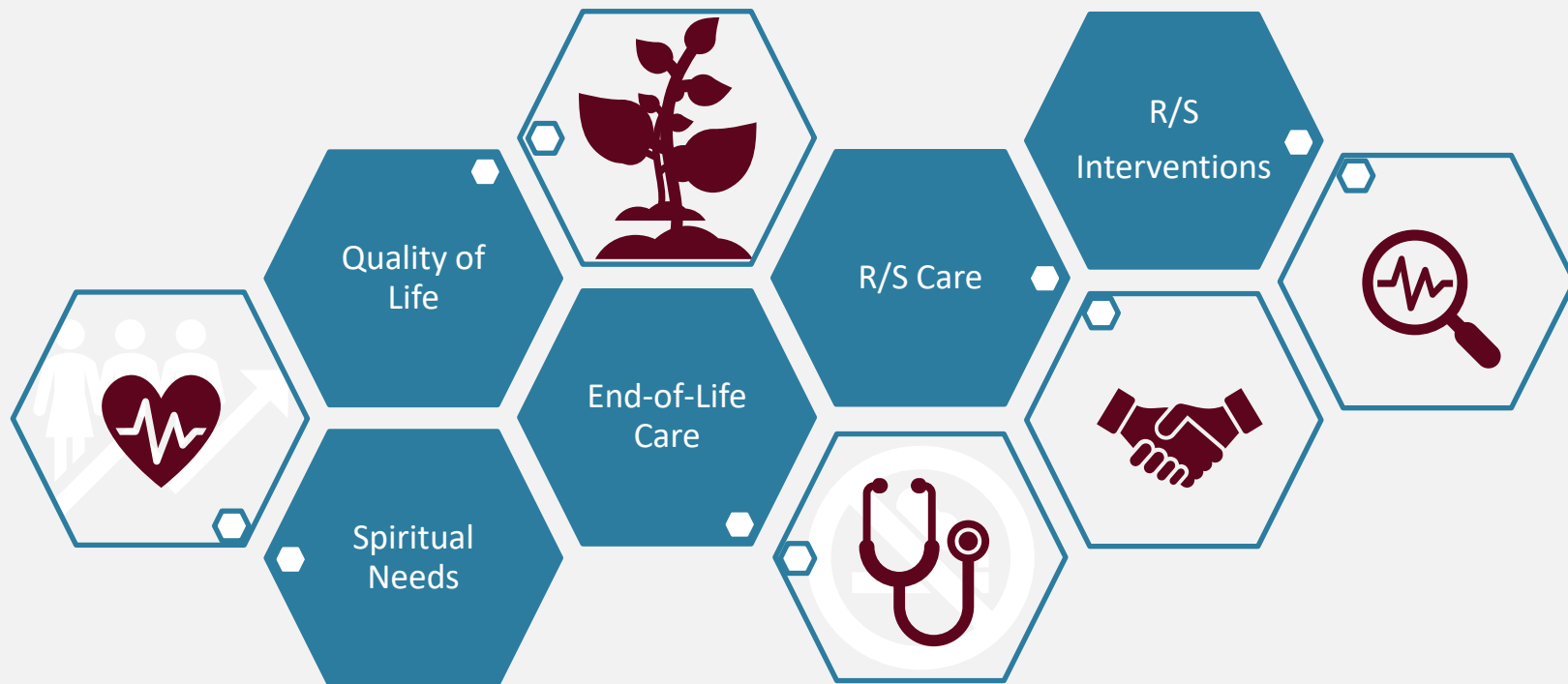


Table 1. Spirituality in Serious Illness Literature Summary

Evidence category	Studies with low to moderate risk of bias/total studies ^a	Continents or regions (No. of studies) ^a	Sample size, median (IQR) ^a	Spiritual measures (No. of studies) ^{a,b}	Summary of findings ^{a,c}
Role of spirituality in serious illness	128/173	North America (86); South America (1); Europe (14); Asia (19 [9 in Middle East, 10 in rest of Asia]); Africa (1); Australia (1); intercontinental (6)	278 (177-496)	FACIT-SP (45); RCOPE Scale (16); Multidimensional Measure of Religiousness/Spirituality (9); Duke University Religion Index (6); Spiritual Well-being Scale (5); Idler Index of Religiosity (2); Spiritual Beliefs and Perspective Scale (2); Systems of Belief Inventory (2); meta-analysis, ie, multiple spirituality measures (2); other spirituality measures (75)	<ul style="list-style-type: none">• Spirituality is important to most patients with serious illnesses, with 71% to 99% of seriously ill patients viewing spirituality as important.^c• Measures of spirituality (eg, spiritual well-being, spiritual salience) are associated with better measures of quality of life in serious illness.
Spiritual needs in serious illness	37/47	North America (22); South America (2); Europe (6); Asia (3 [1 in Middle East, 2 in rest of Asia]); Africa (3); intercontinental (1)	292 (170-600)	RCOPE Scale-NRC (10); Edmonton Symptom Assessment Scale—Spiritual Pain (7); Spiritual Needs Questionnaire (2); Spiritual Needs Assessment Tool (2); Spiritual Distress Assessment Tool (1); other spiritual needs measures (27); other spirituality measures: RCOPE Scale-PRC (7), FACIT-SP (3), Duke University Religion Index (1)	<ul style="list-style-type: none">• Spiritual needs are common in serious illness, with estimates of frequencies of patient spiritual needs ranging from 23% to 98%.^c• Studies suggest that spiritual needs are associated with worse quality-of-life outcomes.
Spiritual care in serious illness	82/112	North America (55); South America (1); Europe (10); Asia (11 [4 in Middle East, 7 in rest of Asia]); Africa (1); Australia (2); intercontinental (2)	356 (205-598)	Spiritual Care Provision and Receipt Questionnaire (8); Multidimensional Measure of Religiousness and Spirituality—Spiritual Care (7); other spiritual care measures (62); other spirituality measures: RCOPE Scale-PRC (4), RCOPE Scale-NRC (4), FACIT-SP (2), Brief Multidimensional Measure of Religiousness and Spirituality (2)	<ul style="list-style-type: none">• Spiritual care is frequently desired by patients in serious illness as part of medical care, with estimates ranging from 50% to 96% of patients wanting spiritual care.^c• Spiritual needs are infrequently addressed in medical care of seriously ill patients, with patient-reported spiritual care from medical teams ranging from 9% to 51%.^c• Interventions to improve spiritual care by medical teams show early evidence of associations with improved spiritual care provision.
Spirituality and patient medical decision-making in serious illness	32/38	North America (26); Europe (2); Asia (2 [1 in Middle East, 1 in rest of Asia]); intercontinental (2)	317 (202-426)	Multidimensional Measure of Religiousness and Spirituality (11); RCOPE Scale-PRC (4); RCOPE Scale-NRC (4); Religious/Spiritual Beliefs in End-of-Life Care Scale (3); FACIT-SP (2); Duke University Religion Scale (2); other spirituality measures (16)	<ul style="list-style-type: none">• Spirituality can play a role in patient medical decision-making in serious illness.
Spiritual interventions in serious illness	30/32	North America (20); Europe (1); Asia (2 [1 in Middle East, 2 in rest of Asia]); Africa (1); Australia (1); intercontinental (5)	196 (118-433)	FACIT-SP (15); Spiritual Well-being Scale (4); McGill Quality of Life (4); meta-analyses, ie, multiple spirituality measures (3); Hopelessness Assessment in Illness (2); other spirituality measures (11)	<ul style="list-style-type: none">• Spiritual interventions are associated with improved quality-of-life outcomes in seriously ill patients.

Abbreviations: FACIT-SP, Functional Assessment of Chronic Illness Therapy-Spiritual Well-being; NRC, Negative Religious Coping Subscale; PRC, Positive Religious Coping Subscale; RCOPE, Religious Coping Scale.

^a Studies included were those meeting the eligibility criteria outlined in eAppendix 1A in the [Supplement](#); risk-of-bias ratings were based on the modified Cochrane criteria outlined in eAppendix 2A of the [Supplement](#). Only studies with low to moderate (vs serious or critical) risk of bias were included in the study detail columns. Studies could inform more than 1 of the 5 topic areas.

^b Studies used 1 or more spirituality measures (see eAppendix 3A in the [Supplement](#)). Scale parameters are summarized in Selman et al.¹⁴

^c See eAppendix 3A in the [Supplement](#) for quantitative results of each study.

8 serious illness
findings deemed
supported by
strong evidence
by panelists

Spirituality in serious illness evidence statements

Religion and/or spirituality are important for most patients with serious illness.

Spiritual needs are common for patients with serious illness.

Spiritual care within medical care is frequently desired by seriously ill patients.

Spiritual needs are frequently unaddressed within medical care for seriously ill patients.

Religion/spirituality can play a role in medical decision-making for patients with serious illness.

Spiritual care is infrequent in the medical care of patients with serious illness.

Provision of spiritual care to patients with serious illness is associated with better end-of-life outcomes (eg, quality-of-life and medical care outcomes).

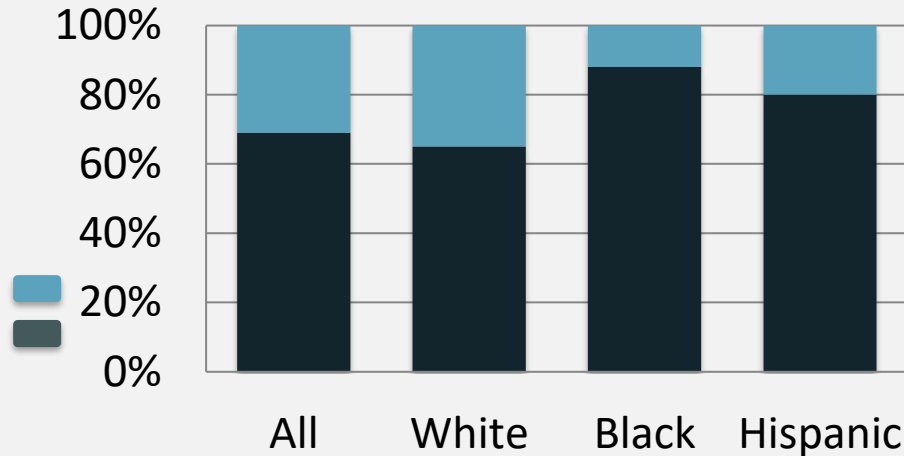
Unaddressed spiritual needs are associated with poorer patient quality-of-life outcomes.

Example 1: Importance of Spirituality in Serious Illness? How?

National study of cancer survivors (n=8405):
“My faith or spirituality has helped me through my cancer experience?”

- Not at all, A little
- Quite a bit, Very much

Importance of Spirituality in Cancer Survivors



Fitchett G et al. *Annals Behav Med.*



Spirituality in Serious Illness

Religion and Spirituality in Cancer Care Study

- 75 randomly selected patients receiving palliative RT (RR=73%) in 4 Boston centers
- 78%: religion and/or spirituality important to advanced cancer experience

Alcorn S et al. *Journal of Palliative Medicine* 2010.



Qualitatively-grounded religious/spiritual themes in patients' experiences of advanced cancer, n = 53*

Theme	n (%)	Representative Quote
Coping through R/S	39 (74)	<i>If it weren't for my faith, I don't know I would have kept my equilibrium through this process... Whenever I'm in my hardest places in life, God just sends his Holy Spirit, and it just takes over.</i>
R/S practices	31 (58)	<i>I pray a lot. It helps. You find yourself praying an awful lot. Not for myself, but for those you leave behind. There will be a lot more praying.</i>
R/S beliefs	28 (53)	<i>Based on my religious beliefs I think I was given a certain number of days on this earth from day one, and I don't think that changes with my diagnosis... It tells me that if God wanted me yesterday, I wouldn't be here today.</i>
R/S transformation	20 (38)	<i>It's a transformative experience to have an illness such as this, and when you have that you have to reevaluate all you've done in life, who you are, and who you are going to be."</i>
R/S community	11 (21)	<i>Well, I depend a lot upon my faith community for support. It's proven incredibly helpful for me.</i>



Example 2: Relationship of patient spirituality to QOL in illness?

Brady et al. *Psycho-Oncology* 1999

- Multi-institutional cross-sectional study of 1610 cancer patients
- R/S (measured by the FACIT-Sp) → independent predictor of QOL
- Controlled for physical well-being, emotional well-being, social well-being, disease, demographic variables

Brady et al. *Psycho-Oncology*. 1999



Example 2: Relationship of patient spirituality to QOL in illness?

National survey of 1885 seriously ill patients on 44 attributes of quality of life near death, top 9 ranked:

Table 5. Mean Rank Scores of 9 Preselected Attributes*

Attributes	Patients	Bereaved Family Members	Physicians	Other Care Providers
Freedom from pain	3.07 (1)	2.99 (1)	2.36 (1)	2.83 (1)
At peace with God	3.16 (2)	3.11 (2)	4.82 (3)	3.71 (3)
Presence of family	3.93 (3)	3.30 (3)	3.06 (2)	2.90 (2)
Mentally aware	4.58 (4)	5.41 (5)	6.12 (7)	5.91 (7)
Treatment choices followed	5.51 (5)	5.27 (4)	5.15 (5)	5.14 (5)
Finances in order	5.60 (6)	6.12 (7)	6.35 (8)	7.41 (9)
Feel life was meaningful	5.88 (7)	5.63 (6)	5.02 (4)	4.58 (4)
Resolve conflicts	6.23 (8)	6.33 (8)	5.31 (6)	5.38 (6)
Die at home	7.03 (9)	6.89 (9)	6.78 (9)	7.14 (8)

*Attributes are listed in the mean rank order based on patient response. Numbers in parentheses are mean rank order, with lowest rank score (1) indicating most important attribute and highest rank score (9) indicating least important. Friedman tests were significant at $P < .001$, suggesting that rankings by each group were different than would be expected by chance alone.

Steinhauser et al. *JAMA* 2000.



Example 3: Spirituality's role in medical decision-making?

Silvestri et al. *Journal of Clinical Oncology*, 2003

- 100 pts with advanced lung cancer, their caregivers, 257 medical oncologists
- Rank 7 factors important to patient in making treatment decisions

Silvestri et al. *Journal of Clinical Oncology*. 2003.



Spirituality and Medical Decision-Making

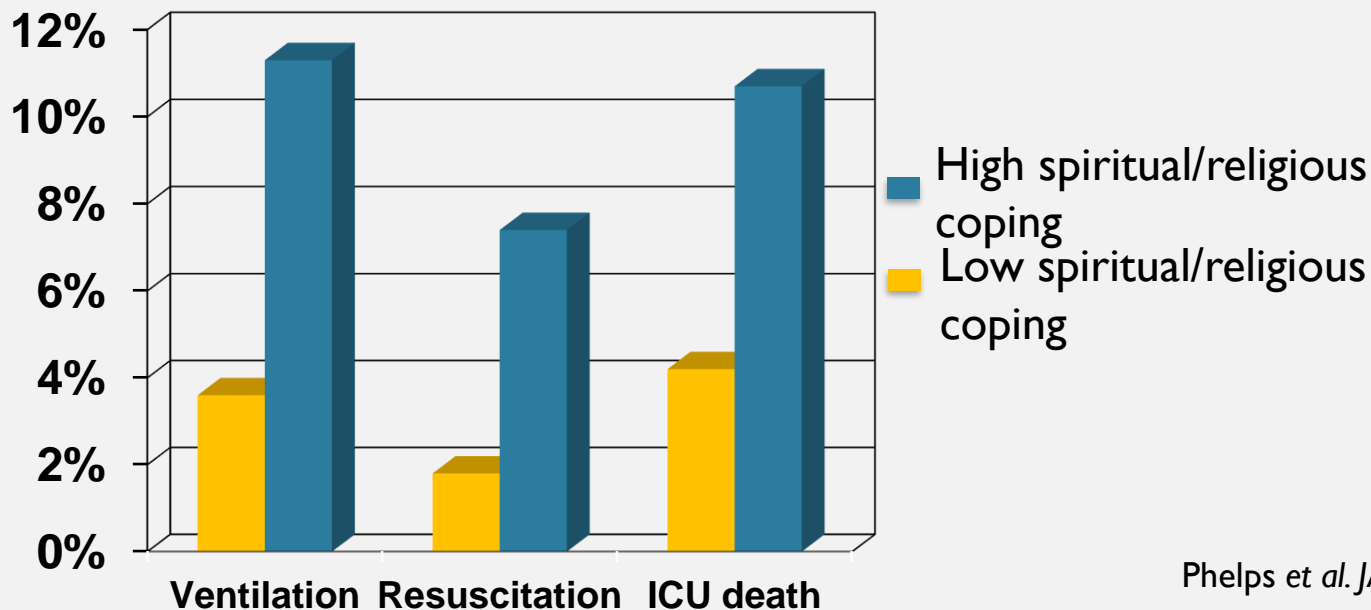
7 factors ranked:

- Oncologist's treatment recommendation
- Ability of treatment to cure disease #1
- Side effects
- Family doctor's recommendation
- Spouse's recommendation
- Children's recommendation
- Faith in God #2 for pts/families, #7 MDs



Spirituality and Medical Decision-Making

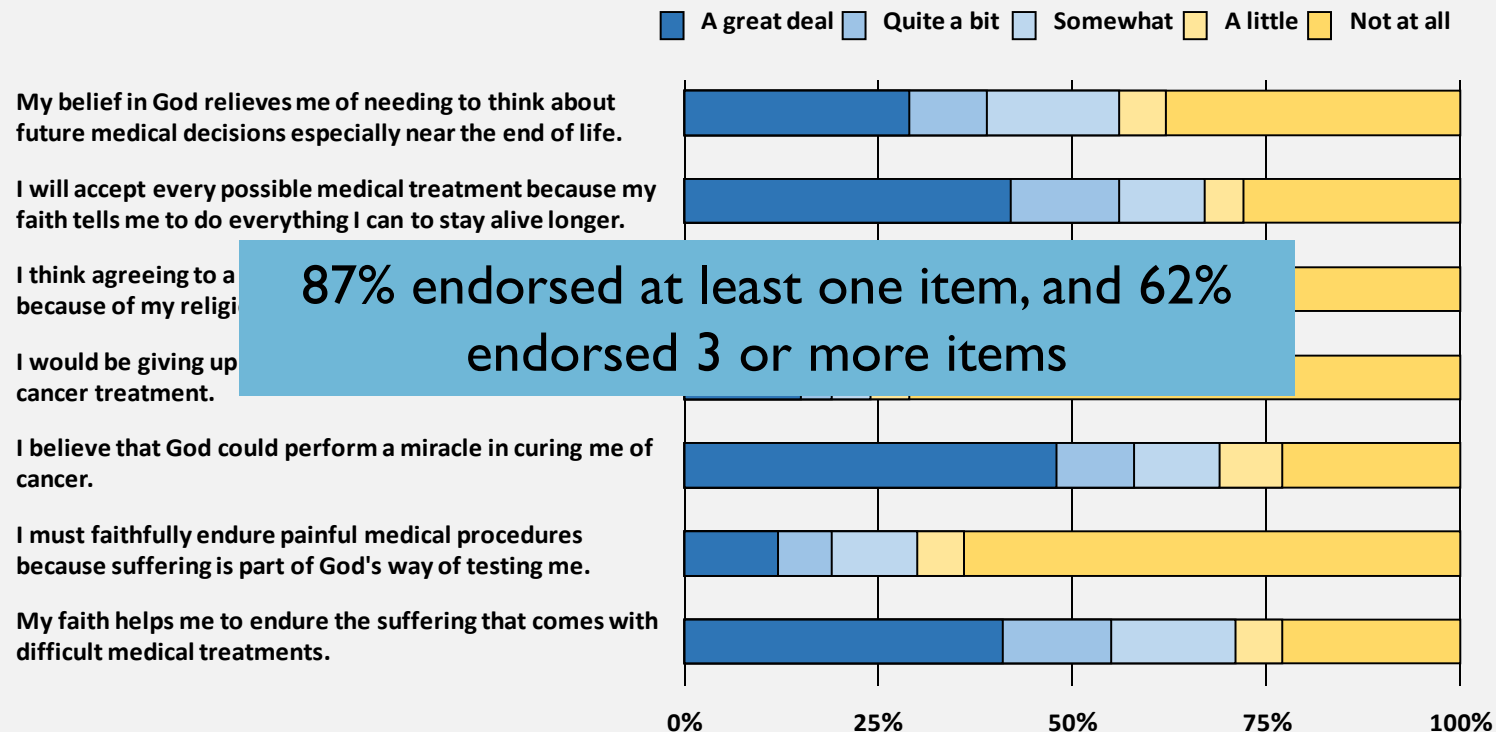
Coping with Cancer study (N=343): Relationship of baseline religious/spiritual coping and receipt of aggressive medical interventions in the last week of life



Phelps et al. JAMA 2009



Religious beliefs about EOL care in 275 advanced cancer patients



Example 3: Spiritual care and outcomes in illness?

Multi-site, prospective study of advanced cancer pts, N=343, examining psychosocial/spiritual factors and relationship to EOL outcomes

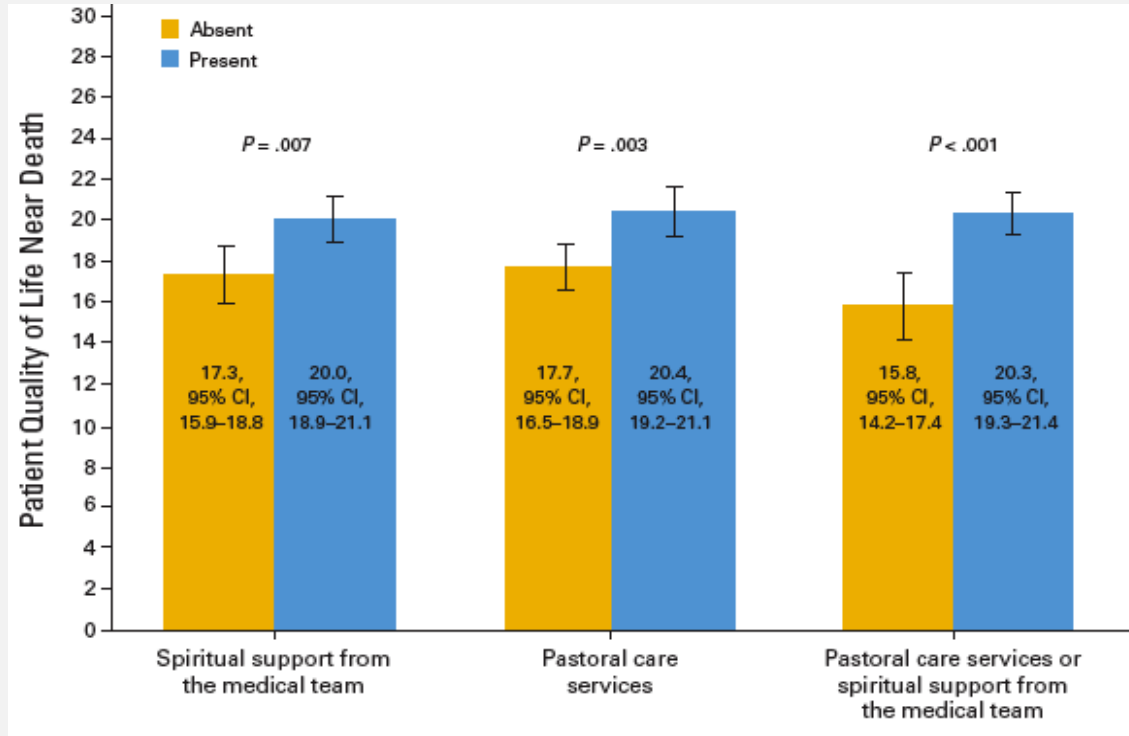
At baseline patient spiritual care assessed:

- Support of spiritual needs by medical team (e.g., doctors, nurses, chaplains)
- Support of spiritual needs by spiritual communities
- Receipt of pastoral care visits

Outcomes: QOL (caregiver assessed) and medical care in last week



Example 4: Spiritual care and QOL outcomes in illness?



Balboni JCO 2010;
Balboni JAMA Int Med 2013



Spiritual Care and EOL Medical Outcomes

High Spiritual Support from Medical Team (26%)

- Greater hospice (OR = 2.99, $p=0.003$)
- Less aggressive interventions (OR = 0.38, $p=.04$)
- Less ICU deaths (OR = 0.23, $p=0.03$)
- Impact of med team spiritual support on EOL care largely seen in high religious coping patients

High Spiritual Support from Religious Communities (43%)

- Less hospice (OR = 0.38, $p=.03$)
- Greater aggressive interventions (OR = 2.55, $p=.03$)
- More ICU deaths (OR= 5.73, $p=0.004$)
- Findings stronger high religious coping patients

Balboni JCO 2010;
Balboni JAMA Int Med 2013



Spirituality in Health Outcomes: 5 Topic Areas

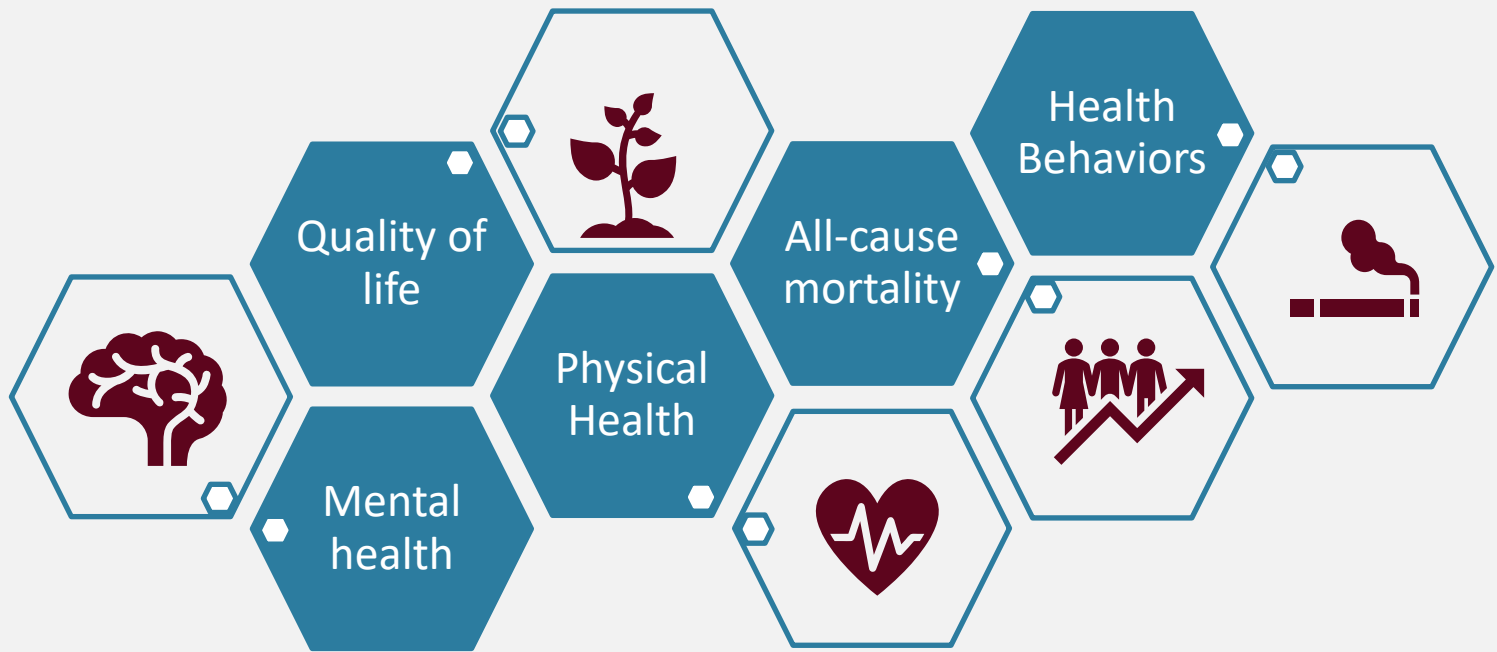


Table 2. Spirituality in Health Outcomes Literature Summary

Evidence category	Studies with low to moderate risk of bias/total studies ^a	Continents or regions (No. of studies) ^a	Study type ^a	Sample size, median (IQR) ^a	Spiritual measures (No. of studies) ^{a,b}	Outcome measures (No. of studies) ^a	Summary of findings ^{a,c}
All-cause mortality	26/32	North America (20); Asia (6 [1 in Middle East, 5 in East Asia])	Survival analysis (26)	11 453 (4421-28 794)	Service attendance (26); other measures (8), including importance	All-cause mortality	<ul style="list-style-type: none"> All but 1 study identified a statistically significant and beneficial association between frequent religious service attendance and all-cause mortality. A meta-analysis of longitudinal studies indicated that service attendance was associated with reduction in all-cause mortality (hazard ratio, 0.73; 95% CI, 0.63-0.84).¹⁵ Some studies identified mediators and variation among subpopulations for this association, but findings varied. There were mixed beneficial and null findings when examining the association between other measures of spirituality and all-cause mortality.
Physical health	21/32	North America (18); Asia (3 [1 in South Asia, 2 in East Asia])	Prospective cohort (11); survival analysis (8); RCT (2)	6323 (2642-59 408)	Service attendance (13); other measures (12), including prayer, spiritual coping, spiritual practice, etc; spiritual-enhanced intervention (2)	Cardiovascular outcomes and risk factors (18); cancer mortality (4); other health problems (5), including diabetes, obesity and lung function	<ul style="list-style-type: none"> The associations between spirituality measures and physical health measures were mixed in all outcome categories. For example, among studies examining cardiovascular disease mortality, 3 found a significant beneficial association, 3 found a null association, and 1 found an inverse, harmful association.
Health behaviors	42/66	North America (34); Australia (1); Europe (4); Asia (2 [1 in East Asia, 1 in Southeast Asia]); Central America (1)	Prospective cohort (42)	2903 (1738-7761)	Service attendance (20); composite (17); other measures (20), including importance, prayer, salience, etc	Substance use (39), including alcohol (21), smoking (20), marijuana and drug use (20); physical activity (2); sexual behaviors (6); use of preventive health care (1)	<ul style="list-style-type: none"> A majority of studies found a beneficial and significant association between spirituality and several measures of substance use, including use, recovery, and initiation. Similarly, spirituality appears to be associated with delayed sexual initiation and lower number of lifetime sexual partners, as well as increased physical activity.
Mental health	47/73	North America (29); Asia (6, all in East Asia); Australia/Western Pacific (2); Europe (6); Africa (1); intercontinental (3)	Prospective cohort (40); RCT (3); meta-analysis (2); survival analysis (2)	4785 (2530-10 588)	Service attendance (27); composite (10); other measures (21), including importance, prayer, practices, etc	Depression (32); suicidal behaviors (7); anxiety/stress (4); distress (3); posttraumatic stress disorder (2); eating disorders (2); general mental health (3)	<ul style="list-style-type: none"> 77% of studies evaluating religious service attendance found a statistically significant, beneficial association with measures of depression. Other measures of spirituality had more mixed results. A meta-analysis of longitudinal studies with control for baseline confounding indicated that service attendance was associated with reduction in odds of depression incidence (odds ratio, 0.67; 95% CI, 0.58-0.81).^{16,17} Spiritual-enhanced interventions appeared to be associated with reduced depression outcomes. With fewer studies for identifying trends, other outcomes found mixed associations of spirituality on other mental health outcomes, with the strongest evidence for protective associations with suicide.
Quality of life	31/50	North America (21); Asia (5 [3 in East Asia, 1 in South Asia, 1 in Middle East]); Europe (4); intercontinental (1)	Prospective cohort (28); RCT (2); meta-analysis (1)	2548 (1135-4129)	Service attendance (21); other measures (16) including importance, practice, salience, etc; composite (3); spirituality-enhanced interventions (2)	Well-being, quality of life, and life satisfaction and components (17); self-rated health (3); physical functioning (5); cognitive functioning (6)	<ul style="list-style-type: none"> Most studies found a significant and beneficial association between spirituality and measures of well-being, quality of life, and life satisfaction. Similarly, most studies found significant and beneficial associations between spirituality and both physical and cognitive functioning.

Abbreviation: RCT, randomized clinical trial.

^a Studies included were those meeting the eligibility criteria outlined in eAppendix 1B in the [Supplement](#); risk-of-bias ratings were based on the modified Cochrane criteria outlined in eAppendix 2B of the [Supplement](#). Only studies with low to moderate risk of bias (vs serious or critical) were included in the study detail columns. Studies could inform more than 1 of the 5 topic areas.

^b Studies used 1 or more spirituality measures (see eAppendix 3B in the [Supplement](#)).

^c See eAppendix 3B in the [Supplement](#) for quantitative results of each study.

8 Health outcomes findings deemed supported by strong evidence by panelists

Spirituality in health outcomes evidence statements

Frequent service attendance is associated with lower risk of mortality.

Frequent service attendance is associated with subsequently less smoking and use of alcohol, marijuana, and illicit drugs among adults.

Frequent service attendance is positively associated with subsequently higher quality of life (eg, well-being, life satisfaction, happiness, self-rated health).

Frequent service attendance is associated with subsequently better mental health outcomes.

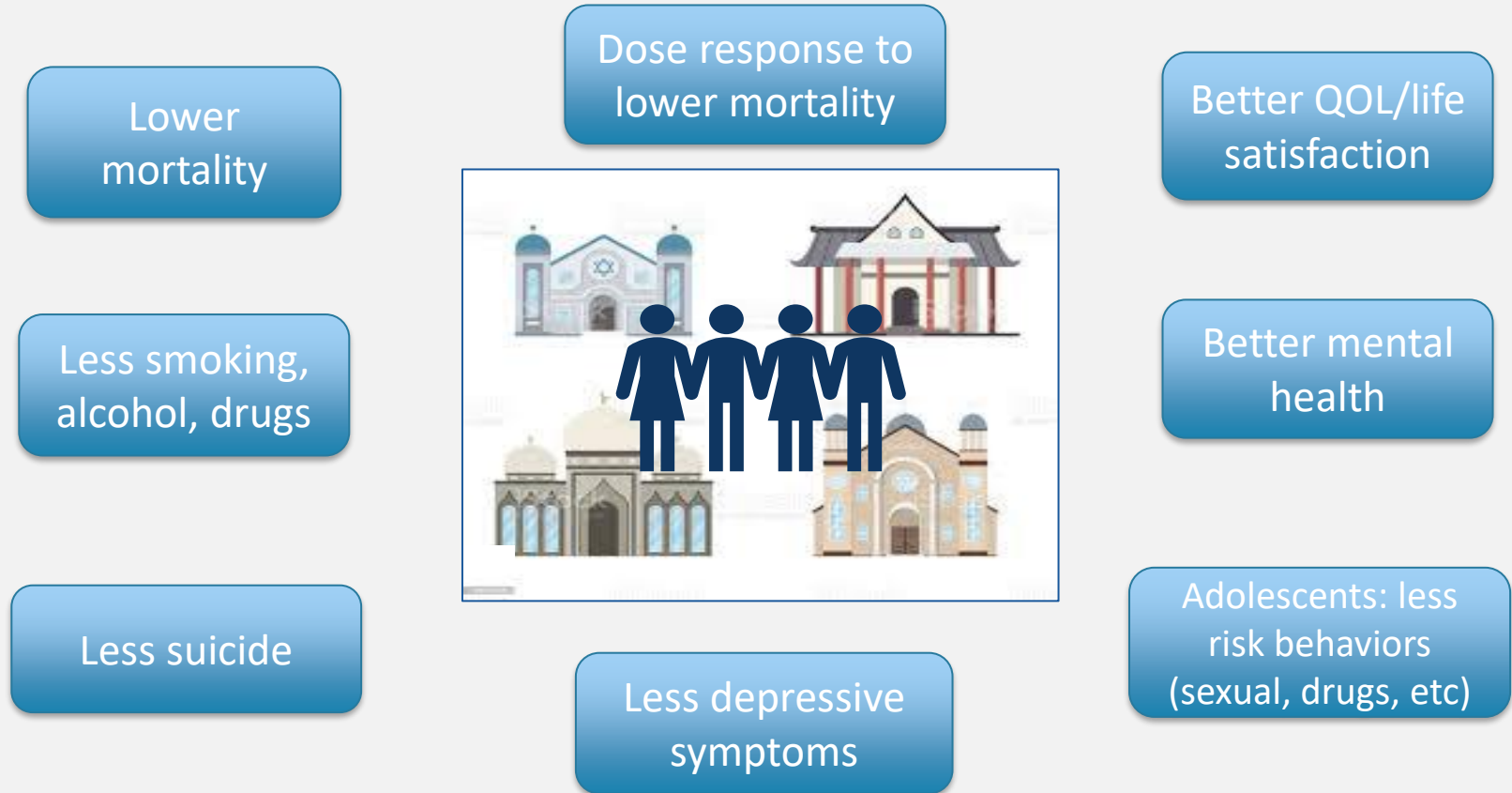
There is a dose-response association between service attendance and lower risk of mortality, with larger magnitudes of associations with more frequent attendance.

Frequent service attendance is associated with subsequently less smoking, risky sexual behaviors, and use of alcohol, marijuana, and illicit drugs among adolescents.

Frequent service attendance is associated with fewer subsequent depressive symptoms.

Frequent service attendance is associated with subsequently fewer suicidal behaviors.

Spiritual Community Involvement and Health Outcomes



Salient Research on Spiritual/Religious Community Involvement and Population Health		
Measure	Study Design	Notable Findings
All-Cause Mortality	Meta-analysis longitudinal studies	Meta-analysis including 121,000 individuals found 27% reduction in all-cause mortality (95%CI=0.63-0.84) ⁴⁵
Health Behaviors and Mechanisms	Longitudinal	1.9 times higher odds of smoking cessation (95%CI=1.3,2.9; N=5,286) for those attending religious services at least weekly versus less often; and 33% reduction in illicit drug use for 6,267 adolescents (RR=0.67; 95%CI=0.55,0.81) for those attending services at least weekly versus never ⁵¹
Disease-specific Mortality and Incidence	Longitudinal	27% reduction in cardiovascular disease mortality (95%CI=0.62-0.85) and 21% reduction in cancer mortality (95%CI=0.70-0.89) among 74,534 women who attended religious services more than weekly versus never ^{53,61,65}
Mental Health	Longitudinal	25% reduction in depression incidence (OR=0.75, 95%CI=0.67-0.84; N=48,984) for those attending services weekly versus never; ⁶⁷ 84% reduction in incidence of completed suicide (HR=0.16; 95%CI=0.06-0.46; N=89,708) for those attending at least weekly versus never ⁷²

Implications for Health Care

Table 5. Spirituality in Health: Multidisciplinary Delphi Expert Panel 3 Top-Ranked Suggested Implications for Serious Illness and Health Outcomes^a

Ranking of suggested implication	Suggested implication	Health outcomes
	Serious illness	
Highest ranking	Routinely incorporate spiritual care into the medical care of patients with serious illness.	Incorporate patient-centered and evidence-based approaches regarding the beneficial associations of religious/spiritual community participation to improve medical care and population health.
Second highest ranking	Include spiritual care education in the training of all members of the interdisciplinary medical team caring for seriously ill patients.	Increase awareness among public health professionals of evidence of protective health associations of religious/spiritual community participation.
Third highest ranking	Include specialty practitioners of spiritual care (eg, chaplains) in the care of patients with serious illness.	Recognize spirituality as a social factor associated with health in research, community assessments, and program implementation.

^a The full lists of ranked suggested implications are available in eAppendixes 6A and 6B in the [Supplement](#).

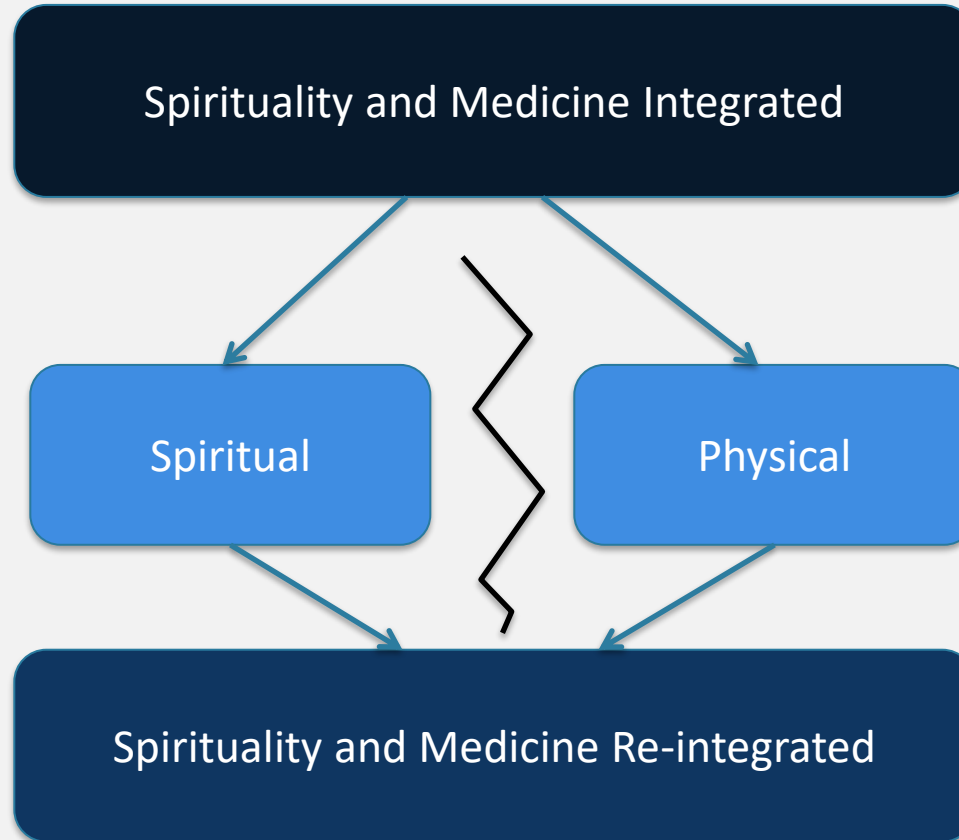
Implications for Health Care

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Model: Spirituality and Medicine



Care with
combined focus
on bodily &
spiritual health
for pts and
caregivers

Care has focus
on body/
technology for
pts & caregivers

Care with
combined focus
on bodily &
spiritual health
for pts and
caregivers

In summary...

- I. Spirituality only recently disconnected from medicine, implications for pts, practitioners, systems
- II. Evidence points to importance of spirituality in serious illness and health of communities
- III. Implications for reintegration of spirituality into medicine – our task to carry that forward





Thank you and questions

Extra slides



NATIONAL CONSENSUS PROJECT DOMAINS OF QUALITY PALLIATIVE CARE

1. Structure and processes of care
2. Physical aspects of care
3. Psychosocial and psychiatric aspects of care
4. Social aspects of care
5. **Spiritual, religious, and existential aspects of care**
6. Cultural aspects of care
7. Care of the imminently dying patient
8. Ethical and legal aspects of care



NATIONAL CONSENSUS PROJECT DOMAINS OF QUALITY PALLIATIVE CARE

Spiritual Care Framework:

- Generalist – specialist model: non-chaplains healthcare workers are generalists, chaplains are specialists
- Generalist's primary role is spiritual history-taking
- Spiritual history guides subsequent conversations and referrals to spiritual care professionals



SPIRITUAL CARE FRAMEWORK: SPIRITUAL CARE GENERALIST'S ROLE

1. Do screening spiritual history as part of a social history, examples include:
 - Do you consider yourself a spiritual or religious person, both or neither?
 - Do you have a faith or spirituality that's important to you?
 - What are some primary sources of meaning and hope for you?
2. Apply that information to guide future questions conversations, either at that time or at future visits.
3. Work with spiritual care specialists in care of pts (e.g., chaplains)

SPIRITUAL CARE FRAMEWORK

1. Do spiritual histories as standard part of pt intake
2. Spiritual history opens a door:
 - Implicitly says, “your medical care includes attention to all of you... It’s ok to talk about your spirituality/core values here.”
 - Gives you key information about the pt to guide care



COCHRANE BIAS RATINGS: SERIOUS ILLNESS

Cochran Bias Rating Criteria		Adapted Cochrane Rating Criteria
Low risk of bias	The study is comparable to a well-performed randomized trial; the study is judged to be at low risk of bias for all domains for this result	Low: <ul style="list-style-type: none"> Multi-institutional sample Use of validated scales Response rate high for given population ($\geq 70\%$) and sampling method rigorous Cross-sectional data: findings supported by strong analytic methods (e.g., qualitative methods, multivariable analyses with strong control for potential confounders to characterize cross-sectional associations) Prospective data: prospective findings supported by strong analytic methods, including multivariable analyses with control for baseline outcome and for other potential confounding variables
Moderate risk of bias	Sound evidence for a non-randomized study; study is judged to be at low or moderate risk of bias for all domains	Moderate: <ul style="list-style-type: none"> Criteria for low largely met, apart from 1 criteria or only partially fulfilling up to 2 criteria [e.g., response rate modest (~51-69%), controlling for proxy baseline outcomes, scales incompletely validated] Response rate not reported allowed as moderate bias if it is the only issue to bias (all else low) and sampling method and potential selection factors not anticipated to influence study outcomes Issues above result in only modest bias, leaving data sound for interpretation, though with some limitations
Serious risk of bias	Study is judged to be at serious risk of bias in at least one domain, but not at critical risk of bias in any domain	Serious: <ul style="list-style-type: none"> Multiple sources of bias (lacking 2+ criteria in "Low", or partially fulfilling 3+), but not resulting in critical risk of bias Lack of control for confounding variables in analyses of associations Issues above result in significant limitations, but data provide some findings of value to interpretation in light of limitations
Critical risk of bias	Study too problematic to provide any useful evidence and should not be included in any synthesis. The study is judged to be at critical risk of bias in at least one domain	Critical: <ul style="list-style-type: none"> Significant opportunities for bias across multiple domains Study data too problematic to be meaningfully interpretable

COCHRANE BIAS RATINGS: HEALTH OUTCOMES

Cochran's rating criteria		Our specific criteria
Low risk of bias	The study is comparable to a well-performed randomized trial; the study is judged to be at low risk of bias for all domains for this result.	Low-Moderate: <ul style="list-style-type: none"> Controls for baseline outcome or very strong proxy Controls for multiple other potential confounders Low and moderate risk of other types of bias (selection/follow-up rates, measurement of exposure or outcome, missing data) Moderate: <ul style="list-style-type: none"> Studies that looked at outcome trajectories or changes from baseline (with no clear baseline control described)
Moderate risk of bias	Sound evidence for a non-randomized study; study is judged to be at low or moderate risk of bias for all domains.	
Serious risk of bias	The study is judged to be at serious risk of bias in at least one domain, but not at critical risk of bias in any domain.	Serious: <ul style="list-style-type: none"> No baseline or very limited confounder control or Potential for bias from another source (selection/follow-up rates, measurement of exposure or outcome, missing data)
Critical risk of bias	<p>The study is too problematic to provide any useful evidence and should not be included in any synthesis.</p> <p>The study is judged to be at critical risk of bias in at least one domain.</p>	Critical: <ul style="list-style-type: none"> Significant opportunities for bias in multiple domains.



Sir Luke Fildes' *The Doctor* (1891)



John Collier *The Sentence of Death* (1908)

DELPHI PROCESS: STEPS

Pre-step: Systematic review of the literature



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graph TD; A[Pre-step: Systematic review of the literature] --> B[Step 1: Project overview and orientation]; B --> C[Step 2: Delphi panel review & qualitative feedback of evidence tables & summaries]; C --> D[Step 3: Qualitative analysis of evidence statements, implications for health care, and edits to data tables/summaries based on panel feedback]; D --> E[Step 4: Presentation of revised data tables/summaries, evidence statements and implications to panelists, quantitative ratings and rankings by panelists];
```

The diagram illustrates the Delphi process as a sequential flowchart. It begins with a brown box for the 'Pre-step: Systematic review of the literature'. This is followed by four blue boxes, each representing a step in the process. The steps are connected by downward-pointing arrows, indicating a sequential flow. The steps are: Step 1: Project overview and orientation; Step 2: Delphi panel review & qualitative feedback of evidence tables & summaries; Step 3: Qualitative analysis of evidence statements, implications for health care, and edits to data tables/summaries based on panel feedback; and Step 4: Presentation of revised data tables/summaries, evidence statements and implications to panelists, quantitative ratings and rankings by panelists.

Step 1: Project overview and orientation

Step 2: Delphi panel review & qualitative feedback of evidence tables & summaries

Step 3: Qualitative analysis of evidence statements, implications for health care, and edits to data tables/summaries based on panel feedback

Step 4: Presentation of revised data tables/summaries, evidence statements and implications to panelists, quantitative ratings and rankings by panelists



Collect

- Broad abstract key word search: Pubmed, PsycINFO, Web of Science, Embase, Sociological Abstracts 2000-2020, update 2020-2022
- Remove Duplicates

Screen

- 2 person, blinded screen for inclusion criteria

Extract

- One extractor and one reviewer pulled key data points of eligible studies

Summarize

- Created data tables and summaries for 5 serious illness and 5 public health categories

-
- Prospective, cross-sectional descriptive studies, meta-analyses, randomized trials
 - 100 or more pts
 - Validated measures of spirituality



-
- Prospective, case-control studies, meta-analyses, randomized trials
 - 1000 or more pts (cohort/case control studies); 100 or more randomized trials
 - Validated measures of spirituality

