



Topic Brief: Compassion Centered Care

Date: 4/10/2020

Nomination Number: 0894

Purpose: This document summarizes information addressing a nomination submitted on 12/09/2019 through the Effective Health Care Website. This information was used to inform the Evidence-based Practice Center (EPC) Program decisions about whether to produce an evidence report on the topic, and if so, what type of evidence report would be most suitable.

Issue: Compassion centered healthcare focuses on improving alignment between clinical care and patients' unique needs with the goal of improving patient experience, engagement in care, and, ultimately, health outcomes. While multiple educational interventions to facilitate the delivery of compassion centered care have been attempted in recent years, it remains unclear which interventions are most effective.

Recommendation

The AHRQ Effective Healthcare EPC will not conduct a systematic review for this nomination because questions 1, 2 and 4 of the nomination are sufficiently answered by the existing systematic reviews. Question 3 should be sufficiently addressed by an upcoming AHRQ technical brief. We identified no systematic reviews and only one primary study that addressed question 5 of the nomination, indicating that there are not enough studies to enable a systematic review to address this question.

Key Findings

Seven¹⁻⁷ systematic reviews evaluated a variety of educational interventions focused on clinician skills and behaviors to facilitate compassion centered care (question 1). Four other systematic reviews^{4, 8-10} assessed the effectiveness of interventions aimed at improving healthcare provider well-being and professional satisfaction and to reduce compassion fatigue (question 2). One in-process AHRQ technical brief¹¹ will address strategies to facilitate patient-caregiver engagement and to improve patient care outcomes (question 3). Three systematic reviews¹²⁻¹⁴ and in-process AHRQ systematic review¹⁵ assessed psychosocial and other support interventions to improve patient caregiver well-being, quality of life, and self-efficacy (question 4). We found only one experimental study¹⁶ which explored a range of interventions to facilitate compassion centered individualized care at the institutional level (question 5).

Background

Compassion and a patient centered approach are critical determinants of high-quality healthcare. Compassion can be defined as “the emotional response to another’s pain or suffering involving an authentic desire to help”¹⁷. Compassionate care embodies understanding of the experience of others, the ability to express rather than suppress compassion, and a commitment to delivering care in a way customized to an individual’s psychological and physical needs¹⁸. Numerous

studies acknowledged the positive influence of educational interventions to facilitate compassionate care on patient satisfaction and health outcomes. Many studies also identified the reciprocal response in healthcare providers whereby promoting compassion centered care also increases clinicians' professional satisfaction, improves well-being and reduces medical errors¹⁹⁻²².

Healthcare organizational factors were shown to have a powerful influence on the delivery of compassion centered care and may serve to either facilitate or inhibit patient centered care²³. Excessive clinician workload, staff shortage, limited resources, lack of decision-making independence, administrative priorities focused on economic incentives and limited appreciation of healthcare provider engagement tend to inhibit compassion centered care²⁴. On the other hand, organizational cultures that support clinicians and recognize and reward individual centered care promote compassionate care delivery²⁵.

Nomination Summary

This topic was nominated by a healthcare practitioner who is interested in exploring the scope and effectiveness of healthcare provider and organizational level interventions to facilitate compassion centered care delivery. In discussions with the nominator, we expanded the scope to also include educational interventions to facilitate compassion centered care among patient caregivers and interventions to support well-being and prevents burnout of clinicians and caregivers.

Scope

1. For healthcare providers, what are the benefits and harms of interventions aimed at facilitating compassion centered care?
2. For healthcare providers, what are the benefits and harms of interventions to support healthcare provider well-being and professional satisfaction outcomes?
3. For patient caregivers, what are the benefits and harms of interventions to improve caregiving skills?
4. For patient caregivers, what are the benefits and harms of interventions to support caregiver well-being and quality-of-life outcomes?
5. On an organizational level, what are the benefits and harms of interventions to facilitate the delivery of compassion centered patient care?

Table 1. Questions and PICOS (population, intervention, comparator, outcome, and setting)

Questions	1. Interventions to facilitate compassion centered care for healthcare providers	2. Interventions to support healthcare provider well-being and satisfaction
Population	Healthcare providers (physicians, nurses, medical assistants, other patient care staff)	Healthcare providers (physicians, nurses, medical assistants, other patient care staff)
Interventions	Educational interventions to develop knowledge, skills and behaviors (e.g., training to improve verbal and nonverbal communication and reflective listening skills, etc.)	Interventions to reduce compassion fatigue and improve well-being (e.g., strategies to reduce stress, mindfulness education, resilience and self-compassion skills building, etc.)
Comparators	Standard practice	Standard practice

Questions	1. Interventions to facilitate compassion centered care for healthcare providers	2. Interventions to support healthcare provider well-being and satisfaction
Outcomes	<p>Patient health outcomes:</p> <ul style="list-style-type: none"> • Patient adherence to treatment • Frequency of hospital admissions • Hospital length of stay • Frequency of Emergency Department visits • Mortality <p>Patient satisfaction outcomes:</p> <ul style="list-style-type: none"> • Patient quality-of-life • Patient perception of provider compassion • Patient satisfaction with care <p>Provider skills related outcomes:</p> <ul style="list-style-type: none"> • Provider expression of compassion • Provider patient communication skills • Provider emotion handling skills <p>Provider satisfaction outcomes:</p> <ul style="list-style-type: none"> • Provider professional quality-of-life • Provider professional satisfaction 	<p>Provider well-being outcomes:</p> <ul style="list-style-type: none"> • Provider psychological health • Provider subjective well-being • Provider health related behaviors <p>Provider satisfaction outcomes:</p> <ul style="list-style-type: none"> • Provider quality-of-life • Provider professional satisfaction <p>Provider skills related outcomes:</p> <ul style="list-style-type: none"> • Provider expression of compassion • Provider patient communication skills • Provider emotion handling skills
Setting	Outpatient	Outpatient

Questions	3. Interventions to improve caregiving skills of patient caregivers	4. Interventions to support patient caregiver well-being and quality-of-life
Population	Patient caregivers	Patient caregivers
Interventions	Educational interventions to improve caregiving skills (e.g., education about the patient's disease process, education regarding disease specific daily care/symptom management, etc.)	<ul style="list-style-type: none"> • Educational interventions to enhance caregiver self-care skills (e.g., resilience skills training) • Caregiver support interventions (e.g. caregiver peer support groups) • Caregiver respite programs
Comparators	No intervention	No intervention

Questions	3. Interventions to improve caregiving skills of patient caregivers	4. Interventions to support patient caregiver well-being and quality-of-life
Outcomes	<p>Patient health outcomes:</p> <ul style="list-style-type: none"> • Patient adherence to treatment • Frequency of hospital admissions • Hospital length of stay • Frequency of Emergency Department visits • Mortality <p>Patient satisfaction outcomes:</p> <ul style="list-style-type: none"> • Patient quality-of-life • Patient perception of provider compassion • Patient satisfaction with care <p>Caregiver satisfaction outcomes:</p> <ul style="list-style-type: none"> • Caregiver quality-of-life • Caregiver satisfaction • Caregiver self-efficacy in providing care 	<p>Caregiver well-being outcomes:</p> <ul style="list-style-type: none"> • Caregiver psychological health • Caregiver subjective well-being • Caregiver health behaviors <p>Caregiver satisfaction outcomes:</p> <ul style="list-style-type: none"> • Caregiver quality-of-life • Caregiver satisfaction • Caregiver self-efficacy in providing care <p>Patient health outcomes:</p> <ul style="list-style-type: none"> • Patient adherence to treatment • Frequency of hospital admissions • Hospital length of stay • Frequency of Emergency Department visits • Mortality <p>Patient satisfaction outcomes:</p> <ul style="list-style-type: none"> • Patient quality-of-life • Patient perception of provider compassion • Patient satisfaction with care
Setting	Outpatient	Outpatient

Questions	5. Organizational level interventions to facilitate the delivery of compassion centered care	
Population	Healthcare organizations	
Interventions	Interventions, policies and practices to facilitate compassion centered patient care on an organizational level, including: <ul style="list-style-type: none"> • Interventions to improve healthcare delivery • Interventions to increase patient and caregiver engagement • Patient centered long-term care planning 	
Comparators	Standard care	

Questions	5. Organizational level interventions to facilitate the delivery of compassion centered care
Outcomes	<p>Patient health outcomes:</p> <ul style="list-style-type: none"> • Patient adherence to treatment • Frequency of hospital admissions • Hospital length of stay • Frequency of Emergency Department visits • Mortality <p>Patient satisfaction outcomes:</p> <ul style="list-style-type: none"> • Patient quality-of-life • Patient perception of provider compassion • Patient satisfaction with care <p>Provider satisfaction outcomes:</p> <ul style="list-style-type: none"> • Provider quality-of-life • Provider professional satisfaction <p>Organizational outcomes:</p> <ul style="list-style-type: none"> • Patient experience • Effectiveness of care • Timeliness of care • Readmission rate • Safety of care
Setting	Outpatient

Assessment Methods

See Appendix A.

Summary of Literature Findings

For question 1 we identified seven systematic reviews¹⁻⁷ that evaluated a range of healthcare provider focused educational interventions to facilitate compassion centered care, including empathetic communication skills, motivational interviewing and addressing patient concerns and emotional responses.

For question 2 we located four systematic reviews^{4,8-10} evaluating the effectiveness of interventions to support healthcare provider well-being and satisfaction. Two systematic reviews^{4,8} assessed the effectiveness of narrative medicine and expressive arts interventions on fostering clinicians’ wellness and professional satisfaction and reducing compassion fatigue. An additional systematic review³ evaluated the effectiveness of yoga and mindfulness interventions, structured meditation, music therapy and development of resiliency skills to mitigate compassion fatigue among clinicians and community service workers. Finally, one systematic review⁵ focused on stress reduction and relaxation-based interventions to counteract secondary traumatic stress and burnout among palliative healthcare professionals.

An in-process AHRQ technical brief¹¹ addressed question 3. This technical brief, anticipated to be published in 2020, focuses on strategies to facilitate patient, family and caregiver engagement. It will present the analytic framework and provide an evidence map of the existing literature on interventions to engage patients and their caregivers into shared decision-making and management of their chronic health conditions.

For question 4 we identified three Cochrane systematic reviews¹²⁻¹⁴ and in-process AHRQ systematic review¹⁵ exploring various interventions to support patient caregivers. One review¹³ focused on telephone-based interventions to provide educational and psychosocial support to caregivers caring for patients with a broad range of chronic conditions. Another systematic review¹² explored the effectiveness of psychosocial support interventions targeted to caregivers of people living with cancer. The third systematic review evaluated supportive interventions for caregivers who care for neuro-oncologic patients¹⁴. An additional in-process AHRQ systematic review¹⁵, waiting to be published later this year, will evaluate a spectrum of care interventions to support well-being of caregivers of patients with dementia.

We did not find any systematic reviews to address question 5 of the nomination as the majority of studies evaluating interventions to facilitate compassion centered care on an institutional level were conducted in the inpatient setting. We identified only one experimental study¹⁶ that assessed interventions focused on facilitating the delivery of compassionate care in the outpatient setting.

Table 2. Literature identified for each Question

Question	Systematic reviews (3/2016-3/2020)	Primary studies (3/2015-3/2020)
Question 1: Interventions to facilitate compassion centered care for healthcare providers	Total: 7 ¹⁻⁷ <ul style="list-style-type: none"> • Cochrane – 2^{6,7} • Other – 5¹⁻⁵ 	Not assessed
Question 2: Interventions to support healthcare provider well-being and satisfaction	Total: 4 ^{4, 8-10} Other – 4 ^{4, 8-10}	Not assessed
Question 3: Interventions to improve caregiving skills for patient caregivers	Total: 1 ¹¹ <ul style="list-style-type: none"> • AHRQ in-process tech brief – 1¹¹ 	Not assessed
Question 4: Interventions to support caregiver well-being and quality-of-life	Total: 4 ¹²⁻¹⁵ <ul style="list-style-type: none"> • Cochrane – 3¹²⁻¹⁴ • AHRQ in-process systematic review – 1¹⁵ 	Not assessed
Question 5: Organizational interventions to facilitate compassion centered care	Total: 0	Total: 1 ¹⁶ <ul style="list-style-type: none"> • RCT – 1¹⁶

See Appendix B for detailed assessments of all EPC selection criteria.

Summary of Selection Criteria Assessment

This is an important topic with potential for impact. We found a total of fourteen systematic reviews^{1-10, 12-14}, one in-process technical brief,¹¹ and one in-process systematic review¹⁵ which together address questions 1–4 of the nomination. There were too few studies to develop a new systematic review for question 5.

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Appendix A: Methods

We assessed nomination for priority for a systematic review or other AHRQ Effective Health Care report with a hierarchical process using established selection criteria. Assessment of each criteria determined the need to evaluate the next. See Appendix B for a detailed description of the criteria.

Appropriateness and Importance

We assessed the nomination for appropriateness and importance.

Desirability of New Review/Absence of Duplication

We searched for high-quality, completed or in-process evidence reviews published in the last three years on March 10, 2020 and repeated our search April 8, 2020 based on updated nomination questions from these sources:

- AHRQ: Evidence reports and technology assessments
 - AHRQ Evidence Reports <https://www.ahrq.gov/research/findings/evidence-based-reports/index.html>
 - EHC Program <https://effectivehealthcare.ahrq.gov/>
 - US Preventive Services Task Force <https://www.uspreventiveservicestaskforce.org/>
 - AHRQ Technology Assessment Program <https://www.ahrq.gov/research/findings/ta/index.html>
- US Department of Veterans Affairs Products publications
 - Evidence Synthesis Program <https://www.hsrd.research.va.gov/publications/esp/>
 - VA/Department of Defense Evidence-Based Clinical Practice Guideline Program <https://www.healthquality.va.gov/>
- Cochrane Systematic Reviews <https://www.cochranelibrary.com/>
- PROSPERO Database (international prospective register of systematic reviews and protocols) <http://www.crd.york.ac.uk/prospero/>
- PubMed <https://www.ncbi.nlm.nih.gov/pubmed/>
- Epistemonikos <https://www.epistemonikos.org/>
- Health System Evidence <https://www.healthsystemevidence.org/>
- PDQ Evidence <https://www.pdq-evidence.org/>

Impact of a New Evidence Review

The impact of a new evidence review was qualitatively assessed by analyzing the current standard of care, the existence of potential knowledge gaps, and practice variation. We considered whether it was possible for this review to influence the current state of practice through various dissemination pathways (practice recommendation, clinical guidelines, etc.).

Feasibility of New Evidence Review

We conducted a comprehensive literature search in PubMed for the past five years (March 2015 through March 2020) for each of the nomination questions. We reviewed all identified titles and abstracts for inclusion and classified any identified studies by question and study design to estimate the size and scope of a potential evidence review.

Feasibility Search Compassionate Care – Question 1	
PubMed Searched on April 8th, 2020	
KQ1 Educational Interventions for Healthcare Providers	((("Education, Professional"[Mesh] OR "education" [Subheading])) OR ((education[Title/Abstract] OR training[Title/Abstract]))
AND	
Compassion Centered Care	((compassion[Title/Abstract] OR compassionate[Title/Abstract])) AND care[Title/Abstract]
Published in the last 5 years English	Filters activated: published in the last 5 years, English.
604	
SR N=16 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498102/public/	systematic[sb]
RCT N=98 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498115/public/	(((((groups[tiab]) OR (trial[tiab]) OR (randomly[tiab]) OR (drug therapy[sh]) OR (placebo[tiab]) OR (randomized[tiab]) OR (controlled clinical trial[pt]) OR (randomized controlled trial[pt]))
Observational N=1 https://www.ncbi.nlm.nih.gov/pubmed/28683799	"Observational Study" [Publication Type]
Other (none of the above) N=489 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498129/public/	

Feasibility Search Compassionate Care – Question 2	
PubMed Searched on April 8th, 2020	
KQ2 Direct Interventions for Compassion Fatigue, etc. in Healthcare Providers	((("Attitude of Health Personnel"[Mesh] OR "Occupational Stress"[Mesh])) OR ((stress[Title/Abstract] OR burnout[Title/Abstract] OR fatigue[Title/Abstract]))
AND	
Compassion Centered Care	((compassion[Title/Abstract] OR compassionate[Title/Abstract])) AND care[Title/Abstract]
Published in the last 5 years English	Filters activated: published in the last 5 years, English.
1196	

SR N=26 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498180/public/	systematic[sb]
RCT N=168 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498187/public/	(((((groups[tiab]) OR (trial[tiab]) OR (randomly[tiab]) OR (drug therapy[sh]) OR (placebo[tiab]) OR (randomized[tiab]) OR (controlled clinical trial[pt]) OR (randomized controlled trial[pt])
Observational N=5 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498195/public/	"Observational Study" [Publication Type]
Other N=997 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498201/public/	

Feasibility Search Compassionate Care – Question 3	
PubMed Searched on April 8th, 2020	
KQ3 Educational Interventions for Caregiving Skills	("Health Education"[Mesh]) OR "caregiving skills"[Title/Abstract]
AND	
Compassion Centered Care	((compassion[Title/Abstract] OR compassionate[Title/Abstract])) AND care[Title/Abstract]
Published in the last 5 years English	Filters activated: published in the last 5 years, English.
N=25	
SR N=0	systematic[sb]
RCT N=9 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498231/public/	(((((groups[tiab]) OR (trial[tiab]) OR (randomly[tiab]) OR (drug therapy[sh]) OR (placebo[tiab]) OR (randomized[tiab]) OR (controlled clinical trial[pt]) OR (randomized controlled trial[pt])
Observational N=0	"Observational Study" [Publication Type]
Other N=16 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498240/public/	

Feasibility Search Compassionate Care – Question 4	
PubMed Searched on April 8th, 2020	

KQ4 Direct Interventions for Caregivers	((("Caregivers"[Mesh]) OR "Family"[Mesh]) OR "Spouses"[Mesh])
AND	
Compassion Centered Care	((compassion[Title/Abstract] OR compassionate[Title/Abstract])) AND care[Title/Abstract]
Published in the last 5 years English	Filters activated: published in the last 5 years, English.
N=141	
SR N=9 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498248/public/	systematic[sb]
RCT N=25 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498257/public/	(((((groups[tiab]) OR (trial[tiab]) OR (randomly[tiab])) OR (drug therapy[sh]) OR (placebo[tiab]) OR (randomized[tiab]) OR (controlled clinical trial[pt]) OR (randomized controlled trial[pt]))
Observational N=1 https://www.ncbi.nlm.nih.gov/pubmed/30462717	"Observational Study" [Publication Type]
Other N=107 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498275/public/	
Feasibility Search Compassionate Care – Question 5	
PubMed Searched on April 8th, 2020	
KQ5 Interventions Aimed at Healthcare Systems	"Delivery of Health Care"[Mesh] OR "Learning Health System"[Mesh]
AND	
Compassion Centered Care	((compassion[Title/Abstract] OR compassionate[Title/Abstract])) AND care[Title/Abstract]
Published in the last 5 years English	Filters activated: published in the last 5 years, English.
541	
SR N=14 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498292/public/	systematic[sb]
RCT N=86 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498300/public/	(((((groups[tiab]) OR (trial[tiab]) OR (randomly[tiab])) OR (drug therapy[sh]) OR (placebo[tiab]) OR (randomized[tiab]) OR (controlled clinical trial[pt]) OR (randomized controlled trial[pt]))

Observational N=2 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498303/public/	"Observational Study" [Publication Type]
Other N=439 https://www.ncbi.nlm.nih.gov/sites/myncbi/r.relevo.1/collections/59498308/public/	

Appendix B. Selection Criteria Assessment

Selection Criteria	Assessment
1. Appropriateness	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	Yes
1b. Is the nomination a request for an evidence report?	Yes
1c. Is the focus on effectiveness or comparative effectiveness?	Yes
1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes
2. Importance	
2a. Represents a significant disease burden; large proportion of the population	Compassion centered care is a critical component of high-quality healthcare and is associated with improved patient care outcomes, reduced rates of medical errors and higher patient satisfaction ¹⁸ . Clinician focused interventions to facilitate compassion centered care were also demonstrated to improve professional satisfaction, reduce burnout and improve retention of healthcare staff ²⁶ .
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	Yes, because compassion focused individual centered care is particularly important in delivering care to people with chronic health conditions and has been associated with improved patient outcomes and reduced healthcare utilization and costs.
2c. Incorporates issues around both clinical benefits and potential clinical harms	Yes
2d. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	Yes. Evidence suggests that compassion focused healthcare results in better patient care outcomes, reduced healthcare utilization and lower rates of burnout for healthcare providers.
3. Desirability of a New Evidence Review/Absence of Duplication	
3. A recent high-quality systematic review or other evidence review is not available on this topic	Seven systematic reviews ¹⁻⁷ addressed question 1 pertaining to educational interventions to facilitate the development of clinicians' skills and behaviors to provide compassion centered care. Four systematic reviews ^{4,8-10} answered question 2 related to strategies to promote healthcare provider well-being and satisfaction. One in-process AHRQ technical brief ¹¹ will address question 3 of the nomination. For question 4, we identified three systematic reviews ¹²⁻¹⁴ and another in-process AHRQ systematic review ¹⁵ that evaluated approaches to support caregiver well-being, quality of life and satisfaction outcomes. Finally, there was only one experimental study ¹⁶ that addressed question 5 regarding organizational level interventions to promote compassion centered care.
4. Impact of a New Evidence Review	

<p>4a. Is the standard of care unclear (guidelines not available or guidelines inconsistent, indicating an information gap that may be addressed by a new evidence review)?</p>	<p>Yes. There is a paucity of literature pertaining to institutional level interventions to facilitate compassion centered patient care which demonstrates the lack of evidence to guide healthcare organization leaders' decisions regarding strategies to promote compassion centered care.</p>
<p>4b. Is there practice variation (guideline inconsistent with current practice, indicating a potential implementation gap and not best addressed by a new evidence review)?</p>	<p>Yes. Currently, there are no established guidelines or consensus practice regarding compassion centered care delivery.</p>
<p>5. Primary Research</p>	
<p>5. Effectively utilizes existing research and knowledge by considering:</p> <ul style="list-style-type: none"> - Adequacy (type and volume) of research for conducting a systematic review - Newly available evidence (particularly for updates or new technologies) 	<p>We found no systematic reviews and only one primary study¹⁶ related to question 5. This indicates that currently there is no sufficient literature base to develop new evidence product to address question 5 of the nomination.</p> <p>We additionally searched <i>ClinicalTrials.gov</i> however did not identify any relevant ongoing or completed clinical trials</p>

Abbreviations: AHRQ=Agency for Healthcare Research and Quality.