



NEW ENGLAND

CEPAC

COMPARATIVE EFFECTIVENESS  
PUBLIC ADVISORY COUNCIL

# Palliative Care in the Outpatient Setting

Public Meeting – March 31, 2016

# Agenda

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- **Meeting Convened and Opening Remarks | 10:00 AM- 10:15 AM**
  - Steven Pearson, MD, MSc, President, Institute for Clinical and Economic Review
- **Presentation of the Evidence | 10:15 AM- 11:30 AM**
  - Sarah Emond, MPP, Chief Operating Officer, Institute for Clinical and Economic Review
  - Dan Ollendorf, PhD, Chief Scientific Officer, Institute for Clinical and Economic Review
  - Rick Chapman, PhD, MS, Director of Health Economics, Institute for Clinical and Economic Review
- **Public Comments and Discussion | 11:30 AM-12:00 PM**
  - Members of the public pre-registered to deliver oral remarks
- **Break for Lunch | 12:00 PM – 12:30 PM**
- **CEPAC Q&A with Experts/Deliberation and Votes| 12:30 PM – 2:00 PM**
- **Policy Roundtable | 2:00PM-3:30 PM**

# New England CEPAC Overview

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- A core program of the Institute for Clinical and Economic Review ([ICER](#))
  - CEPAC is an independent panel that reviews objective evidence reports and holds public meetings to develop recommendations for how patients, clinicians, insurers, and policymakers can improve the quality and value of health care.
- Goal: To improve the application of evidence to guide practice and policy in New England
- Structure:
  - Evidence review from ICER
  - Deliberation and voting by CEPAC– independent clinicians, methodologists, and leaders in patient engagement and advocacy
- Supported by NESCSO, regional private payers, regional provider organizations, and grant funding from the Laura and John Arnold Foundation

# New England CEPAC Overview

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- CEPAC recommendations designed to support aligned efforts to improve the application of evidence to:
  - Practice
    - Patient/clinician education
    - Quality improvement efforts
    - Clinical guideline development
  - Policy
    - Coverage and reimbursement
    - Medical management policies
    - Benefit design

# TOPIC OVERVIEW

**Sarah K. Emond, MPP**  
Chief Operating Officer  
Institute for Clinical and Economic Review

*Disclosures:*

**I have no conflicts of interest.**

*Key review team members:*

**Courtney Cunningham, MPH**

**Erin Lawler, MA**

# Context

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- Palliative care is a multi-disciplinary management approach
  - Provides symptom relief and comfort care to patients with serious or life-threatening illnesses
  - Goal of improving QoL for both patients and their families
- Can be initiated at diagnosis and provided concomitantly with curative therapy
- Most commonly provided for advanced cancer patients in inpatient settings, but limited by capacity issues
- Interest in ways to increase access due to growing number of patients living with progressive diseases

# Settings and Structure

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- Palliative care services can be administered in hospitals, outpatient clinics, skilled nursing facilities, and in the home
- Experts in the field have identified the outpatient setting as the new frontier in palliative medicine\*
- Two dominant types of palliative care:\*\*
  - Generalist: led by providers who have some clinical experience and basic training in palliative care concepts but whose primary specialty is not palliative care
  - Specialist: led by providers with higher specialty education and advanced training in palliative care who are able to treat more complex aspects of disease management

\*Rabow MW, et al. *Cancer Control*. 2015;22(4):465-74.

\*\*Quill TE, et al. *NEJM*. 2013;368(13):1173-1175.



# Barriers

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- **Workforce: Capacity, Education, and Training**
  - Estimated shortfall of 6,000-18,000 palliative care physicians in the U.S.
  - Extensive training requirements and limited fellowships available
- **Lack of Awareness Among Non-Specialist Providers**
  - Lack of training/education to be able to discuss and provide basic palliative care services
- **Patient and Family Knowledge of Palliative Care**
  - Stigma associated with end-of-life care

# Barriers (2)

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- **Availability of Data and Funding for Research**
  - Limited amount of comparative studies
  - Only 1% of the current NIH budget is dedicated to palliative care research
- **Geographic and Socioeconomic Disparities**
  - Dearth of palliative care providers in rural communities
  - Lack of access for minority populations due to issues around cultural competency
- **Billing**
  - Many providers have difficulty being reimbursed for palliative services (e.g., social workers, chaplains, etc.)
  - Reimbursements often cover only half of the costs for outpatient palliative care services

# Opportunities

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- **New Payment Methodology**
  - Integrated delivery systems operating under capitated or risk-bearing managed care payments
- **Use of Electronic Medical Records**
  - To encourage care collaboration among providers and identification of those patients who will benefit from palliative care
- **Patient and Provider Education**
  - Continuing education credits
  - Public education campaign

# Opportunities (2)

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- **Resources for Existing Providers and Health Systems**
  - CAPC's Improving Outpatient Palliative Care program
  - VITALtalk program for promoting basic palliative care communication skills
- **Palliative Care Legislation**
  - Federal level: *The Palliative Care and Hospice Education and Training Act*
  - Regional level: MA and RI are studying barriers and ways to improve public awareness

# EVIDENCE REVIEW

**Dan Ollendorf, PhD**  
Chief Scientific Officer  
Institute for Clinical and Economic Review

*Disclosures:*

**I have no conflicts of interest.**

*Key review team members:*

**Shanshan Liu, MS, MPH**

**Anne Loos, MA**

**Karin Travers, DSc**

# Methods

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- Review limited to higher quality RCTs and comparative cohort studies
- Studies conducted outside U.S. and Canada excluded
- All advanced diseases included
- Primary focus on “specialist” vs. “generalist” interventions

# Study Selection (PICOTS)

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- Population: adults 18 years or older
- Intervention: palliative care interventions that included both physical and psychosocial elements
- Comparators: usual/standard care
- Outcomes: QoL, resource utilization, symptom burden, mood, satisfaction, survival, costs
- Time Frame: January 2000-November 2015
- Setting: all outpatient settings (skilled nursing facilities excluded)



# Selected Studies (13)

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- Study characteristics
  - Relatively large ( $n > 100$ ), mostly RCTs using “modified” intent-to-treat design
  - Even mix of academic/community settings
  - Geographically-diverse
- 9 specialist, 4 generalist
- 5 in cancer only, 8 in mixed populations with cancer and other advanced illness (e.g., CHF, COPD)

# Strength of Evidence

Outcome	Specialized care	Generalist care	Overall
QoL	5 studies	2 studies	7 studies
Resource Use	7 studies	3 studies	10 studies
Survival	3 studies	1 study	4 studies
Symptom Burden	5 studies	2 studies	7 studies
Patient Satisfaction	3 studies	1 study	4 studies
Psychosocial and Spiritual	1 study	2 studies	3 studies
Mood	4 studies	2 studies	6 studies
Caregiver Outcomes	1 study	0 studies	1 study

**Key:**

High
Moderate
Low
No evidence

# Quality of Life

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- Measured in 7 studies
- 4 showed improved QoL
  - 3 specialist, 1 generalist
  - All studies of cancer patients only
- 3 showed equivalent improvements in QoL
  - 2 specialist, 1 generalist

# Mood, Symptoms and Satisfaction

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- Anxiety and/or depression measured in 6 studies
  - 4 showed improvement on one or the other (2 specialist, 2 generalist)
- Patient satisfaction measured in 4 studies
  - 3 showed improvement (all specialist)
- Symptom burden measured in 7 studies
  - 4 studies showed no impact (all specialist)
  - 3 studies showed benefits (2 specialist, 1 generalist)
    - Limited to discrete and disease-specific symptoms (e.g., shortness of breath in COPD)

# Survival

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- Measured in 5 studies
  - Intent of palliative care not to prolong life
  - 2 studies showed improvement in median survival (3-6 months) and rate of survival at one year (both specialist)
  - 1 trial showed improved 1-yr survival in early vs. delayed group (specialist)
  - 2 studies showed no difference in survival (1 specialist, 1 generalist)

# Resource Utilization

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- Measured in 10 studies
  - 7 showed benefits on at least one resource utilization outcome (5 specialist, 2 generalist)
    - Reductions in use of acute inpatient and/or ED services
    - Increase in home deaths and hospice utilization

# Other Outcomes

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- Evidence of outpatient palliative care impact on psychosocial, spiritual, and caregiver outcomes extremely limited
  - Some benefits observed re: improved spiritual wellbeing, increases in advance care planning, and improved depression and stress burden\* for caregivers

\*For a comparison of early vs. delayed palliative care

# Overall Summary

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- *Specialist*: moderate certainty that outpatient palliative care confers an incremental or better net health benefit relative to usual care (ICER evidence rating: B+)
  - Harms not reported in any study
- *Generalist*: small and inconsistent evidence base, but generalist approaches unlikely to be net harmful and produce at least comparable outcomes in available studies:
  - ICER evidence rating: Promising but Inconclusive (P/I)



# Elements Associated with Success

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- **Methods:**
  - Defined success as a statistically significant effect on any QoL measure in favor of the palliative care intervention
  - Compared the frequencies of various specific components of the interventions described in “successful” studies relative to those described in the “unsuccessful” studies

# Elements Associated with Success

Author, Years	Bakitas, 2015	Rabow, 2004	Radwany, 2014	Bakitas, 2009	Rummans, 2006	Temel, 2010	Zimmermann, 2014
<i>Program Components</i>	<i>Unsuccessful Studies</i>			<i>Successful Studies</i>			
Multidisciplinary Care Team	N	Y	Y	N	Y	N	N
Palliative Care Specialist	Y	N	Y	Y	N	Y	Y
Patient & Family Education	Y	Y	Y	Y	Y	N	Y
Advance Care Planning	Y	Y	Y	Y	N	Y	Y
Monthly In-person Office Visit	N	N	N	N	N	Y	Y

# COMPARATIVE VALUE ANALYSIS

**Rick Chapman, PhD, MS**

Director of Health Economics

Institute for Clinical and Economic Review

*Disclosures:*

**I have no conflicts of interest.**

*Key review team members:*

**Dan Ollendorf, PhD**

# Methods

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- Included higher quality RCTs and comparative cohort studies examining economics of palliative care programs in U.S. and Canada
- Same study selection criteria as for Evidence Review
  - Adults in palliative care programs in outpatient settings, compared to usual care (2000-2015)

# Costs & Cost-Effectiveness

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- 3 studies (including specialist and generalist interventions) found ~\$6,000-\$8,000 lower costs/patient with outpatient palliative care in patients with mixed diagnoses
- No studies reported start-up/implementation costs, so full assessment of return on investment could not be performed
- Recent review\* found cost savings through reduced hospital admission rates, shift from high-cost settings (e.g., hospitals) to lower-cost settings (e.g., home health care)

\*Hughes MT, et al. *Ann Rev Public Health*. 2014;35:459-75

# Cost Burden & Unpaid Caregiving

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- Studies employing societal perspective have found that much of the costs offset through reduced use of ED and hospital are shifted to the home setting and care provided by unpaid caregivers
- Informal caregiving estimated to total nearly 70 hours per week, at annual replacement costs >\$30,000\*
  - Replacing informal care provided in U.S. in last year of life with home health aides estimated to require ~\$1.4 billion

# POTENTIAL BUDGETARY IMPACT



# Potential Budget Impact: Methods

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- Based on results from U.S.-based RCT\*
  - Mean cost of \$19,308 for palliative care and \$30,816 for usual care, updated to 2014 dollars
  - Cost offsets of \$11,508/patient enrolled in palliative care vs. usual care
- Estimated entire candidate populations for treatment\*\*
  - Cancers: 585,000
  - COPD, CHF: 202,000
  - TOTAL: 787,000

\*Brumley R, et al. *J Am Geriatr Soc.* 2007;55(7):993-1000.

\*\*Expected LE < 12 months; numbers estimated using NCHS 2013 deaths by cause

# Potential Budget Impact: Methods

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- Evaluated 3 potential implementation rates: 10%, 25%, or 50% of eligible patients per year for 5 years
- Also evaluated 3 gradual implementation rates: 10%, 25%, or 50% at the end of 5 years
  - E.g., if 10% of patients assumed enrolled at 5 years, 2% of eligible patients enrolled in 1st year, 4% in 2nd, 6% in 3rd, 8% in 4th, 10% in 5<sup>th</sup> year

# Potential BI: Number of Patients Enrolled - 10% Assumption

Full	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Cum. Total
Cancer	58,489	58,489	58,489	58,489	58,489	292,445
COPD/CHF	20,176	20,176	20,176	20,176	20,176	100,880
Total	78,665	78,665	78,665	78,665	78,665	393,325

Gradual	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Cum. Total
Cancer	11,698	23,395	35,093	46,790	58,489	175,464
COPD/CHF	4,035	8,071	12,106	16,142	20,176	60,531
Total	15,733	31,466	47,199	62,932	78,665	235,995

# Results at 1 & 5 Years: Full Implementation

Immediate	Analytic Horizon = 1 Year		Analytic Horizon = 5 Years	
	Number Treated	Total BI (billions)	Cumulative Number Treated	Cumulative Total BI (billions)
10%	78,665	-\$0.91	393,325	-\$4.53
25%	196,655	-\$2.26	938,275	-\$11.32
50%	393,315	-\$4.53	1,966,575	-\$22.63

# Results at 1 & 5 Years: Gradual Implementation

Gradual	Analytic Horizon = 1 Year		Analytic Horizon = 5 Years	
	Number Treated	Total BI (billions)	Cumulative Number Treated	Cumulative Total BI (billions)
10%	15,733	-\$0.18	235,995	-\$2.72
25%	39,331	-\$0.45	589,965	-\$6.79
50%	78,663	-\$0.91	1,179,945	-\$13.58

# Summary

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- Outpatient palliative care appears to reduce overall costs of care through reduced use of hospital and ED services
- However, much of this cost appears to be shifted to informal, unpaid caregiving
- Costs studies also lack information on start-up and implementation expenses
- Medical cost reductions of ~\$2.7-\$4.5 billion over 5 years possible even if only 10% of eligible patients opt for palliative care

# PUBLIC COMMENT

**LUNCH**

**Meeting will resume at 12:30PM**





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# Questions for Deliberation

**Palliative Care in the Outpatient  
Setting**

# Comparative *Clinical Effectiveness* Example Question

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Is the evidence “**adequate**” to demonstrate that “**intervention A**” is superior to “**comparator B**” for patients with “**condition X**”?

- **Yes**
- **No**

# Care Value Example Question

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What is the care value of “**intervention A**” vs “**comparator B**”?

- A. Low
- B. Intermediate
- C. High

# Provisional Health System Value Example Question

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Assuming baseline pricing and payment mechanisms, what would be the provisional health system value of “intervention A”?

- A. Low
- B. Intermediate
- C. High

# Practice Question

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Who's your prediction for the NCAA March Madness tournament winner?

- A. Villanova
- B. Oklahoma
- C. Syracuse
- D. UNC

# COMPARATIVE CLINICAL EFFECTIVENESS

# Specialist Palliative Care: QoL

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Is the evidence adequate to demonstrate that **specialist palliative care** delivered in the outpatient setting is superior to usual care for:

*Improving quality of life?*

- Yes
- No

# Specialist: Hospitalization and ED Use

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Is the evidence adequate to demonstrate that **specialist palliative care** delivered in the outpatient setting is superior to usual care for:

*Reducing hospitalization and ED use?*

- Yes
- No



# Generalist: QoL

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Is the evidence adequate to demonstrate that **generalist palliative care** delivered in the outpatient setting is superior to usual care for:

*Improving quality of life?*

- Yes
- No

# Generalist: Hospitalization and ED Use

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Is the evidence adequate to demonstrate that **generalist palliative care** delivered in the outpatient setting is superior to usual care for:

*Reducing hospitalization and ED use?*

- **Yes**
- **No**

COMPARATIVE VALUE

CARE VALUE

# Care Value: Specialist Palliative Care

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Given the available evidence, what is the *care value* of specialist palliative care in the outpatient setting vs. usual care in the outpatient setting?

- A. Low
- B. Intermediate
- C. High



COMPARATIVE VALUE

# PROVISIONAL HEALTH SYSTEM VALUE

# Provisional Health System Value: Specialist Palliative Care

Given the available evidence, what is the overall *provisional health system value* of specialist palliative care?

- A. Low
- B. Intermediate
- C. High



# POLICY ROUNDTABLE

# Policy Roundtable Participants

Policy Roundtable	
<p><b>Marie A. Bakitas, DNSc, NP-C, FAAN</b>            Professor, Marie O’Koren Endowed Chair            School of Nursing/Department of Medicine,            University of Alabama at Birmingham            Associate Director, Center for Palliative and            Supportive Care</p>	<p><b>Diane E. Meier, MD</b>            Vice-Chair for Public Policy, Professor of            Geriatrics and Palliative Medicine, and            Catherine Gaisman Professor of Medical            Ethics, Icahn School of Medicine at Mount            Sinai Hospital            Director, Center to Advance Palliative Care</p>
<p><b>Lori-Jane Higgins</b>            Caregiver, Data Collector for Palliative Care            Research</p>	<p><b>Rob Zavoski, MD, MPH</b>            Medical Director, Connecticut Department            of Social Services</p>
<p><b>Joseph Kozacheck, MD</b>            Senior Medical Director, Custom Care Unit,            Aetna</p>	



# Meeting Adjourned

# Next Steps

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- Final Report and accompanying materials expected in late April.
- Meeting materials and outputs: [icer-review.org/meeting/palliative-care](https://icer-review.org/meeting/palliative-care)

For more information please visit  
[icer-review.org/programs/new-england-cepac](https://icer-review.org/programs/new-england-cepac)