



2026 California Thoracic Society Annual Educational Conference & Chronic Obstructive Pulmonary Disease Symposium

Thursday March 12, 2026-Sunday March 15, 2026

Earn up to 19 CME/CEU/MOC Credits
Jointly Provided by AKH Inc., Advancing Knowledge in Healthcare
and the California Thoracic Society



PORTOLA HOTEL & SPA
AT MONTEREY BAY

Thursday March 12, 2026 (6 CME/CEU/MOC Credits)

COPD Symposium

Friday March 13, 2026 (6.5 CME/CEU/MOC Credits):

Advances in Interventional Pulmonary, Remote Monitoring in Pulmonary and Sleep Medicine,
Approach to Symptom Management in Chronic Lung Disease and Critical Care

Saturday March 14, 2026 (6.5 CME/CEU/MOC Credits)

Sepsis and Shock, Extracorporeal Membrane Oxygenation, Inpatient Pulmonary
Complications of Cancer Care

Sunday March 15, 2026

Fellow and Resident Track Symposium



Friday March 13, 2026

Advances in Interventional Pulmonary

8:00 am – 8:10 am: Welcome and Introduction

8:10 am – 8:55 am: Keynote Address – Evolution of Bronchoscopy in Diagnosing Lung Nodules

- **Christine Argento, MD (Johns Hopkins)** - This speaker will discuss the recent advances in bronchoscopy from radial EBUS, to electromagnetic navigation, to robot technologies, and how advancement has improved lung nodule diagnosis.

8:55 am – 9:20 am: Implications of the new TNM9 staging for lung cancer

- **Colleen Channick, MD (UC Los Angeles)** - This speaker will discuss the new TNM staging system, how staging is currently performed, and how to approach staging in the patient with suspected lung cancer.

9:20 am – 9:45 am: Management of Central Airway Obstruction

- **Raed Alalawi, MD (Arizona-Phoenix)** - This speaker will discuss how interventional pulmonary practitioners can manage and treat central airway obstruction.

9:45 am – 10:10 am: The Changing Landscape of Pleural Disease Management

- **Joon Chang, MD (Stanford)** - This speaker will discuss advances in management of pleural disease by the interventional pulmonologist including when to use an intrapleural catheter, and when to use

10:10 am – 10:20 am: Question and Answer

10:20 am – 10:50 am: Break

Remote Monitoring in Lung Disease and Sleep Medicine

10:50 am – 11:15 am: Developing a home spirometry program

- **Steven Hays, MD (UC San Francisco)** - This speaker will discuss how to approach the development of a home spirometry program to monitor lung disease, how to use digital health technologies to integrate results into the EHR.

11:15 am – 11:40 am: Home Non-Invasive Ventilator Monitoring

- **Christal Hawkins, RRT (UC San Diego)** - This speaker will review how to monitor home non-invasive ventilators for compliance and for adequate control of sleep disordered breathing.

11:40 am – 11:55 am: Pro: Virtual Pulmonary Rehabilitation is Ready for Prime Time

- **Aimee Kizziar, RRT (UC Davis)** - This speaker will argue in favor of virtual pulmonary rehabilitation programs.

11:55 am – 12:10 pm: Con: Virtual Pulmonary Rehabilitation is not ready for Prime Time

- **Julia Rigler, BA, RRT (UC San Francisco)** - This speaker will argue against virtual pulmonary rehabilitation programs.

12:10 pm – 12:20 pm: Question and Answer

12:20 pm – 1:00 pm: Awards Ceremony

1:00 pm – 2:00 pm: Lunch

Hands On Session:

2:00 pm – 3:00 pm: Robotic Bronchoscopy **Raed Alalawi, MD (Arizona-Phoenix) & Joon Chang, MD (Stanford)** Cough Monitoring **Lauren Eggert, MD (UCSF)**; Endobronchial Ultrasound **Pranjal Patel, MD (Stanford)**; Home NIV **Krystle Leung, MD (Stanford)**

3:00 pm – 3:20 pm: Break

Approach to Symptom Management in the Pulmonary Patient

3:20 pm – 3:45 pm: Addressing the Unmet Needs of Refractory Chronic Cough

- **Krishna Sundar, MD FCCP FAASM ATSF (UC Davis)** - This speaker will discuss the etiology behind refractory chronic cough and the treatment approaches for management

3:45 pm – 4:10 pm: Frailty in Pulmonary and Critical Care Medicine

- **Jonathan Singer, MD MPH (UC San Francisco)** - This speaker will discuss the concept of frailty and how it impacts health in patients with lung disease. The speaker will also discuss how frailty can change as lung disease is treated.

4:10 pm – 4:35 pm: Palliative Care for the Patient with Chronic Lung Disease

- **Grace Amadi, MD (UC Davis)** - This speaker will discuss how palliative care teams can benefit patients with chronic various lung disease including ILD, COPD, and pulmonary hypertension.

4:35 pm – 5:00 pm: Palliative Care for the Patient with Critical Illness

- **B. Corbett Walsh, MD, MBE (UC Los Angeles)** - This speaker will discuss how palliative care teams can benefit the inpatient with advancing lung disease, the importance of advance care planning, and palliative care in the intensive care unit.

5:00 pm – 5:10 pm: Question and Answer

5:30 pm – 7:00 pm: Women in Pulmonary, Critical Care, and Sleep Medicine (NON-CME) – Food and beverages will be served





Dr. Corbett Walsh is a pulmonary and critical care physician at UCLA Health with additional fellowship training in Hospice and Palliative Medicine and a graduate degree in Bioethics from the University of Pennsylvania. He practices across the Ronald Reagan UCLA, Santa Monica UCLA, and Barlow Respiratory Hospitals, where he leads initiatives integrating palliative and critical care for patients experiencing serious illness. His research examines ethical decision-making in critical illness, palliative approaches to ventilator withdrawal, and crisis standards of care. Dr. Walsh serves on the UCLA Hospital Ethics Committees and holds leadership roles in the American Thoracic Society and CHEST.



Palliative Care for the Pulmonary Patient with Critical Illness

B. Corbett Walsh, MD, MBE

Clinical Assistant Professor of Medicine

Pulmonary & Critical Care | Palliative Medicine

UCLA David Geffen School of Medicine

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Disclosures

- I had the following relationships with ACCME defined ineligible companies:
 - Baxter Healthcare Corporation (2023-4)
 - *A Delphi Consensus on Recommendations for Improving Research Processes and Infrastructure to Address Health Disparities. (CHEST Critical Care, 2025; Sep 3(3):100160)*
 - InflaRx (2024)
 - *Vilobelimab Advisory Board*
- I **WILL** discuss off-label use and/or investigational use of any drugs or devices.
 - Opioid use for treatment of breathlessness in advanced lung disease

Disclosures: **Wednesday I lost my voice, not my slides**



Widely publicized sip of water approximately 11 minutes into then Senator Marco Rubio's Republican response to President Obama's State of the Union address on February 12, 2013.

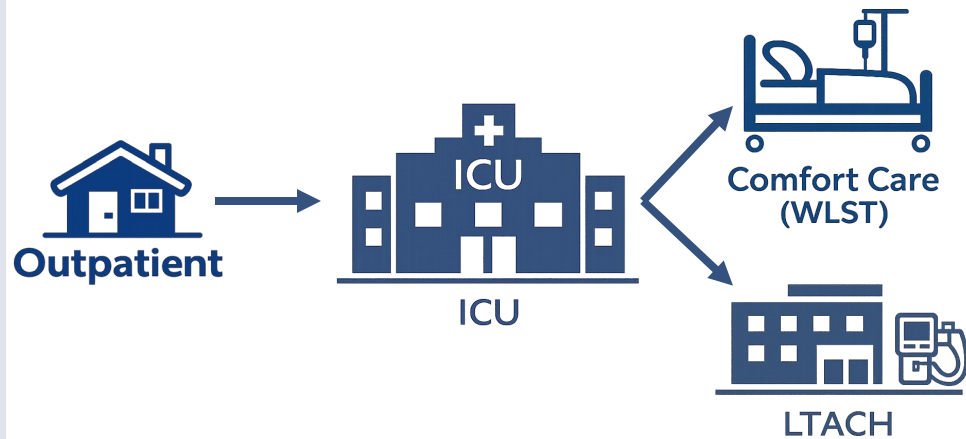


When you hear "Palliative Care" in advanced lung disease, what comes to mind first?

Diane:

67F with severe COPD + fibrotic
ILD overlap, new lung cancer
on treatment, home O2

now worsening dyspnea and
recurrent admissions.



Palliative Care for the Pulmonary Patient with Critical Illness



- Longitudinal Palliative Integration & Referral strategies
- Opioids for Dyspnea



- Structures of Inpatient Palliative Integration
- Prognostication: ProVent
- Communication: Time Limited Trials
- Communication: JumpStart-Optimizing EHR Goals Documentation

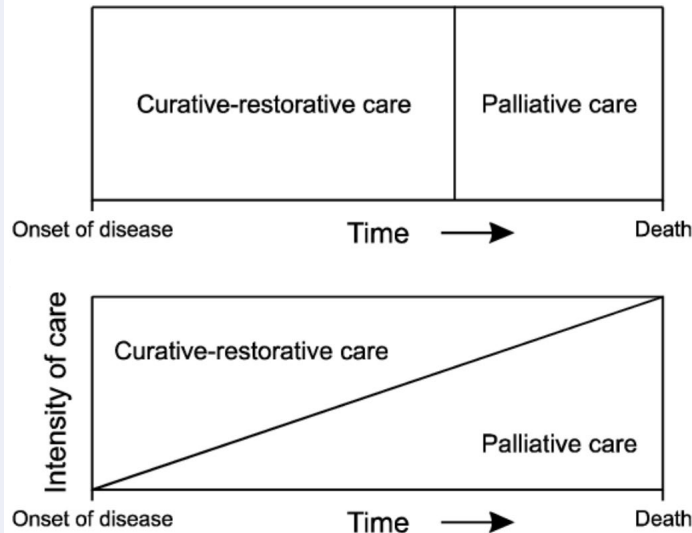


- Medical Futility & Potentially Inappropriate Care
- WLST: Palliative Ventilator Removal



- LTACH: Survival, Function, and the Palliative Care Gap

Operations of Palliative Care

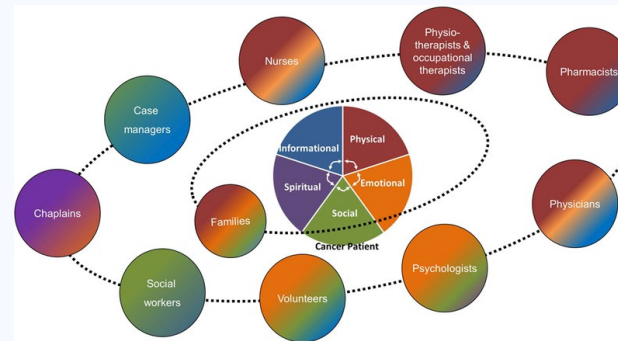
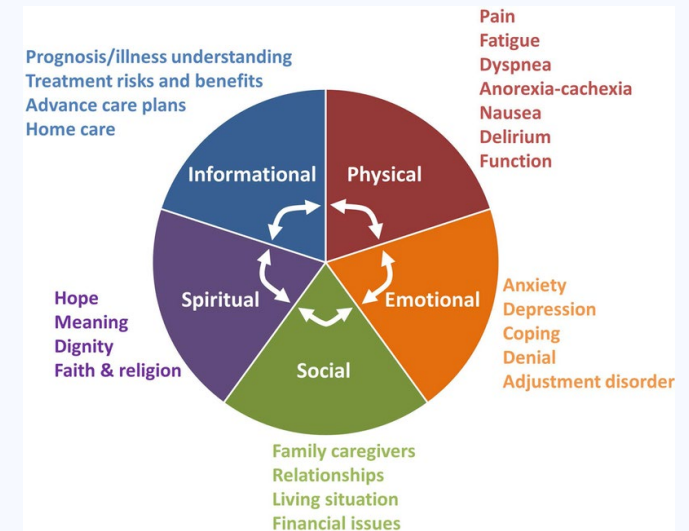
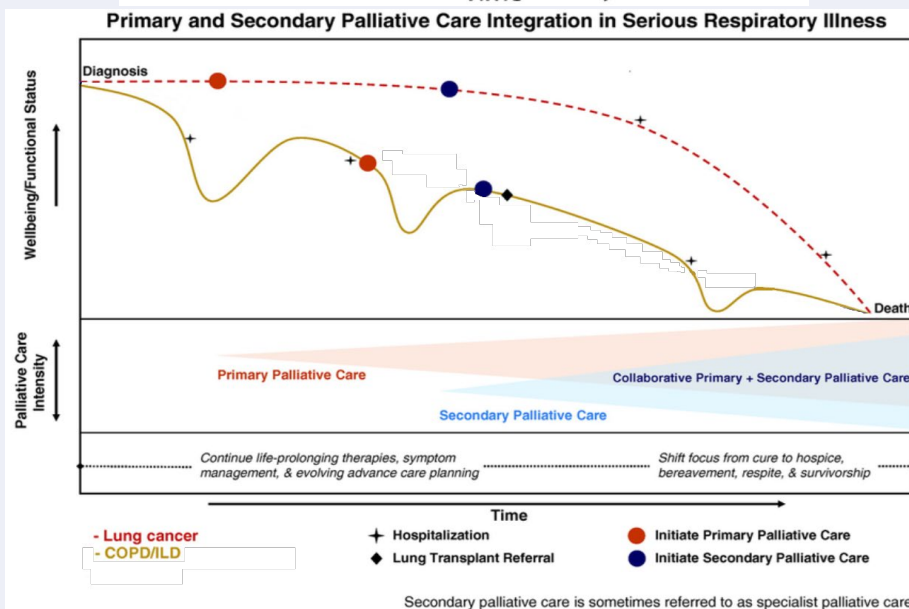


• Primary palliative care:

- symptom control + basic serious-illness communication by the treating team

• Specialist / Secondary palliative care:

- Refractory symptoms
- High conflict
- Complex decision-making
- Elevated caregiver distress
- Moral ambiguity



Outpatient & Longitudinal Integration

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Early Palliative Care for Patients with Metastatic Non–Small-Cell Lung Cancer

N ENGL J MED 363;8 NEJM.ORG AUGUST 19, 2010

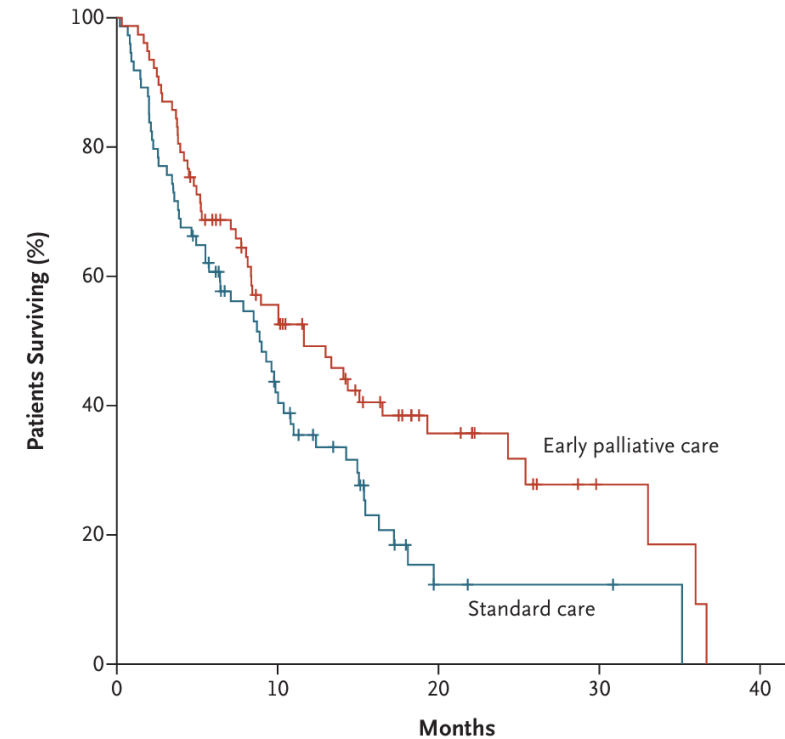


Figure 3. Kaplan–Meier Estimates of Survival According to Study Group.

Outpatient & Longitudinal Integration

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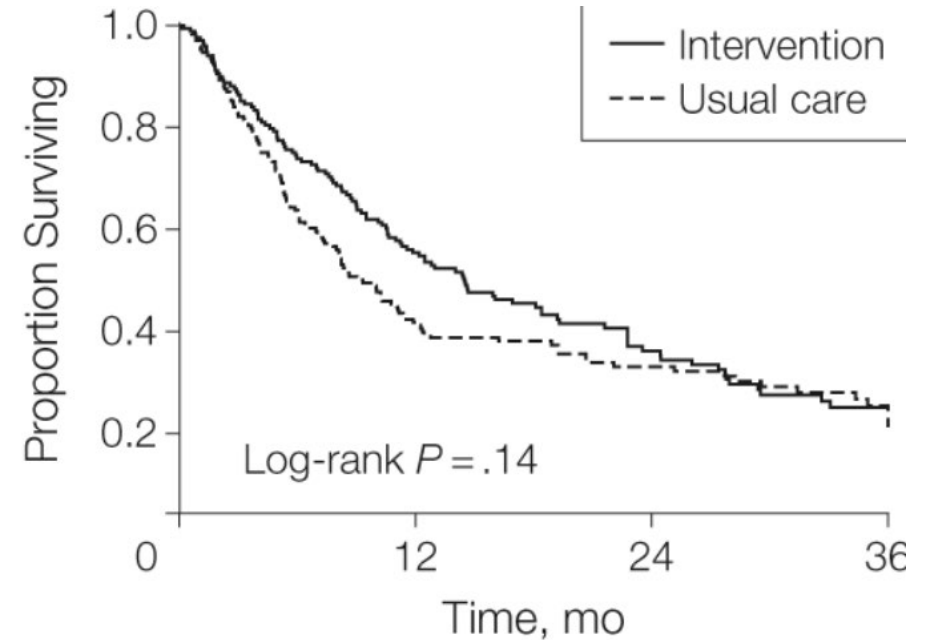
Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer

N ENGL J MED 363:8 NEJM.ORG AUGUST 19, 2010

Original Contribution

Effects of a Palliative Care Intervention on Clinical Outcomes in Patients With Advanced Cancer

The Project ENABLE II Randomized Controlled Trial



No. at risk				
Intervention	161	83	35	16
Usual care	161	62	33	16

Outpatient & Longitudinal Integration

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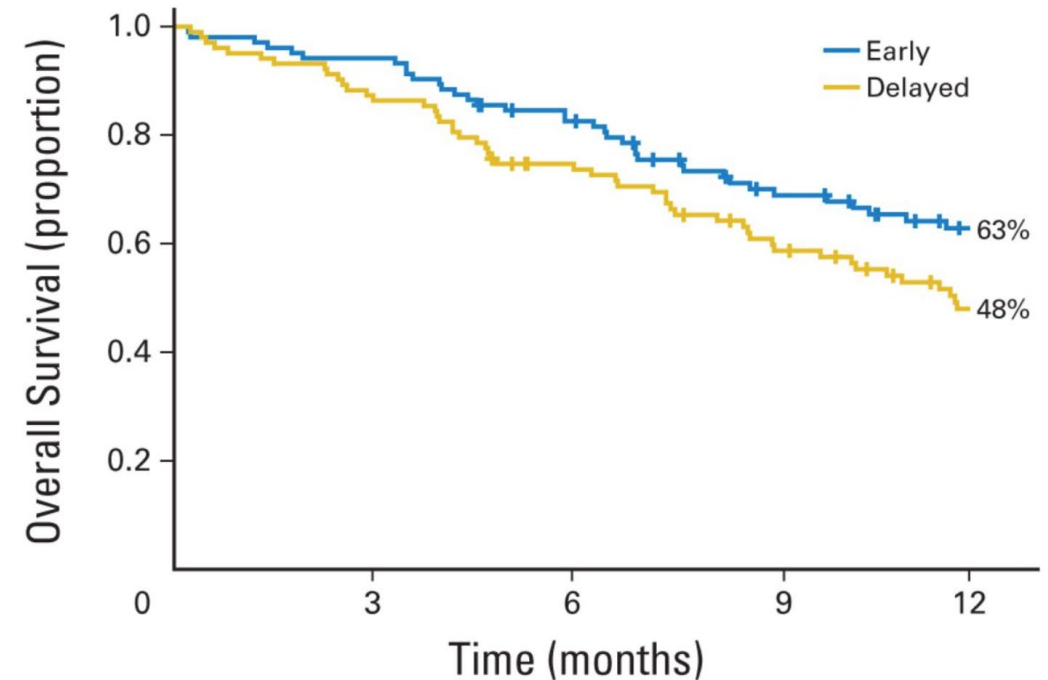
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Effects of a Palliative Care Intervention on Clinical Outcomes in Patients With Advanced Cancer
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PARTIAL ACCESS | ORIGINAL REPORTS | March 23, 2015



Early Versus Delayed Initiation of Concurrent Palliative Oncology Care: Patient Outcomes in the ENABLE III Randomized Controlled Trial



No. at risk	0	3	6	9	12
Early	104	98	83	62	48
Delayed	103	89	73	55	39

Outpatient & Longitudinal Integration

PARTIAL ACCESS | ORIGINAL REPORTS | December 28, 2016

Effects of Early Integrated Palliative Care in Patients With Lung and GI Cancer: A Randomized Clinical Trial

The NEW ENGLAND JOURNAL of MEDICINE

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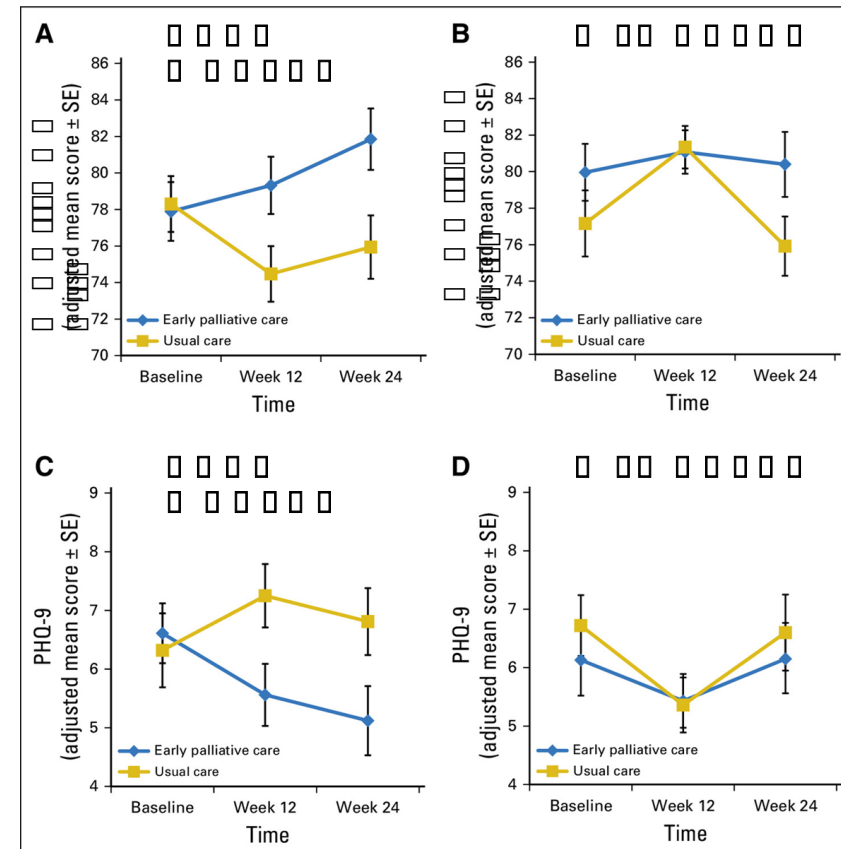
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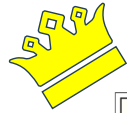
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PARTIAL ACCESS | ORIGINAL REPORTS | December 28, 2016

Effects of Early Integrated Palliative Care in Patients With Lung and GI Cancer: A Randomized Clinical Trial

- Consistent quality of life benefits:
 - effect size is small to moderate
- Survival benefit is inconsistent
 - Possible benefit, unreplicated outside Temel 2010 & ENABLE III
- Cancer type matters
 - Lung cancer patients consistently benefit
- Timing, dose and duration matter
 - Early, more visits over longer periods show more benefit

Outpatient & longitudinal Integration

When to consider palliative referral for the pulmonary patient?

Original Investigation

Nurse and Social Worker Palliative Telecare Team and Quality of Life in Patients With COPD, Heart Failure, or Interstitial Lung Disease

JAMA

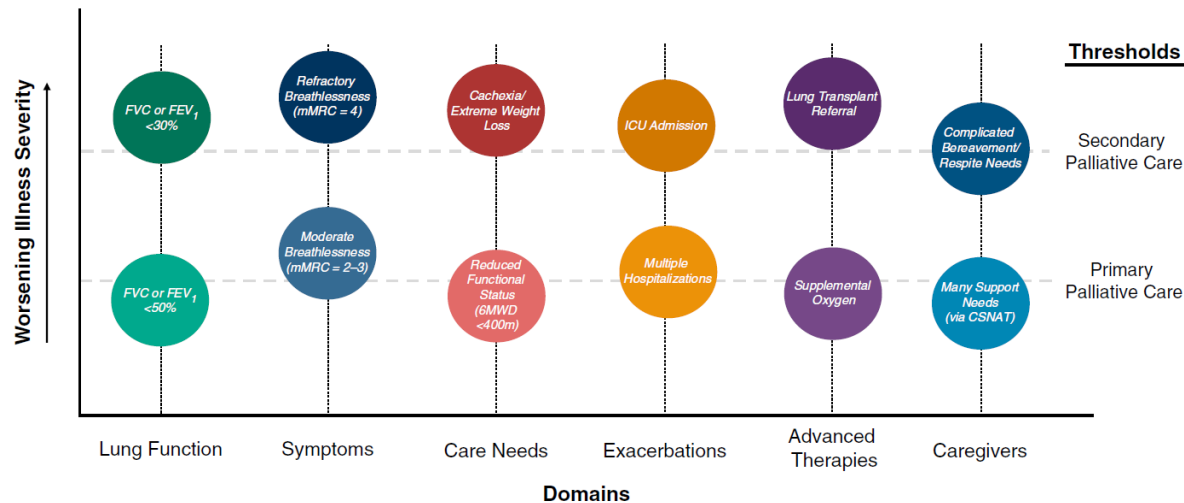
Published Online: January 16, 2024

The ADAPT Randomized Clinical Trial

2024;331(3):212-223. doi:10.1001/jama.2023.24035

- 306 patients with COPD, heart failure, or ILD
- Nurse & social worker palliative telecare team
- QOL clinically meaningful improvement
- Mental Health (depression & anxiety) improved
- Cost ~\$1,140 per patient

Triggers for Initiating Primary and Secondary Palliative Care in Serious Respiratory Illness: The Levers Model



- **Extends early palliative care benefits to non-cancer serious illness in an inexpensive scalable telehealth model**

Dyspnea management: Opioid Recommendations & Evidence

Where is it now?

Guideline	Recommendation	Strength of Recommendation	Certainty of Evidence
ATS 2020 Guideline "Pharmacologic Management of Chronic Obstructive Pulmonary Disease"	In individuals with COPD who experience advanced refractory dyspnea despite otherwise optimal therapy , we suggest that opioid-based therapy be considered for dyspnea management, within a personalized shared decision-making approach.	Conditional	Very low certainty
ERS 2024 "Practice guideline on symptom management for adults with serious respiratory illness"	<p>Not using opioids for the treatment of breathlessness in people with serious respiratory illness</p> <p><u>Non-Pharmacologic Interventions:</u></p> <ul style="list-style-type: none"> • Handheld fan • Breathing techniques • Graded exercise therapy 		

Trial	Population	Duration	Primary Outcome	Result
Verberkt 2020	N=111, COPD, mMRC 2-4	4 weeks	CAT (health status) + PaCO ₂	Positive: CAT improved; subgroup benefit in mMRC 3-4
BEAMS 2022	N=160, COPD, mMRC 3-4	1 week	Worst dyspnea (NRS)	Negative: no difference vs placebo
Mabel 2025	N=143, mixed cardiorespiratory mMRC 3-4	4 weeks	Worst dyspnea (NRS)	Negative for primary; improved cough, signal for improved physical activity

All studies were double masked, placebo controlled RCT
NRS: Numeric Rating Scale

- What High-Functioning ICUs Standardize
 - Shared prognostic framing
 - Internal alignment before family meetings
 - Reliable symptom and comfort protocols
- Model 1: Primary
 - ICU team leads primary palliative care
 - Best when specialist access is limited
- Model 2: Consultative
 - Primary palliative care + automatic triggers
 - Best for moderate volume and variable complexity
- Model 3: Embedded
 - Specialist integrated into ICU team
 - Best in high-volume, high-complexity centers

Integrating Palliative Care in the ICU: *Structure Outperforms Individual Skill*



The Stakes of Chronic Critical Illness

When Ventilation Become Chronic, Outcomes Change

- ≥ 21 days of mechanical ventilation
- **1 year mortality: 48-68%** ¹⁻²
- **Functional independence at 1 year: 9%** ²
- **Poor outcome (death or complete dependency): 65%** ²
- **Return home: 19%** ³



1. Nelson. Crit Care Med. 2010 Sep;38(9):1765-72.
2. Herridge N Engl J Med. 2023 Mar 9;388(10):913-924.
3. Damuth. Lancet Respir Med. 2015 Jul;3(7):544-53.



Introducing Structure to Prognostic Uncertainty

ProVent — A Framing Tool, Not a Verdict

- **Score ≥ 3 : 78-86% 1-year mortality**
- **Score ≥ 4 : 72-94% 1-year mortality**

- Validated in US settings;
- mis calibrated in European cohorts

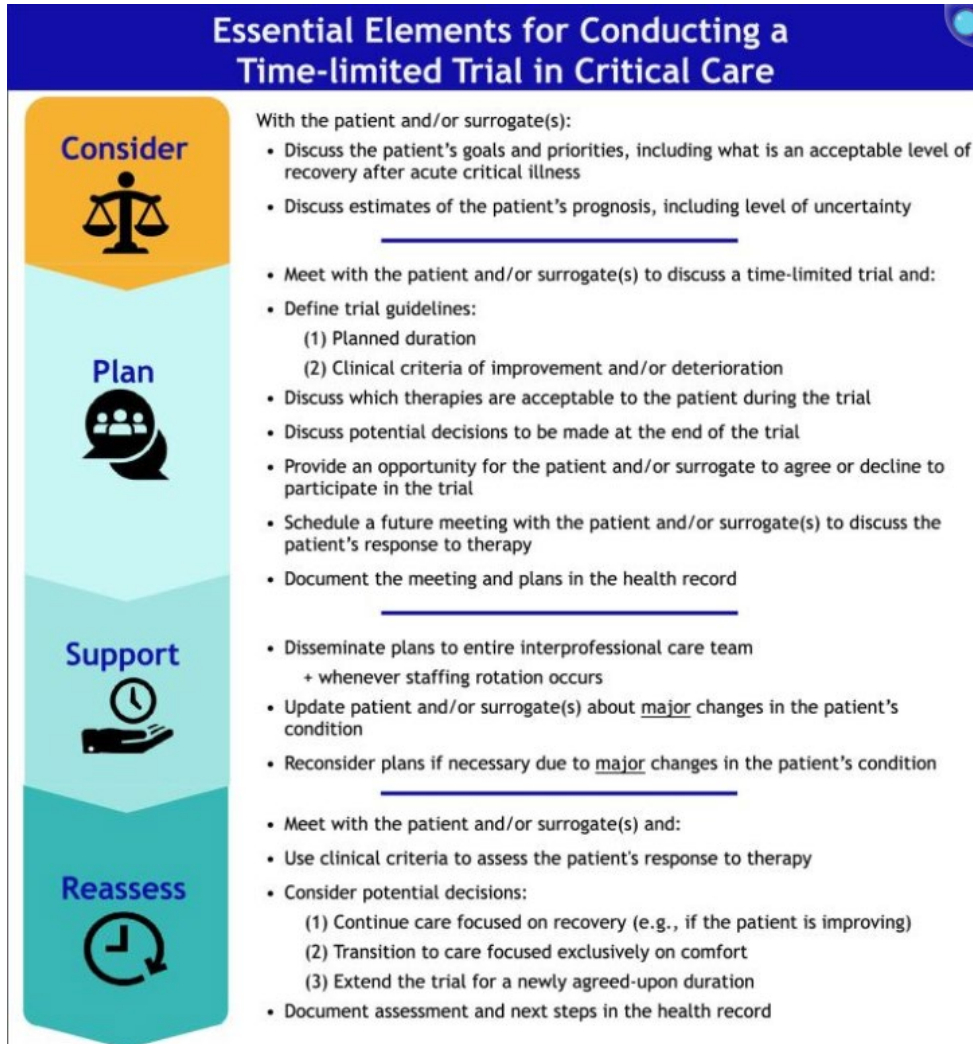
- Best practice: Use to frame planning, not to decide

ProVent Score (Day 14 variables)

Variable		Points
Age	50-64	1
	65 +	2
Platelets	$< 100 \times 10^9/L$	1
Vasopressor	Yes	1
Dialysis	Yes	1

Introducing Structure to Prognostic Uncertainty

Time-Limited Trials — The Antidote to "Do Everything vs. Stop"



ATS 2024 Bedside Checklist:

- 1. Goal of the trial
- 2. Duration
- 3. Criteria for improvement
- 4. Criteria for deterioration
- 5. Reassessment plan (how, when, who)

What's the Evidence? ¹

- Earlier family meetings (2 vs. 3 days)
- Shorter ICU LOS (7 vs. 10 days)
- Fewer procedural interventions in non-survivors
- Stable mortality rates

1. Chang. JAMA Intern Med. 2021;181(6):786–794.
 2. Kruser. Chest. 2024 Apr;165(4):881-891.
 3. Kruser. Ann Am Thorac Soc. 2024 Feb;21(2):187-199.

System Interventions to Promote GOC Discussions

JumpStart: Can EHR Prompts Improve GOC Communication?



- JumpStart: Clinician-facing EHR prompt with patient-specific data + communication prompts (based on VitalTalk framework)
- **EHR-based prompts increase goals-of-care documentation**
- **Effect size depends on intervention intensity, with particular benefit for minoritized patients**

Study	Setting	Intervention	GOC Discussion Rate
Curtis 2018	Outpatient	Clinician ↔ patient	31% → 74%
Lee 2022	Inpatient (pilot)	Clinician ↔ patient	8% → 21%
Curtis 2023	Inpatient (pragmatic)	Clinician Only	30.4% → 34.5%

Curtis. JAMA Intern Med. 2018;178(7):930–940.

Lee. JAMA Netw Open. 2022;5(4):e225088.

Curtis. JAMA. 2023;329(23):2028–2037.

When Critical Care May No Longer Benefit *Practiced Medical Futility*

Defining Medical Futility:

- **Physiologic Futility:**
 - 81% of hospital policies permit unilateral WLST for physiologic futility
- **Potentially inappropriate:**
 - Requires a value judgement (28% consistent with 'offer no chance of meaningful recovery')
 - 64% of hospital policies permit WLST for this category

Process Variation:

Expert Consultation (ethics, palliative, legal)	55%
Second medical opinion	29%
Interdisciplinary committee review	26%
Notify patient / surrogate of decision	27%



When Critical Care May No Longer Benefit

Why non-beneficial care persists: Culture, not just Policy

Recognizing Culture¹

- Hospital culture shapes EOL intensity independent of patient preferences
- High-intensity hospitals: escalation easy, deescalation thwarted
- Lower intensity hospitals: protocolized approaches create opportunities to deescalate

Workforce Impact²

- Moral distress **exacerbated** by: consumerism culture, hierarchies, insufficient deescalation structures
- Moral distress **mitigated** by: empowerment policies, QI initiatives, supportive leadership

Systems Levers — What to Consider at Your Institution

Policy	Does your WLST policy include "potentially inappropriate treatment" as a criterion? (Only 64% do)
Culture	Do you have protocolized family meetings at defined triggers (e.g., day 7, day 14)? Or does it depend on who's on service?
Empowerment	Can nurses independently consult palliative care or ethics? Or do they need physician approval?

1. Dzung. JAMA Intern Med. 2023;183(8):839-848.
 2. Brender. JAMA Netw Open. 2025;8(6):e2516089.

Withdrawal of Life-Sustaining Treatment: A Protocolized Ventilator Approach

1. Prepare the family
 2. Collaboration with stakeholders
 3. Prepare the room
 4. Prepare for symptoms
 5. Anticipate symptoms
 6. Transition off support
 7. Post de-escalation monitoring & management
- **Anticipate symptoms and medicate based on individualized treatment plan**
 - **Stepwise decrease in pulmonary support with frequent symptom reassessment**
 - **Close collaboration with Nursing & Respiratory Therapy**



Long-Term Acute Care:

Survival, Function, and the Palliative Care Gap

Outcome ¹	Finding
1-year survival	45%
Never achieve 60-day recovery	53%
Median remaining life spent as inpatient	66%
Die in inpatient setting, never returning home	37%
Palliative care consultation rate	1%

Care transitions ²: median 3 (range 2–5);
46% readmitted within 6 months



1. Makam. J Am Geriatr Soc. 2019;67(11):2282-2288.
2. Paul. Chest. 2025 Jul;168(1):106-118.

Goal Attainment in the LTACH: Setting Realistic Expectations

Patient Goal	% achieved at Discharge
Speaking	97%
Eating & Drinking	88%
Walking	21%
Self-toileting	18%
Returning home	52%
	(home or acute rehab)

Burden at LTACH Admission (%)

ICU-acquired weakness	80%
Cognitive Impairment	72%
Pharyngeal dysfunction	74%
Moderate-severe anxiety	32%



Palliative Care for the Critically Ill: *What to do Monday*

Domain	Action
Outpatient	Early integration ; responsible trial opioids in mMRC 3-4
ICU Models	Build triggers : consult, meeting, documentation
Prognostication	ProVent at day 14; frame , don't predict
Communication & Ethics	TLTs identify off-ramp ; non-beneficial care may reflect institutional defaults
WLST / LTACH	Protocolized WLST ; ensure the path is chosen, not defaulted



Please provide
feedback