

Palliative Care in Serious Respiratory Illness

Anand S. Iyer, MD, MSPH

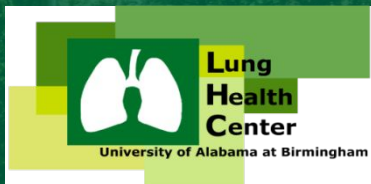
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Disclosures

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Learning Objectives

- Describe early palliative care needs in serious respiratory illness
- Identify potential triggers for early palliative care integration
- Discuss novel palliative care models and the role of primary palliative care in serious respiratory illness

Outline

4

I. Background

II. Early Palliative Care Needs in Serious Respiratory Illness

III. Barriers to Proactive Palliative Care

IV. Improving the Integration of Palliative Care and Its Principles into Practice

Case: Ms. M

5

- 65yo White female with COPD and progressively worsening breathlessness
- 35 pack-year smoking; quit 1 year ago
- 1 hospitalized exacerbation in 2 years
- mMRC 3-4 (severely breathless)
- CAT 24 (poor health status)
- Pulmonary hypertension, sleep apnea on Trilogy
- Inhalers: SABA (Albuterol - MDI, nebs), ICS/LABA (Breo), LAMA (Spiriva)
- Six-minute walk distance: 550ft (2L oxygen)
- BMI: 20



Spirometry

		Ref	Pre Meas	Pre % Ref
FVC	Liters	3.05	1.21	40
FEV1	Liters	2.33	0.36	16
FEV1/FVC	%	77	30	
FEF25-75%	L/sec	2.05	0.15	7
FEF50%	L/sec	3.45	0.15	4
PEF	L/sec	5.84	1.10	19
FET100%	Sec		8.82	
MVV	L/min	55		



Lung Volumes

TLC	Liters	4.84	3.93	81
RV	Liters	1.97	2.72	138
RV/TLC	%	41	69	
FRC N2	Liters	2.68	3.11	116
VC	Liters	2.51	1.21	48
ERV	Liters	0.95	0.37	38
IC	Liters	1.91	0.82	43
Vtg	Liters	3.15		
LCI		7.00	10.98	157
Wash Time	Min		7.0	



Diffusion

DLCO	mL/mmHg/min	20.7	3.1	15
DL Adj	mL/mmHg/min	20.7	3.1	15
DLCO/VA	mL/mHg/min/L	4.45	1.40	31
DL/VA Adj	mL/mHg/min/L	4.45	1.40	31
VA	Liters	4.84	2.21	46

UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM.

I. Background

Palliative Care Misconceptions

7

A word cloud illustrating common misconceptions about palliative care. The words are arranged in a circular pattern, with 'Death' and 'Dying' being the most prominent. Other words include 'Goals of care', 'The End', 'Withdrawal of care', 'Pain', 'Benzos', 'Sad', 'DNR', 'Family meetings', 'Narc them out', 'Anxiety', 'Morphine', 'Last days', 'Hospice', and 'Not ready to go palliative.'.

Not ready to go palliative.

Anxiety

Morphine

Death

Hospice

Last days

Goals of care

Benzos

Dying

Sad

DNR

Family meetings

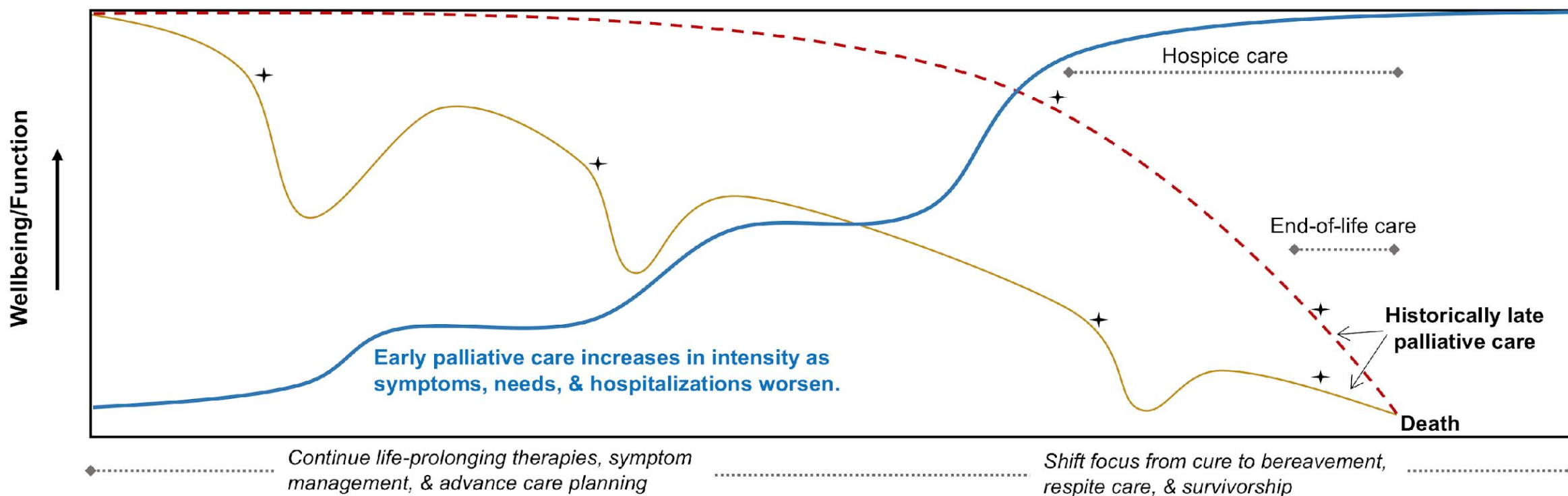
Narc them out

The End

Pain

Withdrawal of care

Trajectories of Decline in Serious Illness

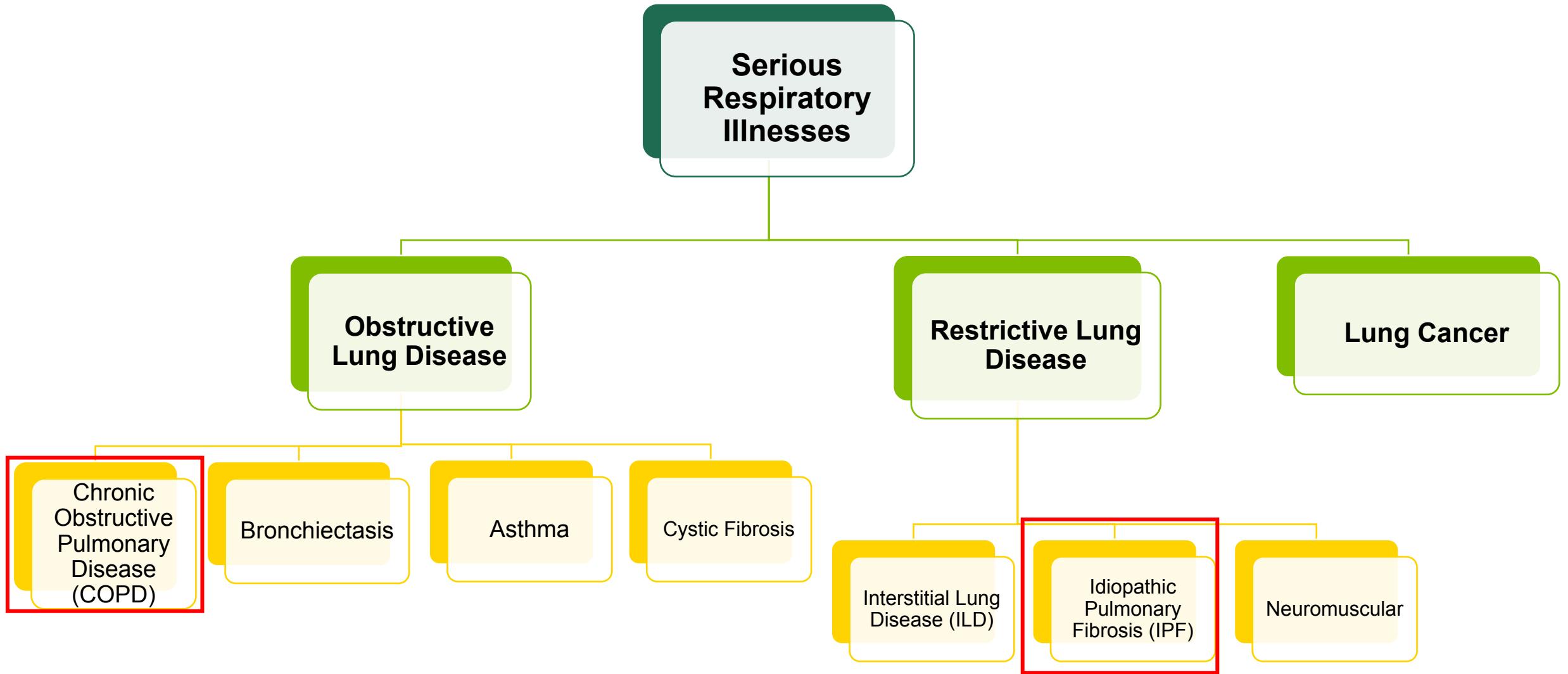


TERMS:

- Palliative care
- Hospice Care
- End of life care
- Respite care
- Bereavement

- COPD/Heart failure
- Advanced cancer/Idiopathic pulmonary fibrosis
- Early palliative care
- ✦ Hospitalization

Serious Respiratory Illnesses



Early Palliative Care Works – Learning from Cancer

ORIGINAL CONTRIBUTION

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

The Project ENABLE II Randomized Controlled Trial

Marie Bakitas, DNSc, APRN
Kathleen Doyle Lyons, ScD, OTR
Mark T. Hegel, PhD
Stefan Balan, MD
Frances C. Brokaw, MD, MS
Janette Seville, PhD
Jay G. Hull, PhD
Zhongze Li, MS
Tor D. Tosteson, ScD
Ira R. Byock, MD
Tim A. Ahles, PhD

Context There are few randomized controlled trials on the effectiveness of palliative care interventions to improve the care of patients with advanced cancer.

Objective To determine the effect of a nursing-led intervention on quality of life, symptom intensity, mood, and resource use in patients with advanced cancer.

Design, Setting, and Participants Randomized controlled trial conducted from November 2003 through May 2008 of 322 patients with advanced cancer in a rural, National Cancer Institute–designated comprehensive cancer center in New Hampshire and affiliated outreach clinics and a VA medical center in Vermont.

Interventions A multicomponent, psychoeducational intervention (Project ENABLE [Educate, Nurture, Advise, Before Life Ends]) conducted by advanced practice nurses consisting of 4 weekly educational sessions and monthly follow-up sessions until death or study completion (n=161) vs usual care (n=161).

Main Outcome Measures Quality of life was measured by the Functional Assess-

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

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

Jennifer S. Temel, M.D., Joseph A. Greer, Ph.D., Alona Muzikansky, M.A., Emily R. Gallagher, R.N., Sonal Admane, M.B., B.S., M.P.H., Vicki A. Jackson, M.D., M.P.H., Constance M. Dahlin, A.P.N., Craig D. Blinderman, M.D., Juliet Jacobsen, M.D., William F. Pirl, M.D., M.P.H., J. Andrew Billings, M.D., and Thomas J. Lynch, M.D.

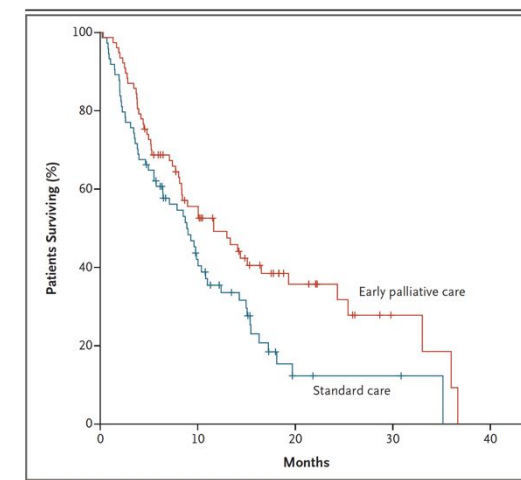
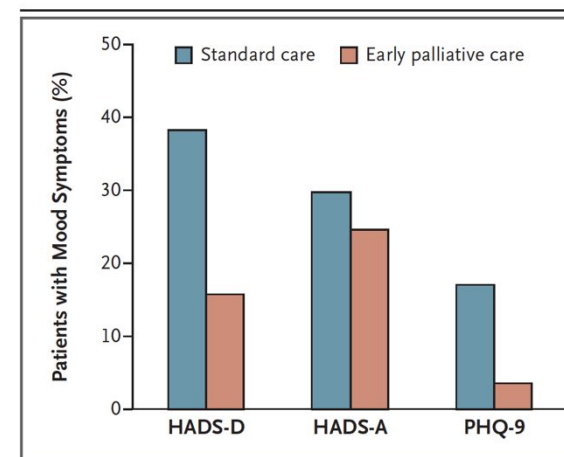
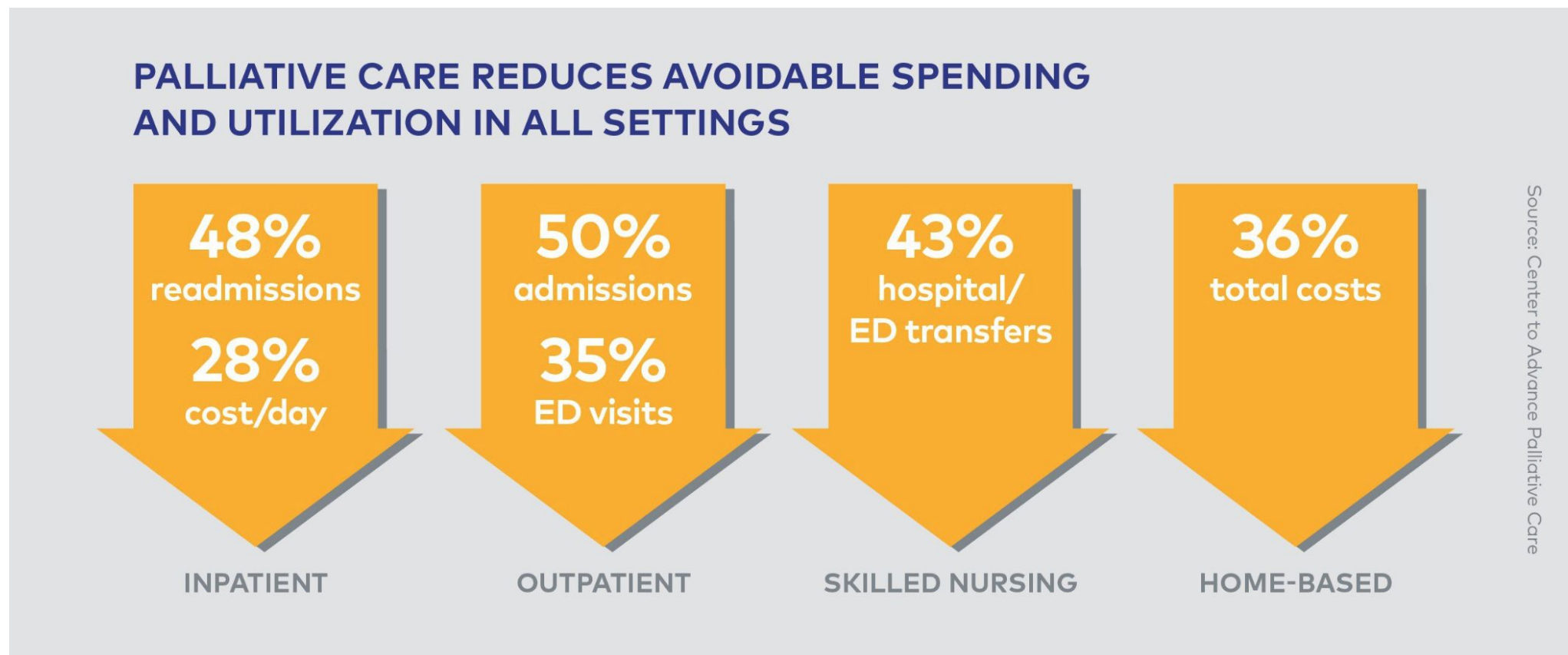


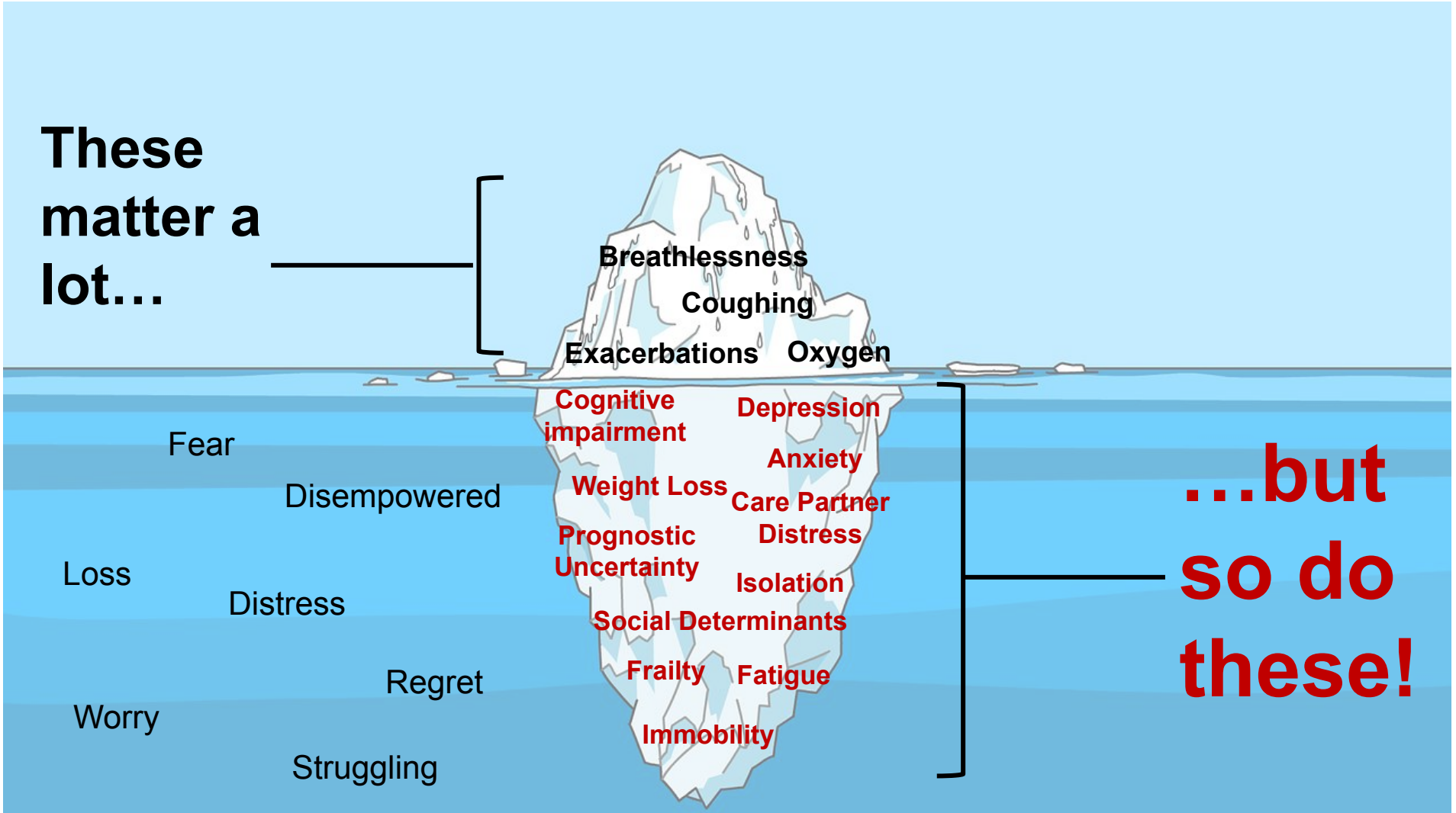
Figure 3. Kaplan–Meier Estimates of Survival According to Study Group.

Early Palliative Care Works

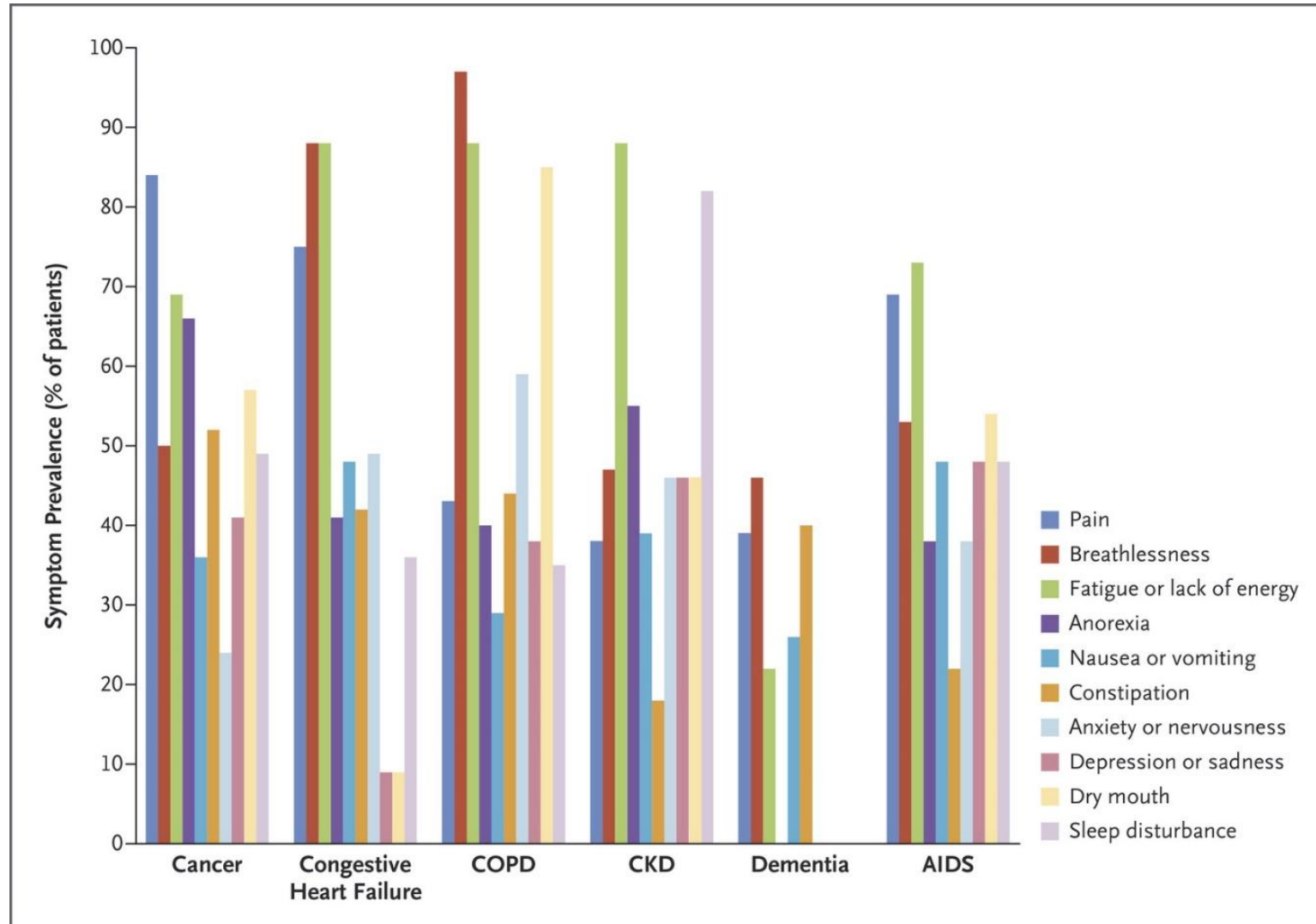


II. Early Palliative Care Needs in Serious Respiratory Illness

Care Needs in Serious Respiratory Illness - The Surface

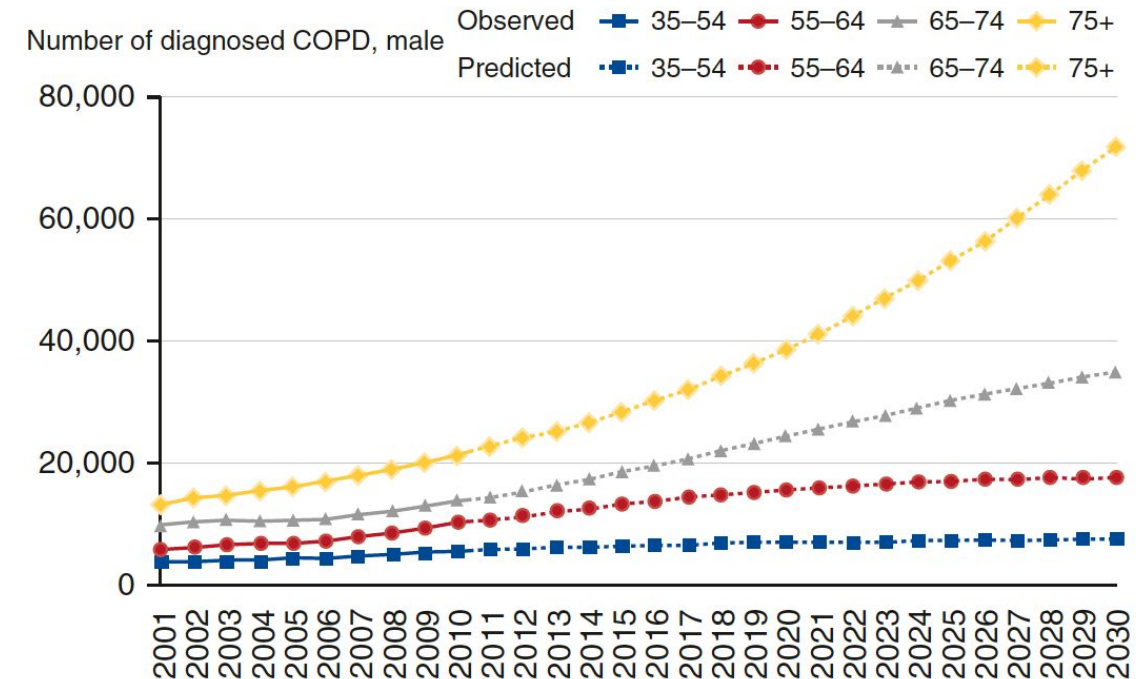


Symptom Prevalence in Serious Illness



Older Adults

- Accelerated pathophysiological aging
- Half of adults with COPD will be >75 years by 2030
- 3rd leading global cause of disability in adults >75 years



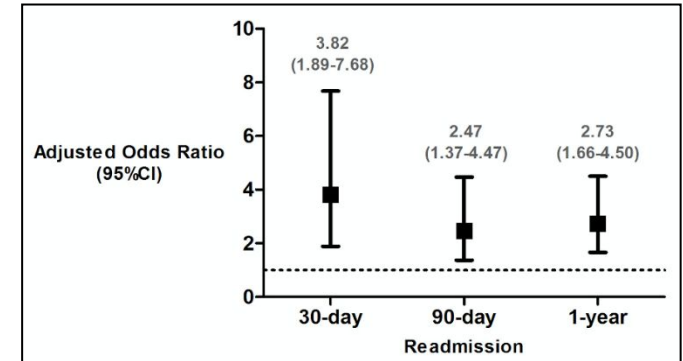
Themes of Early Palliative Care Needs in COPD



Emotional Symptoms

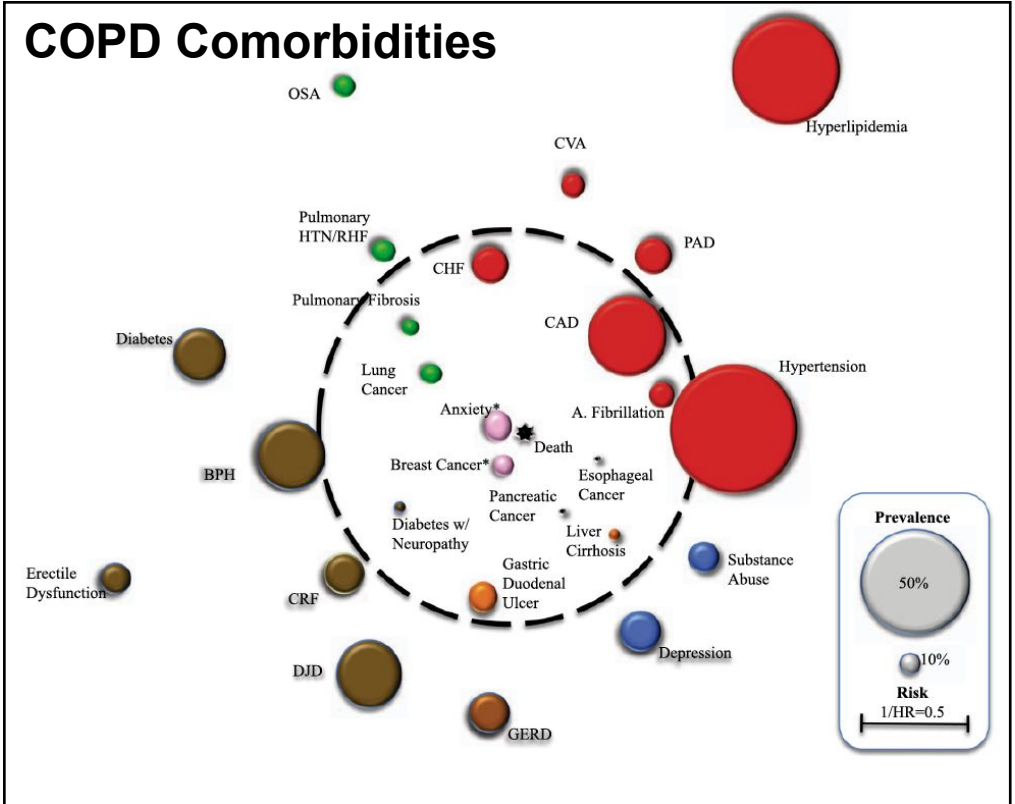
- Prevalent across GOLD stages & increases in prevalence across GOLD letter grades
- Associated with poor COPD outcomes: mortality, exacerbations, readmissions, poor QoL, poor adherence
- Key demographic characteristics associated with have untreated emotional symptoms

Depression and COPD Readmissions



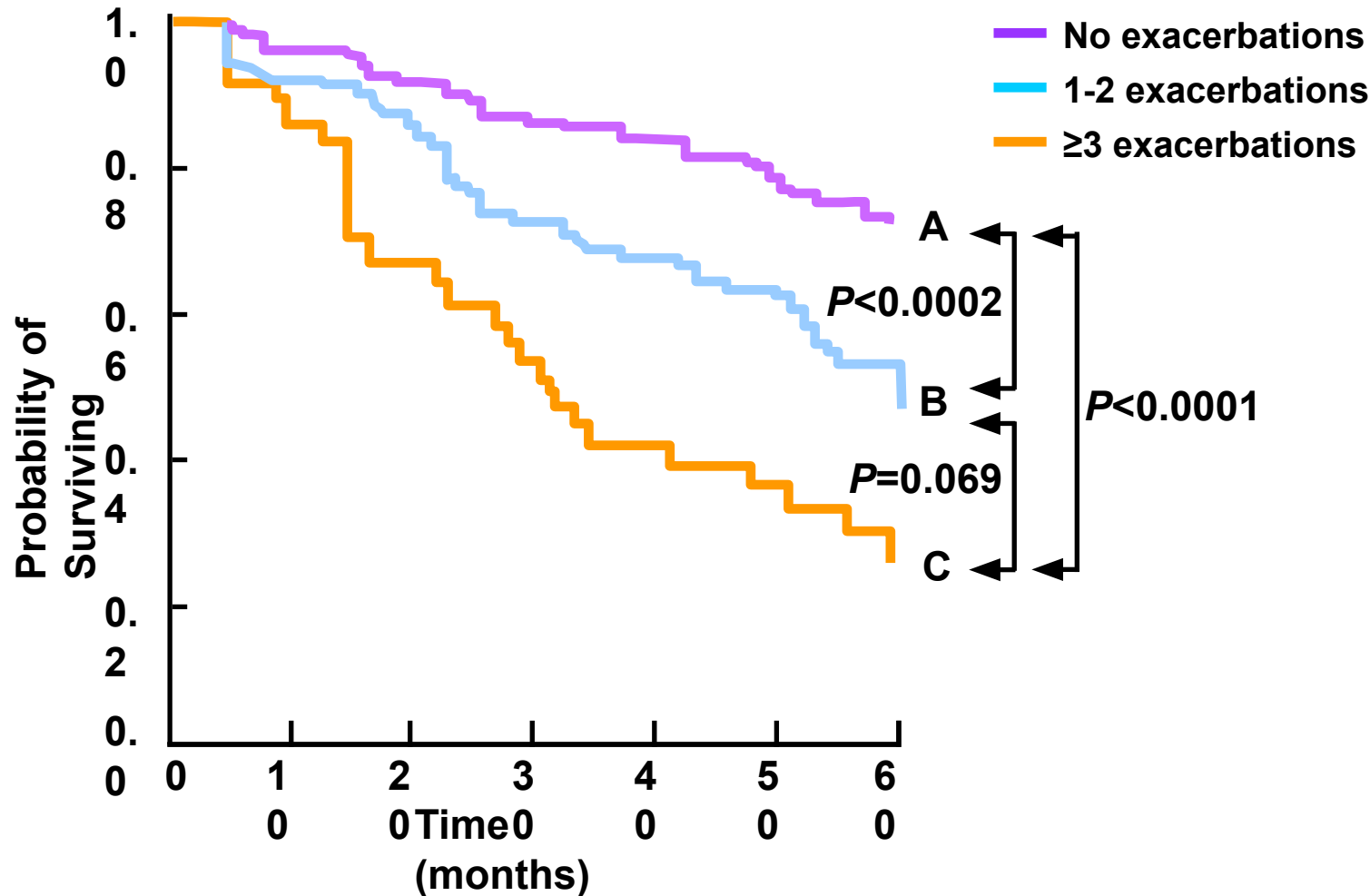
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COPD Comorbidities



Frequent COPD Exacerbations and Mortality

18



- Sentinel event: 25% mortality in 1 year
- Following severe exacerbations: Age, White race, male, prior nursing home, weight loss, and cancer associated with 1-year mortality

GOLD Letter Groups in COPD

Moderate or Severe
Exacerbation History

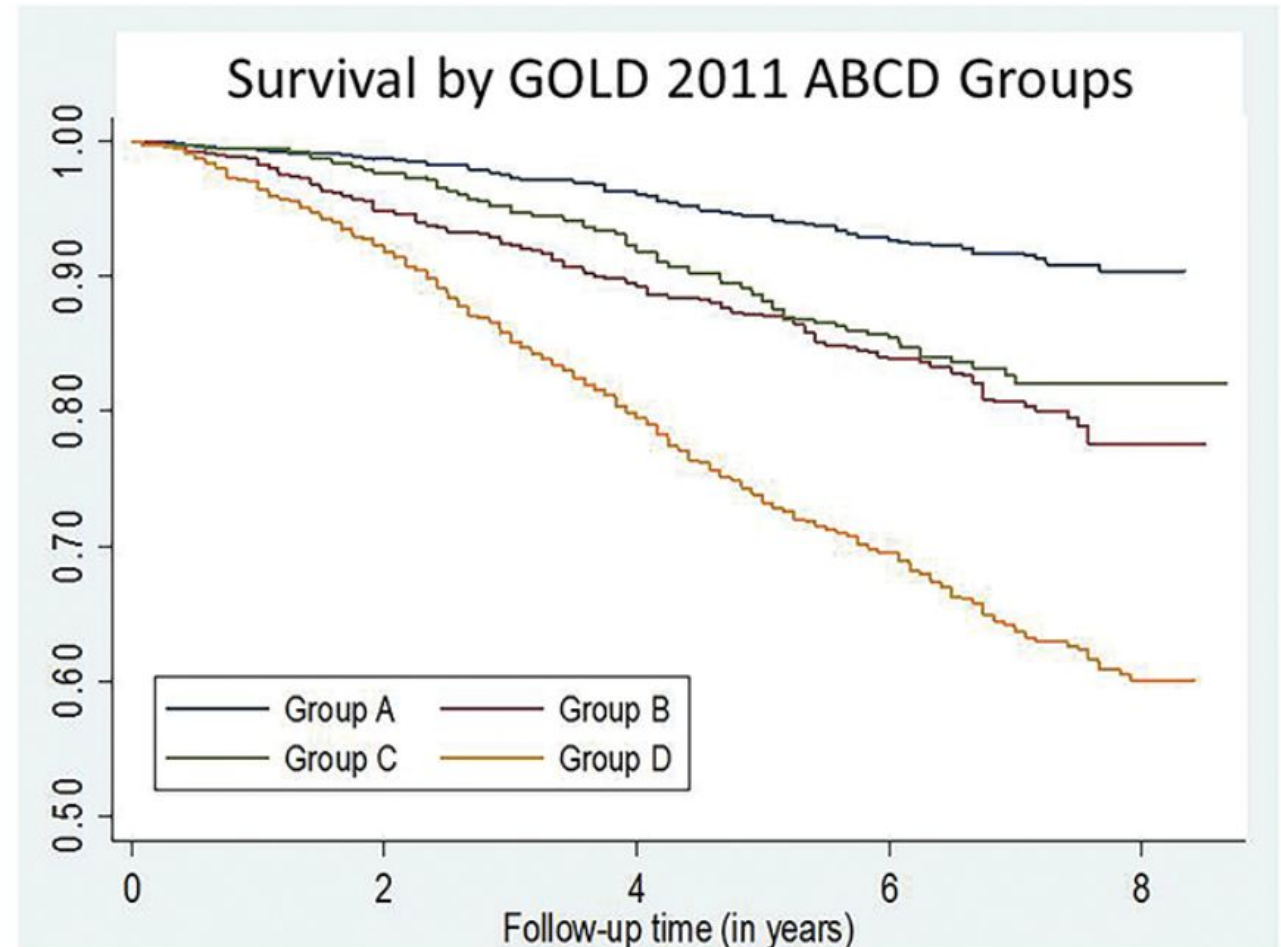
≥2 or
≥1 leading
to hospital
admission

0 or 1
(not leading
to hospital
admission)

C	D
A	B

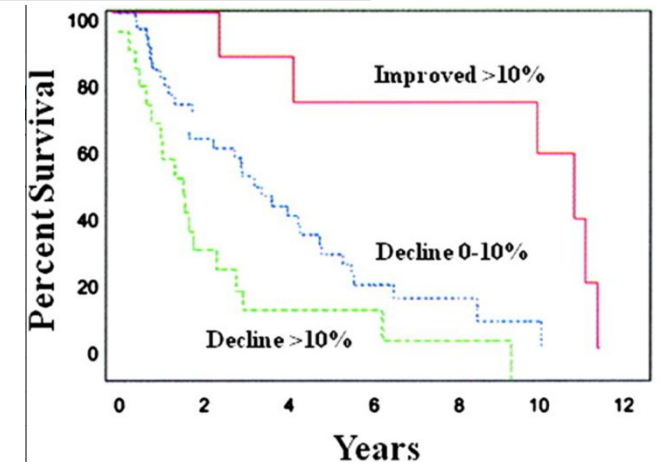
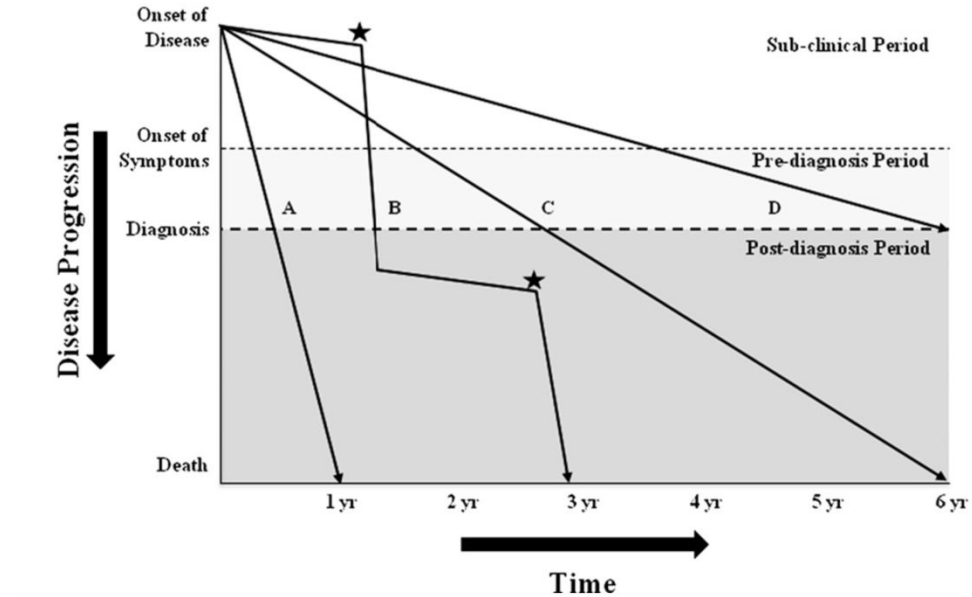
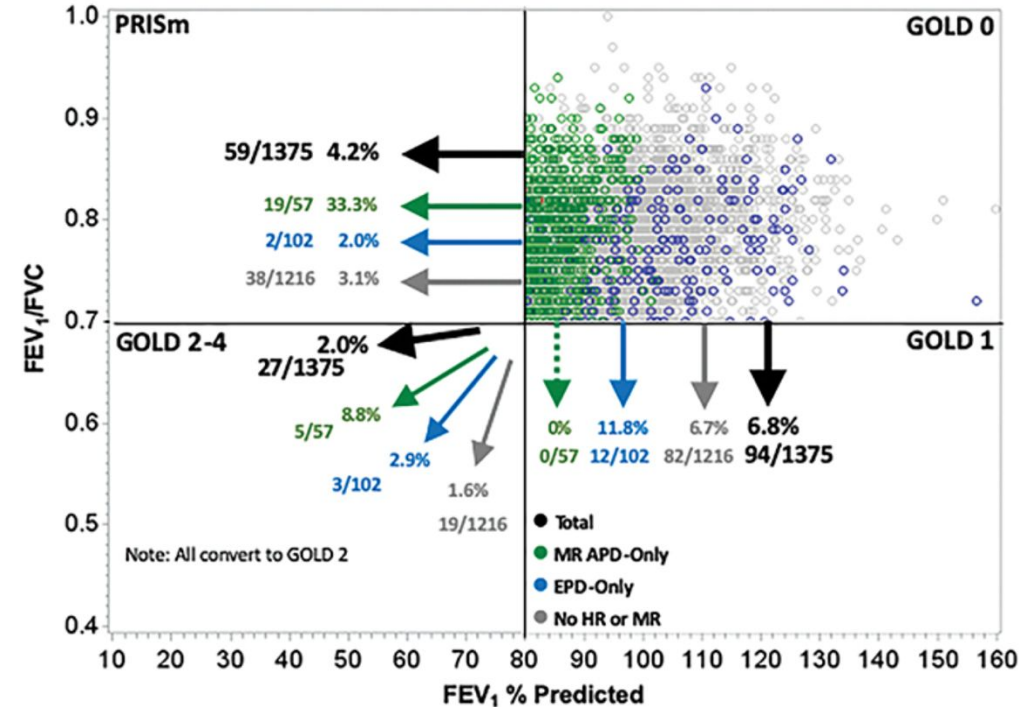
mMRC 0-1 CAT < 10	mMRC ≥ 2 CAT ≥ 10
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Symptoms



Complex Illness Trajectories in Serious Respiratory Illness

COPD



Place of Death in Serious Respiratory Illnesses

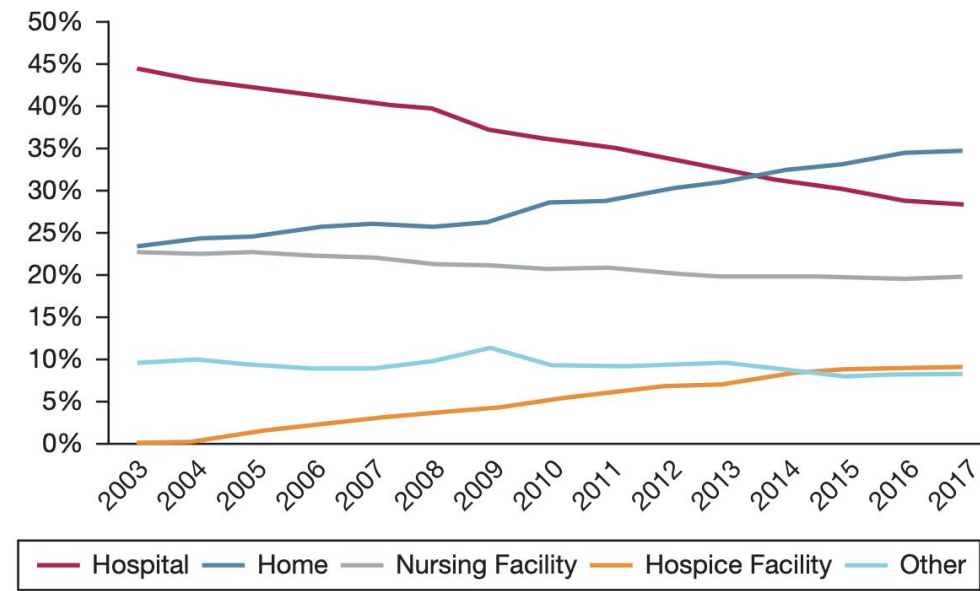


Figure 2 – Trends for lung disease in places of death (2003-2017).

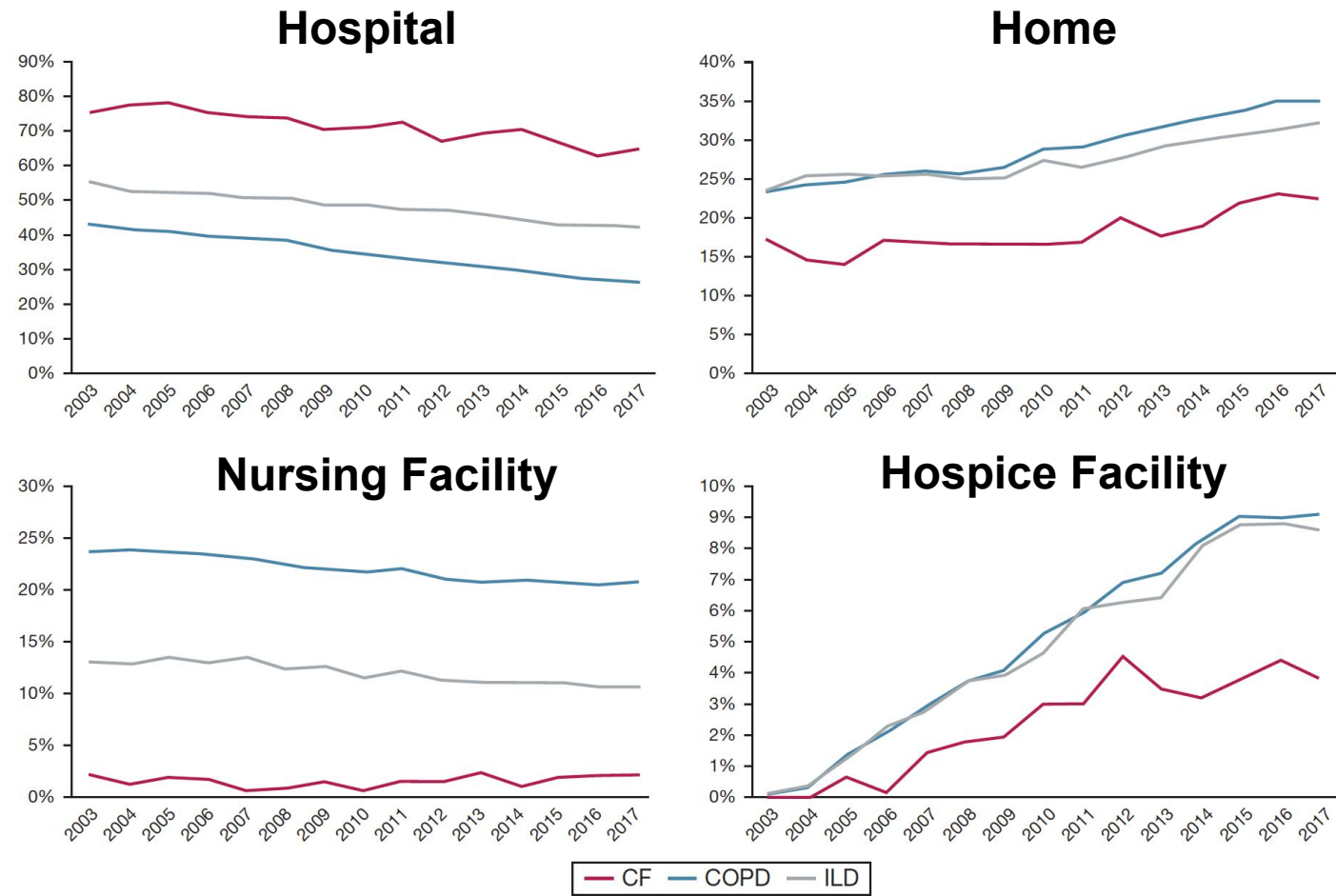


Figure 5 – Trends according to lung disease subtype in places of death (2003-2017). See [Figure 1](#) legend for expansion of abbreviations.

Poor Prognostic Awareness

22

"At least for the sake of family and caregivers, that is something that I feel like immediately needs to be learned to not only prepare the person, but to prepare their families."

49yo AAF patient, FEV₁ 70%

"It's the not knowing, and there's so much not knowing."

53yo WF patient, FEV₁ 16%

"If you don't know these things, you just are like a lost ball in high weed, you know?"

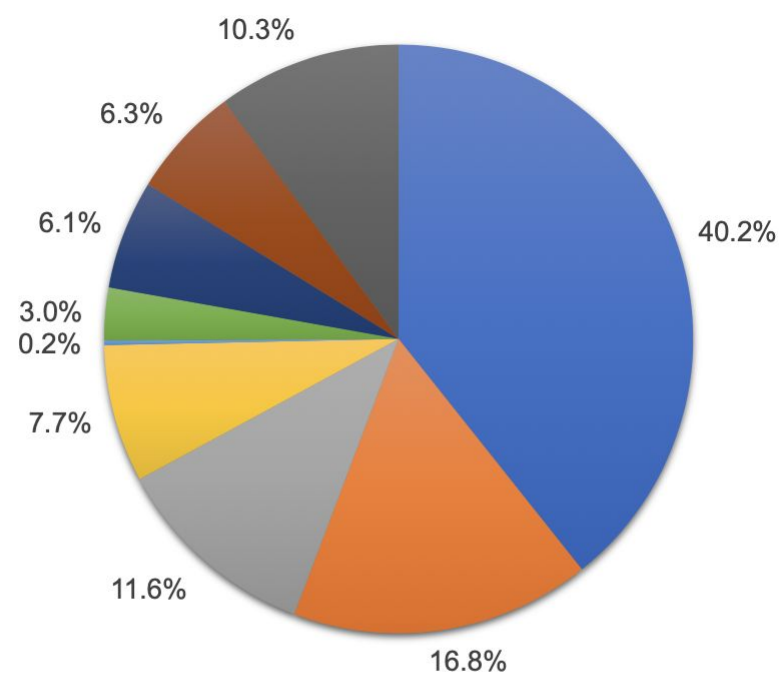
61yo AAF care partner to a 65yo AAM, FEV₁ 33%

"Right now, the little I do know about it, I think it's gonna look very bleak, very bleak. I don't like to say it or discuss death because it don't look good."

61yo AAF care partner to a 61yo AAM, FEV₁ 28%

Spending and Healthcare Utilization in Older Medicare Decedents with COPD at the End of Life

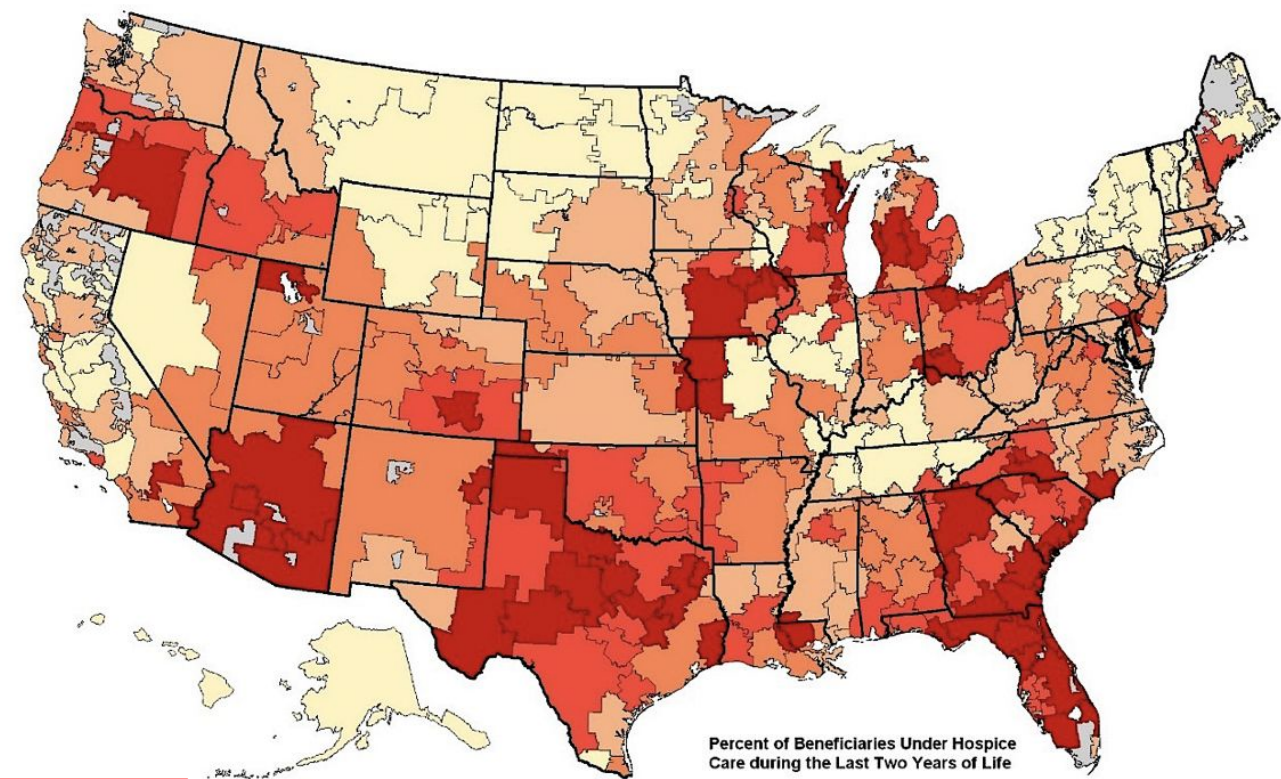
Spending Categories in Last 2 Years of Life



- Inpatient Reimbursement
- Skilled Nursing Facility
- Outpatient Physician
- Home Health Aide
- Hospice
- Part-B Total
- Outpatient Facility
- Medical Equipment
- Long Term Care

82% Hospitalized
55% ICU
38% SNF
12% LTAC










Hospice Use in Last 2 Years of Life



Average time in hospice: 40 days

II. Barriers to Early Palliative Care

Clinician Perspectives on Barriers to Early Palliative Care in COPD

BACKGROUND	METHODS	RESULTS	CONCLUSION
<ul style="list-style-type: none">• Palliative care (PC) is rarely integrated prior to development of end-stage COPD.• Researchers sought to explore both pulmonary & PC clinician views on the barriers & facilitators for early PC in COPD, & possible referral criteria for specialty PC. 	 <ul style="list-style-type: none">• Qualitative descriptive study performed via semi-structured interviews that were thematically analyzed.• 12 clinicians<ul style="list-style-type: none">◦ 6 pulmonary◦ 6 palliative care	 <ul style="list-style-type: none">• Perceived Barriers<ul style="list-style-type: none">◦ PC = end-of-life or hospice◦ COPD prognosis◦ Lack of referral consensus◦ Workforce shortage & strain• Facilitators<ul style="list-style-type: none">◦ Education on primary PC◦ Developing referral criteria◦ Novel delivery models• Priority Referral Criteria<ul style="list-style-type: none">◦ Frequent hospitalizations◦ Emotional symptoms  	 <ul style="list-style-type: none">• Both pulmonary & PC clinicians share the value of early PC in COPD.  <ul style="list-style-type: none">• Must resolve PC misconceptions.  <ul style="list-style-type: none">• Identify consensus referral criteria.  <ul style="list-style-type: none">• Implement novel early PC novels.

Clinician Perspectives on Barriers to Early Palliative Care in COPD

26

"I feel like there's still that negative connotation of what palliative care does. I think palliative care is still thought of as end of life. That's not what they do. They can exponentially improve quality of life. They may even improve quantity of life."

Pulmonary Clinician

"I think the tough thing with COPD is prognostication can sometimes be difficult. Some people say, 'Oh, they're on oxygen now, it's end stage COPD,' but that's not necessarily the case. They could live years in that state. I think the biggest question I usually get from patients is usually, 'Am I going to suffocate to death?'"

Palliative Care Clinician

"So many people, particularly critical care people, want to keep people alive no matter what. They feel like they're abandoning their patient if they don't keep them alive, even to the point of cruel and unusual punishment for the patient, and the family sees that. It's just awful for them. A lot of pulmonary physicians are not that good at palliative care. I mean, that's almost the opposite of what they've been trained to do - to snatch people from the jaws of death all the time."

Pulmonary Clinician

- **30%** had knowledge of palliative care.

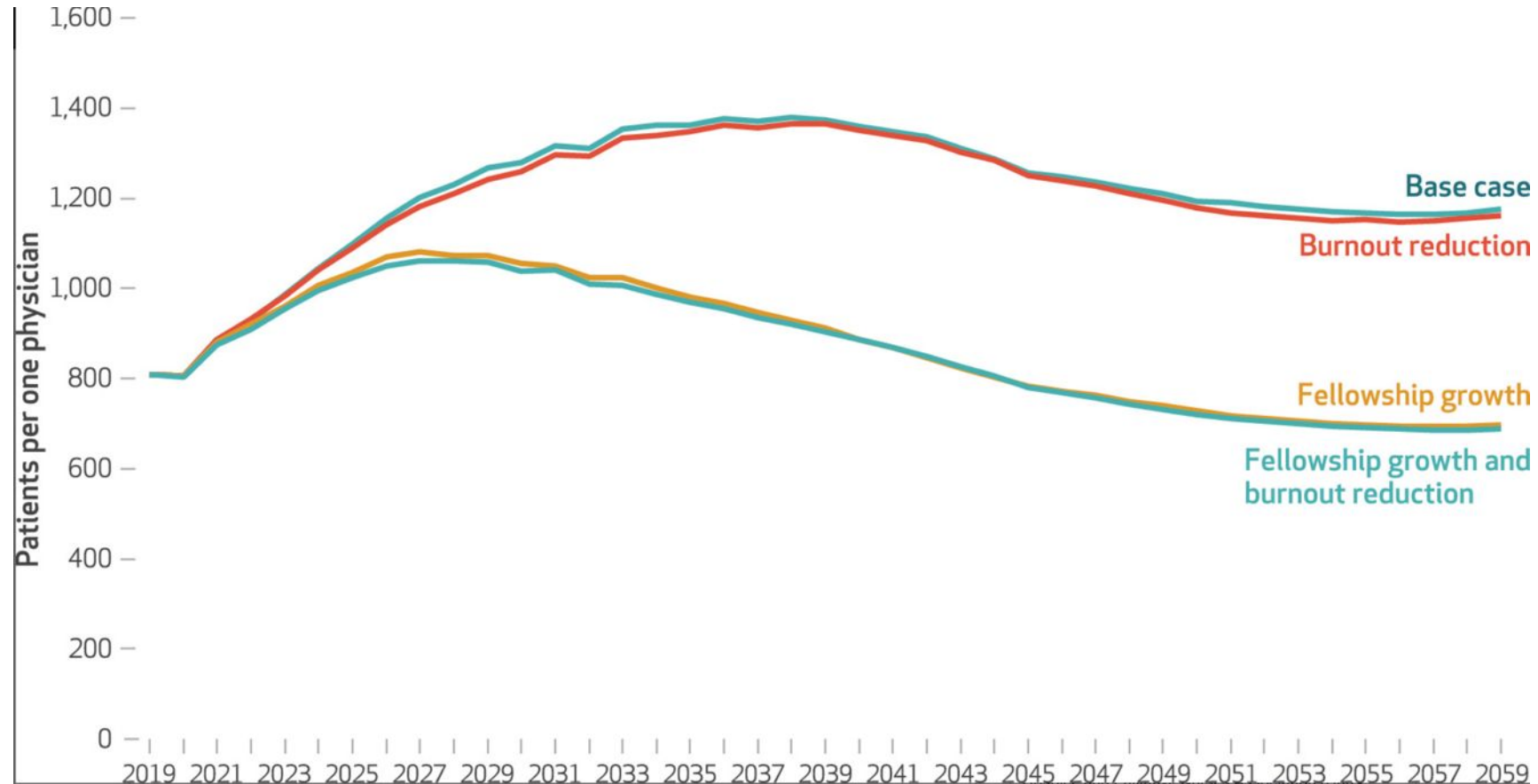
What does palliative care mean to you?	
Patients (n=10)	Care Partners (n=10)
<p><i>"To make the pain go away or somethin'."</i> (72yo WM, FEV₁ 26%)</p> <p><i>"That's care that you get in the last stages of your condition."</i> (71yo AAF, FEV₁ 71%)</p>	<p><i>"Just helping me get through to a normal, everyday living situation and maybe set goals."</i> (65yo WF)</p> <p><i>"Easing your way along, that end of life thing. I think of palliative care as comfort care, making you more comfortable along the way."</i> (62yo WF)</p> <p><i>"I think he is very scared of dying from not breathing. Palliative care is part of dying, I think. I may be wrong."</i> (60yo WF)</p> <p><i>"Making life easier. Not changing the outcome, but making life easier."</i> (73yo WF)</p>

COPD Patient and Care Partner Perspectives on Hospice

What does hospice mean to you?	
Patients (n=10)	Care Partners (n=10)
<p><i>“Hospice means a doctor has determined you only have a short time to live. During that time, the care you receive is palliative care. It's not so invasive.” (72yo WM, FEV₁ 26%)</i></p> <p><i>“Pretty much a person who is at the end of their life.” (49yo AAF, FEV₁ 70%)</i></p> <p><i>“Where they take care of people who can't take care of themselves. Basically give them the attention that they need, that they would normally have to go to an institution like a hospital or somethin'. They can receive it at home instead of being hospitalized. It's basically like a home hospitalization.” (65yo AAM, FEV₁ 33%)</i></p> <p><i>“Oh, that's like the end right there.” (57yo AAM, FEV₁ 50%)</i></p>	<p><i>“(Hospice is) for people who are terminal. It's your time. They're just gonna be there with you to support your family while you're dyin'.” (53yo WF)</i></p> <p><i>“Hospice takes over the drugs. Palliative care does not.” (73yo WF)</i></p> <p><i>“I think [hospice] is the last part of whatever the doctors can do, and they're just tryin' to make you comfortable while you're here.” (61yo AAF)</i></p> <p><i>“Hospice to a lot of people means terminal. It's your time. They're just gonna be there with you to support your family while you're dyin'.” (53yo WF)</i></p>

Deficit of Specialist Palliative Care Clinicians

29



IV. Improving the Integration of Palliative Care and its Principles into Practice

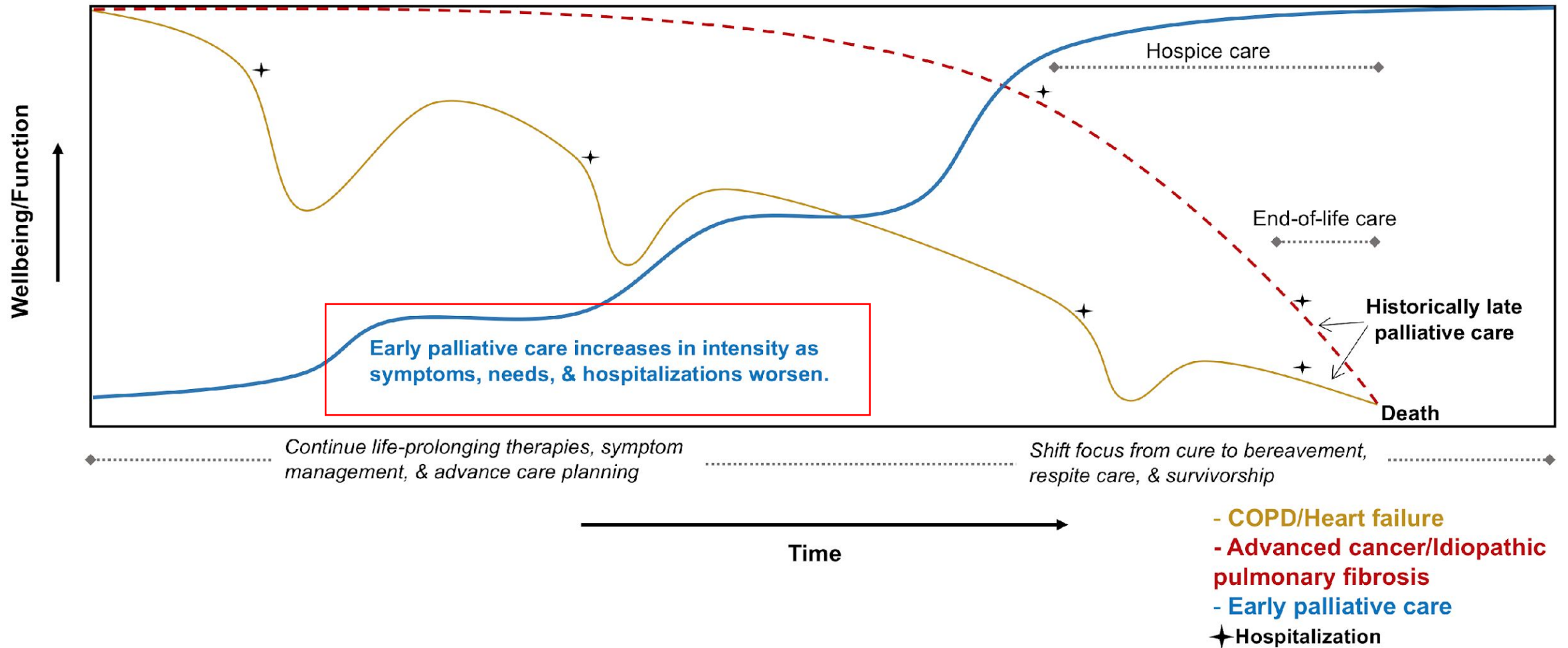
Improving Palliative Care Integration

31

- Early palliative care
- Triggers for palliative care integration and referral
- Primary palliative care, i.e. “PalliPulm”
- Frameworks
- Innovative delivery models

Trajectories of Decline in Serious Illness

32



COPD Patients and Care Partners Support Early Palliative Care

When presented with a standardized definition of early palliative care, all participants found early palliative care valuable and would accept it as early as **moderate COPD (GOLD II)**.

"If I had heard about something like that, I probably would not have went through all the suffering that I did in the first place with trying to breathe and having to go to the emergency room and everything. I would have appreciated it earlier before it got to where it was."

Patient (65yo AAM, FEV₁ 33%)

"I would take it as a positive step to try and see what I can do to make it easier for him. Basically, it's all about him because I don't have that breathing problem. So, I wouldn't know what that's like, but I am eager to find out what is it and I don't want to be going through it myself in order to find out."

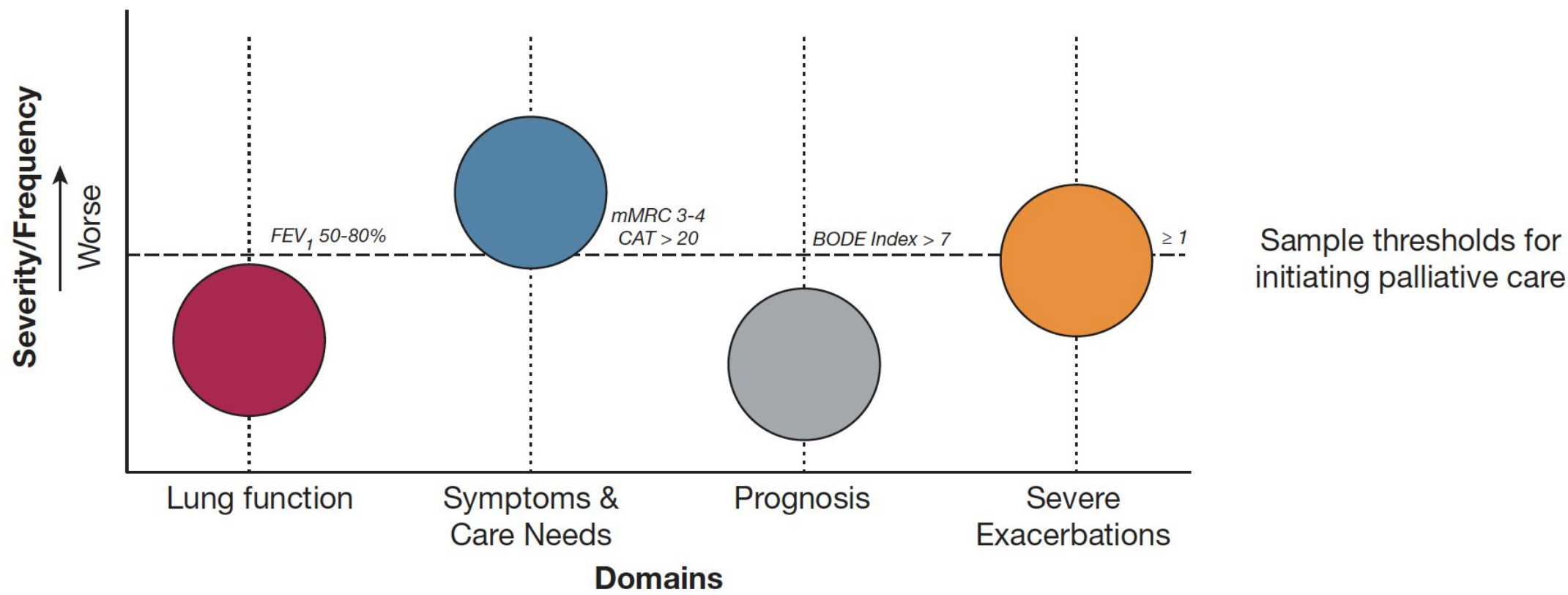
Care Partner (61yo WF, to PT002, FEV₁ 33%)

"I mean, at least for the sake of family and your caregivers, you know, that is something that I feel like immediately needs to be learned to not only prepare the person, but to prepare their families."

Patient (49yo AAF, FEV₁ 70%)

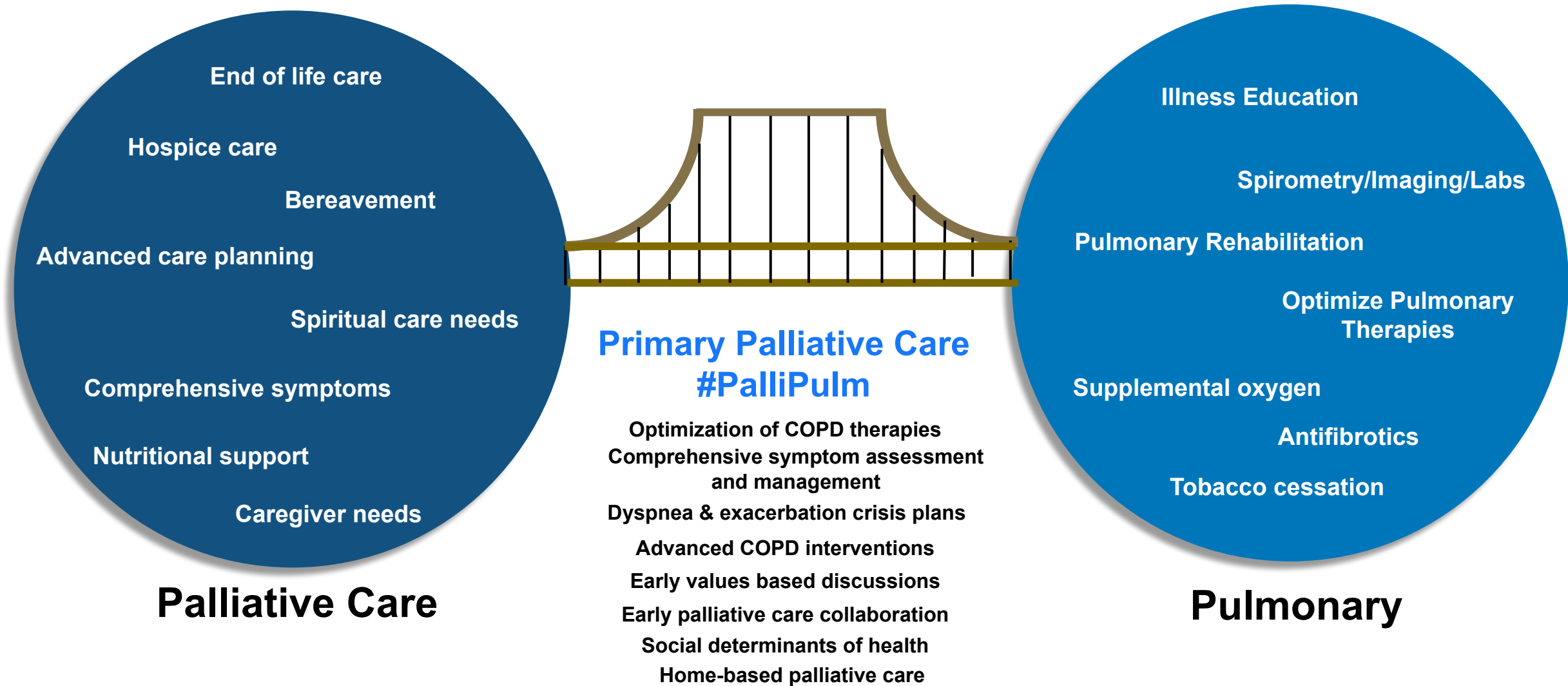
Triggers for Early Palliative Care – Adjusting the Levers

The Levers Model for Early Palliative Care



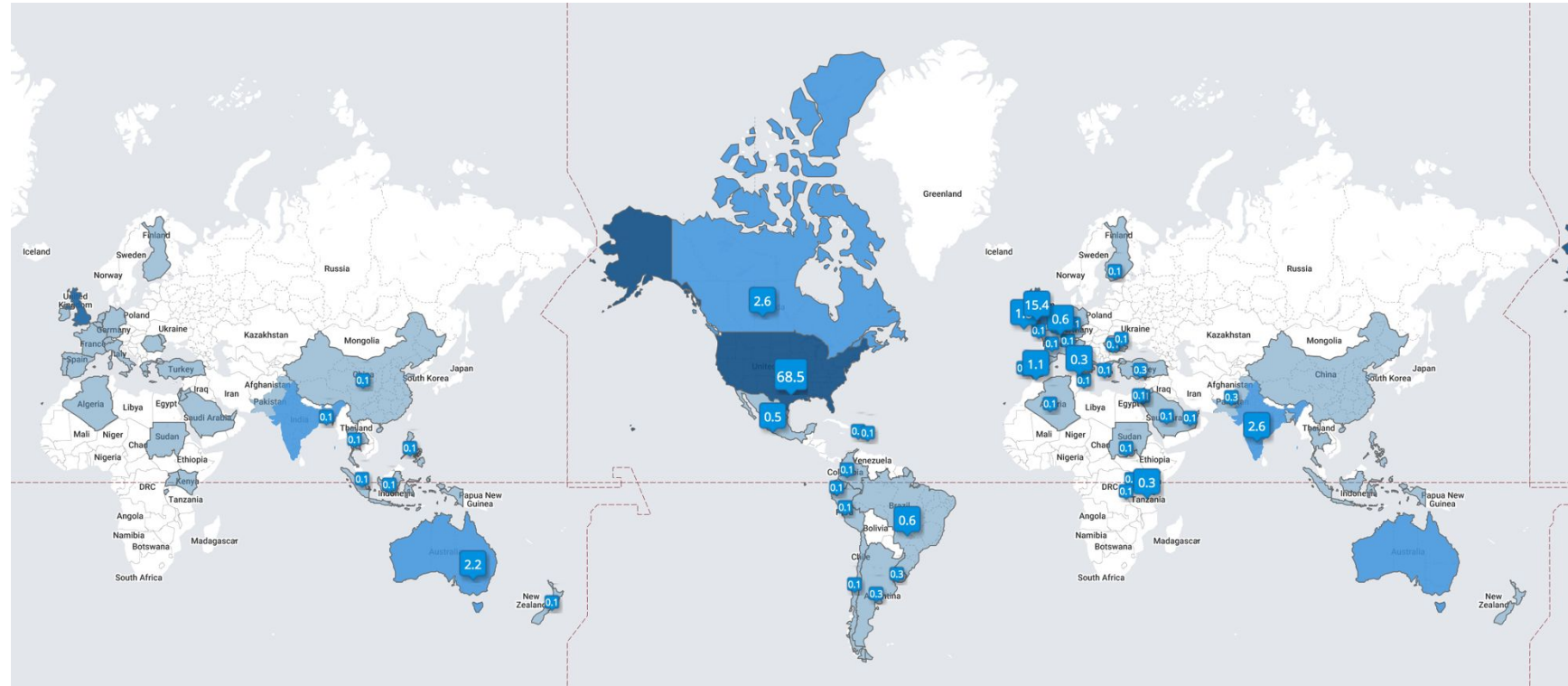
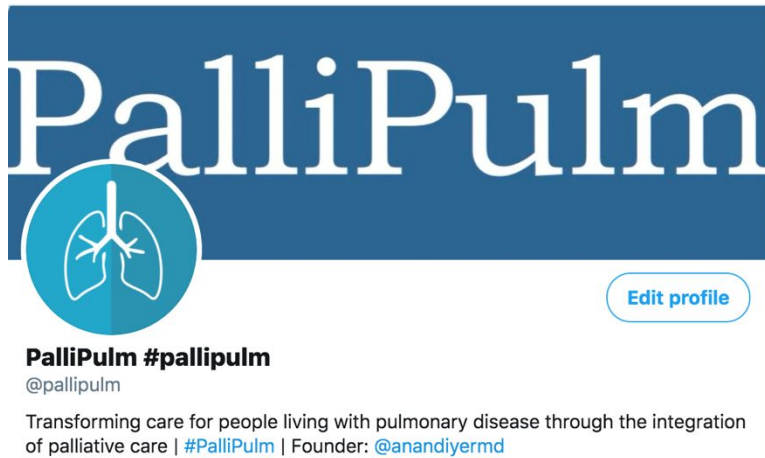
Bridging Palliative Care and Pulmonary through “PalliPulm”

35



Advocacy - @pallipulm #pallipulm

36



PalliPulm in Serious Respiratory Illness – What Does it Look Like?

37

[COPD CHEST Review]



The Role of Palliative Care in COPD

Anand S. Iyer, MD, MSPH; Donald R. Sullivan, MD, MCR; Kathleen O. Lindell, PhD, RN; and Lynn F. Reinke, PhD, ARNP

COPD is the fourth leading cause of death in the United States and is a serious respiratory illness characterized by years of progressively debilitating breathlessness, high prevalence of associated depression and anxiety, frequent hospitalizations, and diminished well-being. Despite the potential to confer significant quality-of-life benefits for patients and their care partners and to improve end-of-life (EOL) care, specialist palliative care is rarely implemented in COPD, and when initiated, it often occurs only at the very EOL. Primary palliative care delivered by frontline clinicians is a feasible model, but is not integrated routinely in COPD. In this review, we discuss the following: (1) the role of specialist and primary palliative care for patients with COPD and the case for earlier integration into routine practice; (2) the domains of the National Consensus Project Guidelines for Quality Palliative Care applied to people living with COPD and their care partners; and (3) triggers for initiating palliative care and practical ways to implement palliative care using case-based examples. This review solidifies that palliative care is much more than hospice and EOL care and demonstrates that early palliative care is appropriate at any point during the COPD trajectory. We emphasize that palliative care should be integrated long before the EOL to provide comprehensive support for patients and their care partners and to prepare them better for the EOL.

CHEST 2022; ■(■):■-■

KEY WORDS: COPD; end-of-life care; hospice care; palliative care

Iyer, Sullivan, Lindell, and Reinke. Chest. 2022

VIEWPOINT

Proactive Integration of Geriatrics and Palliative Care Principles Into Practice for Chronic Obstructive Pulmonary Disease

Half of adults with chronic obstructive pulmonary disease (COPD) in the US will be 75 years or older by 2030.¹ Patients with COPD often have years of debilitating symptoms that accelerate their loss of independence and well-being. COPD is progressive and incurable; many patients are frail and socially isolated and struggle with long lists of medications. Their care is often chaotic and fragmented, with frequent emergency department visits and hospitalizations.² Given the limited numbers of geriatricians and palliative care specialists, clinicians who routinely care for patients with COPD should proactively integrate geriatrics and palliative care principles into their daily practice.

Iyer, Curtis, and Meier. JAMA IM 2020

Primary Palliative Care Training

38

- Fellowship training
- Practicing clinicians
- Organizations:
Ascension, ATS, Chest
- Feasible and
evidence-based
PalliPulm training?

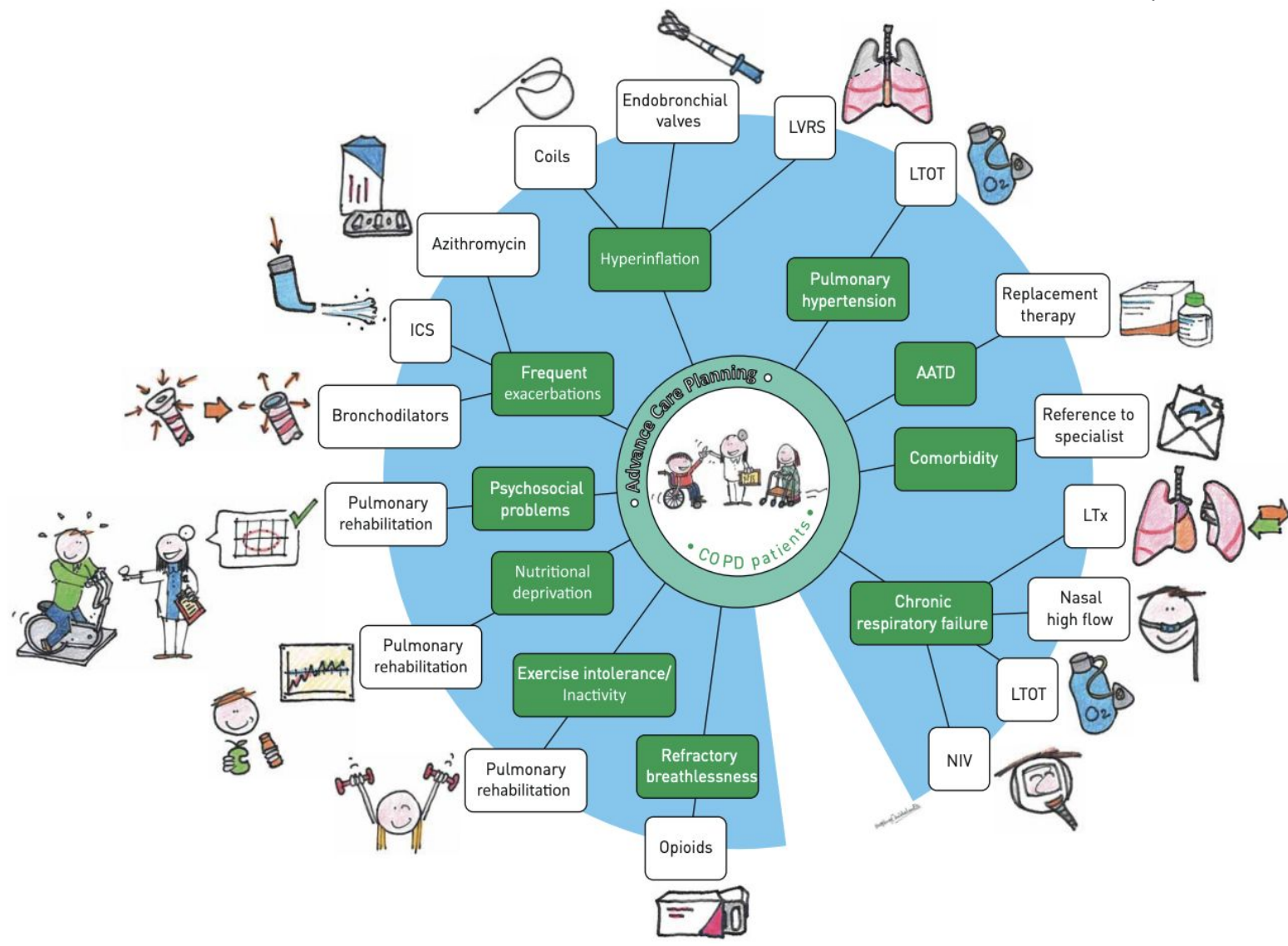
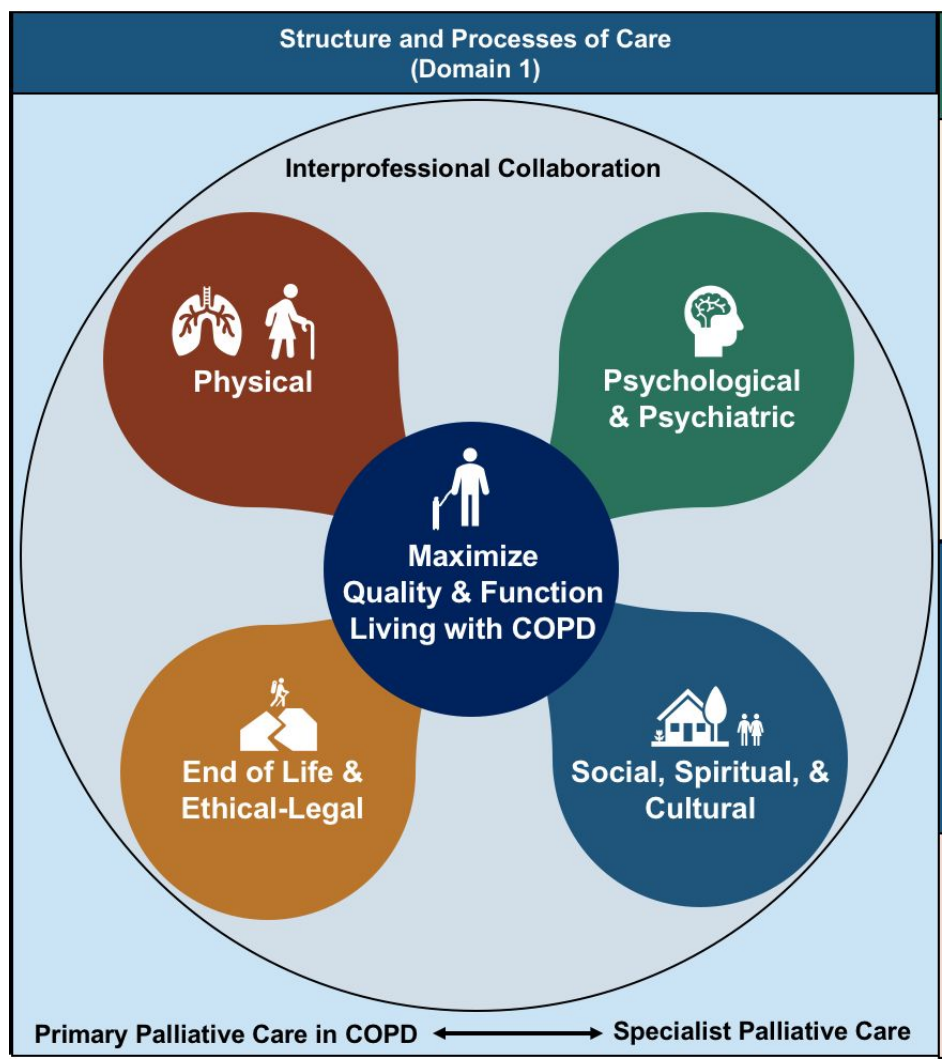
TABLE 1] Primary Palliative Care Training Programs

Program Name (Location)	Brief Description
University of Washington Graduate Certificate in Palliative Care (Seattle, WA)	Interprofessional curriculum designed for practicing clinicians from nursing, medicine, social work, spiritual care, and other disciplines seeking training in palliative care. The program focuses on skills for delivering integrated, person-centered palliative care using a team-based approach, emphasizing individual and team communication skills.
University of Pennsylvania Mid-Career Fellowship (Philadelphia, PA)	ACGME-certified pilot midcareer fellowship program allowing practicing University of Pennsylvania physicians to complete an accredited palliative care fellowship in a flexible format. The program is designed individually to build on each fellow's existing skills and structured in conjunction with the clinical responsibilities.
University of Colorado Interprofessional Palliative Care Graduate Certificate and Master of Science in Palliative Care (Denver, CO)	Program designed to prepare clinicians as palliative care community specialists using a hybrid online and live learning environment.
University of Maryland Master of Science and Graduate Certificate in Palliative Care (Baltimore, MD)	Interprofessional masters for practicing clinicians who want further training in palliative care. The graduate certificate can be tailored to five different domains of palliative care.
Medical University of South Carolina Palliative Care Doctorate in Nursing Practice (Charleston, SC)	Program follows a master of science in nursing and provides a plan of study for nurses to gain advanced training in palliative care principles and clinical experiences.
Harvard Medical School Center for Palliative Care Courses (Boston, MA)	Short courses in "Palliative Care Education and Practice," "Practical Aspects of Palliative Care," "Palliative Care for Hospitalists and Intensivists," and "Art & Science of Palliative Nursing."

ACGME = Accreditation Council for Graduate Medical Education.

Frameworks for Primary Palliative Care

National Consensus Project



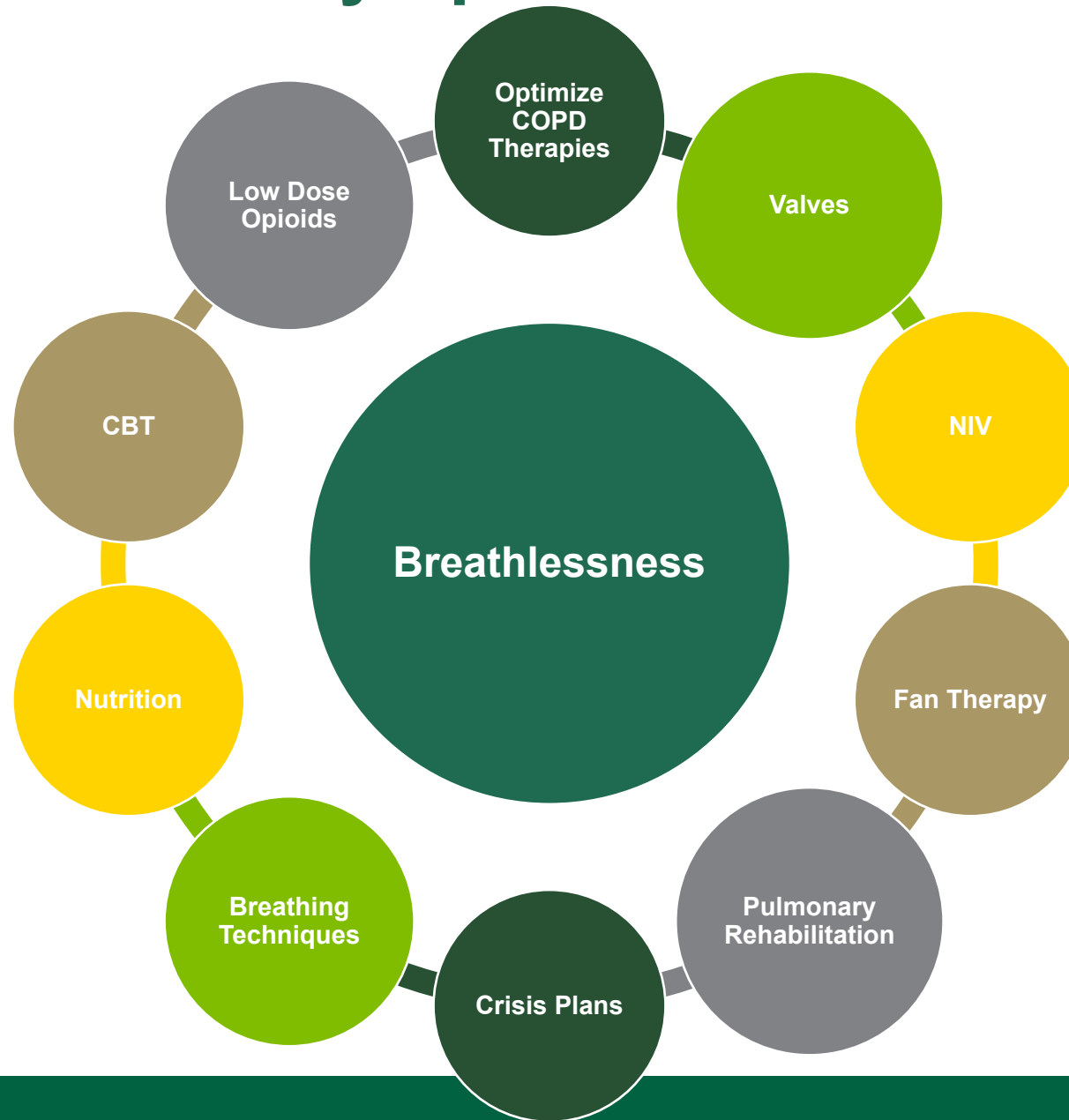
Comprehensive Assessments for Patients and Care Partners - Assess and Reassess

40

- Symptom burden
 - Respiratory: Breathlessness, cough
 - Emotional: Anxiety, depression
 - Pain, fatigue
 - Quality of life
- Socioeconomic needs
- Social isolation
- Nutrition (unintentional weight loss)
- Care partner needs
- Geriatrics care needs: Mobility, Cognitive impairment
- Values, advance care plan

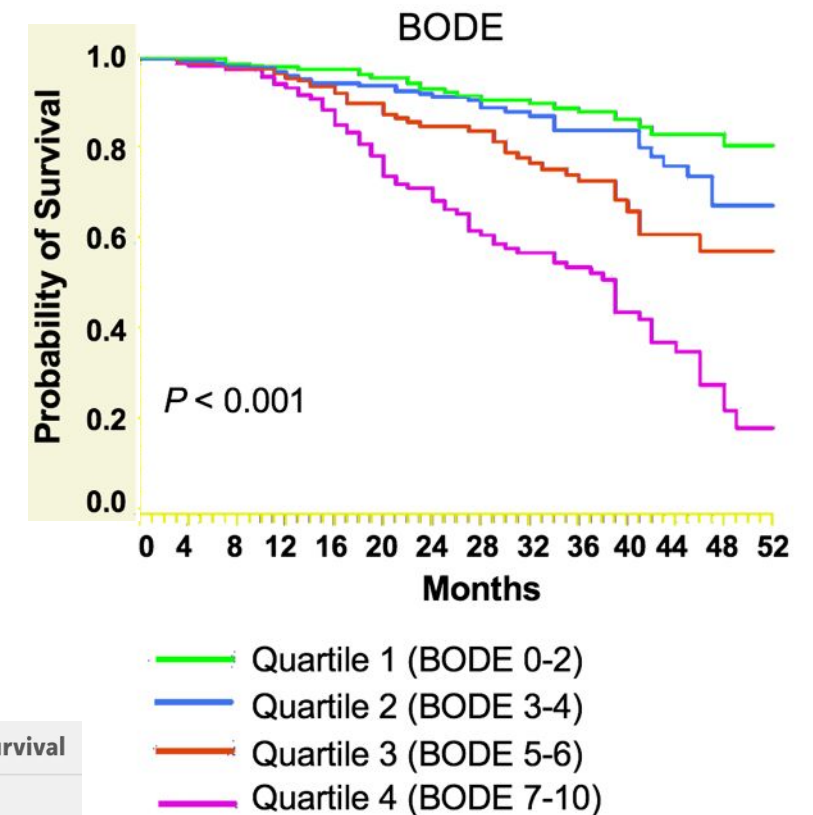
Management of Severe Symptoms- Think Interprofessional

41



Improve Prognostication: BODE

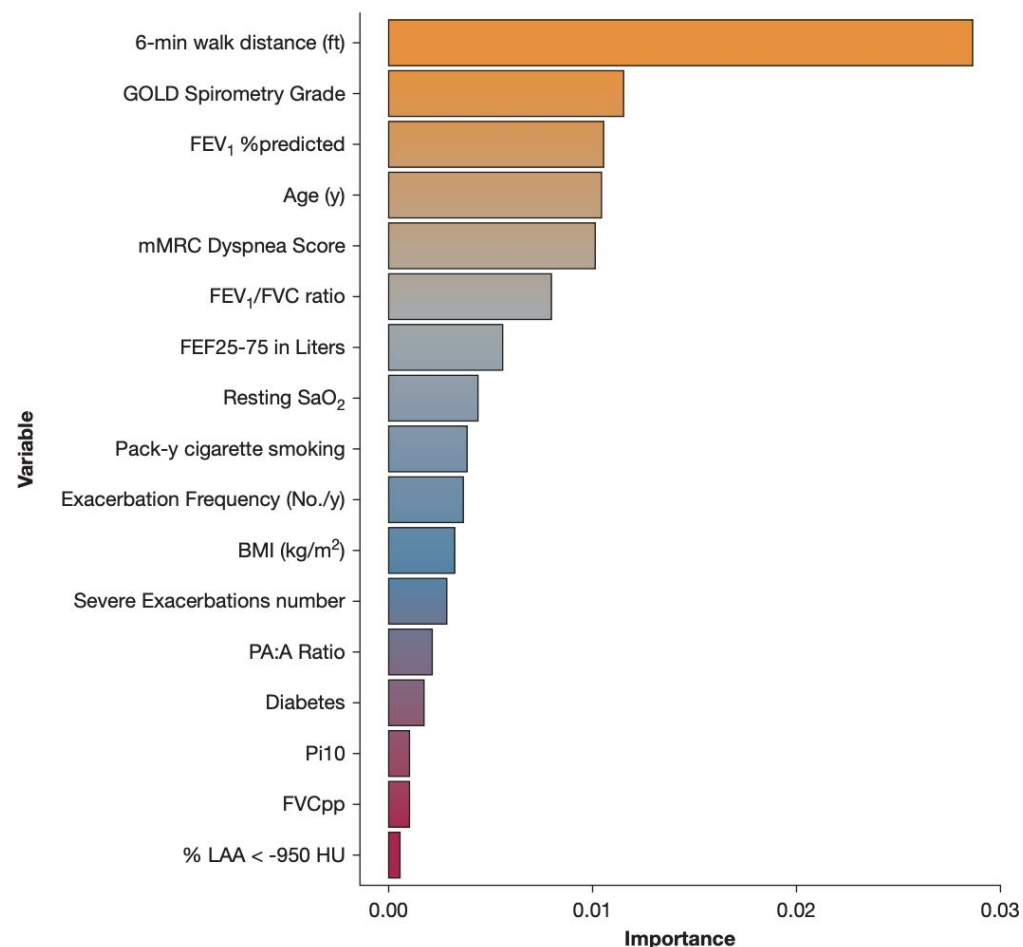
- Higher **BODE score** □ Higher risk of mortality
 - Low **B**MI
 - More severe airflow **O**bstruction (Decreased FEV₁)
 - More severe **D**yspnea (mMRC dyspnea scale)
 - Impaired **E**xercise tolerance (reduced walk distance)



	0 points	1 point	2 points	3 points
FEV ₁ (% of predicted)	≥65	50–64	36–49	≤35
6 Minute Walk Distance (m)	≥350	250–349	150–249	≤149
mMRC Dyspnea Scale	0–1	2	3	4
BMI	>21	≤21	--	--

BODE Index	4-year survival
0–2	80%
3–4	67%
5–6	57%
7–10	18%

Improving Prognostication: Machine Learning Mortality Prediction (MLMP) in COPD



COPDGene Mortality Risk Calculator

Reference: Moll et al., Chest, 2020.

This calculator is designed to help you explore how different clinical, spirometric, and imaging variables affect survival. Below, you can put in your own inputs for a hypothetical patient, and the survival function will be plotted. If you have quantitative imaging variables, you can select to add these variables into the model at the bottom of the page. Finally, you can download the plot of the survival function and the inputs you used.

Enter your hypothetical patient's values in the left panel (change the defaults)

Six-minute walk distance (ft):

1200

FEV1 percent predicted:

50

Age (years):

63

FEV1/FVC (%):

50

FEF25-75 (L):

0.5

MMRC Dyspnea Score:

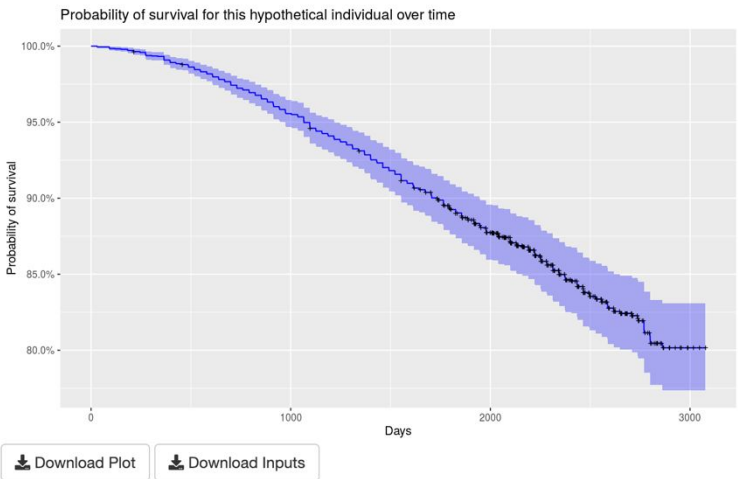
01234

BMI:

27

Based on these variables, the probability of survival at 8 years is:

80.2%



<https://cdnm.shinyapps.io/cgmortalityapp/>

Improve Serious Illness Communication

- Advance care planning is challenging
 - Start early, reassess, adapt and evolve
 - Document
- Use serious illness conversation guides/training tools
 - Serious Illness Conversation Guide – Ariadne Labs
 - VitalTalk (<https://www.vitaltalk.org/topics/reset-goals-of-care/>)

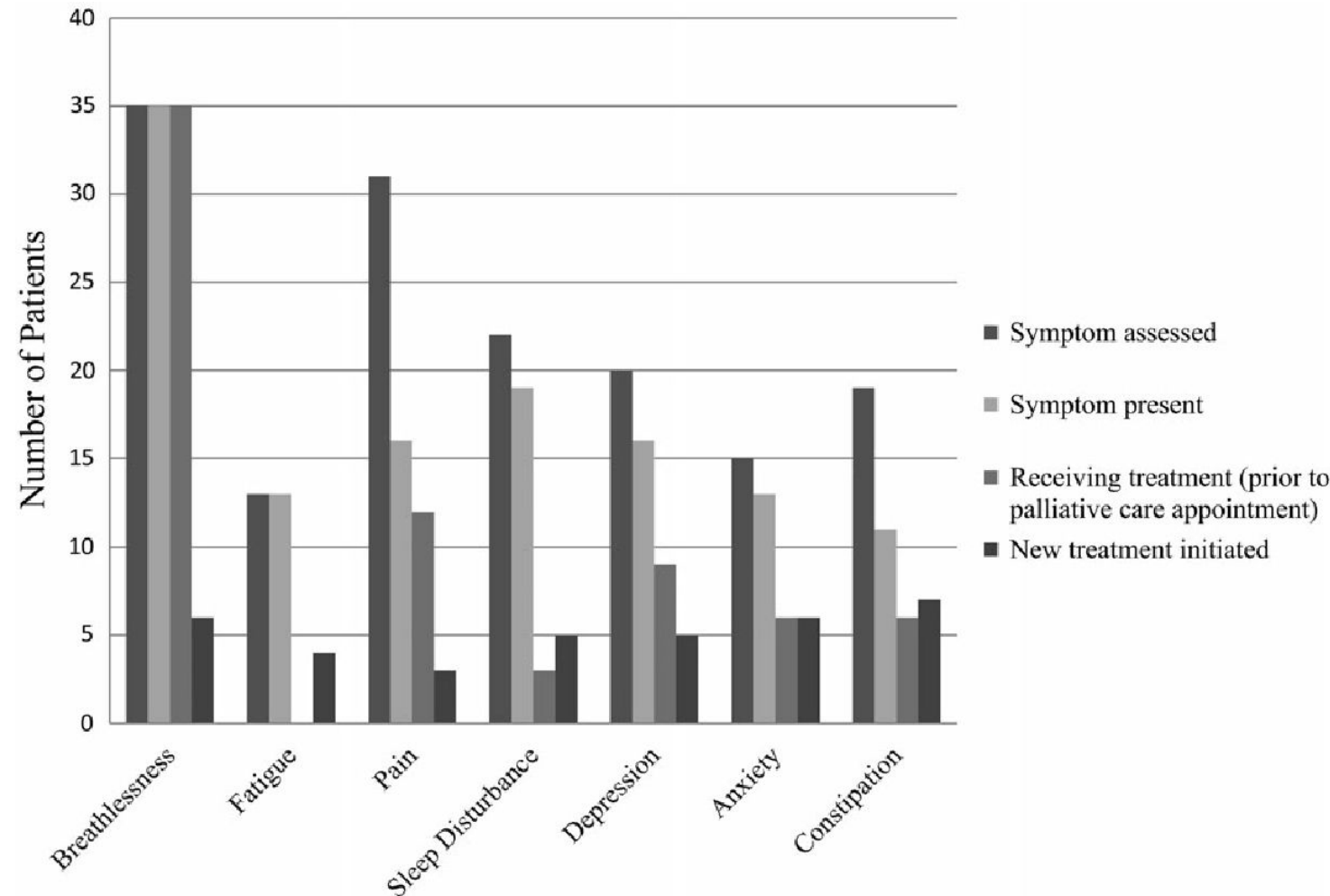
A PalliPulm Clinic Model and COPD Care Needs

45

- Retrospective case series (n=36) in the Northwestern University Palliative-Pulmonary Clinic
- Referral criteria: BODE=7, refractory breathlessness

Topics of Clinic Visits

Symptoms	36 (100%)
Psychological issues	28 (78%)
Social issues	34 (94%)
Spirituality	9 (25%)
Advanced care planning	27 (75%)
Care Coordination	12 (33%)
Consults/Referrals	3 (8%)



Invest in Novel Palliative Care Delivery Models

46

Palliative Care in the Hospital

3 Wishes Program
A2F Bundle in the ICU
Early integration of secondary palliative care for exacerbations
Daily integration of palliative care principles into daily rounds
Patient- and Care Partner-Reported Outcomes

Ambulatory Palliative Care

SUPPORT (IPF)
Project EPIC/ENABLE-COPD (COPD)
Living Well with COPD
Interprofessional pallipulm clinic
Telehealth palliative care
Home- and community-based palliative care
Patient- and Care Partner-Reported Outcomes

Post-Acute Care Palliative Care

INSPIRED COPD
UK Breathlessness Services
CMS Bundled Payments - Transitional care palliative care integration
Palliative care-pulmonary rehabilitation post-discharge
Lay navigation
Post-ICU clinic with palliative care integration
Patient- and Care Partner-Reported Outcomes

Ms. M – Concurrent Palliative Care AND Advanced COPD Therapies

Case Ms. M

48

- 65yo White female with COPD and progressively worsening dyspnea
- 35 PY smoking; Quit smoking 1 year prior
- Exacerbations: x1 severe in 2 years (ICU)
- mMRC 3-4, CAT 24
- History of pulmonary hypertension, sleep apnea on Trilogy
- Inhalers: SABA (MDI, neb), ICS/LABA (Breo), LAMA (Spiriva)
- Six-minute walk distance: 550ft (2L oxygen)



Spirometry

		Ref	Pre Meas	Pre % Ref
FVC	Liters	3.05	1.21	40
FEV1	Liters	2.33	0.36	16
FEV1/FVC	%	77	30	
FEF25-75%	L/sec	2.05	0.15	7
FEF50%	L/sec	3.45	0.15	4
PEF	L/sec	5.84	1.10	19
FET100%	Sec		8.82	
MVV	L/min	55		



Lung Volumes

TLC	Liters	4.84	3.93	81
RV	Liters	1.97	2.72	138
RV/TLC	%	41	69	
FRC N2	Liters	2.68	3.11	116
VC	Liters	2.51	1.21	48
ERV	Liters	0.95	0.37	38
IC	Liters	1.91	0.82	43
Vtg	Liters	3.15		
LCI		7.00	10.98	157
Wash Time	Min		7.0	



Diffusion

DLCO	mL/mmHg/min	20.7	3.1	15
DL Adj	mL/mmHg/min	20.7	3.1	15
DLCO/VA	mL/mHg/min/L	4.45	1.40	31
DL/VA Adj	mL/mHg/min/L	4.45	1.40	31
VA	Liters	4.84	2.21	46

Ms. M: Concurrent Palliative Care and Lung Transplant Evaluation

Pulmonary

- Optimized COPD & PH therapies
 - Pulmonary rehabilitation
- Referral for endobronchial valves
 - Lung transplant referral

Advance Care Planning

- Focus on maintaining hope and planning for the future
- Education on illness trajectory, exacerbations, variability, limitations
- Education on role of concurrent palliative care alongside COPD treatments
- Secondary palliative care
 - primary focus on optimizing quality of life, advocating for her within her care teams, maintaining dignity, honoring her wishes

Emotional

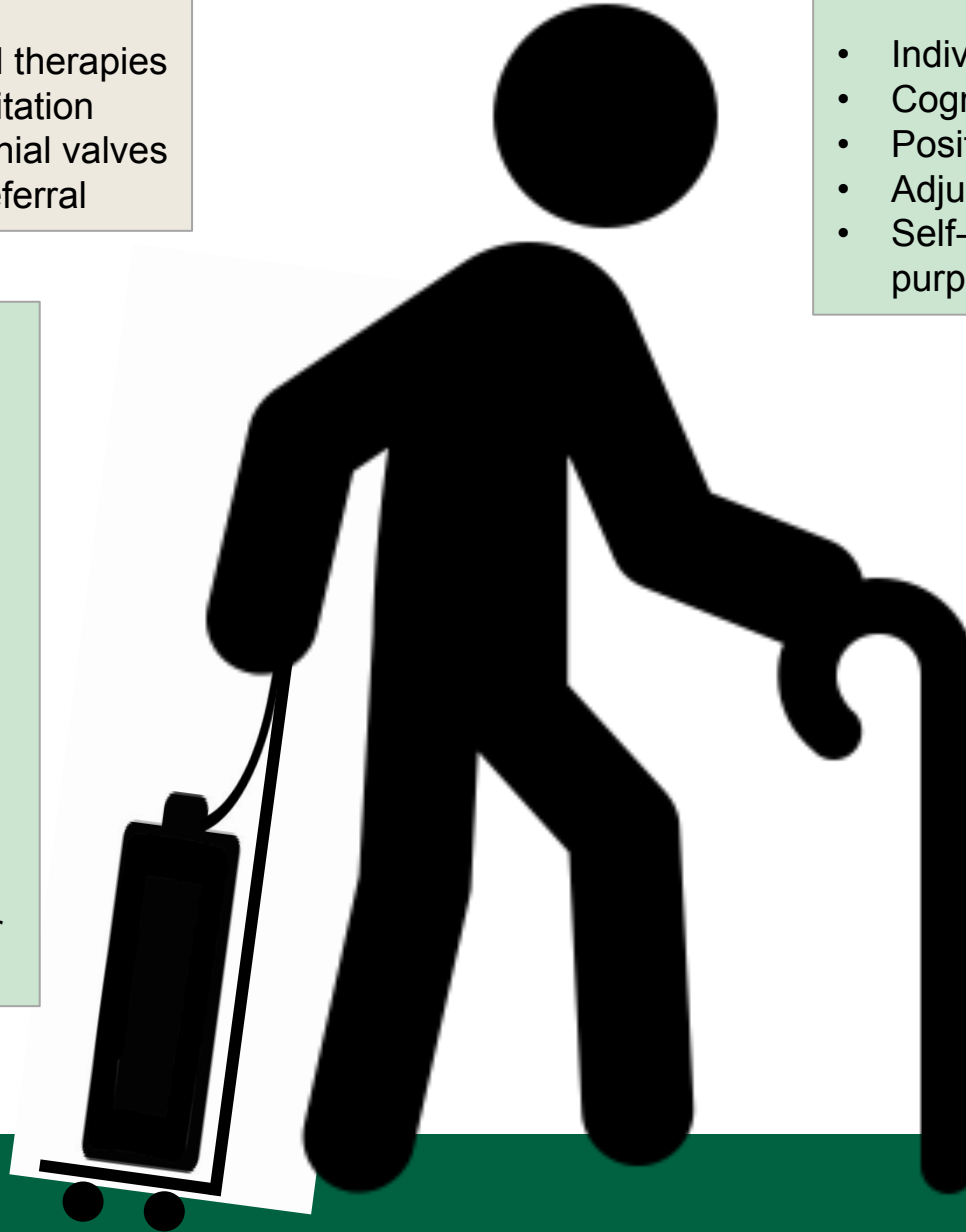
- Individualized therapeutic counseling sessions
- Cognitive reframing
- Positive coping tips, reflection
- Adjunctive pharmacotherapy – Mirtazapine nightly
- Self-care, building emotional support with family, purpose rediscovery, re-establish identity

Unintentional Weight Loss

- Interprofessional team includes nutritionist collaboration
- Goals for weight gain, building lean muscle mass, energy balance, reducing infection risk, dietary adaptations --> optimize for lung transplantation

Fatigue

- Lifestyle modifications
- Mirtazapine
- Physical activity, pulmonary rehabilitation



Conclusions

- Significant early palliative care needs exist in serious respiratory illness for patients and their families that warrant assessment and management.
- A “Levers Model” could identify potential triggers for palliative care integration and referral, including lung function, symptoms/care needs, prognosis, and exacerbations.
- “PalliPulm” or primary palliative care in pulmonary-critical care can bridge the fields and provide comprehensive care to patients with serious respiratory illnesses and their care partners.

Looking to the Future – Stay Tuned!

- “Palliative Care Early in the Care Continuum among Patients with Serious Respiratory Illness”
- A multi-society policy statement:
 - American Thoracic Society
 - American Academy of Hospice and Palliative Medicine
 - Hospice and Palliative Nurses Association
 - Social Work Hospice and Palliative Care Network



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