PALLIATIVE CARE AND HEART FAILURE

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WRHA

Faculty/Presenter Disclosure

Faculty: Tim Hiebert

Relationships with commercial interests:

- Grants/Research Support: none currently
- Speakers Bureau/Honoraria: none
- Consulting Fees: none
- Other: WRHA Employee

Mitigating Potential Bias

- Not Applicable

Disclosures

- I am not a cardiologist
- Speaking from my perspective as general internist providing acute inpatient care and as a palliative care specialist
- Opinions are my own. I do not represent any larger body or organization

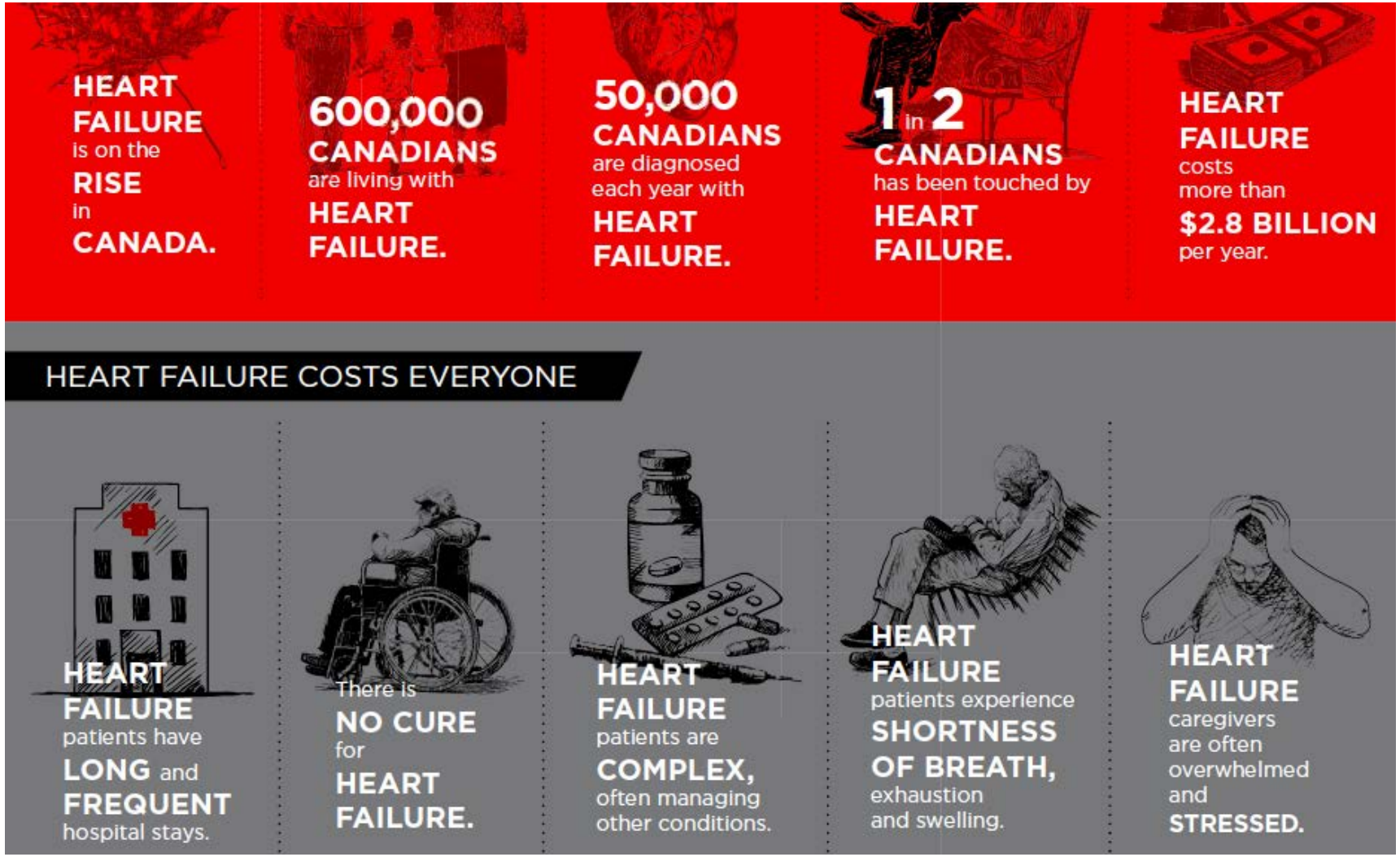
Vested interest

Learning Agenda

- Burden of Heart Disease in Canada
- Prognostication in Heart Failure (HF)
- The Palliative Care Paradigm
- Integrating Palliative care with Medical management
- Symptom Management


THE
BURDEN
OF
HEART
FAILURE

Impacts of Heart Failure



Some More Statistics

- Heart diseases represent 20% of all cause mortality in Canada
- Heart failure (HF) has 23% 1-year mortality at diagnosis
- HF causes more deaths than Ca of colon, breast, prostate combined
- HF deaths are increasing in North America

Statistics Canada, CANSIM table 102-0561.Last modified: 2018-02-23.
Slawnych, Can J Cardiol 34 (2018) 914e924.

HF patients..

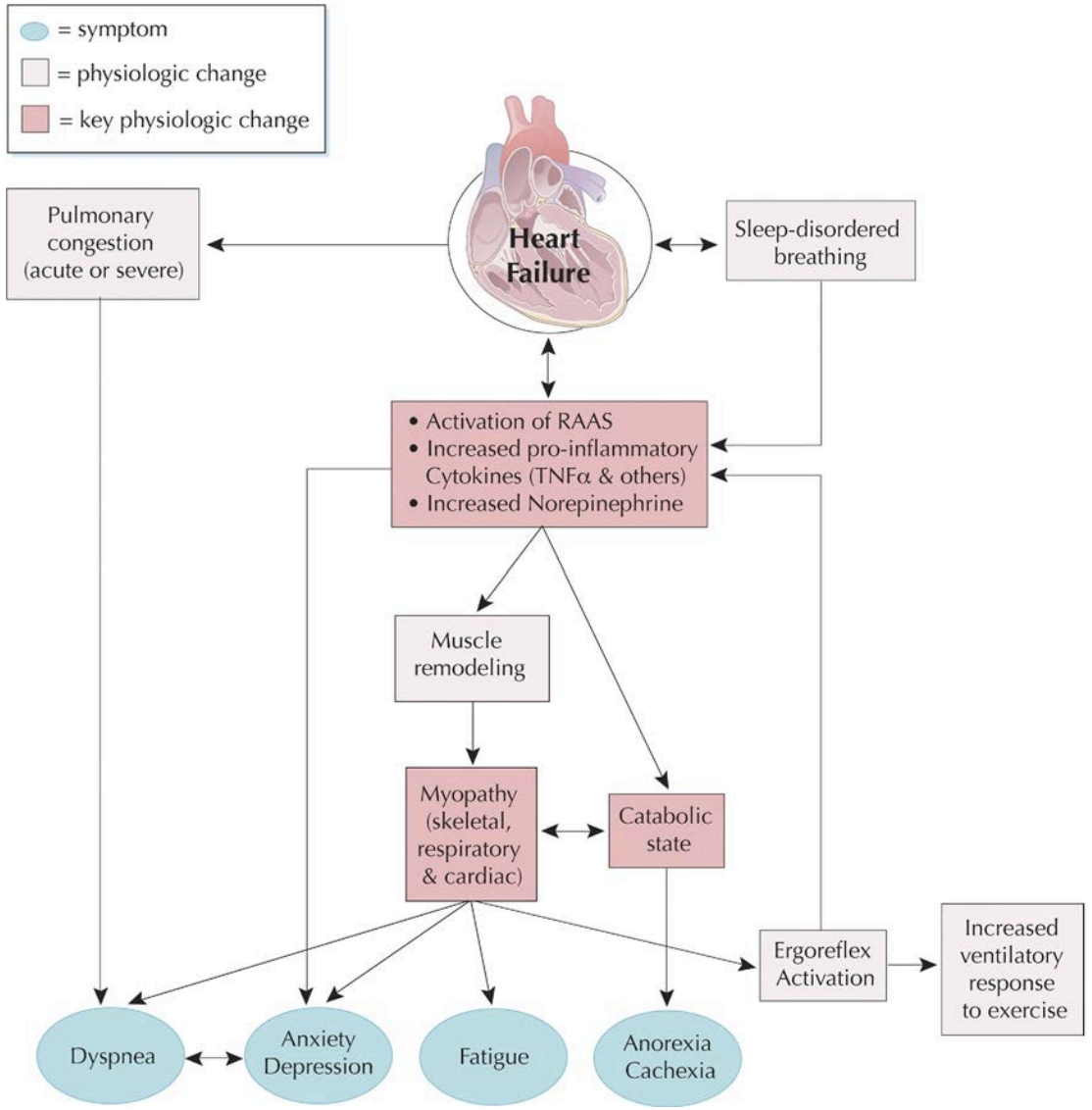
- Often not aware of terminal nature
- Overestimate benefits of therapies/interventions
- Frequent hospitalizations in final 6 months
- more likely to die in hospital
- Often receive aggressive care near the end of life
- Much less likely to receive palliative care services

Slawnych, Can J Cardiol 34 (2018) 914e924.

Symptoms of Heart Failure

- Dyspnea
- Fatigue
- Anxiety
- Depression
- Anorexia/Cachexia
- Sleep disturbance
- Edema
- Cough
- Pain
- Dry mouth
- Sleep disturbance
- Constipation
- Sexual dysfunction
- Memory loss
- Delirium
- Isolation

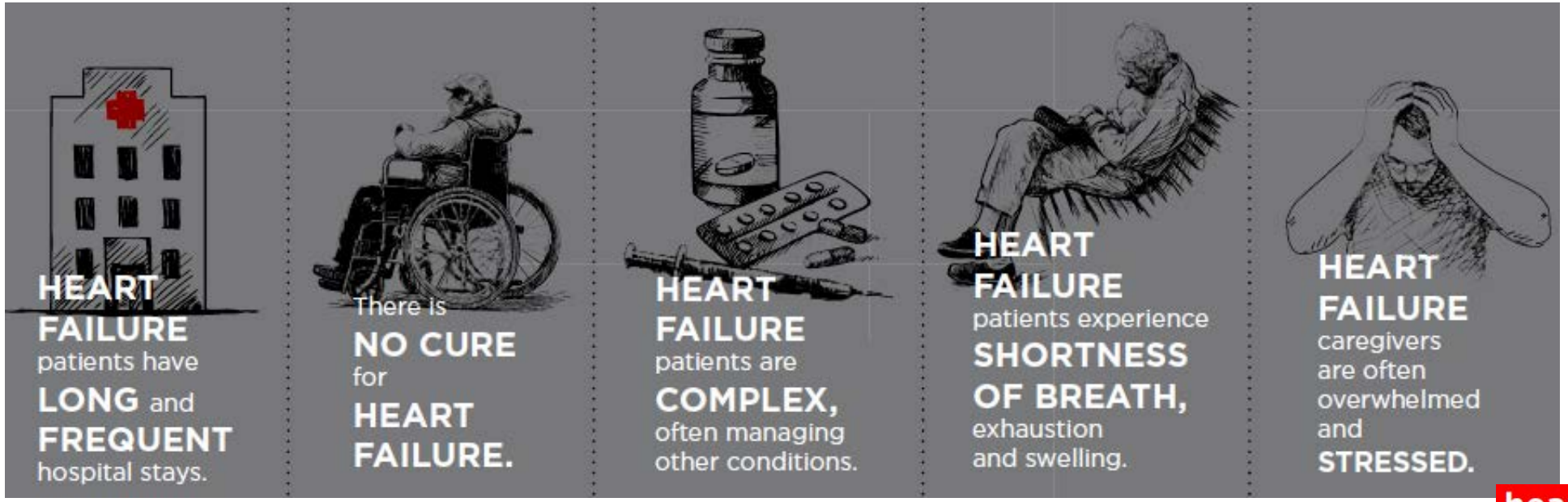
Physiology of symptoms



JACC Vol. 54, No. 5, 2009:386–96

So…

Patients with advanced heart failure need much more than pure medical management



Prognostication in HF

- Accuracy is elusive
- Individual outcomes widely variable
- Most tools can not predict 6 month survival
- ESCAPE score will offer 6 month survival estimate

J Am Coll Cardiol. 2010;55:872-878.

ESCAPE Risk Score

Calculation of Risk Score

Parameter	*points*
Patient Age (> 70 years)	1
Na+ (S) < 130 mEq/L	1
BUN (B) ≥ 40 - ≤ 90 mg/dL	1
> 90 mg/dL	2
BNP (S) ≥ 500 - ≤ 1300 pg/mL	1
> 1300 pg/mL	4
6 Minute Walk Distance < 100 yd	1
No B-Blocker Therapy on Discharge	1
CPR/mech vent	2
Diuretic dose >240mg at discharge	1
Total Points (0 - 13)	

Score (points)	*6th Month Mortality, %*
0 - 1	7.7%
1 - 2	10.4 - 16.7%
3 - 4	26.4 - 44.8%
> 4	75 - 100%

Medicalc website
http://www.scymed.com/en/smnxph/phqlb733.htm

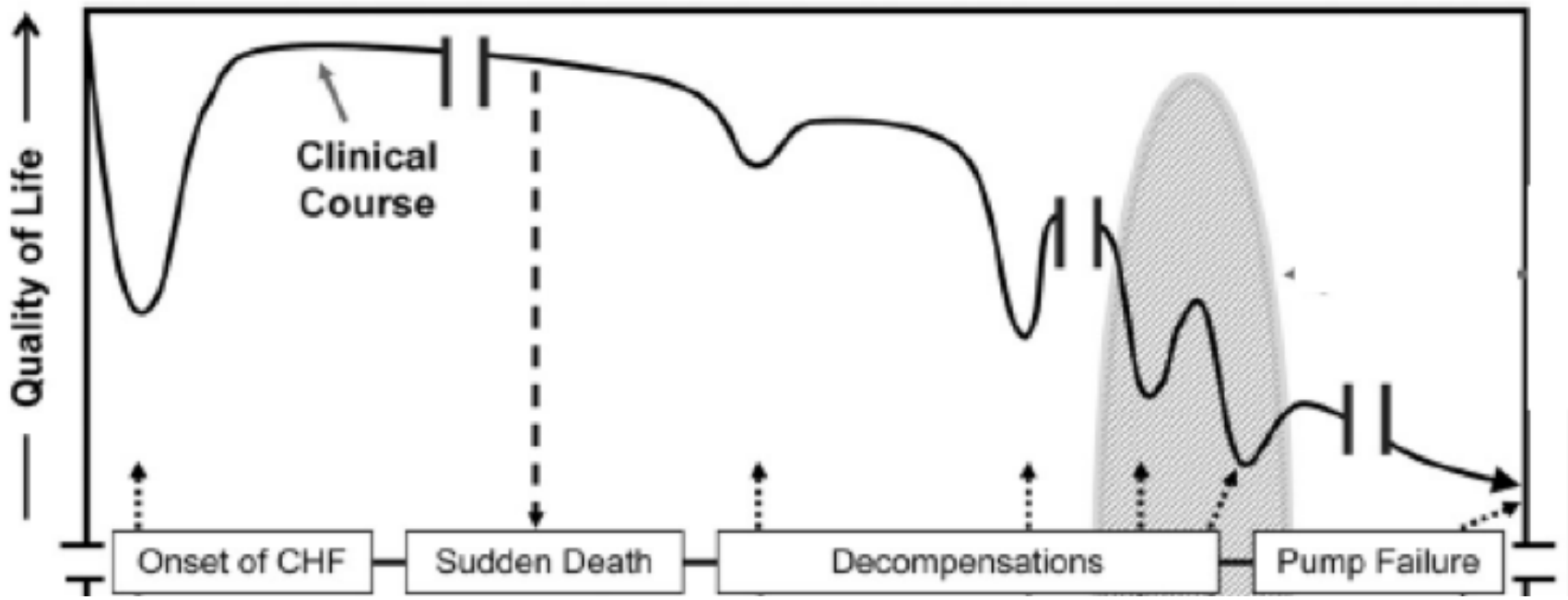
J Am Coll Cardiol.
2010;55:872-878.

PPS Predicts final days and weeks

Variables	Survival Times (in Days)	
	Mean (95% CI)	Median (95% CI)
Initial PPS		
PPS 10%	3 (1, 5)	1 (1, 1)
PPS 20%	7 (4, 11)	2 (2, 2)
PPS 30%	20 (16, 24)	5 (5, 5)
PPS 40%	39 (34, 44)	13 (12, 14)
PPS 50%	76 (64, 88)	28 (25, 31)
PPS 60%	92 (80, 105)	43 (38, 48)
PPS 70%	141 (92, 190)	63 (48, 78)

J Pain Symptom Manage. 2009 Jul;38(1):134-44

Life Expectancy is Unpredictable



Circulation. 2012 Apr 17;125(15):1928-52
Palliat Med. 2009 Oct;23(7):642-8
Br J Gen Pract. 2011 Jan;61(582):e49-62

Markers of Poor Prognosis

- Frequent hospitalizations
- Not tolerating ACE-I, β-Blocker
- Refractory to Diuretics
- Secondary end-organ dysfunction (esp Liver, Kidney)
- NYHA IV despite optimization
- Hyponatremia
- EF < 20%
- Cachexia

Hauptman, *Arch Intern Med* 2005; Ward, *Heart* 2002

The Surprise Question

"Would I be surprised if the person in front of me was to die in the next six months or one year?"

"No"

➔ Increased risk of death in the next 6 months.

CMAJ. 2014 Apr 1;186(6):425-32
J Palliat Med. 2001 Summer;4(2):249-54

It’s time to talk…

- Patients are waiting
- Advanced Care Planning should be initiated by care providers.
- Goals should be set by combining patient values / priorities with and an understanding of treatment options and their outcome

CARENET
Canadian Researchers at the End of Life Network

Speak Up


palliative
people
care
life
patients
disease
illness
hospital
quality
chronic
think
health
get
medicine
families
patient
live
home
hospice
treatment
trained
time
Palliative
possible
Well
doctor
medical
years
better
training
well
team
important
physicians
Medicare
experience
now
also
hospitals
Care
cure
paid
different
like
ago
family
enough
things
know
mean
much
bill
include
make
work
progress
difficult
among
excellent
often
example
spiritual
feel
longer
prolonging
need
country
fact
MmmHmm
costs
goal
actually
access
talk
place
want
right
serious
focused
whether
something
lot
point
go
help
question
died
diagnosis
length
long
manage
tell
reform
chaplain
nurse
thought
law
programs
group
see
value
anything
thinking
majority
understand
today
Mt
Meier
Yes
curative
studies
give
saying
knowledge
relationships
insurance
system
hope
existential
Yeah
focus
believe
consultation
Sinai
million
future
real
day
short
advanced
addition
end
young
one
many
just
got
requires
models
needs
old
helping
regular
across
social
Dr
good
safe
schools
blood

What is Palliative Care?

Palliative care is an approach that **improves the quality of life** of patients and their families facing the problem associated **with life-threatening illness**, through the **prevention and relief of suffering** by means of early identification and impeccable assessment and treatment of pain and other problems, **physical, psychosocial and spiritual**.

(WHO Definition)

Palliative Care IS……

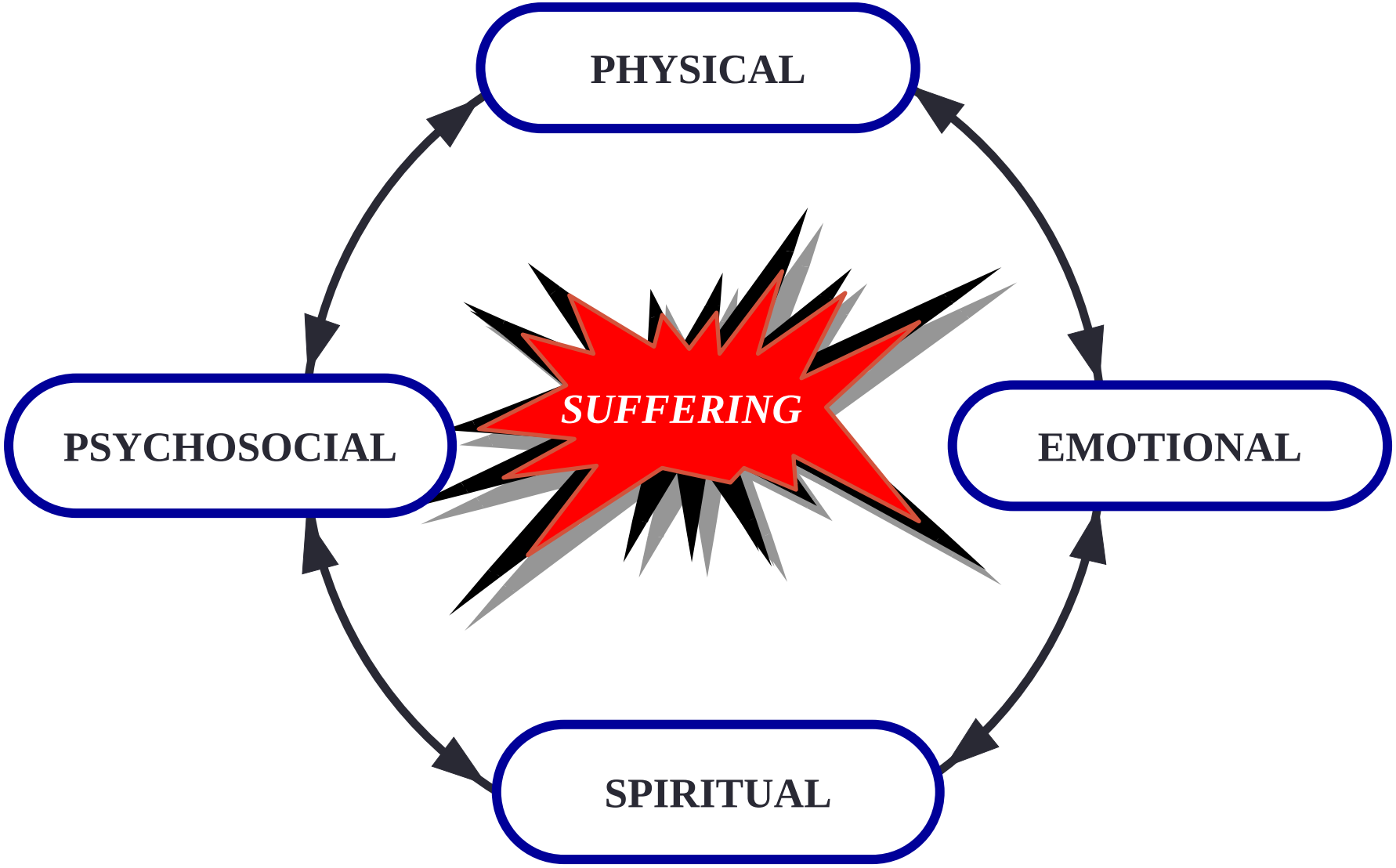
- Patient & Family Centered
- Improve Quality of Life and functional status
- Focus on Symptom control, communication
- Whole-person care; physical, spiritual, emotional and social
- Supports the patient, family and healthcare team
- Multidisciplinary

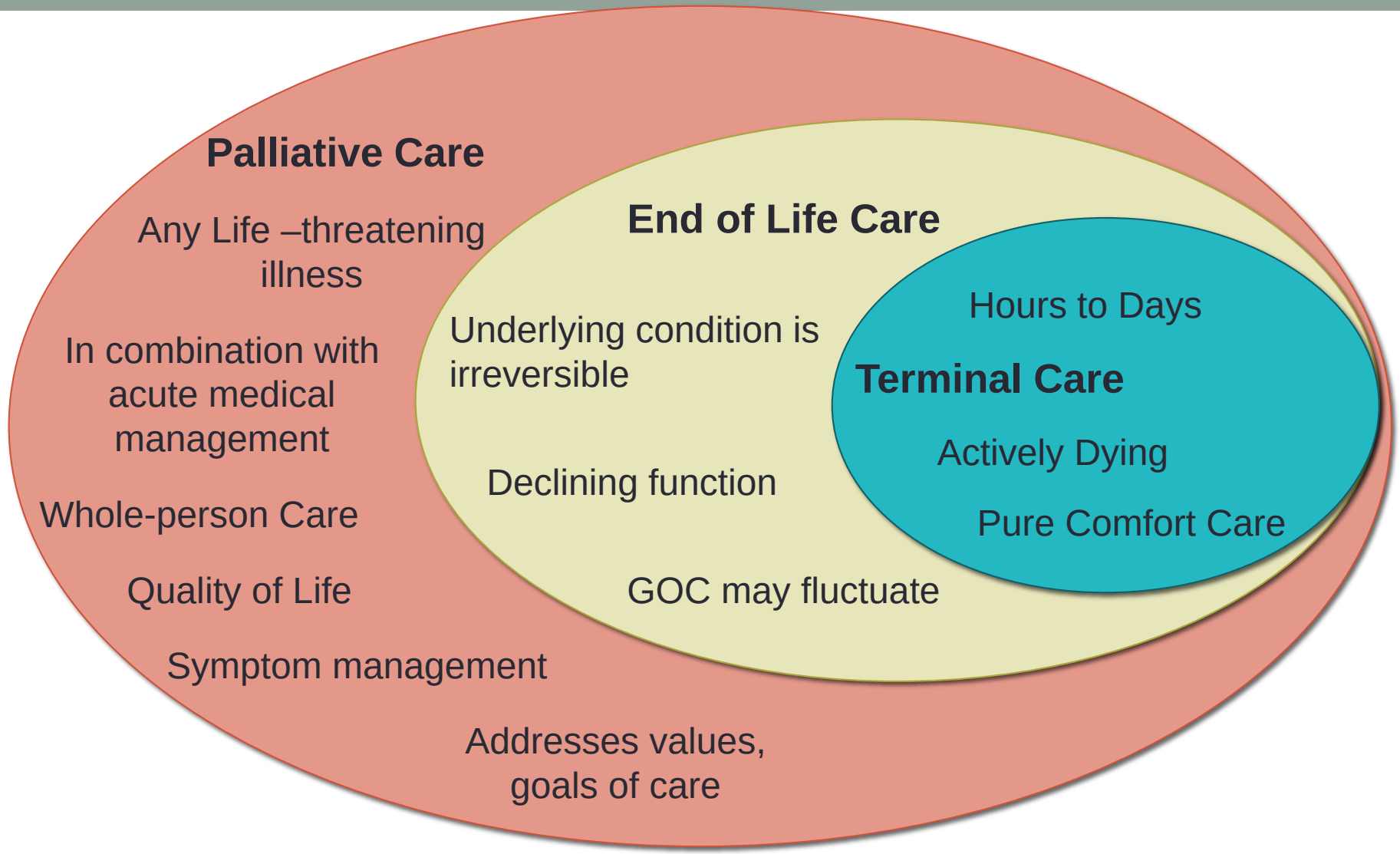
Palliative Care is NOT……

- A Failure
- Withdrawal of Care – **never** say these words
- A Place or Disposition
- Hastened Death
- The WRHA Palliative Care Program

Palliative Care Can and Should be Provided in **All Clinical Settings**

Shared responsibility of **All Healthcare Providers**


PHYSICAL
PSYCHOSOCIAL
SUFFERING
EMOTIONAL
SPIRITUAL



Palliative Care may be the main focus
OR
delivered concurrently with life-prolonging care

Decision-making

Decisions based on

- Realistic Understanding
- Personal Priorities and Values

- Patients and families lack the ability to apply their own values to these decisions
- Physicians often fail to explore what's important for a patient

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Communication is Key

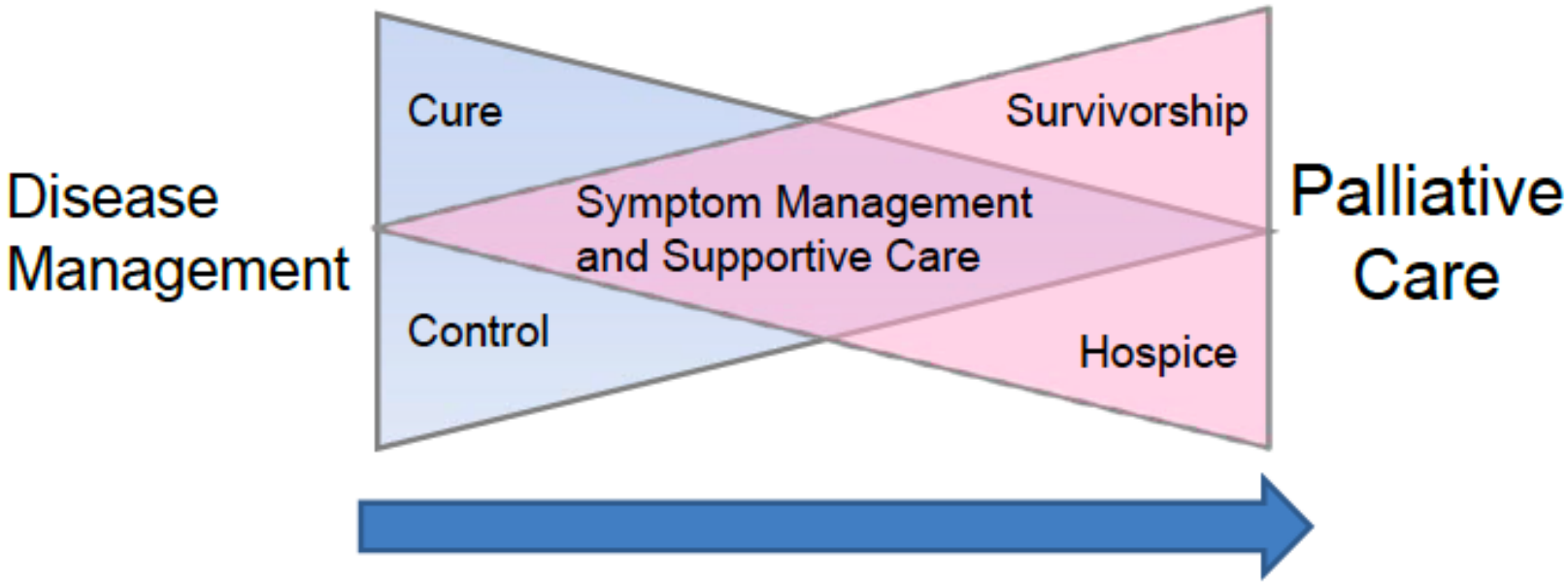
- Patients often unaware that HF is a terminal illness
- Overestimate benefits of treatment
- Treatment goals/consequences may not match patient values

Our job:

- Bring a realistic understanding of illness/prognosis/treatment options and reconcile with patient's values/priorities

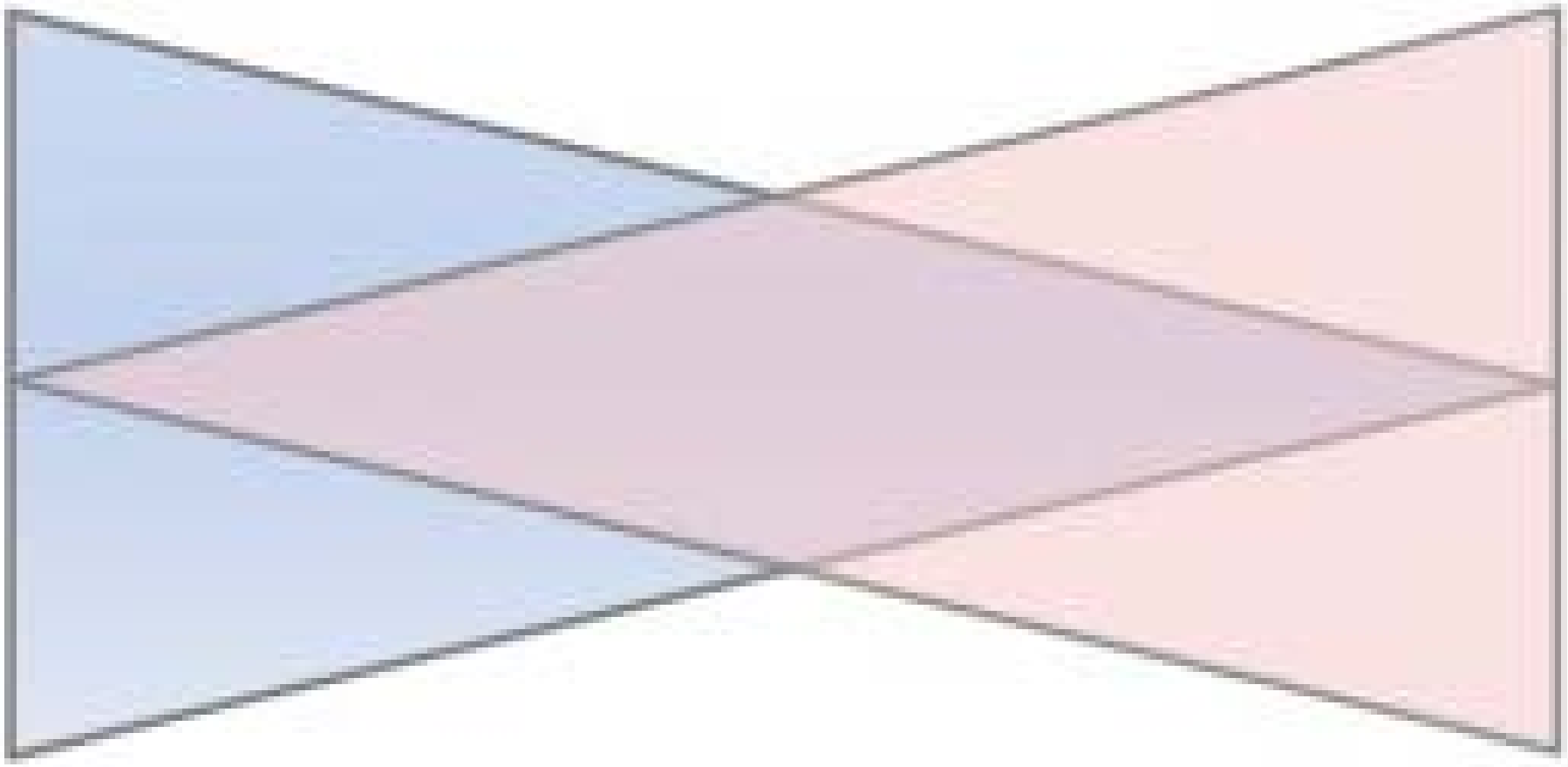
Integrating Palliative Care and Chronic Disease Management

- **First: Optimize management of disease process**
- Add comfort measures to treat refractory symptoms
- Many common symptoms, others very disease-specific

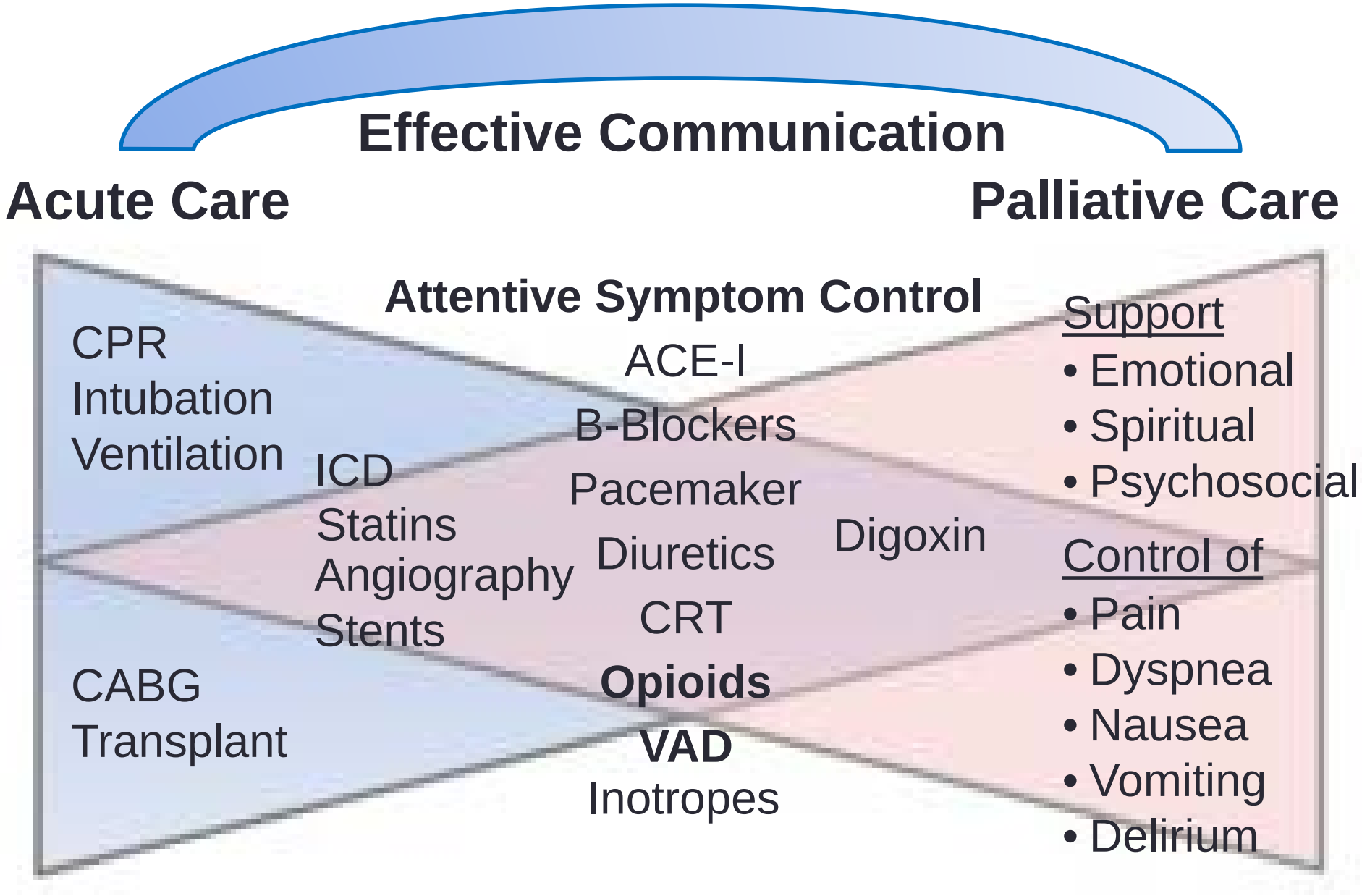


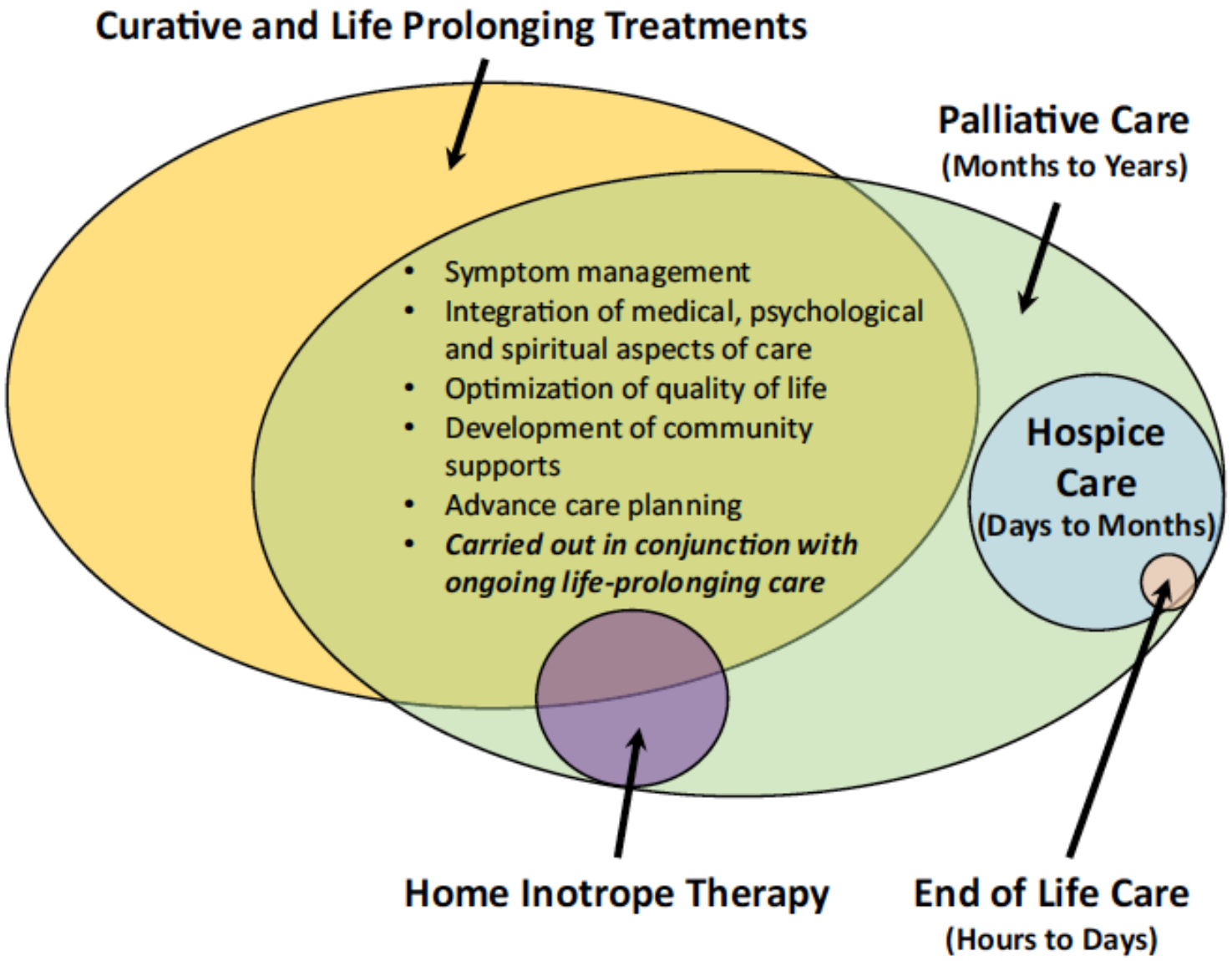
Hawley P. 2014

Acute Care **Palliative Care**



Hawley P. 2014


Effective Communication
Acute Care
Palliative Care
Attentive Symptom Control
CPR
Intubation
Ventilation
ICD
Statins
Angiography
Stents
CABG
Transplant
ACE-I
B-Blockers
Pacemaker
Diuretics
CRT
Opioids
VAD
Inotropes
Digoxin
Support
• Emotional
• Spiritual
• Psychosocial
Control of
• Pain
• Dyspnea
• Nausea
• Vomiting
• Delirium



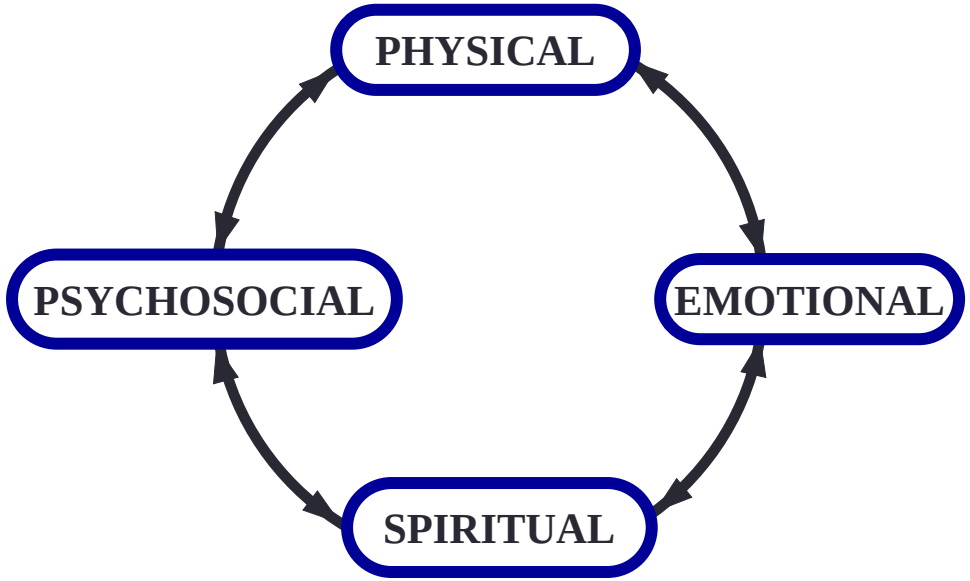
Slawnych, Can J Cardiol 34 (2018) 914e924.

When should palliative care begin?

- A palliative approach should be incorporated in every patient with a life-limiting or progressive disease.

- Specific palliative measures should begin when symptoms can not be mitigated by optimal management (NYHA III-IV)

- Whole-person approach always



Basic versus Specialized Palliation

- Shared decision-making

Management of

- Dyspnea
- Fatigue
- Depression/anxiety
- Pain
- GI Symptoms
- Dry mouth

Specialised

- Refractory dyspnea
- Complicated pain
- Challenging psychosocial dynamics
- Delirium
- Death at home

Very advanced….

- VAD as destination therapy
- Inotropes
- Ultrafiltration
- Appropriate in select situations

We shall have to learn to refrain from doing things merely because we know how to do them.

—Theodore Fox, 1899-1989
(English doctor: speech to Royal College of Physicians, 1965)

Slawnych, Can J Cardiol 34 (2018) 914e924.

Does a Palliative Approach Improve Care in HF?

J Am Coll Cardiol. 2017 July 18; 70(3): 331–341. doi:10.1016/j.jacc.2017.05.030.

The Palliative Care in Heart Failure (PAL-HF) Randomized, Controlled Clinical Trial

Joseph G. Rogers, MD[a,b], Chetan B. Patel, MD[a,b], Robert J. Mentz, MD[a,b], Bradi B. Granger, PhD, MSN, RN[c], Karen E. Steinhauser, PhD[a,d], Mona Fiuzat, PharmD[a], Patricia A. Adams, BSN, CCRC[a], Adam Speck, BS[a], Kimberly S. Johnson, MD[a,b], Arun Krishnamoorthy, MD[e], Hongqiu Yang, PhD[b], Kevin J. Anstrom, PhD[b,f], Gwen C. Dodson, MSN[a], Donald H. Taylor Jr., PhD, MPA[a,g,h], Jerry L. Kirchner, BS, CCRP[b], Daniel B. Mark, MD[a,b], Christopher M. O'Connor, MD[a,i], and **James A. Tulsky, MD[j,k]**

PAL-HF

- 150 patients with advanced HF randomized to usual care Vs usual care plus palliative intervention
- Intervention: Consultation and concomitant care from a multidisciplinary PC team

→

- Improved Quality of life
- Reduced anxiety, depression
- Improved spiritual wellbeing
- No changes in rehospitalization or mortality

J Am Coll Cardiol. 2017 July 18; 70(3): 331–341. doi:10.1016/j.jacc.2017.05.030.

LET’S GET SPECIFIC

Practical Matters

Classic Pharmacologic Management

Drug	I	II	III	IV	Survival	Hospital Admits	Functional Status
Diuretic	X	√	√	√	→	↓	↑
ACE-I/ARB	√	√	√	√	↑	↓	↑
Spironolactone	X	X	√	√	↑	↓	↑
B-blocker	X	√	√	√	↑	↓	↑
Digoxin	X	√	√	√	→	↓	↑

Dyspnea


Come to where
the flavor is.
Marlboro
Marlboro
100's
Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

Dyspnea – Simple Measures

- Sit Up
- Open Window
- Fan
- Reassurance

CHEST Consensus Statement

American College of Chest Physicians Consensus Statement on the Management of Dyspnea in Patients With Advanced Lung or Heart Disease

Donald A. Mahler, MD, FCCP; Paul A. Selecky, MD, FCCP; Christopher G. Harrod, MS; Joshua O. Benditt, MD, FCCP; Virginia Carrieri-Kohlman, DNSc; J. Randall Curtis, MD, FCCP; Harold L. Manning, MD, FCCP; Richard A. Mularski, MD, MSHS, MCR, FCCP; Basil Varkey, MD, FCCP; Margaret Campbell, RN, PhD; Edward R. Carter, MD, FCCP; Jun Ratunil Chiong, MD, FCCP; E. Wesley Ely, MD, MPH, FCCP; John Hansen-Flaschen, MD, FCCP; Denis E. O'Donnell, MD; and Alexander Waller, MD

CHEST 2010; 137(3):674–691

Dyspnea - Pharmacotherapy

- Opioids by far the most effective
- Oxygen clearly effective for hypoxemic dyspnea
- Oxygen in nonhypoxemic less clear
- Benzodiazepines do not treat dyspnea, but may be helpful for concomitant anxiety

Opioids and Dyspnea – Practical Matters

- Life-limiting symptoms (Class III-IV)
- Start low with long intervals

Starting

- Morphine 1 – 2.5 mg PO Q6h-Q8h
- Hydromorphone 0.25 – 0.5mg PO Q6h-Q8h
- Plus PRN Q2-4 hours initially
- Titrate every 1-3 days for inpatients
- Outpatient: adjust q1-2 weeks.
- Shorten interval first (up to Q4h) then increase dose
- SR and Contin require ~ 30mg morphine daily

Opioids and survival

In the ICU:

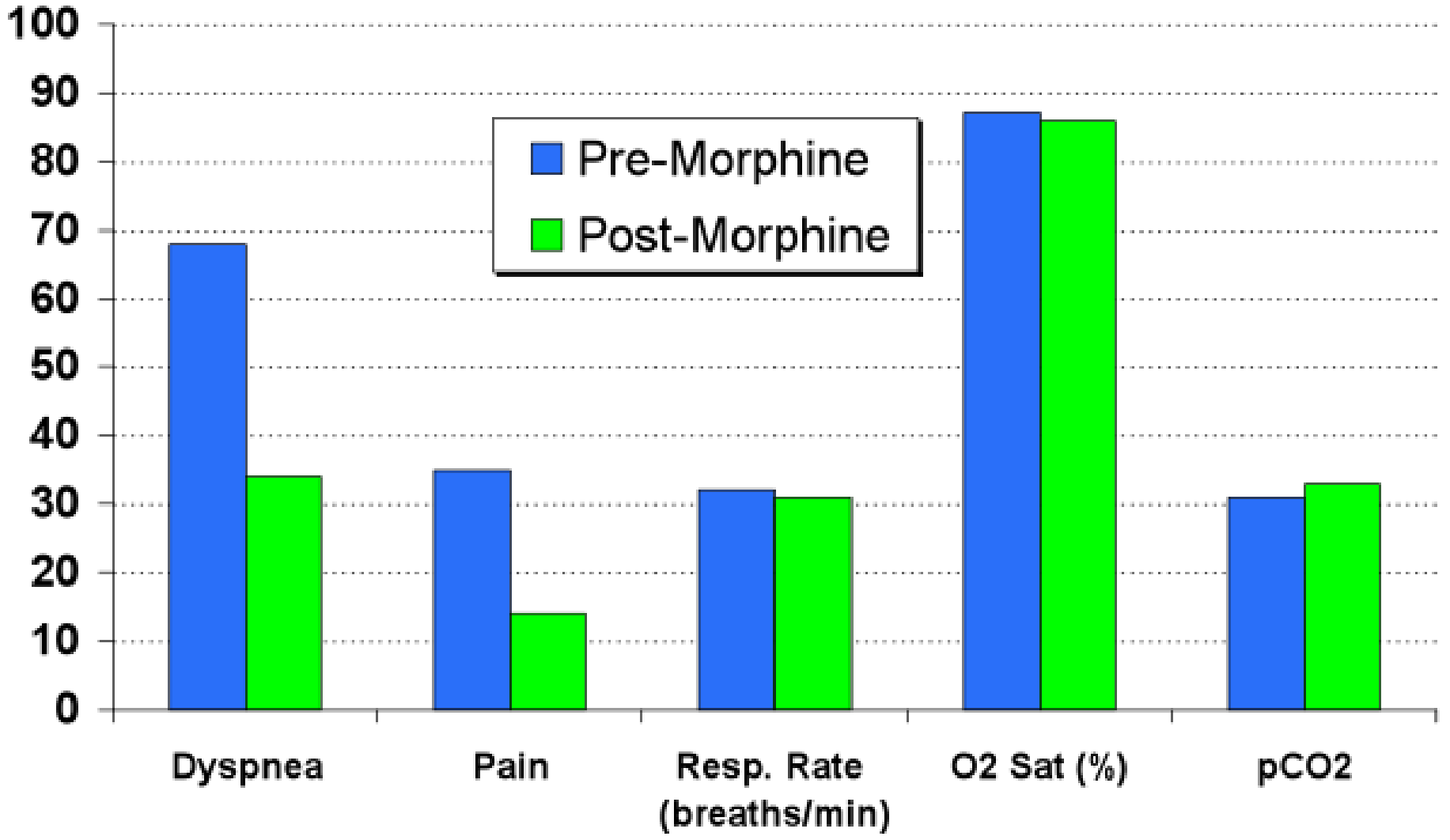
- Removal of Vent without symptom control will result in greatly increased O2 demands, ++sympathetic drive
  → increased Work of Breathing and ++Dyspnea!

With Symptom control

- Diminished sympathetic drive
- Diminished O2 and metabolic demands
- Less Tissue Hypoxia
- Patients treated with opioids and sedative may in fact live longer!

Journal of Palliative Care; Winter 2005; 21, 4;299-302
Am J Hosp Palliat Care. 2008 Apr-May;25(2):152-4.

Morphine and Respiratory Depression



Palliat Med. 2007;21(2):81–6.

Pain

- Consider underlying cause
- Avoid NSAIDS
- MON (+/- A) for chest pain
  - Do not need workup to palliate
- Acetaminophen
- Low dose opioids (with care)

Edema

- Optimise HF therapy
- NonPharm:
  - Elevate
  - Compression garments (mixed results)
  - Skin care!

Sleep disturbances

- Consider cause
  - If orthop/PND then consider increased diuresis
  - Sleep apnea - treat
- Change diuretic dose to earlier in the day
- Sleeping surface
- Incline
- Address Anxiety/Depression

GI symptoms

Nausea

- Optimize HF Tx
- Treat constipation
- Assess electrolytes
- Pro-motility (metoclopramide/domperidone)
- Haloperidol (0.5-1mg)
- Ondansetron (beware - causes constipation)

Constipation

- Stimulant (Bisacodyl, senna)
- Osmotic (PEG3350)
- Docusate – NO benefit
- Relax fluid restriction

Ascites secondary to Cardiac Cirrhosis

- Optimize HF tx
- Avoid hepatotoxins
- Judicious paracentesis
- Indwelling catheter (usually peritoneal dialysis catheter) in select cases

Dry mouth

- Reassess diuretics / fluid restrictions
- Med review – reduce anticholinergics etc..
- Saliva substitutes
- Salivary gland Stimulation (gum, candy)
- Oral hygiene

ICD’s and end-of-life

- Patients with ICD at risk of receiving shocks in the last days – hours of life
- Should include deactivation of ICD in discussions before final days if possible.
- Not all patients will choose to deactivate ICD

WRHA Palliative Care Program

- Provides range of support from consultation, concomitant care for challenging cases, ongoing community support, inpatient care
- Consultation for any patient with a life-limiting or life-threatening illness regardless of goals of care to assist in symptom management
- Enrollment in the Palliative Care program available for patients with life-expectancy < 6 months who no longer request aggressive treatments for their primary illness and goals align with palliative model
- Dedicated inpatient palliative care units intended for patients requiring specialized palliative care

Useful Resources

virtualhospice.ca

thecarenet.ca

advancecareplanning.ca

CANADIAN Virtual Hospice

Information and support on palliative and end-of-life care, loss and grief.

CARENET

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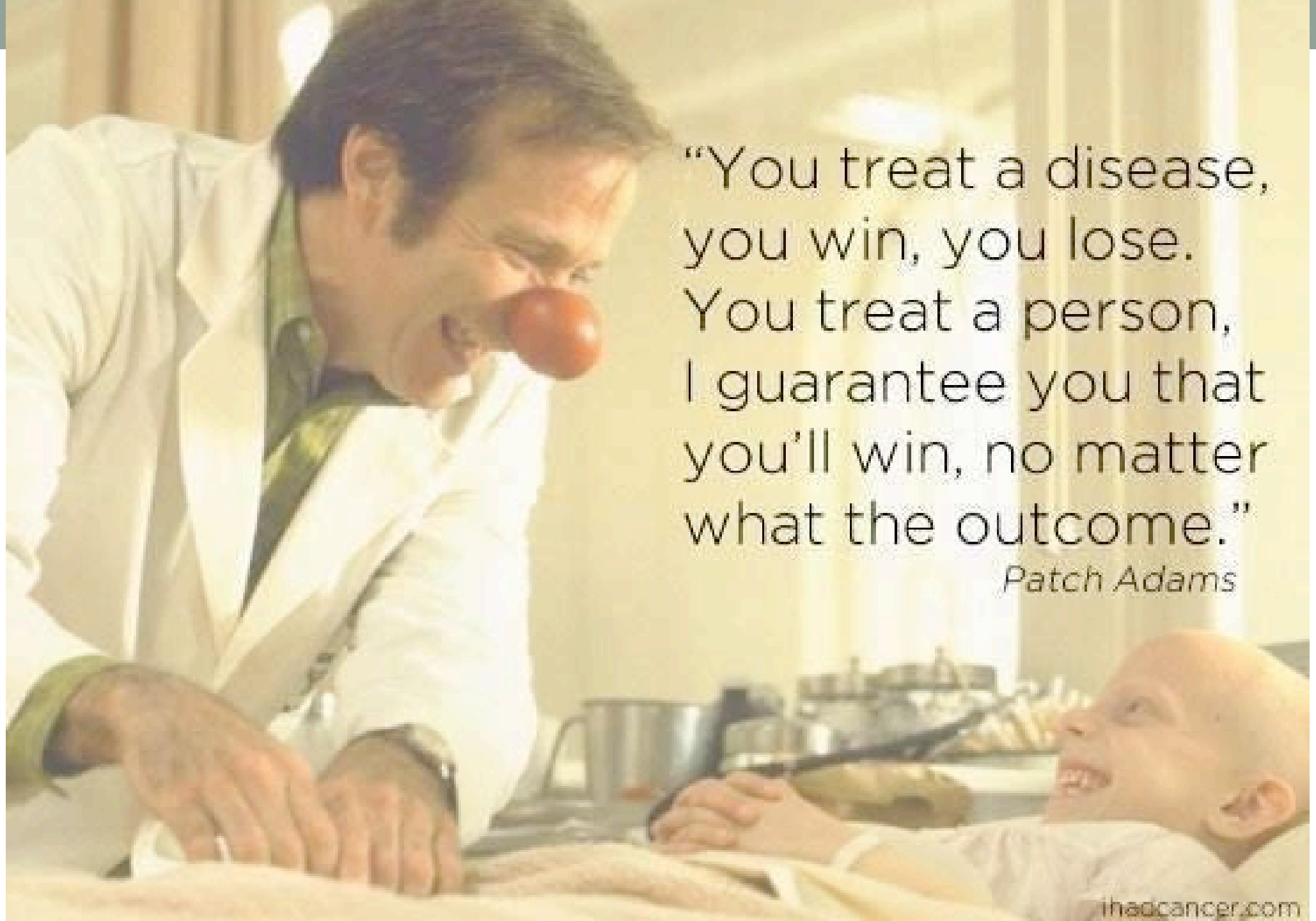
Speak Up


"You treat a disease, you win, you lose. You treat a person, I guarantee you that you'll win, no matter what the outcome."
Patch Adams
ihadcancer.com