

# **Why Geropalliative Medicine Must Become Mainstream for All Specialties**

**Daniel R. Hoefler, MD  
CMO Outpatient Palliative Care  
Sharp HospiceCare**

# Disclosure

I have no relevant financial disclosures

# Objectives

- Describe the changing paradigm of geriatric medicine.
- State the conflict between traditional management and new or evidence based updated standards.
- Demonstrate the importance of prognosticating for hospital risk in the elderly.
- Name three things that could be done at a traditional physical that are not being done now that could improve outcomes to the geriatric population.

**What does a good outcome look like?**

## Traditional metrics versus Palliative Metrics:

Survival	Will I live autonomously?
Stroke	Will I be able to speak/walk/recognize my loved ones?
Myocardial Infarction	Will I be exhausted? In chronic pain?
GI Bleed	Will I be moved to an institution?
Cost to the healthcare industry	What emotional and financial cost will I be to my family?

When we report Terri Schaivo a resuscitation success which set of metrics are we referring to?



“Disease does not exist in isolation and the historic metrics to define good outcomes are inadequate.”

Another historic example:

Feeding tubes in demented elderly who lost their appetite.





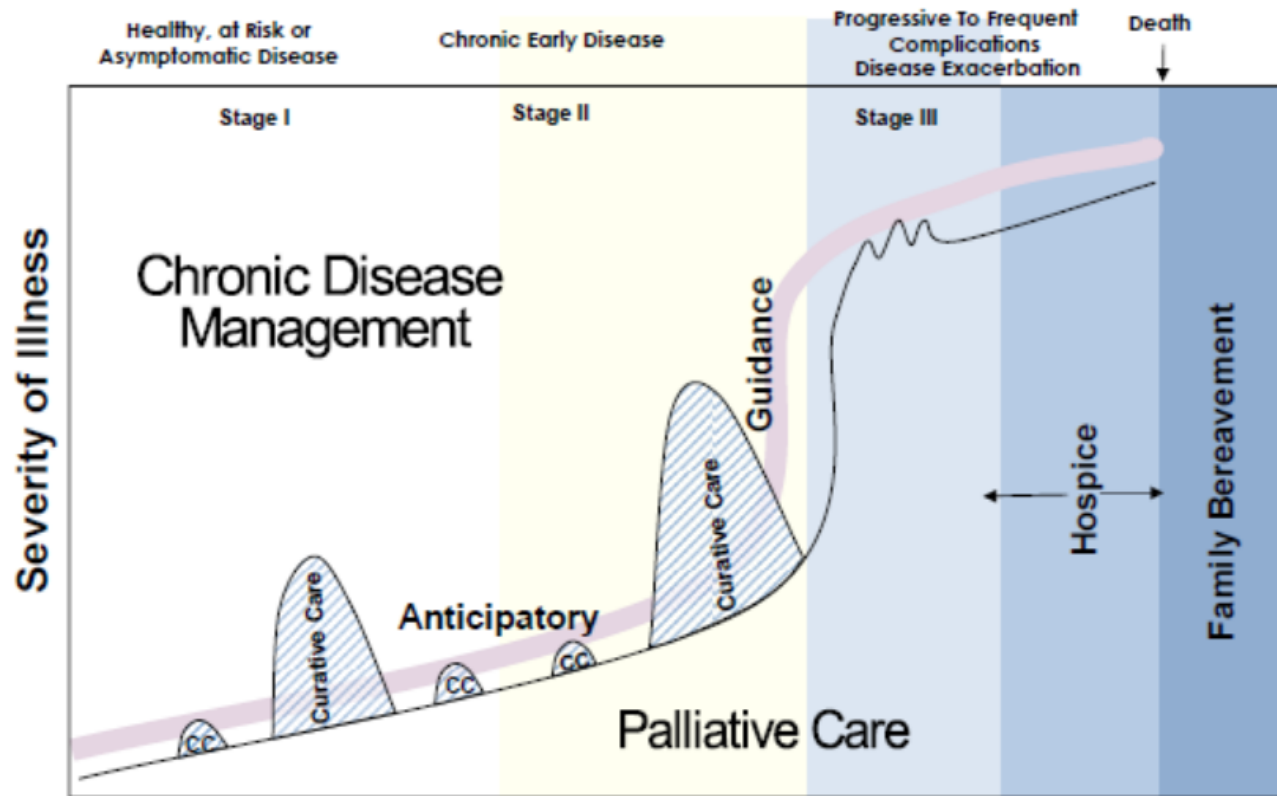
Addressing Patient Centered Quality Metrics (PCQMs) requires:

- ✓ **Expanding research metrics and eliminating metrics that do not provide value**
- ✓ **Full disclosure or short and long-term effects/outcomes**
- ✓ **Evidence Based Knowledge**

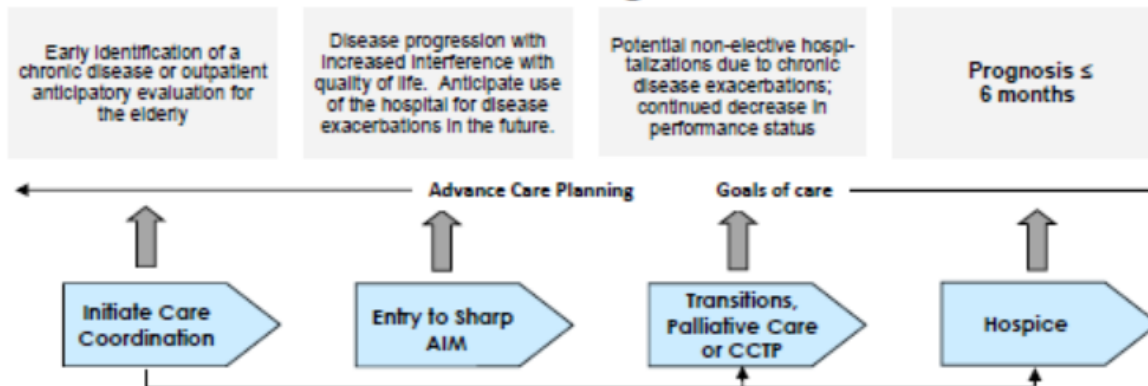
Other tough but important questions:

- **Who are we treating?**
- **How do we address the moral resolution and existential suffering of family and healthcare providers?**

# Sharp Model of Palliative Care



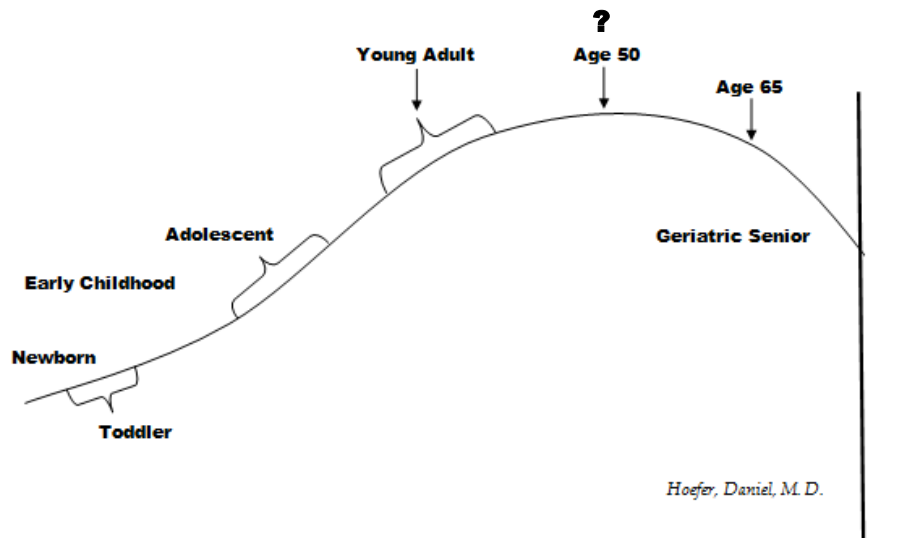
## Health Progression



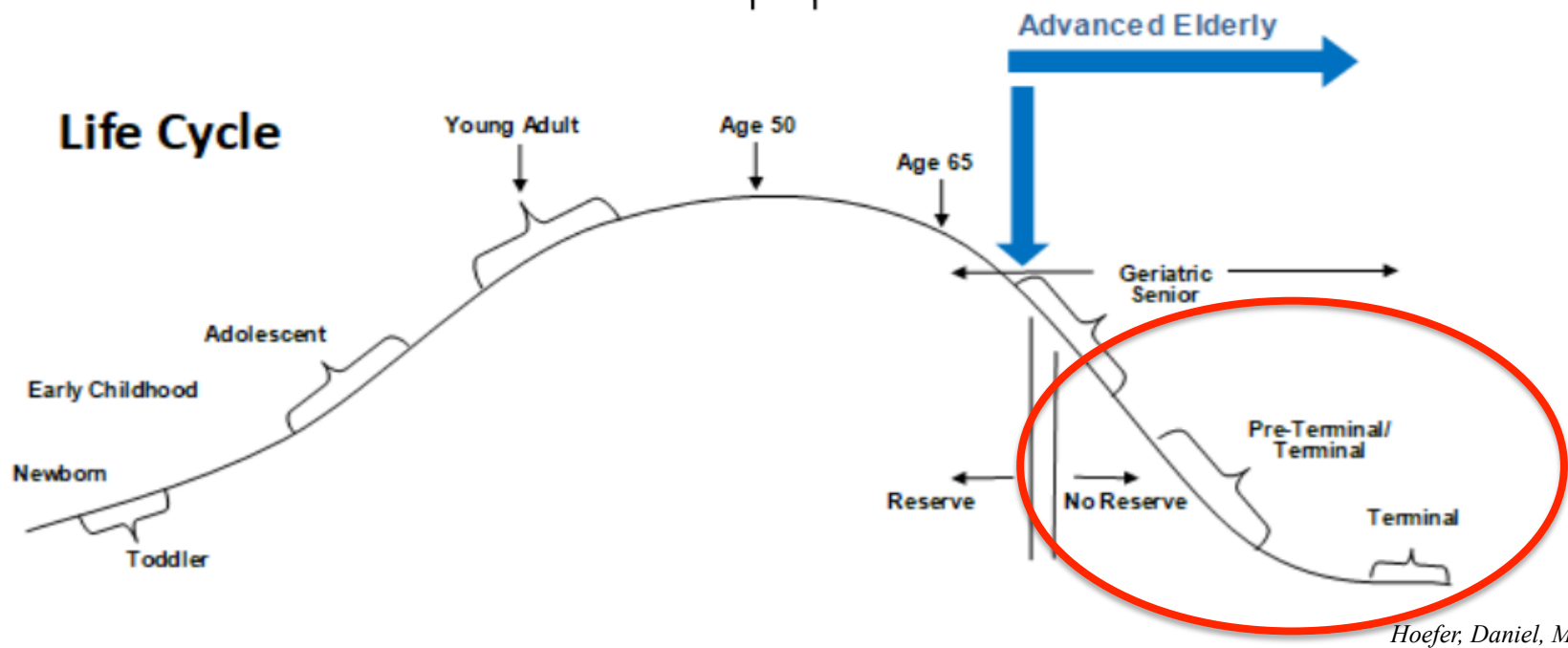
7/10/15

SHARP

Our goal should be to anticipate and guide our patients and families in the “unintended consequences of well intended care.”



## Bell Curve of Life Cycle: Old and New



# Hoefer Geropalliative Tool

## Six Risk Domains

1. General Information
2. Disease Burden
3. Medications and Lifestyle
4. Functional Status
5. Cognitive Status
6. Geriatric syndromes such as frailty

Why should we do this evaluation?

Because uninformed treatment  
is mistreatment

and

Overtreatment is Deadly

# Metta Forrest Monastery







SHARP.



SHARP.

## Case Study - Ortho

- 80 yo female with spinal stenosis comes to your office c/o lbp with radicular symptoms.
- She moved in with her daughter to manage IADLs. She is independent in all ADLs but bathes only twice per week and uses a shower chair.
- She has fallen twice in 6 months. She does not meet phenotypic frailty criteria (no weight loss, is active and gets out of the house with help routinely).
- Her daughter states that she is just not as strong as she used to be and cannot open jars. She uses the hand rail to pull herself up stairs and now for balance.

- PMHx:
- Moderate COPD (RA sat 94%)
- Diastolic Heart Failure (Compensated)
- Moderate depression - controlled
- Insomnia
- Osteoarthritis

## Case Study – Ortho (continued)

Meds: ASA, Paxil, Breo Elipta, ProAir HFA, Lisinopril, Metoprolol, Ambien, Hydrocodone, Famotidine

BMI 20, BP 148/85, RR14, T 98.1

Exam is normal except temporal muscle wasting, decreased grip strength, mildly decreased AE but no rales, ronchi or wheezing, Normal cardiac, no edema. No Neuro deficits except a foot drop

Normal CMP, CBC and chol is 232

CXR is clear

EKG NSR

TUGT 19s

MMSE is 23

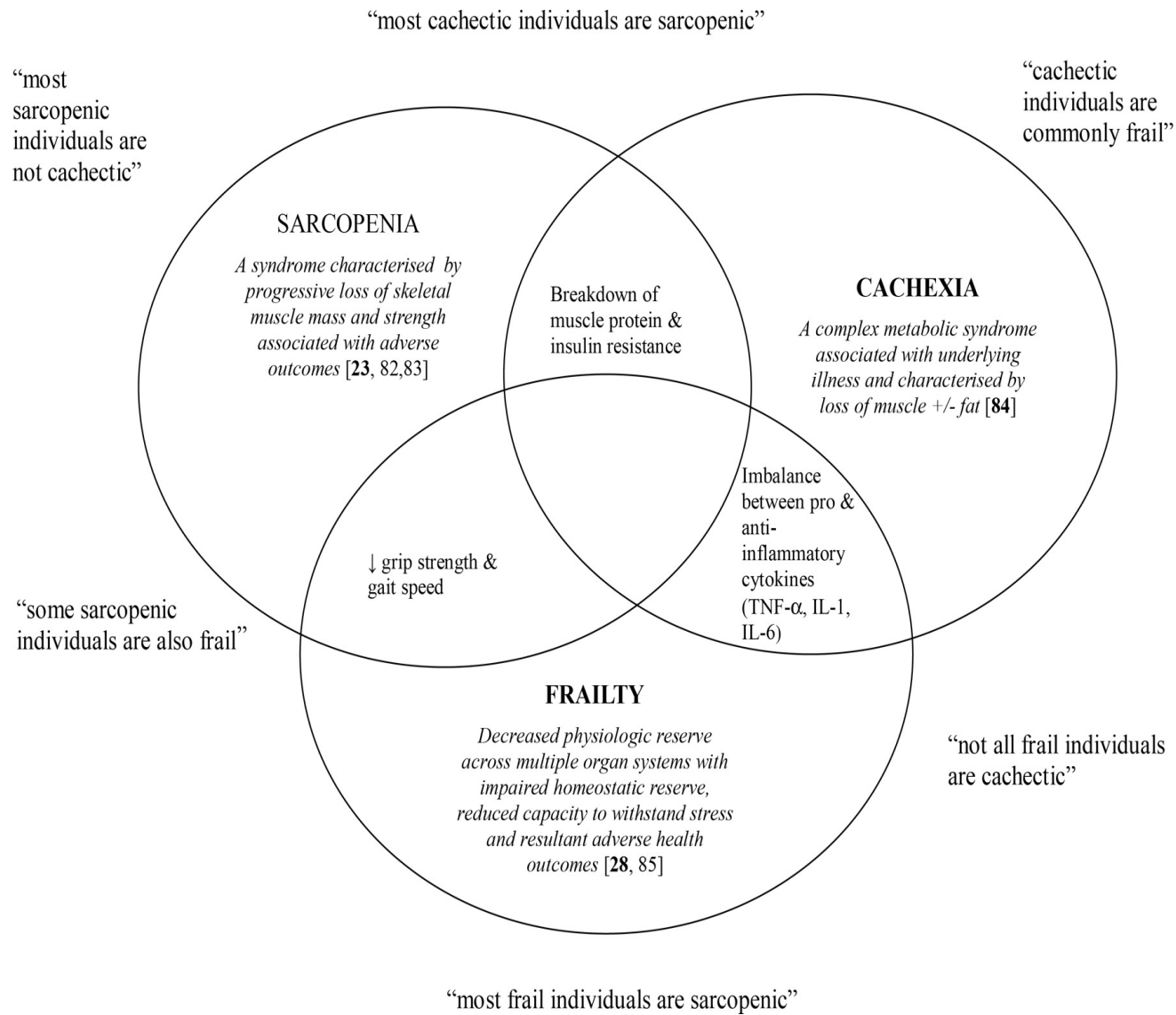
## Case Study – Ortho (continued)

The daughter states that her mother’s life would be better if she did not have “sciatica”. As well, the patient was just in the hospital for a fall due to a foot drop and told that she “must have surgery”. She asks you specifically about surgery and states she has heard “bad things” about opioids. Non-surgical interventions have otherwise had limited benefit.

What can you tell them?

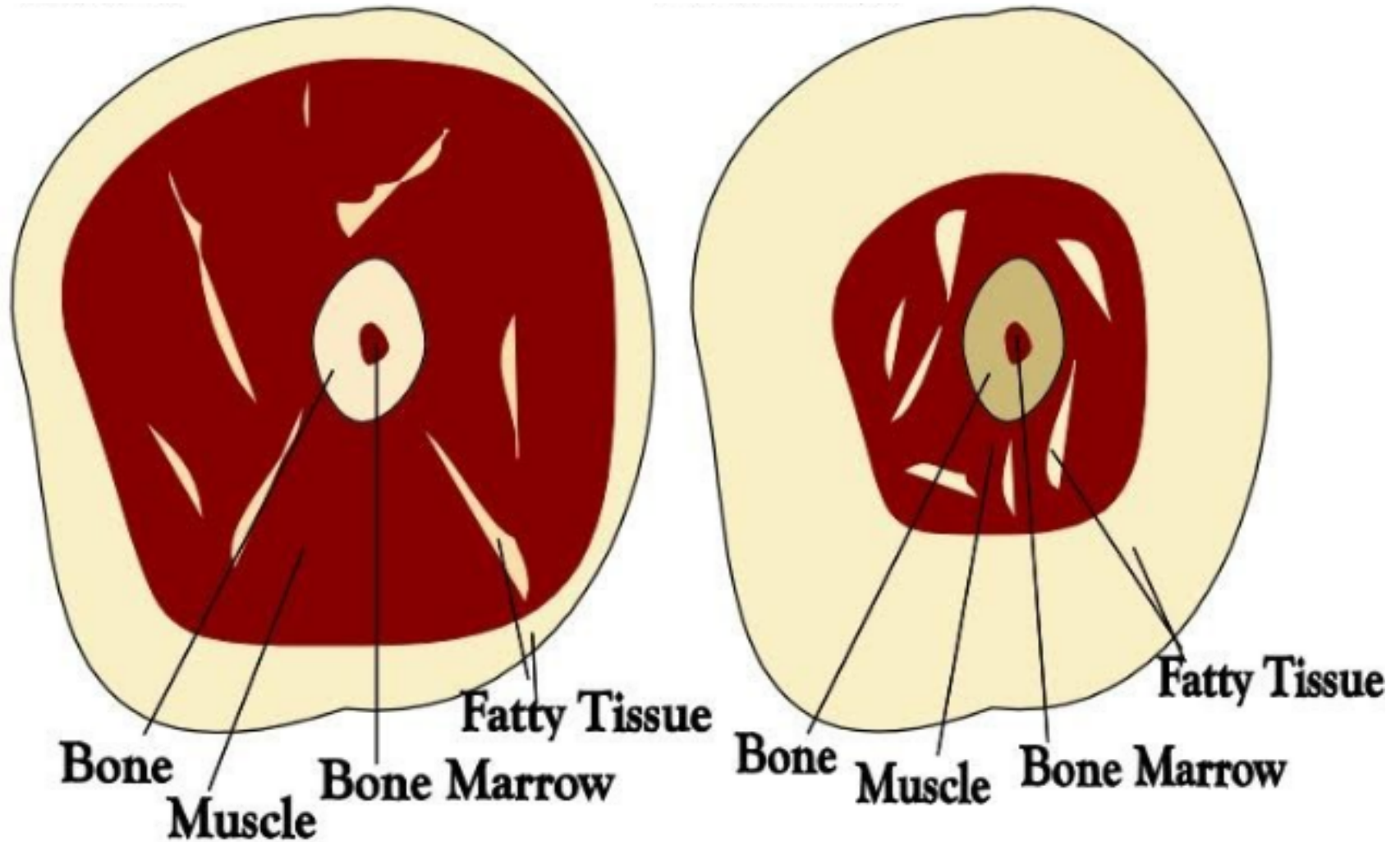
What are her unique risks?

**Use the Six Risk Domains**



50% of persons over the age of  
80 are sarcopenic

This is sarcopenia!





Evidence Based medicine shows that sarcopenia is associated with increased risk of:

- Infections
- Pressure Ulcers
- Loss of Autonomy
- Institutionalization
- Decreased quality-of-life post hospitalization
- Mortality

## Sarcopenia in Thoracolumbar Spine Surgery:

- Length of stay increases to 8.1 days from 4.7
- 300% increase in hospital complications
- About twice the risk of institutionalization – 81.2% v 43.3%

Bokshan, SL, et al, *Effect of Sarcopenia on Postoperative Morbidity and Mortality after Thoracolumbar Spine Surgery*, 2016 Orthopedics, 39(6):e1159-64

Other Prognostic research reinforces functional decline:

- IADL deficiency
- Decreased Cognition
- Age

55% chance of some form for functional decline after hospitalization.

Sager, M, et al, *Hospital Admission Risk Profile (HARP): Identifying Older Patients at Risk of Functional Decline Following Acute Medical Illness*, JAGS 1996, 44(3):251-57

# Timed Up and Go Test (TUGT)

TUGT and functional dependence are the strongest predictors of post hospital institutionalization.

Robinson, TN, et al, *Accumulated Frailty Characteristics Predict Postoperative Discharge Institutionalization in the Geriatric Patient*, 2011 J Am Coll Surg, 213(1): 37-42

There is an inverse correlation with walking speed and polypharmacy. Statistically significant.

George, C. and Verghese, J. (2017), Polypharmacy and Gait Performance in Community-dwelling Older Adults. J Am Geriatr Soc. doi:10.1111/jgs.14957

# Medications – Lifestyle

The medication issue which puts her at the greatest risk for hospital induced delirium is? Functional decline?

## Polypharmacy

Inouye, SK, et al, *Delirium: A Symptom of How Hospital Care is Failing Older Persons and A Window of How to Improve Quality of Hospital Care*, Am J Med 1999, 106:565-73

Demented patients are 500% more likely to develop hospital induced delirium.

If she decided to accept the risk of surgery, what would you do to lower her risk?

- Decrease polypharmacy
- Decrease ACB
- Prehab-
  - Increase her exercise
  - Increase protein in her diet
- Melatonin for sleep and Delirium prevention (off label)
- Consider Perioperative Antipsychotics (off label)
- Be sure the patient and family are aware of all patient centered unintended consequences

## Case study: Cardiac-intervention

83 yo male with severe frailty and declining health comes to your office with severe pedal edema. He is cognitively intact and able to move slowly from room to room with a FWW. ECHO showed moderately severe aortic stenosis. He is referred to cardiology for a possible procedure. He sleeps in a recliner to help him breathe easier.

PMhx: DM with mild nephropathy, CAD, BPH with obstruction, myelodysplasia with anemia

Meds: Plavix, Tamsulosin, Proscar, metoprolol, sliding scale insulin, atorvastatin, metformin

BMI is 21 but he has severe pedal edema. Stage 3 sacral ulcer is healing. Labs are all normal but his total chol is 68. Cachectic appearing.



## Before and After: Dad Pictures



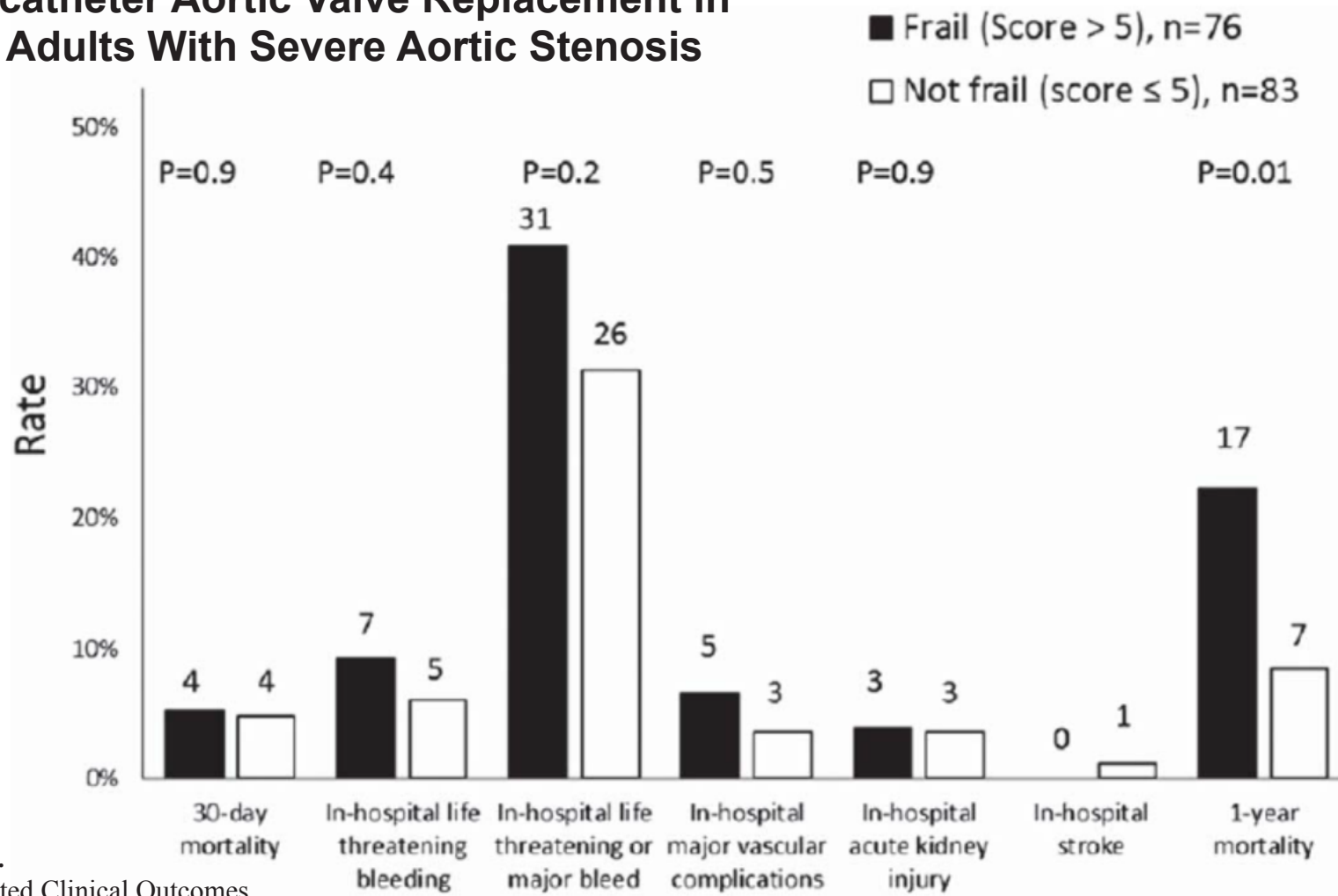
Under no circumstances can you know if a patient is frail by just looking at them. You must do a proper phenotypic or index evaluation.

Patient gets a Palliative consultation and asks you about the risks of surgery or medical management. What can you tell him?

- General – male and older
- Disease burden – incident sacral ulcer. Charlson comorbidity score of 3(7).
- Pharmacy and Lifestyle – Polypharmacy
- Cognitive status – intact
- Functional status – complete iADL and ADL dependence except feeding. TUGT – unable
- 5 of 5 frailty phenotype characteristics

Very high risk of cognitive or functional decline, and mortality

## The Impact of Frailty Status on Survival After Transcatheter Aortic Valve Replacement in Older Adults With Severe Aortic Stenosis



**Figure 1.**  
Unadjusted Clinical Outcomes

JACC Cardiovasc Interv. 2012 September ; 5(9): 974–981. doi:10.1016/j.jcin.2012.06.011.

Do we present information to our patients differently in modern research than to the way we present surviving a cardiac arrest?

We are concerned when a patient's hemoglobin drops from 13.0 to 9.0 or their creatinine rises from 1.0 to 2.0 but why is it that we completely neglect:

1. ...when a patient's MMSE goes from 27 to 19? (Acute on chronic cognitive decline)
2. ...or they develop non-stroke musculoskeletal decline? (Acute on chronic functional decline)



# **Loss of cognition and functional status are the 2 most important issues to patients!**

*“It should be considered profound that the two things that the geriatric population care about most are the things that healthcare providers evaluate least.”*

*Daniel Hoefler, M.D.*

# Mortality with Aortic Stenosis

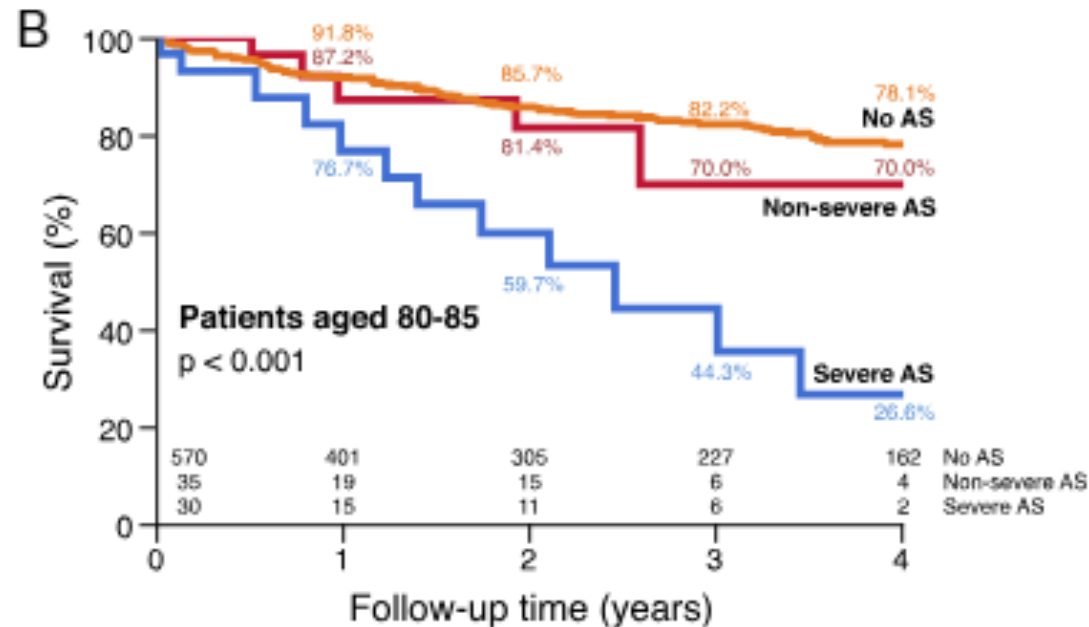


Figure 1.

Survival rates according to grade of aortic stenosis (AS) for (A) whole cohort, (B) participants aged 80 – 85, and (C) participants aged  $\geq 85$ . Numbers at bottom indicate number of participants at risk each follow-up year.

Effect of Asymptomatic Severe Aortic Stenosis on Outcomes of Individuals Aged 80 and Older; Suzuki ET AL. JAGS, July 2018, VOL. 66, NO. 9, Pages 1800-1804

**Table 4.** Population characteristics and prognosis of patients with delirium in various studies

Study	Number of people with delirium/total population	Population characteristics						Prognosis
		mean age	females %	dementia %	nursing home patients, %	comorbidity	ADL impairment	mortality/time
Levkoff et al. [4]	144/325	82	67	24	30	NR	NR	26.4%/6 months
Francis et al. [18]	50/229	78	60	0	0	high	NR	39%/2 years
O’Keeffe and Lavan [5]	95/226	82	60	30	20	Charlson 2.1	high	31%/6 months
Inouye et al. [6]	87/727	79	60	19	4	high	medium	30%/3 months
McCusker et al. [8]	243 compared with 118 nondelirious	30% >85 years	60	NR	NR	Charlson 2.3	high	42%/1 year
Present study	106/425	66% >85 years	75	60	40	Charlson 2.3	high	35%/1 year, 59%/2 years

Charlson = Charlson Comorbidity Index [28]; NR = not reported.

Shi, Sandra M, MD, et al, *Delirium Incidence and Functional Outcomes After Transcatheter and Surgical Aortic Valve Replacement*, 2019 JAGS 67:1393-1401

n = 77 SAVR, n = 110 TVAR

	AVR	TAVR	
Delirium Incidence	50.7%	25.5%	
Mean age (years)	77.9	83.7	
MMSE	26.9	24.7	
Duration (days)	2.2	3.4	(P=0.04)
CAM-S (Severity)	4.5	5.7	(P=0.01)

**Prolonged hospitalization risk:**

No delirium	18.4%	26.8%
Mild delirium	30.8%	38.5%
Severe delirium	61.5%	73.3%

**Institutional Discharge:**

No delirium	42.1%	32.5%
Mild delirium	58.3%	69.2%
Severe delirium	84.6%	80%

At 12 months severe delirium was associated with delayed functional recovery after SAVR and persistent functional impairment after TVAR at 12 months.

- Less invasive procedures are done on patients who are older and with greater cognitive impairment.
- Less invasive procedures appear to be done on patients who are more susceptible to worse outcomes.
- Worse outcomes do not always return the patient to their previous baseline.
- Cognitive impairment in this study was not followed but research shows consistently that we should not expect their cognition to return to base line either.

Moral resolution of providers – if we don't understand or recognize the patient centered consequences of our care how can we advise a patient against care?

**“If we don’t do something he will  
be dead in a year.”**

**Recognize the frail patient at the  
edge of the cliff.**



**So what happened?**

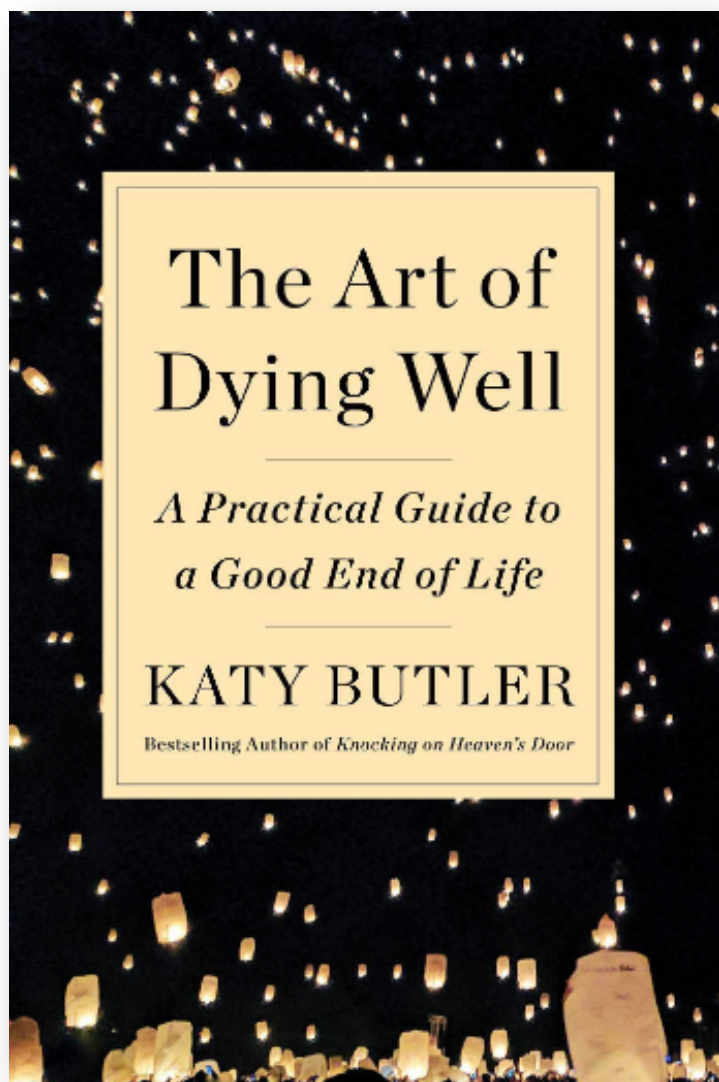
**Hippocratic physicians of ancient Greece  
prized the skill of prognostication above  
all others.**

It is “a most excellent thing for the physician to cultivate Prognosis; for by foreseeing and foretelling...the present, the past and the future, and explaining the omissions which patients have been guilty of, he will be more readily believed to be acquainted with the circumstances of the sick, so that men will have the confidence to intrust themselves to such a physician”

*Citation by Ray Porter in The Greatest Benefit to Mankind*



Recognize that “no surgery” is also a viable option.



Overtreatment is a Deadly  
Iatrogenic Disease

## Cardiac Outcomes with Respect to Frailty Syndrome

- Higher in hospital mortality : 32% v 16%
- Higher 1 year mortality: 48% v 25%
- Higher major adverse hospital events: 39% v 29%
- Higher rates of functional dependence in survivors: 71% v 52%
- Higher readmission rates 56% v 39%
- Have significantly worse Quality-of Life by standard QOL testing.
- (HR for frail TAVI is 1.66 for mortality)

Bagshaw, SM, MD, et al, *Association between Frailty and short- and long-term outcomes among critically ill patients: a multicentre prospective cohort trial*, 2014 CMAJ, 186(2): E96-102

Geropalliative evaluations  
Puts your care into context

**Thank you!**