If Only We'd Been Warned: Identifying Patients At Risk of Poor Outcomes and High Spending

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The views expressed by the conference speakers do not necessarily reflect the views of the American Hospital Association.

Session Outline

- Reliable predictors of adverse outcomes in people with serious illness, especially older adults
- Early identification of high risk patients
- Best practices in caring for the seriously ill and frail older adults to avoid adverse outcomes

Take Home Message

- People at high risk for adverse outcomes can be identified
- Early identification leads to change in care plans
- Change in care plans matched to patient characteristics and priorities improves quality
- Better quality results in reduced LOS, readmissions, hospital mortality, hospital acquired conditions, and adverse post acute care outcomes

Mr. B: 87 years old Frail, moderate cognitive impairment, falls, renal insufficiency, HTN, DM->Lives at home with his wife->New dx lung mass

Usual Care

- Thoracotomy, lobectomy
- Delirium, 2 week ICU stay, 43 day hospital stay, bedbound, pressure ulcers, feeding tube
- Discharge to NH
- Rehospitalized for pneumonia 2 weeks later
- Dies in ICU

Universal Risk Screening

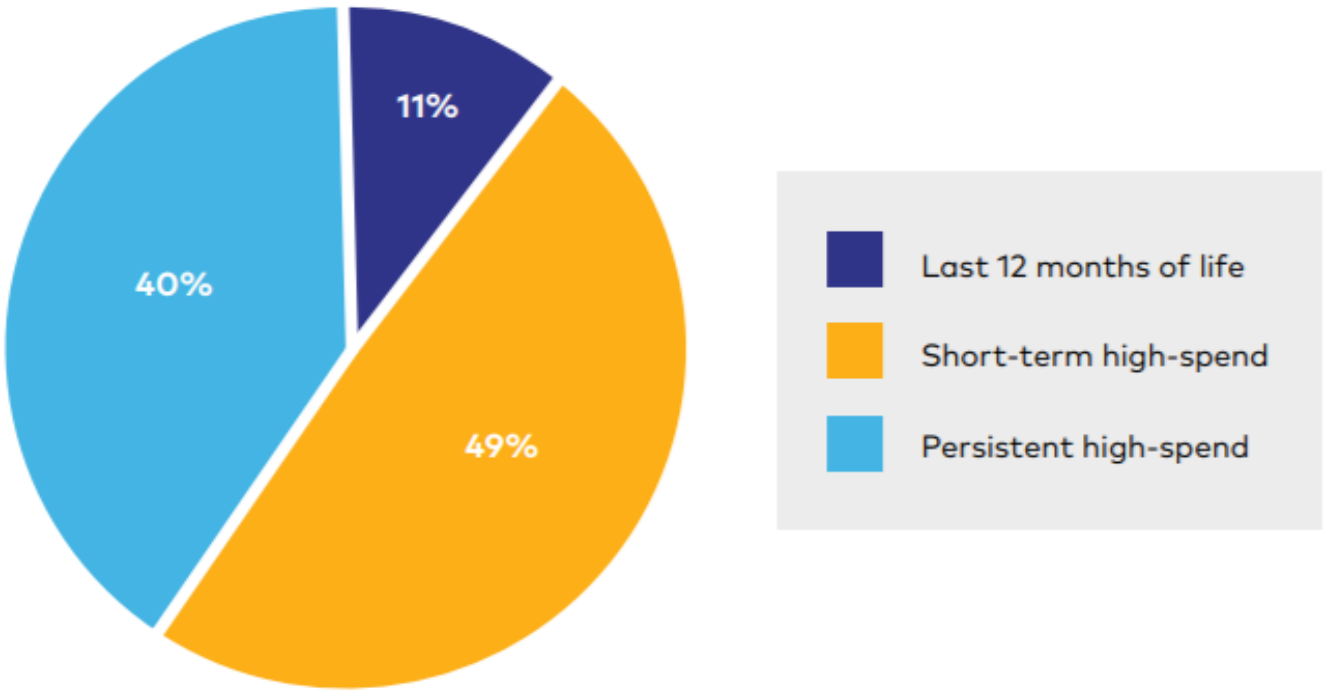
- Screens positive at pre-op visit for frailty, cognitive impairment, poor mobility and functional dependency
- Surgeon explains likely best case scenario is discharge to NH, worst case is death in hospital
- Patient and his wife decline surgery
- Still living at home 6 months later

Who needs to be screened? Older persons and the seriously Ill

- Serious illness is a health condition that carries a high risk of mortality and either negatively impacts a person's daily function or quality of life or excessively strains their caregivers
- Examples: frailty, dementia, metastatic cancer, heart failure, COPD, multiple chronic conditions
- > 40 million in the US currently (Commonwealth Fund, 2019)

Most of these patients are chronically ill- *not* dying

Costliest 5% of Patients in the US



Institute of Medicine, *Dying in America*, 2014 (Appendix E)

Nearly 75% of hospital admissions in the US are for people with multiple chronic conditions

AHRQ Statistical Brief #183, 2014

The Experience of Serious Illness: Our Current System

- Poorly managed pain and other symptoms (van den Beuken *JPSM* 2016)
- Poor communication with clinicians (Medicare HCAHPS Summary Report 2017)
- Enormous strain on family members or other caregivers (NIH Caregiver Health Effects Study 2008)

What do patients actually want?

The risk of adverse functional and cognitive outcomes is the greatest fear and highest priority concern for patients living with serious illness

Survey of Senior Center and Assisted Living subjects, n=357, dementia excluded, no data on function.

Asked to rank order *what's most important:*

1st Independence (76% rank it most important)

2nd Pain and symptom relief

3rd Staying alive.

Fried *Arch Int Med* 2011

Treatment Preferences During Serious Illness

- **A majority would *forego treatment*** if **high probability of functional (74%) or cognitive (89%) impairment**
- To patients, functional and/or cognitive impairment is a worse outcome than death → Risk of mortality is *not* the major determinant in patient choice.

Terri R Fried MD, et al, *Understanding the Treatment Preferences of Seriously Ill Patients,* NEJM 2002; 346: 1061-66

What Matters: Quality of Life

Survey of women >74 years of age

80% report they would rather be dead than experience the loss of independence and quality of life resulting from a hip fracture leading to admission to a nursing home.

Salkeld, G et al, *Quality of life related to fear of falling and hip fractures in older women: a time trade off study,* BMJ 2000; 320(7231): 341-46

Identifying HIGH RISK patients with serious illness or frailty can PREVENT HARM AND REDUCE COSTS

How can we help patients decide?

Assess the reliable predictors of outcomes that matter most to patients ***before the procedure.*** Examples:

1. Frailty
2. Delirium
3. Polypharmacy/Anticholinergic drug burden

Why should we care?

Surgical Outcomes Vary Dramatically based on Frailty and its Degree

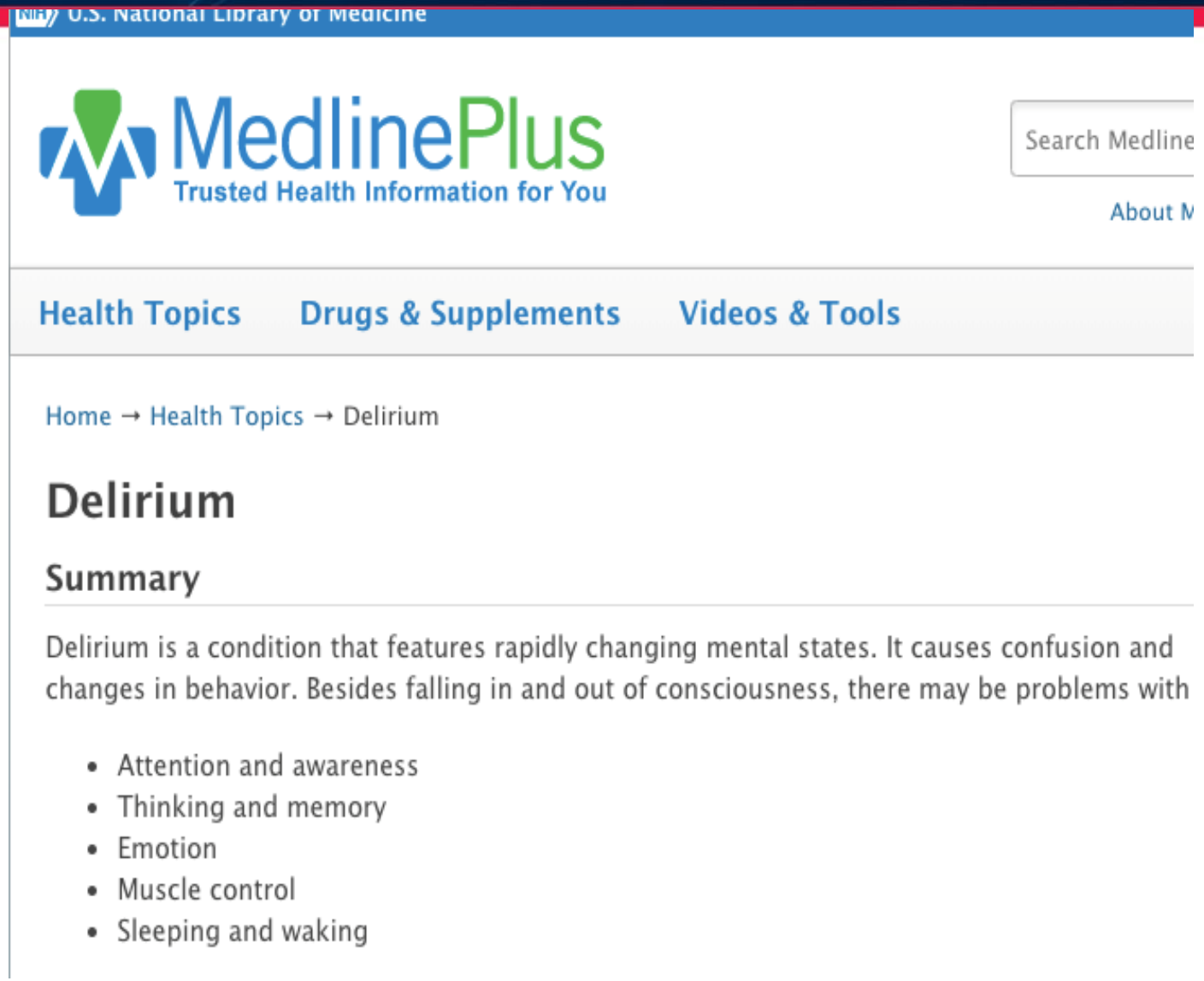
(Robinson 2013)

	Death or NH Placement
High risk frailty	64%

Frailty predicts risk of post-op institutionalization

Risk of NH placement after a major surgical procedure is 14 fold higher in frail patients (42% vs. 3%).

What is Delirium?



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Delirium

Summary

Delirium is a condition that features rapidly changing mental states. It causes confusion and changes in behavior. Besides falling in and out of consciousness, there may be problems with

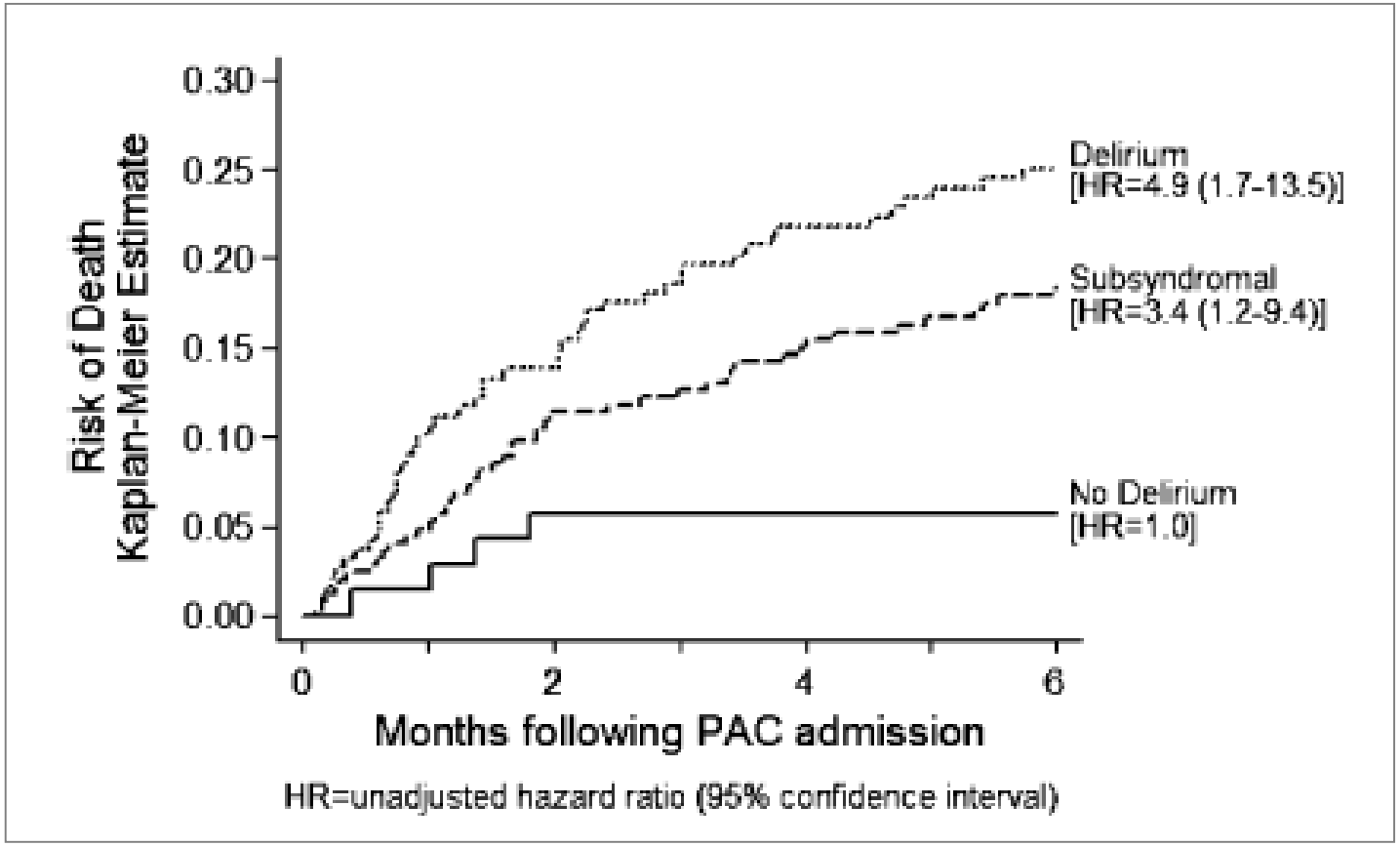
- Attention and awareness
- Thinking and memory
- Emotion
- Muscle control
- Sleeping and waking

Why should we care?

Delirium is associated with **long-term harms**:

- Higher length of stay, readmissions, mortality, and long term nursing home placement
- Permanent functional decline
- Permanent cognitive decline

Why should we care? (continued)



Surgically-induced delirium associated with permanent dementia

5 years post-hip or knee replacement, patients who developed delirium were 10.5 times more likely to develop dementia than those who did not

(Wacker, *DCGD*, 2006) (Marcantonio, JAGS, 2000)

What is anticholinergic drug burden and why should we care?

- Anticholinergic drugs are common and commonly prescribed to and used by older people (e.g. Benadryl OTC)
- Cumulative adverse effect on cognition and increased risk of death.

Anticholinergic drug burden→ cognitive impairment and mortality

N = 8,334 x age =75.2

- After adjusting for multiple variables, use of anticholinergic drugs associated with greater decline in cognition over 2 years
- Mortality was 20% at 2 years if on an anticholinergic vs 7% if not. Every point increase in ACB →26% greater chance of death.

Fox, Chris, MD, et al, *Anticholinergic Medication Use and Cognitive Impairment In the Older Population: The Medical Research Council Cognitive Function and Aging Study,* JAGS 2011, 59; 1477-83 Richardson K et al. Anticholinergic drugs and risk of dementia: A case control study. BMJ 2018;361:k1315

These outcomes can be avoided.

The New York Times

THE NEW OLD AGE

The Elderly Are Getting Complex Surgeries. Often It Doesn't End Well.

Complication rates are high among the oldest patients. Now a surgeons' group will propose standards for hospitals operating on the elderly.

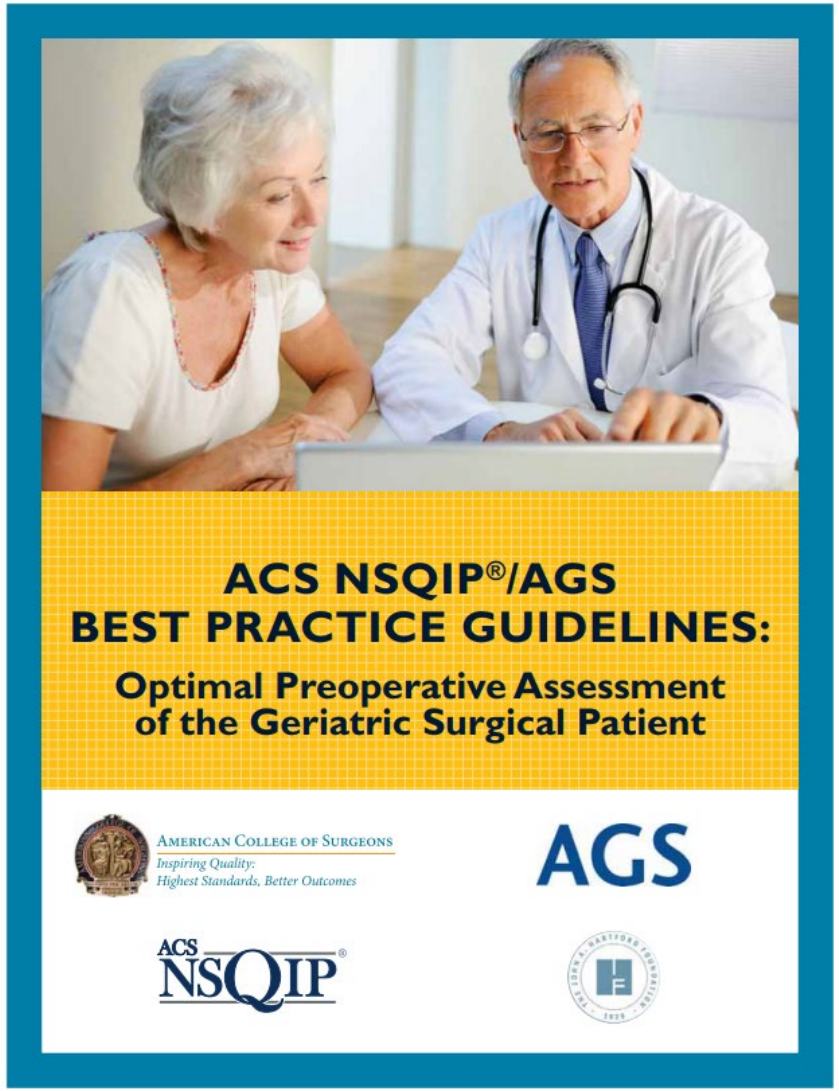
By Paula Span

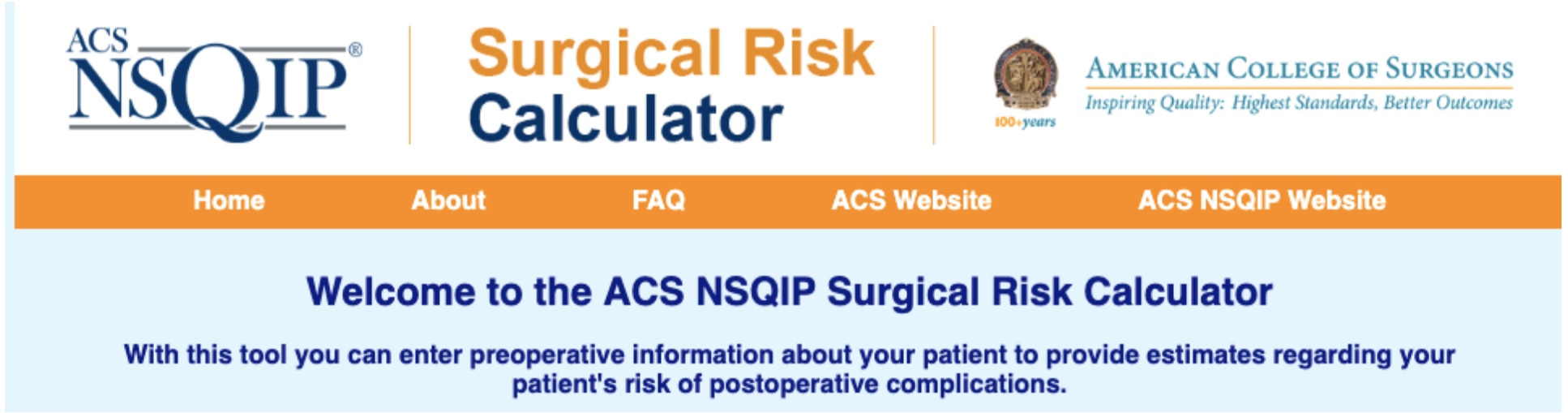
https://www.nytimes.com/2019/06/07/health/elderly-surgery-complications.html

June 7, 2019

Joint guidelines for preoperative evaluation

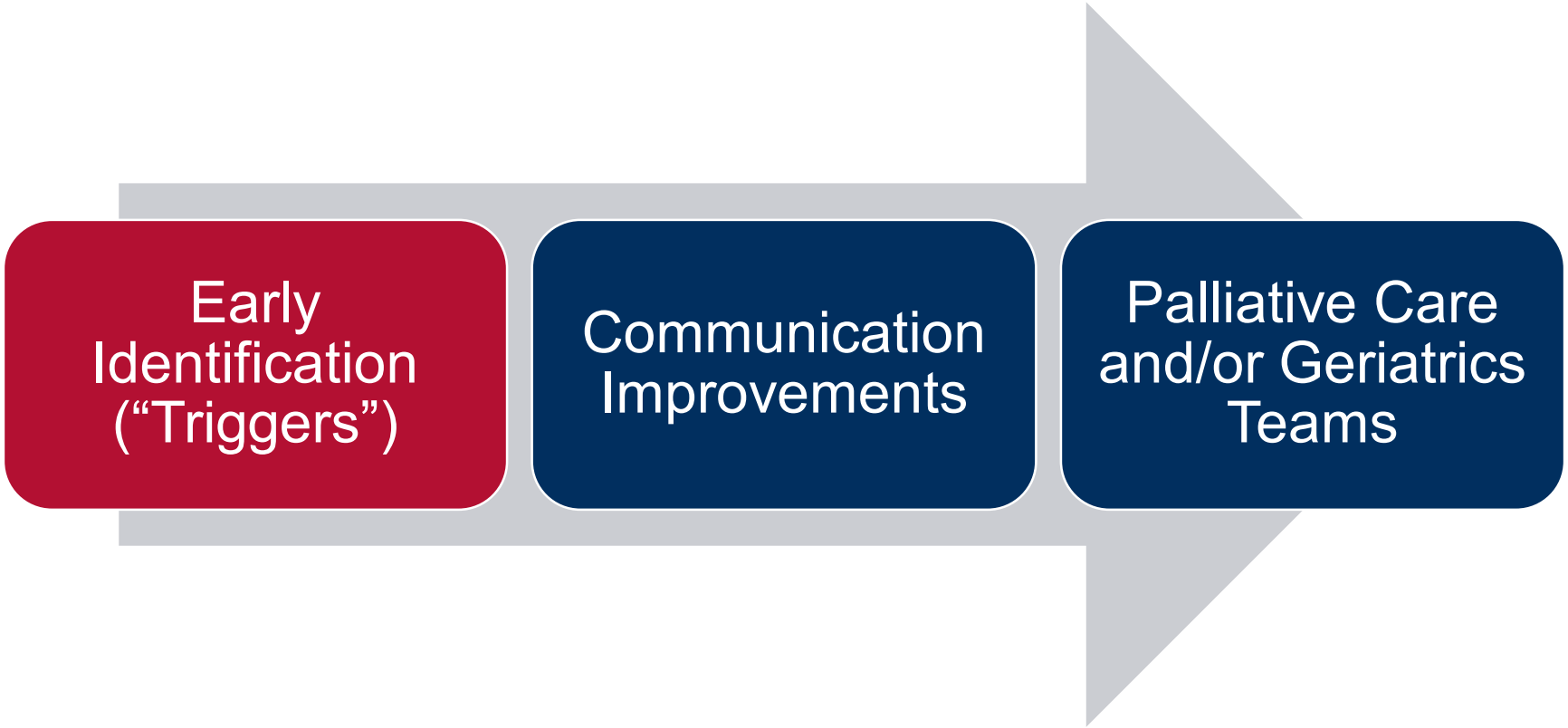
- Cognitive assessment
- Functional assessment
- Frailty score
- Determine patient's treatment goals and expectations in the context of realistic outcomes





https://riskcalculator.facs.org/RiskCalculator/PatientInfo.jsp

Process improvements dramatically impact outcomes



This starts with early identification processes

Screening to identify high risk people

- 35% of hospitals reporting to the National Palliative Care Registry™ use triggers to identify high risk patients
- About 1/3 use identification algorithms built into the hospital EMR
- Positive screens lead to routine consultation with palliative care or geriatrics with the primary team

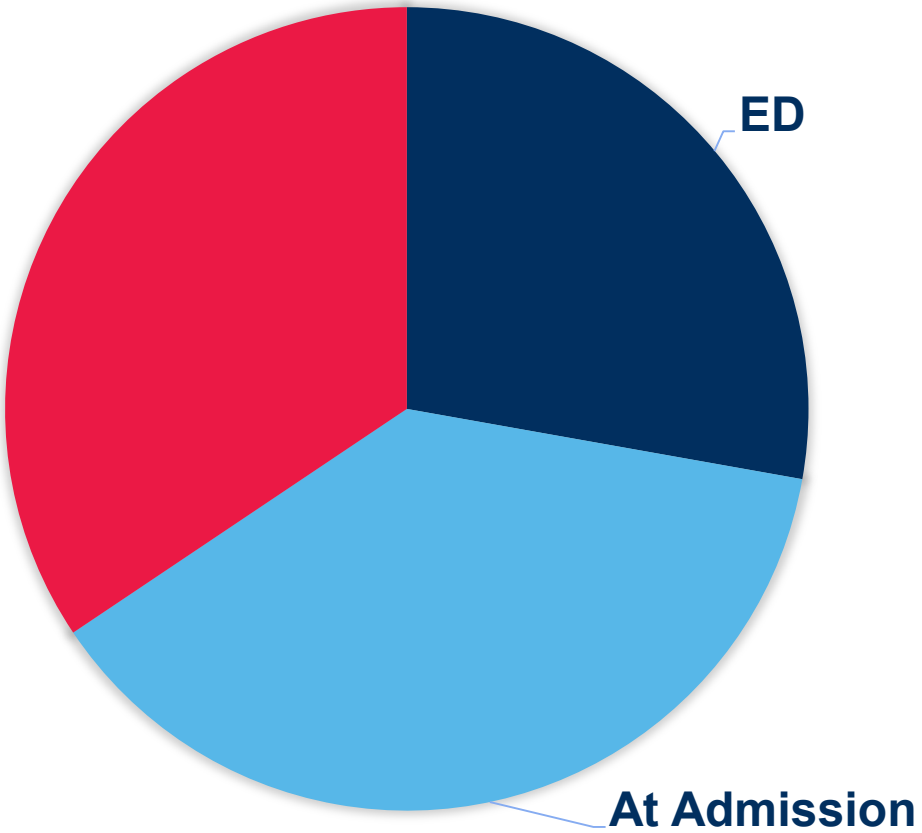
Common elements of hospital trigger programs:

- Frailty
- Confusion, memory loss
- Polypharmacy, anticholinergic drug burden
- Functional decline
- Specific diagnoses (eg, frailty, advanced cancer, COPD, HF, dementia, ESRD)
- Age (>75)
- 30-day readmission
- Distressing symptoms
- Family caregiver burden

The most common screening time is upon ED or hospital admission

WHEN PATIENT IDENTIFIED

Admission to ICU; prior to procedure; clinic



Screening leads to evaluation to

Identify high risk of:

- hospital-induced delirium
- post hospital mortality
- cognitive and/or functional decline
- institutionalization after hospitalization
- post hospital mortality
- prolonged hospital length of stay
- hospital complications
- rehospitalization

Patients want to know about their risk of these outcomes BEFORE any intervention, including hospitalization

Impact of palliative care-surgery co-management

Does it work?

Pre-op (physician led) palliative care consultation led to a 33% reduction in 180-day mortality ($p<0.001$) after controlling for age, frailty, and whether or not the patient had surgery.

Surgical System wide Palliative Consultation and Frailty Screening:
Ernst, KF, et al, *Surgical Palliative Care Consultations Over Time in Relationship to System wide Frailty Screening,* 2014 JAMA Surg

What can you do on Monday?

1. Create a steering committee (surgeons, palliative care, geriatrics, quality) charged to review these data and make a recommendation for action to the health system;
2. Pilot test standardized screening pre-op, on admission, and/or in ED on one service;
3. Based on pilot outcomes, embed screens in EHR and mandate completion;
4. Develop protocols for standard referrals based on screening results

Identifying those at high risk

Predictor of Risk	Screening Tool	Website
Frailty	Hopkins Frailty Assessment Calculator	hopkinsfrailtyassessment.org
Function	Katz ADL	pogoe.org
Cognition	Mini-Cog	mini-cog.com
Delirium	Short Confusion Assessment Method	hospitalelderlifeprogram.org
Mobility	Timed Up and Go Test	pogoe.org
Anticholinergic drug burden	ACB Calculator	acbcalc.com
Prognosis	ePrognosis	eprognosis.ucsf.edu
Depression	PHQ-2	cqaimh.org/pdf/tool_phq2.pdf

What else can you do?

1. Train your clinicians in essential knowledge and skills
2. Adequately staff and support your palliative and geriatric medicine teams to do this work
3. Watch costs go down and quality rankings go up

All clinicians caring for people with serious illness should have these basic skills

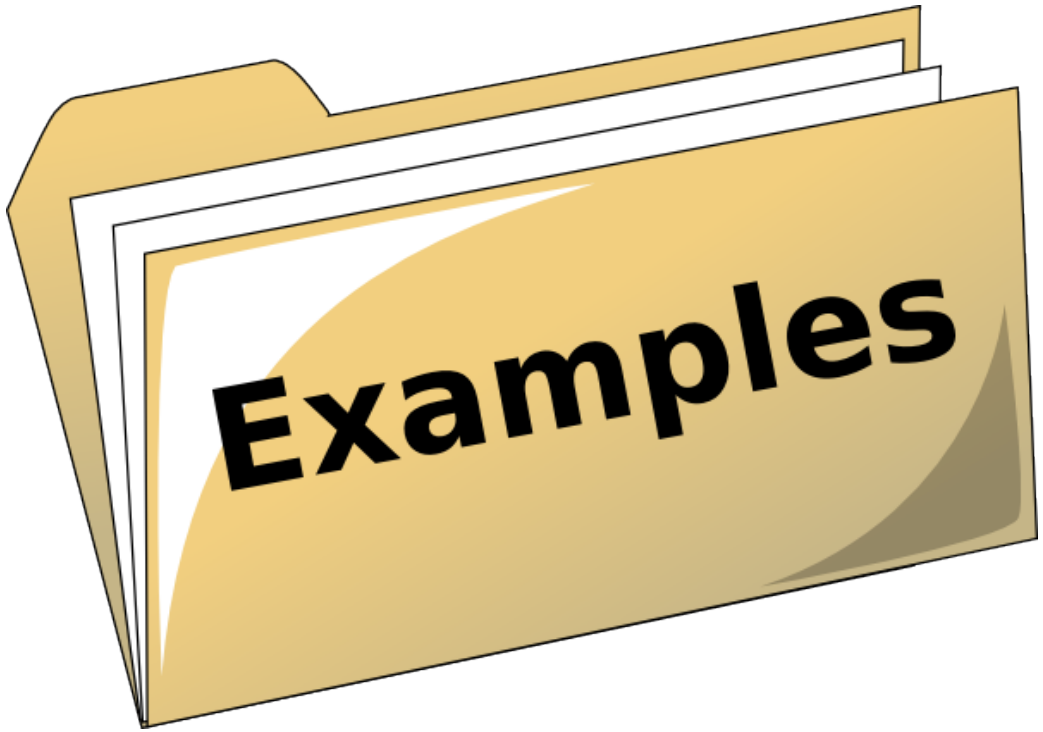
1. Screening for risk of poor outcomes, integrating information into shared decision-making
2. Clarifying goals and treatment decisions (by asking people what matters most to them) and modifying care plans accordingly
3. Assessing for distress
   - Symptoms
   - Psycho-social-spiritual needs
   - Caregiver burden
4. Managing pain and symptoms
5. Referring to specialist level palliative care teams when needed

OWNERSHIP: This is our job

- Our patients depend on us to protect them from foreseeable harm
- We are responsible for both the short term and the long term consequences of our care.
- Standard screening identifies highest risk patients and permits care planning matched to what is most important to our patients.

Discussion: What Has Worked at Your Organization?

Triggers?
Communication Skills Training?
Other?



More information?

Center to Advance Palliative Care:

Tools, Training, and Technical Assistance

www.capc.org

www.getpalliativecare.org

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