Readmissions and Palliative Care Breaking the Cycle

Stephen Evans M.D.
Physician Group Leader
IPC of New York Medical, PC
President and CEO of VIdex US, LLC
Buffalo, New York

Margaret Sayers MS, GNP
COO of VIdex US, LLC
Buffalo, New York

Reducing hospital readmissions

ARTICLES DEALING WITH HOSPITAL READMISSION STRATEGIES ABOUND

- Identifying patients at risk of readmission
- Developing interventions to modify this risk
- Quantifying severity of illness or intensity of interventions
- Categorizing time-frame events (pre-admission, post-discharge)
- Predicting rates based on identification of generic factors

STILL

- **There is NO significant improvement in readmission rates**
- **No single intervention is regularly associated with reducing 30-day readmission**

Reducing hospital readmissions

Strategies from this Readmissions Summit

Interventions to Protect the Patient from the stressors caused by their disease and environment

Examples:

- Care Coordination & Communication
- Predictive Intelligence (of risks)
- Using SWA after discharge
- Home Health Care – Senior Services - Paying lay caregivers
- Better ER care
- Medication Management, and more…….

Questioning hospital readmission rates

1. **WHY** do some patients have higher risk than others for readmission?
2. **WHAT** is the relation of that patient's increased risk and various outcomes?

"The lack of significant improvement in readmission rates [with the variety of interventions available] suggests there is a much more complex relationship between risk factors, interventions, and intended outcomes. "(Marks, 2013)

The complex relationship behind readmission rates

Risk and outcomes

Research based focus on risk:

- Some patients have a higher risk for readmission as a result of their intrinsic risk from biological aging. (Mitnitski, 2013)

- This intrinsic risk is manifest as frailty and vulnerability to adverse outcomes. (Howlett, 2013)

- As frailty increases so also do the number of adverse outcomes, including death. (Koller, 2013)

We would argue that readmissions, infections, falls, low-trauma fractures, and death all exist on the same continuum of risk.

Choosing a measure for the continuum of risk

Characteristics of Ideal Measure:

- Continuum in which small score differences define illness states with distinct prognosis (Jones 2004)
- Valid and reliable in all clinical settings
- Data elements easily mined from EMR
- Real-time availability of score
- Relative baseline stability/little immediate response to acute illness overall (separate from acute illness)
- Potential link among different types of care

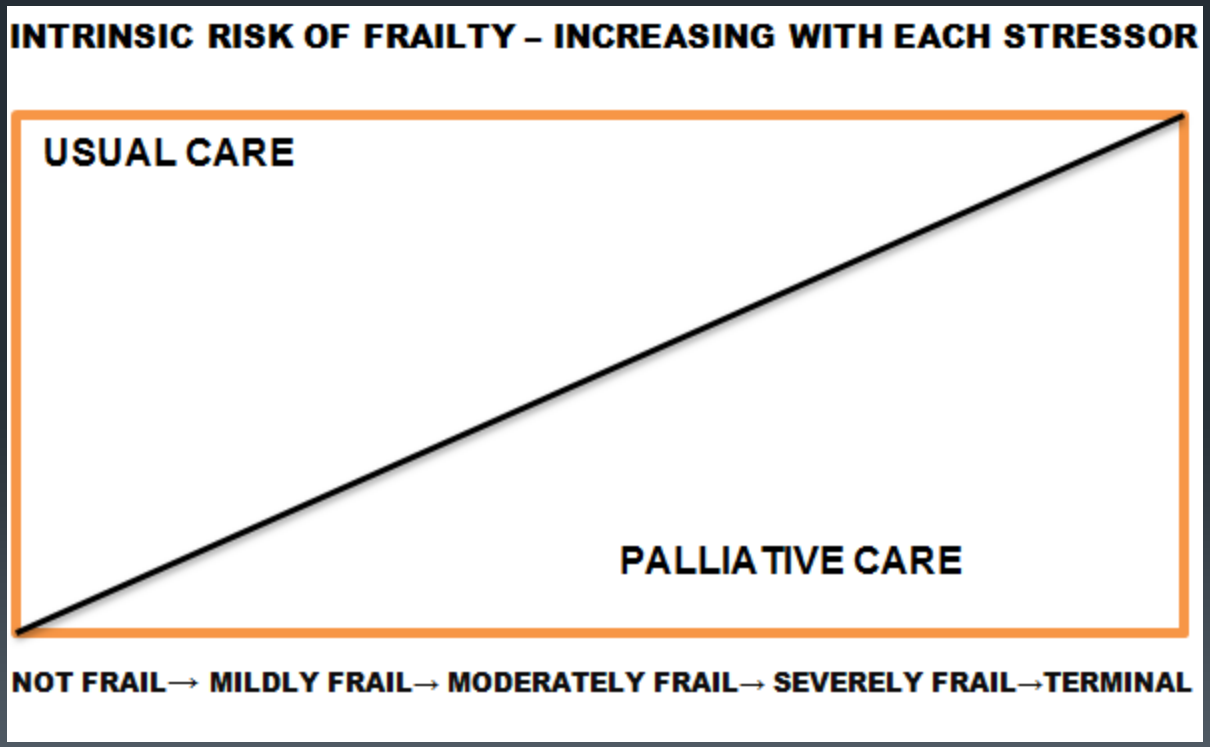
Possible continuums of risk

Cognitive Loss: Many tools exist to identify and quantify dementia but they exclude those vulnerable BUT not demented.	Weakest association with risk when used alone
Functional Loss: Difficult in many settings to access meaningful functional assessments and do not capture everything.	Stronger association with risk (paralleling each increase in level of frailty)
Frailty: When quantified in clinically relevant and comprehensive tool it increases the prediction of adverse outcomes about 17% over functional loss. (Jones, 2004)	Strongest association with risk

Managing patients on a frailty risk continuum

ALL adverse outcomes, including readmissions and death, are on the same risk continuum that changes with intrinsic risk or biological aging

AND this movement influences the type of care likely to benefit ill elderly.



Connecting the dots: how placement on a risk continuum may sort for more appropriate treatment in cancer

Early Palliative Care for Patients with Metastatic Non–Small-Cell Lung Cancer. Jennifer S. Temel, M.D., Joseph A. Greer, Ph.D., et al. N Engl J Med 2010; 363:733-742.

August 19, 2010 DOI: 10.1056/NEJMoa1000678

- Earlier palliative care, including pain and symptom relief, lengthened life and improved patient satisfaction with care.

Or dementia

The Clinical Course of Advanced Dementia. Susan L. Mitchell, M.D., M.P.H., Joan M. Teno, M.D., et al. N Engl J Med 2009; 361:1529-1538 October 15, 2009

- Patients with advanced dementia have a high mortality rate.
- Infections and other usual illnesses present differently and outcomes are worse.

Or pneumonia

Outcome of nursing home-acquired pneumonia: derivation and application of a practical model to predict 30 day mortality. Naughton BJ, Mylotte JM, Tayara A. J Am Geriatr Soc 2000;48:1292-9.

- Clinical outcomes in demented patients with pneumonia are better in the SNF than in hospital.
- For residents admitted to the hospital for treatment of NHAP, the mortality rate ranged from 13% to 41%, compared with a mortality rate of 7%–19% for residents treated in the nursing home. (Mylotte, 2002 + Naughton, 2000)

What is Palliative Care?

- It is specialized medical care for people with serious illness and is focused on improving quality of life as defined by patients and families.
- It is appropriate at any age, for any diagnosis, at any stage in a serious illness, and is provided together with curative and life-prolonging treatments.

Definition from public opinion survey conducted by ACS CAN and CAPC

The Potential for Intervention (in oncology) Frailty as a Dynamic Process

"Regardless of the schema used to classify frailty, the imperative is to find ways to identify transitions between clinical states in the Geriatric oncology population."

Understanding frailty

- Assists in therapeutic decision making
- Identifies candidates for standard treatment or palliative care
- Brings a much-needed step toward designing the best care for vulnerable adults." (Pal, 2010)

Schemas to identify frailty

The frailty phenotype and the frailty index: different instruments for different purposes. Cesari M, et al. Age and Ageing, 10/25/2013

- The frailty phenotype (validated by Fried and colleagues in the Cardiovascular Health Study) and the Frailty Index (validated by Rockwood and colleagues in the Canadian Study of Health and Aging) represent the most known operational definitions of frailty in older persons.
- Often wrongly considered as alternatives and/or substitutable. These two instruments are indeed very different and should rather be considered as complementary.

Making frailty scalable - a continuum of risk

- “Frailty is not ‘all or none’ and needs to be graded.” (Koller, 2013)
- “A gradation of frailty, with progressive accumulation of deficits, is more clinically attractive than a present or absent model.” (Clegg, 2013)
- “The continuous frailty index showed greater discriminatory ability for people with moderate and severe frailty than that shown by the categorical phenotype model—a finding that has been validated independently.” (Kulminski, 2008)

Frailty in Geriatric Healthcare Today

- The concept of frailty directs attention away from the usual "organ-specific", "one-illness" approach to Geriatric healthcare.
- Frailty is strongly associated with adverse outcomes & poor resolution of homoeostasis after a stressor event.
- Identifying & quantifying frailty allows practitioners to balance benefits with risks and patients to make properly informed choices.
- The comprehensive geriatric assessment while resource-intensive is the most evidence-based process to detect and grade frailty for severity.
- Use of existing clinical datasets will advance routine use of this tool.

(Clegg, 2013)

In the meantime - screen

"Health care professionals characterize different kinds of people as frail because they do not have the same perception of frailty: standardized screening should be used across disciplines." (Abellan van Kan, 2010)

The Clinical Frailty Scale©

A pocket card allowing immediate determination of the presence of frailty.

- The scale for the Clinical Frailty Scale is from 1 [very fit] to 9 [terminally ill]
- Patients at ≥4 (vulnerable) are usually referred for completion of a more comprehensive assessment **TO DETERMINE DEGREE OF INTRINSIC FRAILTY**
- This scale cut point, usually ≥4, can be increased depending on population, available staff, or other targets

Clinical Frailty Scale

1. **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2. **Well** – People who have no active disease symptoms but are less fit than Category1. Often, they exercise or are very active occasionally, e.g. seasonally.

3. **Managing Well** – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4. **Vulnerable** – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up," and / or being tired during the day.

5. **Mildly Frail** – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6. **Moderately Frail** – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

7. **Severely Frail** – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8. **Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. **Terminally Ill** – Approaching the end of life. This category applies to people with a life expectancy < 6 months, who are not otherwise evidently frail.

Where dementia is present, the degree of frailty usually corresponds to the degree of dementia:

- **Mild dementia** – includes forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.
- **Moderate dementia** – recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.
- **Severe dementia** – they cannot do personal care without help.

K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489–495

The Frail Scale

- Geriatric Advisory Panel International Advisory Panel Nutrition Health and Ageing 2008

- Fatigue
- Resistance (stairs)
- Ambulation
- Number of Illnesses
- Loss of Weight

- Combination of Fried phenotype and FI

Summarizing

To date no significant **Reduction in Readmissions:** Relationship between risk factors, interventions, and intended outcomes is complex. (Marks, 2013)

Risk for readmissions and other adverse outcomes is higher in elderly who are vulnerable as a result of their frailty. (Mitnitski, 2013)

Quantifying frailty can help to reduce interventions or prompt consideration of palliative care when the “standard of care” would be burdensome & without clinically meaningful benefit to the patient. (Moorehouse, 2012)

Referral to a PC team can result in a reduction of readmissions, fewer ICU readmissions, and increased deaths outside of the hospital. (Gade, 2008, Fromme, 2006)

Final Word

- Breaking the Cycle: What would that resemble?

- Frailty likely represents the only scalable approach to identify elderly patients whose interventions are more likely to group in the 40% of hypothesized harmful/unhelpful care within Medicare.