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Geriatric ECHO

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The Art of Managing Multimorbidity

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The Art of Managing Multimorbidity

Guiding Principles for Managing Older
Adults with Multiple Chronic
Conditions

1/11/2023

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JABSOM

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Adapted from GRS 10
Teaching Slides from
AGS

Objectives

1. The definition of multimorbidity and problems associated with it
2. Why most clinical practice guidelines are not appropriate for older adults with multimorbidity
3. The 5 guiding principles for evaluating older adults with multimorbidity
4. Know how to use ePrognosis as a resource

*What comes to mind when
you hear the word
"Multimorbidity"?*

Multiple chronic conditions

Impacts on death, disability, adverse treatment effects

High use of healthcare resource

Complex due to multiple medications and interactions

Advanced Care Planning and difficult decision making

Challenging caregiver situations - Needs care
management or care coordinator

Frailty

Disability

Vulnerable

Decreased Quality of Life



What is the Problem with Using Clinical Practice Guidelines for these Older Adults?

- Most CPGs focus on the management of only ONE disease
- Older Adults with multimorbidity are excluded or under-represented in clinical trials.
- CPG-based care may be cumulatively impractical, irrelevant or even harmful for these people

Patients are also individuals, and vary by:

-
- Illness Severity
 - Functional Status
 - Prognosis
 - Personal priorities
 - Risk of Adverse Events

So How do we Approach Multimorbidity?

AGS CLINICAL TOOL

Five Guiding Principles

Visit GeriatricsCareOnline.org to learn more about the GEM tools and the new multimorbidity GEMS mobile app.

MULTIMORBIDITY

AGS Geriatrics Evaluation and Management Tools (Geriatrics E&M Tools) support clinicians and systems that are caring for older adults with common geriatric conditions.

From the AMERICAN GERIATRICS SOCIETY

Geriatrics Evaluation & Management Tools

BACKGROUND

- One of the greatest challenges in geriatrics is providing optimal care (patient centered and evidence based) for older adults with multiple chronic conditions, or multimorbidity.
- More than 50% of older adults have ≥ 3 chronic diseases, with distinct, cumulative effects for each individual.
- Multimorbidity is associated with increased rates of death, disability, adverse effects, institutionalization, use of health care resources, and decreased quality of life.
- Most clinical practice guidelines (CPGs) focus on management of a single disease, but CPG-based care for several co-occurring diseases may be impractical, irrelevant, or even harmful for individuals with multimorbidity.
 - Older adults with multimorbidity are regularly excluded or under-represented in trials and observational studies, which means there is less focus on older adults in meta-analyses and systematic reviews and guidelines.
- It is particularly appropriate to apply the approach described in this document for those older adults with multimorbidity who appear to be at greatest risk of adverse effects on health status, function, or quality of life and who require complex health care management, decision making, or coordination.

APPROACH

The five domains outlined in this document are relevant to the care of older adults with multimorbidity.

PATIENT PREFERENCES

Elicit and incorporate patient preferences into medical decision making.

- It is important to distinguish between *eliciting preferences* and *making treatment decisions*.
 - *Eliciting preferences*: Individuals voice their opinions about treatment options and potential outcomes based on personal values and priorities.
 - Example: "I do not want mechanical ventilation because being at home is really important to me, and I do not want to return to the hospital even temporarily. I know my life is short, and I do not want to be bedbound or in a state where I couldn't interact with my family."
 - *Making treatment decisions*: The patient chooses a specific treatment option.
 - Example: "I do not want mechanical ventilation."
- All clinical decisions require an assessment of patient preferences.
 - Less complex decisions may need a brief investigation of preferences to make treatment decisions.
 - More complex decisions may need a more detailed investigation of preferences to make treatment decisions.
- Older adults with multimorbidity need to be adequately informed about the expected benefits and harms of treatment options before eliciting their preferences to make a treatment decision:
 - Present the likelihood of the event occurring or not occurring.
 - Offer absolute rather than relative risks (see Interpreting the Evidence, below).
 - Use visual aids.
 - Assess patient understanding of the information presented (eg, using a "teach back" technique).
 - For individuals who cannot understand the implications of different options, surrogate decision makers may need to assist with decision making.
- The patient's decision-making styles should be accommodated.
 - Patients may want family, friends, or caregivers to be included in decision making or even to make the

Five Guiding Principles

Patient Preferences

Interpreting the Evidence

Prognosis

Clinical feasibility

Optimizing therapies and care plans

(no set sequence)

Guiding Principle #1

PATIENT PREFERENCES

Elicit and incorporate patient preferences into medical decision-making

Care provided in accordance with CPGs may not adequately address individual preferences

They should have the opportunity to evaluate choices and prioritize their preferences for care, within personal and cultural contexts.

ASK: At this stage in your life What Matters Most to you?

CASE EXAMPLE:

80 year-old woman with Afib has an indication for warfarin by traditional algorithms. She does not wish to have regular blood monitoring and does not feel safe taking the newer anticoagulants. She understands the trade-offs and elects to take daily aspirin.

Guiding Principle #2

INTERPRETING THE EVIDENCE

Recognize that there are significant evidence gaps concerning condition and treatment interactions, particularly in older adults with multimorbidity.

Interpret the medical literature specifically for this population.

ASK: Does the information apply to the individual under consideration?

CASE EXAMPLE:

84 year-old man with HLD with no history of vascular (cardiac, cerebral, peripheral) events. He has been on a statin for 12 years. You examine the evidence and advise him that he can stop taking the statin if he wishes because of lack of evidence that he will benefit from this medicine in primary prevention.

Guiding Principle #3

PROGNOSIS

Frame Management decisions within the context of risks, burdens, benefits, and prognosis

ASK: Is time to benefit > life expectancy

1. Discuss Prognosis= remaining life expectancy, functional status and QOL
2. Facilitate Decision-making and ACP
3. Address preferences, treatment rationale and therapy prioritization

CASE EXAMPLE:

79 year-old woman DM, CHF, CKD4. Her daughter is pushing her to get her regular colonoscopy, but she is reluctant. Using www.eprognosis.ucsf.edu/ her provider finds that her estimated remaining life expectancy is <10 years, and therefore not likely to experience overall benefit from screening colonoscopy.

Guiding Principle #4

CLINICAL FEASIBILITY

Consider treatment complexity and feasibility

Complex regimen nonadherence, adverse reactions, impaired QOL, costly, caregiver strain, and depression.

Requires ongoing and more thoughtful approach to education and assessment.

ASK: Can this patient and family do this?

CASE EXAMPLE:

87 year-old man complains of fatigue and feels he takes too many medications. He has dementia, heart failure, osteoarthritis, osteoporosis, insomnia, diabetes, and prostate disease. He has 16 medications, and often forgets to take his evening doses and does not monitor his blood glucose. You discuss with patient and daughter and decide to stop 5 of his medications, modify times of administration, and recommend a pillbox.

Guiding Principle #5

OPTIMIZING THERAPIES AND CARE PLANS

Choose therapies that maximize benefit, minimize harm and enhance QOL.

Consider if there are:

Too many meds: Reducing polypharmacy lowers the risk of ADE

Too few meds: suboptimal medication use

Burdensome interventions: even nonpharmacologic interventions may be more burdensome than beneficial if inconsistent with preferences.

ASK: Does this enhance QOL?

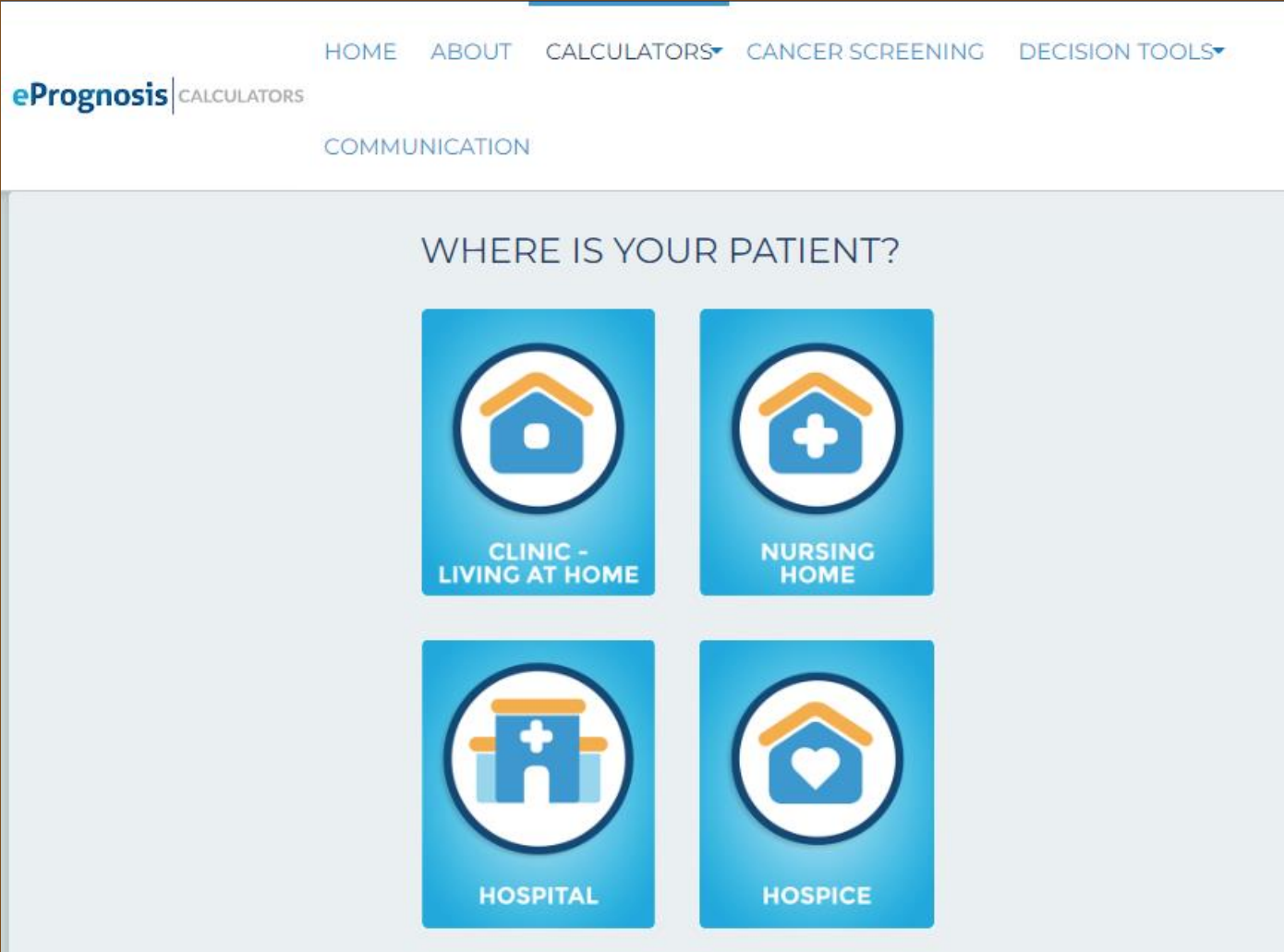
CASE EXAMPLE:

92 year-old widowed man Adv Dementia returns to care of daughter after hospitalization for systolic heart failure. A cardiologist proposed implanting an AICD, but the daughter points out that her father has intense anxiety and won't leave the house. You ask her if her father –if able to speak for himself- would choose an invasive intervention designed only to prolong his life.

Resource for Prognosis:

ePrognosis.ucsf.edu/calculators/index.php

To estimate risk of mortality and disability by setting



The screenshot shows the ePrognosis website interface. At the top, there is a navigation menu with links for HOME, ABOUT, CALCULATORS (with a dropdown arrow), CANCER SCREENING, and DECISION TOOLS (with a dropdown arrow). Below the navigation is the ePrognosis logo followed by the word CALCULATORS. Underneath that is the word COMMUNICATION. The main content area is titled "WHERE IS YOUR PATIENT?" and features four blue square buttons with white icons and text: "CLINIC - LIVING AT HOME" (house icon), "NURSING HOME" (house with cross icon), "HOSPITAL" (hospital building icon), and "HOSPICE" (house with heart icon).

[ePrognosis - Calculators \(ucsf.edu\)](http://ePrognosis - Calculators (ucsf.edu))

Resource for Prognosis:

ePrognosis.ucsf.edu/cancer/index.php

The screenshot shows the top navigation bar of the ePrognosis website with links for HOME, ABOUT, CALCULATORS, CANCER SCREENING, and DECISION TOOLS. Below the navigation is the text 'ePrognosis' and 'COMMUNICATION'. The main content area is titled 'WHAT WOULD YOU LIKE TO SCREEN FOR?' and features three blue buttons, each with a clipboard icon and a checklist. The first button is labeled 'COLORECTAL CANCER', the second 'BREAST CANCER', and the third 'BOTH CANCERS'. Each button also contains a green checkmark and three orange bars representing a checklist.

[ePrognosis - Cancer \(ucsf.edu\)](http://ePrognosis - Cancer (ucsf.edu))

Resource for Prognosis:

ePrognosis.ucsf.edu/time_to_benefit/index.php

[ePrognosis Time to Benefit \(ucsf.edu\)](http://ePrognosis.ucsf.edu/time_to_benefit/index.php)

Instructions:

Adjust life expectancy using the orange slider.

● Generally recommended

● Generally not recommended



Resource for Prognosis:

ePrognosis.ucsf.edu/communication/index.php

[ePrognosis - Communication \(ucsf.edu\)](http://ePrognosis - Communication (ucsf.edu))

PROGNOSIS COMMUNICATION

Example Discussions



**DIABETES
DISCUSSION**



**CANCER
SCREENING**



**GOALS OF CARE &
CODE STATUS**

Communication Skills

[Addressing Emotions](#)

[Discussing Lag Time
to Benefit](#)

[Making a
Recommendation](#)

[Asking Permission](#)

[Ask-Tell-Ask](#)

[Addressing
Uncertainty](#)

[Care Consistent with
Goals](#)

[Discussing Next Steps](#)

[Discussing Trade-offs](#)

[Individualizing
Prognosis](#)

CASE EXAMPLE: Ms. RL

83 year-old woman

Had been living in her own 2 story home, with family members rotating to stay with her/assist her

Has 2 daughters and 2 sons

Ms. RL

PAST MEDICAL HISTORY

Dementia with periods of delusions and aggression

History of malignant liposarcoma of right thigh (s/p resection)- felt to be “cured”

Hypertension

Generalized arthritis (chronic pain)

Irritable bowel syndrome (recurrent GI symptoms)

Hyperlipidemia

CAD and CHF

Osteoporosis with history of fracture

Ms. RL

MEDICATIONS

Citalopram 20 mg daily (agitation)

Quetiapine 25 mg Q12 hours for extreme agitation/ aggression

Acetaminophen 1 gm BID; and 650 mg BID prn

Furosemide 40 mg daily (for symptomatic edema)

KCl 40 meq daily

Melatonin 3 mg Qhs for sleep

Guiding Principles

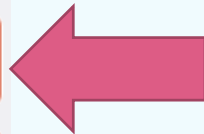
Patient Preferences

Interpreting the Evidence

Prognosis

Clinical feasibility

Optimizing therapies and care plans



Note: Several health issues were intentionally NOT addressed or treated

Ex:

- CAD- not on ASA
- HLD- not on statin
- Osteoporosis- not on Ca, Vit D, Bisphosphonates
- HTN- simplified approach to HTN management

What is her prognosis?

ePrognosis *hospital setting*

Ms. RL

One year later

Worsening agitation, aggression,
difficulty with care at home and day care
center

Admission to med-psych unit to optimize
care and medication management
before return home

Develops severe respiratory symptoms
and hospitalized in January

Marked abdominal distension

Walter Index

- Population: Hospitalized adults age 70 and older
- Outcome: All cause 1 year mortality
- Scroll to the bottom for more detailed information

English Español Français Português

Risk Calculator

1. What is your patient's biological sex? Female

2. Upon discharge, does your patient need help from others in order to:

- bathe (defined as bathing more than one part of the body and/or getting in or out of the tub or shower)? Yes No
- dress (defined as help dressing self)? Yes No
- transfer (defined as moving from bed to chair)? Yes No
- toilet (defined as transferring to toilet, cleaning self, or using bedpan or commode)? Yes No
- eat (defined as partial or total help feeding or requiring parenteral feeding)? Yes No

3. Does your patient have congestive heart failure? Yes No

4. Does your patient have solitary or metastatic cancer? (If your patient has only had minor skins cancers, select "no.") No Solitary Metastatic

5. What is your patient's admission creatinine? ≤ 3.0

6. What is your patient's admission albumin? > 3.4

What is her prognosis?

ePrognosis hospital setting

Ms. RL

One year later

Worsening agitation, aggression,
difficulty with care at home and day care
center

Admission to med-psych unit to optimize
care and medication management;
returns home

Develops severe respiratory symptoms
and hospitalized again in January

Marked abdominal distension

Results Based on Score:
Your total score is: 4

One Year Mortality	
Points	Risk of 1 year mortality (95% CI)
0 - 1 Points	4% (2-4)
2 - 3 Points	19% (15-23)
4 - 6	34% (29-39)
> 6	64% (58-70)

One year mortality: 34%
**Value of treating conditions with
deferred benefit uncertain**

Ms. RL

Her Rocky Course...

Hospital

+ Influenza, started on oseltamivir
Bowel “pseudo-obstruction” and abdominal distention
All stool studies negative
Hypokalemia difficult to treat
Discharged home.

Home

Continued abdominal pain and hypokalemia.
Back in HOSPITAL after 48 hours
Transferred to SNF

SNF

Increasing agitation (patient)
Increasing frustration (family) regarding multiple health problems
Lost a lot of weight
Overall QOL is poor

What is her prognosis?

ePrognosis

nursing home setting

Ms. RL

Given her decline

Now what is her prognosis?

ePrognosis

Nursing home setting

Mitchell Index

- Population: Nursing home adults aged 65 and older
- Outcome: 6 month survival
- Scroll to the bottom for more detailed information

Risk Calculator

1. Has your patient been admitted to the nursing home in the past 90 days? Yes No

2. How old is your patient?

3. What is the sex of your patient? Male Female

4. Does your patient have shortness of breath? Yes No

5. Does your patient have at least one pressure ulcer that is greater than or equal to Stage 2? Yes No

6. Is your patient totally dependent for all Activities of Daily Living, including bed mobility and eating? Yes No

7. Is your patient bedbound most of the day? Yes No

8. Does your patient have insufficient oral intake?
(Defined as not consuming almost all liquids in previous 3 days or at least 25% of food uneaten at most meals) Yes No

9. Does your patient have bowel incontinence? Yes No

10. Is your patient's BMI less than 18.5?
BMI Calculator: BMI = 703 x (weight in pounds) / (height in inches)² Yes No

11. Has your patient experience recent weight loss?
(Defined as more than 5% body weight in prior 30 days or more than 10% in prior 180 days) Yes No

12. Does your patient have congestive heart failure? Yes No

Total Points: 16.10

[Calculate risk](#)

Results Based on Score:
Your total score is 16.1

Points	Risk of 6 month mortality
1.0 - 6.4	7%
6.5 - 7.9	10%
8.0 - 8.9	13%
9.0 - 9.7	14%
9.8 - 10.5	17%
10.6 - 11.5	20%
11.6 - 12.5	23%
12.6 - 14.0	28%
14.1 - 16.1	34 - 43%
> 16.1	49 - 62%

6-month mortality: 34%

Should transition focus to patient preferences

Ms. RL

Family Meeting

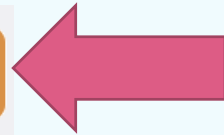
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Preference: comfort care at home

Poor prognosis discussed openly

Limited benefits from hospital care

Tough decisions, hard to gain consensus among adult children

Ultimately, decided for comfort care approach at HOME.

Stabilized at home with palliative care approach

Care burden returned to the family. They can't see doing this for > 6 months. She is readmitted to SNF for indefinite respite.

Tentative plan to return home for final days.



*Questions &
Discussion*