

Frail Elderly and Surgical Decision-making

Where is the balance?

Linda De Sitter, MD

Objectives

- Surgical decision making requires a good GOC discussion for each individual. What are the important factors to consider?
- Frailty does not equal futility, but it should give pause. How to factor frailty into the GOC discussion?
- Cognitive evaluation and functional evaluation should be part of every discussion. How to bring it all together for each individual patient?

Surgery in elders

- Kwok - Population study on FFS Medicare claims data
 - 31.9% underwent an inpatient surgical procedure during year before death
 - 18.3% underwent a procedure in their last month of life
 - 8.0% underwent a procedure in their last week of life
- Developed End-of-life-intensity score for each hospital referral region
- Intensity score was highest in hospitals where they served a community with high hospital bed per head ratio.

Specific surgeries

- Colectomy in elderly NH patients (Glance)
 - 30% die within 3 months after the surgery
 - 40% of the survivors have a significant decline in functional status
 - 12 months after surgery, half the patients have died and half the survivors have a sustained functional decline (Finlayson)
- Emergency laparotomy in patients over age 65 (Cooper)
 - 16% of patients over 65 do not survive their hospital stay
 - almost one-quarter of patients over 65 die within 6 months
 - almost one-half of patients over 85 die within 6 months.
- Hip fracture (Tajeu)
 - Twofold increase in mortality
 - Fourfold increase in long term care
 - Twofold increase in entering into low-income status

GOC – Value based

- More than Advance directives! What is important to this patient?
- Statements like: “I want to die in my home” are important to discuss in depth.
- Case: Ester, family available, saw her mother die in a NH, colon cancer, biggest goal is being with her pet

Remember Values

- What is important to the patient?
- Fried: 74% and 89% of elders would forego treatment if it resulted in functional or cognitive impairment, respectively. Yet most patients were willing to accept a 50% risk of death before rejecting treatment. (2002)
- There are states worse than death.

Surgical Recommendations: (Cooper 2016)

TABLE 5. Key Elements of a Communication Framework

Guide	Clinician Steps	Clinician Prompts
Prognosis	Gather data about illness trajectory and formulate prognosis. Review prior advance directives.	
Connect and elicit	Address symptoms, express concern for patient's well-being, elicit patient illness understanding	"How would you describe your overall health? How have you been functioning lately?"
Inform	Disclose information about the acute problem in context of illness trajectory	"It seems that we've hit something today that changes the course of things ..."
Summarize	Establish shared understanding of patient's overall condition	"The way I am seeing things is that you have both a serious ongoing medical issue, and a new acute surgical crisis. I think what this means is that ..." "I can see how upsetting this is ..."
Pause	Allow the patient to process the information; respond to patient's emotion	
Options	Describe the benefits, burdens, and likely outcomes of surgical and nonsurgical options, including palliative treatments, in context of patient's goals	"In your situation, here is what we expect this could look like ..."
Goals	Understand patient's goals, priorities, and tradeoffs. Discuss existing advance directives with the patient or designated surrogate.	"Have you thought about the kind of medical care you would want if you became very sick?" "Are there any treatments or health states that are intolerable to you?" "How much are you willing to go through to try to get you over this crisis?"
Recommend	Recommend a course of treatment in the context of the patient's goals. Consider time-limited trials.	"Based on your priorities, I would recommend we do x. We can Meet again in x time and see whether things are getting better or worse and reconsider the options then."
Support	Affirm relationship, describe next steps to patient, document the conversation in the medical record, and communicate with clinical team	"We are all committed to taking great care of you, and respecting your goals."

A Tool for Palliative Care

Providence Oregon Palliative Care Grid- DRAFT 6/8/16

	1	2	3	4	5	6	7
Goals of care (GOC)	Assess health care literacy	Assess hopes, fears, and strengths	Discuss values	Discuss GOC in context of health/illness	Prioritize GOC	Discuss GOC with HCR and family	Document GOC in PC plan
Advance Care Planning (ACP)	Discuss role of ACP	Permission to proceed with ACP	Identify Health Care Rep. (HCR)	Complete Advance Directives	Complete POLST	Share ACP with family	Document ACP in PC plan
Symptom management (sx. mgmt.)	Identify symptoms and PPS	Assess symptom burden	Initial symptom mgmt. plan	Reassess symptom burden	Adjust symptom mgmt. plan	Plan for increased sx. burden	Document sx. mgmt. in PC plan
Caregiving	Assess current living situation	Assess current care support	Assess financial resources	Discuss future care needs	Discuss community resources	Develop plan for future needs	Document care plan in PC plan
Spiritual support	Assess spirituality	Explore meaning, hope, coping	Explore impact of beliefs	Affirm belief based coping	Grief support and processing	Connect with community resources	Document spiritual support plan
Emotional support	Assess coping anxiety, and depression	Assess grief, loss, and role changes	Assess family coping, roles, & distress	Provide loss and grief counseling	Referral if appropriate	Plan for on-going support	Document emotional support plan
Disease trajectory	Identify life-limiting illness(es)	Assess patient's understanding	Assess family's understanding	Discuss normal dis. trajectory	Discuss current placement	Discuss future trajectory	Document pt. and family understanding
End-of-life (EOL) planning	Permission to discuss EOL	Assess patient's prior experience	Assess family's prior experience	Discuss resources available	Discuss possible EOL scenarios	Discuss mgmt. of EOL	Document EOL plan in PC plan
Family	Assess and identify family	Assess level of family involvement	Identify family roles	Assess & treat anticipatory grief	Assess financial during & after death	Engagement of community resources	Document family function in plan

Advanced values-based GOC

- Include in history taking- normalizes
- Be curious : “I’m curious....”
- Listen for values in the answers
 - “As long as I can talk to my grandchild...”
 - “I would rather die than live anywhere else...”
 - Two very different statements- summarize
- Ask family if this is consistent with what they have said in the past

What do you need to know to help with surgical decision-making?

- Value based GOC ✓
- Living situation
- Care-giving
- Trajectory
- EOL
- Frailty
- ADLs
- IADLs
- Cognitive Status
- Previous delirium

Living situation

- Where
- With whom (and that person's functional status)
- Question: How close are they to having this living situation not work?
- "I'm curious... what is the plan if you can't live at home anymore?"
 - "What if that's not possible? Who would you want to make that decision?"

Care-giving

- Current help?
- Who is the back-up?
- Question: Is the care plan realistic?
- "I'm curious... what if you needed more help? Who would be available?"
 - "What if they weren't available?"

Disease Trajectory

- Anticipatory guidance: Mobility, function, sleepiness, bed bound status, pain
-
- Question: Do they understand the expected changes in QOL?
- “I’m curious, has anyone explained what to expect in the future with your ____?”
 - “Usually with _____, people get more and more tired. (Example). After you will be needing to rest 16 hours a day, then 20 hours a day, then unable to get out of bed....”

EOL

- Questions:
 - If things don’t well, where would they want to take their last breath?
 - Do they have any previous experience with hospice?
- “I’m curious... We of course are going to do everything possible to get you back to the best quality of life possible, but I’m curious... If there are big complications and we think we’ve run out of tools to keep you with us, where would you want to be...”
 - “We will make sure you are kept comfortable...”

Summarize

- “I hear you saying that what’s most important to you is.... Is that right?”
- “I want to make sure I understand. If things go well, you want.... But if things go poorly and we can’t get you ____ (back home, walking, able to feed self, etc), then you want us to keep you comfortable and let nature take it’s course. Do I have that right?”
- Write down quotes from patient and family!

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Frailty

- A biologic syndrome of decreased reserve and resistance to stressors
- Complex chronic inflammatory state characterized by under-nutrition, sarcopenia, loss of strength, decreased activity, and slow walking speed
- “When the metabolic and inflammatory responses to surgery are superimposed on the complex physiologic changes of frailty, the combined effects may lead to organ failure and/or death”
 - Anaya

Frailty

- History: How far can they walk?
 - How far could they walk 6 months ago?
 - What stops them?
- Question: What is the trajectory?
- The current trajectory will rarely get better with surgery!

Measuring frailty

- Fried- Hopkins
 - Weakness, shrinking (weight loss), exhaustion, low activity, slow
- Rockwood-Hopkins
 - ADLs, mobility, comorbidity burden, abnormal cognition, poor nutrition, anemia, presence of geriatric syndrome (bedsores, fall,
- Robinson
 - Multidomain scale (anemia, low albumin, falls, functional dependence, cognitive impairment, comorbidities, mobility impairment
- Canadian Study of Health and Aging Frailty index (CSHA-FI)
 - 70 factors, includes co-morbidity, mood, cognition, functional status, and nutrition

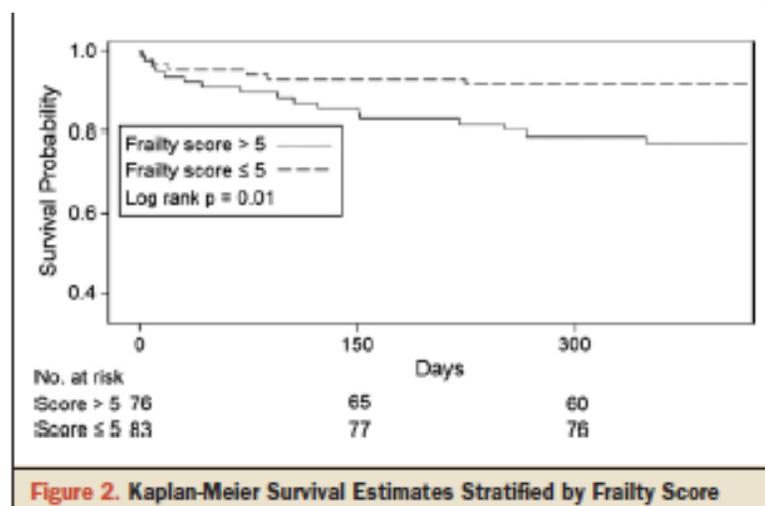
More measures of frailty

- Frailty Index/Comprehensive Geriatric Assessment (FI-CGA)
 - 10 domains based on morbidity and clinical judgement
- Edmonton Frail Scale (ETS)
 - 10 domains, including medication, cognitive, balance, mobility
- Practical domains:
 - Cognition
 - Frailty (5-point frailty phenotype, the Timed Up and Go, gait speed, stair climbing)
 - Function (ECOG, ADLs, IADLs)
- Surrogates of frailty
 - Gait speed (6 sec to walk 15 feet)
 - Hand grip strength (20 kg women, 30 kg men)
 - Timed Up and Go Test (15 sec)

Frailty Scores

- Many frailty scores
- Show association with:
 - increased risk for complications
 - length of stay
 - discharge disposition other than home
 - early hospital readmission
 - increased risk for mortality 6 months after surgery
 - increased risk of being discharged to an institution
- Frailty does not equal hopeless

Frailty



What to do about it?

- “Engage the patient and family in shared decision-making”
 - 2014 VA Symposium (Anaya et al)

Shared decision making around frailty

- Discuss trajectory: “We talked about how you cannot walk as far as you could a few months ago. We are worried that this will continue, even if we fix your (surgery). I am curious about what would happen if you were that much weaker...”
- Discuss the possibility that surgery will make the frailty worse: “Surgery is really hard on anyones body, and it takes more out of us the older we get. We are worried that the (surgery) will make your weakness get worse faster...”

Shared decision making- frailty

- Relate it back to values and living situation
- If they are the border of not being able to live at home, how important would a loss of function be?
- Ella:
 - OK with nursing home
 - Biggest value is seeing her grandchildren grow up
- Harriet
 - Leaving home is worse than death
 - Biggest value is fierce independence

ADLs and IADLs are double checks

- Activities of Daily Living:
- Questions trying to answer:
 - Who helps them now?
 - How easy would it be to get more care?
 - How close are they to needing a foster home situation?
- Instrumental Activities of daily living
- Questions trying to answer:
 - How close are they to needing a higher level of care?
 - How do they feel about a higher level of care?
 - Family availability?

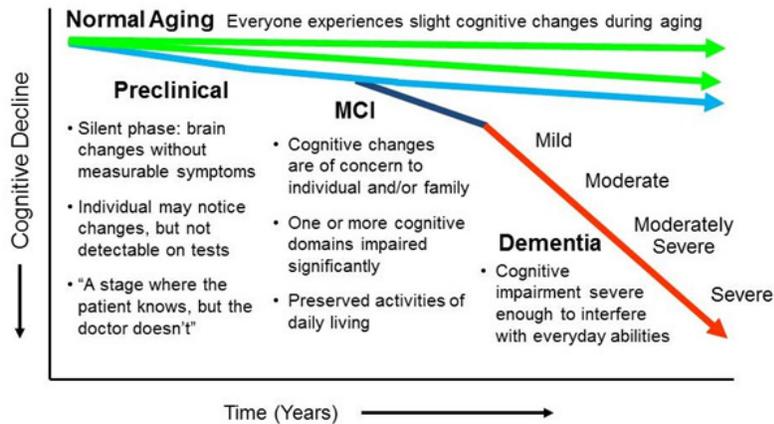
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Cognitive Status

- Get a baseline!
 - MMSE, SLUMS, MoCA
- Ask family:
 - “I ask all my families about memory in my elder patients?”
 - “How does their memory compare with 6 months ago?”
 - “What is the plan if their loved one’s memory gets worse?”
- Do they understand the natural trajectory of cognitive impairment?

Cognitive Loss Trajectory



Cognitive Loss

- Make sure family and patient understand:
 - Surgery will not improve cognitive function.
 - Surgery may make cognitive function worse. The trajectory accelerates with surgery in some people

Cases- TAVR

- Mary- lots of family, goal is to die working in family business
- Joan- graduated care, goal is to play more bingo
- Anti-delirium protocols

Delirium

- Previous delirium increases chances of delirium with next surgery.
- Delirium post-op is the biggest *single* reason elders move into institutional setting from a surgical admission.
- Risks:
 - Cognitive deficits
 - Previous delirium
 - Age
 - Sleep deprivation
 - Visual and hearing impairment
 - Dehydration

Delirium- SAGES trial

- SAGES= Successful Aging after Elective Surgery trial
- 4 groups: No complications, delirium only, complications only, both
- Complications only → Increased LOS (RR=2.8)
- Delirium only → Increased all adverse outcomes
 - Prolonged LOS (RR=1.9)
 - Institutional discharge (RR=1.5)
 - 30-day readmission (RR=2.3)
- Delirium and Complications → All adverse with delirium exerting the highest attributable risk (5.8%)
 - Prolonged LOS (RR=3.4)
 - Institutional discharge (RR=1.8)
 - 30-day readmission (RR=3.0)

Delirium

- Non-medical protocols
- No benzodiazepines
- Minimize the use of H1 antagonists and other medications with strong anticholinergic side-effects
- Avoid meperidine for treatment of pain
- Treat pain- untreated pain can cause delirium
 - Talk to anesthesia about regional blocks for pain

Last cases- hip fractures

- Connie- son at home, home bound, trajectory worsening, goal is to move
- Martha- daughter at home, home bound, trajectory rapid decline, multiple falls, goal is to die at home

Summary

- Surgical decision making requires a good GOC discussion for each individual.
 - Values, trajectory of all illnesses
- Frailty does not equal futility, but it should give pause.
 - Risk to their QOL
- Cognitive evaluation and functional evaluation should be part of every discussion.
 - Risk to their QOL
 - Prevent Delirium

Questions?

- Value based GOC ✓
- Living situation ✓
- Care-giving ✓
- Trajectory ✓
- EOL ✓
- Frailty ✓
- ADLs ✓
- IADLs ✓
- Cognitive Status ✓
- Previous delirium ✓

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