Choosing Wisely®,

The American Geriatrics Society’s List of “Choices”

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Disclosure - I DO have a financial interest/arrangement or affiliation with the following organizations:

Telligen, Chief Medical Officer
American Geriatrics Society, Omnicare Guideline Reviewer
Choosing Wisely®

Presentation Objectives

- Describe the history of the ABIM Foundation’s Choosing Wisely® program and its potential to impact care.
- Refer to the Choosing Wisely® Ten Things Physicians and their Patients should discuss offered by the American Geriatrics Society.
- Engage patients and caregivers in choice-sensitive conversations when discussing treatment options discussed in the AGS Choosing Wisely® lists.
- Access and the professional education resources and the public-education resources available through the Choosing Wisely® program, Consumers Reports, and the American Geriatrics Society.
Handouts

1. The AGS Five Things and Five More Things Physicians and Patients Should Question
2. Health In Aging Resources for Patients
3. JAGS Articles
Choosing Wisely®

Presentation Structure

• Brief Review of the Choosing Wisely® program
• The American Geriatrics Society’s List of ‘Ten Choices’
• Deeper Discussion into Controversies and Public Interest
  • Don’t Use Percutaneous Feeding Tubes in Advanced Dementia
  • Avoid using medications to achieve hemoglobin A1c < 7.5% in most adults age 65 and older; moderate control is generally better.
  • Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, provide feeding assistance and clarify patient goals and expectations.
  • Avoid physical restraints to manage behavioral symptoms of hospitalized older adults with delirium.
• Where to get More Information
• Question and Answer
Choosing Wisely® The AGS
Ten Things Physicians and Patients Should Question
Choosing Wisely® An Initiative of the ABIM Foundation

- First conceived by the National Physicians Alliance
  - Good Stewardship Program
  - Funded by ABIM-F grant
  - Three lists of steps physicians could take to promote more effective use of healthcare resources.
  - Internal Medicine, Family Medicine, Pediatrics
- Rooted in the observation that as much as 30% of care delivered in the US may be duplicative or unnecessary¹
- Estimated that adopting the NPA “Top 5” lists would generate annual savings of $6.76 billion²

1. IOM Best Care at Lowest Cost, The National Academies Press
Choosing Wisely®

An Initiative of the ABIM Foundation

- Choosing Wisely® aims to promote conversations between physicians and patients by helping patients choose care that is:
  1. Supported by the Evidence
  2. Not duplicative of other tests or procedures already received
  3. Free from harm
  4. Truly necessary

- Currently ~ 59 US Professional Associations
Choosing Wisely®

The American Geriatrics Society Process

- National Survey of Geriatricians: 2012
- Panel Review to analyze and prioritize survey results: 2012 - 2013
- Panel Consultation with Content Experts in the Field
- Panel Review of Medical Literature
**Choosing Wisely® – The AGS Initial Five (2013)**

<table>
<thead>
<tr>
<th></th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Don’t recommend percutaneous feeding tubes in patients with advanced dementia; instead offer assisted oral feeding.</td>
</tr>
<tr>
<td>2</td>
<td>Don’t use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia.</td>
</tr>
<tr>
<td>3</td>
<td>Avoid using medications to achieve hemoglobin A1c &lt; 7.5% in most adults age 65 and older; moderate control is generally better.</td>
</tr>
<tr>
<td>4</td>
<td>Don’t use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation, or delirium.</td>
</tr>
<tr>
<td>5</td>
<td>Don’t use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present.</td>
</tr>
</tbody>
</table>
Don’t prescribe cholinesterase inhibitors for dementia without periodic assessment for perceived cognitive benefits and adverse gastrointestinal effects.

Don’t recommend screening for breast or colorectal cancer, nor prostate cancer (with the PSA test) without considering life expectancy and the risks of testing, overdiagnosis and overtreatment.
Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, provide feeding assistance and clarify patient goals and expectations.

Don’t prescribe a medication without conducting a drug regimen review.

Avoid physical restraints to manage behavioral symptoms of hospitalized older adults with delirium.
Don’t recommend percutaneous feeding tubes in patients with advanced dementia; instead offer assisted oral feeding.
Percutaneous feeding tubes in patients with advanced dementia

• Widely used intervention in parts of the United States.
• There is no reason to expect that a feeding tube will reduce the risk of aspiration pneumonia in patients with advanced dementia – and it probably doesn’t.
• There is no evidence that feeding tubes prevent or heal pressure ulcers
• There is no evidence that feeding tubes meaningfully improve survival, function, or quality of life.
• There is evidence of harm.
• There is an alternative: oral assisted feeding.
There is wide variation in rate of percutaneous feeding tubes in patients with advanced dementia.
Percutaneous gastrostomy does not prevent aspiration

- Aspiration resulting in pneumonitis or pneumonia is one of the most frequently reported major complications of PEG placement.
- PEG has not been shown to prevent aspiration of oropharyngeal contents
- Many patients have macroaspiration of gastric contents and tube feedings.
- A systematic review of 8 trials compared gastric and postpyloric feeding and found similar rates of pneumonia, mortality, and length of ICU stay in both groups

Percutaneous gastrostomy does not prevent pressure ulcers

- In surveys, 74.6% of physicians listed a belief that feeding tubes improve pressure ulcer healing.
- In risk adjusted residents of LTC, those with PEG tubes are 2-3 times more likely to develop pressure ulcers.
- PEG feeding tubes do not promote the healing of existing pressure ulcers.
- Restraints? Diarrhea and skin breakdown?
AGS Choosing Wisely® Choice 1

Percutaneous gastrostomy does not improve clinical outcomes

- No studies showing improved survival
- No studies showing decreased infection
- No studies showing improvements or stabilized function
- No studies showing improved quality of life or reduced suffering
AGS Choosing Wisely® Choice 1

Well Documented adverse effects

- Tube occlusion
- Reinsertion complications
- Aspiration
- Skin necrosis
- Gastric Leaking, skin irritation, and local infection
Careful Hand Feeding is as good as Percutaneous Gastrostomy

- Hand feeding with patient in upright position.
- Caregiver education in hand feeding techniques
- Finger foods
- Frequent reminders to swallow multiple times per bolus
- Reducing bolus size to smaller than one teaspoon
- Facilitating techniques such as cheek stroking
Summary

- There is no meaningful evidence that the use of percutaneous feeding tubes improves health or quality of life outcomes for people with advance dementia.
- There is an abundance of evidence that percutaneous feeding tubes can cause harm.
- There is a meaningfully effective alternative, Conservative hand feeding.
AGS Choosing Wisely® Choice 3

Avoid using medications to achieve hemoglobin A1c < 7.5% in most adults age 65 and older; moderate control is generally better.
Tight Glycemic Control in the Elderly – What is the evidence?

<table>
<thead>
<tr>
<th>Trial</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action in Diabetes and Vascular Disease (ADVANCE)</td>
<td>66</td>
</tr>
<tr>
<td>Action to Control Cardiovascular Risk in Diabetes Study Group (ACCORD)</td>
<td>62</td>
</tr>
<tr>
<td>Veterans Affairs Diabetes Trial</td>
<td>60</td>
</tr>
<tr>
<td>UK Prospective Diabetes Study</td>
<td>53</td>
</tr>
<tr>
<td>University Group Diabetes Program</td>
<td>55</td>
</tr>
<tr>
<td>Steno-2</td>
<td>55</td>
</tr>
<tr>
<td>Kumamoto</td>
<td>50</td>
</tr>
</tbody>
</table>
Mortality and A1C in middle aged people

For older adults, the harms of intensive control in medication trials are more clear than the benefits.

- **ACCORD Trial**
  - Mean age 62
  - A1C 6.5% vs 7.5%
  - No change in MI, nonfatal stroke, cardiovascular mortality at 5 years
  - Severe hypoglycemia 10.5% in intensive vs 3.5% standard

- **ADVANCE Trial**
  - Mean age 66
  - A1c 6.5% vs 7.3%
  - Macroalbuminuria 2.9% in intensive vs 4.9% standard
  - Severe hypoglycemia 2.7% in intensive vs 1.5% standard
Elderly at Higher Risk of Harm from glucose-lowering medications

- Age
- Polypharmacy
- Hospitalization
Individualizing Therapy

<table>
<thead>
<tr>
<th>Older Patient Characteristics</th>
<th>Suggested Target HbA1c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy, Few Comorbidities, Life Expectancy greater than 10 years</td>
<td>7.0% - 7.5%</td>
</tr>
<tr>
<td>Moderate Comorbidities, Life Expectancy 5-10 years</td>
<td>7.5% - 8.0%</td>
</tr>
<tr>
<td>Multiple Comorbidities, Functional or Cognitive Impairments, Life Expectancy less than 5 years</td>
<td>8.0% - 9.0%</td>
</tr>
</tbody>
</table>
Choosing Wisely® Choice 3

Summary

• Most of the evidence showing benefits of “tight” glycemic control come from trials studying middle-aged people with new-onset diabetes.

• In those patients, clinically-relevant improvements in health take between 8 and 19 years to be evident.

• More intensive control results in more frequent complications — hypoglycemia, hospitalization, and possibly death.

• Most older adults with diabetes are not similar to those studied in the trials showing benefit: newly diagnosed disease, no serious comorbidities, no geriatric syndromes.

• For most older adults, a reasonable HbA1c target would be 7.5% - 8.0%. 
Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, provide feeding assistance and clarify patient goals and expectations.
Unintentional Weight Loss

- Studies from 1980s report weight loss of approximately 0.1-0.2 kg (0.22 – 0.44 lbs) per year after age 70 due to aging.*

- Involuntary loss greater than 4% of body weight is an independent predictor of increased mortality.

- In US LTC settings, CMS expects that the emergence of an unplanned weight loss problem (5% change in 30 days or 10% change in 180 days) will trigger evaluation of a significant change in status.**

* Hum Biol 1988;60:917-25.

** CMS State Operations Manual, Appendix PP (Rev. 107, 04-04-14)
Unintentional Weight Loss is common in old age

- Annual incidence of approximately 13% in elderly veterans living in the community.*
- Prevalence estimates as high as 27% in high-risk free-living frail elderly receiving community services.**
- Incidence as high as 48% in older nursing home residents.***

# Potential Causes of Unintentional Weight Loss

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percentage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malignant disease</td>
<td>16%-36%</td>
</tr>
<tr>
<td>Psychiatric disorder</td>
<td>9%-42%</td>
</tr>
<tr>
<td>Unknown</td>
<td>10%-36%</td>
</tr>
<tr>
<td>Gastrointestinal disorder</td>
<td>6%-19%</td>
</tr>
<tr>
<td>Endocrine disorder</td>
<td>4%-11%</td>
</tr>
<tr>
<td>Cardiovascular disease</td>
<td>2%-9%</td>
</tr>
<tr>
<td>Nutritional disorders or alcoholism</td>
<td>4%-8%</td>
</tr>
<tr>
<td>Respiratory disease</td>
<td>~6%</td>
</tr>
<tr>
<td>Neurological disorder</td>
<td>2%-7%</td>
</tr>
<tr>
<td>Chronic infection</td>
<td>2%-5%</td>
</tr>
<tr>
<td>Renal disease</td>
<td>~4%</td>
</tr>
<tr>
<td>Connective tissue disease</td>
<td>2%-4%</td>
</tr>
<tr>
<td>Medication Side Effect</td>
<td>~2%</td>
</tr>
</tbody>
</table>

(43x497) CMAJ 2005;172(6):773-780
21st Century Prescription Appetite Stimulants

- megestrol acetate (Megace®)*
- dronabinol (Marinol®)*
- mirtazapine (Remeron®)*
- cyproheptadine (Periactin®)
- anabolic steroids
  - oxandrolone
- eicosopentanoic acid (EPA)

* Commonly prescribed
Pharmacotherapy 2009;29:383-397
21st Century Prescription Appetite Stimulants

- Controversial for a long time.
- More robust Evidence Base
  - Additional clinical study
  - Meaningful Systematic Reviews
    - Results with little or modest benefit
    - Risk-to-benefit profiles concerning
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Time to Stop Using Megestrol Acetate for Unintentional Weight Loss

Megestrol acetate for treatment of anorexia-cachexia syndrome (Review)

Ruiz Garcia V, López-Briz E, Carbonell Sanchís R, González Perales JL, Bort-Martí S

<table>
<thead>
<tr>
<th>Clinical Effect</th>
<th>Clinical Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA improves appetite</td>
<td>NNT = 4</td>
</tr>
<tr>
<td>MA has a small effect on weight gain</td>
<td>NNT = 12</td>
</tr>
<tr>
<td>MA does NOT improve quality of life</td>
<td></td>
</tr>
<tr>
<td>MA increases VTE Risk</td>
<td>NNH = 2 - 55</td>
</tr>
<tr>
<td>MA increases Risk of Dying</td>
<td>NNH = 23</td>
</tr>
</tbody>
</table>

Cochrane Database Syst Rev 2013;3:CD004310
Dronabinol

The medical use of cannabis for reducing morbidity and mortality in patients with HIV/AIDS (Review)

Lutge EE, Gray A, Siegfried N

- Dronabinol is an orally active cannabinoid.
- FDA-approved for anorexia with weight loss in AIDS.
- Evidence for positive effects in patients with HIV/AIDS is limited, and may be the effects of bias.
- Longer-term data, and data showing a benefit in terms of survival, are lacking.
- Not a very “geriatric-friendly” medication

Cochrane Database Syst Rev 2013;4:CD005175
Mirtazapine

- Mirtazapine is an atypical antidepressant
- Increased appetite and weight gain are side effects
  - 17% increase in appetite and 10% increase in weight
  - Most weight gain takes place in the first 4 - 8 weeks
- No evidence of weight gain in absence of depression*
- Weight gain not clearly superior to other antidepressants**

**JAGS 50:1461–1467, 2002
*Cochrane Database Syst Rev 2011;12:CD006528
The Fringe Players

- Cyproheptadine
  - Makes the 2012 Beers Criteria List
    - Highly anticholinergic, greater risk of confusion, dry mouth, constipation, and other anticholinergic side effects
  - Little evidence that it actually works as an orexigenic

- Eicosapentaenoic acid
  - Little evidence that it works as an orexigenic
  - Not studied in elderly

- Anabolic steroids
  - Little evidence that they work in late life or advanced progressive illness
  - Not studied in the elderly
Prescription Appetite Stimulants

Summary

- Avoid Using Prescription Appetite Stimulants.
- Evidence for significant and meaningful effect is lacking for unintentional late life anorexia and weight loss.
- In the case of megestrol acetate, the risk-to-benefit ratio does not favor its use.
Oral Liquid Nutrition Supplements

- Why pick on “Ensure”?  
- “Convenient and Harmless”?  
- A distraction from the real message on appetite stimulants?
Oral Liquid Nutrition Supplements

- A multibillion dollar expense in healthcare
- Main Ingredients
  - Water
  - Sucrose (sugar)
  - Corn Syrup (more sugar)
  - Maltdextrin (less sweet sugar)
  - Few oils, proteins (whey and soy), multivitamin
- Liquid candy bar with vitamins?
- Distraction from real food?
## AGS Choosing Wisely® 8

### Oral Liquid Nutrition Supplements

<table>
<thead>
<tr>
<th></th>
<th>Boost</th>
<th>Ensure</th>
<th>Low-Fat Yogurt and Orange</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Serving Size</strong></td>
<td>8 oz</td>
<td>8 oz</td>
<td>8 oz + 1 orange</td>
</tr>
<tr>
<td><strong>Calories</strong></td>
<td>240</td>
<td>250</td>
<td>206</td>
</tr>
<tr>
<td><strong>Fiber</strong></td>
<td>0 g</td>
<td>&lt; 1 g</td>
<td>3 g</td>
</tr>
<tr>
<td><strong>1st two ingredients</strong></td>
<td>Water Corn Syrup Solids</td>
<td>Water Corn Syrup</td>
<td>Low Fat Milk Milk Solids</td>
</tr>
<tr>
<td><strong>Cost</strong> (San Diego 1999)</td>
<td>$1.40</td>
<td>$1.43</td>
<td>$1.09</td>
</tr>
<tr>
<td><strong>Taste</strong></td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Best = 1 to Worst = 5

http://thedietchannel.com/scoopon.htm
In undernourished, short-term, hospitalized patients:
- Fewer complications: OR 0.72 (0.53-0.97)
- Lower mortality: OR 0.66 (0.49 – 0.90)

Disappointing impact on other circumstances of unintentional weight loss

No clear impact on functional status, mood, or hospital length of stay.

No evidence for supplementation at home or in well-nourished individuals

Generally suboptimal evidence base
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So...what’s a geriatrician to do?

- Understand the patient
  - Clinical investigation as appropriate to goals and circumstances
  - Target investigation for reversible causes
- Assess and address commonly missed problems:
  - Depression
  - Cognitive loss
  - Failing social supports
- Review medications for “anorexogenic” drugs
What else can be done?

- Bolster feeding support in those experiencing increased dependency in eating.
- Eliminate dietary restrictions
- Help make the mealtime environmental ambience more pleasant.
- Work with patients, surrogate decision-makers, caregivers, and loved ones to clarify treatment goals and expectations.
Avoid physical restraints to manage behavioral symptoms of hospitalized older adults with delirium
Physical restraint use in hospitalized patients has clear adverse effects.

- Increased delirium severity/agitation
- Pressure ulcers
- Infections
- Discomfort
- Increased risk of serious injury
- Death

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### Table 3.—Independent Precipitating Factors for Delirium in the Development Cohort (n=196)*

<table>
<thead>
<tr>
<th>Precipitating Factor</th>
<th>Adjusted RR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of physical restraints (n=31)</td>
<td>4.4 (2.5-7.9)</td>
</tr>
<tr>
<td>Malnutrition (n=14)</td>
<td>4.0 (2.2-7.4)</td>
</tr>
<tr>
<td>&gt;3 Medications added (n=18)</td>
<td>2.9 (1.6-5.4)</td>
</tr>
<tr>
<td>Use of bladder catheter (n=50)</td>
<td>2.4 (1.2-4.7)</td>
</tr>
<tr>
<td>Any iatrogenic event (n=81)</td>
<td>1.9 (1.1-3.2)</td>
</tr>
</tbody>
</table>

* n indicates number of patients with the precipitating factor. Adjusted relative risks (RRs) were derived from binomial (relative risk) modeling. CI indicates confidence interval.
Examples of Physical Restraints

- Wrist and leg restraints
- Chest / vest restraints
- Lap belts
- Mitts
- Lap trays
- Full-length side rails in upright positions
- Geri-chair recliners in full-tilted positions
Physical restraint use continues to be common in US Acute Care Settings

- Physical Restraint Prevalence rates: ~ 50 per 1000 patient days
- Great Variability in Use: range of 4.7 to 94 restraint days per 1,000 patient-days
- Reasons Cited for use
  - Prevent Therapy Disruption
  - “Manage” behaviors
  - Prevent Falls

Evidence for effectiveness to prevent treatment disruption is weak

- Physical restraint use in ICU settings has not been shown to effectively prevent therapy disruption.\(^1\)
  - (i.e. patients can still self-extubate and self-d/c other devices)
- Adversely affects quality of life / comfort
- Independent risk factor for development of PTSD in ICU survivors.\(^2\)

Evidence for effectiveness to prevent falls is even weaker-to-nonexistent

- Restraints (including bilateral side rails) have not been shown to lower risk of falls.\(^1\)\(^-\)\(^3\)
- Restraint reduction practices have not resulted in increased fall rates in hospitalized older adults in general\(^4\) or in older adults with delirium\(^5\)

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In addition...patient rights and quality regulation

• Patients have a right to bodily integrity
• Federal regulations restricting use of physical restraints in hospitals have existed since 1990s from CMS, Joint Commission.
  • Restraints may only be imposed to ensure the: immediate physical safety of the patient, immediate physical safety a staff member, or others, and
  • must be discontinued at the earliest possible time*.

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Are there accepted indications for physical restraint use?

- Violence placing patient or caregivers at risk
- Disruption of therapy (when alternatives are exhausted)
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So What’s a Geriatrician To Do?

• Multi-component strategy to reduce restraints in acute care units*:
  • Effective in reduction from 13-27% ➔ 7-14%
  • Least-restraint rounds weekly
  • Development of opinion leaders among nursing leadership
  • Education and training of nurses and physicians

• Emphasize restraint reduction using non-pharmacologic, individualized approaches:
  • Early physical therapy
  • Sensory and mobility aids
  • Attention to hospital environmental re-design

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Alternatives to Restraints: Hide & Disguise

- IV shields
- Skin sleeves
- Abdominal binders
- Stop sign
- Grip-Lok
“Delirium Room” (Flaherty JH, Little MO, JAGS 2011)

- Tolerate, Anticipate, and Don’t Agitate (T-A-DA) approach
- Restraint-free 4-bed unit within geriatric acute unit
  - rate of falls is not higher than in the other beds on the unit
  - better behavioral management of patients with dementia and delirium
  - provides for a higher level of observation
How to get more information
Getting More Information

American Geriatrics Society

www.americangeriatrics.org

Follow the Links in this order
1. Health Care Professionals
2. Clinical Practice
3. Guidelines and Recommendations
Getting More Information

AGS Website
Getting More Information

AGS Clinical Practice Guidelines
The AGS Choosing Wisely® List offers a unique opportunities for you to engage older patients and their loved ones in conversations about health care goals in five treatment decisions where risks predictably outweigh benefits.