Update in Geriatrics:
Choosing Wisely – Primum Non Nocere

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Update in Geriatrics:
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Objectives of this Presentation

1. Provide an overview of the ABIMs Choosing Wisely campaign
2. List the 5 Choosing Wisely recommendations from the two major geriatric care organizations: AGS and AMDA
3. Review some of the recent (and in some cases not so recent) evidence behind the recommendations
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Disclosures

- The further development and dissemination of INTERACT has been supported by grants from:
  - NINR/NIH
  - Centers for Medicare & Medicaid Services
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  - The Retirement Research Foundation
  - The Patient Centered Outcomes Research Institute
  - PointClickCare
  - Medline Industries
  - Think Research

- Dr. and Mrs. Lynn Ouslander are part owners of INTERACT Training, Education, and Management Strategies
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Judith and Michael Lupella, a couple from the Boca Raton area, celebrated their 100th birthdays in 2008 and had been married 80 years in January, 2009.
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The Good News

- Suffered an acute thrombotic stroke at age 98
- Aphasia and hemiparesis
- Underwent thrombolysis
- This is a before and after picture!

Ms. Ola Mae Rainey
Aging increases susceptibility to a variety of diseases and conditions.
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The Bad News

- Older patients often do not do as well as Mrs. Rainey with tests and interventions
- Unnecessary interventions in older patients may cause complications, morbidity, permanent disability, and excess costs
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**The Choosing Wisely Campaign**

- *Choosing Wisely*, an initiative of the ABIM Foundation, is focused on encouraging physicians, patients and other health care stakeholders to think and talk about medical tests and procedures that may be unnecessary, and in some instances can cause harm.

- More than 60 specialty societies have joined the campaign since 2012.
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The Choosing Wisely Campaign

- Specialty societies have created lists of “Things Physicians and Patients Should Question” — evidence-based recommendations that should be discussed to help make wise decisions about the most appropriate care based on a patients’ individual situation.
“Vulnerable Elders” are community dwelling individuals aged 65 and older who are at greatest risk of death or functional decline over a 2-year period.
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- Don't routinely prescribe lipid-lowering medications in individuals with a limited life expectancy.

- There is no evidence that hypercholesterolemia is an important risk factor for mortality or myocardial infarction in persons older than 70 years.

- Studies show that older patients with the lowest cholesterol have the highest mortality after adjusting for other risk factors.
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Hazard Ratio for mortality for increasing cholesterol is significantly less than 1.0; higher cholesterol is associated with lower mortality.

Figure 1. Age group-specific association between total cholesterol and its subfractions and noncardiovascular and cardiovascular mortality. Symbols represent hazard ratios (HRs) and 95% confidence intervals (CIs) per 1-mmol/L increase in total cholesterol and its subfractions (1 mmol/L = 38.61 mg/dL). HDL = high-density lipoprotein.
# 9
- Don’t use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present

# 8
- Don't obtain a urine culture unless there are clear signs or symptoms that localize to the urinary tract
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- Don’t use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present.

- Don’t obtain a urine culture unless there are clear signs or symptoms that localize to the urinary tract.

#### # 9
- Chronic asymptomatic bacteriuria is common, especially in LTC settings.

#### # 8
- A positive urine culture in the absence of localized symptoms is of limited value in identifying whether a patient’s symptoms are caused by a UTI.

- Studies have found no adverse outcomes or benefits of treatment for older men or women with asymptomatic bacteriuria.

- Over-use of antibiotic therapy can lead to an increased risk of antibiotic-related diarrhea and *C. difficile* infection, and drug-resistant organisms.
153 women, mean age 83, diagnosed with a UTI
- Only 87 (57%) were confirmed by culture
- Of the 66 with negative cultures, 63 (95%) were given an antibiotic
Does Eradicating Bacteriuria Affect the Severity of Chronic Urinary Incontinence in Nursing Home Residents?

Joseph G. Outslander, MD; Moses Schapira, MD; John F. Schnelle, PhD; Gwen Uman, PhD, GNP; Susan Fingold, BS; Edward Tuzio, BS; Jennifer Glattler Nigam, MN

Objective: To determine the effects of eradicating otherwise asymptomatic bacteriuria on the severity of chronic urinary incontinence among nursing home residents.

Design: Residents were categorized as nonbacteriuric or bacteriuric on the basis of urine cultures. Bacteriuric residents were then randomly assigned to immediate and delayed treatment groups. The delayed treatment group was included to control for spontaneous changes in the severity of incontinence. The immediate treatment group received antimicrobial therapy for 7 days; after outcome measures had been repeated, the delayed treatment group was treated.

Setting: 6 community-based nursing homes.

Patients: Nursing home residents with chronic urinary incontinence.

Measurements: The frequency and volume of urinary incontinence were determined by physical checks for wetness by trained research aides hourly between 7 a.m. and 7 p.m. for 3 days in all patient groups (nonbacteriuric, bacteriuric with immediate treatment, and bacteriuric with delayed treatment) at baseline, after the immediate treatment group was treated, and again after the delayed treatment group was treated.

Urinary incontinence is a multibillion-dollar health problem that affects almost 60% of some 2 million residents of the 20,000 nursing homes in the United States. Bacteriuria is also prevalent in this population, and the two conditions commonly coexist (1). Incontinent nursing home residents are frequently prescribed antimicrobial agents for urinary tract infections, but the quality and appropriateness of such prescriptions have been questioned (2–5). Unnecessary antimicrobial treatment may result in the undesired development of resistant organisms and substantial unnecessary morbidity and health care expenditure. Well-designed clinical trials have documented that treating asymptomatic bacteriuria in the nursing home population has no significant effects on morbidity and mortality and that it actually leads to the development of strains of bacteria that are resistant to commonly prescribed antimicrobial agents (6, 7). However, no studies have carefully examined the effects of eradicating bacteriuria on the severity of incontinence in this population. In a longitudinal study of a cohort of older women, Besic and colleagues (8) found no difference in self-reported symptoms of incontinence in patients with and without bacteriuria. This was, however, a study of bacteriuria and not of incontinence, and the

Annals of Internal Medicine 122: 749-754, 1995
There is no evidence that tight glycemic control in older adults with type 2 diabetes is beneficial.

Tight control has been consistently shown to produce higher rates of hypoglycemia in older adults.

Glycemic targets should reflect patient goals, health status, and life expectancy.

Reasonable glycemic targets are:

- **7.0 – 7.5%** in healthy older adults with long life expectancy
- **7.5 – 8.0%** in those with moderate comorbidity and a life expectancy < 10y
- **8.0 – 9.0%** in those with multiple morbidities and shorter life expectancy

Avoid using medications to achieve hemoglobin A1c <7.5% in most adults age 65 and older; moderate control is generally better.
Glycosylated Hemoglobin and Functional Decline in Community-Dwelling Nursing-Home Eligible Elderly Adults with Diabetes Mellitus

J Amer Geriatr Soc 2012;60:1215-1221

- **DESIGN:** Longitudinal cohort study of community-dwelling, nursing home (NH)-eligible individuals with (367 participants, 1,579 HbA1c measurements).

- **RESULTS:** HbA1c of 8.0% to 8.9% was associated with better functional outcomes at 2 years than HbA1c of 7.0% to 7.9%.

- **IMPLICATIONS FOR CLINICAL PRACTICE:** In older adults with limited life expectancy, tighter control of diabetes may be harmful in terms of functional outcomes.

Lower levels of Hb A1C were associated with higher mortality and greater functional decline.
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**Association Between Glycemic Control and Hip Fracture**

*J Amer Geriatr Soc. 2011;60:1493-1497*

- **DESIGN:** Case control study in a tertiary hospital in China involving over 500 patients admitted for hip fracture who had HbA1C measured within 3 months of admission.

- **RESULTS:** There was an association between tight glycemic control (when HbA1C < 7%) and greater odds of hip fracture in individuals being treated for type 2 diabetes mellitus.

- **IMPLICATIONS FOR CLINICAL PRACTICE:** Tight control of diabetes in older adults has no proven benefits, and could be harmful.

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**Table 2. Glycosylated Hemoglobin (HbA1c) Levels and Use of Diabetes Mellitus Medications in Participants with Type 2 Diabetes Mellitus with (Cases, n = 558) and without (Controls, n = 558) Hip Fracture**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cases (n = 558)</th>
<th>Controls (n = 558)</th>
<th>Unadjusted</th>
<th>Multivariate Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c, %, median (interquartile range)</td>
<td>6.8 (6.2–7.8)</td>
<td>7.4 (6.7–8.5)</td>
<td>0.77 (0.71–0.84)</td>
<td>0.78 (0.72–0.85)</td>
</tr>
<tr>
<td>HbA1c &lt; 6%</td>
<td>108 (19.4)</td>
<td>58 (10.4)</td>
<td>3.13 (2.1–4.64)</td>
<td>3.03 (2.03–4.52)</td>
</tr>
<tr>
<td>HbA1c 6.1–7.0%</td>
<td>224 (40.1)</td>
<td>153 (27.4)</td>
<td>2.46 (1.8–3.36)</td>
<td>2.39 (1.74–3.25)</td>
</tr>
<tr>
<td>HbA1c 7.1–8.0%</td>
<td>114 (20.4)</td>
<td>159 (28.5)</td>
<td>1.2 (0.86–1.68)</td>
<td>1.18 (0.84–1.65)</td>
</tr>
<tr>
<td>&gt;8%</td>
<td>112 (20.1)</td>
<td>188 (33.7)</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Lower levels of HbA1C were associated with higher odds of hip fracture.
Don’t use sliding scale insulin (SSI) for long-term diabetes management for individuals residing in a nursing home.

- Good evidence indicates that SSI is neither effective in meeting the body’s insulin needs nor is it efficient in the LTC setting.

- SSI regimens put patients at risk for more periods of hyperglycemia.

- SSI may lead to greater patient discomfort and increased nursing time.
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- Don’t use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium.

- These drugs increase the risk of motor vehicle accidents, falls and hip fractures.

- Use of benzodiazepines should be reserved for alcohol withdrawal symptoms/delirium tremens or severe generalized anxiety disorder unresponsive to other therapies.
Emergency Hospitalizations for Adverse Drug Events in Older Americans


**DESIGN:** Adverse-event data from the National Electronic Injury Surveillance System–Cooperative Adverse Drug Event Surveillance project were used to estimate the frequency and rates of hospitalization after emergency department visits for adverse drug events in older adults.
CONCLUSIONS: Most emergency hospitalizations for recognized adverse drug events in older adults resulted from a few commonly used medications.

IMPLICATIONS FOR CLINICAL PRACTICE: Polypharmacy among older patients needs to be reduced.

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Drug Therapy in the Elderly

JOSEPH G. OUSLANDER, M.D., Sepulveda, California

Agerelated biologic and physiologic changes in the elderly may lead to altered pharmacokinetics. Volume of distribution, halflife, systemic clearance, and receptor sensitivity have been shown to change with increasing age. Unique features of illness in the elderly may interfere with effective drug therapy more than in younger patients. Physical, psychologic, and social/behavioral considerations often interfere with ability to obtain and comply with health care. Disease is often difficult to recognize in elderly patients. Multiple chronic conditions, many of which may be undetected, may be exacerbated by or alter drug therapy for other illnesses. Cognitive impairment and diminished vision and hearing may make patient education difficult, and compliance poor. The elderly are also more susceptible to adverse drug reactions. The recommendations for clinical practice and directions for future research that are presented should help make drug therapy in the elderly safer and more effective.

... even when the correct diagnosis is made the aged are frequently improperly treated through our ignorance of the action of drugs upon the senile organism. ... Ask yourself if you have any other rule for diminishing dose in old age than a rough guess.—Schuyler H. Geriatrics. Medical Record. 20 April 1912.

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**Inappropriate Medication Prescribing in Skilled-Nursing Facilities**

Mark H. Beers, MD; Joseph G. Ouslander, MD; Susan F. Fingold, BS; Hal Morgenstern, PhD; David B. Reuben, MD; William Rogers, PhD; Mira J. Zeffren, PharmD; and John C. Beck, MD

**Objective:** To quantify the appropriateness of medication prescriptions in nursing home residents.

**Design:** Prospective, cohort study.

**Setting:** Twelve nursing homes in the greater Los Angeles area.

**Participants:** A total of 1106 nursing home residents.

**Main Outcome Measures:** The appropriateness of medication prescriptions was evaluated using explicit criteria developed through consensus by 13 experts from the United States and Canada. These experts identified 19 drugs that should generally be avoided and 11 doses, frequencies, or durations of use of specific drugs that generally should not be exceeded.

**Results:** Based on the consensus criteria, 40% of residents received at least one inappropriate medication order, and 10% received two or more inappropriate medication orders concurrently; 7% of all prescriptions were inappropriate. Physicians prescribed a greater number of inappropriate medications for female residents. Regression analysis, corrected for clustering effects within facilities, showed that a greater number of inappropriate medication prescriptions were ordered in larger nursing homes. Inappropriate prescriptions were not related to the proportion of Medicaid (Medi-Cal) residents or the number of physicians practicing in the homes.

Several studies have raised concerns about the quality of medication prescriptions received by elderly residents of skilled-nursing facilities in the United States (1-3). Although the problem has received substantial attention from the lay public, media, and government, data on the degree to which medications are prescribed inappropriately in this population are scant (4).

Our increased knowledge of the pharmacology of aging indicates that many cautions and special considerations are needed when prescribing medications to frail, elderly persons (5-7). Although studies of adverse outcomes related to prescribing medications to elderly persons have addressed only a few types of drugs, recent epidemiologic studies have shown some of the serious consequences of drug use in elderly persons (8-10). Institutionalized elderly persons are often frail (11), usually have several illnesses concurrently, receive more medication than noninstitutionalized older persons (12) and, thus, are probably most at risk for developing serious complications from medications. Less serious complications may also affect quality of life, and even constipation, sedation, and blurred vision may adversely affect the ability of nursing home residents to care for themselves, to participate in decision making, and to enjoy daily activities. In addition, because the cost of care in skilled-nursing facilities is often borne by
The “Beers Criteria”

The American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults

J Amer Geriatr Soc. 2012;60:616-631

- An interdisciplinary panel of 11 experts in geriatric care and pharmacotherapy applied a modified Delphi method to the systematic review and grading to reach consensus on the updated 2012 AGS Beers Criteria.
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The American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults

J Amer Geriatr Soc. 2012;60:616-631

- RESULTS: 53 medications or medication classes encompass the final updated Criteria, which are divided into three categories:
  - Potentially inappropriate medications and classes to avoid
  - Potentially inappropriate medications and classes to avoid in older adults with certain diseases and syndromes
  - Medications to be used with caution in older adults
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Potentially Inappropriate Medications Defined by STOPP Criteria and the Risk of Adverse Drug Events in Older Hospitalized Patients
Arch Intern Med. 2011;171:1013-1019

- **DESIGN**: Prospective study of 600 consecutive patients 65 years or older who were admitted with acute illness to a university teaching hospital over 4-months.

- Adverse drug events were defined by World Health Organization–Uppsala Monitoring Centre criteria
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Potentially Inappropriate Medications Defined by STOPP Criteria and the Risk of Adverse Drug Events in Older Hospitalized Patients

Arch Intern Med. 2011;171:1013-1019

Table 2. Most Commonly Prescribed Potentially Inappropriate Medications (PIMs) as per STOPP Criteria

<table>
<thead>
<tr>
<th>STOPP Criteria PIMs</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proton pump inhibitors for uncomplicated peptic ulcer disease at full therapeutic dosage for &gt;8 wk</td>
<td>128</td>
</tr>
<tr>
<td>Aspirin with no history of coronary, cerebral, or peripheral vascular symptoms or occlusive arterial events</td>
<td>86</td>
</tr>
<tr>
<td>Benzodiazepines in patients who have had ≥1 fall in the past 3 mo</td>
<td>56</td>
</tr>
<tr>
<td>Duplicate drug class prescriptions</td>
<td>56</td>
</tr>
<tr>
<td>Long-term (&gt;1 mo), long-acting benzodiazepines or benzodiazepines with long-acting metabolites</td>
<td>48</td>
</tr>
<tr>
<td>Loop diuretic as first-line monotherapy for hypertension</td>
<td>24</td>
</tr>
<tr>
<td>Long-term use of nonsteroidal anti-inflammatory drugs (≥3 mo) for relief of mild joint pain in osteoarthrosis</td>
<td>19</td>
</tr>
<tr>
<td>Long-term opiate in those with recurrent falls (≥1 fall in past 3 mo)</td>
<td>18</td>
</tr>
<tr>
<td>Neuroleptic drugs in those with recurrent falls (≥1 fall in past 3 mo)</td>
<td>16</td>
</tr>
<tr>
<td>Long-term opiates in those with recurrent falls (≥1 fall in past 3 mo)</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 5. Most Common ADEs That Were Classified as Causal or Contributory to Admission and Possibly or Definitely Avoidable as per Hallas Criteria

<table>
<thead>
<tr>
<th>ADE</th>
<th>No. (%)</th>
<th>Attributed to STOPP Criteria</th>
<th>Attributed to Beers Criteria</th>
<th>ADEs Appearing Both in STOPP and Beers Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall(s) while receiving benzodiazepines</td>
<td>24 (16.9)</td>
<td>24 (100)</td>
<td>22 (91.7)</td>
<td>22 (91.7)</td>
</tr>
<tr>
<td>Symptomatic orthostasis while receiving antihypertensives</td>
<td>17 (11.3)</td>
<td>15 (88.2)</td>
<td>1 (5.9)</td>
<td>1 (5.9)</td>
</tr>
<tr>
<td>Falls while receiving opiates</td>
<td>10 (6.6)</td>
<td>10 (100)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hypertension while receiving diuretics</td>
<td>10 (6.8)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Constipation while receiving opiates</td>
<td>6 (4.0)</td>
<td>6 (100)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Falls while receiving sedative hypnotics</td>
<td>6 (4.0)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Acute kidney injury while receiving diuretics</td>
<td>6 (4.0)</td>
<td>3 (50)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Symptomatic orthostasis while receiving diuretics</td>
<td>4 (3.3)</td>
<td>5 (100)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Falls on neuroleptics</td>
<td>5 (3.3)</td>
<td>5 (100)</td>
<td>1 (20)</td>
<td>0</td>
</tr>
<tr>
<td>NSAID-related gastritis/peptic ulcer disease</td>
<td>4 (2.6)</td>
<td>3 (75)</td>
<td>1 (25)</td>
<td>1 (25)</td>
</tr>
<tr>
<td>Bradycardia while receiving β-blockers</td>
<td>4 (2.6)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
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# 4
- Don’t use antipsychotics as first choice to treat behavioral symptoms of dementia

# 3
- Don't prescribe antipsychotic medications for behavioral symptoms of dementia without an assessment for an underlying cause of the behavior
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- Don’t use antipsychotics as first choice to treat behavioral symptoms of dementia
- Don’t prescribe antipsychotic medications for behavioral symptoms of dementia without an assessment for an underlying cause of the behavior
- The first step in managing these symptoms is to exclude a treatable underlying medical cause.
  - Environmental and caregiver-induced behaviors should also be considered
- Use of these drugs should be limited to cases where non-pharmacologic measures have failed and patients pose an imminent threat to themselves or others.
- Many non-pharmacological and environmental interventions have been shown to improve behavioral symptoms of dementia.
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Nonpharmacologic Management of Behavioral Symptoms in Dementia

JAMA. 2012;308:2020-2029
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Is a quality improvement program designed to improve the care of nursing home residents with acute changes in condition

https://interact.fau.edu
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Efficacy of treating pain to reduce behavioural disturbances in residents of nursing homes with dementia: cluster randomised clinical trial

352 residents of 18 NHs in Norway with moderate to severe dementia and clinically significant behavioral symptoms

Randomized to 8 wks of stepped pain management or usual care

Table 2: Stepwise protocol for treatment of pain

<table>
<thead>
<tr>
<th>Step</th>
<th>Pain treatment at baseline</th>
<th>Study treatment</th>
<th>Dosage</th>
<th>No (%) of residents (n=175)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No analgesics, or low dose of paracetamol</td>
<td>Paracetamol (acetaminophen)</td>
<td>Maximum dose 3 g/day</td>
<td>120 (69)*</td>
</tr>
<tr>
<td>2</td>
<td>Full dose of paracetamol or low dose morphine</td>
<td>Morphine</td>
<td>5 mg twice daily; maximum dose 10 mg twice daily</td>
<td>4 (2)</td>
</tr>
<tr>
<td>3</td>
<td>Low dose buprenorphine or inability to swallow</td>
<td>Buprenorphine transdermal patch</td>
<td>5 µg/h, maximum dose 10 µg/h</td>
<td>39 (22)†</td>
</tr>
<tr>
<td>4</td>
<td>Neuropathic pain</td>
<td>Pregabalin</td>
<td>25 mg once daily; maximum dose 300 mg/day</td>
<td>12 (7)</td>
</tr>
</tbody>
</table>

Table 3: Comparison of Cohen-Mansfield agitation inventory (CMAI) total score between control and intervention (stepwise protocol for treatment of pain) groups using repeated measures analysis of covariance (ANCOVA)*

<table>
<thead>
<tr>
<th>Week</th>
<th>Control group (Mean (SD))</th>
<th>Intervention group (Mean (SD))</th>
<th>Estimate (95% CI)</th>
<th>P value</th>
<th>Intraclass correlation coefficient‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>56.2 (16.1), n=177</td>
<td>56.5 (15.2), n=175</td>
<td>—</td>
<td>—</td>
<td>0.162</td>
</tr>
<tr>
<td>2</td>
<td>53.9 (17.0), n=161</td>
<td>52.0 (19.5), n=158</td>
<td>-3.6 (-0.5 to -6.7)</td>
<td>0.022</td>
<td>0.261</td>
</tr>
<tr>
<td>4</td>
<td>52.5 (16.3), n=180</td>
<td>49.4 (19.0), n=148</td>
<td>-4.1 (-0.9 to -7.4)</td>
<td>0.012</td>
<td>0.231</td>
</tr>
<tr>
<td>8</td>
<td>52.5 (16.6), n=157</td>
<td>46.9 (18.7), n=147</td>
<td>-7.0 (-3.7 to -10.3)</td>
<td>&lt;0.001</td>
<td>0.226</td>
</tr>
<tr>
<td>12</td>
<td>52.5 (16.0), n=152</td>
<td>50.3 (20.3), n=142</td>
<td>-3.2 (0.1 to -6.4)</td>
<td>0.058</td>
<td>0.253</td>
</tr>
</tbody>
</table>

BMJ 2011;343:d4065 doi: 10.1136/bmj.d4065
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**# 2**

- Don’t insert percutaneous feeding tubes in individuals with advanced dementia. Instead, offer oral assisted feedings.

**# 1**

- Don’t recommend percutaneous feeding tubes in patients with advanced dementia; instead offer oral assisted feeding.
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Don’t recommend percutaneous feeding tubes in patients with advanced dementia; instead offer oral assisted feeding.

- Strong evidence shows that artificial nutrition does not prolong life or improve quality of life in patients with advanced dementia.
- Tube feeding does not ensure the patient’s comfort or reduce suffering or incidence of pressure ulcers.
- It may cause fluid overload, diarrhea, abdominal pain, local complications, less human interaction and may increase the risk of aspiration.
- Tube-feeding is associated with agitation, increased use of physical and chemical restraints and worsening pressure ulcers.
- Careful hand-feeding for patients with severe dementia is at least as good as tube-feeding for the outcomes of death, aspiration pneumonia, functional status and patient comfort.
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The Clinical Course of Advanced Dementia

- **DESIGN:** 323 nursing home residents with advanced dementia in 22 nursing homes were followed for 18 months

- **RESULTS:** Pneumonia, febrile episodes, and eating problems are frequent complications in patients with advanced dementia, and these complications are associated with high 6-month mortality rates. Distressing symptoms and burdensome interventions are also common among such patients.

- **IMPLICATIONS FOR CLINICAL PRACTICE:** Dementia is a terminal illness. Patients with health care proxies who have an understanding of the prognosis and clinical course are likely to request and receive less aggressive care near the end of life.
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The “BIG 10”
*Basics in Geriatrics*

10. Ethical issues and end-of-life care are critical aspects of the practice of geriatrics
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Advance Care Planning

- Care decisions at the end of life should not be made in a crisis
- They must be clearly documented and communicated between care settings
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Education on Tube Feeding for Residents and Families (cont’d)

Making the Decision about Tube Feeding
Many people make a decision in advance about whether or not they want tube feeding. You can choose between having tube feeding and asking for a 'No Tube Feeding' order. You may not be able to make this decision for yourself at the time you are unable to eat or drink. Making the decision in advance will help make sure that your wishes are carried out.

Benefits of Tube Feeding
- Tube feeding can provide you with nutrition and fluids on a temporary or long-term basis when you are unable to eat or drink, or have difficulty swallowing.

Risks of Tube Feeding
- Although tube feeding can provide you with nutrition and fluids, there are several risks of having tube feeding. For example:
  - Complications of the operation done to put the tube in your stomach, such as bleeding, infection, and pain can occur. But they are infrequent.
  - The area around the tube can become irritated, painful, or infected.
  - The tube may become blocked or fall out, requiring trips to the hospital to have it replaced.

Help in Making Your Decision
There are many resources available to you in making this decision. Organizations such as the American Association for Retired Persons, the Coalition for Compassionate Care, the Conversation Project, Closure, and Continuing Connections of the National Hospice and Palliative Care Organization, as well as many others have information available in print and on their websites that may be helpful to you. In addition, most states have standard forms for documenting your decisions in advance (‘Advance Directives’), and many are recommending completing an order form in advance, such as Physicians Orders for Life Sustaining Treatment (POLST) or other similar forms.

Deciding About Going to the Hospital

Older nursing home residents commonly develop new or worsening symptoms. When this occurs, a decision may be needed about whether to continue care in the nursing home or go to a hospital. Because there are risks as well as benefits of care in a hospital, it is important to make the right decision. The decision depends on a number of factors, and how the nursing home resident and her or his relatives view the benefits and risks of care in the hospital as opposed to the nursing home.

Research has shown that some hospitalizations may be unnecessary. Whether hospitalization can be prevented depends on the resident’s condition, the ability of the staff to provide the care necessary in the nursing home, and the preferences of the resident and her or his family.

Benefits of Hospital Care
There are many symptoms and conditions that usually require treatment in the hospital – for example, if vital signs are very abnormal (temperature, heart rate, or breathing rate), or if symptoms are severe and can’t be controlled (such as pain or vomiting). Hospital care offers benefits in these situations, including:
- Ready availability of sophisticated lab tests, X-rays, and scans
- Access to doctors and specialists who are in the hospital every day
- Availability of surgery and other procedures if needed
- Intensive care units for people who are critically ill

Risks of Hospital Care
Nursing home residents are prone to many complications of care in a hospital. These complications may occur even in the best hospitals, because older age, chronic medical problems, and the condition that caused the transfer all combine with the hospital environment to put nursing home residents at high risk for complications. These complications include:
- New or worsening confusion
- More time spent in bed, which can increase the risk of blood clots, pressure ulcers, muscle weakness, loss of function, and other complications
- Less sleep and rest due to tests, monitoring, and noise
- Increased risk for:
  - Falls with injuries, such as cuts, bruises, and broken bones
  - New infections
- Depression due to limited opportunities to socialize with friends and family, as well as being in an unfamiliar environment

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Update in Geriatrics: 
*Choosing Wisely – Primum Non Nocere*

Summary of Choosing Wisely Campaign
Recommendations for Geriatric Care

1. Don’t recommend percutaneous feeding tubes in patients with advanced dementia; instead offer oral assisted feeding.

2. Don’t use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia; and don’t prescribe them without an assessment of the underlying causes of the behavior(s).

3. Don’t use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium.
Update in Geriatrics: Choosing Wisely – Primum Non Nocere

Summary of Choosing Wisely Campaign Recommendations for Geriatric Care

4. Avoid using medications to achieve hemoglobin A1c <7.5% in most adults age 65 and older, and minimize the use of sliding scale insulin in the long-term care setting.

5. Don’t use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present; and don’t obtain a urine culture unless clear symptoms and signs attributable to the urinary tract are present.

6. Don't routinely prescribe lipid-lowering medications in individuals with a limited life expectancy.