Choosing Wisely®

An initiative of the ABIM Foundation

American Geriatrics Society

AGS Geriatrics Healthcare Professionals

Leading Change. Improving Care for Older Adults.

Ten Things Clinicians and Patients Should Question

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

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. Food is the preferred nutrient. Tube feeding is associated with agitation, increased use of physical and chemical restraints and worsening pressure ulcers.

2 Don't use antipsychotics as the first choice to treat behavioral and psychological symptoms of dementia.

People with dementia often exhibit aggression, resistance to care and other challenging or disruptive behaviors. In such instances, antipsychotic medicines are often prescribed, but they provide limited and inconsistent benefits, while posing risks, including over sedation, cognitive worsening and increased likelihood of falls, strokes and mortality. Use of these drugs in patients with dementia should be limited to cases where non-pharmacologic measures have failed and patients pose an imminent threat to themselves or others. Identifying and addressing causes of behavior change can make drug treatment unnecessary.

3 Avoid using medications other than metformin to achieve hemoglobin A1c <7.5% in most older adults; moderate control is generally better.

There is no evidence that using medications to achieve tight glycemic control in most older adults with type 2 diabetes is beneficial. Among non-older adults, except for long-term reductions in myocardial infarction and mortality with metformin, using medications to achieve glycated hemoglobin levels less than 7% is associated with harms, including higher mortality rates. Tight control has been consistently shown to produce higher rates of hypoglycemia in older adults. Given the long time frame to achieve theorized microvascular benefits of tight control, glycemic targets should reflect patient goals, health status and life expectancy. Reasonable glycemic targets would be 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 < 10 years, and 8.0 – 9.0% in those with multiple morbidities and shorter life expectancy.

4 Don't use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium.

Large-scale studies consistently show that the risk of motor vehicle accidents, falls and hip fractures leading to hospitalization and death can more than double in older adults taking benzodiazepines and other sedative-hypnotics. Older patients, their caregivers and their providers should recognize these potential harms when considering treatment strategies for insomnia, agitation or delirium. Use of benzodiazepines should be reserved for alcohol withdrawal symptoms/delirium tremens or severe generalized anxiety disorder unresponsive to other therapies.

5 Don't use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present.

Cohort studies have found no adverse outcomes for older men or women associated with asymptomatic bacteriuria. Antimicrobial treatment studies for asymptomatic bacteriuria in older adults demonstrate no benefits and show increased adverse antimicrobial effects. Consensus criteria has been developed to characterize the specific clinical symptoms that, when associated with bacteriuria, define urinary tract infection. Screening for and treatment of asymptomatic bacteriuria is recommended before urologic procedures for which mucosal bleeding is anticipated.

These items are provided solely for informational purposes and are not intended as a substitute for consultation with a medical professional. Patients with any specific questions about the items on this list or their individual situation should consult their physician.

Released February 21, 2013 (Items 1 – 5) and February 27, 2014 (Items 6 – 10). Items 2,3,6,7,8 and 10 revised on April 23, 2015.

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6 Don't prescribe cholinesterase inhibitors for dementia without periodic assessment for perceived cognitive benefits and adverse gastrointestinal effects.

Although some randomized control trials suggest that cholinesterase inhibitors may improve cognitive testing results, it is unclear whether these changes are clinically meaningful. It is uncertain whether these medicines delay institutionalization, improve quality of life or lessen caregiver burden. No studies have investigated benefits beyond a year nor clarified the risks and benefits of long-term therapy. Clinicians, patients and their caregivers should discuss treatment goals of practical value that can be easily assessed and the nature and likelihood of adverse effects before beginning a trial of Cholinesterase inhibitors. If the desired effects (including stabilization of cognition) are not perceived within 12 weeks or so, the inhibitors should be discontinued.

7 Don't recommend screening for breast, colorectal, prostate or lung cancer without considering life expectancy and the risks of testing, overdiagnosis and overtreatment.

Cancer screening is associated with short-term risks, including complications from testing, overdiagnosis and treatment of tumors that would not have led to symptoms. For prostate cancer, 1,055 older men would need to be screened and 37 would need to be treated to avoid one death in 11 years. For breast and colorectal cancer, 1,000 older adults would need to be screened to prevent one death in 10 years. For lung cancer, much of the evidence for benefit from low dose CT screening for smokers is from healthier, younger patients under age 65. Further, although screening 1,000 persons would avoid four lung cancer deaths in six years, 273 persons would have an abnormal result requiring 36 to get an invasive procedure with eight persons suffering complications.

8 Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, discontinue medications that may interfere with eating, provide appealing food and feeding assistance, and clarify patient goals and expectations.

Unintentional weight loss is a common problem for medically ill or frail elderly. Although high-calorie supplements increase weight in older people, there is no evidence that they affect other important clinical outcomes, such as quality of life, mood, functional status or survival. Use of megestrol acetate results in minimal improvements in appetite and weight gain, no improvement in quality of life or survival, and increased risk of thrombotic events, fluid retention and death. In patients who take megestrol acetate, one in 12 will have an increase in weight and one in 23 will have an adverse event leading to death. The 2012 AGS Beers criteria lists megestrol acetate and cyproheptadine as medications to avoid in older adults. Systematic reviews of cannabinoids, dietary polyunsaturated fatty acids (DHA and EPA), thalidomide and anabolic steroids have not identified adequate evidence for the efficacy and safety of these agents for weight gain. Mirtazapine is likely to cause weight gain or increased appetite when used to treat depression, but there is little evidence to support its use to promote appetite and weight gain in the absence of depression.

9 Don't prescribe a medication without conducting a drug regimen review.

Older patients disproportionately use more prescription and non-prescription drugs than other populations, increasing the risk for side effects and inappropriate prescribing. Polypharmacy may lead to diminished adherence, adverse drug reactions and increased risk of cognitive impairment, falls and functional decline. Medication review identifies high-risk medications, drug interactions and those continued beyond their indication. Additionally, medication review elucidates unnecessary medications and underuse of medications, and may reduce medication burden. Annual review of medications is an indicator for quality prescribing in vulnerable elderly.

10 Don't use physical restraints to manage behavioral symptoms of hospitalized older adults with delirium.

Persons with delirium may display behaviors that risk injury or interference with treatment. There is little evidence to support the effectiveness of physical restraints in these situations. Physical restraints can lead to serious injury or death and may worsen agitation and delirium. Effective alternatives include strategies to prevent and treat delirium, identification and management of conditions causing patient discomfort, environmental modifications to promote orientation and effective sleep-wake cycles, frequent family contact and supportive interaction with staff. Nursing educational initiatives and innovative models of practice have been shown to be effective in implementing a restraint-free approach to patients with delirium. This approach includes continuous observation; trying re-orientation once, and if not effective, not continuing; observing behavior to obtain clues about patients' needs; discontinuing and/or hiding unnecessary medical monitoring devices or IVs; and avoiding short-term memory questions to limit patient agitation. Pharmacological interventions are occasionally utilized after evaluation by a medical provider at the bedside, if a patient presents harm to him or herself or others. If physical restraints are used, they should only be used as a last resort, in the least-restrictive manner, and for the shortest possible time.

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How This List Was Created (1–5)

The American Geriatrics Society (AGS) established a work group chaired by the Vice Chair of Clinical Practice and Models of Care Committee (CPMC). Work group members were drawn from that committee, as well as the Ethics, Ethnogeriatrics and Quality and Performance Measurement (QPMC) committees. AGS members were invited to submit feedback and recommendations as to what they thought should be included in the list via an electronic survey. The workgroup first narrowed the list down to the top 10 potential tests or procedures. The workgroup then reviewed the evidence and sought expert advice to further refine the list to five recommendations, which were then reviewed and approved by the AGS Executive Committee and the Chairs/Vice Chairs of CPMC, Ethics and QPMC.

How This List Was Created (6–10)

The American Geriatrics Society (AGS) used the same work group from its first list to develop its second list. The group was chaired by the Chair of Clinical Practice and Models of Care Committee (CPMC). Work group members were drawn from that committee, as well as the Ethics, Ethnogeriatrics and Quality and Performance Measurement (QPMC) committees. AGS members were invited to submit feedback and recommendations as to what they thought should be included in a *Choosing Wisely®* list via an electronic survey. The workgroup then narrowed the list down and reviewed the evidence, seeking expert advice to further refine the list to five recommendations, which were then reviewed and approved by the AGS Executive Committee and the Chairs/Vice Chairs of CPMC, Ethics and QPMC.

On April 23, 2015, AGS revised items 2,3,6,7,8 and 10. Read more about these changes and rationale.

AGS' disclosure and conflict of interest policy can be found at www.americangeriatrics.org.

Sources

1

Finucane TE, Christmas C, Travis K. Tube feeding in patients with advanced dementia: A review of the evidence. JAMA. 1999;282(14):1365-1370.

Gabriel SE, Normand ST. Getting the methods right – The foundation of patient-centered outcomes research. N Engl J Med [Internet]. 2012 Aug 30;367(9):787-90.

Teno JM, Feng Z, Mitchell SL, Kuo S, Intrator O, Mor V. Do financial incentives of introducing case mix reimbursement increase feeding tube use in nursing home residents? J Am Geriatr Soc. [Internet]. 2008 May;56(5):887–890.

Teno JM, Mitchell SL, Kuo SK, Gozalo PL, Rhodes RL, Lima JC, Mor V. Decision-making and outcomes of feeding tube insertion: A five-state study. J Am Geriatr Soc.[Internet]. 2011 May;59(5):881–886.

Palecek EJ, Teno JM, Casarett DJ, Hanson LC, Rhodes RL, Mitchell SL. Comfort feeding only: A proposal to bring clarity to decision-making regarding difficulty with eating for persons with advanced dementia. J Am Geriatr Soc. [Internet]. 2010 Mar;58(3):580–584.

Hanson LC, Carey TS, Caprio AJ, Lee TJ, Ersek M, Garrett J, Jackman A, Gilliam R, Wessell K, Mitchell SL. Improving decision-making for feeding options in advanced dementia: A randomized, controlled trial. J Am Geriatr Soc. [Internet]. 2011 Nov;59(11):2009–2016.

2

The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society Updated Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc. 2012 Apr;60(4):616-31.

National Institute for Health and Clinical Excellence and Social Care Institute for Excellence NICE-SCIE. National Collaborating Centre for Mental Health. Clinical guidelines #42: Dementia: Supporting people with dementia and their careers in health and social care [Internet]London. 2006 Nov: Amended 2011 Mar [cited 2012 Oct 16]. Available from: www.nice.org.uk/CG042

Maher A, Maglione M, Bagley S, Suttorp M, Hu JH, Ewing B, Wang Z, Timmer M, Sultzer D, Shekelle PG. Efficacy and comparative effectiveness of atypical antipsychotic medications for off-label uses in adults: A systematic review and meta-analysis. JAMA [Internet]. 2011 Sep 28;306(12):1359-69.

Schneider LS, Tariot PN, Dagerman KS, Davis SM, Hsiao JK, Ismail MS, Lebowitz BD, Lyketsos CG, Ryan JM, Stroup TS, Sultzer DL, Weintraub D, Lieberman JA; CATIE-AD Study Group. Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. N Engl J Med [Internet]. 2006 Oct 12;355(15):1525-38.

Gitlin LN, Kales HC, Lyketsos, CG. Nonpharmacologic management of behavioral symptoms in dementia. JAMA. 2012 Nov 21;308(19):2020-9

3

The Action to Control Cardiovascular Risk in Diabetes Study Group. Effects of intensive glucose lowering in Type 2 Diabetes. N Eng J Med [Internet]. 2008 Jun 12;258(24):2545–2559.

The Action to Control Cardiovascular Risk in Diabetes Study Group. Long-term effects of intensive glucose lowering on cardiovascular outcomes. N Eng J Med [Internet]. 2011Mar 3;364(9):818–828.

Duckworth W, Abraira C, Moritz T, Reda D, Emanuele N, Reaven P, Zeive FJ, Marks J, David SN, Hayward R, Warren SR, Goldman S, McCarren M, Vitek ME, Henderson WG, Huang GD. Glucose control and vascular complications in veterans with type 2 diabetes. N Eng J Med[Internet]. 2009. 360(2):129–139.

ADVANCE Collaborative Group. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. N Engl J Med[Internet]. 2008 Jun 12;358:2560-72.

UK Prospective Diabetes Study (UKPDS) Group. Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). Lancet [Internet]. 1998;352:854-65.

Montori VM, Fernández-Balsells M. Glycemic control in type 2 diabetes: Time for an evidence-based about-face? Ann Intern Med[Internet]. 2009 Jun 2;150(11):803-8. Erratum in: Ann Intern Med. 2009 Jul 21;151(2):144. PMID: 19380837

Finucane TE. "Tight Control" in geriatrics: The emperor wears a thong. J Am Geriatr Soc [Internet]. 2012 Aug 6;60:1571–1575.

Kirkman MS, Briscoe VJ, Clark N, Florez H, Haas LB, Halter JB, Huang ES, Korytkowski MT, Nunshi MN, Odegard PS, Pratley RE, Swift CS. Diabetes in older adults: A consensus report. J Am Geriatr Soc. 2012 Oct;60(12):2342-2356.

Hemmingsen B, Lund SS, Gluud C, Vaag A, Almdal TP, Hemmingsen C, Wetterslev J. Targeting intensive glycaemic control versus targeting conventional glycaemic control for type 2 diabetes mellitus. Cochrane Database Syst Rev. 2013 Nov 11;11:CD008143.

4

Finkle WD, Der JS, Greenland S, Adams JL, Ridgeway G, Blaschke T, Wang Z, Dell RM, VanRiper KB. Risk of fractures requiring hospitalization after an initial prescription of zolpidem, alprazolam, lorazepam or diazepam in older adults. J Am Geriatr Soc. [Internet]. 2011 Oct;59(10):1883–1890.

The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society Updated Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc. 2012 Apr;60(4):616-31.

Kripke DF, Langer RD, Kline LE. Hypnotics' association with mortality or cancer: a matched cohort study. BMJ Open. 2012 Feb 27;2(1):e000850.

Glass J, Lanctôt KL, Herrmann N, Sproule BA, Busto UE. Sedative hypnotics in older people with insomnia: meta-analysis of risks and benefits. BMJ. 2005 Nov 19;331(7526):1169.

Sivertsen B, Omvik S, Pallesen S, Bjorvatn B, Havik OE, Kvale G, Nielsen GH, Nordhus IH. Cognitive behavioral therapy vs zopiclone for treatment of chronic primary insomnia in older adults: a randomized controlled trial. JAMA. 2006 Jun 28;295(24):2851-8.

5

Nordenstam GR, Brandberg CA, Odén AS, Svanborg Edén CM, Svanborg A. Bacteriuria and mortality in an elderly population. N Engl J Med. 1986 May 1;314(18):1152–1156.

Nicolle LE, Mayhew WJ, Bryan L. Prospective randomized comparison of therapy and no therapy for asymptomatic bacteriuria in institutionalized elderly women. Am J Med. 1987Jul;83(1):27–33.

Juthani-Mehta M. Asymptomatic bacteriuria and urinary tract infection in older adults. Clin Geriatr Med [Internet]. 2007 Aug;23(3):585–594.

Nicolle LE, Bradley S, Colgan R, Rice JC, Schaeffer A, Hooton TM; Infectious Diseases Society of America; American Society of Nephrology; American Geriatric Society. Infectious Diseases Society of America Guidelines for the diagnosis and treatment of asymptomatic bacteriuria in adults. Clin Infect Dis. [Internet]. 2005 Mar 1;40(5):643-65.

6

Courtney C, Farrell D, Gray R, Hills R, Lynch L, Sellwood E, Edwards S, Hardyman W, Raftery J, Crome P, Lendon C, Shaw H, Bentham P; AD2000 Collaborative Group. Long-term donepezil treatment in 565 patients with Alzheimer's disease (AD2000): randomized double-blind trial. Lancet. 2004 Jun 26;363(9427):2105–15.

American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society updated Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc. 2012 Apr;60(4):616–31.

Kaduszkiewicz H, Zimmermann T, Beck-Bornholdt HP, van den Bussche H. Cholinesterase inhibitors for patients with Alzheimer's disease: systematic review of randomized clinical trials. BMJ. 2005 Aug 6;331(7512):321–7.

Birks J. Cholinesterase inhibitors for Alzheimer's disease. Cochrane Database Syst Rev. 2006 Jan 25;(1):CD005593.

Lin JS, O'Connor E, Rossom RC, Perdue LA, Eckstrom E. Screening for cognitive impairment in older adults: a systematic review for the U.S. Preventive Services Task Force. Ann Intern Med.2013 Nov 5;159(9):601-12.

7

Schröder FH, Hugosson J, Roobol MJ, Tammela TL, Ciatto S, Nelen V, Kwiatkowski M, Lujan M, Lilja H, Zappa M, Denis LJ, Recker F, Páez A, Määttänen L, Bangma CH, Aus G, Carlsson S, Villers A, Rebillard X, van der Kwast T, Kujala PM, Blijenberg BG, Stenman UH, Huber A, Taari K, Hakama M, Moss SM, de Koning HJ, Auvinen A; ERSPC Investigators. Prostate-cancer mortality at 11 years of follow-up. N Engl J Med. 2012 Mar 15;366(11):981–90.

Moyer VA; U.S. Preventive Services Task Force. Screening for prostate cancer: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med. 2012 July 17;157(2):120–34.

Walter LC, Covinsky KE. Cancer screening in elderly patients: a framework for individualized decision making. JAMA. 2001 Jun 6;285(21):2750–6.

Lee SJ, Boscardin WJ, Stijacic-Cenzer I, Conell-Price J, O'Brien S, Walter LC. Time lag to benefit after screening for breast and colorectal cancer: meta-analysis of survival data from the United States, Sweden, United Kingdom, and Denmark. BMJ. 2012 Jan 8;346:e8441.

National Lung Screening Trial Research Team, Aberle DR, Adams AM, Berg CD, Black WC, Clapp JD, Fagerstrom RM, Gareen IF, Gatsonis C, Marcus PM, Sicks JD. Reduced lung-cancer mortality with low-dose computed tomographic screening. N Engl J Med. 2011 Aug 4;365(5):395-409.

Woolf SH, Harris RP, Campos-Outcalt D. Low-dose lung computed tomography screening for lung cancer: how strong is the evidence? JAMA Intern Med. 2014;174(12):2019-22.

8

Hanson LC, Ersek M, Gilliam R, Carey TS. Oral feeding options for people with dementia: a systematic review. J Am Geriatr Soc. 2011;59:463–72.

Milne AC, Potter J, Vivanti A, Avenell A. Protein and energy supplementation in elderly people at risk from malnutrition. Cochrane Database Syst Rev. 2009Apr 15;2:CD003288. DOI: 10.1002/14651858.CD003288.pub3.

Ruiz Garcia V, López-Briz E, Carbonell Sanchis R, Gonzalvez Perales JL, Bort-Marti S. Megestrol acetate for treatment of anorexia-cachexia syndrome. Cochrane Database Syst Rev. 2013 Mar 28;3:CD004310.

American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society updated Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc. 2012 Apr;60(4):616–31.

Mazotta P, Jeney CM. Anorexia-cachexia syndrome: a systematic review of the role of dietary polyunsaturated fatty acids in the management of symptoms, survival, and quality of life. J Pain Symptom Manage. 2009;37:1069–77.

Dewey A, Baughan C, Dean TP, Higgins B, Johnson I. Eicosapentaenoic acid (EPA, an omega-3 fatty acid from fish oils) for the treatment of cancer cachexia. Cochrane Database Syst Rev. 2007 Jan 24;1:CD004597.

Reid J, Mills M, Cantwell M, Cardwell CR, Murray LJ, Donnelly M. Thalidomide for managing cancer cachexia. Cochrane Database of Systematic Reviews 2012 Apr 18;4:CD008664.

Yavuzsen T, Davis MP, Walsh D, LeGrand S, Lagman R. Systematic review of the treatment of cancer-associated anorexia and weight loss. J Clin Oncol. 2005;23:8500–11.

Watanabe N, Omori IM, Nakagawa A, Cipriani A, Barbui C, Churchill R, Furukawa TA. Mirtazapine versus other antidepressive agents for depression. Cochrane Database Syst Rev. 2011 Dec 7;12:CD006528.

Fox CB, Treadway AK, Blaszczyk, Sleeper RB. Megestrol acetate and mirtazapine for the treatment of unplanned weight loss in the elderly. Pharmacotherapy. 2009;29(4):383–97.

9

National Committee for Quality Assurance. Improving quality and patient experience - the state of health care quality 2013. Washington (DC): National Committee for Quality Assurance; 2013 Oct. 206 p.

Shrank WH, Polinski JM, Avorn J. Quality indicators for medication use in vulnerable elders. J Am Geriatr Soc. 2007;55 (suppl 2):S373–82.

Hajjar ER, Cafiero AC, Hanlon JT. Polypharmacy in elderly patients. Am J Geriatr Pharm. 2007 Dec;5(4):345–51.

Steinman MA, Hanlon JT. Managing medications in clinically complex elders: "There's got to be a happy medium". JAMA. 2010 Oct 13;304(14):1592–1601.

Drenth-van Maanen AC, van Marum RJ, Knol W, van der Linden CM, Jansen PA. Prescribing optimization method for improving prescribing in elderly patients receiving polypharmacy. Drugs Aging. 2009;26(8):687–701.

10

Bray K, Hill K, Robson W, Leaver G, Walker N, O'Leary M, Delaney T, Walsh D, Gager M, Waterhouse C; British Association of Critical Care Nurses. British Association of Critical Care Nurses position statement on the use of restraint in adult critical care units. Nurs Crit Care. 2004 Sep-Oct;9(5):199–212.

Center for Medicare & Medicaid Services. Electronic Code of Federal Regulations. Condition of participation: patient's rights. 42 C.F.R. § 482.13.

Cotter VT, Evans LK. Avoiding restraints in hospitalized older adults with dementia. Best practices in nursing care to older adults with dementia. 2012;D1.

Inouye SK. Delirium in older persons. N Engl J Med. 2006;354:1157–65.

Minnick AF, Mion LC, Johnson ME, Catrambone C, Leipzig R. Prevalence and variation of physical restraint use in acute care settings in the U.S. J Nurs Scholarsh. 2007;39(1):30–7.

Maccioli GA, Dorman T, Brown BR, Mazuski JE, McLean BA, Kuszaj JM, Rosenbaum SH, Frankel LR, Devlin JW, Govert JA, Smith B, Peruzzi WT; American College of Critical Care Medicine, Society of Critical Care Medicine. Clinical practice guidelines for the maintenance of patient physical safety in the intensive care unit: use of restraining therapies – American College of Critical Care Medicine Task Force 2001-2002. Crit Care Med. 2003;31(11): 2665–767.

Mott S, Poole J, Kenrick M. Physical and chemical restraints in acute care: their potential impact on rehabilitation of older people. Int J Nurs Pract. 2005 Jun;11(3):95–101.

Flaherty JH, Little MO. Matching the environment to patients with delirium: lessons learned from the delirium room, a restraint-free environment for older hospitalized adults with delirium. J Am Geriatr Soc. 2011 Nov;59Suppl 2:S295–300.

McPherson JA, Wagner CE, Boehm LM, Hall JD, Johnson DC, Miller LR, Burns KM, Thompson JL, Shintani AK, Ely EW, Pandharipande PP. Delirium in the cardiovascular ICU: exploring modifiable risk factors. Crit Care Med. 2013 Feb; 41(2): 405-13.

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The mission of the ABIM Foundation is to advance medical professionalism to improve the health care system. We achieve this by collaborating with physicians and physician leaders, medical trainees, health care delivery systems, payers, policymakers, consumer organizations and patients to foster a shared understanding of professionalism and how they can adopt the tenets of professionalism in practice.

To learn more about the ABIM Foundation, visit www.abimfoundation.org.

About the American Geriatrics Society

The American Geriatrics Society (AGS) works to improve the health, independence and quality of life of all older people. Our geriatrics health professional members work together to provide interdisciplinary, patient- and family-centered team care to older adults. The society also works to bring the knowledge and expertise of geriatrics health professionals to the public via www.healthinaging.org.

To learn more about the AGS, please visit www.americangeriatrics.org.

For more information or to see other lists of Five Things Physicians and Patients Should Question, visit www.choosingwisely.org.