

Ten Things Physicians and Patients Should Question

1 **Don't insert percutaneous feeding tubes in individuals with advanced dementia. Instead, offer oral assisted feedings.**

Strong evidence exists that artificial nutrition does not prolong life or improve quality of life in patients with advanced dementia. Substantial functional decline and recurrent or progressive medical illnesses may indicate that a patient who is not eating is unlikely to obtain any significant or long-term benefit from artificial nutrition. Feeding tubes are often placed after hospitalization, frequently with concerns for aspirations, and for those who are not eating. Contrary to what many people think, tube feeding does not ensure the patient's comfort or reduce suffering; it may cause fluid overload, diarrhea, abdominal pain, local complications, less human interaction and may increase the risk of aspiration. Assistance with oral feeding is an evidence-based approach to provide nutrition for patients with advanced dementia and feeding problems.

2 **Don't use sliding scale insulin (SSI) for long-term diabetes management for individuals residing in the nursing home.**

SSI is a reactive way of treating hyperglycemia after it has occurred rather than preventing it. Good evidence exists that SSI is neither effective in meeting the body's insulin needs nor is it efficient in the long-term care (LTC) setting. Use of SSI leads to greater patient discomfort and increased nursing time because patients' blood glucose levels are usually monitored more frequently than may be necessary and more insulin injections may be given. With SSI regimens, patients may be at risk from prolonged periods of hyperglycemia. In addition, the risk of hypoglycemia is a significant concern because insulin may be administered without regard to meal intake. Basal insulin, or basal plus rapid-acting insulin with one or more meals (often called basal/bolus insulin therapy) most closely mimics normal physiologic insulin production and controls blood glucose more effectively.

3 **Don't obtain a urine culture unless there are clear signs and symptoms that localize to the urinary tract.**

Chronic asymptomatic bacteriuria is frequent in the LTC setting, with prevalence as high as 50%. A positive urine culture in the absence of localized urinary tract infection (UTI) symptoms (i.e., dysuria, frequency, urgency) is of limited value in identifying whether a patient's symptoms are caused by a UTI. Colonization (a positive bacterial culture without signs or symptoms of a localized UTI) is a common problem in LTC facilities that contributes to the over-use of antibiotic therapy in this setting, leading to an increased risk of diarrhea, resistant organisms and infection due to *Clostridium difficile*. An additional concern is that the finding of asymptomatic bacteriuria may lead to an erroneous assumption that a UTI is the cause of an acute change of status, hence failing to detect or delaying the more timely detection of the patient's more serious underlying problem. A patient with advanced dementia may be unable to report urinary symptoms. In this situation, it is reasonable to obtain a urine culture if there are signs of systemic infection such as fever (increase in temperature of equal to or greater than 2°F [1.1°C] from baseline) leukocytosis, or a left shift or chills in the absence of additional symptoms (e.g., new cough) to suggest an alternative source of infection.

4

Don't prescribe antipsychotic medications for behavioral and psychological symptoms of dementia (BPSD) in individuals with dementia without an assessment for an underlying cause of the behavior.

Careful differentiation of cause of the symptoms (physical or neurological versus psychiatric, psychological) may help better define appropriate treatment options. The therapeutic goal of the use of antipsychotic medications is to treat patients who present an imminent threat of harm to self or others, or are in extreme distress – not to treat nonspecific agitation or other forms of lesser distress. Treatment of BPSD in association with the likelihood of imminent harm to self or others includes assessing for and identifying and treating underlying causes (including pain; constipation; and environmental factors such as noise, being too cold or warm, etc.), ensuring safety, reducing distress and supporting the patient's functioning. If treatment of other potential causes of the BPSD is unsuccessful, antipsychotic medications can be considered, taking into account their significant risks compared to potential benefits. When an antipsychotic is used for BPSD, it is advisable to obtain informed consent.

5

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

There is no evidence that hypercholesterolemia, or low HDL-C, is an important risk factor for all-cause mortality, coronary heart disease mortality, hospitalization for myocardial infarction or unstable angina in persons older than 70 years. In fact, studies show that elderly patients with the lowest cholesterol have the highest mortality after adjusting other risk factors. In addition, a less favorable risk-benefit ratio may be seen for patients older than 85, where benefits may be more diminished and risks from statin drugs more increased (cognitive impairment, falls, neuropathy and muscle damage).

Ten Things Physicians and Patients Should Question

6

Don't place an indwelling urinary catheter to manage urinary incontinence.

The most common source of bacteremia in the post-acute and long-term care (PA/LTC) setting is the bladder when an indwelling urinary catheter is in use. The federal Healthcare Infection Control Practices Advisory Committee (HICPAC) recommends minimizing urinary catheter use and duration of use in all patients. Specifically, HICPAC recommends not using a catheter to manage urinary incontinence in the PA/LTC setting. Appropriate indications for indwelling urinary catheter placement include acute retention or outlet obstruction, to assist in healing of deep sacral or perineal wounds in patients with urinary incontinence, and to provide comfort at the end of life if needed.

7

Don't recommend screening for breast, colorectal or prostate cancer if life expectancy is estimated to be less than 10 years.

Many patients residing in the LTC setting are elderly and frail, with multimorbidity and limited life expectancy. Although research evaluating the impact of screening for breast, colorectal and prostate cancer in older adults in general and LTC residents in particular is scant, available studies suggest that multimorbidity and advancing age significantly alter the risk-benefit ratio. Preventive cancer screenings have both immediate and longer term risks (e.g., procedural and psychological risks, false positives, identification of cancer that may be clinically insignificant, treatment-related morbidity and mortality). Benefits of cancer screening occur only after a lag time of 10 years (colorectal or breast cancer) or more (prostate cancer). Patients with a life expectancy shorter than this lag time are less likely to benefit from screening. Discussing the lag time ("When will it help?") with patients is at least as important as discussing the magnitude of any benefit ("How much will it help?"). Prostate cancer screening by prostate-specific antigen testing is not recommended for asymptomatic patients because of a lack of life-expectancy benefit. One-time screening for colorectal cancer in older adults who have never been screened may be cost-effective; however, it should not be considered after age 85 and for most LTC patients older than 75 the burdens of screening likely outweigh any benefits.

8

Don't obtain a C. difficile toxin test to confirm "cure" if symptoms have resolved.

Rates of Clostridium difficile infection (CDI) have been increasing, especially among older adults who have recently been hospitalized or who reside in the PA/LTC setting. Patients residing in PA/LTC facilities are particularly at risk for CDI because of advanced age, frequent hospitalizations and frequent antibiotic exposure. Studies show that up to 57% of patients in the PA/LTC setting are asymptomatic carriers of C. difficile. Furthermore, studies have also shown that C. difficile tests may remain positive for as long as 30 days after symptoms have resolved. False positive "test-of-cure" specimens may complicate clinical care and result in additional courses of inappropriate anti-C. difficile therapy. To limit the spread of C. difficile, care providers in the PA/LTC setting should concentrate on early detection of symptomatic patients and consistently use proper infection control practices, including hand washing with soap and water.

9

Don't recommend aggressive or hospital-level care for a frail elder without a clear understanding of the individual's goals of care and the possible benefits and burdens.

Hospital-level care has known risks, including delirium, infections, side effects of medications and treatments, disturbance of sleep, and loss of mobility and function. These risks are often more significant for patients in the PA/LTC setting, who are more likely to be frail and to have multimorbidity, functional limitations and dementia. Therefore, for some frail elders, the balance of benefits and harms of hospital-level care may be unfavorable.

To avoid unnecessary hospitalizations, care providers should engage in advance care planning by defining goals of care for the patient and discussing the risks and benefits of various interventions, including hospitalization, in the context of prognosis, preferences, indications, and the balance of risks and benefits. Advance directives such as the Physician Orders for Life Sustaining Treatment (POLST) paradigm form and Do Not Hospitalize (DNH) orders communicate a patient's preferences about end-of-life care. Patients with DNH orders are less likely to be hospitalized than those who do not have these directives. Patients who opt for less-aggressive treatment options are less likely to be subjected to unnecessary, unpleasant and invasive interventions and the risks of hospitalization.

10

Don't initiate antihypertensive treatment in individuals ≥ 60 years of age for systolic blood pressure (SBP) < 150 mm Hg or diastolic blood pressure (DBP) < 90 mm Hg.

There is strong evidence for the treatment of hypertension in older adults. Achieving a goal SBP of 150 mm Hg reduces stroke incidence, all-cause mortality and heart failure. Target SBP and DBP levels should be set cautiously, however, as data do not suggest benefit in treating more aggressively to a goal SBP of < 140 mm Hg in the general population ≥ 60 years of age. Furthermore, moderate- or high-intensity treatment of hypertension has been associated with an increased risk of serious fall injury in older adults.

How This List Was Created (1–5)

AMDA – The Society for Post-Acute and Long-Term Care Medicine convened a work group made up of members from the Clinical Practice Committee (CPC). Members of the CPC include board certified geriatricians, certified medical directors, multi-facility medical directors, attending practitioners, physicians practicing in both office-based and nursing facility practice, physicians in rural, suburban and academic settings, those with university appointments, and more. It was important to AMDA that the workgroup chosen represent the core base of the AMDA membership. Ideas for the “five things” were solicited from the workgroup. Suggested elements were considered for appropriateness, relevance to the core of the specialty and opportunities to improve patient care. They were further refined to maximize impact and eliminate overlap, and then ranked in order of potential importance both for the specialty and for the public. A literature search was conducted to provide supporting evidence or refute the activities. The list was modified and a second round of selection of the refined list was sent to the workgroup for paring down to the final “top five” list. Finally, the work group chose its top five recommendations before submitting a final draft to the AMDA Executive Committee, which were then approved.

How This List Was Created (6–10)

The AMDA *Choosing Wisely*® endeavor utilized a similar procedure as published in *JAMA Intern Med.* 2014;174 (40):509-515 - A Top 5 List for Emergency Medicine for our five items.

The AMDA Clinical Practice Committee acted as the Technical Expert Panel (TEP).

Phase 1 – The Clinical Practice Committee (CPC) along with the Infection Advisory Committee clinicians brainstormed an initial list of low-value clinical decisions that are under control of PA/LTC physicians that were thought to have a potential for cost savings.

Phase 2 – Each member of the CPC selected five low-value tests considering the perceived contribution to cost (how commonly the item is ordered and the individual expense of the test/treatment/action), benefit of the item (scientific evidence to support use of the item in the literature or in guidelines); and highly actionable (use decided by PA/LTC clinicians only).

Phase 3 – A survey was sent to all AMDA members. Statements were phrased as specific overuse statements by using the word “don’t,” thereby reflecting the action necessary to improve the value of care.

Phase 4 – CPC members reviewed survey results and chose the five items.

AMDA’s disclosure and conflict of interest policy can be found at www.amda.com.

Sources

1 Teno JM, Gozalo PL, Mitchell SL, Kuo S, Rhodes RL, Bynum JP, Mor V. Does feeding tube insertion and its timing improve survival? *J Am Geriatr Soc.* 2012 Oct;60(10):1918-21.

Hanson LC, Ersek M, Gilliam R, Carey TS. Oral feeding options for people with dementia: a systematic review. *J Am Geriatr Soc.* 2011;59(3):463-72.

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.* 2010;58(3):580.

Sorrell JM. Use of feeding tubes in patients with advanced dementia: are we doing harm? *J Psychosoc Nurs Ment Health Serv.* 2010 May;48(5):15-8.

Sampson EL, Candy B, Jones L. Enteral tube feeding for older people with advanced dementia. *Cochrane Database Syst Rev.* 2009 Apr 15;(2):CD007209.

Gillick MR, Volandes AE. The standard of caring: why do we still use feeding tubes in patients with advanced dementia? *J Am Med Dir Assoc.* 2008 Jun;9(5):364-7.

Ganzini L. Artificial nutrition and hydration at the end of life: ethics and evidence. *Palliat Support Care.* 2006 Jun;4(2):135-43.

Li I. Feeding tubes in patients with severe dementia. *Am Fam Physician.* 2002 Apr 15;65(8):1605-11.

Finucane TE, Christmas C, Travis K. Tube feeding in patients with advanced dementia: a review of the evidence. *JAMA.* 1999 Oct 13;282(14):1365-70.

Mitchell SL, Kiely DK, Lipsitz LA. The risk factors and impact on survival of feeding tube placement in nursing home residents with severe cognitive impairment. *Arch Intern Med.* 1997 Feb 10;157(3):327-32.

2 Sue Kirkman M, Briscoe VJ, Clark N, Florez H, Haas LB, Halter JB, Huang ES, Korytkowski MT, Munshi MN, Odegard PS, Pratley RE, Swift CS. Consensus Development Conference on Diabetes and Older Adults. Diabetes in older adults: a consensus report. *J Am Geriatr Soc.* 2012 Dec;60(12):2342-56.

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.

Haq J. Insulin sliding scale, does it exist in the nursing home. *JAMDA.* 2010 Mar;11(3):B14.

Hirsch IB. Sliding scale insulin—time to stop sliding. *JAMA.* 2009;301(2):213-14.

American Medical Directors Association. Diabetes management in the long-term care setting clinical practice guideline. Columbia, MD:AMDA 2008, revised 2010.

Pandya N, Thompson S, Sambamoorthi U. The prevalence and persistence of sliding scale insulin use among newly admitted elderly nursing home residents with diabetes mellitus. *J Am Med Dir Assoc.* 2008 Nov;9(9):663-9.

Umpierrez GE, Palacio A, Smiley D. Sliding scale insulin use: myth or insanity? *Am J Med.* 2007;120(7):563-67.

Boyle P, Childs B. A roadmap for improving diabetes management in long-term care communities. Available from: <http://www.med-iq.com/index.cfm?fuseaction=courses.overview&clD=591>.

Golightly LK, Jones MA, Hamamura DH, Stolpman NM, McDermott MT. Management of diabetes mellitus in hospitalized patients: efficiency and effectiveness of sliding-scale insulin therapy. *Pharmacotherapy.* 2006;26(10):1421-32.

Queale WS, Seidler AJ, Brancati FL. Glycemic control and sliding scale insulin use in medical inpatients with diabetes mellitus. *Arch Intern Med.* 1997;157(5):545-52.

3

- Stone ND, Ashraf MS, Calder J, Crnich CJ, Crossley K, Drinka PJ, Gould CV, Juthani-Mehta M, Lautenbach E, Loeb M, MacCannell T, Malani TN, Mody L, Mylotte JM, Nicolle LE, Roghmann MC, Schweon SJ, Simor AE, Smith PW, Stevenson KB, Bradley SF. Surveillance definitions of infections in long-term care facilities: revisiting the McGeer Criteria. *Infect Control Hosp Epidemiol*. 2012; 33(10):965-77.
- Drinka P. Treatment of bacteriuria without urinary signs, symptoms, or systemic infectious illness (S/S/S). *J Am Med Dir Assoc*. 2009 Oct;10(8):516-9.
- Arinzon Z, Peisakh A, Shuval I, Shabat S, Berner YN. Detection of urinary tract infection (UTI) in long-term care setting: is the multireagent strip an adequate diagnostic tool? *Arch Gerontol Geriatr*. 2009 Mar-Apr;48(2):227-31.
- High KP, Bradley SF, Gravenstein S, Mehr DR, Quagliarello VJ, Richards C, Yoshikawa TT. Clinical practice guideline for the evaluation of fever and infection in older adult residents of long-term care facilities: 2008 update by the Infectious Diseases Society of America. *J Am Geriatr Soc*. 2009 Mar;57(3):375-94.
- Zabarsky TF, Sethi AK, Donskey CJ. Sustained reduction in inappropriate treatment of asymptomatic bacteriuria in a long-term care facility through an educational intervention. *Am J Infect Control*. 2008 Sep;36(7):476-80.
- Richards CL Jr. Infection control in long-term care facilities. *J Am Med Dir Assoc*. 2007 Mar;8(3 Suppl):S18-25.
- Ducharme J, Neilson S, Ginn JL. Can urine cultures and reagent test strips be used to diagnose urinary tract infection in elderly emergency department patients without focal urinary symptoms? *CJEM*. 2007 Mar;9(2):87-92.
- Loeb M, Brazil K, Lohfeld L, McGeer A, Simor A, Stevenson K, Zoutman D, Smith S, Liu X, Walter SD. Effect of a multifaceted intervention on number of antimicrobial prescriptions for suspected urinary tract infections in residents of nursing homes: cluster randomized controlled trial. *BMJ*. 2005 Sep 24;331(7518):669.
- Loeb M, Brazil K, Lohfeld L, McGeer A, Simor A, Stevenson K, Walter S, Zoutman D. Optimizing antibiotics in residents of nursing homes: protocol of a randomized trial. *BMC Health Serv Res*. 2002 Sep 3;2(1):17.
- Nicolle LE. Urinary tract infection in geriatric and institutionalized patients. *Curr Opin Urol*. 2002 Jan;12(1):51-5.
- Boscia JA, Kobasa WD, Abrutyn E, Levison ME, Kaplan AM, Kaye D. Lack of association between bacteriuria and symptoms in the elderly. *Am J Med*. 1986 Dec;81(6):979-82.
- Nicolle LE, Bentley D, Garibaldi R, Neuhaus E, Smith P. SHEA Long-Term-Care Committee. Antimicrobial use in long-term-care facilities. *Infect Control Hosp Epidemiol*. 1996;17:119-28.
- High KP, Bradley SF, Gravenstein S, Mehr DR, Quagliarello VJ, Richards C, Yoshikawa TT. Clinical practice guideline for the evaluation of fever and infection in older adult residents of long-term care facilities: 2008 update by the Infectious Diseases Society of America. *Clin Infect Dis* 2009; 48: 149-71.

4

- American Medical Directors Association. Dementia in the long term care setting clinical practice guideline. Columbia, MD: AMDA 2012.
- Perkins, R. Evidence-based practice interventions for managing behavioral and psychological symptoms of dementia in NH residents. *Ann LTC*. 2012;20(12):20-4.
- Flaherty J, Gonzales J, Dong B. Antipsychotics in the treatment of delirium in older hospitalized adults: a systematic review. *JAGS*. 2011;59:S269-76.
- American Medical Directors Association. Delirium and acute problematic behavior clinical practice guideline. Columbia, MD: AMDA 2008.
- Ozbolt LB, Paniagua MA, Kaiser RM. Atypical antipsychotics for the treatment of delirious elders. *J Am Med Dir Association*. 2008;9:18-28.
- U.S. Food and Drug Administration. Information for healthcare professionals: antipsychotics. FDA Alert, [Internet]. 2008 Jun 16. [Cited 2008 Sep 23]. Available from: http://www.fda.gov/cder/drug/InfoSheets/HCP/antipsychotics_conventional.htm.
- U.S. Food and Drug Administration, U.S. Department of Health and Human Services. 2007 information for healthcare professionals: haloperidol (marketed as Haldol, Haldol decanoate, and Haldol lactate). [Internet]. 2007 Sep 17. [Cited 2013 Jul 23]. Available from <http://www.fda.gov/cder/drug/InfoSheets/HCP/haloperidol.htm>.
- Schneeweiss S, Setoguchi S, Brookhart A, Dormuth C, Wang PS. Risk of death associated with the use of conventional versus atypical antipsychotic drugs among elderly patients. *CMAJ* 2007;176(5): 627-32.
- Gill SS, Bronskill SE, Normand SL, Anderson GM, Sykora K, Lam K, Bell CM, Lee PE, Fischer HD, Herrmann N, Gurwitz JH, Rochon PA. Antipsychotic drug use and mortality in older adults with dementia. *Ann Intern Med*. 2007;146(11):775-86.
- Schneider LS, Dagerman KS, Insel P. Risk of death with atypical antipsychotic drug treatment for dementia. *N Engl J Med*. 2005 Oct 19;294(18):1934-43.
- Schneider LS, Tariot PN, Dagerman KS. Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. *N Engl J Med*. 2006;355(15):1525-38.
- Sink KM, Holden KF, Yaffe K. Pharmacological treatment of neuropsychiatric symptoms of dementia: a review of the evidence. *JAMA*. 2005;293:596-608.
- U.S. Food and Drug Administration, U.S. Department of Health and Human Services. FDA public health advisory: deaths with antipsychotics in elderly patients with behavioral disturbances. [Internet]. 2005 Apr 11. [Cited 2013 Jul 23]. Available from <http://www.fda.gov/cder/drug/advisory/antipsychotics.htm>.
- Schneider LS, Dagerman KS, Insel P. Risk of death with atypical antipsychotic drug treatment for dementia: meta-analysis of randomized placebo-controlled trials. *JAMA*. 2005;294(15):1934-43.

5

- Dalleur O, Spinewine A, Henrard S, Losseau C, Speybroeck N, Boland B. Inappropriate prescribing and related hospital admissions in frail older persons according to the STOPP and START criteria. *Drugs Aging*. 2012 Oct;29(10):829-37.
- Schiattarella GG, Perrino C, Magliulo F, Ilardi F, Serino F, Trimarco V, Izzo R, Amato B, Terranova C, Cardin F, Milietto C, Leosco D, Trimarco B, Esposito G. Statins and the elderly: recent evidence and current indications. *Aging Clin Exp Res*. 2012 Jun;24(3 Suppl):47-55.
- Maraldi C, Lattanzio F, Onder G, Gallerani M, Bustacchini S, De Tommaso G, Volpato S. Variability in the prescription of cardiovascular medications in older patients: correlates and potential explanations. *Drugs Aging*. 2009 Dec;26 Suppl 1:41-51
- Schatz IJ, Masaki K, Yano K, Chen R, Rodriguez BL, Curb JD. Cholesterol and all-cause mortality in elderly people from the Honolulu Heart Program: a cohort study. *Lancet*. 2001 Aug 4;358(9279):351-5.
- Weverling-Rijnsburger AW, Blauw GJ, Lagaay AM, Knook DL, Meinders AE, Westendorp RG. Total cholesterol and risk of mortality in the oldest old. *Lancet*. 1997 Oct 18;350(9085):1119-23.
- Krumholz HM, Seeman TE, Merrill SS, Mendes de Leon CF, Vaccarino V, Silverman DI, Tsukahara R, Ostfeld AM, Berkman LF. Lack of association between cholesterol and coronary heart disease mortality and morbidity and all-cause mortality in persons older than 70 years. *JAMA*. 1994 Nov 2;272(17):1335-40.

6

CMS Manual System Pub. 100-07 State Operations Provider Certification. Transmittal 8. Revision of Appendix PP–Section 483.25(d)–Urinary Incontinence, Tags F315 and F316. Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services; 2005 Jun 28 [cited 2014 Dec 31]. Available from: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/r8som.pdf>.

Gould CV, Umscheid CA, Agarwal RK, Kuntz G, Pegues DA; Healthcare Infection Control Practices Advisory Committee. Guideline for prevention of catheter-associated urinary tract infections 2009. *Infect Control Hosp Epidemiol*. 2010 Apr;31(4):319-26.

Hooton TM, Bradley SF, Cardenas DD, Colgan R, Geerlings SE, Rice JC, Saint S, Schaeffer AJ, Tambayh PA, Tenke P, Nicolle LE; Infectious Diseases Society of America. Diagnosis, prevention, and treatment of catheter-associated urinary tract infection in adults: 2009 International Clinical Practice Guidelines from the Infectious Diseases Society of America. *Clin Infect Dis*. 2010 Mar;50(5):625-63.

Clarfield AM. Screening in frail older people: an ounce of prevention or a pound of trouble? *J Am Geriatr Soc*. 2010 Oct;58:2016-21.

Gill TM. The central role of prognosis in clinical decision making. *JAMA*. 2012 Jan 11;307(2):199-200.

Gross CP. Cancer screening in older persons: a new age of wonder. *JAMA Intern Med*. 2014 Oct;174(10):1565-7.

Lee SJ, Leipzig RM, Walter LC. Incorporating lag time to benefit into prevention decision for older adults. *JAMA*. 2013 Dec (25);310(24):2609-10.

Lonsdorp-Vogelaar I, Gulati R, Mariotto AB, Schechter CB, de Carvalho TM, Knudsen AB, van Ravesteyn NT, Heijnsdijk EA, Pabiniak C, van Ballegooijen M, Rutter CM, Kuntz KM, Feuer EJ, Etzioni R, de Koning HJ, Zauber AG, Mandelblatt JS. Personalizing age of cancer screening cessation based on comorbid conditions: model estimates of harms and benefits. *Ann Intern Med*. 2014 Jul 15;161(2):104-12.

Moyer VA. Screening for prostate cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med*. 2012 Jul 17;157(2):120-34.

Royce TJ, Hendrix LH, Stokes WA, Allen IM, Chen RC. Cancer screening rates in individuals with different life expectancies. *JAMA Intern Med*. 2014 Oct;174(10):1558-65.

Spivack B, Cefalu C, Kamel H, et al. Health Maintenance in the Long Term Care Setting Clinical Practice Guideline. 2012. Columbia, MD: American Medical Directors Association.

van Hees F, Habbema JD, Meester RG, Lansdorp-Vogelaar I, van Ballegooijen M, Zauber AG. Should colorectal cancer screening be considered in elderly persons without previous screening? A cost-effectiveness analysis. *Ann Intern Med*. 2014 Jun 3;160(11):750-9.

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

7

8

Riggs MM, Sethi AK, Zabarsky TF, Eckstein EC, Jump RL, Donskey CJ. Asymptomatic carriers are a potential source for transmission of epidemic and nonepidemic *Clostridium difficile* strains among long-term care facility residents. *Clin Infect Dis*. 2007 Oct 15;45 (8):992.

Surawicz CM, Brandt LJ, Binion DG, Ananthakrishnan AN, Curry SR, Gilligan PH, McFarland LV, Mellow M, Zuckerman BS. Guidelines for diagnosis, treatment, and prevention of *Clostridium difficile* infections. *Am J Gastroenterol*. 2013 Apr;108(4):478–98.

Creditor MC. Hazards of hospitalization of the elderly. *Ann Intern Med*. 1993 Feb 1;118(3):219.

Deciding About Going to the Hospital. Interact v4.0 Tool. Florida Atlantic University; 2011 [cited 2015 Jan 2]. Available from: http://interact2.net/docs/INTERACT%20Version%204.0%20Tools/INTERACT%20V%204%20Deciding_About_Going_to_Hospital%20Nov%2017%202014.pdf.

Inouye SK, Westendorp RG, Saczynski JS. Delirium in elderly people. *Lancet*. 2014 Mar 8;383(9920):911-22.

Murray LM, Laditka SB. Care transitions in older adults from nursing homes to hospitals: implications for long-term care practice, geriatrics education, and research. *J Am Med Dir Assoc*. 2010 May;11(4):231-8.

Tulsky JA. Beyond advance directives: importance of communication skills at the end of life. *JAMA*. 2005 Jul 20;294(3):359-65.

9

10

Beckett NS, Peters R, Fletcher AE, Staessen JA, Liu L, Dumitrascu D, Stoyanovsky V, Antikainen RL, Nikitin Y, Anderson C, Belhani A, Forette F, Rajkumar C, Thijs L, Banya W, Bulpitt CJ; HYVET Study Group. Treatment of hypertension in patients 80 years of age or older. *N Engl J Med*. 2008 May 1; 358(18):1887-98.

James PA, Oparil S, Carter BL, Cushman WC, Dennison-Himmelfarb C, Handler J, Lackland DT, LeFevre ML, MacKenzie TD, Ogedegbe O, Smith SC Jr, Svetkey LP, Taler SJ, Townsend RR, Wright JT Jr, Narva AS, Ortiz E. 2014 evidence-based guideline for the management of high blood pressure in adults. *JAMA*. 2014 Feb 5;311(5):507-20.

Muntner P, Bowling CB, Shimbo D. Systolic blood pressure goals to reduce cardiovascular disease among older adults. *Am J Med Sci*. 2014 Aug;348(2):129-34.

Tinetti ME, Han L, Lee DSH, McAvay GJ, Peduzzi P, Gross CP, Zhou B, Lin H. Antihypertensive medications and serious fall injuries in a nationally representative sample of older adults. *JAMA Intern Med*. 2014 Apr;174(4):588-95.

About the ABIM Foundation

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 AMDA

AMDA - The Society for Post-Acute and Long-Term Care Medicine is dedicated to excellence in patient care and provides education, advocacy, information and professional development to promote the delivery of quality post-acute and long-term care (PA/LTC) medicine. AMDA strives to provide cutting edge education, information, and tools on advocacy, clinical, management and technology topics that are specific to the evolving PA/LTC setting. AMDA offers opportunities to learn about best practices and activities that can maximize the quality of care and quality of life for patients.

