Choosing Wisely XIII

Alan S. Peterson, M.D.
Associate Director, Family and Community Medicine
Walter L. Aument Family Health Center

This is my 13th article on "Choosing Wisely" from the Board of Internal Medicine Foundation. As previously noted, each specialty group is developing "Five or Ten Things Physicians and Patients Should Know."

The "Choosing Wisely" topics in this issue are from The American Academy of Nursing (AAN), The Society of General Internal Medicine (SGIM), and The Society of Hospital Medicine – Adult Hospital Medicine (SHM).

RECOMMENTATIONS FROM THE AMERICAN ACADEMY OF NURSING (AAN)

1. Don't automatically initiate continuous electronic fetal heart rate (FHR) monitoring during labor in women without risk factors; consider intermittent auscultation (IA) first. Continuous FHR monitoring during labor is associated with an increase in Caesarean and instrumental births without improving APGAR score, NICU admission rates, or intrapartum fetal death rates. IA allows women freedom of movement during labor, thereby enhancing their ability to cope with labor pain and to utilize gravity to promote labor.

2. Don't let hospitalized older patients lie in bed or only get up to a chair. Up to 65% of the elderly who are able to walk independently will lose that ability during a hospital stay. Walking during a hospital stay is critical to maintaining functional ability, and the elderly who walk during their hospital stay are able to walk farther by discharge, are discharged from the hospital sooner, have improved ability to perform basic activities of daily living, and have a faster rate of recovery after surgery.

3. Don't use physical restraints with an older hospitalized patient; they cause more problems than they solve. Behavioral expressions of distress and/or change in medical status require immediate assessment and attention. Safe quality care without restraints can be achieved when multidisciplinary teams and/or geriatric nurse experts help staff. Restraint-free care is supported by staff educated about restraints, and by suitable organizational culture and structure.

4. Don't wake hospitalized patients for routine care unless the patient's condition or care specifically requires it. Sleep deprivation negatively affects breathing, circulation, immune status, hormone function, and metabolism. It can also lead to delirium, depression and other psychiatric impairments. Remember that noise, patient care activities, and patient-related factors such as pain, medication, and co-existing health conditions can affect a hospitalized person's ability for normal sleep.

5. Don't place or maintain a urinary catheter in a patient unless there is a specific indication to do so. Catheter-associated urinary tract infections (CAUTIs) are among the most common healthcare-associated infections in the United States. They obviously lead to an increase in healthcare costs and more serious complications in hospitalized patients.[1]

6. Don't use aloe vera on skin to prevent or treat radiodermatitis. Many Internet sites market aloe to help prevent these "sunburn type" reactions, but evidence-based research shows that aloe vera is not beneficial and one study reported worse patient outcomes with its use. Radiodermatitis can cause pain and pruritus that affect quality of life, body image and sleep. It can necessitate reduction in radiation dose or treatment delays that negatively impact treatment of the cancer. The highest incidence has primarily occurred in women receiving treatment for breast cancer.

7. Don't use L-carnitine/acetyl-L-carnitine supplements to prevent or treat symptoms of peripheral neuropathy in patients receiving chemotherapy for treatment of cancer. Some chemotherapeutic agents can cause chronic peripheral neuropathy, and many Internet sites that sell herbal and dietary supplements have recommended the above for peripheral neuropathy, but evidence has shown that they are ineffective and also may make

symptoms worse. Nurses need to educate patients not to use this dietary supplement while undergoing chemotherapy for cancer.[2]

8. Don't neglect to advise patients with cancer to get physical activity and exercise during and after treatment to manage fatigue and other symptoms. Up to 99% of patients receiving treatment for cancer will have fatigue and many continue to experience fatigue for years after completion of treatment. It is natural to try to get more rest while feeling fatigued. Resistance and aerobic exercise have shown to be safe, feasible, and effective in reducing symptoms of fatigue during multiple phases of cancer care. This also can have a positive effect on anxiety and depression. Professional guidelines now recommend 150 minutes/week of moderate-level exercise such as fast-walking, cycling, or swimming, with two to three strength training sessions per week unless specifically contraindicated.

9. Don't use mixed medication mouthwash, commonly termed "magic mouthwash" to prevent or manage oral mucositis caused by cancer treatment. Some chemotherapeutic agents and radiation therapy can cause a painful debilitating oral mucositis that includes the oral mucosa in the treatment field. This impairs the ability to eat and drink fluids and impacts quality of life. In severe cases, hospitalization and total parenteral nutrition can become necessary. Mixed medication mouthwash also known as "magic mouthwash," "Duke's magic mouthwash," or "Mary's magic mouthwash" is commonly used to prevent or treat this mucositis, but research studies have found that it can cause taste changes and irritating local side effects, yet is no more effective than rinses with salt and baking soda (sodium bicarbonate). In addition, the magic mouthwash often is compounded by a pharmacy, is expensive, and may not be covered by health insurance.[3]

10. Don't administer supplemental oxygen to relieve dyspnea in patients with cancer who do not have hypoxia. Overall prevalence of dyspnea ranges from 21% to 90% among patients with cancer, and it frequently increases during the last six months of life regardless of cancer diagnosis. Supplemental oxygen is commonly prescribed to relieve dyspnea in people with advanced illness despite arterial oxygen levels within normal limits. This treatment is not only costly and incurs multiple safety risks associated with the use of oxygen equipment, but it often causes functional restriction and distress due to being attached to a device. Palliative oxygen (administration to non-hypoxic patients) has consistently been shown *not* to improve dyspnea in individual studies and systematic reviews. Care should be focused on those interventions which have demonstrated efficacy against dyspnea, such as immediate release opioids.[4]

RECOMMENDATIONS FROM THE SOCIETY OF GENERAL INTERNAL MEDICINE (SGIM)

1. Don't recommend daily home finger glucose testing in patients with type 2 diabetes mellitus who don't use insulin. Unlike in type 1 diabetes, self-monitoring of blood glucose offers no benefit to patients with type 2 diabetes mellitus who are not on insulin or medications associated with hypoglycemia. Further, it is costly, and has a potential negative clinical impact. Self-monitoring should be reserved for patients during the titration of their medication doses or during periods of changes in their diet and exercise routines.

2. Don't perform routine general health checks for asymptomatic adults. (Routine health checks are defined as office visits in which a patient sees a health professional exclusively for preventive counseling and screening tests. They contrast with visits necessitated by acute illness, specific evidence-based preventive strategies, or chronic care management such as treatment of high blood pressure, diabetes, or hyperlipidemia.)

Regularly scheduled general health checks without a specific cause, including "health maintenance" annual visits, have not been shown to significantly reduce morbidity, mortality, or hospitalization, and can create a potential for harm from unnecessary testing.

Notwithstanding those statistics, however, I have found that a yearly CPE (Complete Physical Examination) can be useful for a PCP. In today's rushed world of medical practice, there is far too little time to cover essential health updates and to review important issues such as: the meaning of unnecessary testing and overdiagnosis, the maintenance of good health habits, the need for a Living Will (and the meaning of POLST), the need to update immunizations, the importance of seat belts, radon testing, etc. Patients also want time to ask THEIR questions or to discuss other issues that are not necessarily acute, but rather well-known chronic problems. The extra time usually provided in a CPE

time slot is also helpful to discover less obvious problems, many of which relate to psychological or behavioral issues.

3. Don't perform routine pre-operative testing before low-risk surgical procedures. This item has also been found in Choosing Wisely lists from other specialties. A proper pre-operative assessment includes an appropriately directed and sufficiently comprehensive physical examination, and in some cases might include laboratory and other testing to help direct management and assess surgical risk, but routine pre-operative testing for low-risk surgical procedures (such as cataract extraction) results in unnecessary delays, adds to significant avoidable costs, and should be eliminated.[5]

4. Don't recommend cancer screening in adults with life expectancy of less than 10 years. Patients can be exposed to immediate potential harms with screening tests that do not lead to a mortality benefit. Patients with life expectancies of less than 10 years are unlikely to live long enough to derive the distant benefit from screening. These patients may be more susceptible to complications of testing and treatments and are more likely to be frail.[6,7]

5. **Don't place (or leave in place) peripherally inserted central catheters (PICCs) just for the convenience of the patient or provider.** PICCs are commonly associated with two costly and potentially lethal healthcare-acquired complications: central-line associated bloodstream infection, and venous thromboembolism. Placement of PICCs should therefore be limited to recognized indications: long-term intravenous antibiotics, total parenteral nutrition, chemotherapy, and frequent blood draws. Removal should be done promptly when acceptable indications have ended.

RECOMMENDATIONS FROM THE SOCIETY OF HOSPITAL MEDICINE (SHM)—ADULT HOSPITAL MEDICINE

1. Don't place (or leave in place) urinary catheters for incontinence or convenience or monitoring of output for non-critically ill patients (see also Recommendation No. 5 from The American Academy of Nurses above). To monitor diuresis, weigh the patient instead. Acceptable indications for a catheter are: critical illness, urinary obstruction, hospice care, or peri-operative use (for less than two days) for a urologic procedure.

Published guidelines suggest that hospitals and long-term care facilities should develop, maintain, and promulgate policies and procedures for catheter insertion, including recommended indications, insertion and maintenance techniques, discontinuation strategies, and replacement indications.

2. Don't prescribe medications for prophylaxis of stress ulcer in medical inpatients unless they are at high risk for GI complications. Evidence-based guidelines do not support their use for adult patients in non-ICU settings. Both histamine-2 receptor antagonists and proton-pump inhibitors are associated with adverse drug events and increased costs. Community-acquired nosocomial pneumonia and Clostridium difficile susceptibility can be enhanced by these drugs.

3. Avoid transfusions of red blood cells for arbitrary hemoglobin or hematocrit thresholds in the absence of symptoms of active coronary disease, heart failure, or stroke. The American Association of Blood Banks recommends adhering to a restrictive transfusion strategy (7-8 g/dL) in hospitalized, stable patients. They also suggest that transfusion decisions be influenced by symptoms as well as by hemoglobin concentration. According to a National Institute of Health Consensus Conference, no single criterion should be used as an indication for red cell component therapy. Instead, multiple factors related to the patient's clinical status and oxygen delivery should be considered.

4. Don't order continuous telemetry monitoring outside of the ICU without using a protocol that governs their continued use. In patients with low-risk cardiac chest pain and a normal electrocardiogram, telemetric monitoring has limited utility or measurable benefit. Published guidelines for its use provide clear indications that are contingent upon the frequency, severity, and duration of symptoms, as well as the conditions under which they occur. Inappropriate use is likely to increase the cost of care, while potentially producing falsely positive findings that can lead to errors in patient management.[8]

5. Don't perform repetitive CBC and chemistry testing in the face of clinical and lab stability. Deceptively large volumes of blood are frequently drawn from hospitalized patients for diagnostic testing during short periods of time, which can contribute to anemia and may have other significant consequences, especially for patients with cardiorespiratory diseases. Reducing the frequency of blood tests also results in significant cost savings. [9]

TOP TIPS

MANY WITH "ALCOHOL USE DISORDER" ARE NOT GETTING TREATMENT

Almost 33 million adults in the United States have problems with alcohol, but most have never sought treatment - according to a study published on-line June 3 in JAMA Psychiatry.[10] This means that nearly one-third of Americans have experienced problems related to use of alcohol during their lifetime, and more than one in 10 have experienced it within the previous year. This is the first national estimate based on the new term "alcohol use disorder."

DSM-5 defines those with the disorder as people with at least two of the 11 characteristic symptoms including drinking that harms performance at work, school or home, frequent hangovers, and failed attempts to limit drinking. "Mild" problems involve two to three symptoms; "severe" involve at least six symptoms.

Researchers from the National Institute on Alcohol Abuse and Alcoholism asked 36,000 adults during 2012 or 2013 about lifetime drinking habits, including current habits and within the past year. Nearly 40% of adults surveyed said that they had engaged in binge drinking--downing at least five drinks in a day at least once in the past year, up from 31% in the earlier survey. Drinking problems were most prevalent among men, whites, and Native Americans. Relatively high rates were also found among low-income adults, those younger than 30, and those who never married. Problem drinking was also more common among city dwellers than those in rural areas, while the West and Midwest had higher rates than other regions.

Dr. George Koob, Director of the Federal Agency in the survey, said it's unclear why problem drinking has increased, but that many people underestimate the dangers of excessive alcohol, many don't seek help because of "stigma and denial," and many don't realize that medications and behavioral treatments can help. Only 19.8% of respondents with lifetime alcohol use disorder had received treatment.

In June 2015 the Pennsylvania House Judiciary and Transportation Committees opened discussion on House Bill 278, which would require all first-time and repeat DUI offenders with blood alcohol content of 0.10% or greater to use an ignition interlock on their vehicles for at least six months. Research shows that there are more than 30,000 first-time DUI offenders each year and that a substantial number will violate the terms of their license suspension and become repeat offenders.

SUMMARY OF REVISIONS TO STANDARDS OF MEDICAL CARE IN DIABETES-2015[11]

The "Standards of Medical Care in Diabetes—2015" should still be viewed as a single document, but it has been divided into 14 sections to highlight important topic areas and facilitate navigation.

The section changes contain the following more substantive revisions.

Section Two: Classification and Diagnosis of Diabetes. The BMP cut point for screening overweight or obese Asian Americans for pre-diabetes and type 2 diabetes was lowered to 23 kg/m^2 which reflects this population's increased risk for diabetes at lower BMP levels relative to the general population.

Section Four: Foundations of Care; education, nutrition, physical activity, smoking cessation, psychosocial care, and immunization. All individuals, including those with diabetes, should be encouraged to limit the amount of time they spend being sedentary by breaking up extended sitting periods of more than 90 minutes. E-cigarettes are not supported as an alternative to smoking or for smoking cessation. Immunization recommendations now reflect the guidelines regarding PCV 13 and PPSV 23 vaccinations in older adults.

Section Six: Glycemic Targets. The ADA now recommends a pre-meal blood glucose target of 80—130 mg/dL. The standards include new recommendations for assessing a patient's readiness for continuous glucose monitoring, and for providing ongoing support.

Section Seven: Approaches to Glycemic Treatment. The type 2 diabetes management algorithm was updated to reflect all of the currently available therapies for diabetes management.

Section Eight: Cardiovascular Disease and

Risk Management. The goal for diastolic blood pressure was changed from 80 mmHg to 90 mmHg for most people with diabetes and hypertension to reflect evidence from randomized clinical trials. Recommendations for statin treatment and lipid monitoring were revised after consideration of 2013 American College of Cardiology/American Heart Association guidelines on the treatment of blood cholesterol. Initiation of treatment is now driven primarily by risk status rather than LDL cholesterol level. It is now recommended that the standards provide the following lipid monitoring guidance: a screening lipid profile is reasonable at diabetes diagnosis, at an initial medical evaluation and/or at age 40 years of age, and periodically thereafter.

Section Nine: Microvascular Complications and Foot Care. It is now emphasized that all patients with insensate feet, foot deformities, or a history of foot ulcers have their feet examined at every visit.

Section 11: Children and Adolescents. The Standards now recommend a target A1C of less than 7.5% for all pediatric age groups, although individualization is still encouraged.

Section 12: Management of Diabetes in Pregnancy. This is a new section that has been added to provide recommendations related to pregnancy and diabetes, including recommendations regarding pre-conception counseling, medications, blood glucose targets, and monitoring.

CAN PATIENTS UNDERSTAND THE CONCEPT OF OVERDIAGNOSIS?

Kenny Lin, MD is a graduate of the LGH Family Practice Residency Program and has contributed to JLGH in the past on the topic of cancer screening. He is now a family physician at Georgetown University School of Medicine in Washington, DC. and he blogs at Common Sense Family Doctor. He notes that the concept of overdiagnosis is difficult for patients and physicians to grasp. (Overdiagnosis means making a diagnosis that – even when correct – is unnecessary because the patient would never have suffered any symptoms or consequences from the disease.) This usually occurs when a patient is screened for cancer on the presumption that early detection will find it at a stage when it is more amenable to treatment. Unfortunately, cancer screening often detects clinically insignificant tumors for which the treatment is worse than the disease.

Dr. Lin points out that prostate cancer is the poster child for overdiagnosis. Until we started screening with the prostate-specific antigen test, prostate cancer was considered a disease with a uniformly bad prognosis, so most men currently diagnosed with prostate cancer undergo surgery or radiation therapy, often with bothersome side effects.

Though the majority of men in their 60s and 70s will have pathologic evidence of prostate cancer, only one in 30 men actually die from the disease.[12] Studies now estimate that one in two prostate cancers, one in three breast cancers, and one in five lung cancers are most likely overdiagnosed.[13]

Dr. Lin's opinion is that doctors are not doing enough to inform patients about the possibility of overdiagnosis. One survey showed that it was discussed with only 9.5% of patients aged 50-69 years.

A randomized control trial published in The Lancet found that women who were given a decision-aid that contained information about overdiagnosis in mammography had more knowledge about screening outcomes and were more likely to make a decision based on their own personal preferences than women who were given a decision-aid that did not contain information about overdiagnosis. Dr. Lin supplies patients with an aid from the Public Health Agency of Canada,[14] and he suggests that family physicians should share this aid with women aged 40 and older.

REFERENCES

1. Tenke, P et al. An update on prevention and treatment of catheter-associated urinary tract infections. Curr Opin Infect Dis. 2014 Feb;27(1):102-7.
2. Peripheral Neuropathy [Internet]. Pittsburgh (PA): Oncology Nursing Society; 2015 [cited 2015 Apr 6]. Available from: https://www.ons.org/practice-resources/pep/peripheral-neuropathy.
3. Mucositis [Internet}. Pittsburgh (PA): Oncology Nursing; 2015 [cited 2015 Apr 6]. Available from https://www.ons.org/practice-resources/pep/mucositis.
4. Dyspnea [Internet]. Pittsburgh (PA): Oncology Nursing; 2015 [cited 2015] Apr 6]. Available from: https://www.ons.org/practice-resources/pep/dyspnea.
5. Apfelbaum, JL et al. The Committee on Standards and Practice Parameters. Practice advisory for pre-anesthesia evaluation: An Updated Report by the American Society of Anesthesiologists Taskforce on Pre-anesthesia Evaluation. Anesthesiology. 2012 Mar;116:522-38.
6. Lee, SJ. Et al. 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; 345:e8441.
7. Moyer, VA. U.S. Preventative Services Taskforce. Screening for Prostate Cancer: U.S. Preventative Services Taskforce Recommendations Statement. Ann Intern Med. 2012 Jul 17;157(2):120-34.
8. Snider, A et al. Is Telemetry Monitoring Necessary in Low-Risk Suspected Acute Chest Pain Syndromes? Chest [Internet]. 2002 Aug [cited 2012 Sep 4];122(2):517-523.
9. Stuebing, EA, et al. Surgical Vampires and Rising Healthcare Expenditure: Reducing the Cost of Daily Phlebotomy. Arch Surg [Internet]. 2011 May [cited 2012 Sep 4]; 146(5):524-7.
10. JAMA Psychiatry 2015 Jun 3 [doi:10.1001/jamapsychiatry.2015.0584]
11. Diabetes Care 2015;38(Suppl 1): S4 / DOI:10.2337/dc15-S003
12. Martin RM. Commentary: Prostate Cancer is Omnipresent, but Should We Screen for It? Int J Epidemiol. 2007;36:278-81.
13. Welch HG et al. Overdiagnosis in Cancer. J Natl Cancer Inst. 2010;102:605-613.
14. Public Health Agency of Canada. Information on Mammography for Women Age 40 and Older: A Decision Age for Breast Cancer in Canada. http://www.phac-aspc.gc.ca/cd-mc/pdf/Information_on_Mammography-eng.pdf. Accessed Mar 30 2015

Alan S. Peterson, M.D.
Associate Director, Family and Community Medicine
Walter L. Aument Family Health Center
Quarryville, PA 17566
717-786-7383
aspeters@lghealth.org