Patient Safety America Newsletter

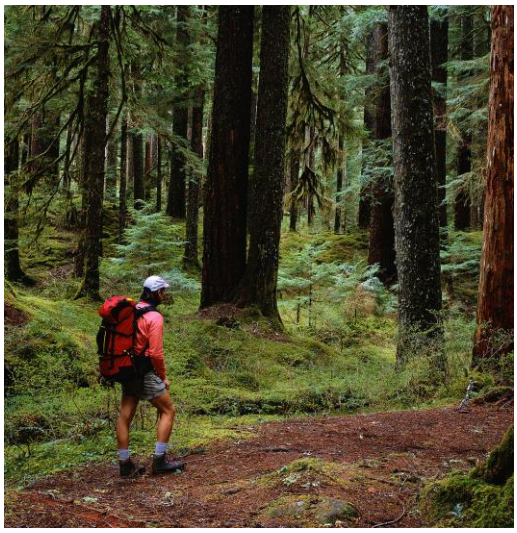
February 2014 http://PatientSafetyAmerica.com John T. James, Ph.D.

***Question**: In a study of older patients who had been screened at least once for breast or prostate cancer, what percentage of the time did the physician recommending the screening provide the patient with accurate information on the risks of over-diagnosis and overtreatment? a) 70% b) 50% c) 25% d) 10% e) 1%*

News on High Blood Pressure

High blood pressure has been associated with higher risk of heart attacks, strokes, kidney failure and death. The question is, "How high does blood pressure have to be to significantly increase these risks?" The "Eighth Joint National Commission" just released their findings based on a "rigorous, evidence-based approach," and these findings have changed the criteria for management of high blood pressure to avoid health risks.[1] Blood pressure consists of two numbers. The top (first) number is called the systolic blood pressure and the bottom (second) number is called the diastolic blood pressure. Diastolic pressure is that in blood arteries between heart contractions and systolic pressure is the maximum pressure achieved by the heart to push adequate amounts of blood through arteries. The units of blood pressure are "mm Hg," which indicates the pressure needed to push a column of mercury to a certain height. For example, a pressure of 100 mm Hg would push a column of mercury 100 mm high.

For persons over 60 years old, there is strong evidence to treat the patient until a blood pressure of 150/90 mm Hg is achieved. For persons from 30 to 59 years old there is strong evidence to treat diastolic blood pressure to less than 90 mm Hg. There is not sufficient evidence to treat systolic blood pressure to a specific number in those 30 to 59 years old; however, based on expert opinion, treating these younger folks to a target of 140/90 mm Hg is recommended. There is no difference in recommendations for the younger group depending on whether the patient has diabetes or kidney disease. The treatment recommendations for black and non-black populations vary, so ask your physician about treatment options if you have a need for blood pressure management.



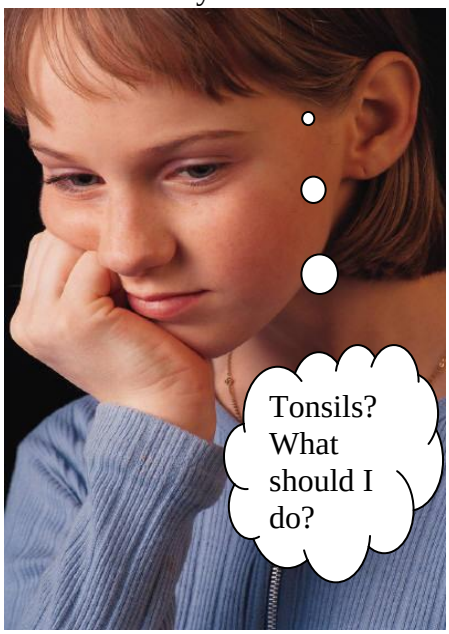
More Guidelines for Your Health

Several new guidelines have been issued by the American College of Cardiology, the American Heart Association, and the Obesity Society. I did not know that the last one existed; anyway, I'm going to focus on 2 of these here.[2] The **Healthy Lifestyle Guideline** offers no real surprises: eat a heart healthy diet *consistent with your culture*, reduce sodium intake to below 2400 mg/day, and get moderate to brisk exercise for 40 minutes at least 3-4 times per week (http://bit.ly/17uXmnm). The **Guideline for Addressing Obesity** suggests target weight losses of 5-10% of body weight

within a 6-month period with calorie restriction and increased exercise. During this period, the patient should meet with a "trained professional" 2-3 times per month (http://bit.ly/17phxDc). Bariatric surgery may offer health benefits for those with a BMI above 40. A new guideline was also issued for use of statins to manage lipid levels, but these are complex and are going to result in the number of adults using these drugs to increase from 15% to 30%. One skeptic of the change (Rita Redberg, MD) was critical of the changes and whether the "experts" took into account the risk of statins vs. the presumed benefits.[2]

Patient Preferences Reflected in Practice Guidelines

OK, so long as you are not yet tired of reading about guidelines, an interesting article appeared in the *JAMA* on how patient preferences factor into formation and application of guidelines, such as those described above. Three experts writing a "viewpoint" article survey the difficulty in making truly evidence-based guidelines and that such guidelines typically lack consideration of patient preferences as part of the guideline.[3] The concept of "informed preference" emerges in their writings rather than a rigid adherence to guidelines that may or may not be based on strong evidence. They suggest that a certain level of "practical wisdom" is necessary to implement a treatment based on informed preference of the individual patient.



In my opinion, there are 3 steps to achieving what the writers suggest: 1) a no-nonsense attitude toward the evidence base by the panelists establishing the guidelines, 2) a balanced attitude about how to reflect the possible array of patient preferences that might be reasonably anticipated, and 3) communication of the guideline to the individual physician and patient who together must make a decision about care. None of these are easy steps.

I saw a couple of things I liked in the experts' viewpoint.[3] They suggested that guideline panels must include "frontline patients and clinicians." Also, the panelists must be free of bias, which is often present because scientists doing research in a given area are the ones most likely to know the evidence base well and are the most likely to have an intellectual or financial bias. In complex situations where informed preference matters, clinicians are not going to find the time to educate each patient on her choices, so balanced, timely and complete decision aids are going to have to be readily available to assist patients. In the meantime patients are going to have to ask hard questions and demand clear unbiased answers.

Tonsillectomies are Serious Business

Most parents regard tonsillectomies as free of risk to their children's wellbeing, but a recent tragedy (December 9, 2013) in which a girl died from the bleeding complications of tonsillectomy at Oakland Children's Hospital, suggests otherwise. A study published in the journal *Pediatrics* shows that tonsillectomies can be risky.[4] After her surgery the girl bled profusely, went into cardiac arrest and was declared brain dead by her doctors. According to the *Pediatrics* study, bleeding and vomiting accompanied by dehydration are the most serious complications causing a return of children to the hospital after a tonsillectomy.

For perspective, tonsillectomies are performed more than a half million times per year in the US, which makes this the second most common childhood surgery and the 9th most cumulatively expensive. Evidence-based guidelines, published in 2011, called for administration of dexamethasone to reduce post-surgery nausea, vomiting and pain, and for no use of antibiotics because these are ineffective in reducing the risk of infection. The team of investigators asked how often these guidelines were followed prior to adoption (2004-2010) and what the variability was from hospital to hospital in complications that caused a return visit.

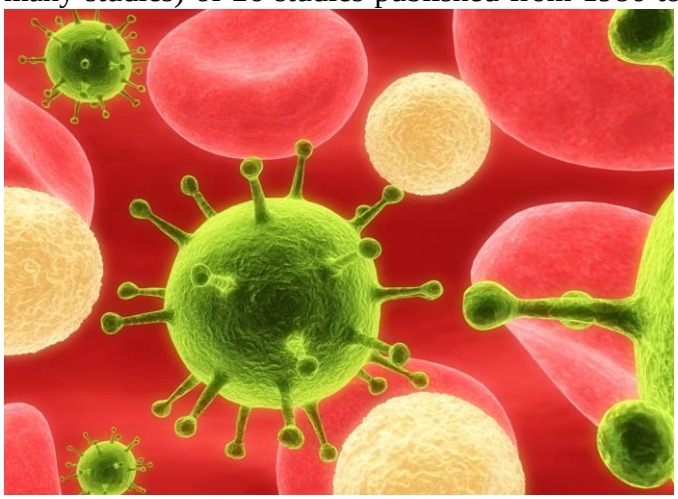
During the study period dexamethasone median use was 76%, but the hospital to hospital variability was 0.3% to 99%. The median use of

antibiotics was 16% with a range in use of 3% to 93%. Clearly some hospitals were greatly underusing dexamethasone and others overusing antibiotics. Revisits for complications also varied greatly. The median revisit rate was 8% with a hospital to hospital variability range of 3% to 13%. The authors postulate that as bundled payments become more common, the adverse outcomes (revisits) should be reduced because hospitals, determined to maintain their profit margins, will have to absorb the costs of revisits rather than pass them on to the patient (or insurance company) as they have been doing under the fee for service payment structure.

I might note that if the revisit rates for each hospital were made available to the public, then hospitals would be strongly inclined to optimize their care of children undergoing tonsillectomy, regardless of the payment structure.

Costs of Healthcare Associated Infections (HAIs)

I have couple of friends who were victims of HAIs given to them in hospitals. Both were surgical site infections, and even after 2 years, one of them is still battling the effects of the infection. Aside from the human suffering these infections cause, one might also ask what HAIs cost the US medical system to "repair." A team of investigators employed Meta-analysis (a statistical combining of many studies) of 26 studies published from 1986 to



2013 to estimate the costs associated with 6 types of HAI: 1) central line associated bloodstream infections, 2) ventilator associated pneumonia, 3) surgical site infection, 4) catheter-associated urinary tract infection, 5) *Clostridium difficile* (a gastrointestinal infection), and 6) catheter associated urinary tract infection.[5] Their stated goal was to disclose the cost of these HAIs so that the costs can help "providers and payers justify investing in prevention."

In terms of 2012 dollars, except for catheter-associated urinary tract infections that were inexpensive to repair, the average cost to "repair" harm from the infections ranged from $11,000 (*Clostridium difficile*) to $46,000 (central-line associated bloodstream infection). The total cost associated with the 5 most costly types of infection was estimated at $10 billion per year for adult inpatients. If you are planning a hospital stay, you should ask to talk with the hospital's infection control officer about their procedures for controlling HAIs. While these infections are on the decline, there is still a long way to go to and progress against HAIs has been slow. It is estimated that far more than half of such infections are preventable.

Informed Consent, Over-diagnosis, and Overtreatment

You may recall from last month's newsletter the true story of Ralph as told by Otis Brawley, MD in his book "How We Do Harm." All poor ole Ralph did was to allow himself to be subjected to prostate cancer screening, and the mess that followed led to his demise. Two investigators published a research letter this past month in which they asked the question: Are patients informed by their doctors about the consequences of over-diagnosis and overtreatment when they are considering screening for cancer?[6]

The researchers conducted an on-line survey of 317 US men and women aged 50 to 69 years, assuming that they would be the most likely to have undergone cancer screening. These included only persons with no history of cancer and for whom their physician had recommended screening. The survey included a short tutorial on over-diagnosis and overtreatment. Eighty-three percent of the subjects had actually been to at least one cancer screening session. Only 30 of the participants said that their physician had informed them of the potential for over-diagnosis and overtreatment as a result of screening. Of those who chose not to have any screening, one third said that discussions of overtreatment had been a factor in their decision.

The researchers note that one reason for the lack of information provided by physicians to

patients is that physicians themselves do not know the potential risks of over-diagnosis and overtreatment. The writers point to a study showing that a national survey found that about 40% of those doctors surveyed could provide a correct estimate of over-diagnosis and overtreatment in mammography and prostate-specific antigen screening. The authors call for improvements in physician education about over-diagnosis and overtreatment.

Advanced Dementia and Hospitalization

One of the great dilemmas in medical care is how to handle the care of folks in nursing homes with advanced dementia when they become acutely ill. The choice should always depend on the wishes of the patient, presumably declared in better times when an advanced directive can be prepared. Unfortunately, the care received depends more on the patient's insurance status than on their medical needs. This fact was shown by a group of investigators who compared the care given to patients covered by managed care vs. patients covered by Medicare fee-for-service care.[7] On average, residents with managed care were only 1/4th as likely to be transferred to a hospital as those under Medicare fee-for-service care. Survival, comfort, and other treatment outcomes did not differ between the groups.

So, why are there so many more transfers of acutely ill patients with advanced dementia to hospitals under fee-for-service payment? The researchers suggest that there is an opportunity here for cost savings. I would be a bit blunter. The medical-care system is exploiting the fee-for-service payment system by hospitalizing acutely ill patients with advanced dementia to make as much money as it can – and offering no benefit whatsoever to the patient. And you, the Medicare tax payer, are paying for this gaming for money.

References

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Answer to question this month: d) 10% of the time, reference 6