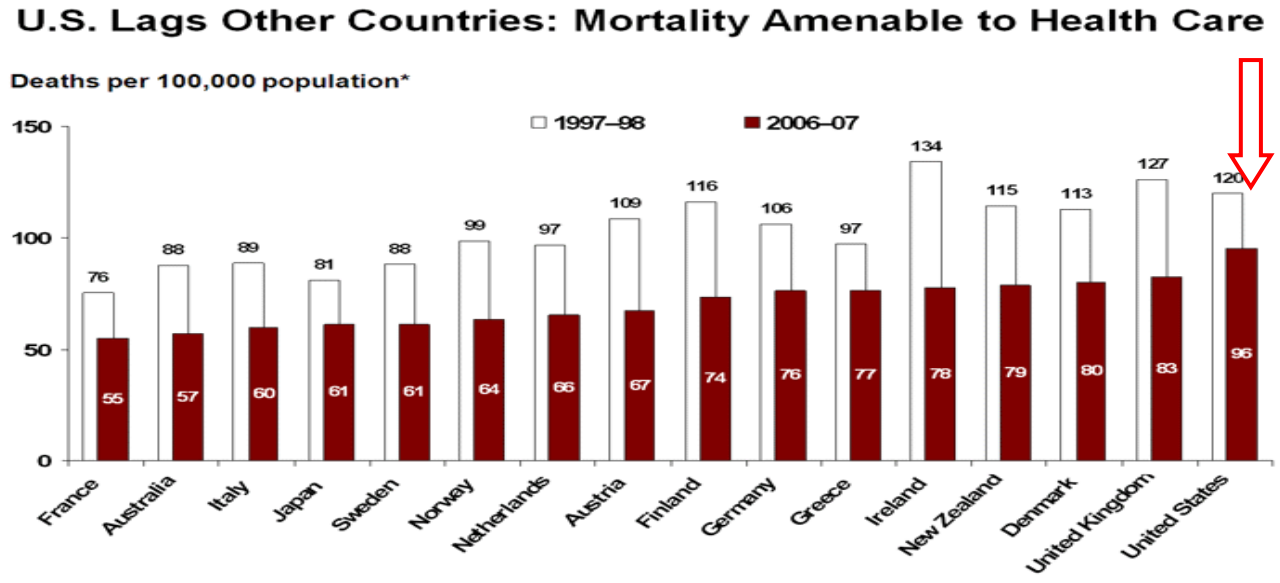
PSA

Patient Safety America Newsletter

October 2011 http://PatientSafetyAmerica.com John T. James, Ph.D.

***Question**: By what percentage was the standard of care better when electronic health records were used instead of paper records for diabetic patients? a) 5% b) 15% c) 35% d) 65% e) 95%*



* Countries' age-standardized death rates before age 75; including ischemic heart disease, diabetes, stroke, and bacterial infections. Analysis of World Health Organization mortality files and CDC mortality data for U.S.

Source: Adapted from E. Nolte and M. McKee, "Variations in Amenable Mortality—Trends in 16 High-Income Nations," *Health Policy,* published online Sept. 12, 2011.

THE COMMONWEALTH FUND

U.S. Healthcare: Last and Falling Further Behind

In early September the Commonwealth Fund, a private research organization headquartered in New York and dedicated to high-performance healthcare, released its comparisons of "mortality amenable to healthcare" in 16 high-income countries. The release was through the journal *Health Policy* in an online article written by a scientist and an MD.[1] Using data available through the World Health Organization, they compiled the number of deaths in persons under 75 years of age that could have been prevented by timely and effective healthcare. The amenable-to-healthcare factors they examined included: childhood infections, vascular diseases, diabetes, treatable cancers, and heart disease.

The findings were deeply troubling for two reasons: 1) the U.S. had the highest death rate of any of the countries in 2006-7, and 2) our rate of improvement from 1997-8 to 2006-7 was the worst of any of the 16 countries. This is illustrated in the figure above. The writers point out that if the U.S. had had the rates of the three best-performing countries, then more than 84,000 Americans would not have died in 2006-7 because they did not receive timely and effective healthcare. I would also point out that in absolute terms the rate of death due to poor healthcare in 300 million Americans is equivalent to 288,000 lives lost that could have been saved by timely and effective healthcare.

Errors of Omission

Most of us think of medical errors as something a provider *did* to a patient that caused harm; however, a common type of medical error is

the error of omission. Errors of omission happen when something should have been done for the patient to reduce the risk of harm, and it was not done. A large group of investigators asked how often patients entering the intensive care unit (ICU) of a hospital or just admitted to a hospital have their medications accidentally discontinued.[2] The authors note that when a patient's care is in transition from one provider to another, omissions due to communication errors often occur, leaving the patient vulnerable to unintended harm.

The investigative team used administrative records from almost 400,000 Canadians aged 66 years or older from 1997 to 2009 and asked how often five groups of evidence-based medications were inadvertently discontinued. For simplicity, let's focus on a single group – discontinuation of anticoagulant medications. The comparisons of ICU patients and hospital-admitted patients were against a matched outpatient population. The controls had an 11.8% discontinuation rate, whereas the ICU patients had a 22.8% rate and the hospitalized patients had a rate of 19.4%. This suggests that far too many hospitalized and ICU patients had anticoagulant medications discontinued.

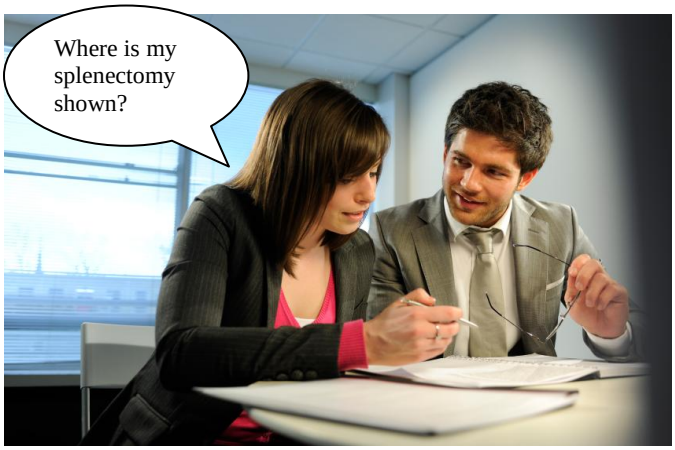
Can this difference in discontinuation rate of anticoagulants be associated with a difference in outcomes? The answer is yes. One-year follow up of patients whose anticoagulant therapy was discontinued showed that the inpatients were 10% more likely to die, come to the ER or seek other hospitalization than controls. The authors' conclusion: 'Patients prescribed medications for chronic diseases were at risk for potentially unintentional discontinuation after hospital admission. Admission to an ICU was generally associated with an even higher risk of medication discontinuation.' In my opinion, if the medications benefit the patient, then omitting the medications is harmful.

The take home message is that you as a patient or patient advocate need to understand why any medication is discontinued when you enter a hospital. There may be a good reason, or it may be a dangerous oversight by the care providers.

Another investigation, published as a 'Perspective' in the *New England Journal*, revealed more ways errors of omission can be harmful. Three physicians tell the story of a 53 year old woman who nearly died of pneumococcal sepsis.[3] She had had a splenectomy after an automobile accident 10 years earlier, but had not received the evidence-based vaccinations recommended by the Centers for Disease Control. This was vaccination against pneumococcal infection at 5-year intervals. The woman had been entirely within the care of the authors' care system, so the question was, "How did this omission occur?"

The care-system's electronic medical record provides prompts for the vaccinations; however, the fact that she had had a splenectomy was never entered into her problem list. During the doctor's investigation, they discovered that only 60% of patients with splenectomy in their problem list had documented vaccinations. They expressed discouragement that 40% of the time the prompt from the electronic records system was not being followed. In a massive survey of electronic medical records in their care system they discovered more than 7,000 patients with splenectomy mentioned in the records, but only 17 % of these had received the pneumococcal vaccination. If the splenectomy was in the 'problem list,' then the rate of vaccination increased to 54%.

The authors 'repaired' this problem by hiring some residents to add 'splenectomy' to the problem list of the electronic medical records of each appropriate patient. This cost about $1.50 per record. But they note that this one-time intervention is not the lasting answer. They note a number of possible solutions including the fact that avoiding one malpractice suit would make prevention efforts worth the cost. Of course in states like Texas where malpractice suits are nearly a thing of the past, that argument is irrelevant.

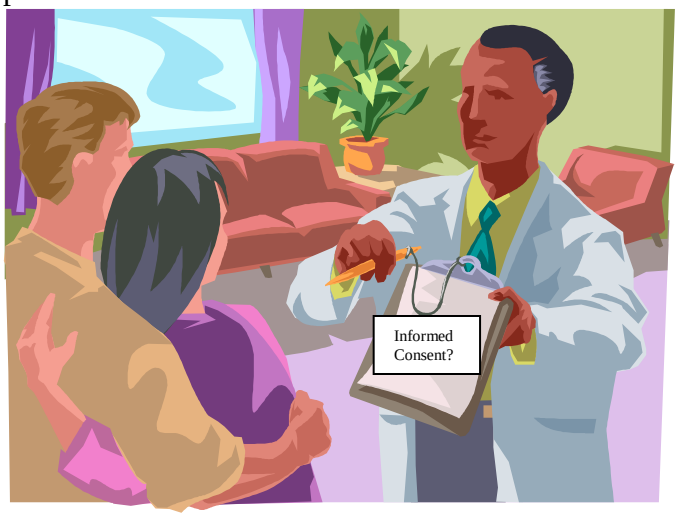


My sense of this thoughtful, but troubling commentary is that the authors cannot recommend an approach that will ensure optimal patient care in situations like an unvaccinated patient with splenectomy. They discuss limitations of any

attempt to change the system or those practicing within the system. I was disappointed to observe that better engagement of patients in their care was not on their list of possible remedies. There is no substitute for a thorough history from the patient. The authors note that we need a system that makes it easy to do the right thing and difficult to do the wrong thing. How such a system is created is unclear. **As a patient you cannot ask too many questions about your care and you must review your medical records for omissions and mistakes. You only have one life.** You do not want to follow the pathway of the 53-year old woman who needlessly walked near death because she had not been given evidence-based vaccinations against infections that could easily kill her.

Are Disparities in Hospital Outcomes Part of Informed Consent?

Lack of sufficient information for patients to make an informed decision about their healthcare is one of the unfortunate hallmarks of the American medical industry. Patients are often guided into expensive and invasive procedures that they would reject if they had been fully informed about other choices. A team of experts (legal and medical) examined the question of whether physicians should inform patients that an increased volume of procedures is associated with better outcomes.[4]



The authors focus on two types of cancer surgery that have the clearest relationship between volume of procedures and outcomes – esophageal and pancreatic cancer surgery. The consensus is that patients should be informed of this relationship, but how is not obvious. Few patients use public databases, and hospitals are not obliged to declare this information to patients, so it seems that this responsibility falls to the physician managing the patient's care. Routine disclosure of outcome information could lead to hospitals and doctors selecting 'easier' patients to keep their outcome record better, and thereby increase the number of referrals, although no evidence of this was cited.

The bottom line for physicians seems to be that volume-outcome information should be given to the patient when it is well known; however, a discussion of the limitations of the data may also be required. As most patients know, a good question to ask your doctor is, "How many times have you done this procedure and what is your outcome record?" **A further question for your doctor should be, "In which hospital is my procedure most often performed and where has the outcome been the best?"**

Managing Cost and Quality of Healthcare

Experts believe that the current budgetary crisis in the United States cannot be solved unless medical spending can be controlled. Our country spends far more per person on healthcare than any other developed country in the world, yet objective measures of health and healthcare (e.g. life expectancy or infant mortality) show that we fall behind many third-world countries in outcomes. A recent proposal by Paul Ryan intended to provide Medicare recipients with vouchers to purchase private insurance from companies that compete with each other. As reluctant as we Americans seem to be to learn anything from another country, is it possible that we can glean how well such an approach might work? Three experts assert in the *New England Journal* that the experience of the Netherlands can be instructive about insurance competition.[5]

The idea is that competition among insurance companies would keep overall costs down and improve quality, but it has not turned out that way in the Netherlands. The unexpected outcomes include 1) no stabilization in the rate of cost increases, 2) an increase in the number insured who do not pay their premiums, 3) few citizens actually changing insurance companies, and 4) continued rigid control of government payments. The authors point out that Ryan's plan would erode government contributions to the point that Medicare beneficiaries would pay 2/3 of the cost of their medical care. They point out that healthcare systems

in Europe, Canada, Japan, and other countries depend on regulated prices, coordinated payments, budget ceilings, and limited use of expensive technology. The authors call the idea that the Dutch model provides support for Ryan's model 'bizarre.'

A commentary in the *JAMA* by and MD attempts to summarize what physicians can do to control costs and reduce waste. He suggests dividing procedures into four categories: 1) inappropriate, 2) equivocal, 3) appropriate, and 4) necessary.[6] The catch here is that the patient's specific condition may determine where on this scale the procedure falls. An example that comes to my mind is the use of cardiac stents. Inserting stents in patients with stable angina is inappropriate, and could harm the patient; whereas, stents can be lifesaving for patients in acute heart failure. The commentator's opinion is that unless doctors start identifying and eliminating wasteful procedures, there is no hope of controlling healthcare costs.

Ah, but there is hope, as evidenced by a paper in *Archives of Internal Medicine*. You may recall that the March 2010 PSA Newsletter summarized a suggestion from Howard Brody, MD that each specialty identify the five most wasteful procedures commonly practiced. This task was undertaken by family medicine doctors, internists, and pediatricians with guidance from The Good Stewardship Working Group of the National Physicians Alliance.[7]

There is not space here to summarize their findings, but suffice it to say that each of the three specialties came up with a consensus list of five procedures that could be eliminated in many circumstances. One comment by the authors that I appreciated was at the end of their article: "The National Physicians Alliance also plans to request the endorsements of consumer groups and patient safety groups for the recommendations in the top-5 lists. Having such endorsements will help dispel the misconception that these clinical recommendations represent rationing and support the idea that often less is truly more." There were some limitations to the study. It seemed to me that the outcome was more based on the opinions of the physicians doing the field testing than by hard evidence from medical research. Before I would endorse the recommendations I would want to see the evidence that the proposed reductions are for the benefit of the patient.

References

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4) Hoursi, N, M Coombs, BJ Orandi, et al. Ethics and the law: Is there common ground on informed consent for disparities in hospital outcomes? *Ann Intern Med* 155:260-264, 2011
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7) The Good Stewardship Working Group. The "Top 5" lists in primary care. *Arch Intern Med* 171:1385-1390, 2011
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Answer to question this month: c) 35% better with electronic records; found in reference 8.

News for Texans: http://www.duluthnewstribune.com/event/article/id/210353/group/homepage/