Patient Safety America Newsletter

June 2010 http://PatientSafetyAmerica.com John T. James, Ph.D.

Question: The rate of false positive CT scans for lung cancer after two annual exams is:
a) 2% b) 5% c) 10% d) 25% e) 33% f) 50%

Are Rankings of Hospitals by US News & World Report Trustworthy?

Many of us are familiar with the rankings provided periodically by US News & World Report (USNWR) magazine on American hospitals. In the past I have trusted these, knowing that the rankings are not scientific, but they are the best anyone can do. However, after reading an article this month in the *Annals of Internal Medicine*, I know my trust has been misplaced. The author of the paper looked at the top 50 ranked hospitals in 12 specialty areas and asked two questions: Does the USNWR ranking in the top 50 correlate with subjective reputation as reported by doctors, and does the USNWR ranking correlate with objective measures of hospital quality?[1]

Obtaining high-quality, objective data on the top-50 ranked hospitals is not easy. The investigator used quality measures that included the following: mortality index, patient safety index, nurse-to-patient ratio, availability of key medical technologies, and specialized accreditation where applicable. The results were shocking to me.

The data were summarized as "association scores" such that 1.0 is perfect association and 0.0 is no association. The association scores between USNWR rankings and physician reputation scores were very high, ranging from 0.6 to 0.9. However except for cancer treatment, the association scores between USNWR rankings and *objective* measures of quality ranged from 0.0 to 0.2. For cancer the association score was 0.4.

The author concludes that USNWR relies much too heavily on reputation as reported by physicians to establish their ranking of the top 50 hospitals. The USNWR rankings do *not* reflect objective measures of hospital quality selected by this author. For USNWR to continue to claim rankings based on "hard data" they need to rely much less on hospital reputation scores provided by doctors. The analysis was confined to the top 50 hospitals and may not apply to hospitals in lower-ranked categories. To my knowledge there is no trustworthy means to select a top quality hospital with confidence. During the few years I have paid attention to patient safety I have heard horror stories from patients who have gone to top ranked hospitals, only to return disappointed and injured by their treatment. It is Russian roulette.

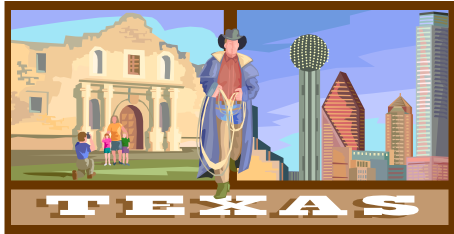
OUR RANKING IS NUMBER 1-50

Admitting

Malpractice Reform

A lawyer and doctor in a perspective article in the *New England Journal of Medicine* wrote an article about how to handle malpractice in the courts.[2] The article was motivated by the recent action of the Illinois Supreme Court ruling against a cap on non-economic damages in cases of

malpractice. They note that traditional approaches to malpractice reform have not met with widespread acceptance. I would note that in Texas the special-interest groups have steadfastly manipulated legislators to the ongoing detriment of patient welfare and rights since the enactment of tort reform in 2003. This has left patients vulnerable to unsafe medical practices and at the mercy of the Texas Medical Board for justice, a commodity medical boards are known to have in short supply (see story to the right).



The authors propose several "models" for reform of medical malpractice law. Some involve limited admission and just compensation between hospital, doctor, and the person harmed. Such models require that a plan to improve patient safety must be implemented to prevent similar injuries. Some countries use a "health court" system in which a panel of experts determines if the alleged injury would have ordinarily occurred with best practices. In some of these models the injured person has a right to appeal.

In my opinion, any malpractice model that does not hide a physician's identity when he asserts malpractice in a colleague's care, and does not rely on tapping into *unbiased* physician expertise in the case of alleged malpractice, is doomed to be unjust to the person harmed. I have proposed a "competency jury" model in which records from malpractice cases are mixed into physician competency assessments with the physicians knowing only that their competency score depends upon their ability to identify mistakes in diagnosis and treatment as documented in the medical records.[3] If a high portion of physicians examining a record indicate malpractice has occurred, then the "jury" has spoken: it is malpractice.

Non-economic compensation could then be based on a number of factors. I proposed, at least in the case of lethal malpractice, that the number of years lost off the victim's life should be the determining factor in monetary compensation. This would certainly get the attention of those treating children and those who insure pediatricians.

Unfortunately, only the voice of lawyers, insurers, and physicians is heard in the malpractice reform debate; the victims' voice is not heard.

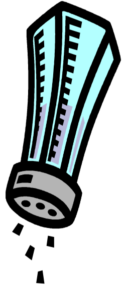
License to Heal or to Harm?

A perspective article in the *New England Journal of Medicine* by a physician calls for a more active roll by state medical boards in ensuring that those who have licenses to practice medicine in their respective states are actually competent to practice medicine.[4] Once a doctor is licensed in a state, very little is expected of him in terms of demonstration of competency to retain his license. State medical boards rely on unverified questionnaires and haphazard continuing medical education (CME) activity to determine if a physician should retain his medical license. There is little "auditing" of CME by medical boards. For example, in Texas the medical board verifies that CME was done by only 1% of licensed doctors each year.[5] The author notes that such boards have limited resources, but that many new competency-assessment tools are becoming available. In the end, he writes that "opportunities abound for state licensing boards to better fulfill their duty to protect the public." At least in the case of the Texas Medical Board, I could not agree more.

Salt-The Silent Killer

This past month a cluster of articles appeared in major medical journals on the need to reduce sodium (see also April 2010 PSA Newsletter). In one article a group of investigators asked which would be more cost effective: government persuasion of food manufacturers to voluntarily reduce sodium content in food, or a tax on sodium in food.[6] They noted that in the United Kingdom the government started in 2003 persuading manufacturers to reduce sodium content in processed food. This has resulted in a 10% reduction in sodium intake by Brits, and the ultimate goal is a

40% reduction. In regard to taxation, the authors estimate that a tax on sodium use in food processing that increased its price by 40% use would result in a reduction of about 6% in sodium intake by the people.



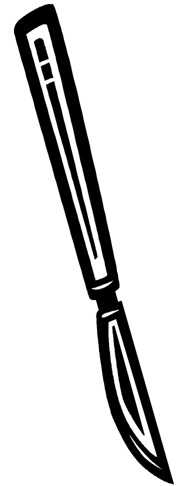
The details of the model they developed are beyond the scope of my knowledge and this summary; however, if we trust their modeling, then the results are as follows: a 10% reduction in sodium use in food processing in the U.S. would result in 1,320,000 life years gained. The 6% reduction if a tax were placed on sodium would result in 840,000 life years gained. These estimates reflect the gains in adults aged 40 to 85 years of age.

An editorial on the article above points out that many other developed countries, including Japan, Finland, Ireland, Australia, and Canada have started effective salt-reduction programs.[7] In the U.S. we have reached the point that in 2009 Congress directed the Centers for Disease Control and Prevention (CDC) to work with the Institute of Medicine (IOM) to develop strategies to reduce salt in the food supply. For their part, the IOM released a report in February 2010 calling for better management of hypertension.[8] Key parts of the IOM report draw attention to physicians' failure to adhere to guidelines for treatment of patients with high blood pressure.

A research letter in the *Archives of Internal Medicine* brought home to me the huge amount of sodium in fast foods.[9] The authors, including several MDs, asked New Yorkers leaving 11 types of fast food restaurants after lunch what they had eaten and for their receipt. Company information on sodium content in milligrams (mg) in each meal was indexed against the types of meals eaten. According to guidelines, most adults need to limit their sodium intake to 1500 mg/day. In this single lunchtime meal in New York the percentage of adults consuming more than their entire day's recommended amount of sodium was as follows for the worst 3 chains: Popeye's – 87%, Kentucky Fried Chicken – 81%, and Pizza Hut – 68%. The "best" fast-food chain was Papa John's Pizza at only 44%.

Combining the information in these four articles and opinions on sodium consumption[6-9] tells me that we are killing ourselves with our diets. It also tells me that my country's overpriced healthcare industry is lagging far behind many other developed countries in nationwide efforts to reduce sodium consumption. Why do you suppose that might be? The answer, of course, is that no one makes money limiting sodium in foods, so no one does it. Again we see a sad commentary on our profit-driven healthcare industry and the legislators that continue to follow rather than lead in preventive medical care and patient welfare. After all, patients don't have a political action coalition, do they?

Before They Invade your Back with their Knives – Ask



A research article published in the *JAMA* tallied the changes in back surgery from 2002 to 2007 as gleaned from Medicare claims.[10] Claims on patients with spinal stenosis were examined to determine the type of operation performed. In order of increasing invasiveness these were: decompression alone, simple fusion (1-2 disk levels), and complex fusion (more than 2 disk levels). The authors looked at the changes in the frequency of each type of operation, the major complications from operations, the 30-day post-operative mortality, and costs.

During the 6-year period of study there was little change in the rate of the two less invasive operations, but the more invasive operation, complex fusion, increased from 0.01 to about 0.2 operations per year per thousand beneficiaries. Life-threatening complications increase with invasiveness from 2% in patients undergoing decompression surgery to almost 6% in complex fusion surgery. The average hospital cost for

> *The proliferation of risky and expensive practice beyond reasonable supporting evidence is commonly mentioned as a fundamental failing of medical practice in the United States…The fact that lumbar decompression is well studied and highly effective in spinal stenosis does not mean that it is well-compensated.*
>
> - *Eugene Carragee, MD*[11]

decompression alone was $24,000 and for complex fusion it was $81,000. The authors note that there are large geographic variations in the rates of spinal surgery. They also note that there is no evidence that the more invasive procedures are more effective than the simpler procedures.

An editorial on this study places some of the findings in perspective.[11] Half the complex fusion operations were performed on patients with uncomplicated lumbar stenosis. This is not warranted and is placing such patients at much higher risk of complications. This over treatment is most likely due to vigorous promotion of newer procedures and devices, a general problem in medicine. In addition to large differences in hospital costs[10], the editorialist[11] notes that a surgeon performing a simple decompression operation makes about $700, whereas, the surgeon's fee for a complex fusion is roughly 10-fold higher. The editorialist notes that Consumer Reports rates spinal surgery as the most overused operation by the American medical industry.

In my opinion, placing a patient with lumbar stenosis alone at higher risk of life-threatening complications because he was sold a complex fusion operation is grossly unethical. Medicare officials could stop this sort of thing by refusing to pay doctors and hospitals for such operations without an evidence-based rationale, but they seem to lack the courage to make such decisions. They are wasting your tax dollars and allowing the industry to needlessly risk patient lives. You had better ask hard questions before you submit to back surgery.

Off-Label Use of Anti-Psychotics

A "Medical News" article in the *JAMA* by Bridget Kuehn describes the growing, and perhaps irresponsible, off-label prescribing of antipsychotic drugs by doctors.[12] The cost for such drugs reached almost $15 billion in 2008, having increased from just under $10 billion in 2004. The author points out that, based on a study of prescriptions issued by VA doctors, doctors may not even be aware that their prescribing is off-label. Furthermore, the use of atypical antipsychotics is rapidly increasing despite mounting evidence that these are no more effective than older medications and have been associated with cardiac risk and metabolic risk (e.g. diabetes).

Elderly patients in nursing homes may be especially vulnerable to the inappropriate prescribing of antipsychotics. These drugs seem to control the agitation that sometimes appears in such patients, but one must ask if the long-term risks are worth the short-term gain. It seems that physicians need to become better informed about the risks of these drugs and how to manage them – e.g. by screening for hyperglycemia. They must also learn which uses may be off-label so that they can practice evidence-based restraint. If you or someone you love may need antipsychotic drugs, ask hard questions before allowing these powerful drugs to invade your body or the body of another person.

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Answer: e) 33%
[Croswell, et al. Ann Intern Med 152:505, 2010]
Of these false positives, 7% had an unnecessary invasive procedure.