PSA

Patient Safety America Newsletter

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

***Question**: Regional health information organizations (RHIOs) offer hope that integration of clinical data on outpatients will improve communication between physicians. As of 2010, what fraction of RHIOs had fully adopted use of electronic medical record systems? a) 10% b) 30% c) 50% d) 70% e) 90%*

Over Eager Arterial Plumbers

Most of us have had clogged plumbing in our house at some time. In my house we use a chemical purging material to try to free the clog before calling a plumber. That plumber will use strong mechanical means to bore through the clog and reestablish flow. The bottle of purging chemical costs me a few bucks, but the plumber will charge me at least $150 for his visit to my house and his mechanical solution. This situation is a good analogy for what is going on in cardiology, except far too often no one attempts to use the cheaper and totally effective chemical solution, preferring to go directly to the expensive arterial plumber.

Coronary artery plumbers, also known as cardiologists, are one of my favorite targets for criticism because they present such an easy target to hit. There are of course many excellent cardiologists that put their patients first and follow guidelines for their care, but there is a surprising number that simply do what makes money regardless of guidelines and risk to their patient's wellbeing. These are the guys that stick stents into coronary arteries whether they are needed or not. There is no question that stents can benefit patients in *acute* cardiac distress; however, guidelines published in 2002 and supported by strong evidence require that *stable* patients be treated with optimal medical treatment (OMT) *before* an invasive procedure like stent placement is undertaken.[1]

A group of six investigators, mostly MDs, set out to determine how often patients with stable coronary artery disease are subjected to stent placement before they have been tried on OMT.[2] They focused on whether the publication in 2007 of a major study (called 'COURAGE') reinforcing the importance of OMT before stent placement changed the percentage of time stent placement was performed before OMT was tried. They looked at 470,000 records on patients that had stable coronary artery disease and were given a stent placement between September 2005 and June 2009. The average age of the patients was 65 years and 55% had government insurance, paid for by you and me. The COURAGE study alone cost $33.5 million.

In the years before the 'COURAGE' study was published in 2007 the guideline was followed 43.5% of the time by cardiologists and after the publication it was followed 44.7% of the time, a trivial increase. In my opinion this finding is simply outrageous. Furthermore, even after the presumably unnecessary stent placements, more than a third of the patients were *not* placed on OMT at discharge from the hospital.

The authors attempted to understand why cardiologists continue to stick stents in coronary arteries against definitive guidelines and why patients are not given OMT after stent placement. They suggest that we need more implementation research to improve the translation of evidence from the research arena to clinical practice. In my opinion that is not the case. I suppose the authors are unwilling to discuss the real cause of the failure to follow guidelines: doctors and hospitals get paid for unnecessary procedures regardless of whether they follow evidence-based guidelines or not. In addition,

patients are placed at additional risk because of invasive procedures like stent placement. It is frankly unethical to perform an invasive procedure on a patient who does not need the procedure. It is simply ignorant to pay for one. We have been ignorant long enough.

Our Fossilized Healthcare Industry

The American healthcare industry actually has two modes: fossilized and expensively venturesome. The preceding story emphasizes the fossilization of clinical cardiology regarding stent placement. On the venturesome side, we are coming into a time when extremely expensive new treatments for cancer, expensive imaging techniques, and high-cost replacement for almost any body part can be purchased if one has enough money. The government does not have enough money to provide the products of these ventures to all patients that may need them. The healthcare industry in America is not sustainable.

Thus, we come to the question posed by two experts: The $640 billion question – Why does cost-effective care diffuse so slowly in the United States?[3] In other words, why is American healthcare fossilized in its inefficiency? There are several answers to that question, but first let's see where the authors got their idea that we could save $640 billion with efficient healthcare. They note that certain physicians and healthcare organizations deliver high quality care that is 20% less expensive than the norm. By their calculations, if the rest of healthcare in America would follow their example, then $640 billion would be saved each year.

Why doesn't the rest of American healthcare become more efficient? The basic answer: Because it does not want to give up any of its income. According to the experts, the healthcare insurance industry has resisted standardization of coverage and administrative transactions because this would force them to compete on the basis of price, and their profits would drop. In my opinion, as it is now, buying healthcare insurance is something like buying gasoline of an unknown octane in an unknown amount. We would never stand for that in gasoline purchases, so why do we tolerate it in healthcare insurance purchases? Answer: because we don't have a choice.

> Legislators, for their part, usually oppose reforms that would make U.S. health care more cost-effective because they seek campaign contributions from health industry stakeholders who benefit from the current inefficient arrangements.
> Victor Fuchs, PhD and Arnold Milstein, MD, MPH in NEJM[3]

As far as hospitals go, the experts postulate that administrators resist reductions in occupancy and are afraid to pressure doctors to lower costs because the doctors will just go to another hospital to admit patients. Manufacturers of drugs, new medical devices and clinical equipment do not seek widespread evaluations of their products because this would undermine their current approach, which is to market their product to patients and physicians as unique even if it is not. This circumvents the price negotiating power and quality evaluations of large healthcare organizations.

This all reminds me of a conversation I had with an official of the Institute of Medicine some years ago. He said that little is going to change in American healthcare because too many people are making too much money to allow it to change. Change will come when a sufficient number of people wake up to the inefficient and dangerous way healthcare is practiced in our country, and then express their outrage openly at the voting booth.

Reported Malpractice Claims: Inpatient vs. Outpatient Harm

We tend to think of malpractice claims as associated with care received in hospitals; however, a new study suggests that the number of successful malpractice claims was similar in patients harmed while hospitalized and in patients harmed outside hospitals.[4] The investigators used information in the National Practitioner Data Bank to determine whether the 10,700 malpractice claims reported to the databank in 2009 were the result of bad outpatient care, bad inpatient care, or both.

They found that 48% of the patient harms were due to errors on inpatients, 43 % on outpatients, and 9% on a combination of the two. As a patient, your risk of harm may be about equal during hospitalization or during outpatient treatment. I reported previously on the dangers of outpatient care (http://patientsafetyamerica.com/e-newsletter/psan1011-2/).

Assuming this number of paid claims is reasonably accurate, it is a tiny fraction of those known to *die* as a result of medical errors. For those who support tort reform, you might want to consider whether this sort of change will lead to even less accountability for medical errors and therefore more harmful errors. You as a taxpayer may also want to know that this database is totally supported by your tax dollars, but you cannot have access to any physician-specific information compiled in it. The American Medical Association has successfully fought that transparency, even though your taxes paid for the database.

Dangerous Over Diagnosis: Pulmonary Emboli

Modern medical technology enables physicians to probe our bodies in a host of ways; however, that probing can lead to findings that are clinically meaningless, but generate procedures that can harm us. The key is for doctors to be able to discern which findings require attention and which are best left alone. Three physicians examined the impact of the increasing use of CT pulmonary angiography on saving the lives of patients with pulmonary emboli.[5] They compared the incidence of pulmonary embolism diagnosis before CT angiography (1993-1998) to the incidence after introduction of the procedure (1998-2006). The incidence nearly doubled from 62 to 112 per 100,000 persons. Of course patients did not actually have more emboli. The change occurred because doctors could find smaller emboli even in asymptomatic patients.

So, the investigators asked, "Did the mortality from pulmonary emboli decrease because of the new procedure?" During the years before the procedure was introduced the mortality dropped from 13.4 to 12.3 per 100,000, and after the procedure was introduced the mortality dropped from 12.3 to 11.9 per 100,000. The investigators call the second small drop a "minimal" reduction in mortality. In my opinion, it is reasonable to deduce that this small drop would have occurred without the introduction of CT pulmonary angiography.

The advantages to the patient as measured by avoiding death are minimal at best. But are there risks associated with frequent over diagnosis of pulmonary emboli? Yes, there are. During the years before the new procedure was introduced, the complication rate from anticoagulation treatment was stable at 3.1 per 100,000 patients; however, it increased to 5.3 per 100,000 patients after introduction of the procedure. The most serious complication was excessive bleeding. The authors conclude, "Better technology allows us to diagnose more emboli, but to minimize harms of over-diagnosis we must learn which ones matter." Medicine can often have a very slow learning curve, impeded by the need to pay for new and often marginal procedures and technology.

Looking Only Where the Light Shines

We are all familiar with the fabled person who has lost a valuable coin on a dark night and insists only in looking under the street light where he can see the coin. Of course, the proverbial coin is not in the area lighted by the street light, so he will never find it. He has failed to fetch a flashlight and shine light elsewhere. So it is with our healthcare industry, postulate two MDs.[6] According to these

writers, clinical care consumes 95% of our healthcare dollar and delivers about 20% of health determinants. The other 80% is delivered by personal behaviors and community wellness environments. The authors take exception to the current agenda on comparative effectiveness research because it fails to include areas outside the traditional purview medicine and because economic evaluations are legislatively restricted. In other words, we are not shining the light where the greatest gains – both in economy and in health - can occur.

The authors call for a realignment of research priorities. I suspect that this is anathema to the healthcare research industry because it is focused on biomedicine between the molecular and clinical level and not on preventing the person from ever showing up in the clinic in the first place. I'll end with a quote from the writers: "Without so doing [changing the research agenda], the United States will continue to overinvest in clinical care, underinvest in upstream determinants of health, and fall farther behind other nations in terms of health, spiraling medical care costs, and competiveness." I would remind my reader that the U.S. spends about twice as much per person on healthcare as any other major, developed nation, yet our infant mortality and life expectancies are consistently ranked in the 40s among all the nations of the world.

Cash for Cancer

The cost of care for cancer patients is rapidly rising in the United States, from $104 billion in 2006 to an estimated $173 billion in 2020. Two MDs expressed their opinion about how our society might bend the projected cost curve so that the expenses will not overwhelm our ability to pay.[7] They recommended five attitudes or practices that the oncology industry could adapt to help manage costs better.

In brief these are as follows: 1) cost depends on what is and is *not* done; 2) doctors and patients must have realistic expectations, 3) pay for the doctor's knowledge rather than doses of chemotherapy, 4) combine symptom relief into normal oncology care; and 5) accept the reality that there are going to be spending limits on care.

Regarding the third point, the writers indicate that more than half the profits in oncology stem from drug sales, which is not sustainable. This is especially true since emerging drugs can cost $5,000 per month or more to administer. Oncologists should be paid when their knowledge dictates that drugs should *not* be given. The writers cite two studies showing that "some oncologists choose chemotherapy in order to maximize their profits." For example, giving chemotherapy in the final weeks of life needs to be discouraged in many instances. I liked the way the MDs' proposals ended by including consumers in the decision making processes that will make cancer treatment more affordable. We, you and I, have a role in bending the cost curve – if they would just listen.

References

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Answer to question this month: a) 10% as reported by surveyed physicians[8]