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Great health care, guaranteed

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YANKEE DOODLING **Douglas Kamerow**

Great health care, guaranteed

A 90 day guarantee on surgery may be the first step to improving quality outcomes in the USA

The front page story in the *New York Times* on 17 May was about a healthcare system in Pennsylvania that has been giving a 90 day guarantee on its coronary artery bypass surgeries since February 2006. For a fixed price, patients get the operation, postoperative care, and any necessary follow-up treatment, including rehospitalisation and even repeat surgery. There are no extra charges. This is news in America, where we are used to unit pricing in health care. That generally leads, of course, to a perverse incentive: if you do a poor job and extra care is needed, you get paid more.

The newspaper likened the surgical guarantee to a warranty on a new car or a home appliance. The healthcare system, Geisinger, guarantees that all will go well or it will fix the problem, at no additional cost to the purchaser . . . er . . . patient. I generally don't like using the term "consumer" for patients, but in this case it seems appropriate. The customer is buying a product, coronary artery grafts, and the installer of the product, the hospital, stands behind its work—sort of like a brake job at the auto repair shop, but a little more complicated and a lot less mechanical.

Bypass graft surgery is generally a big winner financially for American hospitals; they make money on them and try to increase their volume to make more money. So, for the guarantee plan to pay off in our medical economy, Geisinger has to price the surgery competitively and keep costs in line. To do that, it has to minimise expensive adverse outcomes. And to deliver good surgical outcomes on a regular basis, the health system has to do two things: identify the "right" processes—those that are linked to good outcomes—and deliver them consistently.

To identify the right things to do, Geisinger staff reviewed the American College of Cardiology/American

Heart Association guidelines and operationalised them into 40 best practices and benchmarks. These cover everything from preadmission screening to postdischarge care. It then incorporated the best practices into all hospital processes and procedures. Prompts and defaults were programmed into electronic health records, for example, and surgery was automatically cancelled if specific benchmarks weren't met.

It took a while to get everyone on board. Herding surgeons is probably as difficult as herding cats. Even after all parties agreed to the benchmarks, only 60% were actually being met. After three months, the percentage reached 100%, and it remained above 90% throughout the first year.

How has it worked? Reasonably well. A year into the project, Geisinger staff presented a comparison of their 2005 and 2006 elective bypass surgery outcomes at a surgical society meeting. The trends are all going in the right direction: more patients with no complications, fewer blood transfusions, decreased operative mortality, and fewer pulmonary complications. Most improvements are not yet statistically significant, owing to small numbers, but the results are promising. Length of stay has decreased by 12% and hospital charges have fallen by 5%. The elusive goal of decreasing costs while increasing quality seems to be within reach for this procedure.

The Geisinger story shows that it takes a huge amount of work to optimise all the aspects of care for even one type of surgery, much less for all operations or for everything that happens in a hospital or an outpatient clinic. A lot of the quality improvement work that has gone on so far in the US has been less ambitious. It's usually what might be called the "quality nugget" approach—find one isolated thing that has been shown to make a difference, figure out some way to



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do it or not do it, measure the results, and declare victory. So we have lists and lists of "quality measures" that tend to round up the usual suspects: β blockers and statins after heart attacks, support stockings or low molecular weight heparin when the patient is immobilised, eye and foot examinations for people with diabetes, and so forth.

It is worth looking back at the impetus for the medical errors/quality crusade in the US: the Institute of Medicine reports of 1999 (*To Err is Human*) and 2001 (*Crossing the Quality Chasm*). The first report documented the shocking costs, in morbidity and mortality, of medical errors; showed how other industries had dealt with similar problems; and recommended a systematic approach to document and analyse errors and improve patient safety. The latter expanded the focus from patient safety to healthcare quality. It proposed a comprehensive re-imagining of how evidence based health care is delivered: customised to patients' needs, in a transparent healthcare system where safety is a system property, waste is continuously decreased, knowledge is shared, and outcomes are optimised.

We're obviously not there yet. But to get there we need to move beyond the piecemeal quality nugget approach to a much more comprehensive redesign of the systems that deliver health care and of the training received by the people who work in them. As quality guru Don Berwick said in the *New York Times* article, "Getting everything right is really, really hard." It seems to me that the Geisinger bypass surgery programme is both an admirable first step and a scary example of how difficult it will be to totally reinvent medical care.

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