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15 WAYS TO MAKE
HEALTHCARE CHEAPER
BY MAKING IT BETTER



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Better Health Care for Half the Price

We could do health care, at markedly higher quality, for everyone, without rationing or denying anybody the care that they need, at half the cost we do it now.

The remarkable thing about this assertion is that most people who actually run health care institutions - and I talk to a lot of them - do not find it remarkable at all.

Why would I make such an assertion? Where is the evidence to back it up? For one thing, all other advanced economies render health care to all their citizens for half (at most two thirds) of what we do, whether measured per capita or as a percentage of the national output - and they have better health outcomes. In other words, they get more for less than we do. Even within our own borders, it typically costs Medicare 60% more (per case or per patient per year) if you are treated in places like Miami, Los Angeles, New York, Boston, or McAllen, Texas, than if you are treated in places like the San Francisco Bay Area, Seattle, Minnesota, or northeastern Pennsylvania.¹ There is no correlation with socioeconomic status, education, or race - McAllen, Texas, for instance, is one of the poorer spots in this country, while the San Francisco Bay Area and Seattle are among the better off. The variation correlates only with how much medical resources there are in an area - how many specialists, ICU beds, and scanners there are per capita. And the people in the more costly areas are no better off. In fact, the only visible variations in outcomes is negative - every procedure has a risk, and when you do more of them, more people die, an estimated 30,000 per year.² In our own country, some people get significantly better care for significantly less money.

A wide range of studies identify huge amounts of waste in U.S. health care - most of it leading to worse care, not better. Thomson Reuters just released a large meta-analysis of a number of these studies. The aggregate of the studies identifies \$600-\$850 billion in waste per year - ¼ to ⅓ of all the entire amount that we spend on health care.³

If somehow the whole country emulated the way medicine is performed in the less expensive areas, the cost of U.S. health care would drop by approximately 30%.

These differences - between the U.S. and other countries, and between different parts of the U.S. - only measure the way we do healthcare now. They do not take into account any of the myriad ways in which health care could be made more efficient and effective. Taking all this into account, it easy to imagine that we could drop the cost of health care not just by 30%, but by 50% or more, while giving better care to all Americans.

The “Value Question”

Health care over the coming years will be increasingly driven by the “Value Question,” the kind of questions you confront every time you buy a shirt, a latte, or a stock: “How good is this thing? How much will it cost? To be specific, how much will it cost me? How much it will it cost me, really? How much will the whole thing cost me? What are my alternatives?” Under our usual business models and payment structures, and without any way to get real information, most of those questions are unanswerable in healthcare. We have few real measures of value, few real prices,

¹ A Gawande, “The Cost Conundrum: What a Texas town can teach us about health care,” *The New Yorker*, June 1, 2009

B Sirovich, P Gallagher, D Wennberg, E Fisher. “Discretionary Decision Making By Primary Care Physicians And The Cost Of U.S. Health Care,” *Health Affairs*, 27, no. 3 (2008): 813–823

E Fisher *et al.*, “The Implications of Regional Variations in Medicare Spending,” *Annals of Internal Medicine* 138, no. 4 (2003): 273-298

² S Brownlee, *Overtreated: Why Too Much Medicine Is Making Us Sicker And Poorer* (Bloomsbury 2007), estimate from Elliott Fisher, MD, of the Dartmouth Group on Health Care, p. 36

³ R Kelley, “Where Can \$700 Billion In Waste Be Cut Annually From The U.S. Health Care System?” Thomson Reuters White Paper, October 2009

and little opportunity to even find out what “the whole thing” we are buying is. And the most common “alternative” is doing nothing.

Beyond reform

In this very political year, this paper is not about political solutions. It is not about coverage, or the public option, or single payer. For the moment, we are leaving those arguments aside, because there is an entirely different conversation to have about why health care costs so much. If we could actually wring half of the costs out of U.S. health care, the cost of providing health care for all uninsured Americans would be trivial by comparison. The highest estimates for insuring the uninsured come to about \$100 billion per year. Half the cost of U.S. health care comes to over 12 times that amount: \$1.25 trillion per year. This is big money. There are huge opportunities in health care’s inefficiencies.

Here I am going to talk about 15 ways to save money by making health care better. These are far from the only 15. They are just examples. Once we begin to explore this landscape, the possibilities are nearly endless.

15 Ways

1. Checklists

Common but critical procedures such as putting in a central line can be standardized, and tracked by simple checklists, much like the checklists that airline pilots use. A five-point paper checklist for putting in a central line, listing such basic matters as draping the patient completely and wearing full gloves, mask, and gown, dropped the infection rate, in a small initial study at Johns Hopkins, from 11% to zero. The “Keystone” study, which implemented the checklist in all Michigan hospitals, saved (compared to the previous period) an estimated \$175 million and 1500 lives over 18 months. Michigan has 1/30th of the population of the United States. Adopting this one technique across all states should save some 30,000 lives and \$35 billion in hospital costs per year. The study was conducted in 2003 and published in 2006. Three years later, the checklist is still not standard practice in U.S. hospitals.⁴

Even more complex and variable procedural areas such as surgical suites can be governed by common, clinical baselines, such as giving the patient a perioperative antibiotic, and checking the procedure against the medical record. A massive, multi-continent, multi-site study published in early 2009 showed that using a simple 19-point surgical checklist dropped the mortality rate by ½ and the complication rate by ⅓.⁵ This checklist has not become standard practice in U.S. operating rooms. The opportunity in saved lives and saved money is huge - from a simple change in procedure.

2. More clinicians, more primary care

Every country that gets more for less in health care has a stronger primary care sector. U.S. primary care doctors make only a fraction of what specialists make, and every year fewer and fewer medical school grads (burdened as they are with large school loans to pay off) choose to go into primary care, once the most respected, and one of the best-paid, branches of medicine.⁶ Any measures that would, for instance, subsidize medical school for doctors who promise to go into primary care, increase the relative pay of primary care physicians, re-organize primary care so that

⁴ P Pronovost et al., “An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU,” *N Engl J Med* 2006;355:2725-32

⁵ AB Haynes et al., *N Engl J Med* 2009;360:491-9, January 29, 2009, “A Surgical Safety Checklist to Reduce Morbidity and Mortality in a Global Population”

⁶ B Sirovich, P Gallagher, D Wennberg, E Fisher. “Discretionary Decision Making By Primary Care Physicians And The Cost Of U.S. Health Care,” *Health Affairs*, 27, no. 3 (2008): 813–823

healthcare. Whatever can reasonably be standardized in medicine should be standardized - with any clinician able to vary from the standard when there is a reason to.

Medicine is fighting a long battle that can be characterized as “intuition” vs. “evidence.” There are many situations in which a clinician’s intuitive judgment can come up with a better answer, a real breakthrough. But those situations are, in fact, rare. Relying on intuition, training, and experience all the time - the traditional medical route - rather than relying on constant study of outcomes and real data (“evidence”) leads to many of the medical mistakes that we constantly see now (such as the rejection of checklists mentioned in my first point).⁸

6. Reform malpractice

Treating malpractice as a matter for the courts means that most patients who are hurt by medical mistakes are never compensated or helped at all, since the only way to get help is to get a lawyer, and sue, and prove your case in enormously complex trial taking months to years. It also means that a great deal of the money expended on malpractice awards goes to attorneys, rather than patients. And there is little to no evidence that “punishing bad doctors” through malpractice suits makes them into better doctors. What it does is ramp up the costs of medicine by forcing all doctors into “defensive medicine,” performing more tests and procedures than they actually think necessary out of fear of losing a malpractice suit. Asked in an anonymous survey, 93% of all physicians will admit to practicing defensive medicine. Amitabh Chandra — a Harvard economist whose research is cited by both the American Medical Association and the trial lawyers’ association — says \$60 billion a year, or about 3 percent of overall medical spending, is a reasonable upper-end estimate for this type of wasteful over-use.

Other countries have various systems for dealing with medical mistakes without making them into court cases - all are less expensive than ours (Canada’s malpractice system, for instance, costs about 10% of ours), and most are far more effective than ours both at helping the victims of medical mistakes, and reducing the chances of the mistakes happening again.⁹

7. Package it, price it

A “better faster cheaper” system would not be largely in the business of selling procedures, tests, devices, drugs, and encounters. Most of medical practice, by volume and by revenue, would consist of selling products, product lines, and subscribed services. Such products and services might include, for instance, a fixed knee (from diagnosis through rehab), an uncomplicated birth, a diabetes management program, or a “medical home” primary care contract. Services would be “bundled” around medical conditions. For instance, everything needed to replace a hip, staple a stomach, or manage someone with congestive heart failure would be put into one basket (just the way the body-and-fender shop does not charge you separately for the epoxy or sandpaper used). The basket would be a “product.” Only when services are bundled into products can you measure your efficiency and effectiveness at providing the product—the re-plumbed heart, the removed tumor, the stabilized AMI patient.

These “products,” built for common conditions, would have prices. Fixing a broken leg costs so much, from X-ray to rehab; an uncomplicated birth so much; a re-plumbed heart so much. The prices would be real, and published.

⁸ D Leonhardt, “Making Healthcare Better,” *NY Times*, November 10, 2009

⁹ R Epstein, “How Other Countries Judge Malpractice,” *Wall Street Journal*, June 30, 2009

R Kelley, “Where Can \$700 Billion In Waste Be Cut Annually From The U.S. Health Care System?” Thomson Reuters White Paper, October 2009, pp 13-15

D Leonhardt, “Medical Malpractice System Breeds More Waste,” *NY Times*, September 23, 2009

8. Ban preferential discounts

Preferential discounts should be banned, the way they are already for “common carriers” such as airlines or telephone companies. A hospital, any provider, should be able to set their prices - but those prices should be real, and the same for every customer. Today there are few real prices in healthcare. A hospital publishes a master list of charges for each specific procedure, test, or night in a room. Then they deeply discount all those prices in deals with insurance companies. Medicare sets its own rates through a complex and fairly opaque process. No one pays the “charge master” prices except for the rare self-pay, uninsured patient who doesn’t even know to ask for the 30-40% discount commonly given to the uninsured, and is shocked to receive a bill two, three, even ten times as high as a bill the insurance company might pay. You can’t improve the price/benefit value equation if the price is both unknown and arbitrary.

Banning discounts would, first, force providers to do proper cost accounting. Even now, most health care CFOs could not tell you how much it costs to produce a particular full outcome, such as a transplanted hip. Proper cost accounting will be basic to finding the value in health care. How can you improve the cost effectiveness of producing good outcomes if you don’t know what your costs actually are?

Banning discounts would force providers to compete on a cost/benefit basis, like any other business: We can offer this service, for this price, and we can establish how good the service is. Banning discounts would deprive health plans of their main way of establishing themselves in a market, driving discount pricing; on the other hand, it would force them into true “shopping” on behalf of their members, finding the best value for a given product in the local market (who gives the best outcome at the lowest cost for, say, diabetes management) and rewarding that provider with more business.

9. Warranties

Warranties should be offered on specified packaged procedures: If you have to come back for more treatment, beyond what is considered a normal successful outcome, it’s on us. Geisinger Health Care in northeastern Pennsylvania, for instance, has offered warranties for several years now, first on their heart bypass graft operations, then on a number of other procedures. Warranties are most important not for the marketing promise that they give to patients, but for their effect in driving quality into the organization. You can’t afford to give warranties on a product that is sloppily made. You can only afford to give a warranty when you have made your processes so tight that you will rarely, if ever, have to pay out. After instituting a warrantee, Geisinger’s mortality rate for heart surgeries dropped from 1.5% to zero.¹⁰

10. Disruptive business models

Pricing, bundling, giving a warranty - all these are examples of changing the classic business model of most of health care: the fee-for-service model, in which the provider (doctor or hospital) performs whatever service (test or procedure) is justified by the circumstances, then bills someone for it.

To get to the “Value Question,” we need a variety of new business models. These new business models are likely to derive from the different forms that healthcare actually takes. In *The Innovator’s Prescription*,¹¹ Clayton Christensen and his co-authors argue that different new business models should be used to support different types of medicine. These would include “solution shops” for the hard, intuitive cases. Current examples of “solution shops” might include M.D. Andersen for cancer; National Jewish in Denver for pulmonary disease, particularly asthma; the Texas

¹⁰ C Connolly, “For This Health System, Less Is More: Program That Guarantees Doing Things Right the First Time, for Flat Fee, Pays Off,” *Washington Post*, March 31, 2009

¹¹ CM Christensen, JH Grossman, MD, J Hwang MD, *The Innovator’s Prescription: A Disruptive Solution for Healthcare*, McGraw-Hill 2009

Heart Institute; or the heart and vascular institute and the neurological institute of the Cleveland Clinic. These models assemble highly skilled multi-specialty teams for individualized support. Standardized “precision medicine,” on the other hand, calls for a “value-added process” model, much like a factory. You do one thing over and over and get really good at it. The project is well-defined, the outcomes highly expectable, the variations well managed. Such processes can be billed on a “fee for outcome” basis, since the outcome is fairly certain. On such a targeted basis, you can get rapid improvement and lower costs. Christensen *et al.* cite Ontario’s Shouldice Hospital, which does only hernia repair, as a four-day in-patient process on a country-club-style campus – and still charges 30% less than the U.S. CPT 49560 outpatient hernia repair reimbursement. And U.S. hernia repairs average 10 to 20 times the Shouldice’s 0.5% complication rate.

There are other business models for health care delivery, including guided patient networks (for patients with chronic conditions), the medical home, and clinical well-care. Many of these models are adapted to particular disease areas or life stages, such as diabetes, cancer, mothers and children, or end-stage multiple-system chronic disease. Currently, the all these different kinds of processes are mixed together in one business model, as if all of medicine is intuitive and non-standard. Under such conditions, it is impossible for any one process to profit from improvement. Separated, they can find their proper value, and mitigate the problem of doing “too much medicine” for some and too little for others. There may be many specialized “hospitals-within-hospitals” joint ventured between healthcare systems and groups of doctors, as well as many other business shapes.

A number of such new business models are already emerging. On the simple end, we are seeing an enormous growth in urgent care clinics (largely small, doctor-owned operations), which are essentially primary care operations that have extended hours and take walk-in traffic. Retail clinics, mostly large chains associated with Wal-Mart or chain drugstores such as CVS or Walgreen’s, grew rapidly before slowing in recent years. They do a strictly limited menu of primary care items, such as coughs and colds and cut fingers, for set prices, and typically take no insurance.

Another example of a strikingly new business model in health care is MDLiveCare.com. You want to talk to a board-certified doctor, or a licensed mental health professional, right now, by phone, email, chat, or webcam videochat? That will be \$59.95. Sign up, and you get the better deal - \$9.95 per month, \$99.95 per year, \$149.95 for your whole family - and they can do lab work, fill prescriptions, and keep your medical records, too.

11. Integrate

At the same time as we see a proliferation of different business models more suited to providing value at different life stages and for different conditions, we see them thriving within a much more integrated healthcare ecology.

The organizations in U.S. healthcare that seem to work best, that provide the highest quality healthcare at the most reasonable cost, the organizations that continually pop up as examples in the current debate, such as Pennsylvania’s Geisinger, with its warranties; Intermountain Health; Kaiser Permanente; the Mayo Clinic; and the Cleveland Clinic, all have some form of integration. Here’s a fact I find astonishing: the least expensive place in the nation for a patient to be treated over the last two years of life? Mayo. Almost as inexpensive: Cleveland Clinic. The most expensive places, like UCLA Medical Center, Cedars-Sinai in Los Angeles, and New York University Medical Center in Manhattan, cost twice as much. The difference is clearly not quality of care. The one consistent difference is some type of integrated care model. For some things, and in some markets, a fully-integrated Kaiser-style staff-model HMO with its own financing makes sense. In others, joint ventures limited to particular types of operations (such as an ortho clinic) make more sense. There are, in fact, multiple ways to “Mayo up.”¹²

¹² “Rethinking Business Models in the Global Health Economy: A Toolkit For Innovation,” Health Horizons Program, Institute For The Future, August 2007

12. Rebuild every process

Six-sigma, the Toyota Production System, the Theory of Constraints, benchmarking - all are methods of getting the people who are doing the actual processes of a business to continually find out what works best, and get creative at implementing it. Every other industry does it, why not health care?

In fact, health care does, but only here and there. Health care organizations that have vigorously applied versions of the Toyota Production System and other techniques to their internal processes have regularly uncovered millions of dollars in savings, coupled with higher quality. The leader in using similar techniques to improve clinical quality is Intermountain Health in Utah, but the Institute for Healthcare Improvement, led by Don Berwick, has been leading the charge to spread such ideas throughout the sector.¹³

All these disciplines are beginning to gain traction. The Theory of Constraints helps you identify what to pay attention to at any given moment: What good is “Pay For Performance” if you don’t know which parameter will actually move the dial on cost and quality? Or you’re not even sure what you want the dial to measure? The Toyota Production System mobilizes the people who actually do the work to discover how to do it better – and then to own their process and their improvement. “Six Sigma” is appropriate, even necessary, for processes that can and must be done with the greatest possible precision and repeatability, such as patient identification and drug administration. Getting a grip on processes is the only way to substantially reduce the cost of doing business, which health care institutions simply will have to do. The only way to reduce system cost is to think systemically, and to teach and incentivize every manager to think systemically, and to align every job, every incentive, not to excellence on one narrow measure (such as reducing unit cost on materials), but to systemic excellence (such as reducing the costs of whole processes, including materials, labor, and resources). One great recent exemplar is North Carolina’s Novant Health, whose decision to calibrate all costs against Medicare payments is profiled in “A Model of Efficiency,” by Matthew Weinstock, in the August 2009 H&HN Magazine.¹⁴

13. Get transparent

A “Healthcare SEC” law, modeled on the Securities and Exchange Act, would force all providers and payers to publish a standard set of relevant facts. Hospitals have to publish infection rates, for instance, as well as outcomes data for all common procedures. All payers have to publish their medical loss ratio, payment rates in all markets, rates of rescission (rescinded contracts) and denial of claims.

Real comparative effectiveness research would be the health care equivalent of “shopping” - finding out what works and what doesn’t. But for it to make a difference in the costs of health care, the research has to have teeth: If a test, a procedure, a drug, or a therapy really is proven to be no better than other, less expensive ways of dealing with the problem, payers need to stop paying for it.

14. Digitize and automate

The “better faster cheaper” system is fully digitized, not only with PACS and EMRs, but everywhere possible. You can’t improve a system’s processes if you don’t know what they are. Healthcare is far too complex to track on paper. Digitization gives providers the ability to track outcomes and processes to a fine level of detail, to improve clinical quality and reduce costs.

¹³ D Leonhardt, “Making Healthcare Better,” *NY Times*, November 10, 2009

¹⁴ M Weinstock, “A Model of Efficiency,” *H&HN (Hospitals and Health Networks) Magazine*, August 2009

In this fully digitized world, clinicians can see the records in ways that are most useful to them (longitudinal changes, for instance, comparative statistics over multiple encounters, comparisons with similar patients). Patients can see the records in ways that they can understand, system managers in ways that help them see what is working efficiently and effectively, and what might need intervention.

Beyond digitizing, healthcare has to follow the path pioneered by airlines with their human-free ticketing systems, and banks with their ATMs. Lots of processes in healthcare would be done much better and cheaper by machine, and should be. Removing humans as much as possible from every transaction and handoff eventually reduces transaction costs enormously, and greatly reduces the opportunities for mistakes. In the “better faster cheaper” system, networked automation extends throughout the hospital, and beyond its walls to the community clinics, the lab, the pharmacies, and even into the homes of patients and families.

15. Re-think the end of life

We spend vast sums doing procedures on people whom they won't help, procedures that in fact hurt them and have no chance of giving them back their lives. This is not about “killing grandma to save a few bucks,” it's about, “Let's stop torturing grandma as she is dying.” Let's have some honesty about what is actually going on, and let's have some real compassion for the dying. Saving vast amounts of money is almost a side effect.¹⁵

The biggest conversation

This truly is the biggest conversation that we can have about health care: Why we do it so poorly, and cost ourselves such insane amounts of money. When we look at the system squarely, we can see that it is within our grasp to build a new system within the bones of the old, a system that would work “better, faster, and cheaper,” for far less money than our system costs us today.

¹⁵ A MacGillis, “The Unwitting Birthplace of the ‘Death Panel’ Myth,” *Washington Post*, September 4, 2009