COLUMN

FINDING THE MONEY FOR HEALTHCARE REFORM

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The elephant in the room in healthcare reform is this: If we pay for "producing a higher-quality product" in healthcare—namely good health—then we will have more than enough money for comprehensive healthcare reform. If not, we will be simply rearranging deck chairs on the *Titanic*. Not only will our nation's health and healthcare system decline, but our nation will fall to the bottom of the global sea of failed nations as 34% of our gross domestic product (GDP) and 75% of all federal spending will be consumed by Medicare and Medicaid by 2040, according to the President's Council of Economic Advisors.

Conspicuously absent from proposals for health reform policies from the White House, Senate, and Congress, aside from programs for community wellness and prevention, is any mechanism for payment for services that not only better prevent, reverse, and treat the major disease and cost drivers, but actually create better health—in other words, a healthcare system that creates increased value: unit of health purchased per dollar spent.[1] By improving the quality of our health and focusing on health creation and improved health outcomes, the sinking ship of healthcare can be righted, and the behaviors of physicians and healthcare institutions will shift from doing more things (volume) to doing the right things (quality).

We need not only community wellness but also clinical wellness programs. We need not only more sidewalks and bike paths and access to healthier food but to transform the clinical encounter between healthcare practitioners and their patients to produce health, not just treat symptoms and diseases. If the medical encounter does not incorporate the science of "health creation" in addition to symptom suppression, then the burden of disease and the cost of healthcare will continue to increase unchecked. There is only one problem: the focus in health reform is on doing what we already do better, not doing the right thing. We are looking for ways to pay less for what we are already doing, not pay less as a result of improving the "product" of healthcare—the health of individuals and communities.

MORE THAN FINANCING AND DELIVERY SYSTEMS

Recent proposals have focused on mechanisms for financing and delivery of healthcare such as employee and individual mandates for coverage, taxes on employer-provided health benefits, surtaxes on high income earners, eliminating waste, bundling payments, reducing errors, implementing electronic records, decreasing hospital re-admissions, false cost "savings" by cost shifting, and restricted services and payments. The hospital industry agreed to $155 billion in reduced payments over the next 10 years (a mere 1.4% of total revenues over 10 years, which they will recoup many-fold because they no longer will have to absorb the cost of the uninsured).[2] The pharmaceutical industry agreed to reduce costs for medications by $80 billion. The insurance industry and physician organizations are brokering similar deals that trim fat but don't address the diseased underbelly of healthcare. Though enlisting healthcare stakeholders to tighten their belts and improving process measures are necessary, it is beside the point if the foundation on which we deliver care is flawed. Asking pharma to accept reduced payments for medication or hospitals to lower payments for hospitalizations or the American Medical Association to accept reduced fees for doctors may reduce costs in a bloated system designed to profit from overutilization of medical services, but it will not correct one simple problem. We pay for volume and utilization of medical and hospital services, medications, and procedures, not quality or improved health.

Medical services that we hold sacred, such as medications, procedures, and surgery, often don't work or don't work as well as we thought they would to treat the diseases that account for the majority of sickness and costs today—namely heart disease, diabetes, obesity, prostate and breast cancer, digestive disorders, mood disorders, and autoimmune diseases. Yet we pay for these services because of lobbyists and clinical practice guidelines established through industry influence or custom, not through science.[3] We pay for what we do even if it is not proven effective and leads to higher costs and no improved health outcomes, as long as it is a medication or a procedure. In other words, we are not getting value (health) for our money. The history of medicine is rife with fallen "heroes." Who remembers that a decade ago the number-one selling medicine in America was Premarin, a form of hormone replacement now proven to cause breast and ovarian cancer, strokes, and heart attacks?[4] Who, we must ask, is lobbying for science and for patients?

DO CURRENT TREATMENTS FOR CHRONIC DISEASE WORK?

We labor under the twin false assumptions that (1) current medical interventions and early disease detection strategies (like mammograms and prostate-specific antigen testing) save lives and prevent disease and (2) true prevention strategies and lifestyle intervention treatment programs for chronic disease lead to higher costs and don't work. The data and the logic behind these assumptions are false. Science and true value are off the table in health reform rather than at the center of the debate.

First, let's examine treatment and prevention methods for heart disease and diabetes. Are medications and surgery the most effective or cost-effective treatments? In fact, are our currently reimbursed practices for treatment for the most prevalent and costly diseases truly data-driven? Do they meet the holy grail of "evidence-based" medicine? And if they don't, why do we pay for them?

Services with no measurable health benefit consume 30% of Medicare dollars.[5] Better access to the same care will not solve our heathcare crisis. Do cholesterol-lowering medications (statins) prevent heart attacks and death? According to the "best evidence" presented in the ATP III revised guidelines for primary and secondary prevention of cardiac events in 2001, the number of American's eligible to take statins increased from 13 million to 36 million. For adults between 30 and 80 years of age with occlusive vascular disease, the benefits of statins are proven. Yet a close look at the data in more than 10 990 women of any age and 3230 men over 69 years of age, statins were not shown to prevent cardiovascular events.[6] For high-risk males between the ages of 30 and 69 years for whom statins are proven to reduce cardiovascular events, 50 patients would need to be treated for 5 years to reduce just one cardiovascular event! Yet at a cost of over $20 billion a year, 75% of all statin prescriptions are for exactly this type of unproven primary prevention. Simply applying the science over 10 years would save over $200 billion. This is just one example of reimbursed but unproven care. We need not only to prevent disease but also to prevent the wrong type of care.

The unspoken secret in health reform is that if we are to reduce our costs, including improving value through improving health outcomes per dollar spent, and healthcare costs are potentially reduced from $2.5 trillion to $1 trillion annually, then some in the healthcare system will be out significant amounts of cash. We can't just keep doing the same thing and pay a little less and expect a different outcome. The industries that profit from the sickness and obesity of Americans will have to retool to profit from health promotion or they will go out of business.

Next, we assume that angioplasty and cardiac bypass prevent future cardiovascular events and death. We are paying more than $100 billion a year for these services according to the American Heart Association.[7] But do they save lives? The COURAGE trial showed that in stable coronary disease (most patients), angioplasty does not prevent heart attacks or prolong life.[8] Cardiac bypass surgery developed before rigorous evidence was applied, and since 1977, the number of surgeries increased from 82 000 to 448 000 annually (at a cost of $99 743 each). Yet this surgery is helpful in only a small number of select patients.[9] A new procedure or test or medication is not required to have strong evidence or save money to be reimbursed. It is reimbursed for one reason: because we pay for medications and procedures—and not the most effective, common-sense, or cost-effective treatments that deal with the underlying causes of these diseases. In fact, 2 recent large prospective cohort studies found that lifestyle could prevent 78% of new onset hypertension[10] and reduce the incidence of heart failure[11] in the aging population from 1 in 5 people to 1 in 10. Yet treatments to apply this science are not reimbursed.

What about treatment methods for type 2 diabetes, the fastest growing epidemic in the world, with a 1000% increase in children over 10 years, 24 million Americans affected, and nearly 60 million with pre-diabetes? Surely lowering blood sugar in diabetics is an effective strategy for reducing the risk of death and heart disease. It would seem obvious that if diabetes is a disease of high blood sugar, then reducing blood sugar would be beneficial. Elevated sugar is only a symptom, however, not the cause of the problem. The real problem is elevated insulin unchecked over decades from a highly refined carbohydrate diet, a sedentary lifestyle, and environmental toxins.[12] Most medications and insulin therapy are aimed at lowering blood sugar through increasing insulin. In the randomized ACCORD trial of more than 10 000 patients, this turned out to be a bad idea. In the intensive glucose-lowering group, there were no fewer cardiac events, and more patients died. Yet we continue to pay $174 billion annually[13] for this type of care for diabetes despite evidence that lifestyle modification works better than medications. We also pay for cardiac bypass and angioplasty in diabetics when evidence shows no reduction in death or heart attacks compared to medication.[14]

Drinking 48-oz sodas, eating cheeseburgers and french fries, and living a sedentary lifestyle then taking your statin or blood sugar–lowering medication and undergoing an angioplasty or bypass if the medication fails to prevent heart disease or diabetes is not only bad science, it flies in the face of common sense. We need to do something radically different. Pay for what works. Pay for health. Pay for quality, not volume. Then costs will come down—not just "bend."

BENDING THE COST CURVE: LESSONS FROM AN IOWA CHICKEN FARMER

What can we learn about how to transform healthcare and "bend the cost curve" from a man who was raised on an Iowa chicken farm, has doctorates in mathematics and physics, and who helped change our perspective of "made in Japan" from one of derision to one of emulation? William Deming (1900-1993) viewed industry, education, and government as "systems." His idea was simple: improving quality (outcomes) will reduce costs while improving productivity and market share. The focus was on quality, not volume. In other words, doing the right thing pays. If the product of healthcare is health, then how do we improve the quality of our health?

Clearly health is not improved by increased access to more care. The 4 states with the highest healthcare expenditures, Texas,

Louisiana, California, and Florida, provide more care but have worse outcomes than other states in 25 metrics of quality of patient care. The Dartmouth Atlas Project found that in regions with more physicians, hospital beds, MRI scanners, and greater volume of services and care, health outcomes were worse and costs were up to 2-fold higher.[15] More care and more spending equaled more sickness, less access, and more patient dissatisfaction. We don't need more physicians. We need more physicians working with integrated healthcare teams doing the right things, paid in ways that incentivize health creation.

We need accountability for quality, cost, and outcomes. We need comprehensive tracking of metrics of value: improved biometrics, psychometrics, and econometrics. And we need true comparative effectiveness research between medications or procedures and comprehensive lifestyle and environmental therapies delivered by integrated health promotion teams. In an old joke, a New England farmer was asked, "How is your wife?" He answered in a way that all research institutions and policy makers should respond when evaluating any proposed treatment: "Compared to what?" The playing field needs to be leveled by Comparative Effectiveness Research. We need to compare lifestyle intervention and treatments that address the cause of diseases with medications or procedures. Lifestyle treatments are perceived as ineffective because all doctors know that patients don't listen when you tell them to eat better and exercise more. Unless you give patients the support, education, and tools to change behavior, you won't see sustainable, significant change. But in multiple randomized trials in heart disease[16] and prostate cancer,[17] intensive lifestyle treatment by integrated healthcare teams have been proven more effective than currently used and reimbursed treatments. More importantly, these changes improve health and quality of life and even enhance gene expression through lifestyle changes. In other words, they provide value.

The present system of care is unsustainable and will not reduce the burden of chronic disease. We need to implement a new system of care that addresses the proven drivers of chronic disease (what we eat, how much we exercise, how we handle stress and environmental toxins) and their associated costs. A healthcare system designed to address these drivers of disease and cost doesn't exist for one simple reason: it is not reimbursed.

During the last year, others and I have participated in healthcare reform through meetings with Senators, Representatives, and their staffers, testifying before the HELP committee and meeting with key healthcare leaders at the US Department of Health and Human Services (HHS) and the White House. I have been struck by the fact that everyone wants the same thing: to improve quality (better outcomes and health), provide universal coverage, and reduce costs. The only confusion and disagreement is about how to achieve that.

The focus has been largely on ways to improve the delivery model and financing for our current "products"—pharmaceuticals, procedures, and surgery. In other words, to do the same treatments better. If these were the best available treatments to produce the best health, then, of course, payment for more of these services would improve outcomes and quality and reduce costs. Unfortunately, the data point to a very different conclusion.

We do what we know how to do—prescribe medicine and perform procedures. The more we do, the more we get paid, regardless of the outcome or quality of health. But we do not get more health for our money. How, then, do we create health?

CREATING VALUE AND QUALITY: A HIGH-SCIENCE, LOW-TECH APPROACH TO CHRONIC DISEASE

Within the conversation in Washington, DC, and the media, in proposed policies and bills, there is a conspicuous absence of one simple idea. If we want to improve the product of healthcare, namely, good health, then we must incentivize treatments that create health. What may startle many in the healthcare debate is that the data point to a very surprising fact.

A high-science, high-touch, low-tech, low-cost treatment is more effective for the top 5 chronic diseases that account for more than 75% of healthcare costs than our current approaches. Yet is it not taught in medical schools, practiced by physicians, or delivered in hospitals or healthcare settings. In fact, this treatment, if applied to all the patients with cardiovascular disease, diabetes, metabolic syndrome (obesity), and prostate and breast cancer could reduce healthcare expenditures by $930 billion over 5 years* and result in a better "product"—higher quality at reduced costs. William Deming would be proud.

What is that treatment? It is intensive lifestyle intervention for chronic disease delivered by integrated healthcare teams who are paid for teamwork, not piece work. This "treatment" is often incorrectly framed as prevention. Improving diet, exercising, and managing stress are seen as soft; yet under the lens of hard science, the evidence points to these as better strategies not only for prevention of disease before it has occurred (primary prevention) or preventing recurrence or exacerbation (secondary prevention), but also for lifestyle interventions as a better treatment for existing chronic disease. This reframing from lifestyle as prevention to treatment is necessary if we are to create a mechanism to create better healthcare.

This is not just academic; it is personal. My stepfather died this year from complications of diabetes and cardiovascular disease. He had the best medical, pharmaceutical, and surgical care available yet was in very poor health. The evidence has shown no reduced mortality for cardiac bypass or angioplasty in diabetics.[18] Yet, because we do what we know and what is paid for, he underwent a cardiac bypass after chest pain. A postoperative infection of his sternum with methicillin-resistant *Staphylococcus aureus* led to a month in the intensive care unit, plastic surgery to repair the chest defect, and "mini-strokes" following bypass surgery, which led to mild cognitive impairment or "pre-dementia"[19] and a protracted recovery from hospitalization requiring months of home care. The surgery and subsequent medical therapy with antihypertensives, statins, and anticoagulants did not give him a very good quality of life. In fact, he continued to be sedentary, crave sugars and refined carbohydrates, and decline rapidly physically and mentally. The cost of

*According to Cleveland Clinic estimates for the 2009 Take Back Your Health Act of 2009. Data were prepared by the clinic and presented to Congress by Drs Mark Hyman, Dean Ornish, and Michael Roizen.

his medical care in the last years of his life exceeded $400 000.

How much "health" did that expenditure purchase" I would say it purchased no "health" at all. He was not offered a treatment that would have cost less than 2% of that and created infinitely more value through better outcomes and enhanced quality of life. It should be our right to have access to proven treatments that provide better value for the individual and for the healthcare system. This must change in order for us to significantly impact our chronic disease epidemic and the frightening convergence of the GDP and healthcare cost curves.

That is why we need a mechanism within healthcare to stimulate quality based on improved outcomes based on the best available data. We must offer a treatment to address the upstream drivers of disease, not just send a patient to surgery or prescribe poly-pharmacy. This is necessary to reverse the epidemic of chronic disease and exorbitant costs.

TAKE BACK YOUR HEALTH

A proposal derived from proven dietary and lifestyle interventions called "Take Back Your Health" is now working its way through Washington. Collective advocacy is needed to enact this long overdue strategy for creating value rather than volume in healthcare.

Here is what it would provide:

1. Intensive lifestyle treatment programs for heart disease, diabetes, metabolic syndrome, and breast and prostate cancer (and potentially expanded to other chronic diseases), reimbursed at competitive bundled rates for team care that would incentivize wide adoption by healthcare institutions and professionals.
2. Personalized treatment plans delivered by integrated healthcare teams including physicians and other healthcare professionals trained in nutrition, exercise, stress management, and psychosocial support. This may include but would not be limited to registered dietitians, exercise physiologists, behavioral therapists, health coaches, and psychologists.
3. Individual and group sessions up to 72 hours over the course of a year for the development of a personalized treatment plan and sustainable behavioral and lifestyle changes.
4. Health and cost outcomes tracked and analyzed annually and payments linked to accepted biometrics and psychometrics.
5. Patient rewards that would foster further health-oriented behaviors.
6. Development of treatment methods and applied nutritional science and behavioral therapies that result in the best outcomes and value.

This legislative mechanism in the health reform bill from Congress, or a regulatory mechanism through HHS must provide a small opening for intensive lifestyle treatments to take hold in medical care. It will be a lever for catalyzing change through simulating innovation for integrated healthcare teams for chronic disease management, the creation of the infrastructure for sustainable behavioral change, and payment for outcomes and quality, not volume. It will also reinvigorate primary care and drive the transformation of existing healthcare institutions, medical schools, postgraduate education, and insurers to meet the demand for interventional lifestyle treatment services for chronic disease. It will support shared responsibility, self-care, and participatory medicine as well as lifestyle changes in communities and corporations. It will support the development of health information technology solutions to coordinate care, measure outcomes and costs, enhance research, and facilitate whole-systems medicine rather than automating our current model of care. It will support the development of a wellness- and health-based economy rather than one based on sickness and obesity. With one small change, one small lever, our sick care system could be transformed into a healthcare system.

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