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THE NEXT GENERATION OF HEALTH INFORMATION TOOLS FOR CONSUMERS

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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THE NEXT GENERATION OF HEALTH INFORMATION TOOLS FOR CONSUMERS

WEDNESDAY, MAY 10, 2006

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met at 10 a.m., in room 106 of the Dirksen Senate Office Building, the Honorable Robert F. Bennett (Vice Chairman of the Committee) presiding.

Senators present: Senator Bennett.

Representatives present: Representatives Maloney, Sanchez, and Cummings.

Staff members present: Tom Miller, Jeff Schlagenhauf, Colleen Healy, Katie Jones, Daniel Dowler, Chad Stone, and John McInerney.

OPENING STATEMENT OF HON. ROBERT F. BENNETT, VICE CHAIRMAN, A U.S. SENATOR FROM UTAH

Chairman Bennett. The Committee will come to order. We're expecting some Members of the House to join us fairly quickly, but we will move ahead in respect to the witnesses and their willingness to be with us and to share their expertise.

We welcome you all to this hearing on the next generation of health information tools for consumers. We need to provide health care consumers, employee plan sponsors, doctors, hospital administrators, and health care program administrators with better information to improve their choices and decisionmaking.

I sit on the Banking Committee where we're always using the word transparency, and talking about the importance of transparency in capital markets. Well, we need transparency in health care choices. I remember the time, which I hope is past now, when policymakers would say: Customers are not intelligent enough to make decisions with health care. They are at the mercy of providers, because they don't have the education, the background, the understanding of science that can allow them to make intelligent decisions. So they simply take whatever the provider or the payment administrator decides is the best decision.

We're in "Health Care Week" in the Senate right now, discussing health care issues. This is a logical time to examine the current and future state of health information. That's essential to improve our current health care arrangements, whether we're talking about consumer-driven health plans or health savings accounts, traditional employer-sponsored plans, Medicare, Medicaid, charitable care, or concierge care; cash payment at the moment of service.

Whatever it is, we need better information; more transparency, to use the capital market's word, with respect to our health care choices.

We need information about price, quality and value of health care options as well as support tools to assist and improve decision-making all across the board. We may differ in how much information we wish to or can absorb, but something more than what we currently have is available is better for just about all of us.

Now, neither stronger financial incentives to consumers nor top-down efforts to re-engineer health care delivery will by themselves be able to change the future trends without better information.

We've witnessed the transformative power of better information in other parts of the economy. Information technology is king in such mundane areas as retailing. Health care need not continue to be a lagging exception with respect to the importance of information technology.

So today's hearing will go into this area, and we have two panels, of whom we're very proud and to whom we're very grateful.

Our first panel of witnesses includes Dr. Carolyn Clancy, who directs the Agency for Healthcare Research and Quality, and they're at the forefront of coordinating public and private efforts to improve the data measurement, aggregation, and reporting activities that can produce more valuable and actionable consumer health information.

Then we have Dr. Arnold Milstein, who is the medical director of the Pacific Business Group on Health and the U.S. Health Care Thought Leader at Mercer Health & Benefits.

He heads performance measurement activities for both the Leapfrog Group and the Consumer-Purchaser Disclosure Project and is a MedPAC Commissioner.

I like somebody with a scientific background who embraces the name of the Leapfrog Group. It shows a little bit of flexibility.

Dr. Michael Parkinson is executive vice president and chief health and medical officer for Lumenos, one of the country's leading providers of consumer-driven health care. And the company's goal is to improve consumers' health outcomes and achieve long-term cost efficiency for employers that sponsor health plans.

Paul Ginsburg is an economist and president of the Center for Studying Health System Change. HSC's main research tool is the Community Tracking Study, which consists of national surveys of households and physicians in 60 nationally representative communities across the country and site visits to 12 of these communities.

So that will be our first panel. I'll introduce the members of our second panel when we're through with the first panel, but we express gratitude for you all for your willingness to come share your insights here. Now we've been joined by Mrs. Maloney from the House, and we're happy to have her for whatever opening statement she might wish to make.

[The prepared statement of Senator Robert F. Bennett appears in the Submissions for the Record on page 34.]

OPENING STATEMENT OF HON. CAROLYN B. MALONEY, A U.S. REPRESENTATIVE FROM NEW YORK

Representative Maloney. I thank the Senator for calling this hearing; thank you so much, Senator Bennett, and I want to thank you for holding this hearing on health information tools for consumers, and I want to welcome our panels of experts and thank them all for testifying today.

I think the Joint Economic Committee has an important role to play in looking at ways that markets for all kinds of goods and services can serve consumers, and health care is certainly a market that Americans would like to see work better. They would like to be sure that they can get affordable health insurance and high quality medical care. I think we would all agree that more and better health care information is good for everyone and is part of the solution to improving the performance of the health care market.

But I would also like to strike a cautionary note. A large fraction of medical expenses are accounted for by a small percentage of people, and many of those expenses are incurred in situations that are largely divorced from normal economizing behavior. So I worry that the benefits from better information, while real, are often oversold. Better information and increased transparency may help people make some routine medical decisions more wisely, but they are not likely to significantly affect the overall costs of health care or make much of a dent in the number of people without health insurance.

I also think we have to be sensitive to privacy issues when we talk about making vastly more information available. Those pushing hardest for greater information appear to be those who are particularly enamored of the "consumer-driven" approach to health care with its emphasis on high-deductible health insurance and tax-sheltered health savings accounts.

The President's push for consumer-driven health care would shift more costs onto individuals, while creating additional tax incentives for high-deductible insurance and HSAs that ordinary families will have little opportunity to use. High deductible plans don't reduce costs or cover the uninsured, but they do have a tendency to discourage people from using health care services.

Consumer-driven health plans rely on consumers to obtain reliable information on treatment choices, quality, and charges by providers. But the concept of "empowering" consumers to make cost-conscious choices about their health care decisions is misleading, because purchasing health care is not like buying a car or a washing machine. You simply don't have a lot of time to shop for a doctor when your appendix bursts. Health care needs are often unanticipated, and patients rely on their doctors' expertise to guide their medical decisions.

Finally, for years we have heard that our information technology systems are inadequate, and that patients die because of mistakes that could have been corrected if we had better technology and record keeping. Clearly government and the private sector have a responsibility to close the information gaps that are affecting the health of or having a life or death impact on Americans.

I look very much forward to the testimony, as always, and to your comments, Senator. Thank you.

[The prepared statement of Representative Carolyn B. Maloney appears in the Submissions for the Record on page 36.]

Chairman Bennett. Thank you very much.

Dr. Clancy, we'll begin with you.

STATEMENT OF CAROLYN M. CLANCY, M.D., DIRECTOR, AGENCY FOR HEALTHCARE RESEARCH AND QUALITY, ROCKVILLE, MARYLAND

Dr. Clancy. Good morning, Mr. Chairman, Representative Maloney. I ask that my written statement be entered into the official record.

Chairman Bennett. Without objection.

Dr. Clancy. Mr. Chairman, before I deliver my prepared remarks, I'd like to ask you and Representative Maloney, as well as my fellow witnesses and members of the audience, to raise their hands if you've looked for information about health or health care quality on the Internet, in the library, or from any other source.

[Show of hands.]

And to keep your hands up if the information was what you needed.

[No hands.]

I usually begin speeches by posing those two questions to the audience, and unfailingly, the number of people who look for information vastly exceeds the number who find what they need. This has to change, and I commend you, Mr. Chairman, for recognizing the significance of engaging consumers in their health care, and for holding this hearing.

I don't think I can overemphasize Secretary Leavitt's and HHS's commitment to ensuring that all Americans can easily obtain understandable information about the quality and price of health care. To realize this vision, Secretary Leavitt has articulated four strategies for achieving this goal: Promoting quality transparency, promoting price transparency, facilitating the greater use of health information technology, and transforming health care so its incentives support a consumer-oriented or patient-focused healthcare system.

My written testimony goes into great detail in how the Agency for Healthcare Research and Quality, working in partnership with the public and private sectors, is working on those strategies.

Consumers make two types of decisions. The first that we're calling marketplace decisions, for example, involves selecting a health plan, a clinician, a hospital, or a long-term care facility.

The second are decisions that patients and their caregivers must make among alternative treatments in the management of clinical conditions. Both types of decisions require unbiased, reliable, and science-based information that's user-friendly and readily accessible. AHRQ has a long track record of providing information to consumers and other purchasers, and I'd like to highlight three lessons that we've learned in our efforts.

The first lesson is that informed choice only occurs when consumers can assess the value of a health care good or service, and consumers can only assess value when they have information on both price and quality.

Research has demonstrated that the highest quality providers are often not the most expensive. Therefore, consumers and purchasers need to have both types of information to make an informed choice.

I'd like to also note that there are other elements in consumer choice. We all know that we make decisions based on other factors such as personal preferences, tolerance for risk or uncertainty, unique circumstances, and the assessment of acceptable trade-offs. However, it's important to have a foundation of objective scientific facts for all decisions.

The second lesson is that transparency is critical for enhancing consumer choice and improving competitiveness. Research sponsored by my Agency clearly demonstrates that where the message comes from makes a profound difference. If you think about what many people do when they make a major purchase like a car or appliance, they turn to a source like Consumer Reports, which is a trusted source of unbiased information that reviews the quality and value of a product based upon independent testing.

We need to create a similar, unbiased, trusted source of information for health care services. This is particularly important now as consumers need to make more decisions about their health and health care, and they grow increasingly skeptical of the vast and growing array of information available to them on the Internet and other sources.

The final lesson is that we simply can't assume that providing information is enough. In that well known movie, The Field of Dreams, the refrain was, "If you build it, they will come." That's not true for health care information.

Assuming that consumers and patients will come and get the information isn't enough. We must ensure that information is available when and where consumers need it, and we also need to help make them aware that information can help them get better health care and play a more active role in their health and health care.

The best information for consumer choices needs to be linked with decisions under patients' control. For example, elective admissions to the hospital, questions they should ask, and other steps that they can take to improve a health care encounter.

In a strange way, the problem we're facing is not a lack of information. As the title of this hearing suggests, Mr. Chairman, the need is for information that is pulled together so that alternatives can easily be compared, easily understood, and easily acted upon.

And finally, we need to make sure that that information is easily understandable. Our research has shown that some 90 million adults have lower than average reading skills, or low health literacy, and are less likely than other Americans to get potentially life-saving screening tests such as mammograms and pap smears, flu and pneumonia vaccines, and to take their children for well child care visits.

The bottom line is, we can't possibly get to better value in health care without the full engagement and participation of consumers. They need to play an active role in their own health and health care, and make informed choices about providers and treatments.

Thank you for your attention, and I'd be happy to answer any questions.

[The prepared statement of Dr. Clancy appears in the Submissions for the Record on page 38.]

Chairman Bennett. Dr. Milstein.

STATEMENT OF ARNOLD MILSTEIN, M.D., MPH, MEDICAL DIRECTOR, PACIFIC BUSINESS GROUP ON HEALTH; WORLDWIDE PARTNER, MERCER HUMAN RESOURCE CONSULTING, SAN FRANCISCO, CA

Dr. Milstein. Last fall's National Academy of Sciences report on the U.S. health care system estimated that 30 to 40 percent of health care spending is what they described as waste. Many of the large employers and labor unions with which I work believe that estimate may be low.

Much of this waste could be eliminated by enabling the identification and reward of physicians who demonstrate more affordable patterns of resource use and favorable quality. Over the past 10 years, methods have been developed to measure, for individual physicians in most medical specialties, both average total cost of health care resource use per treatment, which I'll refer to as relative affordability, and quality of care.

Though criticized by some as imprecise, pioneering employers, labor unions and insurers that have used these methods have lowered their per capita spending by 2 to 17 percentage points compared to other regional payers without lowering quality of care scores.

Any payer can generate these measures from health insurance claims data, via off-the-shelf software. Measurements demonstrate that at all levels of measured quality, physicians in the same specialty and in the same community vary up to 2× in their average total cost of resources used per treatment, as demonstrated via the chart on the easel.

Chairman Bennett. Let me give you a little extra time, and ask you to walk through the easel. I have seen it close up, but I think the people in the audience probably don't get it from just having you refer to it in that fashion.

So can you take a few minutes to walk through that?

Dr. Milstein. Certainly, Mr. Chairman.

Chairman Bennett. We'll put it back on your clock.

Dr. Milstein. Thank you.

On the easel is an exhibit that was commissioned jointly by the Boeing Company and the Machinists Union, who are working collaboratively to manage health care costs and quality in the markets in which Boeing has many workers.

This is a study that they commissioned that was implemented by Regence Blue Shield in the Puget Sound area.

In essence, this displays physician performance on two dimensions. The vertical dimension is the quality of care dimension.

Chairman Bennett. So everything above the line is good.

Dr. Milstein. Right, above the dark line is defined as upper half quality of care, meaning relatively high rate of compliance with evidence-based scientific guidelines for health care. The horizontal axis is analogous to miles per gallon consumption of health insurance fuel. And the way it's laid out is, as you move from left to right, there is less total spending per episode of treatment.

Chairman Bennett. So if you're on the left side of the line, you're cheaper?

Dr. Milstein. Your fees may or may not be cheaper, but the total amount of health insurance fuel burned per treatment is less. It is not counting just physician fees.

Chairman Bennett. So I want to be above the line for quality and to the left of the line for price?

Dr. Milstein. You want to be to the right of the line for total resources expended. The far left side is the equivalent of burning 10 miles per gallon of health insurance fuel, and the right side of the line is 30 miles per gallon of health insurance fuel.

Chairman Bennett. OK, so I want to be on the right side of the line, and as high as possible.

Dr. Milstein. Yes, in the Northeast quadrant.

Chairman Bennett. The Northeast quadrant.

And all of the little dots clustered around the cross are all of the doctors in Seattle?

Dr. Milstein. Like most health insurers, Regence Blue Shield, even though it is the largest insurer in that region, only had enough data to characterize the performance of about 40 percent of the doctors. It's a 40 percent sample of doctors.

Chairman Bennett. You've got a 40 percent sample, and you've got as many doctors in each quadrant.

Dr. Milstein. Yes.

Chairman Bennett. So you've got doctors that are giving you high quality and good value for your money in the Northeast quadrant——

Dr. Milstein. Correct.

Chairman Bennett [continuing.] And just as many who are giving you low quality but high price in the Southwest quadrant.

Dr. Milstein. Correct.

Chairman Bennett. And as far as the individual is concerned or the employer is concerned, without this information a doctor is a doctor is a doctor.

Dr. Milstein. Correct. And I would also say from the perspective of physicians, a doctor is a doctor is a doctor. The physicians themselves, before this profile, did not have any information telling them where they stood in their community of peers.

Chairman Bennett. OK. Thank you. I appreciate your walking through that, because I think this is a stunning piece of research that informs what we're talking about at the hearing.

Now you can go back, and let's put another three, three and a half minutes back on Dr. Milstein's clock, because I'm the one who burned up his time with that. But thank you for making that figure clear for us.

Dr. Milstein. Thank you, Mr. Chairman.

Most private payers lack a sufficient volume of claims data to make valid comparisons for even half of a region's physicians, as I mentioned was the case in this particular example in Seattle.

Medicare could remove this barrier. The key is adding a new permitted routine use of the 100 percent Medicare claims data file. Such a routine use would enable requestors to access a beneficiary-anonymized form of the data file, specifically for the purpose of pro-

ducing physician performance measures by combining claims data pertaining to multiple beneficiaries.

Americans already have relative affordability, or what some people would refer to as "total cost of ownership" measures for appliances and for automobiles. But not for physicians, whose patterns of resource use consume a much greater share of American income.

If routinely paired with quality of care measures, such physician relative affordability measures would comprise a new navigational system by which patients, physicians, and health benefits sponsors can lower health care spending growth rates for all payers, including Medicare, while improving quality of care.

Physician performance measures can be used to inform physicians, to engage consumers, to set payment policy or to set consumer cost-sharing. They can also send a pivotal upstream signal to new biomedical technology developers, that innovations will be judged not only on their unit price and clinical effectiveness, but also on their contribution to lowering total health care spending growth.

Thank you for the opportunity to describe how Medicare can speed the private sector's removal of large, but currently invisible inefficiencies in American health care delivery, and foster the emergence of a better, faster and leaner American health care system.

[The prepared statement of Dr. Milstein appears in the Submissions for the Record on page 45.]

Chairman Bennett. Thank you very much.

Dr. Parkinson.

STATEMENT OF MICHAEL D. PARKINSON, M.D., MPH, EXECUTIVE VICE PRESIDENT AND CHIEF HEALTH AND MEDICAL OFFICER, LUMENOS, ALEXANDRIA, VIRGINIA

Dr. Parkinson. Good morning, Mr. Chairman, Mrs. Maloney.

I want to thank you for the opportunity to testify today. My name is Mike Parkinson, I'm Chief Health and Medical Officer for Lumenos, a pioneer in consumer-driven health care and a subsidiary of WellPoint.

My comments today are based on nearly 5 years of experience with self-insured employers, and direct feedback from consumers and patients enrolled in our consumer-driven plans.

At Lumenos, we created an integrated and incentivized health improvement strategy, targeted at the major drivers of excessive health care costs, with a particular emphasis on those with chronic illness. In fact, 25 percent of our employers are full replacement clients, meaning that they only offer HRAs or HSAs account-based programs to their employees.

In general, consumers and employers are highly satisfied with the current information, tools and supports that Lumenos provides. Year over year, both employers and consumers are seeking more specific and actionable information about the cost and quality of medical services.

To Carolyn's point, however, reinforcement of why the information is important, how to access it, how to engage to better manage one's care; for example, health coaching, and how to use it in concert with one's physicians are likely more important than the avail-

ability, or in some cases, the specificity and accuracy of the data itself.

Quality efforts to date have concentrated on plan and provider administrative data rather than on consumer and patient knowledge, competencies and decisionmaking arising from better information and a partnering patient-physician relationship.

Defining generic and disease-specific qualities associated with effective and efficient medical services, and creating standardized patient surveys would be of great value in increasing the engagement of patients and improving the marketplace of patient-relevant information for provider choice.

Providing cost data will become progressively more granular, and transparent pricing by plans, providers, and facilities will increase. The release of fee schedules for selected Medicare services and the institution of transparency requirements for Federal health and benefits programs will impact both the direction and pace of cost transparency.

Consumer-driven care will accelerate clinical and business practice innovation. The provider community is showing evidence of welcoming such innovation, and in some instances is calling for wholesale reform of delivery and financing models.

Translating and publicizing the health and cost advantages of patient-centric innovations will accelerate their adoption.

Consumers and patients will increasingly understand the quality and safety value of health information technology. Deployment of information technology could become a key provider, market differentiator, and quality cost metric. Acceleration of national technology standards for information and interoperability is urgently needed to promote widespread dissemination and decreased price.

As consumer information on quality and cost of services becomes more transparent, cost shifting, inexplainable cost differentials, and inefficient clinical and business practices, will become more apparent. Health policy and societal questions, which have been known and discussed for years, will become much more visible to all stakeholders and hard decisions will likely have to be made about the appropriate role of the private market sector versus the government funded public sector in financing and delivering of health care.

Thank you very much, and I look forward to your comments and questions in the follow up.

[The prepared statement of Dr. Parkinson appears in the Submissions for the Record on page 62.]

Chairman Bennett. Thank you, sir.

Dr. Ginsburg.

STATEMENT OF PAUL GINSBURG, Ph.D., PRESIDENT, CENTER FOR STUDYING HEALTH SYSTEM CHANGE, WASHINGTON, DC

Dr. Ginsburg. Mr. Chairman, Representative Maloney, and Members of the Committee, thank you for the invitation to testify at this hearing.

My organization, the Center for Studying Health System Change, is an independent, nonpartisan health policy research organization, funded principally by the Robert Wood Johnson Foundation, and

affiliated with Mathematica Policy Research. Its mission is to provide policymakers with objective and timely research on developments in health care financing and delivery and their impacts on people.

My statement makes four key points: First, engaging consumers to be more aware of cost and quality issues in health care has the potential to increase the value of health care. And by value, I mean a superior combination of cost and quality, not only for the individual patients who use this information, but for the U.S. population as a whole.

I believe the greatest opportunities involve incentives for consumers to choose higher value providers, which in turn will motivate providers to increase value. Unfortunately, some are overselling the potential for progress in this area.

As Representative Maloney pointed out, many services are too complex or urgent for effective shopping by consumers. Those patients responsible for the bulk of health care spending in any given year are often beyond the reach of patient financial incentives in typical consumer-driven benefit structures.

Realizing the potential in this direction will require a long-term investment that collects and translates meaningful consumer price and quality information, and the development of innovative benefit structures that can improve on large deductibles.

Even if the potential is reached, however, empowered consumers alone are not the hoped-for silver bullet to solve the health care cost crisis facing this country.

I want to point out that health plans will play a key role in consumer shopping for price and quality. The health plan has long been a powerful asset for both enrollees and purchasers; they negotiate substantial discounts with providers, and as benefit structures change to put more emphasis on price and quality comparisons, insurers will compete on innovation and tools to increase plan value to consumers.

Insurers basically have the potential to employ their formidable data and analysis resources to translate complex information on price and quality into something that's more usable by consumers. But without the support of insurers, there are practical limitations on the ability and willingness of consumers to become savvy health care shoppers.

We've studied the consumer experience in self-pay markets, and find that the experience has been romanticized by some advocates of consumerism in health care. Of the markets we've looked at, price shopping exists only for Lasix services, and there's little information on quality in any of these markets other than word of mouth recommendations.

Finally, I'd like to discuss the role of government. I believe the greatest opportunity for government in promoting consumer choice is in the areas of information on provider quality and the funding of research on medical effectiveness. I believe there's less potential in providing price information directly to consumers.

I'm very optimistic about the potential of Medicare's voluntary program for hospital quality reporting to contribute valuable information for consumer choice, and to motivate hospitals to improve their quality.

As Dr. Milstein has recommended, I believe that making Medicare Part B claims files available to insurers can substantially increase their ability to provide information and incentives to enrollees that favors physicians who are higher quality and more efficient.

The Agency for Healthcare Research and Quality has developed an excellent reputation for funding effectiveness research, but funding for these activities has been extremely limited, especially in contrast with what the Federal Government currently spends on biomedical research overall.

I look forward to answering your questions.

[The prepared statement of Dr. Ginsburg appears in the Submissions for the Record on page 67.]

Chairman Bennett. Thank you very much.

Thank you all. I think we're going to have a worthwhile discussion here; and my pattern is to try to get you talking to each other, rather than individually talking to us, because I think we can have some good interaction here.

I do have some questions, as I'm sure the other Members of the Committee will have other questions.

Dr. Clancy, you emphasized price and quality. Dr. Ginsburg, you were a little less excited about the price thing, and the main benefit would come from understanding quality.

Could you briefly either resolve that, or——

Dr. Ginsburg. Well, sure. I think that price is equally important to quality. My point was that as far as what the government can do, I thought that the government has the potential to do more important things in the area of information on quality than it does in the area of information on price.

I believe that insurers are in a very good position, with a lot of information on price, to really analyze that and translate it for their enrollees into simpler decisions.

Chairman Bennett. OK. Yes, Dr. Clancy.

Dr. Clancy. I would agree. Right now, though, if you think about it, almost all individuals who get health insurance through their employer, including the Federal Government, are facing increasing out-of-pocket costs. And those incentives are really clear.

What to do with those incentives is far less clear. So for example, a vast majority of Americans now face tiered pharmacy benefit arrangements, and yet it's very difficult to find out information on when it's worth it to buy a brand name drug as opposed to using a generic. And of course the throw-away line is, "Well, ask your doctor."

And the sad part of it is that we've begun to make some small dents in giving doctors the kind of information so that they could help patients with comparative choices, but we've got a long way to go.

Chairman Bennett. Yes. Well, one underlying theme here is the complexity of these decisions, and so ask your doctor, ask your pharmacist, whatever; and the point was made by you, Dr. Ginsburg, that the most expensive people—there are a few people that take most of the money. We know that the 80/20 rule applies here; 80 percent of the money goes to 20 percent of the patients.

My own experience, and it's entirely anecdotal, but I'd like to get your response to it, is that the use of this kind of information is generational. When I get told I have a problem, I go to a doctor. And if I want a second opinion, I go to a second doctor.

We've recently had, within our family, a fairly serious medical situation arise for our daughter, who instantly went to the Internet. She wanted to get the information herself. And she was not nearly as willing to listen to a doctor. Now her doctor told her, "Yes, you have this situation." First thing she did was go on the Internet and find out as much about it as possible.

I have a daughter-in-law who, with one of our grandchildren was told, "This child has this problem." The first thing she did was go to the Internet. The next thing she did was argue with the doctor, based on the information, and found another doctor who had a different point of view, and she very much took charge of this whole situation based on her inclination that there's information available to her.

And frankly, in my generation, that simply would never have occurred to me. And when something came up with respect to my health, and I talked about it within the family, the kids all went on the Internet and they started giving me advice and counsel.

Now I think we have a common theme here, in going back to Dr. Clancy. It would be very, very valuable if we had, quote, a "Consumer Reports" close quote, for medical information, because I have now discovered, when I go on the Internet, I can get whatever I want, depending on my prejudice. I can get an Internet report that tells me that eating dark chocolate is going to be really good for me, and good for my health. And the Internet told me that taking 4,000 milligrams of Vitamin E would increase my chances of getting a heart attack, where Dr. Isold, the Capital physician, had prescribed 400—not 4,000, 400.

And I went back to Dr. Isold and he says, "Yeah, that's the way medicine is. And we're now saying 200. But at the time that I told you 400, everybody was agreeing with 400, and now we're saying 200."

My colleague, Senator Hatch, says I should be taking 1,000, and I'm going to make that decision increasingly in this kind of world, whether the medical establishment wants me to or not.

So we're talking about not only transparency and availability, but we're talking about ultimately the kind of thing that Dr. Milstein has put here, where you have some reliable measure, statistical.

Now I want to know, if I'm Seattle, one of those dots on that chart is the doctor that I represent; I want to know where he is on the chart, or she. And I'm assuming the doctor wants to know. That the doctor will say, "Oh, boy, I'm above the line, but I'm way over to the left. I don't want to change my quality, but I've got to figure out better ways to deal with the price."

And as you pointed out, the insurer wants to know. And the insurer then comes in and says, "Here we are." I find it fascinating, Dr. Milstein, that your study was co-sponsored by Boeing the employer, and the union, both sides of the management-labor divide wanted to know this. Because the statistic that has come out that

something from 30 to 40 percent of our health care dollar is being wasted is a staggering wake-up call for all of us.

If we as politicians could somehow take 30 percent out of the cost of Medicare, we would all be huge heroes, and we would solve the Nation's deficit problem overnight. We could build all the bridges to nowhere we wanted to build on the savings that would come out of that. And that's why I'm so fascinated by the information that you're giving us here, and I thank you all.

Mrs. Maloney.

Representative Maloney. Thank you, Mr. Chairman. I think your panelist really raised an important point, how the Internet has really changed how we view health care, and every consumer is on it, checking what their doctor has to say and comparing diagnosis and treatments with other doctors. I think it's a whole new phenomenon that is going to really change the way medicine takes place.

I recall once a doctor told me I needed an operation, and I went on the Internet and read all this and determined I did not need it. So I think a lot of people—and then later, the entire medical establishment came and supported the decision that I had made in that particular case.

So I think we're really in a changing way now, with the Internet there.

Dr. Ginsburg, you testified earlier that one of your key messages is that giving consumers better information can provide benefits to the patients themselves, and certainly to the U.S. population as a whole; but that we shouldn't, to use your words, "exaggerate the extent of the savings."

Can you elaborate on that point?

Dr. Ginsburg. Yes. Well, even I can take off from Senator Bennett's discussion about, you know consumers are more involved in health care decisions, and it is a generational thing. It's not universal. You know, if you look at survey data, you still see lots of people not accessing health care information, but it's one thing to get involved in a decision about whether to have surgery, or whether to pursue the alternative treatments, but it's another to get involved in every detail.

So that even if the consumer is more involved in that decision, let's say the consumer decides to do surgery, data like Dr. Milstein has presented shows that physicians vary greatly in the efficiency; and if his data were actually about a particular condition, a surgical treatment for a condition, I suspect that he could show that physicians vary greatly in the resources and the quality that they provide, when they're pursuing this outcome.

So I've always thought that if we are going to engage consumers, that probably the most important decision on price and quality that consumers make is the decision about which provider to go with. Because even if they're making the choice about surgery versus something else, there are all these follow-through decisions which really are pretty much left to the physician. So that's critical.

Representative Maloney. What if we moved more in the direction of consumer-driven health care with high deductible insurance policies and more responsibility placed on the consumer.

What is the evidence that we could achieve significant cost savings by giving consumers incentives to be savvy health care shoppers?

Again, Dr. Ginsburg, do you have any comment on that?

Dr. Ginsburg. Yes. I think there are some studies coming out now on some of the early experiences with consumer-driven health care. Many of them are not strong methodologically, but I think it's clear that there are savings.

And the issue is, if we generalize this to a broader population, how much are we going to get? And considering the fact that over a long period of time, spending per capita on health care rises at two and a half percentage points a year more rapidly than the growth of income or GDP per capita.

You really wonder if small changes would be too much as far as addressing this long-term trend.

Representative Maloney. And I'd like to ask each member of the panel the following question: To what extent are the benefits of the kinds of information tools you're talking about dependent on what kind of health care system we have? Are they as valuable within the existing system of health insurance as they would be if we moved to a system of much higher deductibles and made consumers more directly responsible for how much they spend on health care?

Any comments from anyone?

Dr. Milstein. I think the information availability that has been supported across-the-board by the panel would improve performance under any vision of the American health care system, whether it were continuation of what we have or movement to high deductible. I think giving the customer information on quality and what someone referred to as "all-in" cost, not just what the doctor is charging, would favorably impact almost any vision of American health care or American health insurance.

Representative Maloney. Well, that is a common theme of this hearing, that more information is a good thing. So my question is, who is opposed to the kinds of ideas we've heard today? Is it a matter of entrenched special interest? Or are there legitimate concerns that need to be taken into account in deciding what information should be released and in what form.

Everyone agrees, on the panel, that more information is a good thing.

Dr. Milstein. I can't speak for them, but I have a sense that providers are not too enthusiastic about having a lot of information on their performance very accessible to the public.

And I think there's the overall issue of doing things that improve information on price and quality that are really useful, rather than just look useful. But then I suspect that if we're talking about major changes in information on providers, that they're not going to be that happy about it, and that's where the opposition might come from.

Representative Maloney. So the opposition is that providers do not want to display what their fees are. Is that what it is, Dr. Milstein?

Dr. Milstein. When I was clinically active, I would not have enthusiastically embraced any facet of my performance being publicly

released. Whether it's my prices, the relative economy with which I use health insurance resources or my quality of care. If I felt it was coming my way, I would have insisted that it be postponed until it was better perfected, and as far forward in the future as possible.

I don't think this attitude is unique among physicians. If you look at the revolution in restaurant hygiene in Los Angeles, when the Department of Health first proposed posting a gigantic A, B, or C on the front door of every restaurant in Los Angeles based on restaurant hygiene, the restaurant owners universally and strongly opposed it.

But it had a very favorable impact on restaurant hygiene scores in Los Angeles. The car manufacturers, when J.D. Power first started out, were strongly opposed to their performance being systematically evaluated and publicly released.

Representative Maloney. Well, you then raised the question of privacy. And maybe we need to pay more attention to that and talk more about it. For example, making information about patient outcomes more widely available. Obviously you've always heard the story, "The operation was a great success, but the patient died." Making the outcomes more available to the public. Are there any comments on that and the privacy concerns involved?

Dr. Clancy. This is a core part of the work, Representative Maloney, and we can do that without violating privacy; and are working very hard with the Department and also with research contractors who have access to very large databases and who have been doing this for a while, to make sure that this can be done in such a way that people's personal information is not betrayed.

You asked a moment ago about more and more information work in our current health care system. I wanted to make two comments there. One is that if the picture that Dr. Milstein drew were suddenly available and you knew about physician price and quality, a real practical issue in today's health care system is: You need to know if they will take your insurance and if they had openings in their panel size, and so forth. Actually, that turns out to be a nontrivial kind of challenge.

The other observation I would make is I don't think it's more and more information. It's information that's organized in a way that's useful and comprehensible, so that people can understand "What this means for me." Then I think we'll see the value of that.

Right now consumers in many, many plans have incentives to get better information. What they don't actually have is information that is lined up to help them make the right kinds of decisions, and I think we've got to get both of those together.

And I don't think there's information on patient outcomes out there. There's some information on patient outcomes, from work that we support. We are now, thanks to the support from the Congress, actually putting out information on very common problems confronting the Medicare, Medicaid, and SCHIP populations. The first two reports are out, and they don't say you should do this or that; they say here's the best science we have, and we will update these reports as more science becomes available.

So the first report was on what clinicians call GERD; that's gastroesophageal reflux disease; the rest of us would call heart-

burn. It focused on whether pills, and which kinds of pills, or surgery are better, and under what circumstances. The second report looked at the use of specific types of tests for women who've been found to have a suspicious growth on a mammogram; asking the question, could you avoid the need for a biopsy? The short answer today is No. But there will be more and more reports like this coming out over the coming year.

Representative Maloney. But I mean in shopping patient outcomes, if you were looking for doctors who do, I don't know heart surgery.

Dr. Clancy. Several states do this. And there's been much debate about. Is it done fairly? But there's been accumulated experience that makes this work.

Some of the demonstrations that CMS is now sponsoring have shown that they can collect very good information on outcomes for patients with hip and knee replacements, very common procedures for the Medicare population. And other types of surgeries actually can be done. And I think consumers really would value this information.

Representative Maloney. Thank you. My time is up.

Chairman Bennett. Representative Sanchez. I hope you're over your jet lag.

Representative Sanchez. Yes, of course, Mr. Chairman.

Good morning, and I'm sorry that I arrived late. I had some other pending business in the House.

Dr. Milstein—and I didn't get to hear all of your presentation, so I'm sorry about that. Dr. Milstein, when you said provider, and you were talking specifically about, I think the physician experience, would you also say that the proprietor might be a medical group or the hospital, or the pharmaceutical company trying to sell its drugs, or the health care plan that one is under?

Dr. Milstein. Yes.

Representative Sanchez. So do you think they all have an interest in not really disclosing what the price of their product is?

Dr. Milstein. Yes, I think it's a universal human and organizational trait. If somebody were to ask me, "Would I like my performance evaluation at work published on the Internet," I would say, no." It's universal and cuts across all those provider categories that you described.

Representative Sanchez. I heard my colleagues talk about getting on the Internet or people getting on the Internet. A lot of people think that they get on the Internet and they do this, but we know from surveying and understanding people's time, that there's a lot of information out there, but the reality is not as many people really get on the Internet unless it's, maybe I'm going to die of cancer; if I got the notice today I was going to die of cancer, maybe I would get on the Internet and try to find out everything.

But for a large part, we tend to really go with the flow and do what our health care plan tells us to do, or our doctor or second opinion, and that's probably as far as we go. So do you think that if we had something like a consumer report on the Internet that people would begin to use that for something other than "my life is really at stake?"

Dr. Milstein. I think that, as expressed by some of the other panelists, some people would use it, and it would largely, but not be totally generationally-driven. That said, I don't think the Internet is only method by which we can avail consumers of performance information.

Again, I think the Los Angeles restaurant example is a wonderful example.

Representative Sanchez. So you think when I visit a hospital, I should see an A, B, or C on the door of the emergency room?

Dr. Milstein. I personally would support it being not only on the door of the emergency room, but also on the front door of every department within the hospital, so that interdepartmental variation within a hospital would be known to any customer before, on nonemergency basis, they made a decision to be treated in that hospital department.

Representative Sanchez. People have talked about using the Internet. You know, as a minority, and I represent a very diverse population, including one of the populations that deal almost exclusively in their own language, for example the Vietnamese community, which I represent the largest Vietnamese community outside of Vietnam in the world, for example. Especially in the older generation, very driven by their language.

Lack of Internet availability, especially to lower income arenas, and lack of it in languages where—I mean, everything's complicated. I get confused looking at some of these things.

If we were to look more at doing some sort of a rating system, would you say—how would you say that we could push it out to, in particular culturally and language different arenas and also low socioeconomic arenas. How would you say that we might be able to do that? Would you suggest that we would translate it into other languages in specific areas?

And I'm asking everybody, I guess. Maybe we can start with Dr. Clancy and go down the list.

And I say this because it's my personal opinion that very, very rich people probably do a lot of information gathering, and probably spend money—the price is really not an object for them, so they'll go to Switzerland if they think they can get the lifesaving treatment; and the very low end seem to have a lot of these major dollars that we're spending in our system. It's almost like the middle gets squeezed, and you don't access this much health care.

Dr. Clancy. I wanted to comment on something Dr. Milstein just said to you and then get to the very, very important question you asked.

Right now the information that is reported on quality of care at the level of hospitals and in some cases for physician groups, and so forth, is not all that useful for individual consumers. However, it has had a very important impact on the providers, and I don't think that we can overlook that.

We still need to learn a lot about making it more useful to consumers to guide their choices.

Representative Sanchez. On the providers in the sense that maybe a provider won't be able to get into certain hospitals because the hospitals can see what the providers are doing?

Dr. Clancy. To be very specific, for the past several years, nursing homes are required to report publicly on performance, and the hospitals can volunteer. And if they don't volunteer, they don't get their payment update, so it turns out that they all volunteer.

In our annual report on health care quality, we have seen much more significant improvements in quality in nursing home care and in hospital care than in many other aspects of health care. And there are a lot of studies that support that kind of observation as well.

Representative Sanchez. When people are watching, we tend to be nicer.

Dr. Clancy. Yes, right. The schools, name your domain.

So Dr. Milstein's right, most providers don't line up for the opportunity, but it does actually have very positive impacts.

Regarding the question about how to reach multiple populations, the overarching principle needs to be that good information, that will help you get better health and health care, has to be impossible to avoid. That will require translation; in some cases it's actually going to require a human interface to help people navigate.

I think the longest standing experience in the Federal Government for treatment decisions is at the Cancer Institute. And they have a fabulous Web site for people who are very comfortable doing that. They also have humans that you can call and help you navigate, and many of the people that you referenced that we would expect to have difficulty also have children and grandchildren, as the Chairman referenced, who can sometimes play a very valuable role there.

So when I speak to clinicians who practice in underserved settings, what they tell me is that drawing on family resources and so forth, they're starting to see that kind of divide narrow; which I think ultimately is a very good thing for health care.

Representative Sanchez. Thank you.

Dr. Milstein. Two comments. First, in most families and most social units, not everybody that even subscribes to Consumer Reports reads it. They often rely on one person who's the conscientious or more experienced one in the family who reads it and then describes it to everybody else. That's the way it is in my family.

On your question about diverse populations, one of the examples I put forward in my testimony was the Culinary Workers Union Health Benefits fund in Las Vegas. I think that directly addresses the population group that you referenced. It is a population with average wages probably in the range of $10 an hour. More than half of the population does not speak English as a first language.

And they were among the early heroes of the physician performance evaluation movement. They used measurements of physician performance to encourage their members to move to the better rated physicians. And as you can see in the materials that I provided, the percentage rise the fund's health insurance cost in the subsequent year was substantially less than any others in the Las Vegas area.

What I didn't reference in my testimony, is that quality of care scores either improved or remained stable. So it was a very favorable outcome; in fact, an outcome so favorable that the Hotels and the Culinary Workers Union, savoring unexpectedly large savings

that resulted, delivered a voluntary, out of contract, 55 cent per hour raise for the workers, in addition to a better return for hotel shareholders. It was a major victory for both management and labor.

Dr. Parkinson. Ms. Sanchez, you hit the nail on the head. I look at behavior change, with proven behavior change models. And really, at the end of the day, we're talking about individual, family, community, employer and national behavior change if we're going to get this right. And just going to a better doctor ain't going to get it.

I referenced the Ken Thorpe study in my paper; Ken Thorpe is an economist at Emory, who said that 62 percent of the entire rise in health care costs over the last 5 years are due to personal health behaviors that we have chosen to treat medically with the latest, greatest direct-to-consumer advertised drug or technology, in multiple languages, I'm sure.

The thing that I like about the movement now is that information is just an enabler; it does not change behavior unless you have two other things present: First, incentives or "Why should I care?" It's always been the employee's money; they just never saw it as such. It came out of their paycheck. And second, information makes the incentive of "my own money" actionable.

There is a dissociation between the choices I make about my health risk factors; do I smoke, do I move, and do I eat right? And my awareness of the diseases those risk factors drive: cancer, diabetes, etc. For example, 9 out of 10 diabetics are lifestyle-related, they don't genetically have a bad pancreas.

So we have got to get the incentives right at the macro level and build new infrastructure to support them. "Cash and Counseling" the Medicaid project is a wonderful demonstration. Medicaid disabled populations, given a choice using a culturally-sensitive counselor who helps explain to that Medicaid disabled person what their options are for service and equipment, for activities of daily living, actually make better choices for themselves than the usual government purchasing practice (standard Medicaid) at lower cost.

Not everybody is going to go to the Web for information; it's just one source. You've got to have phone contacts. You probably have to do what was done in China; it's called the barefoot doctor. Who's the trusted agent in every community that's a health resource? How do we train those people to do better? What's the role of the health plan in the future to help partner with those people, to extend empowered consumerism and improved health behaviors without having to engage the medical system. So while we're very proud of our Web site, you really have to build whole new infrastructure linking information to people for assistance. And it's got to live in an incentivized environment. A lot of the good information that Dr. Clancy referenced has been around for quite a long time in health care. But it's not been acted upon, because we're missing the incentives and the infrastructure to make it understandable and actionable.

We try to look at the whole system and say, across the continuum of care, from health promotion, risk reduction, acute care, chronic care, surgical decision support, inpatient hospital care, and then end of life care in hospice; do we provide the consumer-patient

with the incentives, infrastructure, and information to make a better decision?

And I think the good work that Carolyn Clancy's agency is doing is going to get much more sophisticated, so that that patient achieves better outcomes at lower costs.

Anecdotes are powerful. An 85-year-old women sitting next to me at a Lumenos consumer dinner in Dallas asked, "Are you Dr. Mike? Because I'm in a Lumenos plan." She said, "I love your plan. All the information you've got about prices of drugs. But you know what I really want? I'd love to be able to talk to somebody like me who has a husband who just had that tube put in his heart."

I said, "You mean a stent?" She said, "Yes. He was so depressed. He was so angry. He was on six medications. I was lost." Now that's a new value proposition for a health plan. Better engagement by patients and their families has been shown to drive down unnecessary worry, depression, utilization, and costs. So we have a huge opportunity here.

Information is part of equation, but patient centricity, new infrastructure, new types of culture-sensitive health coaches are whole new things we've got to create. I think it's exciting, but we can do it.

Dr. Ginsburg. I just have two quick points, and I think these are consistent with what some of the other panelists have said.

I think a key thing is that many people need agents to help them sort through this information, rather than go and get the raw, original information. And whether it's a union, an employer or a health plan, there are agents to massage this data.

Dr. Milstein's example in Las Vegas really shows how the union was a key player in massaging this data to communicate to the workers which are the high value physicians to go to.

And the other point I want to make is that I think people, you don't need to get 100 percent of patients or the consumers using this information, making good decisions, to get some real movement on the part of the providers to improve their quality, to improve their value. You may only need 10 percent, and that's actually an optimistic thing that—you know, we tend to think about the gains that the individual gets by making this, going to this provider versus that provider, how much they save, whether the quality was better.

But for society, I think the big potential is where the providers that aren't the best see that they're losing patients and see that in public domains their scores aren't as good as others, and they are motivated to improve what they do; and this really improves care for everybody.

Representative Sanchez. May I ask one more question, Mr. Chairman?

You know, when I did go on the net or when I've had friends go on the net, I mean, anybody can put anything on the net. And most people don't know what they're talking about, especially when it comes to medicine. Yet people read, you know they read and they see.

So the worry is, how do you make sure people are looking at the right thing? And I also include in this, for example, these commercials by the drug companies, where they've got some drug they're

promoting today, and the guy is flying over the wheat fields—I don't know what the drug does, but god, I want to get that. And I know that they must be going into the physician and saying, "Well, I saw this thing and it's going to make me fly over the wheat fields."

Information is powerful, but it can also be very detrimental. So what are the safeguards we have to think about as we look at this information issue?

Dr. Parkinson. If I may, this is one of my favorite topics. I oftentimes say I learn more about health care and the business of health care from Dorothy Hamill than I ever learned from medical school professors. Dorothy trained a whole generation of people to ask for a drug that by and large they probably didn't need; and now lo and behold we've got some safety issues.

We built something called the Department of Defense Pharmacoeconomic Center that still lives in San Antonio, Texas to judge one drug against another, because we couldn't afford all the drugs that were coming out of the pipeline being advertised directly to consumers. And we concluded, back in '97 or '98, I forget the year, that this drug, Vioxx, was not much better than Naprosyn.

But as long as the decision to see a drug or not was imposed upon people, by saying "You can't have it" or "You've got to go through a rheumatology referral on a five-tiered formulary to get it" it was a seen as a takeaway or bad medicine.

Rather, what if we provided access to the information, gave it to the consumer, to support evidence-based guidelines to the doctors, and said, "Here's the information and full cost of your choice. Here are your options. Talk with your doctor. And oh, by the way, can we talk a little bit about weight loss, perhaps, a little bit more physical activity, which likely impact the need for drug as well?"

So the role I think of all of us here is to appropriately counterdetail what I call the health care industry that creates and markets new technologies, with comparative, accurate value-added information.

For example, the University of Oregon just compared the effectiveness and costs of drugs for 10 leading classes of pharmaceuticals. You can access that information through Consumer Reports.

If we're going to "ride the rails" of consumerism, then we need health information technology standards and some trusted source of comparison out there. And right now you're paying for that; all the health plans do it themselves; they largely have some different methodologies. Often one hears complaints about a health plan saying, "This is investigational" based on their internal analysis. "What do you mean it's investigational? It's licensed by the FDA," the consumer or physician complains.

An authoritative, neutral analysis is needed to assert the consumer better. If I'm going to be the advocate of the consumer, and the employers who entrust me with their health, I've got to have good information to say, "You know what? Ms. Sanchez deserves the best information to make an informed choice" and in large part, it's not there today.

Representative Sanchez. Dr. Clancy, you had a——

Dr. Clancy. I think the information that you're talking about has to come from a trusted source. What's very interesting is that cancer patients, for example, learn to get very skeptical and good at evaluating whether what they're seeing on the Web or hearing about from others has a funny smell to it, and they know to ask the right questions. If it's coming from a dot-com they know that there might be a profit motive and all that kind of thing.

But ultimately, we need a trusted source that lets people know that the information is based on science, or it's based on belief. The information can be all over the Web and in many other places but it must be very clear to either individuals or their agents, what this is based on, what's the source. And what is the potential conflict of interest.

Representative Sanchez. Anybody else?

OK, thank you, Mr. Chairman, for indulging me with the time.

Chairman Bennett. Thank you very much.

Thank you to the panel. I think it's been a very useful discussion, and we've gotten a lot of good information out of it.

I just leave you with this one last thought. I was giving speeches when I was first elected to the Senate that were absolutely brilliant with respect to health care, and always well-received. And then a woman came up to me and said, "I really enjoyed your speech, but of course you understand you don't have the slightest idea what you're talking about."

And I said, "OK, help me understand." And I think this kind of runs through where you are. She said, "The problem with the poor is not money. The problem with the poor is not access. The problem with the poor is that they can't navigate the system."

She said, "You walk into the Salt Lake clinic and you know which desk to go to, which questions to ask, and which procedures to fill out." She said, "I deal with the homeless, I deal with the poor. They walk into a medical facility of that kind and they're totally baffled. And they walk out."

And if you're going to make health care truly accessible to them, you have to have a navigator that will take them through and help them understand; and Dr. Parkinson, your navigator would talk to them about their lifestyle and their habits, and try to get them to do healthier things.

Dr. Ginsburg, I think you're right, there is no silver bullet here. But the common theme that runs through her comments to me and your comments here today is: The more people know, the better off they're going to be. And the more they know, the more empowered they will be to take control of their own lives and their own health care situations.

So it's been a very valuable panel, and I thank you all for your willingness to contribute to it.

We'll now move to the second panel. The Committee will take a 3-minute recess as the second panel assembles itself.

[Recess.]

Chairman Bennett. The Committee will come to order. And we welcome the members of our second panel. Douglas Cave of Cave Consulting Group, I have him listed, I assume—he stepped out for a minute. Donald Kemper of Healthwise, and Walton Francis, a

longtime primary author of CHECKBOOK's Guide to Health Plans for the Federal Employee.

We appreciate your being here. Let me discuss—let's see. Mr. Francis, you've been a pioneer in looking at systematic comparison of health insurance plans, and we appreciate your being here. And Mr. Kemper, you're chairman and CEO of Healthwise, founding chair of the Center for Information Therapy, Board of Directors. And you've put forward the idea that offering every patient the right information prescription is part of the process of care. And we appreciate your pioneering effort there. Mr. Cave, President of Cave Consulting Group, you've worked with large employer group coalitions and health insurers to develop a consumer-driven health care model.

So we appreciate the three of you, and we'll hear from you in that order, starting with Mr. Francis.

STATEMENT OF WALTON J. FRANCIS, MA, MPA, MPP, AUTHOR AND INDEPENDENT CONSULTANT, FAIRFAX, VIRGINIA

Mr. Francis. Thank you very much, Mr. Chairman.

I'm going to hit just a few highlights from my testimony, if I may, and try to relate them to some of the dialog that's already heard in this hearing, because some of the points are so important.

First, it's essential to understand when we talk about customer information, it's not just that Joe Blow, a consumer, is going to use that information; it includes the ability of his friends, his family to use it; it includes the provider as a trusted intermediary to use it. When I'm thinking of getting a surgical procedure and I consult my primary care physician about where might I go, I want him to have a copy of that chart we've talked about so much, before he picks or suggests a couple of specialists——

Chairman Bennett. With a name for every dot.

Mr. Francis. Right. And of course we all benefit when the market has changed and quality is enhanced and prices reduced, we all get the benefit of competitive markets, even if we're not the most savvy shopper personally.

So what's at stake here is huge. And it doesn't have to be something that we can predict with great precision as to how the information will turn out to be valuable to us all; it's just without it being available, it can't be valuable.

Another general point. There are many barriers in the system, and I cover this by type of—I'm not going to go through all the types of consumer information; they're in my testimony. But there was some earlier discussion of providers resist providing information. Yes, they do. And they all have incentives not to have their performance known to others.

But that doesn't mean we can't overcome those barriers, and there are a variety of ways to do it. And indeed, ultimately the role of government may be to play a part in that process. Though an awful lot of it does not require the government.

When I started CHECKBOOK's *Guide,* the government had nothing to do with it. As a different example, I'm today involved in the Medicare Part D drug benefit in a variety of ways, one of which is, I was a minor contributor to and I'm a heavy user of the

Plan Finder tool on the Web, that Medicare has provided that helps people pick the best deal drug plan.

Millions of people have used this tool already. Millions of people who would have been hopelessly confused had they tried to do this by hand, have found themselves guided to the least costly health plans for their needs. You know, it's hard work to do something like that, but it can be done and we've got proven results from several insurance comparison systems.

There is also an angle here: We have an immediate need by approximately 50 million Americans, not just the few million in high deductible health plans, but the 45 million uninsured who have faced the highest deductible of all, to get better price information. I take some mild disagreement with Dr. Ginsburg's earlier comments that price information alone or price information wasn't as high a priority, maybe, as the total value package. And I certainly endorse the package that gives information on outcomes as well as price and cost.

But the reality is, people find it extremely difficult to shop, and there are lots of less costly providers out there and lots of less costly treatments.

When I was preparing this testimony, I got one of the plan Web sites—and that's a huge breakthrough recently, the plans themselves sponsoring Web sites with consumer information, unfortunately for their members, not for those 50 million people I'm talking about. And for the first time in many years of seeking I was able to find out what having a baby costs in America. I assure you this information is not freely available today on the World Wide Web. If you Google search for maternity and cost, you will not find out what it costs to have a baby. But if you go to the Aetna Web site, if you're an Aetna member, you'll find that, on average, it costs $7700. That includes the price of the hospital, the obstetrician, the drugs and so on.

That's important information. There's also some low-hanging fruit out there, and I'll conclude with this one example: Medicare pays virtually all health care providers in America. Now the Medicare rates are somewhat artificial in their methods of derivation, but the fact is they are used by health insurance companies and others in setting their rates; and furthermore, the fact that Doc Sawbones or Hospital X accepts the Medicare rate is potent information, if I'm a consumer.

What we need to do is get the Medicare payment rate information, which is free and available, out there in consumer friendly forms so that people can actually go to Doc Sawbones and say, "Well, if you're giving the rest of your consumers this cheap rate, why can't I get it?"

This has been a particular issue in the area of hospital costs. There was a notorious case at Yale University Hospital in New Haven where poor persons were being charged triply or quadruply over what preferred provider consumers and clients were being charged. There is also the California hospital rate experience. The law in California that forces hospitals to publish their charges has been an eye opener in terms of the incredible disjuncture between what the privileged people, who are using preferred providers

through health plan pay, and what the 45 or 50 million people who face really high deductibles have to pay.

That concludes what I have to say. I'll be glad to answer any questions you have.

[The prepared statement of Mr. Francis appears in the Submissions for the Recored on page 72.]

Chairman Bennett. Thank you very much. I will say I do remember our first born child cost $500. It was very neatly divided; $250 for the hospital and $250 for the OB-GYN. Things have changed a little.

Mr. Kemper.

STATEMENT OF DONALD W. KEMPER, MPH, CHAIRMAN AND CEO, HEALTHWISE, INC., BOISE, IDAHO

Mr. Kemper. I know. My first son was born in a military hospital and it cost us $16, but you get what you pay for.

I'm pleased to be here, Mr. Chairman, Ms. Sanchez. My message is pretty simple; it's just that the greatest untapped resource in health care is the consumer, and that we have to find a better way to inform and engage people in their own care.

The message is a little less on helping people become great shoppers as it is on helping people become great decisionmakers and great managers of their own care. It is aligned with what your daughter and daughter-in-law have done in their families, what you've done, and what Mrs. Maloney had done for her own surgical decision.

More technology alone is not the answer; cost-shifting alone is not the answer. Greater transparency is not the complete answer. The answer really involves helping people do more for themselves. More to avoid illness in the first place, or to avoid medical errors. More to avoid unnecessary care, and more to ensure that they get the care that will really make a difference to them and their families.

For 31 years, as CEO of Healthwise, I've relentlessly pursued ways to improve the consumer's role in health care. In the 1970s I helped to start the medical self-care movement in this country. In the 1980s, I was at the beginning of the national wellness movement. In the 1990s, I helped to make sure good consumer health information got put on the Internet.

And today my organization, not-for-profit Healthwise, provides information for most of the major health Web sites on the net. We have about 70 million patient visits, if you will, per year to our information.

Each of these efforts has made a difference, a big difference; but they've not been enough. The recommendation I'm making today I think is far better than all the rest. And, it is a simple message: Let's prescribe information to every patient. Prescribe information to every patient at every moment in care. Simple idea.

Today, patients are left in the dark much of the time. Our doctors have neither the tools nor the time to help us learn what we can do for ourselves. Plus when we do get the information, we forget about half to four-fifths of it instantly, and what we remember by the time we get home is about half wrong.

We need to find a better way to communicate with the patient. Mr. Chairman, imagine a world in which your doctor prescribed to you the information you needed to make decisions about health care. Imagine that the information about your care was considered to be an essential part of your care, and imagine that your doctor could prescribe decision aids and action plans that would actually help you improve your health.

What you're imagining we call "information therapy" and this is how it works. It starts with information triggers already known about your diagnosis, or the treatments that you've received or the tests that have been ordered for you. These triggers can predict your moment in care—where you are in that diagnosis. When we know your moment in care, we can pretty well predict the questions you might have and the decisions you'll be facing.

Then, it's a relatively simple process to prescribe information that will help you answer those questions and help support your decisions.

Group Health Cooperative in Seattle is already today giving information therapy prescriptions to every patient. Kaiser, the VA, the DoD, all have information therapy initiatives started. Information therapy is coming, but an enlightened Federal policy could help get it here a lot faster. In my written testimony I've laid out 10 ways that Congress could accelerate this movement toward information prescriptions.

In the time I have, I'd just like to focus on one area, and that is what we could do in Medicare. I think that we can start by making sure that *Medicare.gov* includes good consumer health information, so people can get it. Next I'd say that we have the information to prescribe to each Medicare patient a good prevention guide that is personalized to their comorbidities and to their sex, age, and interests.

And then finally, for every Medicare member who is diagnosed with a chronic disease, we can prescribe a self-management plan that can help improve their health.

The consumer is the greatest untapped resource in health care, and information therapy is the way to tap it. Thank you.

[The prepared statement of Mr. Kemper appears in the Submissions for the Record on page 81.]

Chairman Bennett. Thank you very much.

Dr. Cave.

STATEMENT OF DOUGLAS G. CAVE, Ph.D., MPH, PRESIDENT, CAVE CONSULTING GROUP, FOSTER CITY, CALIFORNIA

Dr. Cave. CC Group is a company that's focused on improving efficiency and effectiveness in the health care system. We work with some of the largest health plans in the country, in the areas of consumer health care transparency, and pay for performance programs.

Most health plans recognize the need to produce more detailed consumer health information. Today, many are in the process of developing a program that provides physician level efficiency and effectiveness information. The employer benefit consulting community and large employers have been very vocal to health plans

about the urgent need to present this type of health information to consumers.

Most health plans are attempting to meet this strong market demand, but each health plan is going about it in their own unique way. To date, the most commonly offered comparisons have been limited to unique procedures, diagnostic tests, and prescription drugs. With respect to these services, the information has been on a unit price basis, and that's important. We've been talking about price a lot.

Where we believe we need to go is that the information needs to be presented on a longitudinal episode of care bases, where we're not only taking into account for medical condition treatment the price, but the volume and the intensity of service.

There are several main reasons, though, why health plans have elected to start their consumerism efforts with only unit prices. One of these reasons is that health plans generally do not have enough claims experience data to measure enough network physicians to have an entirely successful physician performance program; and we heard this from the first panel as well.

The question becomes, how do health plans obtain enough claims data to accurately and reliably rate the performance of most physicians. One answer is that CMS provide access to the full Medicare claims data base. Initial testing shows that CMS data bases, the full data bases, will be able to measure the performance of 80 percent of all practicing physicians in all geographic regions.

This percent of physicians measured is more than enough to provide consumers with meaningful physician-level performance information. However, it is important to recognize that even in using the full CMS claims data bases, many of the measured physicians will have a low volume of assigned episodes of care. We have to keep in mind that there's the law of low episode numbers, because when we develop and implement methodologies to accurately measure physician performance, we have to do it accurately.

There are several methodologies being used in the market that do provide accurate and reliable physician performance data. But, on the other hand, there are a good number of methodologies that are being employed, where you'll obtain a physician efficiency score, and you will obtain a physician effectiveness score; but the scores will not be accurate or reliable.

I provide three examples in my written testimony of studies that illustrate the lack of agreement and reliability within and between these measurement systems.

Let me close by pointing out that there is an important opportunity for Congress to assist in promoting consumer health information. Congress could assist health plans with obtaining access to the full CMS Medicare dataset, as long as the access continues to protect Medicare beneficiary privacy under HIPAA and the Privacy Act. Thank you.

[The prepared statement of Dr. Cave appears in the Submissions for the Record on page 96.]

Chairman Bennett. Thank you very much.

I'm interested, Dr. Cave, in your emphasis on the number of procedures performed. At a previous hearing or examination of this kind of issue some years ago, I remember someone saying a heart

bypass operation at a high volume facility like the Mayo Clinic or some equally well-known place where they do a lot of them costs $30,000. A similar operation at a rural hospital where they do very few of them costs $80,000. The $30,000 operation is substantially better than the $80,000 operation.

Now this is a fact of life in the manufacturing world. I've spent more of my life as a businessman in the manufacturing world. One of the rules of thumb is that every time you double your output, you lower your real cost by 20 percent, just on the experience. So the first car that they produce is $10 million; the second one is $8 million. The fourth one is $4 million and so on, and by the time they've produced 5 million Tauruses or whatever car it is we're talking about, they have seen their manufacturing costs come down 20 percent every time the number doubles.

And I think what you're saying here is that a similar sort of effect occurs in medicine; the more they do it, the better they get, the more they learn. And the cost comes down.

Now am I up in the night on this, or have I picked up on something that is genuine?

Dr. Cave. I think that there's a lot of evidence that says volume is very associated with quality, particularly for higher cost procedures.

Another key component part of that statement, or an ancillary component part, is that with the Medicare claims data can examine the practice patterns of 80 percent of all the physicians.

Now in respect to higher-cost procedures, the prevalence rate tends to be low, and you need many episodes of care to examine appropriate practice patterns. Asthma is a good one, where you can have enough episodes to measure enough physicians to really rank their efficiency and effectiveness very well.

Going back to your main point that volume is associated with quality, yes absolutely, volume generally is related to a reduction in cost and increased quality. That's been proven by some studies.

Chairman Bennett. That implies a systemic change in that we ought to be moving toward high volume operations in particular procedures. In other words, here's a hospital which does nothing but heart transplants.

Dr. Cave. That argument has been made, yes.

Chairman Bennett. OK. Now we get resistance to it, and I don't want to get into that too much. But let's go down that line in terms of the subject of this hearing, which is consumer information.

Do you anticipate a Web site or a 1–800 number or whatever that would tell people "This particular facility has the highest volume of doing the procedure that you're looking at, and is probably worth the travel costs and the motel expenses"—we want to discuss the whole cost here, not just the unit cost, as you say—but you should consider, even if you live in rural Utah, that it's worth your money to travel to Minneapolis or wherever it might be, even including your travel costs and your motel room and all of the rest of it, because this is a high volume circumstance where the price will come down, the quality will go up, and this is customer information in a perfect world. Do you see that kind of thing happening?

Dr. Cave. Yes, as a matter of fact today on the inpatient facility and outpatient facility side, there has been a strong emphasis by at least three organizations to publish that type of information, and the health plans actually will contract with those organizations to present that information on their Web site.

And you can now find the volume of most procedures by hospital, because consumers are pretty savvy to that point already. It is available right now. That information you're talking about is out there, on the hospital side.

It's the physician side we want to try to move toward also.

Chairman Bennett. The physician side, OK.

Mr. Francis, do you have those kinds of data in your guide?

Mr. Francis. Mr. Chairman, I do something slightly differently, but in effect I'm doing that. What I do is show people—I'm rating insurance plans, and the primary function of an insurance plan is to pay your bills; and you want to minimize the cost of your out-of-pocket and your premium. And I rate health insurance plans against each other in terms of how hard they hit your wallet. That's exactly what I do.

We also do have quality information about insurance plans, but there's sort of an inherited limited ability—if the insurance plan pays its claims on time, and that's kind of an awful lot—there's not a lot more to be said about that plan, usually; though there are other kinds of differences that matter, and we do have consumer satisfaction data, for example, and we use it. If I could just pick up on two points that have been made:

First, there is a fair amount of institutional performance data out there for hospitals; CHECKBOOK, for example, publishes hospital death rates—the ultimate outcome measure, for all Medicare participating hospitals. And there are bits and pieces. You mentioned heart transplants; there's a Web site at HHS that actually rates every heart transplant center in America with quality adjustments; and yes, it often makes sense, in terms of lifesaving, not to use your next door transplant center.

Chairman Bennett. I misspoke. If I said transplant, I meant bypass. You don't get a transplant for $30,000.

Mr. Francis. No.

Chairman Bennett. I meant bypass surgery.

OK, go ahead.

Mr. Francis. Several witnesses have mentioned the question of using Medicare data, the claims data; and they're absolutely right, that it's a gold mine of information. The problem that faces HHS right now is that under the privacy act, as it's been interpreted by one court, releasing data on the performance of individual physicians would violate their privacy, OK?

It's not a patient privacy issue, it's a physician privacy issue. And it may take—I don't know where the lawyers at HHS are on this, I'm not one of the parties to that issue, but this may be an area where the Congress may have to help the Department do what I'm sure it would like to do.

Chairman Bennett. Yes. We talked in the first panel, and you made reference to it, about people who are resisting. And we heard the story about the restaurants in Los Angeles and the A, B, C, and I think as soon as that went up, every restaurant became an

A very quickly. Because who wants to eat in a restaurant where the sanitary condition is C? Whether they wanted to or not, they made the investment to bring themselves up to an A.

You take me back to two experiences of my own business life. I was a Washington representative—fancy word for lobbyist—for a retailer back in the 1960s, and one of the main issues that was prominent among retailing—we were a dry goods retailer; I worked for J.C. Penney—so we just observed this. But one of the prominent issues among grocery retailers was labeling, nutritional labeling, and unit cost. And they fought it as hard as they could.

And I would say to my fellow lobbyists in the quiet of our conversations, "Why are you against this? This is good for the consumer, and "Well, it's going to cost money and we're going to have to"—I said, "Look, that's unsustainable as a public posture for you to say you don't want to tell your consumer how much sugar, how much protein, how much whatever is in this particular product. Or you don't want to tell them how much it costs per ounce, lest they would figure out that Brand A is cheaper than Brand B. You don't want to do this."

And they would look at me and say, "You're right, we're very uncomfortable up there on the Hill, fighting against this." And now everybody does it, and somehow the grocery market world didn't come to an end when they started putting nutrition labels on food and unit costs on their various items. Their consumers got happier and their sales continued going on, and the costs were easily contained.

And I think that's a demonstration of what could happen to providers if we say we're going to start putting names on those dots. Well, I don't want my name on a dot that's down in the Southwest quadrant, I'd better change my practice or whatever, so that pretty soon we're all where we ought to be.

Representative Sanchez, do you have questions, comments for this panel?

Representative Sanchez. No.

Chairman Bennett. In the spirit of these hearings, do you have anything you want to say to each other? Again, I like to get the panels going back and forth, and we had some back and forth in the first panel. Do either of you, any of you, have a comment you'd like to make to the other in the testimony that's been presented here?

Mr. Kemper. Yes, sir.

Related to the issue of getting a quality score for your doctor, one of the facts of life is, not everybody can go to the best doctor. I think what Carolyn Clancy was saying is that the real benefit of these scoring systems is that it makes everybody want to move toward, at least to the center and maybe beyond. It's kind of Lake Woebegone, where we'd all be above average, if we could be.

The issue though for the consumer is, that they can make their doctor a better doctor. Medical mistakes are going to happen, but they don't have to happen to you if you're really tuned in to what your care is about.

One of the challenges is that most of us already have our doctors, and what we want to do is to work with that doctor so that we get the best possible care for the problems that we have. We can do

that if we have the right information and if we develop that partnering relationship with the doctor. I think the doctors are ready for that.

Chairman Bennett. Any other comment?

Dr. Cave. Yes. I think there's really a two-pronged approach that's going on. First, the health plans aren't sitting back and letting medical consumerism drive their role, and giving up. They're actually in the process, many of them, of developing or have developed what are called high performance networks. It's those physicians that Dr. Milstein was talking about in the upper right hand quadrant.

But these identified physicians are not all perfect there, either. And there's still the ability to improve the performance from the efficiency and effectiveness side; and that's where the health plans are really looking for the consumer to help out.

It's not that they're depending on the consumer to do 100 percent of the shopping themselves, the health plans are trying to continually improve their performance. But, there aren't enough physicians if health plans only contracted with the top 10 percent for physicians.

So even with tiered networks and high performance networks, where a high performance network is based on evaluating physicians price and the volume of services, and then also quality or effectiveness. Not all physicians are perfect. Medical consumerism will help to improve the performance.

But we still need to have the consumer to drive that enhancement as well.

Chairman Bennett. OK, thank you. You trigger another memory. At Intermountain Health Care, which is a major provider in my State, they were looking at the question of infection following operations. And at the time, the national standard—we're talking about information here—was 2 percent. If you had less than 2 percent of operations that developed an infection after, you were acceptable as the national standard.

And they decided to try to find out if they could do better than that. And so they tried a number of things; trial and error, back to the old days, foundation of medicine, "Try this and see if they get cured."

And they discovered, if I have it right, if they gave the antibiotic used to prevent infection within a certain time period after the operation——

Mr. Kemper. Before, I believe.

Chairman Bennett. Before the operation, OK. Just by changing the timing, they dropped the infection rate at their hospitals to .02 percent, and then made that standard throughout their whole organization.

Well, they were talking to me about that when we were having a discussion about health care. I as a consumer, if I now were to go to GW, or Georgetown, I want to know if they were following that particular protocol. Now undoubtedly they are; that got out in the world, you picked it up, you're saying they're not.

Mr. Kemper. Increasingly they are, but your chances are still iffy.

Chairman Bennett. OK. And this is one case where as a consumer, I could say, I could have an impact on what's going to happen.

Mr. Kemper. Mr. Chairman, what I'd like to do is to prescribe information to everybody scheduled for surgery to know that, so they could talk with their doctor about it in advance of the surgery.

Chairman Bennett. OK, that's where you're coming from, and I think that's a wise thing to say.

Mr. Francis. If I may, Mr. Chairman, just to answer that, right now something like this is being done, though not anywhere near this personalized way, which in many cases may be far and away the most effective. I'm not denigrating that idea at all. But the pay-for-performance data on hospitals that Dr. Clancy mentioned earlier, that's posted on the CMS Web site, and is already influencing hospital behavior, happens to be largely composed of measures of things hospitals should do that they often don't do, like giving people an aspirin upon admission for a heart attack; and we're seeing already substantial changes in hospital behavior.

As a prudent consumer, back to your point about that, I wouldn't go in a hospital without taking a look at that Web site first.

Chairman Bennett. OK. Thank you very much. We appreciate your contributions. The Committee is adjourned.

[Whereupon, at 11:45 a.m., Wednesday, May 10, 2006, the hearing was adjourned.]

Submissions for the Record

JOINT ECONOMIC COMMITTEE
ROBERT F. BENNETT, VICE CHAIRMAN

For Immediate Release: May 10, 2006
Contact: Emily Christensen (202) 224-5444
Mary Jane Collipriest (202) 224-5444

Vice Chairman's Opening Statement

Senator Robert F. Bennett

Hearing of the Joint Economic Committee
"The Next Generation of Health Information Tools for Consumers"
May 10, 2006

Good morning and welcome to our hearing on the next generation of health information tools for consumers. Newer financial incentives have set the stage for improving the performance of our health care system. However, we still need to provide health care consumers, employer plan sponsors, doctors, hospital administrators, and, yes, even public health program administrators with better information to improve their choices and decision making. We particularly need to arm individual consumers with better information and incentives at the point of service, so they are not left defenseless; first in the examination room and then months later when they receive a mysterious bill and cryptic explanation of benefits.

As we continue our focus on Health Care Week in the Senate, it's an important time to examine the current and future state of health information that is so essential to improving our current health care arrangements, whether they involve consumer-driven health plans, health savings accounts, more traditional employer-sponsored plans, Medicare, Medicaid, charitable care, or cash payment at the point of service. We all could use the assistance of more transparent and consumer-friendly information about the price, quality, and value of our health care options, as well as support tools to assist and improve our decision making. We may differ in how much information we wish to, or can, absorb but something more than what we currently have available is better for just about all of us.

Neither stronger financial incentives to consumers, nor top-down efforts to reengineer health care delivery will, by themselves, be able to change future trends toward rising health care costs and disappointing quality. The intermediation of value-enhancing information holds the promise of boosting the productivity of health care services, strengthening accountability for the decisions made across the health care sector of our economy, and stimulating innovation in health care delivery.

We have already witnessed the transformative power of information technology in other industries and areas of daily life. Health care need not continue to be a lagging exception. Today's hearing will examine the extent to which relevant and usable health care information involving value (the best mix of cost, price, quality, treatment outcomes, and overall health improvement) is available to empowered consumers. We will explore how it may be best delivered and utilized, and how public policy can enrich, expand, and exploit its full potential.

Our witnesses will also discuss the information component of proposed initiatives for pay-for-performance and value-based purchasing, and their potential future impact on health spending growth rates and health outcomes, primarily from the perspective of end-user consumers and the agents who serve them.

We have two panels of witnesses today, because they have a lot of diverse information to convey to us in a nevertheless succinct and crisp manner. I will be filling out a consumer report card on your performances today, but your written testimony already has received high grades.

Our first panel of witnesses includes Dr. Carolyn Clancy, who directs the Agency for Healthcare Research and Quality, which is at the forefront in coordinating public and private efforts to improve the data measurement, aggregation, and reporting activities that can produce more valuable and actionable consumer health information.

Dr. Arnold Milstein is the medical director of the Pacific Business Group on Health (PBGH) and the U.S. Health Care Thought Leader at Mercer Health & Benefits. He heads performance measurement activities for both the Leapfrog Group and the Consumer-Purchaser Disclosure Project and is a MedPAC Commissioner.

Dr. Michael Parkinson is executive vice president and chief health and medical officer for Lumenos, one of the country's leading providers of consumer-driven health care.
The company's goal is to improve consumers' health outcomes, and by doing so, to achieve long-term cost efficiency for employers that sponsor health plans.

Paul Ginsburg is an economist and president of the Center for Studying Health System Change. HSC's main research tool is the Community Tracking Study, which consists of national surveys of households and physicians in 60 nationally representative communities across the country and site visits to 12 of these communities.

Our second panel of witnesses will include Douglas Cave of Cave Consulting Group, Donald Kemper of HealthWise, and Walton Francis, longtime primary author of *CHECKBOOK's Guide to Health Plans for Federal Employee.* I will reintroduce them in somewhat greater detail a little later, when they provide testimony about what information tools and resources are already available in current markets, as well as how they could be improved and enhanced in the future.

SEN. JACK REED (RI)
RANKING DEMOCRAT

SEN. EDWARD M. KENNEDY (MA)
SEN. PAUL S. SARBANES (MD)
SEN. JEFF BINGAMAN (NM)
REP. CAROLYN B. MALONEY (NY)
REP. MAURICE HINCHEY (NY)
REP. LORETTA SANCHEZ (CA)
REP. ELIJAH E. CUMMINGS (MD)

Congress of the United States
Joint Economic Committee
Democrats

109TH
CONGRESS

804 HART SENATE OFFICE
BUILDING
WASHINGTON, DC 20510-6602
202-224-0372
FAX 202-224-5568
www.jec.senate.gov/democrats

CHAD STONE
STAFF DIRECTOR

Opening Statement
Representative Carolyn Maloney
Joint Economic Committee Hearing
May 10, 2006

Thank you, Senator Bennett. I want to thank you for holding this hearing on health information tools for consumers and I want to welcome our panels of experts and thank them all for testifying here today.

I think the Joint Economic Committee has an important role to play in looking at ways that markets for all kinds of goods and services can serve consumers better, and health care is certainly a market that Americans would like to see work better. They would like to be sure that they can get affordable health insurance and high quality medical care. I think we would all agree that more and better health care information is good for everyone and is part of the solution to improving the performance of the health care market. But I would also like to strike a cautionary note.

A large fraction of medical expenses are accounted for by a small percentage of people, and many of those expenses are incurred in situations that are largely divorced from normal economizing behavior. So I worry that the benefits from better information, while real, are often oversold. Better information and increased transparency may help people make some routine medical decisions more wisely, but they are not likely to significantly affect the overall costs of health care or make much of a dent in the number of people without health insurance. I also think we have to be sensitive to privacy issues when we talk about making vastly more information available.

Those pushing hardest for greater information appear to be those who are particularly enamored of the "consumer-driven" approach to health care with its emphasis on high-deductible health insurance and tax-sheltered health savings accounts. The President's push for consumer-driven health care would shift more costs onto individuals, while creating additional tax incentives for high-deductible insurance and HSAs that ordinary families will have little opportunity to use. High deductible plans don't reduce costs or cover the uninsured, but they do have a tendency to discourage people from using health care services.

Consumer driven health plans rely on consumers to obtain reliable information on treatment choices, quality, and charges by providers. But the concept of "empowering" consumers to make cost-conscious choices about their health care decisions is misleading, because purchasing health care is not like buying a car or a washing machine. You simply don't have a lot of time to shop for a doctor when your appendix bursts. Health

care needs are often unanticipated and patients rely on their doctors' expertise to guide their medical decisions.

Finally, for years we have heard that our information technology systems are inadequate and that patients die because of mistakes that could have been corrected if we had better technology and record-keeping. Clearly, government and the private sector have a responsibility to close the information gaps that are affecting the health of or having a life or death impact on Americans.

I look forward to the testimony of our witnesses here today and to a discussion of these issues.

Testimony Before the

Joint Economic Committee

A Hearing On: "Arming Health Care Consumers with Better Information and Incentives"

Statement of

Carolyn M. Clancy, M.D.

Director

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

For Release on Delivery
Expected at 10:00 a.m.
on Wednesday, May 10, 2006

Mr. Chairman, thank you for inviting me to join you for this important hearing on "Arming Health Care Consumers with Better Information and Incentives." Ensuring that consumers have the information and tools they need to make the health care choices that are right for them is a high priority of this Administration and, especially, of the Department of Health and Human Services (HHS). HHS is committed to ensuring that Americans can easily obtain understandable information about the quality and price of health care. To realize this vision, Secretary Leavitt has articulated four objectives: promote quality transparency, promote price transparency, facilitate the greater use of health information technology, and transform health care so its incentives support a consumer-oriented—or patient focused—health care system.

The Agency for Healthcare Research and Quality (AHRQ), which I direct, is a science partner or the Centers for Medicare & Medicaid Services (CMS) and other HHS agencies to advance these objectives. As a science partner, our job is to assure that Department priorities are based on valid, unbiased, credible science. As consumers seek to play a more active role in decisions about their health and health care, there are multiple opportunities for providing them with customized, scientific information. My comments today will focus on consumer information intended to help consumers make market and treatment decisions.

AHRQ'S EXPERIENCE WORKING WITH CONSUMERS: THREE LESSONS

I want to begin my testimony by emphasizing three lessons from our work with consumers. First, informed choice only occurs when consumers can assess the "value" of a health care good or service, and consumers can only assess value when they have both price and quality information. In fact, Secretary Leavitt has made Health Care Value Incentives a HHS Priority.

He has stressed transparency for information on both quality and price because both are essential to good decisionmaking. I should also note that while this factual information informs consumer choice, only the consumer can make the most appropriate decisions after weighing this objective information against his or her preferences, tolerance for risk or uncertainty, unique circumstances, and assessment of acceptable tradeoffs.

Second, transparency is critical for enhancing consumer choice and improving competitiveness. My agency's research on consumer choice demonstrates that where the message comes from makes a profound difference. The increased availability of information on health and health care means that consumers are increasingly skeptical of the impartiality of the information they receive. As my colleague CMS Administrator Mark McClellan has stated, such transparency is just as critical for physicians. Measurement is at the heart of public reporting and potential value-based purchasing initiatives, but physicians and other providers need to know that these measures are valid, appropriate, and widely accepted.

Finally, we must not assume that we can approach consumer choice as a "Field of Dreams." To paraphrase the movie's tagline, we cannot assume that by providing consumers with more information that they will necessarily use it. For many health care consumers, the problem is not a lack of information. It is, Mr. Chairman, as your hearing title suggests, a need for better information: information that is pulled together so that alternatives can be easily compared, easily understood, and easily acted upon. Unfortunately, it is not easy or simple to develop or present information in these ways. But I am delighted to report we are making progress.

PROVIDING CONSUMERS WITH BETTER INFORMATION

Mr. Chairman, my testimony is organized around the two broad types of decisions that consumers make. The first are marketplace decisions, in which consumers or purchasers need to select a health plan, a clinician, a hospital, or a long-term care facility. The second are decisions that patients and their caregivers must make among alternative treatments and the management of their conditions. It also includes the types of benefit design decisions that health plans and purchasers make so that their benefit packages support health care that works. For both types of consumer decisions, we need good evidence on what works and effective strategies to ensure that this information is available and that it can be used or implemented.

MARKETPLACE DECISIONS

Some of the most basic and important marketplace decisions are: Which health plan that my employer offers is right for me? How do I know which primary care physicians, specialists, or health care facilities provide quality care? If my father

needs a cardiac bypass procedure, how do I know which surgeon and which hospital are the best?

For developing information for these types of decisions, the Consumer Reports approach to evaluating alternative goods or services is a helpful practical model. We take on faith with Consumer Reports what we are now struggling with in health care: that the measures address the most relevant factors, that the measures are applied fairly and consistently, and that the results are portrayed in ways that are valid and easily understood.

Measuring the Right Things Well. Mr. Chairman, I will address public reporting and valuebased purchasing in a moment. But since neither can succeed unless we measure the right things well, I want to provide three examples of the types of measures that AHRQ develops and validates. AHRQ is a leader in this area. Many of the reporting and value-based purchasing experiments across the country are relying, at least in part, on our work.

Over a decade ago, AHRQ responded to concerns that there was often a "disconnect" between the satisfaction surveys developed and released by health plans and the experience of enrollees. Our response was not to develop a government-administered survey but to create a tool that would ensure a valid assessment of enrollees' experience with their health plans and make it available for use by public and private sector plans and purchasers. By consumer experience of care, I mean such issues as whether patients received the right care, how quickly, were they treated with respect, whether their caregivers communicated with them in ways that they could understand, and whether they were invited to participate in decisionmaking regarding their care.

AHRQ developed the Consumer Assessment of Health Providers and Systems—or CAHPS—survey, and it is now accepted as the industry standard. Today, over 123 million Americans, including Federal employees and military dependents, can use CAHPS data to make decisions about their health plans. Mr. Chairman, you and your staff have access to CAHPS data to make decisions about your Federal Employees Health Benefits Program coverage. AHRQ does not collect CAHPS data but provides technical assistance on how to communicate the findings.

As the health plan survey evolved into the industry standard, CMS and others urged us to provide similar tools for the industry to use in other areas. We have now developed, tested, and validated survey instruments for assessing children with special health care needs, behavioral health, and learning more about why Medicare beneficiaries disenroll from managed care plans. Over the next 18 months we will complete development of survey instruments that will address additional settings, populations, and types of services. As with our prior work, these will not be AHRQ-conducted surveys; these survey instruments will be in the public domain for use by others. These include hospitals, Medicare prescription drug plans, in-center hemodialysis, clinicians and group practices, Preferred Provider Organizations, and recognizing that some nursing home residents are cognitively impaired, we are developing both a survey for residents and their families. CMS recently asked us to work with them on development of a survey for home health care services.

To assist hospitals in their clinical quality improvement initiatives, AHRQ also developed four sets of Quality Indicators. Inpatient Quality Indicators examine mortality, utilization, and volume for leading conditions and procedures. Patient Safety Indicators identify post-operative complications and iatrogenic (physician-caused) harms. Pediatric Quality Indicators are focused on those 17 years old and younger. For systems, which include hospitals and primary care practices, Prevention Quality Indicators measure ambulatory care sensitive conditions, i.e., conditions for which a patient should rarely need to be admitted to the hospital if the primary care system is working properly. In the last 3 years we have seen an increasing trend by States and others to use the Quality Indicators for public reporting, and at least one CMS demonstration project is using them to test whether the quality of inpatient care for Medicare beneficiaries improves when financial incentives are provided.

AHRQ has also launched an exciting project to develop and validate efficiency measures. Nearly every report promoting public reporting calls for the addition of efficiency measures, but there are few, if any, efficiency measures for which there is widespread support. This is a high priority for purchasers, but providers have expressed concerns. The provider community believes that efficiency measures should support, and not undermine, our shared goal of encouraging appropriate high quality care. AHRQ agrees. For example, primary care practices should have incentives to help those patients who have one or more chronic illnesses learn to effectively manage their condition(s) in an efficient manner, in order to avoid risks to patient health, and large costs from avoidable emergency room visits, hospitalizations, or

complications. Appropriately constructed measures need to take such issues into account in determining efficiency.

We already are consulting all of the interested parties and leading experts and reviewing existing knowledge regarding efficiency measures. We expect to complete development and evaluation of efficiency measures by the end of this year. This will be an important addition to public and private sector initiatives because it will enable them to do what they cannot do now: compare the efficiency of their practice or their facility with the competition.

Public Reporting. A number of public reporting initiatives are drawing on our work. Of the States that have public reporting of health quality information, at least 8 States are using one or more sets of Quality Indicators that my agency developed. The states are: Colorado, Florida, Massachusetts, New York, Oregon, Texas, New York, and Utah.

To provide actual examples of reports of quality information created by a number of organizations, AHRQ will soon make available on our Web site, *www.TalkingQuality.gov,* a Report Card Compendium, a directory of over 200 sources of comparative information on the quality of health plans and providers. This directory provides in a single location an easily searchable data base of report examples, which will allow report developers to explore and assess different approaches to formatting information, displaying data, and explaining why quality information is important to consumers and other purchasers. Since it also provides (with their permission) information on the organization and individuals who developed each report, the Compendium will allow users to locate and network with one another concerning new strategies and ideas for report development. This is critical because information relating to how these reports cards were developed, how they were disseminated and used, and how they were received is rarely published. The Report Card Compendium includes reports on health plans, hospitals, medical groups/clinics, individual physicians, managed behavioral health organizations, nursing homes, home health agencies, and dialysis facilities.

I am delighted to report that the health care industry and health professional societies have stepped up to the plate to help develop public reporting initiatives. The Ambulatory Care Quality Alliance (AQA) is a consortium of private sector groups that I chair. Eighteen months ago, the American Academy of Family Physicians, the American College of Physicians, and America's Health Insurance Plans asked AHRQ to serve as a neutral convener for this collaborative effort to determine how to promote uniformity in quality measurement and reporting in outpatient settings across public and private payers. Substantial physician leadership in AQA now includes the American Medical Association and many major medical societies.

In addition to enthusiasm for identifying common measures to promote uniformity and facilitate improvement efforts, physicians are interested in their validity and use. Specifically, physicians want assurances: that measures are based on the best science and will be updated as the science changes; that we will address unanticipated consequences such as reports that discourage physicians from seeing the most difficult patients; and that any incentives will be fair and equitable. Not surprisingly, physicians are more willing to trust measures that are developed by neutral scientific parties.

AHRQ and CMS are also active participants and partners in the Hospital Quality Alliance, a public-private partnership that is committed to developing and making available standardized measures of hospital quality. Over the last 3 years, the Alliance has built a system of quality reporting for hospitals. The result is the HHS Web site, Hospital Compare (*www.hospitalcompare.hhs.gov*), which provides easily accessible comparative quality information. We are very pleased that the Hospital Quality Alliance will use the Hospital CAHPS survey, which we have developed for CMS to provide information on consumers' experiences with their hospital care. The survey is now being field tested. We are especially pleased that the Alliance has publicly stated that HCAHPS, "represents a quantum leap toward the goal of consumer-directed health care decisionmaking."

Value-Based Purchasing. Value-based purchasing is the concept of rewarding providers based upon their quality and efficiency. There are, of course, financial incentives inherent in all payment systems, so the issue is not incentives versus no incentives. As Secretary Leavitt points out, the challenge is that existing incentives are often poorly aligned; all too often they do not support our goals of improving efficiency and promoting quality.

AHRQ is working with CMS, the Blue Cross plans, the RWJ Rewarding Quality Initiative, and others to provide technical assistance and to assist in the evaluation of the value-based purchasing experiments now underway. Some of these experiments, such as the CMS Premier quality incentive demonstration, are using our Quality Indicators as part of their measure sets.

As interest began to grow in value-based purchasing initiatives, AHRQ undertook a synthesis of the existing literature. While the evidence was not conclusive when we released our report last year, the gaps in evidence are beginning to fill in. The evidence shows that measurable improvements have been seen in large-scale tests that reward increased use of preventive screenings and other processes that improve quality and safety. We developed Pay for Performance: A Decision Guide for Purchasers to Consider, which we released last week. These efforts underscore the importance of understanding how value-based purchasing programs are designed, so that all participants understand the rules.

TREATMENT DECISIONS

Let me now turn to treatment decisions.

Understanding What Works and For Whom. As I noted, one of AHRQ's basic activities is to understand what treatments and interventions work and do not work. There are three reasons why AHRQ's work is critical in assessing health care's state-of-the-art. First, with our increasing investment in basic and biomedical research, there has been an exponential increase in the number of scientific findings, and a similar increase in the proportion of clinical decisions where there are two or more treatment options. This makes it increasingly difficult for physicians to keep abreast of the literature and put the latest findings into perspective. Second, research shows that that there is a 17-year time lag between discovery and when most Americans benefit from that discovery. AHRQ and other HHS agencies are committed to reducing that time lag. Finally, academia rewards original research, not synthesis of existing knowledge. So synthesis of our exploding knowledge base is the exception, rather than the rule.

Section 1013 of the Medicare Modernization Act (MMA) significantly expanded AHRQ's ability to develop state-of-the-art evidence syntheses for the conditions and interventions of significance for Medicare, Medicaid, and State Children's Health Insurance Programs. To respond to the MMA mandate, we established the Effective Health Care Program to provide current, unbiased evidence about the comparative effectiveness of different health care interventions. Where the Effective Health Care Program breaks new ground is how we undertake these syntheses: the process is transparent, they will be routinely updated as warranted by new discoveries, and consumer-friendly versions will be produced of every finding.

Our initial report compared the effectiveness of treatments for gastroesophageal reflux disease (GERD). This report is a good example of the opportunities for greater patient involvement in decisionmaking. The report found that patients who had surgery to treat GERD did so in the hope that they would no longer require ongoing medication. Yet despite the costs and risks, nearly two-thirds needed to continue taking medication. For patients receiving pharmaceutical therapy, there was a large difference in the cost, but not in the effectiveness, of the different classes of medications.

This information is already being used by purchasers to improve the quality of their health benefit plans. For example, the National Business Group on Health, in its work supporting the National Committee on Evidence-Based Benefit Design, has summarized the information for purchasers and identified benefit design options for health benefits managers.

Translating Knowledge Effectively. Communicating information to patients and consumers about medical decisionmaking can be daunting. The subject matter is often complex; statistical odds or risks of developing a disease or complication are extremely difficult to communicate; and the end result, all too often, is misunderstanding. It can often be difficult to reach consumers who are "health illiterate" or who have reached a saturation point with health care information.

A member of our National Advisory Council, Judy Hibbard, a professor in the University of Oregon's Department of Planning, Public Policy, and Management, is an expert in the field of patient and consumer communication. We have relied on her insights in developing many of our products. She has identified three major factors that affect whether a consumer uses this type of information:

- Consumers need to understand the importance of the information to their lives. The information must be understandable, salient, and framed in ways that consumers can easily grasp.
- Consumers often need specific skills to understand and use the information. For example, health literacy and the ability to understand numerical information like the odds of developing a disease or complication are important.
- Finally, motivation of consumers to use the information is critical. In fact, a high level of motivation can compensate for a low level of these skills.

We have come to appreciate that the task is not merely translating a document into a specific reading level. What is required is a better understanding of the audience for the information: what will make specific health messages meaningful to those who need to act upon them. We also need to make the action steps concrete.

We are beginning to address these challenges. We are structuring the recommendations of the U.S. Preventive Services Task Force, which AHRQ sponsors, so they can be used digitally. By the end of the year, we will have a web-based interactive program where an individual can type in his or her age, sex, or other relevant information and understand more clearly what services the Task Force recommends they receive, and how often.

Interestingly, the issue of clarifying action steps extends to clinicians. As decision support systems—whether in Personal Digital Assistants or desktop computers—become more pervasive, we are discovering that these programs do not easily accommodate findings that are framed in terms of factors that physicians need to consider. The information must be reformatted to provide specific action steps that match the demographics of the patient being treated.

In the short term, we are restructuring our recent findings so that they can be more easily incorporated into decision support systems. In the long term, it is clearly more efficient to incorporate this focus into our work from the outset. So we have begun to change our process for developing evidence syntheses so that the results can readily be used by patients interactively on the Web or by caregivers in decision support systems. Our first prototype is an interactive data base of articles on the costs and benefits of health IT; we will now apply this approach to the work of the U.S. Preventive Services Task Force. Over the next 3 years, we expect this approach will become an integral part of all of our synthesis work. This should make an important contribution to reducing the 17-year time lag between discovery and widespread adoption.

Patients with Chronic Illness. A substantial proportion of health care expenditures are focused on caring for individuals with multiple chronic illnesses. Judy Hibbard is also helping us to think through the challenge of motivating chronically ill patients to take an active role in the management of their care. While most health plans have developed or incorporated disease management strategies into their programs, this is only the first step in what is a much longer process. We sometimes forget the often overwhelming myriad of decisions and actions that a chronic care patient must take. Combined with the difficulties of navigating a highly complex delivery system, it is not surprising that few patients actually try. When you consider that fewer than 50 percent of patients actually quit smoking after a heart attack—an event that should motivate even the most intransigent smoker—it seems less surprising that it can be difficult to motivate chronic care patients to take an active role in managing their care and their lifestyle. AHRQ will increasingly focus attention on how we can effectively engage patients with chronic illnesses in their care.

CONCLUSION

Mr. Chairman, in closing, I believe that we are making significant progress toward our shared goal of enhancing patient choice. The industry deserves great credit for creating the Hospital Quality Alliance and Ambulatory Care Quality Alliance to advance public reporting. Similarly, the leadership of Dr. Mark McClellan and his team at CMS has played a critical role in the progress we have made to date.

As I noted during my opening remarks, we need to keep our eye on the ball: ensuring that all of us—as consumers and taxpayers—are getting real value for our health care dollars. Second, we need to recognize that all of these efforts succeed or fail based on the transparency of the process. The more transparent we make measuring the right thing well, the more likely that health care providers and consumers will accept the results. Third, we need to be realistic about the challenges of getting consumers to use this information in making health care decisions. This will not occur magically. We need to focus on how to best engage consumers more effectively in their health care decisions.

My closing observation is that we must not overlook the significant response of the provider community to public reporting already. Health care systems are increasingly looking at how they can redesign their systems and processes for quality and value. We are supporting or providing technical assistance for a number of exciting projects intended to help build the evidence base for how systems can improve. For example, we are providing support to a public system's effort to apply the automotive concept of "lean" processes to health care, another project to more effectively measure waste, and a large collaborative effort to reduce avoidable injuries, in a first step toward developing "fail safe" hospitals. As we explore public re-

porting and value-based purchasing, interest in redesign for efficiency, quality, effectiveness, and safety will only increase.

By serving as a "science partner" for these efforts, we will ensure that the lessons learned from these cutting edge initiatives will be rapidly shared throughout the health care industry. In fact, we will launch a web-based Innovations Clearinghouse later this year to serve as a platform for rapid dissemination. We also hope to make additional contributions through the types of system redesign projects I just mentioned, our continuing work in patient safety, and our support for the Administration's broader health IT agenda.

Mr. Chairman, this concludes my prepared statement. I will be delighted to answer questions.

Stimulating the Emergence of a 60 Mile Per Gallon American Health Care System

Employers, Unions, Insurers, and Consumer Organizations Could Greatly Improve Health Insurance Affordability and Quality via Improved Physician Performance Transparency; Access to Beneficiary-Anonymized CMS Claims Data is Pivotal

Testimony of Arnold Milstein MD, MPH

House/Senate Joint Economic Committee

May 10, 2006

I am Arnold Milstein, Chief Physician at Mercer Health & Benefits and the Medical Director of the Pacific Business Group on Health (PBGH), which serves 50 large and over 7,000 small California employers. My testimony incorporates my work with employer-funded health benefits plans operating in Nevada, Washington, Massachusetts, and California. It also reflects findings from a Robert Wood Johnson Foundation funded study of health care consumerism that I led in partnership with Professor Meredith Rosenthal at the Harvard School of Public Health. It does not represent the positions of these organizations. Findings from the Mercer/Harvard Study were published recently in *Health Affairs* (Attachment A).

As American employers, unions, and taxpayers struggle to tame a long-standing 2.5 real percentage point gap between annual health care spending growth and GDP growth, one tool of great power remains mostly unused: the measurement of individual physicians' and physician groups' relative propensity to "consume" health insurance "fuel" when treating an episode of acute illness (such as a broken leg) or a year of chronic illness (such as advanced diabetes). The terms for this dimension of physician performance are "total cost of care," "all-in cost," "longitudinal cost-efficiency," or more simply "relative affordability."

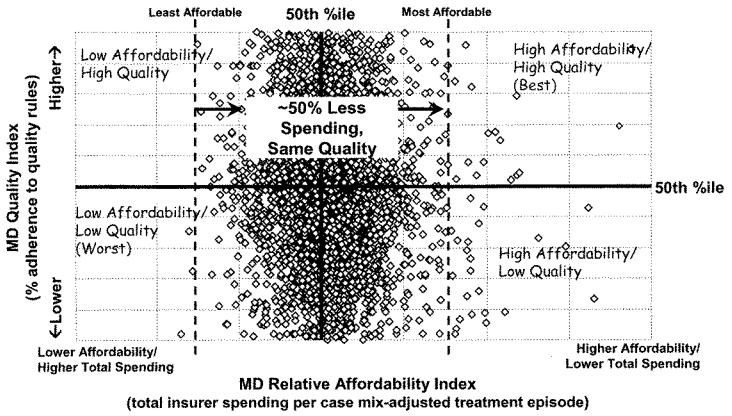
An Opportunity to Reduce Spending Without Lowering Quality

After adjusting for differences in the mix and severity of illnesses that they treat, physicians in the same community and same medical specialty may vary from each other by as much as 2x in their relative affordability. Such wide variation in average total health insurance fuel consumption per episode of treatment is often not driven by differences in physician fees or in the volume of services provided directly by a physician. Rather, it is due to differences in the many factors that physicians influence through their uniquely powerful role in recommending drugs, imaging studies, lab tests, specialist consultations, hospitalizations, and healthy behaviors. The practice pattern of more affordable physicians consumes the equivalent of 30 miles per gallon of health insurance fuel; other physicians, often unknowingly and unintentionally,

function as the medical equivalent of large SUVs. These affordability differences do not correlate with quality of care. Exhibit 1 demonstrates in an illustrative community this wide difference in physician-associated health insurance fuel consumption. *The inter-physician spread in relative affordability persists at every level of measured quality of care.*

EXHIBIT 1

At Every Level of Quality, MDs with the Most Affordable Practice Patterns Incur Up To 50% Lower Insurer Spending Than Least Affordable MDs (each dot is a Seattle MD)



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Adapted from Regence Blue Shield; for Seattle MDs

Most physicians are unaware of the relative affordability of their pattern of practice. When physicians' relative affordability is measured, payers can use the results in four ways to encourage physician improvement. Arranged roughly in order of their likely power to improve affordability, these uses are:

A.	FEEDBACK FOR MD USE IN PERFORMANCE IMPROVEMENT	Sharing affordability and quality measures with physicians and relying on their professionalism to improve the affordability and quality of their practice pattern, as was advocated for Medicare by MedPAC in 2005.
B.	PUBLIC TRANSPARENCY	Publicly releasing affordability measures, along with quality measures, so that consumers may select more affordable, high quality physicians.
C.	PAY-FOR-PERFORMANCE	Using affordability measures, along with quality measures, in physician pay-for-performance programs.
D.	PHYSICIAN NETWORK NARROWING OR TIERING	Using affordability measures to create insurance products that reward consumers with lower cost-sharing if they select more affordable, high quality physicians.

Proof of Concept

Critics of physician affordability measures reasonably question whether a physician's affordability score primarily reflects differences in (a) patients' severity of illness, health behaviors, or health care preferences; (b) the accuracy/completeness of claims data submitted by physicians; or (c) the impact of other providers. To answer this question, a number of employers, union-administered multi-employer benefits trusts and insurers have applied the ultimate test of the validity of such measures: they incentivized their enrollees to switch to quality-credentialed physicians who scored in the more affordable range (method D, above), and then measured whether per person health care spending growth slowed compared to other insurance plans in the same local area. In Exhibit 2, I have summarized their results: in brief, *all achieved substantial savings,* roughly in proportion to their degree of physician selectivity and salience to local physicians.

EXHIBIT 2

Proof of Concept by Pioneering Purchasers and Insurers
% Reduction in Per Capita Spending Compared to
Similar Local Plans via Building MD Networks on
Relative "All-in" Affordability, Rather Than on Lowest Fees;
Quality of Care Measures Were Unchanged or Improved

Pitney Bowes, 1995 Connecticut [1]	**17%**
Culinary Union Trust, 2003 Nevada[2]	**7-8%**
PacifiCare, 2005 Multiple States[3]	**6%**
Aetna, 2006 Multiple States[4]	**2-3%**

[1] Appendix II in "Improving the Value of Health Benefit Plans Through Consumer-Driven Health Care," Mercer Human Resource Consulting, April 25, 2002
[2] Slide 2, Testimony of Peter V. Lee before the House Subcommittee on Health Promoting Quality and Efficiency of Care for Medicare Beneficiaries, March 15, 2005
[3] e-mail correspondence from Dr. Samuel Ho, PacifiCare, May 3, 2006
[4] e-mail correspondence from Dr. Donald Storey, Aetna, April 26, 2006

Barrier to Rapid Progress

Other private sector health benefit plan sponsors are beginning to follow these pioneers. For example, Wellpoint in California is offering a new PPO plan based on a network of more affordable, quality-credentialed physicians. Its premiums are on average 9% lower than for its less selective PPO plan. However, *very few private sector plans have enough claims experience to measure with confidence the affordability or quality for a majority of individual physicians in a community.* This leaves private sector health benefits plan sponsors with unattractive choices: (a) select physicians from among a minority of physicians with whom they do have enough claims experience; (b) select physicians based on marginal or outdated claims experience; or (c) merge claims data with other insurers. Most sponsors judge options (a) and (b) to be unworkable. Due to inter-payer differences in claims data bases and anti-trust concerns, option (c) is very difficult and slow. There are a few noteworthy exceptions. Under the leadership of the Massachusetts state employee benefits plan, "the GIC," six of Massachusetts's seven largest

insurers merged their claims data and measured individual physician affordability and quality statewide in consultation with the Massachusetts Medical Society. Health insurers began offering less costly new plans to GIC members last month, based on preferential use of more affordable physicians with favorable quality scores. In other states, over 50 large employers and 6 partnering multi-state insurers participate in "Care Focused Purchasing." CFP is pursuing a claims data merger that will enable similar solutions in multiple urban areas effective January 1, 2008. AHIP's "AQA" initiative intends to test the feasibility of merging of regional CMS and private sector claims data bases, in partnership with CMS, AHRQ and other organizations, including PBGH. However none of these pioneering efforts offer a near-term national private sector solution.

Facilitation Via a New Routine Use of CMS Claims Data

Private sector progress could be greatly accelerated if CMS routinely made available, in beneficiary-anonymized format, the full Medicare claims data base. Except for pediatric and maternity care, such availability would enable employment-based and individually based health benefits plans to lower premiums and raise quality of care by all four methods A-D outlined above. To further safeguard beneficiary privacy, such data base availability could be conditioned on HIPAA-compliant user agreements that limited the permitted use of the data to the generation of provider performance measures based on the aggregated claims of multiple beneficiaries. Such CMS claims data availability has been advocated by the Business Roundtable, by the *New York Times* editorial board, and in my prior testimony before this committee 2 years ago.

The full power of these measurement tools in America's battle to tame health insurance affordability and poor quality lies not in the one-time opportunity for pioneering employers, unions, or insurers to reduce spending 2-17% by incentivizing enrollees to link to more fuel-efficient, high quality physicians. *Rather, it lies in the motivational power of performance transparency in any industry, including the physician services industry, to propel continuous gains in affordability and quality, once consumers and/or prices begin to favor better, faster, leaner providers.*

To open this pathway to better, faster, and leaner "60 mile per gallon" American health care, CMS need not expend resources to provide requested data. Requestors of the data can pay CMS' incremental cost of fulfilling each data request. Moreover, CMS would reap substantial benefit, since resulting improvements in physician performance would also lift the financial sustainability and quality of care for Medicare, Medicaid, Tri-Care, and FEHBP beneficiaries.

Summary

Today's American health care market is only beginning to awaken to the error of primarily incentivizing low physician fees and high volumes of service, rather than physician excellence in quality and "all-in" affordability. Instead of endlessly passing the hot potato of health care spending growth back and forth between payers, consumers, and providers, let's unlock innovation in value breakthrough among American physicians. Through a combination of patient trust and laws, no one has more influence on clinical and financial outcomes than physicians do. If stimulated by a much more performance-sensitive environment that encourages all-in affordability and quality, American physicians can lead infinite innovation in better, faster, leaner care, and help stabilize or reduce health care spending as a percentage of our national income.

Attachment A

(See page 1599 for pivotal importance of access to Medicare claims data)

"Market Watch: A Report Card on the Freshman Class of Consumer-Directed Health Plans," M. Rosenthal, C. Hsuan, and A. Milstein, *Health Affairs*, Vol. 24; No. 6, November/December 2005.

MARKETWATCH

A Report Card On The Freshman Class Of Consumer-Directed Health Plans

Consumer-directed plans need major refinements if they are to substantially improve the affordability and quality of care.

by Meredith Rosenthal, Charleen Hsuan, and Arnold Milstein

ABSTRACT: We used a series of case studies of first-generation consumer-directed health plans to investigate their early experience and the suitability of their design for reducing the growth in health benefit spending and improving the value of that spending. We found three fundamental but correctible weaknesses: Most plans do not make available comparative measures of quality and longitudinal cost-efficiency in enough detail to help consumers discern higher-value health care options; financial incentives for consumers are weak and insensitive to differences in value among the selections that consumers make; and none of the plans made cost-sharing adjustments to preserve freedom of choice for low-income consumers.

IN THE WAKE OF the backlash against managed care, U.S. health benefit programs are undergoing a transformation.[1] The fulcrum for management of costs and quality has shifted from insurers and physicians toward consumers. Consumer-directed health plans, the result, vary in multiple dimensions but share (1) enhanced tools to support informed choice of providers and treatments; (2) expansion of programs to enable consumers to manage their health and health care; and (3) stronger financial incentives for consumers to control spending.[2]

Proponents of consumer-directed plans argue that they will catalyze health system reform by making enrollees better consumers of health care. They forecast that such plans will curb consumers' demand for low-value health services and stimulate their preference for more-affordable and higher-quality providers and treatments.[3] Skeptics suggest that the plans amount to Trojan horses carrying camouflaged reductions in risk protection and financial access to care.[4] They are concerned that consumer-directed plans offered alongside other plans will skim off the healthier members of the risk pool, resulting in a redistribution of resources from the sick to the healthy.[5]

In this paper we evaluate the early experience and design of fourteen first-generation consumer-directed health plans. We examine six design features that relevant health services research suggests will be required for such plans to reduce spending growth and increase value substantially. In addition, we reflect on early estimates of impact reported by the industry and independent researchers. We

Meredith Rosenthal (mrosenth@hsph.harvard.edu) is an assistant professor of health economics and policy in the Department of Health Policy and Management, Harvard School of Public Health, in Boston, Massachusetts. Charleen Hsuan is a former research assistant in the department. Arnold Milstein is Worldwide Partner at Mercer Human Resource Consulting in San Francisco, California.

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examined both spending-account and tiered consumer-directed plan models.

■ **Spending-account models.** Spending-account plans now come as health reimbursement accounts (HRAs) or health savings accounts (HSAs) and offer consumers a fund to spend on some or all categories of health care. Once the consumer has depleted the account, and for some expenses not eligible to be reimbursed out of the account, a high deductible must usually be met before preferred provider organization (PPO)–style coverage applies. HSAs, created by the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003, must be accompanied by a high-deductible health plan that conforms to Internal Revenue Service (IRS) guidelines and are portable for a person's lifetime. In HRAs, unspent balances are also carried forward by the beneficiary for future use but usually revert to the employer when the beneficiary changes employers.

■ **Tiered models.** Tiered models are more heterogeneous. They vary along several key dimensions: the scope and timing of consumer cost sharing. We label as "premium-tiered" those models that vary consumers' premium contributions based on annual selections, such as network size or health care delivery model. The most flexible forms of premium-tiered models are "customized-benefit-design" models that also allow consumers, at enrollment, to customize cost-sharing parameters such as size of deductible or coinsurance, as well as network scope and model. Another type of tiered model is "point-of-care." These models vary consumers' cost sharing for each provider contact at the point of service, based on the provider's quality, price, or cost-efficiency tier.

Study Methods

With an advisory team of five senior health services researchers, we identified fourteen consumer-directed health plans for study. We included the full range of new consumer-directed employee health benefit "solutions," except HSAs, which had newly entered the market. We prioritized plans with larger market share and those operating for at least a year, to allow sufficient operating experience. We included plans serving large employers (mostly self-insured) and small employers (mostly fully insured) because of likely differences in benefit design and implementation.

Among the fourteen plans were seven spending-account models, three premium-tiered models, one premium-tiered customized-benefit-design model, and three point-of-care tiered models. To obtain candid information from respondents, we agreed to not identify specific companies or products and to label them as Plans 1–14.[6] Because there are few insurers with large enrollments in spending-account models and point-of-care tiered networks, the seven spending-account models we studied accounted for nearly 85 percent of 2003 U.S. enrollment in such models, while the three point-of-care tiered models accounted for nearly 80 percent of 2003 U.S. enrollment in such models.

For each selected model, we focused on a specific employer's implementation of that model. In late 2003 and early 2004, we conducted a series of recorded telephone interviews with health plans' medical directors or marketing executives and the employer's human resource or health benefits director. We asked health plans questions in six categories: (1) targeted purchasers, including self- or fully insured; (2) benefit design; (3) consumer decision support and health/health care management; (4) quality of care/financial protections; (5) observed risk segmentation effects among enrollees; and (6) impact, if measured, on enrollees' satisfaction, re-enrollment rates, service use, plan-paid costs, out-of-pocket costs, and provider behavior. With health benefit purchasers, we explored instead integration of the consumer-directed plan with any other health plan options, including the employer's contributions toward plan premiums.

Effects Reported By The Plans

Rigorous analysis of the actual impact of consumer-directed plans is key to assessing the value of these new models. Because these plans are relatively new to the market, however, almost all of the evidence on savings

comes from the plans themselves or their consultants, and thus it should be regarded as preliminary until independently confirmed. The impact of favorable selection among enrollees, empirically demonstrated in some studies, remains the largest unknown.[7] Also, findings relate to specific populations and plan designs and might not be generalizable.

■ **Service use and spending.** Most of the spending-account plans reported internal estimates of reduced service use and total spending because of the introduction of the new models. One premium-tiered plan also reported that its introduction caused enrollees to buy less generous plan designs and to reduce use compared with the previous year.

Reported savings are difficult to generalize because they are relative to a variety of comparison plans, and, in many cases, it is unclear how much were attributable to coverage reductions rather than behavioral change. The largest savings estimate suggested an 11 percent absolute reduction in total spending in the first year, while other plans in the market were growing at double-digit rates. Most plans reported a reduced rate of positive spending growth, and some had no data. Several plans reported that consumers' out-of-pocket spending grew more slowly than comparison plans, as well. Plans attributed most savings to service substitutions by consumers rather than reductions in overall rates of service use. Substitutions included generic for brand-name drugs and office visits for emergency room visits. One spending account and one premium-tiered plan (Plans 2 and 9) found that use of preventive care increased relative to comparison groups. Some point-of-care tiered plans observed slight behavioral modification among enrollees. Plan 13 reported "modest but measurable" switching among enrollees to providers in the preferred tier, while Plan 14 will increase the out-of-pocket cost differentials and add a fourth tier because of negligible switching among enrollees.

Independent evaluations of consumer-directed plans are now under way. The largest evaluation, and the only one to report savings, assesses spending accounts offered by Definity in comparison to health maintenance organization (HMO) and PPO plans offered to the same risk pools.[8] In this setting, drug spending greatly decreased for spending-account enrollees and remained below that of other plans throughout the study. Hospital admission rates were also initially lower but then surpassed those of the comparison plans. These findings might be explained by the fact that in later years, many enrollees had accrued enough in their accounts to offset all or most of the deductible.

■ **Consumer satisfaction.** Finally, several spending-account plans reported annual renewal frequency above 90 percent for both employers and employees with a choice of plans. This, and survey results cited by the same plans, suggests that satisfaction with the spending-account models is relatively high. Published survey data provide a somewhat different insight. In one employer setting, consumers who chose a consumer-directed plan offered alongside HMO and PPO options were somewhat less satisfied with their plan than other employees and were more likely to have switched plans at the end of the year.[9] Recall, however, that these findings relate to a single plan and might not be generalizable.

The Grading System For Judging Consumer-Directed Plan Designs

We used principles derived from relevant health services research to score the plans on the following six design features likely to be pivotal to a plan's ability to greatly curb per capita spending and ameliorate quality failure.

■ **Low-spender incentives.** Because tiered plans are primarily attempting to influence choice of providers, to test the adequacy of their low-spender incentives, we sought evidence on the amount of incremental cost sharing required to encourage enrollees to select a provider other than their natural choice. Survey research by David Meltzer and colleagues on consumers' acceptance of inpatient care by hospitalists rather than by their personal physicians showed that $200 will cause 85 percent of U.S. patients to select a hospitalist.[10] Only half of the premium-tiered models re-

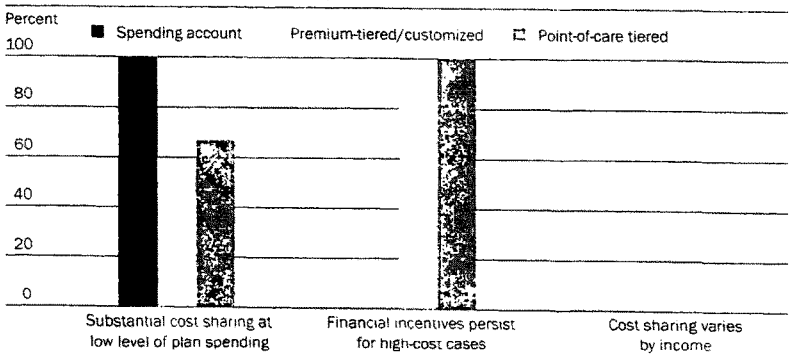
quired consumers to pay at least $200 more per year for selecting a lower provider tier. Two-thirds of the point-of-care tiered models required copayment differences of at least $200 if they received the modal annual amount of care from lower-tier physicians or hospitals.

Spending-account plans require consumers to pay dollar for dollar out of their accounts or out of pocket up to $1,000–$1,750 for single coverage. Because all of the accounts we examined had rollover provisions, we assume that enrollees typically treat account dollars as having high opportunity costs and will therefore try to conserve them for uses perceived as being of higher value.[11] Thus, all of the spending-account models passed our test of adequacy of low-spender incentives (Exhibit 1).

■ **High-spender incentives.** The principal factor driving growth in health spending is the use of high-cost technologies.[12] If consumer financial incentives rather than managed care preauthorization controls are to be relied upon for cost control, they must influence consumers with high levels of spending. To test for this, we examined whether consumer-directed plans use financial incentives to influence consumers' selections after combined spending exceeds $5,000.[13] For premium-tiered and point-of-care tiered models, we again looked for expected annual out-of-pocket payment differences of at least $200 between the most and least preferred hospitals and physicians, but at higher levels of plan spending. For spending accounts, we looked at the coinsurance rate to determine the consumer's share of spending after $5,000 and compared this to 20 percent, the modal coinsurance rate faced by current PPO or point-of-service (POS) enrollees for physician services.

We judged that all four premium-tiered plans offered sizable high-spender incentives based on the following logic: If a high-spending consumer responded to the premium differences among plan options by selecting a narrower network or higher cost sharing (or both), then the marginal incentives intrinsic to that selection would persist for the entire year, until the consumer exceeded the out-of-pocket maximum. The three point-of-care tiered plans also influence consumers' selections at relatively high levels of spending because each time a person visits a nonpreferred physician or hospital, an additional copayment is required. For most patients at $5,000 of combined plan spending, the out-of-pocket limit will not have been reached. The spending-account models required coinsurance of 10 percent or less once the deductible had been met. Thus, incentives to reduce spending were weak or absent once a person reached $1,500–

EXHIBIT 1
Structure Of Consumer Cost Sharing In Consumer-Directed Health Plans



SOURCE: Authors' analysis of information collected by telephone interview with case-study participants.

$2,500 in cumulative plan spending.

We note, however, that cost sharing is inherently a limited mechanism for influencing high spenders because out-of-pocket maximums, which are needed to protect against catastrophic financial risk, ultimately desensitize enrollees to the cost-efficiency of their selections, unless positive incentives are used.

■ **Low-income incentive adjustments.** Although cost sharing needs to be adequate to encourage higher-value selections, it is counterproductive if it discourages use of valuable services by lower-income enrollees or offers choice in theory only.[14] POS cost sharing, coverage bonuses, out-of-pocket limits, or premium contributions that are sensitive to enrollees' income all might protect lower-income people. Among all types of consumer-directed plans we examined, none of the employers or plans used these forms of income-sensitivity.

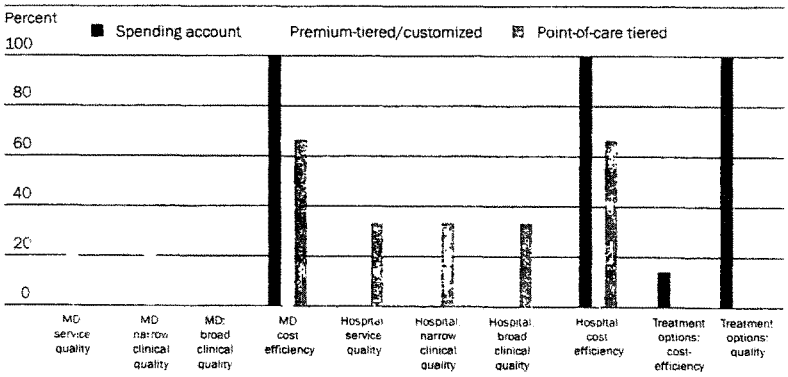
■ **Value-tailored incentives.** We looked separately at whether cost sharing favors higher-quality and more cost-efficient plan selections (rather than just those with lower unit prices) of physicians, hospitals, and major treatment options. For quality, we further differentiated between measures used that represent only service quality; narrowly defined clinical quality; or multidimensional, broadly defined quality. For treatment options, we examined whether cost sharing varies based on cost-efficiency and any measure of quality.

Because most spending accounts rely on deductibles and traditional coinsurance, cost sharing is not sensitive to the quality of provider selections (Exhibit 2). However, three of the seven spending accounts made some concession to quality by providing first-dollar coverage or subsidies for preventive services, and one plan offered a reward program to encourage healthy behavior, including appropriate primary prevention. One spending-account model also favored high-value care by providing more generous coverage for maintenance drugs for chronic conditions.

We also deemed spending accounts to offer enrollees incentives to select more cost-efficient physicians and treatments, because the individual bears the full cost of provider and treatment selections (up to the deductible). However, because nearly any hospital admission entails spending beyond the deductible, spending accounts do not encourage selection of more cost-efficient hospitals (they only discourage admissions).

To test point-of-care tiered and premium-tiered plans, we examined the measures they used to rate providers for the purposes of tier-

EXHIBIT 2
Value-Tailored Incentives In Consumer-Directed Health Plans



SOURCE: Authors' analysis of information collected by telephone interview with case-study participants.

ing. All used risk-adjusted information on cost-efficiency for this purpose, but only two used quality measures.[15]

■ **Decision support.** If consumers lack access to information about the costs and quality of provider and treatment options, the notion of a discriminating health care consumer is meaningless. Ideally, this information would include comprehensive cost-efficiency and broad quality measures and would be actively presented to consumers in particular health states. At a minimum, we looked for information on unit prices (for cost) and selected quality domains, available online, in print, or by telephone.

Only two spending-account plans provided any provider-specific cost information, and this was limited to unit price—a highly imprecise proxy measure of cost-efficiency (Exhibit 3). Three premium-tiered and two point-of-care tiered plans made available qualitative ratings of physician or medical group costs (for example, an indication of being above or below a threshold using stars, arrows, or dollar signs). To rate cost performance, these five plans used a measure of cost-efficiency—total cost per episode—rather than unit price.

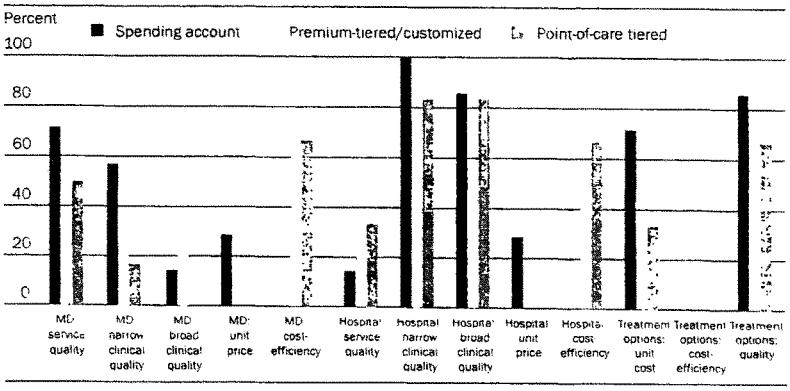
■ **Health management support.** We looked for four sentinel support mechanisms that provide direct, professionally staffed support to consumers (rather than providers) to manage health and health care: nurse-staffed telephone help lines; health risk assessment linked to staffed risk-reduction programs, shared decision support/health coaching, and case management.[16] Most of the plans undertook to engage consumers in managing their own health through these four mechanisms (Exhibit 4), although some differences among plan types emerged.

Final Grades

To summarize the strengths and weaknesses of each type of consumer-directed plan model across the fourteen cases, we assigned final letter grades to the plan models based on the percentage that fulfilled each of our six evaluation criteria (Exhibit 5).

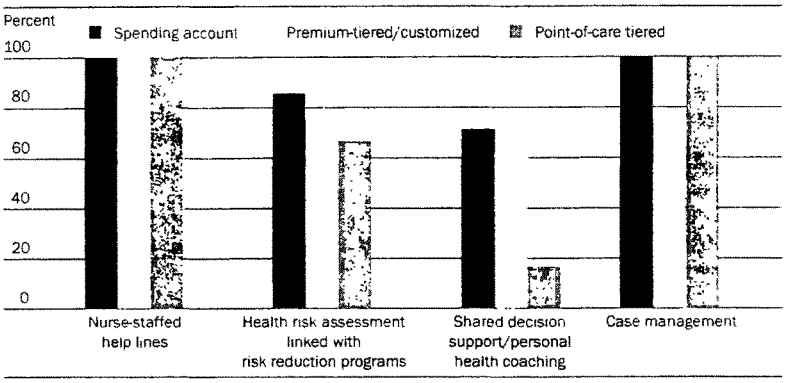
For value-sensitivity of cost sharing, we awarded one point each for physician or hospital cost-efficiency and for treatment option cost-efficiency. Similarly, we awarded one point each for sensitivity of cost sharing to the quality of physician or hospital services and both narrowly defined and broadly defined

EXHIBIT 3
Information To Guide Consumers' Selections Of Provider And Treatment Options In Consumer-Directed Health Plans



SOURCE: Authors' analysis of information collected by telephone interview with case-study participants.

EXHIBIT 4
Provision Of Health Management Support In Consumer-Directed Health Plans



SOURCE: Authors' analysis of information collected by telephone interview with case-study participants.

clinical quality. We also allocated one point for cost sharing that reflected treatment quality (we gave a half credit on this measure for subsidizing preventive care or maintenance drugs). The overall grade was then determined by the sum of points awarded over the maximum possible.

For decision support, we similarly aggregated binary scores for the availability of comparative cost information for physicians, hospitals, and treatment options (half credit for unit cost; full credit for cost efficiency) to yield an overall total. For quality information, we awarded one point each for reporting service quality measures, narrowly defined clinical quality measures, and broad quality measures for providers. Finally, we awarded each case a grade commensurate with the total number of staffed health management supports offered to enrollees, divided by four.

In the overall scoring, no plan model ranked better than another across all criteria (Exhibit 5). The category in which grades were favorable overall was health management. Few

EXHIBIT 5
Report Card On The Freshman Class Of Consumer-Directed Health Plans

Model type	Spending account	Premium-tiered/ flexible benefit	Point-of-care tiered
Substantial cost sharing at low level of plan spending	A	F	D
Persistence of cost sharing for high-cost cases	F	B+	A
Cost sharing varies by income	F	F	F
Value-tailored incentives			
Cost	A	C	C
Quality	F	F	F
Information for selecting provider and treatment options			
Cost	F	F	D
Quality	C	F	D
Health management support	A–	B–	C+

SOURCE: Authors' analysis of information collected by telephone interviews with case-study participants.

plans provided consumers with incentives to select higher-quality care. With respect to incentives to economize, most plans require that consumers pay more for higher-cost (less cost-efficient) options. Few plans, however, provide cost information that would enable consumers to compare various options, other than the option to avoid the health care system altogether.

Discussion

We studied the design and implementation of fourteen consumer-directed health plans to assess whether they were likely to reduce health care spending and improve the value of spending for health benefits. A natural limitation of the case-study approach is that the selected cases might not generalize to the universe of consumer-directed plans. In particular, we selected health plan models based in part on the length of time they had been in the market. This criterion favors the best plans (survivorship bias) but also might miss later design innovations. This market is rapidly evolving, particularly with the diffusion of HSAs, and is likely improving upon the first-generation plan models we examined.

■ Three critical weaknesses in plans. Efforts to refine consumer-directed plans should focus on rectifying three critical weaknesses in the freshman class.

First, if these plans are to succeed in promoting informed consumer choice, much more detailed information on cost efficiency and quality needs to be made available to enrollees. To be fair, this lack of transparency is market-wide. Other benefit models, however, do not claim to promote consumerism or to leverage consumer choice for value improvement. Off-the-shelf software that uses administrative data to compute risk-adjusted longitudinal cost-efficiency measures for episodes of care is widely available.[17] These measures, which reflect a combination of unit prices and utilization patterns over an episode of acute illness or year of chronic illness, relieve plans' concerns about revealing negotiated unit prices. More importantly, they can protect consumers from the false economy of judging a provider's or treatment's cost-efficiency based on price, rather than on the likely impact on total spending.

The problem of inadequate denominator sizes to measure cost-efficiency and quality performance for individual physicians or hospital service lines could be partially addressed by giving health plans real-time access to the full Medicare claims database from the Centers for Medicare and Medicaid Services (CMS), holding back data only to the extent necessary to protect the privacy of individual beneficiaries. Although there are obstacles—primarily political—to such a proposal, they are not insurmountable. Indeed, the Business Roundtable and a separate group of more than thirty large employers are actively supporting its inclusion in proposed legislation making its way through Congress.[18] Moreover, in light of the CMS's own efforts to assess and reward physician quality and resource use, substantial direct gains would accrue to the CMS by enabling the private sector to do the same via a common database. Meanwhile, the denominator can be enlarged via unit-price, neutralized, multiplan pooling of claims data, which has already been achieved by six large Massachusetts health plans under the leadership of the state's Group Insurance Commission.[19]

Second, it is difficult to rationalize the spread of spending-account models unless they incorporate easily understood cost-efficiency comparisons into the benefit design. For example, one plan we interviewed was developing for its spending-account model a drug benefit that put drugs in tiers by cost-effectiveness within a therapeutic class. In addition to applying it to physician and hospital selections, this concept could be refined to encompass cost-utility ratings defined collectively by insurance pool members rather than by the insurer and extended to other medical and surgical treatment choices for which sufficient outcome data exist.

Third, to be effective in controlling overall spending, consumer-directed plans will probably need stronger, more salient incentives that engage all enrollees, particularly those with high expected spending. Income-sensitive cost sharing or income-based contribu-

tions to spending accounts will be necessary to protect low-income consumers in these more high-powered benefit designs. Positive incentives (payments to lower-income enrollees) might be best suited to induce participation in health management programs and selection of the most cost-efficient and high-quality provider and treatment options at high levels of spending.

CAPTURING THE potential of consumer-directed plans to improve the affordability and quality of U.S. health care will require major refinements of the freshman class. Given the continued development of increasingly complex and valuable biomedical innovations, the future viability of employer health insurance pools requires equally sophisticated benefit models in synergy with efforts to enable and motivate provider reengineering of clinical processes.

Financial support for this research was provided by the Robert Wood Johnson Foundation's Changes in Health Care Financing and Organization (HCFO) Initiative. The authors are grateful to their advisory panel (Arnold Epstein, Paul Ginsburg, Judith Hibbard, Joseph Newhouse, and Joel Weissman) for input on the design of the interview protocol and helpful comments on an earlier draft of this paper.

NOTES

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6. A table listing these fourteen plans (identified only by number) and a summary of their characteristics is available online at content.healthaffairs.org/cgi/content/full/24/6/1592/DC1.
7. Tollen et al., "Risk Segmentation."
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11. If the employee anticipates leaving the company, however, there will be an incentive to spend down the account.
12. J.P. Newhouse, "An Iconoclastic View of Health Cost Containment," *Health Affairs* (Supplement 1993): 152–171.
13. In principle, a plan could pay consumers to go to preferred providers or make evidence-based treatment selections, but none reported doing so.
14. R.H. Brook et al., "Does Free Care Improve Adults' Health? Results from a Randomized Controlled Trial," *New England Journal of Medicine* 309, no. 23 (1983): 1426–1434.
15. We did not include Plan 9 in the denominator for this metric, because the consumer selections that affect premium contribution vary primarily based on levels of cost sharing rather than provider selections.
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17. J.W. Thomas, K.L. Grazier, and K. Ward, "Comparing Accuracy of Risk-Adjustment Methodologies Used in Economic Profiling of Physicians," *Inquiry* 41, no. 2 (2004): 218–231.
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Revised v.1 **Approved September 2005**

AQA Parameters for Selecting Ambulatory Care Performance Measures

Based on discussion from the November 2, 2005 Efficiency Subgroup meeting and input from the Performance Measurement Workgroup, the document is revised as follows:

1. Measures should be reliable, valid and based on sound scientific evidence.
2. Measures should focus on areas which have the greatest impact in making care safe, effective, patient-centered, timely, efficient or equitable (IOM's six aims for improvement), and primarily, but not exclusively, where the most improvement can be made ("80/20 rule").
3. Measures should be selected based on where there has been strong consensus among stakeholders and predictive of overall quality performance.
4. Measures should reflect processes of care that physicians can influence or impact.
5. Measures which have been endorsed by NQF should be used when available.[1]
6. Evidence-based quality measures should be evaluated in relation to cost of care; Cost of care measures should be evaluated in relation to quality.
7. Outcome measures should be appropriately risk-adjusted and stratified.
8. Measures should, as much as possible, be constructed so as to result in minimal or no unintended harmful consequences (e.g., adversely impact access to care).
9. When relevant, physician-level measures should as much as possible complement measures in hospital and other health care settings.
10. The measurement set should include, but not be limited to, measures that are aligned with the IOM's priority areas.
11. The measurement set should balance completeness and measurement burden and strive to include the minimum number of needed measures.
12. The set of measures should reflect a spectrum rather than a single dimension of care (e.g., prevention and health promotion, chronic illness, acute care and procedures (diagnostic and surgical).
13. Implementation of measures should be as least burdensome as possible (i.e., electronic data systems should be considered whenever possible).[2] [3]
14. Performance measures should be developed, selected and implemented through a transparent process.

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[1] This parameter preserves the right to use measures that have not been endorsed by NQF. However, such measures should currently or in the near future go through the NQF process.
[2] While the workgroup acknowledged that administrative data should be considered as the logical starting point, there was interest in moving beyond claims and other administrative data as soon as is practicable.
[3] When appropriate, measures derived from medical chart review should not be excluded.

PREPARED STATEMENT OF MICHAEL D. PARKINSON, M.D., MPH, EXECUTIVE VICE PRESIDENT AND CHIEF HEALTH AND MEDICAL OFFICER, LUMENOS, INC., ALEXANDRIA, VIRGINIA

Mr. Chairman and members of the Committee, thank you for the opportunity to testify today regarding health care information for consumers. My name is Michael D. Parkinson, and I am Executive Vice President and Chief Health and Medical Officer for Lumenos, a pioneer in consumer-driven health care and a subsidiary of WellPoint, the largest publicly traded commercial health benefits company in terms of membership in the United States. I have long been concerned about the health, productivity and economic impact of health care costs on employers and on our nation in general, and am honored to share my thoughts with the Committee today.

PERSPECTIVE

My comments reflect my experience as a physician, former leader in the Air Force and Military Health System and as the head of our health improvement and clinical strategy at Lumenos. My clinical training and practice experience is in primary care and preventive medicine/public health. My comments are based on Lumenos experience with self-insured employers (generally 200 employees or more) and direct feedback from consumers and patients enrolled in either Health Reimbursement Arrangement (HRA) or Health Savings Account (HSA) plan designs.

I believe, and an increasing body of evidence supports, that consumer-driven health care, both in its current form and as it rapidly evolves and grows, has great potential to improve the health of patients and consumers, the effectiveness of medical care and the efficiency of the health care system. However, better consumer engagement, more patient-centered care, greater ownership of resources expended on healthcare and improved quality/cost information will have predictable consequences on the health care system. These consequences and system deficiencies should be anticipated and addressed.

ADDRESSING THE TRUE DRIVERS OF EXCESSIVE HEALTH CARE COSTS

A properly designed consumer-driven health care program assists and supports the consumer/patient to understand and address the primary drivers of poor health and excessive medical costs, which are personal health behaviors and ineffective and inefficient health care. The flexibility of account-based benefit designs to promote, educate, incentivize and financially reward improved health behaviors, preventive care and evidence-based medical practices is unique. A recent study by leading health care economist Ken Thorpe concluded that 63 percent of the rise in real U.S. per capita health spending is due to the increasing prevalence of health risk factors which are medically treated rather than prevented or improved through health promotion and disease prevention strategies.[1]

The inherent "rollover" of funds in account-based designs from year-to-year reinforces improved health behaviors, appropriate self-care and better care management for chronic conditions. Prevention and evidence-based care particularly for those with chronic disease are clearly prioritized and financially rewarded. Both our HRA and HSA plans cover evidence-based preventive services at 100 percent without copays or deductibles. In addition, 60 percent of Lumenos employers cover tobacco cessation and 30 percent cover weight management as preventive care services at 100 percent.

Consumer-driven models have the power to incent three major actions by all individuals and patients that improve health, medical care and outcomes. Specifically, each of us needs to *understand* our health status (our risk factors and current medical conditions), *agree to participate* in a program or activity (risk reduction program or "disease management") if we have significant risk factors or chronic disease and *understand and master* our care, in partnership with our physician to optimize outcomes and care.

At Lumenos, we created an integrated and incentivized health improvement strategy, targeted at major drivers of excessive health care costs, which meets the needs of the full range of health risk and users, with a particular emphasis on those with chronic disease and high utilization.

INFORMATION, TOOLS AND SUPPORT SERVICES AVAILABLE TODAY

Lumenos and its partners provide a comprehensive array of information, tools and personal support services for consumers to understand and better engage in their

[1] KE Thorpe, "The Rise in health care spending and what to do about it" *Health Affairs,* Nov/Dec 2005.

health and health care decisions. We have found that web-based information is an important enabler of better decisionmaking, but not the sole or most important factor in assisting consumers and patients. The organization, timing, linkage, ability to access at the point-of-decision and content delivery method are important as well.

Communication is required to reinforce the use of the health, clinical, and quality and cost information. Ideally this communication would occur initially and repeatedly throughout the year using multiple modalities. In both formal surveys and in face-to-face focus groups with hundreds of Lumenos consumers, members are surprised and appreciative of the wealth of organized information and support available to them. We have found that consumers are seeking more accurate and actionable information over time. Of interest, the consensus answer to the open-ended question, "What could Lumenos do better for you?" is to create a means to connect with other patients with similar medical conditions or with consumers with shared health interests.

In general, consumers and employers are highly satisfied with the current information, tools and support that Lumenos provides. Year-over-year, both employers and consumers are seeking more specific and actionable information about the cost, quality (and necessity) of medical services. Communication and reinforcement of why information is important, how to access it, how to engage to better manage one's care (e.g., health coaching) and how to use it in concert with one's physician are likely more important than the availability, or in some cases, the specificity and accuracy of the data itself.

HOW IT'S WORKING FOR EMPLOYERS AND HEALTH SYSTEMS

In general, Lumenos' experience for both employers who adopt "account-based plans" as a full replacement strategy and for those who offer them on an optional basis reflects the findings of the McKinsey study.[2] Increases in preventive care, decreases in the cost of prescription drugs, and decreases in outpatient and ER visits lead to significant employer health care cost trend mitigation relative to other benefit designs. Particularly when accompanied by financial incentives, patients with chronic illness become engaged either through health risk assessments or direct self-referral to a health coach. Unlike the McKinsey study, which showed low satisfaction with the information and support provided to consumers, Lumenos has consistently experienced high satisfaction with both information/support/communications and re-enrollment.

One of my personal goals, and a major reason for the American Medical Association's support for Health Savings Accounts and consumer-driven care in general, is to better support patient-physician relationships. Consumer-driven models have two inherent value propositions for providers: improved clinical care and outcomes through the better informed and engaged patients and reduced administrative burdens relative to "traditional" care.

In addition to providing care, health systems and hospitals are also employers purchasing and providing health care services for their own employees. These employees often have among the highest risk-adjusted health care costs of any industry. Lumenos has suggested, and some leading health systems who are now full replacement clients agree, that consumer-driven health care has great potential not only to appropriately mitigate excessive health care costs, but also to catalyze clinical and business practice innovation.

Employers, as well as a growing number of health care systems, are adopting consumer-driven health plans on either an optional or full replacement basis. Health care cost mitigation, increases in preventive care and in engagement by those with chronic disease can be accompanied by high enrollee and employer satisfaction when information, tools and support are designed, implemented, communicated and reinforced.

IMPROVING APPROPRIATE CONSUMER AND PHYSICIAN DECISION MAKING

There is a growing awareness and tailoring of information, tools and support to address the preference and price sensitivities of medical care. If the health of individuals, the care of physicians and the performance of the health care system are to improve, then the behavior of each entity needs to be better understood and addressed using approaches which predispose, enable and reinforce desired outcomes. The creation of a "health care marketplace" with improved information on cost and quality will impact health care decisions and players differentially and will likely occur incrementally, which, in my opinion, is desirable. At Lumenos, we have delib-

[2] McKinsey & Company, "Consumer-directed health plan report—early evidence is promising" acessed at *www.mckinsey.com/clientservice/payorprovider/Health-Plan-Report.pdf. 2005*

erately built an incremental approach to quality and information collection and dissemination.

A health care typology that has been useful in shaping our information and support strategy includes health risk factor identification, maintenance and reduction, clinical preventive services, acute/episodic care, chronic disease management, surgical decision support, emergency/catastrophic care and end of life needs. Similarly health care can be parsed by care that is proven clinically effective, care that is preference-sensitive and care that has shown to be "supply sensitive" (e.g., wide variations in practice typically associated with oversupply of providers or facilities relative to other geographic areas). Provider-specific issues that relate to care and business practices can also be evaluated and impacted through a consumer-driven "prism" as noted previously.

Making the right thing to do clinically also be the easy thing to do will require realignment of thinking, infrastructure and incentives among the consumer/patient, provider and "the system." Better information and tools for quality and costs should be informed by a more specific understanding of how patients use or could use such information and support across the spectrum of the different health care needs and in different geographic and economically over- or undersupplied provider markets.

WHAT'S MISSING: STANDARDIZED CONSUMER-FOCUSED TOOLS AND INFORMATION FOR ENGAGEMENT

Patients with serious medical conditions or chronic illness want to know whether other patients with the same condition understand their disease, are able to improve the likelihood of a favorable outcome and are they treated humanely in the process. Currently available information is not adequate to answer this question. Furthermore, the medical literature supports that knowledge, outcomes and even more judicious use of resources are more likely to be acquired in the context of a healthy physician patient relationship with shared decisionmaking.

New performance indicators of quality around consumer acquisition of competencies by physicians, medical groups or health systems could complement existing, administrative (claims-based) measures of quality and efficiency. For example, the disease specific, evidence-based guidelines developed by the Institute of Medicine would be useful for consumers if translated into language designed for lay people. What for example, does the newly diagnosed colon cancer patient need to know, do and act upon in concert with her physician? What knowledge, competencies and proposed actions are appropriate for a patient with diabetes in patient terms, which reflects the evidence-based guidelines promoted to patients and measured by accreditation and other quality efforts?

A standardized, generic patient satisfaction questionnaire, or "ambulatory HCAPS", that includes the major elements of an effective shared decisionmaking relationship (i.e., "Does your physician offer and discuss options, share the pros and cons, consider your preferences, etc.") would also be very useful to consumers. Aggregated standardized survey information on the physician's practice style would be most valuable to consumers to help them determine which provider or group is likely to improve their engagement, care skills and health outcomes.

Quality efforts to date have concentrated on plan and provider measurements from administrative data rather than on consumer and patient knowledge, competencies and decisionmaking arising from information access and a partnering, shared-decision making patient-physician relationship. Efforts to define both generic and diseasespecific qualities associated with high quality, high value and safe medical practices which can then result in standardized patient surveys could be of great value in increasing the effective engagement of patients, and over time, improving the "marketplace" of patient-relevant quality information for provider choice.

WHAT WE NEED TO DO BETTER: QUALITY AND COST INFORMATION

Consumers spending "their own money" for healthcare are asking for more information, access and convenience. Providing estimated expenses for episodes of care will become progressively more granular and transparent pricing by providers and facilities will increase. Making sure that quality is measured consistently will be important in order for consumers to compare "value" as they do currently for prescription drugs. The anticipated Federal release of physician and hospital reimbursement for selected Medicare services and the requirement for transparency prices of a core set of services in order to bid on Federal employee health benefits programs will undoubtedly impact the direction and pace of the provider and payor's approach to cost transparency.

A promising approach is the NCQA Physician Recognition program, which allows physicians to volunteer and be reviewed for compliance with evidence-based guidelines for diabetes and heart disease. Additional recognition is awarded for implementing an electronic medical record or system for tracking and improving evidence-based care and patient outcomes. Lumenos displays this information today to help inform patients about those physicians interested in and evaluated for these chronic conditions.

ACCELERATING INNOVATION IN CARE DELIVERY AND FINANCING

Consumers, patients and health systems deploying consumer-driven care for their own employees and physicians are likely to embrace value-added innovations and avoid lower value services or practices. For example, group visits for chronic disease management, reimburseable e-visits for established patient-physician relationships, and behavior change and disease management programs have traditionally not been demanded by consumers/patients or built by physicians or health systems. Consumers paying "with their own money" and employers, trying to maximize the productivity of their work force, are more likely to see value in new ways to connect with providers and health information outside the too often ineffective, rushed, brief face-to-face physician visit. The major health care systems that Lumenos serves are building these capabilities largely in response to the consumer-driven market both internally, for their own employees, and externally, for the patients and employers they serve. Some hospitals are now providing enhanced information to inform patients about their actual out-of-pocket costs and/or total price of selected procedures and treatments (e.g., OB, outpatient surgery, gastroenterology services, rehab, etc.).

Primary care providers, already concerned with declining reimbursements for primary care and chronic disease management, are now seeing the rapid expansion of acute care clinics in retail and drug stores with transparent, all-inclusive, reasonable pricing for acute or routine conditions. Chronic disease patients who are looking for consistent, compassionate, evidence-based service and expertise may be an important lever to help drive the reinvigoration of comprehensive, longitudinal primary care and the creation of an "advanced medical home."[3] Surgical hospitals and new centers or systems for specialized chronic disease management may also arise and be welcomed and sought by more engaged consumers.

Consumer-driven care will likely accelerate clinical and business practice innovation as patients better understand their options and seek greater assistance, convenience and value for their time and money. The provider community is showing evidence of welcoming such innovation and, in some instances, is calling for wholesale reform of current clinical, delivery and financial models. Publicizing the value of these innovations and translating them into meaningful health and cost advantages will further accelerate their dissemination and adoption.

ACCELERATION OF HEALTH INFORMATION TECHNOLOGY

Consumers are generally not aware of the health or cost impact of seeing a physician or being admitted to a hospital or facility that does not deploy state-of-the-art health information technology. Consumer and patient focused messages need to be developed and disseminated to create market demand for the safer, more effective and efficient care that electronic/personal health and medical records, electronic prescribing and hospital physician order entry can provide. Creating a marketplace with accurate information about the health information technology status of providers is important and evolving. However, health information and interoperability standards are needed urgently to facilitate both rapid adoption and lower price points for providers, particularly those in smaller practices, to acquire needed technology.

Consumers and patients will increasingly come to understand the safety, health and cost value of health information technology from their providers. This could become a key market differentiator and "quality/cost metric" in the near term. Acceleration of technology standards for information and interoperability is critical and urgently needed to promote widespread dissemination and decrease price.

MAJOR HEALTH CARE ISSUES TO BE ANTICIPATED AND POTENTIALLY ADDRESSED

There are numerous major healthcare issues, needs and practices that will be highlighted and catalyzed by the growth of consumer-driven health plans, consumerism and greater transparency in cost and quality.

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[3] American College of Physicians Position Paper, "Reform of the dysfunctional healthcare payment and delivery system." Accessed at *http://www.acponline.org/college/pressroom/as06/dysfunctional-payment.pdf. 2006.*

(1) Need for improved, standardized assessment of therapies and technologies. Currently the military, VA, health plans, foundations and consumer groups all attempt to assess the health and economic marginal value of new treatments and procedures without any consistent methodology and with inefficient use of resources;

(2) Malpractice reform to decrease unnecessary, defensive medical services;

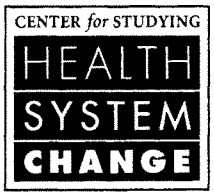
3) Shifted and hidden costs for graduate medical education. Who should pay for the education of a qualified health professional workforce?;

(4) A discussion of an optimal mix of market-based versus public sector functions of health care; and

(5) Statutory and regulatory reforms to foster an appropriate health care marketplace. Michael Porter's recent characterization of a health care marketplace and what would be needed to create one is a useful framework for what consumers, providers and payors all should consider, describe and work toward.[4]

As consumer information on quality and costs of services becomes more transparent, cost-shifting, unexplainable cost differentials and inefficient clinical and business practices will become more apparent. Health policy and societal questions which have been known and discussed for years will become more visible to all stakeholders and hard decisions will likely have to be made about the appropriate role of the private, market sector and public sector in financing and delivering health care.

[4] M Porter, "Fixing competition in US health care," Harvard Business Review, June 2004.



Statement of Paul B. Ginsburg, Ph.D.
President
Center for Studying Health System Change

Before the Congress of the United States
Joint Economic Committee

Hearing on "**The Next Generation of Health Information Tools for Consumers**"

May 10, 2006

600 MARYLAND AVE SW• SUITE 550 •WASHINGTON, DC 20024-2512 • TEL: 202.484.5261 • FAX: 202.484.9258 • WWW.HSCHANGE.ORG
HSC, FUNDED PRINCIPALLY BY THE ROBERT WOOD JOHNSON FOUNDATION, IS AFFILIATED WITH MATHEMATICA POLICY RESEARCH, INC.

Mr. Chairman, Mr. Vice Chairman and members of the Committee, thank you for the invitation to testify about the next generation of consumer health information tools. My name is Paul B. Ginsburg, and I am an economist and president of the Center for Studying Health System Change (HSC). HSC is an independent, nonpartisan health policy research organization funded principally by The Robert Wood Johnson Foundation and affiliated with Mathematica Policy Research.

HSC's main research tool is the Community Tracking Study, which consists of national surveys of households and physicians in 60 nationally representatives communities across the country and intensive site visits to 12 of these communities. We also monitor secondary data and general health system trends. Our goal is to provide Members of Congress and other policymakers with objective and timely research on developments in health care markets and their impacts on people. Our various research and communication activities may be found on our Web site at *www.hschange.org*.

My testimony today will make three points:

• Engaging consumers to be more aware of cost and quality issues in health care has the potential to increase the value of health care not only for individual patients but also for the U.S. population as a whole. But some are overselling the magnitude of this potential. And achieving this potential will require investment in collecting and translating meaningful consumer price and quality information and encouraging innovative benefit structures. And even if this potential is reached, it will not be the hoped-for silver bullet that solves the health care cost crisis in this country.

• For most consumers who are insured, their health plan has long been their most powerful asset in shopping for lower prices, and insurers have the potential to become even more effective agents as they develop more sophisticated benefit structures and information tools to support consumers in choosing effective treatments from higher-quality, lowercost providers.

• There are practical limitations on the ability and willingness of consumers to become savvy health care shoppers. Markets for self-pay health services, such as LASIK, are often cited as a model for consumer engagement, but our research indicates that consumers' experiences with self-pay markets have been romanticized and do not offer much encouragement as a roadmap for effective health care shopping without either a large role for insurers or regulation.

The current policy interest in price and quality transparency is essentially the second stage of the evolution of consumer-driven health care. The first stage was financial incentives for consumers in the form of greater cost sharing—high deductibles and coinsurance. Tax-sheltered savings accounts—health savings accounts (HSAs) and health reimbursement arrangements (HRAs)—may be useful tools to make increased cost sharing more palatable to consumers, but they do not reinforce consumer incentives to economize on health care—they actually temper them.

Now industry and policymakers are focusing on the tools needed by consumers to make informed decisions on reducing the costs of their care or ascertaining the quality of care. As insurers compete vigorously to sell consumer-driven products, they seek to differentiate their products on the basis of the tools offered to consumers to compare price and quality across providers. Policy makers are interested in exploring government's role in fostering greater costconsciousness and a more favorable environment for consumers to make informed choices about health care services.

Traditionally, health insurance has either removed or sharply diluted consumer incentives to consider price in choosing a provider or treatment strategy. It is difficult for consumers to get price and quality information from providers—traditionally they have shown little interest in competing for patients on this basis. Likewise, there is little information available to help patients examine the effectiveness of treatment alternatives. Lack of quality information understandably makes consumers reluctant to choose a provider solely on the basis of a lower price. It is one thing to realize after the fact that you chose a poor-quality provider when price is not an issue but another to have that result from choosing on the basis of price. Similarly, lack of information on effectiveness of treatment alternatives makes consumers more reluctant to consider price in the choice of treatment. Consumer difficulties in weighing alternative treatment approaches reflects not only difficulties in accessing what is known about medical effectiveness but also a failure of government to make adequate investments in effectiveness research. Even with better information on price, quality and effectiveness of different treatments, there are

strong indications that many consumers are unable and/or unwilling to seek health information from sources other than their physicians.[1]

Unfortunately, much of the recent policy discussion about price and quality transparency downplays the complexity of decisions about medical care and the dependence of consumers on physicians for guidance about what services are appropriate. It also ignores the role of managed care plans as agents for consumers (and purchasers of health insurance, such as employers) in shopping for lower prices.

POTENTIAL FOR EFFECTIVE PRICE SHOPPING

If you define effective shopping as obtaining better value for money spent, then consumers do have the potential to be more effective shoppers for health care services. There are direct and indirect benefits of choosing providers that offer better value. The direct benefits are simply the cost savings, for example, of choosing the lower-cost of two providers of comparable quality.

But the indirect benefits are potentially more important. If enough consumers become active in comparing price and quality, this will lead to market pressure on providers to improve their performance on both cost and quality dimensions. Providers that measure up poorly on the value dimension will lose market share and will be motivated to revamp their operations to remain viable. Our market economy offers many examples of competitors responding to loss of market share by making difficult changes and regaining their edge, and examples are starting to appear in health care as well. The gains from providers improving their operations will accrue broadly to the health care system.

But we need to be realistic about the magnitudes of potential gains from more effective shopping by consumers. For one thing, a large portion of medical care may be beyond the reach of patient financial incentives. Most patients who are hospitalized will not be subject to the financial incentives of either a consumer-driven health plan or a more traditional plan with extensive patient cost sharing. They will have exceeded their annual deductible and often the maximum on out-of-pocket spending. Recall that in any year, 10 percent of people account for 70 percent of health spending, and most of them will not be subject to financial incentives to economize.

When services are covered by health insurance, the value of price information to consumers depends a great deal on the type of benefit structure. For example, if the consumer has to pay $15 for a physician visit or $100 per day in the hospital, then information on the price for these services is not relevant. If the consumer pays 20 percent of the bill, price information is more relevant, but still the consumer gets only 20 percent of any savings from using lower-priced providers. And the savings to the consumer end once limits on out-of-pocket spending are reached.

In addition to those with the largest expenses not being subject to financial incentives, much care does not lend itself to effective shopping. Many patients' health care needs are too urgent to price shop or compare quality. Some illnesses are so complex that significant diagnostic resources are needed before determining treatment alternatives. By this time, the patient is unlikely to consider shopping for a different provider. We need to build on the fact that even under scenarios in which consumers play a much more active role in their care than is the norm today, that for those who are sickest, who account for the lion's share of health care spending, physicians will be playing a major role in directing their care. So choosing a physician—or a medical practice—may well be the most important consumer choice.

The significant role that physicians play in patients' treatment choices means that advocates of consumerism should focus on the importance of choosing a physician before the onset of major medical problems. Some of these constraints could be addressed by consumers' committing themselves, either formally or informally, to providers. Many consumers have chosen a primary care physician as their initial point of contact for medical problems that may arise. Patients served by a multi-specialty group practice informally commit themselves to this group of specialists—and the hospitals that they practice in—as well. So shopping has been done in advance and can be applied to new medical problems that require urgent care. This is a key concept behind the high-performance networks that are being developed by some large insurers.

When consumers choose treatment strategies, the absence of neutral financial incentives for providers is a serious problem. The most typical situation today is one where the provider gets paid on a fee-for-service basis, so the incentive is to rec-

[1] An HSC study documented how few consumers seek health information, especially those with low education levels. See Tu, Ha, and J. Lee Hargraves, Issue Brief No. 61, *Seeking Health Care Information: Most Consumers Still on the Sidelines,* Center for Studying Health System Change, Washington, DC (2003).

ommend more services, especially those that have higher unit profitability. Increasingly, physicians have an ownership interest in services, such as imaging, beyond their usual professional services, creating an additional conflict between physicians' interests and those of their patients.

INSURER ROLE

Much of the policy discussion about price transparency has neglected the important role that insurers play as agents for consumers and purchasers of health insurance in obtaining favorable prices from providers. Even though managed care plans have lost clout in negotiating with providers in recent years, they still obtain sharply discounted prices from contracted providers. Indeed, in my own experience as a consumer, I often find that the discounts obtained for the preferred provider organization (PPO) network for routine physician, laboratory and imaging services are worth more to me than the payments by the insurer.

Insurers are in a strong position to further support their enrollees who have significant financial incentives, especially those in consumer-driven products. Insurers have the ability to analyze complex data and present it to consumers in more understandable ways. For example, they can analyze data on costs and quality of care in a specialty and then offer their enrollees a simple incentive to choose providers in the high-performance network. Insurers also have the potential to innovate in benefit design to further support effective shopping by consumers, such as increasing cost sharing for services that are more discretionary and reducing cost sharing for services that research shows are highly effective.

Insurers certainly are motivated to support effective price shopping by their enrollees. Employers who are moving cautiously to offer consumer-driven plans want to choose products that offer useful tools to inform enrollees about provider price and quality. When enrollees become more sensitive to price differences among providers, this increases health plan bargaining power with providers. Negotiating lower rates further improves a health plan's competitive position. One thing that insurers could do that they are not doing today is to assist enrollees in making choices between network providers and those outside of the network by providing data on likely out-of-pocket costs for using non-network providers.

Some health plans are now experimenting with ways to communicate to their enrollees the fact that certain hospitals have particularly high or low negotiated fees, without violating their agreements to hospitals and their desire to maintain the confidentiality of their price negotiations.[2] For example, Blue Cross of California, which tends to rely heavily on coinsurance in its benefit structures, has been posting ratings of the costliness of hospitals for PPO enrollees. It follows the approach of Zagat guides to restaurants, where "$" is assigned to the lowest cost hospitals and "$$$$" is assigned to the highest cost hospitals. This approach not only maintains the confidentiality of contracts with hospitals, but it also engages the formidable actuarial resources of the plan to simplify complex and voluminous hospital data for consumers. Humana Inc. has presented hospital price information to some of its Milwaukee enrollees that maintains confidentiality by using ranges and combining hospital costs with physician costs. I expect that insurers will come up with more innovative ways to present price information to enrollees.

SELF-PAY MARKETS

Many have pointed to markets for medical services that are not covered by insurance to show the potential of consumer price shopping. Since these services are not medically necessary—the basis for their not being covered by insurance—they should be prime candidates for more effective consumer price shopping. HSC has studied markets for LASIK, in-vitro fertilization (IVF), dental crowns and cosmetic surgery by interviewing providers, consultants and regulators in these fields. Our findings are not as encouraging as one hears from advocates of consumerism.

LASIK has the greatest potential for effective price shopping because it is elective, non-urgent, and consumers can get somewhat useful price information over the telephone. Prices have indeed fallen over time. But consumer protection problems have tarnished this market, with both the Federal Trade Commission and some state attorneys general intervening to curb deceptive advertising and poorly communicated bundling practices. Many of us have seen LASIK advertisements for prices of $299

[2] In testimony before the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Health, on March 15, 2006, I explain how publication of price agreements between hospitals and insurers is likely to result in higher prices for hospital care. The testimony can be accessed at http://energycommerce.house.gov/108/Hearings/03152006hearing1813/Ginsburg2770.htm.

per eye, but in fact only a tiny proportion of consumers seeking the LASIK procedure meet the clinical qualifications for those prices. Indeed, only 3 percent of LASIK procedures cost less than $1,000 per eye, and the average price is about $2,000.

For the other procedures that we studied, we found little evidence of consumer price shopping.

For dental crowns and IVF services, many consumers are unwilling to shop because they perceive an urgent need for the procedure, and other consumers are discouraged from shopping by the time and expense of visiting multiple providers to get estimates. In cosmetic surgery, a limited amount of shopping does occur, facilitated by free screening exams offered by some surgeons. However, quality rather than price is the key concern to most consumers in this market; in the absence of reliable quality information, most consumers rely on word-of-mouth recommendation as a proxy for quality, instead of shopping on price.

ROLE OF GOVERNMENT

Governments can support consumers in their efforts to shop more effectively for price and quality in health care by providing information on providers' prices and quality. The greatest opportunities may lie in the areas of information on provider quality and the funding of research on medical effectiveness.

Medicare's voluntary program for hospital quality reporting has succeeded in obtaining participation by almost all hospitals and likely will grow in sophistication over time. HSC's recent community site visits found that quality reporting to Medicare and the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) have stimulated hospitals to place a much higher priority on quality improvement. Hospital respondents envision a day when consumers and insurers will use publicly reported information to choose hospitals or for payment. An untapped resource is the Medicare Part B claims files. The Business Roundtable recently called for making this data available to insurers—with protections for patient confidentiality. This would permit greater statistical power for insurer assessments of physician efficiency and quality and would support their role as agents for consumers.

Most accept the Federal role in funding research on medical effectiveness as a classic "public good" activity. The Agency for Healthcare Research and Quality has developed an excellent reputation in carrying out this role. But the funding for these activities has been extremely limited, especially in contrast with what the Federal Government spends on biomedical research overall.

I believe that government provision of price information to consumers has less potential. For those with health insurance, health plans are better positioned to tell people what they really want to know—patients' out-of-pocket costs for different services. Efforts by some states to provide hospital price information have been limited by the complexity of the information—the difficulty of translating it into what it will cost an individual for what they need. And few who are uninsured have the wherewithal to pay for a hospital stay, even if they choose a less expensive hospital.

CONCLUSION

The need for consumers to compare prices and quality of providers and treatment alternatives is increasing and has the potential to improve the value equation in health care. But we need to be realistic about the magnitude of the potential for improvement from making consumers more effective shoppers for health care. Whatever the gains from increased shopping activity, rising health care costs will, nevertheless, price more consumers out of the market for health insurance and burden governments struggling to pay for health care from a revenue base that is not growing as fast as their financing commitment.

PREPARED STATEMENT OF WALTON FRANCIS, MA, MPA, MPP, AUTHOR AND INDEPENDENT CONSULTANT

THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING

I am pleased to be able to provide this Committee with my diagnosis as to where we are and where we need to go in providing information on the price and value of health care to consumers. I think that improving "transparency" (how about just plain "access"?) to price and value information on health care is the most important budgetary and economic issue facing America. It is vital to Medicare reform, and to avoid the train wreck of impending insolvency of that program, but more broadly vital to reducing the unsustainable and crippling problem that rising health care costs impose on all Americans in all income classes, whether they pay by taxes, premiums, cost sharing, or going "naked" without insurance.

During the many years that I have authored the annual *CHECKBOOK's Guide to Health Plans for Federal Employees,* I have watched in amazement the inability of either the market-driven Federal Employee Health Benefits Program (FEHBP) or the legislatively and bureaucratically micro-managed Medicare program to halt the seemingly inexorable rise in health care costs, year after year, at a rate higher than either inflation or per capita income. This doesn't mean that these programs are failures at cost control. Quite the contrary, they have in their quite different ways achieved cost containment results worth many billions of dollars annually. But what they are able to accomplish in the dysfunctional American healthcare "market" (*sic*) has been palliative, not curative.

If there is one point on which virtually all health care economists agree it is that the fundamental cause of the rise and level of health care spending is the prevalence of health care insurance that is not pure insurance, but instead prepaid, first-dollar health care. Even with modest copayments, most health care for most Americans is virtually free. Some call the resulting waste "moral hazard." Others simply call it the results of demand and supply curves intersecting where the price to the consumer is set by payers near zero. Whatever one terms it, the result is immense waste. Shifting some insurance policies to a consumer-driven model with high deductibles and hence restoring some semblance of fiscal discipline is an important reform. But it is less than half the needed reform. And the bigger half is simply better price and value information for consumers.

Lady Windermere, in Oscar Wilde's play, said "a cynic knows the price of everything and the value of nothing." Through no choice of their own, American consumers have been forced to become and remain something worse than cynics, allowed to know neither the price nor the value of health care. The essential problem is that without price and quality signals, or incentives to use them, consumers have no way to compare either treatments or providers and to impose market discipline to reward efficiency and drive down prices and costs.

The presence of intermediary "middleman" insurance organizations both complicates and presents opportunities for reform. Those organizations have a strong incentive to control costs at least as well as their competitors, and they have price and outcome data. But they have to attract broad provider panels, and pay more, to compete in a world where customers do not directly obtain the savings from narrower provider panels and other economies. The 1990s rebellion over heavy-handed "gatekeeper" HMO requirements, that reversed the trend to HMO insurance and led to the vast rise in PPO insurance, illustrates the potency of the problem. In the final analysis, insurers are in a market where deep pocket payers—employers and taxpayers—routinely pay the going rate, however high that is, to maintain the status quo. Something has to change.

Meanwhile, there are roughly 45 million uninsured (most voluntarily so), and another 5 million or so who face significant cost sharing. In total some 50 million people have to cope with a market that provides virtually no functional price signals as to how to save money by choosing lower cost treatments or providers, and only weak quality signals.

In assessing this data chasm, its possible bridging remedies, and their possible outcomes, it is useful to draw sharp distinctions among various categories of information. Consider a consumer with a diagnosis that will involve high costs, such as childbirth, breast cancer, severe carpal tunnel syndrome, or prostate cancer. Suppose this consumer has no health insurance but an option to join or change plans in open season. Such a consumer would need need six categories of consumer information. Together with his or her own preferences, such information would enable an informed choice among options. Far more importantly, if all consumers had such information this would drive the health care market over time to more effective and efficient outcomes. The six categories are:

(1) Alternative courses of treatment,
(2) Likely outcomes of those alternative treatments,
(3) Monetary and other costs of such treatments on average,
(4) Costs of using particular providers,
(5) Quality and outcomes using particular providers, and
(6) Estimates of which health insurance plan is the best buy, taking into account both premiums and out-of-pocket costs, for the next plan year.

Today, I will cover briefly the current availability of consumer information on each of these topics, recent progress and efforts under way, problems and opportunities in filling gaps, and long run consequences of filling those gaps. I will try to illustrate some of my findings and conclusions with examples using the diseases or conditions mentioned above, and a few other situations.

Current availability of Consumer Information. Consumer information across these six types today ranges from scarce to nonexistent to abundant but flawed.

There are innumerable books, articles, and learned opinions on (1) *alternative courses of treatment.* For example, for a woman expecting no complications of maternity, using a midwife represents a huge saving compared to hospital delivery. There is abundant information on the very low risks of delivery, and a slim but not insubstantial body of literature on the slightly larger risks of using midwives. For a woman with breast cancer, there is abundant literature on the various mastectomy and lumpectomy alternatives, taking account of different stages of disease progression. For prostate cancer, there are four major treatment modalities, one of which is benign neglect (old age will usually kill the patient faster than this cancer). For carpal tunnel syndrome, there are several inexpensive treatment options with expensive surgery the only effective option in many severe cases.

While medical science is constantly advancing, and there are huge gaps in information, to say nothing of diseases for which there are not yet any effective treatments (e.g., Alzheimer's disease), it is fair to say that consumers and their advisors (notably physicians) do not lack access to whatever information exists. One could fill libraries with medical advice literature, on or off the Internet, in books, articles, and snippets from disease-specific Web sites, and more.

The Internet has greatly advanced low-cost access to this information by consumers, through sources such as Medline, trusted Web sites such as WebMD, and forums for patient groups.

The Healthline Web site (*www.healthline.com*), of which you are hearing something today, is itself proof that treatment information is there—Healthline specializes in sifting through the vast Internet resources to find the best information. But even without the Internet, the information is available. Books and journals are available in public libraries and bookstores throughout America.

Likewise, there is abundant information on (2) *likely outcomes of alternative treatments.* This information deals not only with straightforward measures such as survival rates, but also with qualitative outcomes important to patients. Many women (though a small minority) positively prefer the experience of childbirth at home with a midwife. Breast cancer alternatives differ hugely in preservation of women's perceived attractiveness and potential complications. Prostate cancer treatments differ in major ways not only as to prognosis but also as to such complications as incontinence and impotence.

Access to treatment outcome information is almost as widely available at low cost as information on treatment options. There is far less outcome information, but consumers have access to whatever is known, in print or on the Web.

There is also a recurring problem with respect to outcome information, a problem that grows progressively worse as we move from overall outcomes to provider specific outcomes. Data that are not risk-adjusted or case-mix adjusted can be very misleading. Breast and prostate cancer outcomes depend on the stage of progression of the disease, the condition of the patient, and other variables. For example, in both of these cancers the age of the patient has a huge effect on whether or not drastic surgery is indicated.

Information on the (3) *average monetary costs of treating diseases or conditions* is, in sharp contrast, almost nonexistent for consumers. I have repeatedly used Internet search engines to try to find, for example, the cost of an appendectomy or childbirth. Google and other search engines will find thousands of "hits" when terms such as "cost childbirth" are entered, but the links found are invariably dry holes. A relative of mine recently had surgery for carpal tunnel syndrome. I ran a Google search on "carpal tunnel surgery cost" and obtained a half million hits. After skimming a few hundred of them I found none that provided any data whatsoever about price or cost, and gave up.

A major development in the last several years has been the provision of treatment costs on the Web sites of some major insurance firms. These include Aetna and

Tufts, for example. Consumer-driven health plans such as Lumenos (see *www.lumenos.com* for a useful demonstration) also provide such information, as you are hearing today. These information sources are tightly restricted to plan members, and hence unavailable to virtually all of the 50 million Americans who need such information for obvious financial reasons, and another 240 million insured Americans who might wish to impose lower costs on their fellow insureds, even though they save little or nothing. There are also some far small firms that are beginning to provide such data, though often restricted to enrollees (see, for example, *www.healthia.com* and *www.healthmarkets.com*).

A recent Business Week article (February 20, 2006) praised Aetna for the best consumer information on its Web site of three major insurance firms compared. I haven't reviewed all of these or other sources, but I certainly agree that Aetna is developing a fine set of information for its enrollees. However, the reality is that the Aetna Web site only covers about 60 conditions, albeit with different levels of severity for most of them.

Of the several conditions I have previously mentioned, the Aetna Web site divulges that the estimated cost of an uncomplicated pregnancy, with either vaginal or cesarean delivery, is approximately $7,700 ($3,600 for the hospital, $2,600 for the physician, $100 for prescription drugs, and $1,400 for tests.) You are reading this estimate today in a breakthrough public disclosure. Just try to find such an estimate in any other document. You can find many Web sites that sell maternity insurance, but none of them estimate the cost without insurance. In preparing this testimony I ran a Google search on "maternity cost" that found almost 9 million hits and no discernable information on price or cost. Alas, Aetna provides no cost estimates for breast or prostate cancer (or for that matter, for any other cancer) or for appendectomy or carpal tunnel surgery, and no estimates for alternative treatment modalities, such as nurse midwives.

In other words, even for Aetna enrollees, the information is profoundly limited. For the rest of us even this limited information is simply unavailable. And this is the state of the market! In sum, so far as I can determine consumers today cannot find reliable information on the costs of major medical conditions and their treatments from any publicly available free resource.

Nor do consumers have ready access to information on the costs of most individual procedures. Aetna provides some such information to its enrollees, but only for about three dozen of them. These are among the most common (e.g., "office consultation for moderate to severe problems" with a specialist, or "new patient office visit for moderate problems" with a generalist), but there are approximately 10,000 ambulatory procedures and the listed procedures are but a drop in that bucket. No surgical procedures are listed.

Turning to (4) *information on the costs of using particular providers,* information is even sparser. Perhaps the greatest innovation of the Aetna information for its enrollees is the provider-specific charge information available on its Cincinnati Web site. Assuming, illustratively, that Aetna has thirty percent of the Cincinnati market, and that this market comprises one million individuals, approximately one tenth of 1 percent of Americans have access to information on provider-specific prices. Even adding in Tufts and Lumenos and a few other firms, as a practical matter information on the charges of specific providers is essentially unavailable to the public today. There are a few seeming exceptions, such as California hospital charges, but as a practical matter that information is unusable by consumers (see the Anderson testimony referenced below).

Contrast this with the situation for medical procedures not ordinarily covered by insurance. Lasik is the fashionable example, but there are many others. See *www.beyourbest.com* for price quotes on breast augmentation ($3,000), liposuction ($2,000), and many other plastic surgery procedures at "guaranteed lowest prices." Where consumers pay, price matters. Contrast medical procedures with other major purchases, such as automobiles or airline tickets or any of the thousands of goods sold on e-Bay or through department stores. Not only is price information routinely available, there are many services specializing in enabling consumers to quickly compare prices before making a choice (e.g., Orbitz and Travelocity, among many, many others for airline, hotel, and rental care prices). Imagine using Healthline not only to obtain treatment information, but also for price and cost information.

This is not a trivial gap for the approximately 50 million American consumers who shop for health care with no insurance or with insurance gaps. As notoriously shown by the recent California requirement that hospitals make their charges available to consumers, charges to uninsured individuals are typically double, triple, or quadruple the charges to clients of major insurers (a description of the utter irrationality of hospital charges as they have developed over time, and a good deal of sensible advice on price transparency issues can be found in the testimony of Gerard

Anderson of Johns Hopkins University before the House Energy and Commerce Committee in March of this year at http://energycommerce.house.gov/108/Hearings/03152006hearing1813/Anderson2771.htm).

The availability of information on the (5) *outcomes of using particular providers* is actually far greater. In one of its most important actions for consumers ever taken, the Centers for Medicare and Medicaid Services (then HCFA) made available about 20 years ago data on hospital mortality and adverse outcome rates for all Medicare-participating hospitals (i.e., virtually all hospitals), both overall and for a dozen or so major types of procedures. Originally CMS published these data. In the last decade it has simply made them available as data files. At least two organizations, Washington Consumers CHECKBOOK and HealthGrades, continue to use those files to make risk-adjusted data available, for sale (e.g. Consumers' Guide by Hospitals, by the editors of Consumers' CHECKBOOK Magazine, 2002, also available online and updated at *www.checkbook.org*). While these data are not free, they are available to all American consumers.

While the risk of an adverse outcome is certainly the single most important measure of hospital quality, there are many others. CHECKBOOK surveys physicians to see which hospitals they rate highly. In effect, experts are used to rate other experts.

More recently, CMS has led a major reform effort to initiate the collection of data from Medicare-participating hospitals on a set of quality measures that focus on the most common hospital procedures, and those shown by research to be among those most prone to failure. For example, the failure to provide Aspirin to patients admitted with a heart attack is a major and not uncommon quality failure. As another example, this initiative also addresses one of the most vital steps owed to all patients: whether they are given discharge instructions when they leave the hospital. With collaborative partners, most notably the Hospital Quality Alliance and the Agency for Health Care Research and Quality (AHRQ), CMS now makes available a wide range of performance measures (see *http://www.hospitalcompare.hhs.gov/).* These measures are also used in "Pay for Performance," a major initiative now set in statute that conditions up to 2 percent of a hospital's payment from Medicare on it performance on measures of quality in comparison to other hospitals. Expansion of Pay for Performance in traditional Medicare is arguably as, if not more, important to future restraint on the growth of health care spending than the addition of Medicare Advantage plans as alternatives to traditional Medicare.

Early reports show that this collaborative but competitive system has had major effects in upgrading the quality of hospital performance. The consumer information is not just static, read by some consumers and ignored by most, but a spur to improved performance by hospitals that cannot afford, literally and figuratively, to be regarded as inferior.

CMS also now publishes on the Web comparative data on the quality of performance of other providers, such as Nursing Homes and Home Health Agencies.

There are more specialized efforts that indicate both the potential and the problems of developing outcome/quality measures for providers. For many years the United Network for Organ Sharing (UNOS) has devoted substantial resources to developing measures of patient and organ survival, by institution, that would not only allow consumers to compare outcomes and quality, but also provide them risk—or case mix—adjusted data that would account for the differences among hospitals in the severity of patients that they serve. In the world of transplants, sufficient expertise and consensus has been developed to allow a robust system of comparing provider outcomes for each type of transplant (www.srtr.org). Any transplant candidate can compare the performance of every transplant center in the United States before deciding where to "list" for a transplant.

But there are few if any other complex medical procedures for which comparable data are publicly available today. One notable bright spot is the Pennsylvania Health Care Cost Containment Council, with quality information on a number of procedures including provider-specific data on coronary bypass surgery (*http://www.phc4.org/default.htm*).

The big gap in quality-related outcome data has been in the performance of individual physicians and physician groups. While CMS and AHRQ are diligently working to develop outcome-related measures of ambulatory quality through the Ambulatory Care Quality Alliance (AQA) (see *www.ahrq.gov/qual/aqastart.htm*), the only widely available quality measures today use such crude measures as board certification or disciplinary actions, or what is arguably the best measure of all: ratings by other physicians. For example, CHECKBOOK publishes what is essentially a national system of physician ratings, by specialty, in Consumers' Guide to Top Doctors (2002, updated on the Web at *www.checkbook.org*). The Washingtonian magazine,

and other publications, also use surveys to rate physicians in particular metropolitan areas.

In summary, quantitative measurement of quality and outcomes for ambulatory care providers generally, and physicians in particular, remains a work in early stages of progress. Performance of several other major types of providers, such as hospitals, is further advanced. But progress is certain to be slow, expensive, and complex.

I have for almost three decades provided consumer information on (6) *comparing health plans,* in my annual *CHECKBOOK's Guide to Health Plans for Federal Employees.* My Guide provides information to approximately 8 million Federal employees and retirees on which of the health plans they can join provide the best value. In essence, this is simply a matter of comparing the total costs of consumers of enrolling in plan A versus plan B, assuming that each plan pays the promised proportion of medical bills incurred. The Guide performs this calculation, and shows every year that family enrollees who select the best deals available can save (a) a thousand dollars a year or more by choosing an HMO, and which HMOs provide such savings and how much savings, or (b) a thousand dollars a year or more by choosing the lower cost PPO or FFS plans, and which ones provide these savings and how much. These dollar savings estimates take account of both premiums (a "for sure" expense) and expected out-of-pocket costs at various spending levels.

The Guide also rates plans on several quality measures. In the early years, I focused on "quit rates" as a measure of service. Office of Personnel Management data on disenrollment rates grew increasingly unreliable over the years, and I had to abandon this measure (which, incidentally, required complex statistical adjustments using multivariate regression analysis.)

In more recent years we have included customer survey data on satisfaction with plans. Unfortunately, such data as currently published suffer from two inherent defects: (1) only a relatively few plan enrollees face life- and wallet-threatening events, and hence the most severe cases get negligible weight in overall ratings that count all consumer equally, and (2) elderly enrollees on average rate health plans far more highly than younger enrollees. As a result of these defects, and the failure of national accrediting organizations to address them by appropriate statistical techniques, customer satisfaction data as published today are extremely weak as measures of plan quality.

Another major approach to health plan comparison has been pioneered by CMS. For prescription drug expenses, which for most people are stable from year to year. CMS has developed a "Plan finder" tool (see plan comparison at *www.Medicare.gov*) that shows how much each participating Medicare prescription drug plan costs enrollees for the drugs they use today. Like the Guide, this tool takes into account both premium and out-of-pocket costs. Unlike the Guide, the approach is "current usage" specific rather than actuarial. In essence, it assumes that drug costs will usually not change, while the Guide assumes that future hospital, medical, and drug costs are only partially predictable, and always subject to random events. Both approaches have substantial strengths, and both approaches have saved millions of enrollees a great deal of money by steering them to plans that are better buys.

The CHECKBOOK Guide is available for a fee; the Medicare Plan finder at no charge. Historically, the Guide was sold in paperback to individual employees and retirees. However, at present the majority of Federal agencies provide "free" copies to all employees. Unfortunately, most agencies do not broadcast the availability of the Guide effectively, and lose the very substantial savings they could realize if a larger fraction of employees realized how much they could save and chose plans with lower employer as well as employee premiums.

For both Medicare and the FEHBP, data are available showing that even with a minority of consumers using plan comparison information, consumer choices among plans to select better buys save billions of dollars to both enrollees and payers.

Unfortunately, plan comparison tools such as these have only limited applicability. The vast majority of Americans do not have available a wide range of plans. Federal employees and retirees typically have about 15 or 20 plans to choose from. Medicare beneficiaries typically have about 40 or 50 plans to choose from. Most workers are provided at most two or three plans by their employers, such as one HMO, one PPO, and one fee-for-service plan. Since one of these three plan types is usually strongly preferred for reasons other than cost, the effective range of choice is usually one plan.

As a result, until or unless most Americans are given a broader range of insurance plan choices, powerful plan comparison decision tools such as these are of limited help in improving the health care market.

Problems and Opportunities in Filling Gaps. As the analysis above suggests, the availability of consumer information varies significantly by category.

Arguably, the most important gaps to fill are (a) data on provider payments or prices by procedure or condition or both, (b) the same information on a provider specific basis, e.g. "what this doctor would charge compared to that doctor," and (c) data on ambulatory care provider quality and effectiveness.

Are the consumers there to use the information? Most consumers have no incentive to seek information on costs, and to reduce costs by shopping, in a world of first dollar coverage. Nonetheless, with approximately 50 million people having a vital interest in keeping their costs low, it is clear that there are plenty of willing consumers of price information, if there were not other barriers to its dissemination. All 290 million consumers have a substantial interest in quality and effectiveness information.

"Consumer-driven" health care through high deductible plans and Health Savings Accounts adds to this potential demand, and brings a substantial number of higher utilizers (sicker and older) and well-educated consumers to the missing market for price information. But growth in consumer-driven plan enrollment is neither necessary nor sufficient given the substantial numbers of consumers who need such information already. What is needed is rapid rather than glacial movements by the insurers, both public and private, who have the data on payments and outcomes.

Overall payment and price data are simultaneously easy and difficult to provide. Every insurer in American knows what it pays each physician in its network. The data could be made available on the Web virtually overnight.

However, what each insurer pays is a trade secret. If competitors learn the payment rates, they could offer slightly better rates to attract preferred providers, or bargain harder with providers, or both. Providers know what they charge patients (usually different rates depending on which insurer is involved). However, they have an equally grave problem. It is not in their interest to make it widely known that they have settled for price X from payer A and price Y from payer B. Payers can use this information to ratchet down rates. A major firm, Subimo, today makes a great deal of its revenues from the sale of price data to insurance companies and, to a far lesser degree, to consumers (*www.subimo.com*). While Subimo and others could prosper from a different business model (imagine free price information with revenue from advertisements paid by low cost providers), there may be legal and other impediments to such a transformation.

The one player with no self-interest barrier to wider discloser of payment information is HHS. HHS provider payment systems are calculated using statutorily mandated formulas and procedures, and within specified geographic areas are "one size fits all." However, HHS faces a potential barrier in disseminating physician (but not hospital) payment information by the contractual agreements, long since struck, that commit it to using proprietary medical procedure codes that have been copyrighted by the American Medical Association (AMA). The AMA position, enforced by a willingness to impose major legal costs by suing alleged violators, is that "Common Procedural Treatment" (CPT) codes can only be used with AMA permission. Such AMA permission is never given to anyone who would publish procedure prices for broad consumer use. This posture is largely rationalized by the traditional ethical strictures against price competition in medical care. Other motives can be inferred.

In a case decided almost a decade ago, the AMA position was upheld against a private publisher by the Ninth Circuit Court of Appeals (*Practice Management Information Corporation* v. *American Medical Association,* 121 F.3d 516 as amended at 1333 F 3d 1140). The Supreme Court denied cert.

HHS could practicably publish consumer-friendly versions of its physician, outpatient, and inpatient payment schedules. These schedules are currently online, but require fairly substantial computer expertise to download and translate into understandable units, such as "What does it cost in dollars in my area and nearby?" Therefore, as a practical matter they are currently unavailable to consumers. Unfortunately, it is possible that the physician procedures would have to be recoded and presented in terms of ICD–9 or ICD–10 codes (alternatives to CPT) to meet legal concerns. This in turn raises issues about which codes would be used in practice and hospital management and billing systems, and some very expensive changes. I think that these issues could probably be decoupled, and the public information provided without depending on future code system decisions, but the job may be harder than I predict. One option might be to publish information coded under all three systems simultaneously, which would work for most procedures, but would require a good deal of work.

Procedure payment amounts are arguably not as useful as estimates of the costs of treating a disease or condition, but these serve different purposes. A consumer

seeking to save money could seek a low cost obstetrician and low cost hospital as separate decisions, constrained only by physician privileges. Moreover, in the case of hospitals the CMS reimbursement system is primarily based on condition ("Diagnosis Related Group") and hence avoids most of the problems posed by itemized charge systems. The bargaining mode for a woman seeking a good price for maternity care should be "Let's start with the Medicare payment that you already accept."

Providing disease and condition-specific cost information taking into account all types of provider and service is harder, since it requires an additional step. However, it is possible to search any major public or private insurer's payment records to find one or several common clusters of services. Presumably, this is what Aetna did to create its estimate of maternity costs.

In either case, what might otherwise be a gargantuan problem is greatly simplified by starting with relatively limited numbers of procedures and disease. The most common 100 physician, 100 outpatient, and 100 inpatient procedures, and the 100 most common diseases or conditions, would be a relatively easy starting point.

This in essence is what Aetna, Lumenos, and some other insurers are doing. The problem is that they are providing the information only to their own customers, who represent only a small share of those facing strong incentives to use price information. By definition, none of the uninsured has access to information limited to those enrolled in a company's insurance plans.

Provider-specific price, charge, or payment rates are arguably both the most needed and most difficult information to provide. However, they are quite likely to emerge over time as a by-product of shopper behavior using system-wide rates. Competition begets competition and there is no reason why we could not expect to see in the future advertisements such as "Use Doctor A and Hospital B for your pregnancy and delivery and get the bargain rate of $6,300, 20 percent off and $1,400 less than the average cost of maternity care."

But we need not await that development. A consumer with access to Medicare payment rates, knowing that the great majority of providers accept these rates for Medicare patients, wields a potentially mighty club. "Hospital B (or Doctor A), why shouldn't you give me the same deal you give most of your other patients? If you won't I can try one of your competitors." So far bargaining tactics have met with limited success, but consumer efforts have barely begun, and the Medicare payment rates are a vital tool for future bargaining.

Meanwhile, Aetna, Tufts, and others are experimenting with providing provider-specific payment rates to their enrollees. Armed with three pieces of information—average rate for a procedure in the network, average rate outside the network, and the precise rate charged by Doctor A and Hospital B—enrollees are given the vital information they need to decide whether, and how hard, to shop further around.

Data on provider quality and effectiveness is the most difficult challenge by far. Without these data consumers cannot complete the "value" equation.

HHS, primarily through AHRQ and CMS, is devoting immense intellectual capital with its alliance partners to creating such information. There are valuable systems already in place for some dimensions of hospital and nursing home quality. Other and more ambitious efforts are underway through the Hospital Quality Alliance and the Ambulatory Care Quality Alliance. I am sure that Dr. Carolyn Clancy is addressing those in her testimony today in great detail. Dr. Mark McClellan, the CMS Administrator, has testified several times on these issues before other Committees of the Congress.

One of the biggest problems in developing such measures is that without case-mix adjustment they may often mislead. The best surgeon may take the hardest cases and wind up with success rates lower than those of the average surgeon. Statistical validity also requires a significant sample size (rarely fewer than 25 or more cases) and many procedures are not performed in high volume by most physicians. There are also substantial issues in developing actual quality measures, especially for procedures that do not usually lead to simple outcomes. For these and other reasons, efforts to create quality and effectiveness information that will be genuinely useful to consumers must be measured in years, and will indeed never be complete.

Luckily, we already have a good deal of information on both ambulatory and inpatient quality. It resides in the heads of physicians and other health professionals, who observe their peers directly and through their informal information networks. It is made available to consumers through direct advice from their own physicians on questions such as "Which specialists would you recommend as the next step for me to take, and how would you compare them?" It is also available through publications such as CHECKBOOK's Consumers' Guide to Top Doctors, which surveys physicians themselves as to whom they would recommend most highly in other specialties.

Health plans make decisions on which physicians and other providers to enlist as preferred providers, based on both willingness to accept the insurer's payment rates and appraisals of performance. These appraisals may be crude and simple, or may reflect statistical analysis of insurance records over time, but in either case serve as an important check to weed out poor performers. Thus, simply using preferred providers is an easy quality (as well as financial) rule for consumers. (Unfortunately, some of the very best physicians often opt out of such panels over payment levels—a problem that would lessen over time if plans would be more flexible in paying more for higher quality, which in turn requires new quality measures.)

There also remains the possibility of using insurer data to provide more information. For example, simply knowing the volume of a certain procedure performed is often immensely valuable to the consumer because for a large number of procedures research has shown that high volume correlates strongly with quality. Such information is readily available in Medicare files. For many procedures (though a small proportion of the universe of procedures) the information could be reasonably used with minimal statistical refinement. According to recent press reports (Robert Pear, in the New York Times, April 10, 2006), employers are now pushing HHS to disclose these and other Medicare data on physician performance. Unfortunately, it appears that HHS feels constrained by a 1979 court case that interpreted the Federal Privacy Act as preventing the release of records identifying individual physicians. However, that case dealt with an entirely different situation that could not arise under current Medicare payment procedures. It is also arguably irrelevant given that the Congress has since 1979 mandated a wide range of quality measurement and improvement efforts by CMS. CMS now has a legal duty to use information on provider quality, and without public access to that information, the performance of CMS itself cannot be evaluated. Under the Freedom of Information Act, an evaluative purpose arguably trumps the Privacy Act. Moreover, the 1979 decision was a District Court decision, never affirmed by higher courts. The outcome of further legal analysis, or court action, remains to be seen.

Consequences of Filling These Gaps. Some analysts denigrate the value of making price, payment, and quality, information available to consumers. They argue, for example, that most medical care costs are spent on high-cost cases that are fully insured, and that as a result market forces will be greatly attenuated. These pessimists may be right. Even if they are right these reforms should be made, however, simply because some 50 million Americans will get substantial benefit.

But the pessimists are most likely wrong. Market forces, if unleashed, will drive behaviors of consumers and providers, and insurers, in ways that we simply cannot predict. It is not just a matter of a minority of consumers haggling and bargaining with a minority of providers:

- Some providers may seek the opportunity of using market information to position themselves as cheaper and better ("I am Doc Sawbones and I score 99 percent on the official government quality measure and charge only three-fourths of the average payment rate.").
- The invention of lower—rather than higher-cost technology may be spurred. Why pay for the $20,000 pacemaker from your health saving account or on your credit card when there is a $10,000 model available that has fewer features but is more reliable?
- New forms of low cost health care organization may arise (we may need to look no further than the health care centers that Walmart is installing).
- Medicare is already moving in a significant way to "Pay for Performance" for hospitals rather than "one price fits all." This has revolutionary implications if it can be expanded to more Medicare payments, to other insurers, and to additional measures of hospital outcomes. Few conceivable payment systems are more lunatic than those so widely used today by Medicare, Medicaid, and most private insurers, that in effect pay more for less effective service.
- Quality and outcome measures are particularly important for insurance reform. Consumers can select providers based on reputation. Third party payers need more objective, measurable information.
- Consumer advice on dealing with health problems would be able to include comparative information integrated in ways that steer consumers to high value courses of treatment, and help them control costs.
- If price information becomes widely available as a point of comparison, providers may elect to bundle services at a discount.
- Providers may simply be forced, by the existence of lower cost competitors, to accept lower payments. We see this already in the growing numbers of American patients going to India or the Caribbean to obtain high quality care at a fraction of the price in the United States. What happens to overall spending when con-

sumers see that high quality alternatives are available at half or less the going rate?

All these potential effects loom larger because of the unsustainable growth rate of health care spending in America. We need not dwell on the impending Medicare insolvency data (estimated as 2018 for the hospital trust fund in the just-released Trustees report) to consider that the average cost of a family health insurance policy providing first dollar coverage is today approaching $10,000, and that the average cost of a Medicare beneficiary for hospital care, medical care, and drugs already exceeds $10,000, and will within a few years exceed the cost of the average Social Security benefit.

At the same time, the Dartmouth experts estimate that one-third of Medicare spending is wasted on unnecessary care (E.S. Fisher et al, "The Implications of Regional Variations in Medicare Spending," Annals of Internal Medicine, February 18 2003, *http://www.annals.org/cgi/content/full/138/4/273*).

We cannot predict how rapidly or how far direct market forces using price and quality information will operate to reduce the growth in health care costs or improve health outcomes. But we cannot afford not to try. The other alternatives such as direct rationing, triple-digit premium increases (in contrast to the double-digit increases we see today), or draconian tax increases, are unpalatable in the extreme.

It certainly appears that the current Administration "gets it." Drs. McClellan and Clancy have worked tirelessly and effectively for years on these issues. The White House has opined forcefully. HHS Secretary Leavitt recently assembled hundreds of executives of his Department to issue his top priorities for the next 3 years, and No. 1 on the list was "Health Care Value Incentives" aimed at restraining the growth of health care costs "because consumers [should] know the comparative costs and quality of their health care." However, I do not think that this is a partisan issue. In the usual disjuncture between public policy reforms and subsequent outcomes, it is likely that the next Administration, of whichever party, will not only endorse, but get much of the credit for the reforms begun in the first years of the 21st century.

As a concluding comment, there are a number of bills pending in the Congress that deal with these issues in one fashion or another. Former Speaker Gingrich has mentioned the possibility of "right to know" legislation that would require doctors and hospitals to post prices. (For hospitals, that would stimulate immediate change because hospital charges generally bear little or no relation to either their costs or what insurers pay them.) Congressman Shadegg is sponsoring a bill that would enable health insurance to be sold across state lines, and make other reforms that would open up consumer-driven insurance to millions of consumers, including many of the currently uninsured who are prohibited by State law from buying the insurance plans available to most Americans. There is a companion Senate bill. And both the Ways and Means and Senate Finance Committees are considering pay for performance legislation. I have not studied these bills and have no specific recommendations on details of legislation at this time. However, in the light of the substantial legal difficulties that HHS faces in releasing payment and performance information in a form that would either be directly useful to consumers or be useful after analysis by expert researchers, I suggest that if any bill nears enactment it include provisions that will help in overcoming any legal barriers.

Disclaimer: I have affiliations with three organizations mentioned in this testimony, Washington Consumers CHECKBOOK, the Centers for Medicare and Medicaid Services, and the United Network for Organ Sharing. Nothing in my testimony represents the views of any of these organizations, or relies in any way on information that these organizations do not provide to the public at large.

Prepared Statement

of

Donald W. Kemper, MPH
Chairman and CEO,
Healthwise

Founding Chairman,
Ix Center Board of Directors

Before the

United States Congress
Joint Economic Committee

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Oral Testimony

Information Therapy: Prescribing information to tap the power of the patient

Mr. Chairman and members of the Committee,
My name is Don Kemper. I live in Boise, Idaho.
Thank you for this opportunity.

I have a simple message. The greatest untapped resource in health care is the consumer.

If we don't find a better way to inform and engage people in their own care, we will fall deeper and deeper into the health care cost crisis.

- More technology, alone, is not the answer.
- Shifting costs, alone, is not the answer.
- Transparency, alone, is not the answer.

The answer requires helping people do more for themselves.

- More to avoid illness
- More to avoid medical errors
- More to avoid unneeded health care costs
- And more to ensure that they get the care that will really make a difference

For the past 31 years I have led a not-for-profit organization whose sole mission is to help people make better health decisions. We create information that is used on the nation's most popular health Web sites, by 9 of the 10 largest MCO health plans, and by hundreds of hospitals across the United States.

For 31 years I have relentlessly sought ways to improve consumer health.

- In the 70s I helped start the medical self-care movement.
- In the 80s I helped start the wellness movement.
- And in the 90s I helped bring good consumer health information to the Internet.

Each of those efforts has made a big difference. But none have been enough.

The recommendation I would like to make to you today is the most powerful of them all.

It is simple—remarkably simple. But it has the power to impact the quality and cost of care like nothing else that has ever come before this Committee.

This is it: Prescribe information to every patient. Prescribe information to every patient, at every moment in their care.

Donald W. Kemper, MPH
Healthwise
www.healthwise.org
1.800.706.9646
May 10, 2006

Today, patients are left in the dark much of the time. Our doctors have neither the tools nor the time to help us learn what we can do for ourselves.

We forget half to four-fifths of what our doctors tell us—instantly. And, by the time we get home, much that we do remember, we remember wrong. The only way out of the health care cost spiral is to better inform and engage all of us—every patient.

Imagine this:

- Imagine a world in which your doctor prescribed to you the information you need to make better decisions.
- Imagine that you always knew your treatment options, and understood them.
- Imagine that your doctor prescribed decision aides and action plans that actually helped you improve your health.

What you are imagining is called "information therapy" or "Ix". And, it is alive and thriving in, at least a few, leading health care organizations. Let me tell you how it works.

[Chart #1]

1. Ix starts with "**information triggers**" from the diagnosis and treatment codes already known about the patient.
2. The triggers predict the patient's "**moment in care.**" As soon as a person's moment in care is known, it's easy to determine the questions she likely has and the decisions she is likely facing.
3. Then, the doctor or the system can prescribe **information** that helps to answer the questions and support the decisions.

Group Health Cooperative, in Seattle, gives information therapy prescriptions to every patient. Kaiser Permanente, the VA, and the DoD have all begun information therapy initiatives. Ix is coming. But, enlightened federal policy could help it reach the mainstream sooner.

My written testimony presents ten ways in which Congress could accelerate health care improvement through information therapy. [Chart #2] But if I had to pick a single policy area, I would focus on three changes within Medicare. [Chart #3]

1. I'd start by adding a consumer health portal to Medicare.gov—the only major American health plan that doesn't have one.
2. Next, I'd prescribe an annual preventive services guide personalized to every beneficiary.
3. Finally, I'd prescribe a personalized self-management plan to every chronically ill Medicare patient.

For a modest investment in these three things, Medicare would gain a huge payoff in a short time. The consumer is the greatest untapped resource in health care. Information therapy will tap it. Thank you.

Donald W. Kemper, MPH
Healthwise
www.healthwise.org
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Supplemental Written Testimony

The Top Ten Ways for Federal Policy (and funding) to Improve Health Care Quality and Lower its Cost Through Information Therapy

1. Add Information Therapy (Ix) to Medicare.gov

Every major health plan in the United States is investing heavily in providing and prescribing consumer health information to its members. Medicare should do the same. The Medicare Ix Initiative should develop each of the following functions over the next 2-5 years.

- Create within Medicare.gov a robust consumer health information portal to serve the information needs of beneficiaries. The portal would begin with evidence-based medical information and decision guides accessible by anyone. Later, cost and quality information on hospitals, physicians, tests, and drugs would be added and integrated with core consumer health content. The portal would provide a single trusted source of information to support any health care decision or self-management plan.
- Develop an information service to provide each Medicare beneficiary with an annual, personalized plan for medical screening and prevention services. An updated plan would be delivered by mail or e-mail to each person in advance of their birthday each year. The plan would be based on both demographic parameters and the diagnosis and treatment data collected by CMS from the claims records. Beneficiaries would be able to access their plans at any time, correct inaccuracies, and engage, at their discretion, reminder systems for the timing of preventive services throughout the year. Anyone not wanting to use the system could opt out. However, some incentives might be provided to ensure a high level of participation.
- Deliver for each Medicare beneficiary with one or more chronic illnesses a personalized self-management plan that takes into account their co-morbidities, treatment histories, and self-management preferences. Each interactive plan would allow the beneficiary to control the frequency of messages to be received in support of the plan. The plan could be deactivated or reactivated at the control of the beneficiary. Consider such a plan as a part of one or more of the CCIP Medicare Health Support pilots now ongoing.
- For each CMS quality indicator identified within a disease category, develop predictive modeling strategies to select patients for whom the indicators are relevant. Then present decision support information therapy campaigns to the selected beneficiaries to encourage improved quality performance based on the indicators.
- Provide, as an administrative service, a method for each beneficiary to review their treatment history based on CMS claims data; and include with each claim

report information about the diagnosis, drugs, tests, or treatments involved. Beneficiaries should be given control over whether they would like notification when updates to the history are made. As e-claims submittal becomes common and the claims history service becomes closer to "real time," the benefit to the Medicare members will grow rapidly.

- Allow physicians to prescribe information from the Medicare.gov Web site and provide economic incentives to encourage widespread adoption. CMS would work collaboratively with its information partners and the developers of physician office and hospital EMR and e-prescribing software to ensure compatibility and ease of use.

2. **Add Ix to Medicaid**
   Medicaid beneficiaries are increasingly gaining access to Internet resources, either on their own or through friends and family members. While Medicaid is administered by the states, federal policy can encourage the use of information therapy services to both improve the quality of care received by Medicaid beneficiaries and to reduce the cost of unnecessary services. Federal policy should pre-approve waiver programs for states wishing to implement information therapy programs that would otherwise be blocked by federal mandates.

3. **Add Ix Coding to EMR and e-Prescribing Standards**
   Federal grants and contracts through HRSA and other agencies are helping to establish long-needed technical and quality standards for the development and use of electronic medical records (EMRs), computerized physician order entry (CPOE) systems, and e-prescribing applications. In addition, federal funding is going to support regional health information organizations (RHIOs) and other health information exchange efforts. Unfortunately, virtually none of the RHIO efforts, to date, have focused on helping to get information to the patient. HRSA and others should designate some developmental funds for establishing quality and technical standards for consumer health information exchange to patients based on clinical encounter information delivered to or through the RHIOs.

4. **Add Ix Within the FEHB Program**
   OPM should follow the lead of employer health coalitions around the country in requiring that health plan applicants in the FEHB program have robust systems for delivering evidence-based medical information to their enrolled members. At a minimum the same portal, preventive services plans, and self-management plans discussed for Medicare could be expected to be delivered by FEHB programs.

5. **Expand Ix Within the DoD**
   The Medical Treatment Facilities (MTFs) of the DoD provide an ideal platform for the delivery of high quality information therapy to the service men and women and their families who receive medical services from them. The FY06 DoD Appropriations Bill includes a modest allocation for the development of an information therapy program within DoD Medical Treatment Facilities and

TRICARE. The Congress should encourage and support the DoD in expanding the reach and depth of the program to include the same elements as described for the Medicare program above. The Congress should also support the accelerated development by TRICARE of a Personal Health Record system that would allow information prescriptions to be triggered out of events recorded in the EMR. Because there is already a start for Ix within the DoD, increasing resources and focus can quickly add great value to our service men and women.

6. **Expand Ix within the VA**
   The Veterans Administration has long been admired for its leadership both in electronic medical records and in quality improvement. The VA's VistA system combined with its MyHealtheVet Web site provides the perfect foundation for a fully-functioning information therapy system. In a 2001 study, 62% of veterans reported that they had access to the Internet. (http://www.va.gov/vetdata/SurveyResults/nsv/final/ADA508f/INTRODUCTION.pdf) With more veterans going online each year, the threshold for a robust information therapy program has been reached. The Congress should continue support for further development and expansion of the groundbreaking MyHealtheVet patient portal to ensure its universal availability for launching information prescriptions for veterans receiving care at VA facilities.

7. **Ask AHRQ to Evaluate the Cost Effectiveness of Ix**
   Research will bolster the success of information therapy. The leadership of AHRQ has a clear view of the potential importance of information therapy to health care improvement. AHRQ has invited discussion about how best to engage mainstream medical researchers in Ix evaluation work. A conference of researchers and research sponsors has been envisioned but delayed because of limited resources. Supplemental funding to AHRQ could accelerate the creation of an Information Therapy Research Agenda and common metrics that could be used in all Ix research.

8. **Ask HRSA to Help Extend Ix to Hard-to-Reach Populations**
   Most information therapy content has been developed for the mainstream, English-speaking American. HRSA would do well to allocate a portion of its research and development budgets to improving Ix content and learning what works best for different socioeconomic groups, ethnic groups, and other hard-to-reach groups. Our health care system supports diverse populations—so should our information therapy programs.

9. **Allow increased HSA Contributions When Ix is Used**
   A weakness of the current IRS rules around HSA contributions blocks the ability to increase contributions for employees who are known to be suffering from chronic conditions. Because effective self-management of chronic illness is the only way to avoid or reverse the expected increases in the cost of chronic care, a rules change that would allow excess HSA contributions to be given as incentives to employees who

actively participate in disease self-management efforts would result in lower overall costs.

10. A Congressional Ix Appeal to All Americans

Health care is an issue of national economic security. When our congressional leadership comes together in solidarity with our administrative leadership to encourage every American to become better informed and more deeply engaged in their own health care and health behaviors, we will all win. The power of leadership can be significant.

Donald W. Kemper, MPH
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State of the Art: Information Therapy in the United States today

The Center for Information Therapy
Professional development of the information therapy field in the United States is focused around the work of the Center for Information Therapy (IxCenter) in Washington, D.C. The IxCenter is an independent, 501(c)3 tax exempt not-for-profit that aims to advance the practice and science of information therapy to improve health, consumer decision making, and healthy behaviors. Launched in 2001, the IxCenter acts as a catalyst for health care delivery innovation by diffusing Ix strategies through research, education, and collaboration. A core function of the IxCenter is engaging with Ix proponents and industry leaders through its IxAction Alliance.

Current membership of the IxCenter Board (formerly known as the Information Therapy Commission) is made up of prominent thought leaders in health care including:

- **Susan Edgman-Levitan, PA** Executive Director, John D. Stoeckle Center for Primary Care Innovation, Massachusetts General Hospital
- **James L. Field** Executive Director, The Advisory Board Company
- **Alan Greene, MD, FAAP** Chief Medical Officer, A.D.A.M.
- **James F. Hereford** Executive Vice-President, Strategic Service and Quality, Group Health Cooperative, Seattle
- **Jessie Gruman, PhD** President and Founding Executive Director, Center for the Advancement of Health
- **Donald W. Kemper, MPH** Founder and CEO, Healthwise
- **Albert G. Mulley, Jr., MD, MPP** Chief, General Medicine Division, Massachusetts General Hospital
- **Annette M. O'Connor, RN, MScN, PhD** Canada Research Chair in Health Care Consumer Decision Support and Professor, University of Ottawa
- **Margaret E. O'Kane** President, National Committee for Quality Assurance
- **John W. Rowe, MD** Chairman and President, Aetna
- **Paul Wallace, MD (Chair)** Executive Director, Care Management Institute, Kaiser Permanente
- **Andrew Webber** President and CEO, National Business Coalition on Health
- **Gale Wilson-Steele** Founder and Chief Strategic Officer, MedSeek

IxAction Alliance
The IxCenter has created a membership program called the IxAction Alliance with a growing list of members in both the IxImplementers and IxSolution Partner categories as follows:

IxImplementers
- Aetna
- Cheshire Medical Dartmouth Hitchcock-Keene
- Group Health Cooperative (Seattle)
- Group Health Cooperative (Madison)

- HealthPartners
- Kaiser Permanente's Care Management Institute
- Massachusetts General Physicians Organization
- MGH's Stoeckle Center for Primary Care Innovation
- PCHI (Partners Community Healthcare, Inc.)
- Priority Health
- St. Alphonsus Regional Medical Center
- United HealthCare Group
- University of Wisconsin Medical Foundation

IxSolution Partners (organizations that provide vehicles for Ix delivery)

- Enhanced Medical Decisions
- Healthways
- Health Dialog
- Health Outcomes Sciences
- Healthwise
- HPN WorldWide
- MedSeek
- Resolution Health
- Rightfield Solutions
- Telemedik
- WebMD

In addition, the IxAction Alliance includes a group of IxSupporters including the eHealth Initiative, the Foundation for Informed Medical Decision Making, and other notable groups.

Annual Information Therapy Conference
Since 2002, the IxCenter has hosted the annual Information Therapy Conference in Park City, Utah. The dates for the 2006 conference are September 25-27. The Ix Conference provides the centerpiece of the IxCenter's efforts to exchange ideas, evaluate results, and develop opportunities in the Ix field.

International Interest in Information Therapy

The United States is currently a net exporter of consumer health information products in a small but fast-growing market. While U.S. consumers have always led the way for the world in the area of patient education and involvement, other countries are increasingly recognizing the value of an informed and engaged patient as a part of a cost-effective and modernized health care system.

Canadian Consumer Health Experience—The BC HealthGuide Program
The BC HealthGuide Program provides reliable health information and advice by phone, through handbooks and online, 24 hours every day for the people of British Columbia. Information is presented to help people understand, manage, and make decisions about

their health. While the information used in the program is licensed from Healthwise, a U.S.-based organization, it has been comprehensively localized to correspond to the health care system and information needs of Canadians.

UK Plans for Information Prescriptions
On January 30, 2006 the UK Department of Health released a major White Paper entitled Our Health, Our Care, Our Say: A new direction in community services. The paper proposes to "**give all people with long-term health and social care needs and their carers an 'information prescription'** "

Individuals and organizations both within and outside of the National Health Service have embraced the proposal and are working to make information therapy a reality within the NHS.

Other Indications of International Interest
Healthwise has been invited to present seminars and conference presentations in the UK, the Czech Republic, India, and the Netherlands. In every case, both public and private interests are focused on the potential for an informed and engaged patient to better manage medical decisions with their doctors and self-manage chronic illness at home. Currently there is opportunity for further exporting of health information abroad once the issues of localization and translation are resolved.

Information Therapy of the Future: A look ahead

While the technologies, infrastructures, and attitudes of today are adequate for launching comprehensive and cost-effective information therapy programs, three innovations expected to occur over the next few years will bring far greater value to the information therapy sector. Each of the three changes is discussed below.

1. **Real-Time Information Triggers**
   A key part of prescribing the right information to the right person at the right time is getting the time right. Often a person's need for information is very time-specific. You don't need information on a back surgery decision until you are faced with the surgery, and then you need it immediately. That's no problem when information therapy is delivered in a clinical setting with the help of an EMR—it happens at the right time. But, when the information description is delivered by a health plan, the currency and the accuracy of the information triggers become critically important. For example, if a patient doesn't receive decision support information for a surgery until after the surgery is over, it can do no good.

   A good number of health plans are now engaged in initiatives designed to reduce administrative costs by using Web-based, automatic claims adjudication systems. Physicians are given the incentive of being paid faster if they shift to the Internet. The shift will have exciting implications for information therapy. If the information prescription can get to the patient within 24 hours of a clinic visit, it has a much better

chance of getting both attention and results. If the information prescription can be sent instantly while the patient and the doctor are still together, it can provide for a smooth integration of clinic care and home care as one interconnected continuum.

2. **A Personal Coach for Every Health Decision**
   In an ideal world, every individual would have a trusted nurse or doctor with the following characteristics:
   - Always up-to-date on the medical issues involved with the health problem you are experiencing today and always ready to support you in making a decision.
   - Knows you well and remembers everything you have said in previous appointments.
   - Has earned your trust that he or she is focused solely on your best interests.
   - Is available to you 24x7 and with no one ever in the waiting room.
   - Has a kind, patient, and respectful voice and manner.

   Rarely is the world that perfect. At best, you may be able to telephone your doctor for a quick discussion. Otherwise you likely need to go through the appointment process, which greatly increases both the time and cost commitment.

   Enter the virtual coach. Through the use of an interactive conversation interface (iCi) that provides the pace and responsiveness of a real conversation, the patient is coaxed into dispelling the known belief that he or she is talking with a computer. These virtual conversations must be meticulously designed, developed, and refined. But with careful study and execution, they can become significantly effective—though never quite as effective as the ready professional in the ideal world. Within the next few years these virtual coaches will become commonplace and provide a great relief for the manpower shortages in health care today.

3. **Cell-phone and PDA Delivery Anytime, Anywhere**
   The third transformational opportunity comes in digital cell phone technology. In the future many people will access the Internet not through a PC but through a cell phone. Already in India, 100 million people have digital cell phones, far outpacing the number of computer Internet hookups. The combination of a cell phone digital display and a voice-centered virtual coach guiding people through the information could produce a breakthrough that revolutionizes the patient's expectations regarding consumer health information.

Concluding Thought

Without a change in the patient's role in making informed decisions about care, the health care crisis has no plausible solution. Information therapy informs and engages the patient in a way that reduces waste and emphasizes getting the care that really makes a difference—to the patient. With an enlightened federal policy to promote the use of information therapy for everyone, we can improve the quality of care and lower its cost.

Donald W. Kemper, MPH
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Chart #1

How Ix Works

- Information triggers
  - ICD-9/10, CPT-4, SNOMED
- Moments in care
  - Diagnosis, Treatment, Discharge
  - Questions & Decisions Faced
- Information prescription

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Donald W. Kemper, MPH
Healthwise
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Chart #2

Top Ten Ways for Federal Policy to Improve Quality and Lower Cost Through Information Therapy

1. Add Ix to Medicare.gov
2. Add Ix to Medicaid
3. Add Ix Coding to EMR and e-Prescribing Standards
4. Add Ix within the FEHB Program
5. Expand Ix Within the DoD
6. Expand Ix Within the VA
7. Ask AHRQ to Evaluate the Cost-Effectiveness of Ix
8. Ask HRSA to Extend Ix to Hard-to-Reach Populations
9. Allow Increased HSA Contributions When Ix is Used
10. A Congressional Ix Appeal to All Americans

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Chart #3

Add Information Therapy to Medicare.gov

- Start with a consumer health portal
  - Every medical condition
  - Every medical treatment
  - Every medical test
- Prescribe an annual preventive services guide personalized to every Medicare participant.
- Prescribe a personalized self-management support plan to every Medicare participant with a chronic illness.

Donald W. Kemper, Healthwise 5/10/06 JEC Testimony

Donald W. Kemper, MPH
Healthwise
www.healthwise.org
1.800.706.9646
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Testimony to the Joint Economic Committee of the U.S. Senate

Providing Health Information to Consumers to Improve the Efficiency and Effectiveness of the U.S. Healthcare System

By
Douglas G. Cave, Ph.D., M.P.H.
President of Cave Consulting Group (CCGroup LLC)
May 10, 2006

Thank you for your invitation to present some of the most recent experience with consumer health information from CCGroup LLC and additional observations relating to the experience of the health insurance industry. My name is Douglas Cave, and I am the President of CCGroup. CCGroup is a company focused on improving the efficiency and effectiveness in the healthcare delivery system. We recognize the need to address all components of medical trend (and not just service price discounts), if efficiency and effectiveness are to be improved and medical trend is to be controlled. Today, CCGroup works with some of the largest health insurance companies in the country in the areas of consumer health care transparency, pay for performance (P4P) programs, high performance network (HPN) building, and network tiering based on practitioner efficiency and effectiveness.

My testimony summarizes some current health services literature and "in practice" findings with respect to measuring practitioner efficiency and effectiveness as well as presenting consumers with health information. There are accurate and reliable methodologies available for measuring practitioner efficiency and effectiveness using medical claims data. Understanding the methodologies that work (and do not work) is very important. If practitioner efficiency and effectiveness are not accurately measured, then consumers cannot be provided with meaningful practitioner information. The end result will be that the efficiency and effectiveness of the current U.S. healthcare system may not be improved further through greater levels of consumer health information. This is because many practitioners may be inaccurately measured as efficient and effective (or, conversely, inaccurately measured as inefficient and ineffective), and the consumer may be inadvertently guided to the less efficient and less effective practitioners.

1. Vision for Consumer Health Information

Background

A trend in the health insurance industry today is to build consumer-directed health benefit plans. A definition of consumer-directed benefit plans is health benefit plans that: (1) incentivize consumers to select more affordable and/or higher quality health care options; and (2) provide consumers with cost and/or quality information on practitioners and medical conditions with which consumers can make more informed choices.

A stated objective of consumer-directed health benefit plans is to increase consumer engagement in health care decision making, rather than relying solely on practitioners and hospitals in the decision-making process. The thought is that improved consumerism will result in improved

efficiency and effectiveness (or quality) of care in the U.S. healthcare system, thereby reducing, or at least controlling, current healthcare expenditures. I define here efficiency as using the appropriate level of medical services in an appropriate setting to treat a patient's medical condition and achieve a desired quality of patient care. Thus, efficiency is a function of unit price, volume of service, intensity of service, and quality of service. Effectiveness means coordinating medical services for a patient based on process of care and/or outcome measures that are established by national expert panels.

Whether consumer-directed health benefit plans will succeed depends largely on providing consumers with accurate and reliable physician-level information. Moreover, looking beyond the current debate over the value of consumer-directed health benefit plans, we have to provide consumers with physician-level efficiency and effectiveness information if we desire to improve or reform the current U.S. healthcare system. The reason is that providing this information drives competition, whereby a consumer is expected to choose based on product price, quality, and convenience. This fact is no different than in any other competitive industry.

Available Methodologies for Accurate and Reliable Efficiency and Effectiveness Scores

There are several methodologies that will provide accurate and reliable physician "efficiency" information. This is important, as consumers will come to trust and utilize the efficiency information when the data is accurate and stable from year-to-year. Using this information, a "star" rating system (or another easily understood consumer rating system) may be used to rank more efficient and less efficient physicians by specialty type. The star system may apply to a physician's overall efficiency score or to a physician's medical condition-specific efficiency score.

On the other hand, there are many methodologies being employed in the market that will calculate physicians' efficiency scores, but the scores are not accurate or reliable. In essence, this means a physician's efficiency score will be jumping around from year-to-year. For instance, in 2005 the physician may appear efficient (using less resources as compared to a peer group or best practice), but in 2006 the physician may appear inefficient (using more resources as compared to a peer group or best practice). Consumer health information based on non-stable scores will not be meaningful or helpful in reforming the U.S. healthcare system.

There are several methodologies that will provide accurate and reliable physician "effectiveness" information. Using this information, a star rating system (or another easily understood consumer rating system) may be used to rank more effective and less effective physicians by specialty type. The star system may apply to a physician's overall effectiveness score or to a physician's medical condition-specific effectiveness results.

In applying any effectiveness measurement methodology, we need to define a good set of medical condition-specific effectiveness measures. A large amount of work has been performed, or summarized, in this area by the Agency for Healthcare Research and Quality (AHRQ) and other expert organizations with respect to medical condition-specific process and outcomes of care (especially those measures that may be calculated using medical claims data): RAND, National Quality Forum (NQF), National Committee for Quality Assurance (NCQA), and

Ambulatory Care Quality Alliance (AQA). The richness of this effectiveness information should be recognized and utilized.

As with efficiency methodologies, there are effectiveness methodologies being employed in the market that will calculate physicians' effectiveness scores, but the scores are not accurate or reliable. In using these methodologies, the consumer health information will not be meaningful or helpful in improving the quality of care in the U.S. healthcare system.

Claims Experience Data to Rate Physician Efficiency and Effectiveness

Medical claims data is the largest single source of information that a health plan has available to rate physician efficiency and effectiveness. Therefore, health plans will continue to use claims data as the primary information source for individual physician and hospital evaluation and measurement.

However, in any geographic region of the country, the membership base for many health plans is not large enough to generate enough claims data experience to measure all physicians in their network. A general rule of thumb is that a health plan's claims data may be able to measure the efficiency and effectiveness of about 60% of the health plan's network physicians (which equates to about 30% of all practicing physicians in the region because not all physicians are under contract with the health plan). Of these 60% of network physicians, about 75% will have a lower volume of assigned episodes of care (typically under 50 episodes) for efficiency and effectiveness measurement.

The question becomes, "How does a health plan obtain enough claims data to accurately and reliability rate the efficiency and effectiveness of all (or most) physicians?" One answer is for the health plan to pool its claims data with competing plans in a geographic region. However, health plans are hesitant to pool their claims data with competing plans out of fear the negotiated unit price discounts with physicians and hospitals may be revealed to a competitor health plan. Then, the competitor health plan may try to replicate these discounts.

Another answer is for the Centers for Medicare and Medicaid Services (CMS) to provide access to the full CMS Part A and Part B claims databases, holding back only to the extent necessary to protect the privacy of individual Medicare beneficiaries. Initial testing shows the CMS databases may be able to measure the efficiency and effectiveness of 80% of "all" (not just the health plan's network physicians) practicing physicians in a geographic region. This percent of physicians measured is more than enough to provide consumers with meaningful, physician-level efficiency and effectiveness information.

It is important to recognize that even using the full CMS claims database, many of the measured physicians will have a lower volume of assigned episodes of care (generally under 70 episodes) for efficiency and effectiveness measurement. Consequently, we need to always consider the Law of Low Episode Numbers when developing and implementing methodologies that will accurately and reliably measure practitioner efficiency and effectiveness.

Testimony by Douglas G. Cave, Ph.D., MPH
President, CCGroup LLC

Where Is the Market with Respect to Providing Consumer Health Information?

Most health plans desire to provide physician efficiency and effectiveness information to their plan members. The most frequent way expressed by health plans to disseminate this information is through a secured Internet website (as opposed to a hardcopy network provider directory or other media).

To date, the most commonly offered comparisons have been limited to prescription drug options, surgical procedures, and diagnostic tests. With respect to these services, the information has been on a unit price basis charged by the physician, pharmacy, or hospital. The information has not been presented on a medical condition-specific, longitudinal episode of care basis, which accounts for all components of medical expenditures, which include unit prices, volume of services, and intensity of services. Presenting only unit prices to a consumer is problematic, and may provide misleading signals of relative efficiency. For example, health services researchers have documented that lower negotiated unit prices generally induce physicians to provider a greater volume of services and/or more resource-intensive services.

There are three main reasons as to why health plans have elected to start consumerism efforts with unit price information:

- A key component of consumer-directed health benefit plans has been to provide consumers with information to make more informed healthcare decisions. The most readily available information to share with consumers has been unit prices. Therefore, health plans have started with unit price comparisons for physicians, hospitals, and pharmaceuticals.

- Health plans have been reticent to be the first health plan in a geographic region to present consumers with physician efficiency and effectiveness information out of worry that physicians will threaten to drop out of the network or, alternatively, will negotiate lower price discounts then currently exist. To date, most health plan networks have been built on physician and hospital price discounts alone. Therefore, health plans do not want to upset the balance they presently have with network providers.

- Some health plans do not have enough claims data experience (at least is some geographic regions) to measure enough network physicians to have a successful physician efficiency and effectiveness measurement program. In these instances, the health plan would have little consumer health information to share with their plan members.

The present comparisons aside, many health plans recognize the need to produce more detailed consumer health information. Of these health plans, most are in the process of developing a program that provides physician level (or physician-group level) efficiency and/or effectiveness information. The employer benefit consultant community and larger employers have been vocal to health plans about the urgent need to present this type of meaningful consumer health information. Most health plans are attempting to meet this strong market demand, but each health plan is going about the process in its own unique manner.

Testimony by Douglas G. Cave, Ph.D., MPH
President, CCGroup LLC

2. Overview of CCGroup

About CCGroup

CCGroup believes market efficiency and effectiveness will be improved once practitioner and hospital efficiency and effectiveness are accurately and reliability measured, practitioners are informed of their performance results, and patients have knowledge of — and are directed to — the most efficient and effective practicing providers. Moreover, transparency of practitioner practice patterns to the consumer (patient) will continue to grow. Practitioner pay-for-performance programs will prevail as a key mechanism to improve practitioner performance. Finally, we believe market efficiency and effectiveness will be improved once patients with unstable chronic medical conditions are accurately identified and properly managed.

We began measuring the efficiency and effectiveness of practitioners' practice patterns in 1990 — and published our first article in 1992. Since this time, we have worked with many leading HMOs, insurance companies, employers, physician-hospital organizations, and third party administrators. Today, CCGroup works with some of the largest health insurance companies in the country.

Efficiency and Effectiveness Measurement Software

The CCGroup Marketbasket System™ compares physician efficiency and effectiveness to a specialty-specific peer group using a standardized set of prevalent medical condition episodes with the intent of minimizing the influence of patient case mix (or health status) differences and methodology statistical errors. The efficiency and effectiveness of physician groups may also be compared.

Derivations of the CCGroup Marketbasket System™ have been validated, published, and tested on over 48 million members and 398,000 physicians in health plans, TPAs, ASOs, Medicare, and Medicaid, with over a decade of research and development.
The CCGroup Marketbasket System™ is made up of four key components:

- **The Cave Grouper™**. The Cave Grouper™ groups over 14,000 unique ICD.9 diagnosis codes into 526 meaningful medical conditions. The 526 medical conditions in the Cave Grouper™ account for 100% of all medical conditions and expenditures as identified by ICD.9 medical condition diagnostic codes.

- **CCGroup EfficiencyCare™ Module (physician efficiency measurement software)**. The CCGroup EfficiencyCare™ Module takes the output from the Cave Grouper™ and develops specialty-specific physician efficiency scores that compare individual physician efficiency (or physician group efficiency) against the efficiency of a peer group of interest.

- **CCGroup EffectivenessCare™ (physician effectiveness or quality measurement software).** The CCGroup EffectivenessCare™ Module takes the output from the Cave Grouper™ and develops specialty-specific physician effectiveness (i.e., process of care quality) scores that compare individual physician effectiveness (or physician group

effectiveness) against the effectiveness of a peer group of interest. There are over 100 effectiveness metrics derived from national expert resources.

- **CCGroup MediScreen™ (high-cost patient predictive model and patient health-risk stratification software).** The CCGroup MediScreen™ Module takes the output from the Cave Grouper™ and develops accurate and reliable scores for predicting the chance of being a high-cost patient next year. Moreover, the CCGroup MediScreen Module™ allows the user to health-risk stratify patients across all medical conditions.

The purpose of the CCGroup Marketbasket System™ methods and software system is to compare physician efficiency and effectiveness to a specialty-specific peer group, using a standardized set of prevalent medical condition episodes, with the intent of minimizing the influence of patient case mix and methodology statistical errors.

3. Episodes of Care for Measuring Practitioner Effectiveness and Efficiency

In measuring physician efficiency and effectiveness, the health insurance industry has turned to using medical condition episodes of care. The purpose of episode of care groupers is to form longitudinal episodes of care for a patient using medical claims data. A longitudinal episode of care is defined as all services linked together that are used to treat a patient's medical condition within a specified period of time—including all ambulatory, outpatient, inpatient, and prescription drug experience. This linkage allows examination of a physician's (or several physicians') global patterns of treatment for a specific patient with a specific condition, such as diabetes and arthritis. The longitudinal episode of care may also be used in patient disease management, patient health promotion and wellness, and many other healthcare programs.

For acute conditions (e.g., upper respiratory infections), the patient's episode duration is specified by a time period, or window period, that defines the maximum number of days between contact with a provider for which follow-up care is still reasonable. Each of the acute medical conditions has its unique window period. If the date of service for a patient's episode is separated by a longer period than the window period, the latest date of service is considered the start date for a new condition-specific episode of care.

For example, the window period for upper respiratory infections may be 60 days. Assume that a patient had three treatments in January and two in the following August. Because the treatments in the series were separated by more than 60 days, these would be two episodes of care.

For chronic conditions, once the episode starts, the episode continues on. By definition, a chronic episode does not stop during a defined study period. However, for the practitioner efficiency and effectiveness analysis, we need to ensure a constant and defined number of days for each condition-specific episode. This number of days generally is 180 days or 365 days. For example, we may examine the initial 180 day period after the first diagnosis of the medical condition occurs being the study period.

4. Law of Low Episode Numbers

The Law of Low Episode Numbers states that no matter what health plan membership base is examined, about 75% of those practitioners that can be measured in a health plan network will have less than or equal to 50 episodes assigned to each practitioner. The other 25% of network practitioners may have greater than 50 episodes assigned to each practitioner.

Therefore, the majority of practitioners in a health plan's network have a low volume of episodes. The Law of Low Episodes Numbers means that we have to pay very close attention to potential efficiency and effectiveness measurement errors. Otherwise, an employed methodology will provide practitioner efficiency and effectiveness scores, but these scores may not be accurate or reliable (i.e., stable).

The Law of Low Episode Numbers also applies to the Centers for Medicare and Medicaid Services (CMS) Part A and Part B claims databases (the 100% non-sample files). A strong advantage of using the CMS databases is that we can measure the efficiency and effectiveness of a significantly greater number of practitioners:

- For instance, in a given geographic region, a health plan's claims data may be able to measure the efficiency and effectiveness of 60% of the health plan's network physicians (which equates to about 30% of all practicing physicians in the region because not all physicians are under contract with the health plan). Of these 60% of network physicians, about 75% will have a lower volume of assigned episodes of care (typically less than 50 episodes) for efficiency and effectiveness measurement.

- In this same geographic region, the CMS claims data may be able to measure the efficiency and effectiveness of 80% of "all" (not just a health plan's network) practicing physicians. Of these 80% of physicians, about 70% will have a lower volume of assigned episodes of care for efficiency and effectiveness measurement.

These findings show that the Law of Low Episode Numbers also will apply in using the CMS claims databases.

Consequently, we need to always consider the Law of Low Episode Numbers when developing and implementing methodologies to accurately and reliably measure practitioner efficiency and effectiveness. Otherwise, any consumer health information based on practitioner efficiency and effectiveness measurement will not produce healthcare improvements. The Law of Low Episode Numbers does not disappear when using very large claims-based databases.

5. Examples of Practitioner Measurement Accuracy and Reliability Issues

One of the most frequent questions being asked by health insurance companies is, "Why do my physician efficiency and effectiveness scores change between time periods, or when small changes are made to my current methodology?" This question brings into light some of the difficulties with accurately and reliably measuring practitioner efficiency and effectiveness.

I present here summarized results from three different studies that illustrate the lack of agreement and reliability within and between measurement systems. Then, I present three of the top methodology reasons that lead to this lack of agreement and reliability. These methodology issues are particularly pronounced with the Law of Low Episode Numbers.

Health Plan Study on Reliability of Scores Over Time

The first study was performed by a large, national BlueCross BlueShield health plan (results presented at a 2005 managed care conference). This study was designed to examine the reliability of physician efficiency results from time period T1 (2002-2003) to time period T2 (updated 6 months of claims data added to the 2002-2003 T1 claims data), whereby the same exact episode-based physician efficiency methodology was employed in T1 and T2.

The following is a summary of key methodology elements:

- To be included in the analysis, a physician needed to have 30 or more episodes in both T1 and T2. There were 11,951 physicians that met this study criterion.

- T1 was January 1, 2002 – December 31, 2003. Then, six months of new claims data was added to the T1 claims data, and the initial 6 months of claims data in T1 was removed from the study. This became the T2 claims data set. Therefore, the T2 claims dataset had 25% of new claims data added to it; 75% of the T1 claims data remained exactly the same with the T2 claims data.

- In this study, "efficient" physicians received a score of 0.95 or less (whereby the peer group comparator was a 1.00). Physicians practicing of or around the "peer group" efficiency received a score of 0.96 – 1.04. "Inefficient" physicians received a score of 1.05 or more.

The following table summarizes the results from this health plan study:

- In the shaded diagonal area, good correlation of physician efficiency scores would have resulted in 100% of the physicians being in the yellow highlighted areas of the table (or perfect correlation of scores between T1 and T2). Instead, we observe that 78% of the physicians are in the yellow highlighted areas.

- Moreover, we observe that only 67% of the physicians ranked an "inefficient" in T1 were also ranked as "inefficient" in T2. We determine this 67% correlation between T1 to T2 by dividing the 21% (which is the percent of physicians ranked inefficient in both T1 and T2) by the 32% (which is the percent of physicians ranked "inefficient" in T1) in the below table.

- Yet, these inefficient physicians are the very physicians we want to accurately identify for the implementation of and success for a consumer health information initiative.

T2 Analysis with 6 Months New Data

	Score Type	Efficient or Peer Group	Inefficient	Total
T1 Original Analysis	Efficient or Peer Group	57%	11%	68%
	Inefficient	11%	21%	32%
	Total	25%	25%	100%

Conclusions: The study results showed that the utilized episode-based efficiency methodology resulted in fairly unstable year-to-year practitioner efficiency scores. Furthermore, this instability occurred when 75% of the claims data remained the same between T1 and T2. We expect the results to be substantially worse with no overlap in claims data between T1 and T2.

There appear to be two main methodology issues for this low reliability in physician efficiency scores over time (which will be detailed in Section 6). These issues appear to be more prominent with the Law of Low Episode Numbers:

- Issue #1: Inadequate patient case-mix adjustment
- Issue #2: Standard deviation statistical bias.

Academic Study on Accuracy of Scores in One Study Time Period

The second study was performed by Thomas, Grazier, and Ward (William Thomas, Kyle Grazier, Kathleen Ward. A Comparative Evaluation of Risk-Adjustment Methodologies for Profiling Physician Practice Efficiency. A report to the Robert Wood Johnson Foundation, September 2002; work recently published in Health Services Research, August 2004, Economic Profiling of PCPs: Consistency Among Risk-Adjusted Measures.) This study was designed to examine the inter-rater agreement between six physician efficiency methodologies in measuring physician efficiency within one time period (T1). Some of the methodologies were not episode-based, but instead, were "overall charges per member" based.

In summary, the study applied about a 100,000 member claims-based database (time T1) to six efficiency measurement systems. The thought was to observe how well these systems agreed with each other in ranking a physician as inefficient:

- The results showed that when one system ranked a physician as inefficient, sometimes only one of the other five systems ranked that same physician as inefficient.

- After some statistical bias corrections, the authors found that sometimes two of the other physician efficiency measurement systems ranked that same physician as inefficient.

- The results showed generally 30% agreement or less across measurement systems in ranking the same physician as inefficient.

- Yet, these inefficient physicians are the very physicians we want to accurately identify for the implementation of and success for a consumer health information initiative.

Conclusions: The study results showed that the employed efficiency methodologies resulted in low agreement between systems in ranking a physician as inefficient. Thomas *et al* concluded that there may be at least two methodology issues for this low agreement in physician efficiency scores over time (which will be detailed in Section 6). These issues appear to be more prominent with the Law of Low Episode Numbers.

- Issue #1: Inadequate patient case-mix adjustment
- Issue #2: Standard deviation statistical bias.

CCGroup Study on Accuracy and Reliability of Scores

The third study was performed by CCGroup in working with a large health plan's claims data. This study was designed to examine the agreement and reliability (both) of two physician efficiency measurement systems – both using a medical condition, episode-based approach. The first system was the CCGroup Marketbasket System method and software. The second system was the health plan's internal efficiency measurement system.

The CCGroup Marketbasket System adjusts for the two main methodology issues resulting in the low agreement and low reliability of physician efficiency scores: (1) inadequate patient case-mix adjustment; and (2) standard deviation statistical bias. The second system does not adjust for these two issues.

In this study, CCGroup initially examined the inter-rater agreement between the two physician efficiency methodologies in measuring physician efficiency within one time period (T1 = calendar year 2003). The following is a summary of key comparison elements:

- To be included in the analysis, a physician needed to have 35 or more episodes present in the time period T1 under both physician efficiency methodologies. We examined different specialty types. However, only the family and general practitioner (FP/GPs) results are presented here. There were 227 FP/GPs that met the minimum episode criterion.

- After receiving an efficiency score, physicians were separated into quartiles (1, 2, 3, and 4). Quartile 1 physicians used fewer medical resources to treat the patient episodes-of-care as compared to their physician peer group. Quartile 2 and Quartile 3 physicians were the next quartiles of physicians in terms of the amount of resources used to treat the patient episodes-of-care. Quartile 4 physicians used greater medical resources to treat the patient episodes-of-care as compared to the physician peer group.

- If there was perfect agreement between the two efficiency measurement systems, then we would expect results as found in the following table. Note that 100% of physicians should fall along the diagonal because the Quartile 1, Quartile 2, Quartile 3, and Quartile 4 physicians should be exactly the same between the two systems.

		CCGroup Marketbasket System				
	Quartile	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
	Q1	25%	0%	0%	0%	25%
Health Plan's Internal Efficiency Measurement System	**Q2**	0%	25%	0%	0%	25%
	Q3	0%	0%	25%	0%	25%
	Q4	0%	0%	0%	25%	25%
	Total	25%	25%	25%	25%	100%

N = 227 Family/General Practitioners with >=35 episodes of care in both efficiency measurement systems.

The next table summarizes the results from this agreement study:

- We observe that only 41% of the physicians are in the yellow highlighted diagonal area – and not 100%.

- As importantly, we observe that only 11% of the most inefficient physicians (Quartile 4) matched between the two systems – and not the desired 25%.

- Furthermore, 23% of the physicians are two or more quartiles away between the two measurement systems.

	CCGroup Marketbasket System				
	Quartile	Q1	Q2	Q3	Q4	Total
Health Plan's Internal Efficiency Measurement System	Q1	12%	7%	3%	3%	25%
	Q2	5%	9%	6%	5%	25%
	Q3	5%	5%	9%	6%	25%
	Q4	3%	4%	7%	11%	25%
	Total	25%	25%	25%	25%	100%

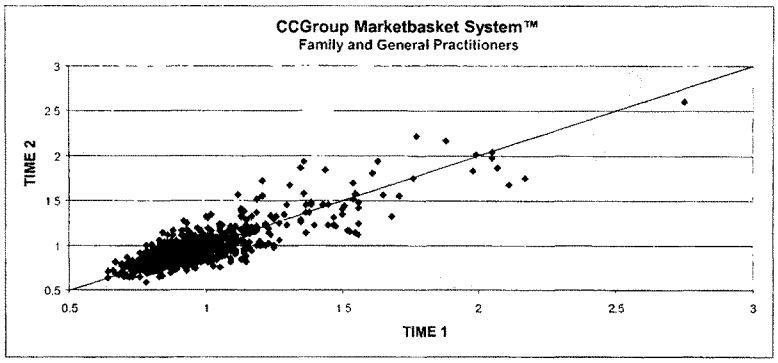
N = 227 Family/General Practitioners with >=35 episodes of care in both efficiency measurement systems.

Conclusions: The study results showed that the employed efficiency methodologies resulted in low agreement between the two systems in ranking a physician as inefficient. As with the other two studies defined above, the health plan's internal efficiency measurement system maintained the two main methodology issues: (1) inadequate patient case-mix adjustment; and (2) standard deviation statistical bias. The CCGroup Marketbasket System adjusted for these two main methodology issues.

The next step in this study was to examine the reliability of physician efficiency scores from time period T1 and T2. For the CCGroup Marketbasket System, T1 equaled the 2002 calendar year, and T2 equaled the 2003 calendar year. There was no overlapping claims data between T1 and T2. For the health plan's internal efficiency measurement system, T1 equaled the two year period 2002-2003, and T2 equaled the two year period 2003-2004. Thus, about 50% of the claims data remained the same between T1 and T2.

The reason for performing the reliability analysis is as follows. We wanted to determine if one of the systems has a better reliability of physician efficiency scores between T1 and T2. If yes, then this system may be considered to be more accurate and more reliable then the other system. However, if both systems have the same reliability between T1 and T2, then we cannot judge that correcting for the two main methodology issues has any relevance to improving the accuracy and reliability of efficiency scoring.

CCGroup employed the Pearson's correlation coefficient (r) to determine the agreement between physician efficiency scores for the two measurement systems. The correlation coefficient varies between 0.00 and 1.00. The closer the score is to 1.00, the stronger the agreement between T1 and T2 (or the stronger the correlation).



The results showed the following:

- The T1 and T2 correlation results for the FP/GPs was 0.88 using the CCGroup Marketbasket System methodology. (Refer to the inserted diagram above.) This is a strong indicator that the physician efficiency scores are accurate and reliable. For the other tested specialties, the T1 and T2 results showed a correlation of between 0.70 and 0.95 – with the average specialty-specific correlation being about 0.79.

- The T1 and T2 correlation results for the FP/GPs was 0.42 using the health plan's internal physician efficiency measurement system. These results indicate that the physician efficiency scores are not very accurate or reliable. Many of the other tested specialties had T1 and T2 correlation results in a similar correlation (r) range – with the average specialty-specific correlation being about 0.39.

Conclusions: The results indicated that the CCGroup Marketbasket System methodology resulted in fairly stable year-to-year physician efficiency results ($r = 0.88$). The CCGroup Marketbasket System did adjust for the two main methodology measurement issues. The health plan's system, which maintained the two main methodology measurement issues, had a significantly lower year-to-year correlation. This finding indicates that correcting for the two main methodology issues does have a positive impact on physician efficiency score accuracy and reliability.

6. Main Methodology Errors/Issues with Respect to Practitioner Efficiency and Effectiveness Measurement, and How to Correct for These Errors/Issues

An accurate and reliable practitioner efficiency and effectiveness methodology needs to address the main sources of accuracy and reliability error. This error reduction is important to consider – if market efficiency and effectiveness are to be improved through consumer health information. Otherwise, consumers may be inadvertently guided to the less efficient and less effective practitioners, when the actual objective of consumer health information is to direct consumers to the more efficient and more effective practitioners.

I discuss here three of the most important measurement methodology issues/errors, and provide one example of how to correct for each measurement methodology issue/error. There may be additional ways to correct for each measurement methodology issue/error. The three issues are the following:

- Issue #1: Inadequate patient case-mix adjustment
- Issue #2: Inadequate standard deviation statistical bias adjustment
- Issue #3: Inadequate episode of care severity of illness adjustment.

Issue #1: Inadequate Patient Case-Mix Adjustment

Many practitioner efficiency and effectiveness methodologies continue to examine "services per 1,000 members" or "all non-outlier episodes of care" treated by a physician. These approaches probably add the most to efficiency measurement error.

These methodologies attempt to adjust "services per 1,000 members" or "all episodes of care" treated by a physician by age and gender—and then compare one practitioner's utilization pattern to a peer group average. However, age and gender explain less than 5% of the variance in a patient's medical expenditures. This means that over 95% of the variance is unexplained, and may be attributed to differences in patient health status (or case mix). Patient health status and patient case mix are used inter-changeably in this Section 6.

Some methodologies adjust "services per 1,000 members" or "all non-outlier episodes of care" based on specific ICD.9 (or diagnosis) algorithms that measure expected resource intensity. The idea is that a patient's diagnosis codes will provide more predictive power than age/gender alone. However, the most predictive of the published and marketed models explain only 20% to 30% of the variance in a patient's medical expenditures. This means that 70% or more of the variance continues to be unexplained, and may be attributed to differences in patient health status.

The best predictive models on the market today explain only 20% to 30% of the variance in a patient's medical expenditures. (This includes DxCGs, ACGs, ERGs, and other adjustment tools.) This means that 70% or more of the variance is unexplained, and may be attributed to differences in patient health status. Consequently, including all—or almost all—patients in practitioner efficiency measurement will result in unstable and inaccurate ratings.

This is a particular problem because of the "Law of Low Episode Numbers" in that each physician generally has only 20-50 assigned episodes (refer to Section 4). With the Law of Low Episode Numbers, we need a case-mix adjustment that explains about 70% to 90% of the variance in a patient's medical expenditures – and claims data is just not sensitive enough to obtain this predictive power.

In addition, practitioners often criticize the "services per 1,000 members" and "all episodes of care" methodologies for not appropriately adjusting for differences in patient health status — rightly stating that their patients may be "sicker."

What does this mean with respect to measuring individual physician efficiency? If all claim line items (CLIs) and/or episodes of care (tracked to a physician) are used in the efficiency or effectiveness analysis, then up to 70% of the observed utilization difference between physicians may be attributed to patient health status differences. Therefore, you are not measuring individual physician efficiency differences, but patient health status differences.

This weakness in current case-mix adjustment tools means that we cannot examine all CLIs or patient episodes of care treated by a physician. Instead, an isolated set of more prevalent medical conditions, stratified by severity of illness (SOI) level, needs to be examined across physicians of a similar specialty type. In effect, the idea is to eliminate patient health status (or case mix) background noise by isolating down what medical condition-specific episodes are examined in a practitioner efficiency and effectiveness analysis.

Yet, many existing physician efficiency methodologies continue to examine all non-outlier episodes of care assigned to a physician:

- An actual weighted average episode charge is calculated.
- Then, an expected weighted average episode charge is calculated. The actual weighted average episode charge is compared to the expected weighted average charge — and an efficiency score is calculated.
- Finally, this efficiency score is adjusted by DxCGs, ACGs, or another case-mix index. The problem is that these indices are all less than 30% predictive. With the Law of Low Episode

Numbers being the norm for a physician, these tools are not adequate to perform the case mix adjustment.

- Consequently, those physicians with a higher case-mix of patients may continue to be rated as inefficient as compared to a peer group.

One Way to Minimize Patient Case Mix Adjustment Error?

A key to improving the accuracy and reliability of efficiency and effectiveness measurement is to remove the confounding effect of patient case mix (or health status) differences between practitioners. CCGroup uses marketbaskets of the most common medical conditions for each specialty type (i.e., CCGroup Marketbasket System™). The following is a portion of the cardiology marketbasket. (Not all medical conditions are included in this example. SOI in the table means severity-of-illness.)

4. CARDIOLOGY

Order Number	Medical Condition Number	SOI Level	Medical Condition Short Description	Market-basket Weight
1	10.13	1	Ischemic heart disease	0.150
2	10.13	2	Ischemic heart disease	0.050
3	17.4	1	Diabetes with circulatory	0.050
4	17.4	2	Diabetes with circulatory	0.050
5	10.21	1	Acute myocardial infrct, active	0.075
8	10.5	1	Supraventricular arrhythmias	0.050
9	10.4	1	Ventricular arrhythmias	0.050
10	10.1	1	Abnormal heart beat	0.050
12	36.19	1	Chest pain	0.050
13	10.10	1	Conduction disorders	0.050
14	10.16	1	Congestive heart failure	0.050
15	10.17	1	Cardiomyopathy	0.050
18	10.8	1	Angina pectoris	0.025
19	10.12	1	Rheumatic heart disease	0.025
20	36.18	1	Dyspnea	0.025
			For all 20 medical conditions	1.000

The Marketbasket System examines only common medical condition episodes for a particular specialty type. This results in a fair apples-to-apples comparison of each practitioner's practice patterns. Under this approach, patient case mix (or health status) differences are significantly controlled as compared to examining all episodes of care assigned to a physician, and then applying a commercially available case-mix adjustment tool. Therefore, the variation in practice patterns is related to actual practitioner efficiency, and not to sicker or healthier patients.

Medical conditions are placed in a specialty-specific marketbasket if they are a prevalent part of the particular specialty type's practice — generally accounting for 75% to 90% of the episodes

treated by that specialty type. The medical conditions are selected for the marketbasket in work effort order—a function of the prevalence rate and average medical condition charges.

> Medical conditions are placed in a specialty-specific marketbasket if they are a prevalent part of the particular specialty type's practice—generally accounting for 75% to 90% of the episodes treated by that specialty type.
>
> Therefore, the specialty-specific marketbaskets comprise a large percent of a PCP's and specialist's practice and are very representative of the patients treated in their given practice area.

Summary to Patient Case-Mix Adjustment

A solution to controlling for episode patient case-mix in physician efficiency and effectiveness analysis is not the following. You should not assign all non-outlier episodes to a physician and then apply a case-mix adjustment tool, such as DxCGs or ACGs, to control for the significant remaining differences in episode case mix. With the "Law of Low Episode Numbers" per physician, all available patient case-mix adjustment tools are not sensitive enough, as the health services literature well defines that up to 70% of the patient case-mix differences may remain.

Instead, the Marketbasket System builds a marketbasket of prevalent medical conditions, and examines a consistent set of episodes by severity-of-illness level from these medical conditions. In effect, this is the CCGroup case-mix adjustment tool. This technique removes patient case mix background noise that cannot be adjusted with any case mix tool. Another way to think about this is that CCGroup has developed a more robust outlier episode analysis whereby only a defined large grouping of condition-specific episodes are examined for a physician as compared to the peer group.

Issue #2: Inadequate Standard Deviation Statistical Bias Adjustment

Practitioners of a specialty type generally treat similar medical conditions. However, for a given health plan and with the Law of Low Episode Numbers, many specialists (of a given specialty type) will have a significantly different set of condition-specific episodes with a marketbasket of conditions as compared to the other specialists.

For example, one cardiologist's assigned episodes may be a quite homogeneous set of routine hypertension episodes. On the other hand, another cardiologist's assigned episodes may be the severity-of-illness two (SOI-2) ischemic heart disease patients. This second cardiologist has a patient population that is very "heterogeneous" as compared to the first cardiologist. With the Law of Low Episode Numbers, we know the second cardiologist will have a significantly greater standard deviation around this cardiologist's mean episode charge.

Health services research shows us that there may be a significant statistical bias present when two cardiologists have the chance for a different standard deviation around their mean episode charge. As I will demonstrate below, this statistical bias disadvantages those cardiologists (and any other practicing PCP or specialist) that have an assigned episode composition of a higher case mix. These physicians with a higher case mix episode composition have a greater probability of being rated as inefficient, as compared to physicians that have an assigned episode composition of a lower case mix.

Statistical Bias Results From Direct Standardization

Many efficiency methodologies examine a practitioner's actual episode composition as compared to a specialty-specific peer group —and then compare the efficiency of that practitioner to another practitioner. This is called "direct standardization." Under direct standardization, each physician's episode distribution is applied to determine that physician's observed and expected efficiency results.

However, in using direct standardization, the differences in each practitioner's patient case-mix composition results in differences in variability (i.e., the standard deviation) around a practitioner's average episode treatment charges. This variability is not due to the efficiency or inefficiency of a practitioner, but instead results because longer and more resource-intensive medical conditions generally require more services and, therefore, have more potential variability around the average (or mean) episode treatment charges. Moreover, more resource-intensive conditions generally have a lower prevalence rate, also contributing to the variability, or heterogeneity, around the average episode treatment charges.

For example, easier-to-treat upper respiratory infection (URI) episodes may have the following mean and standard deviation (with outlier episodes removed): $185 ± $65. Here, the standard deviation around the mean is not large—and is 0.35 the size of the mean (i.e., 65 / 185 = 0.35).

However, easier-to-treat pediatric asthma episodes may have the following mean and standard deviation (with outlier episodes removed): $1,650 ± $850. Here, the standard deviation around the mean is larger than for URI episodes—and is 0.52 the size of the mean (i.e., 850 / 1,650 = 0.52).

The variation difference between the two conditions is 49% greater for asthma than URIs [(0.52 - 0.35) / 0.35]. This variation difference occurs for two reasons: (1) more resource-intensive conditions require more services to treat; and (2) there generally are a small number of episodes available to examine in a given practitioner efficiency study as compared to the universe of episodes that could actually be studied—and a smaller number of episodes results in a higher chance for variability around the mean. (On the other hand, this variation is not the result of practitioner practice pattern differences.)

If the statistically based variability around the mean is not corrected, then substantial error may enter into the practitioner efficiency measurement equation. Consequently, the final practitioner efficiency score differences may be attributed to the statistical condition-specific variability around the mean episode charge (due only to the case-mix of episodes treated).

We showed above that the variation difference may be 50% or more (around a condition-specific mean episode value). Logically, then, if we examine all episodes treated by practitioners and calculate efficiency scores, there has to be some statistical bias present. A significant statistical bias generally is present:

- Using a more traditional episode-based efficiency measurement methodology, lower-episode-volume practitioners treating patients with a higher case-mix index score are more likely to receive an inefficient ranking as compared to lower-episode-volume practitioners treating patients with a lower case-mix index score.

- This finding results because a physician with higher case-mix patients treats episodes having more variability (i.e., a greater standard deviation) around average episode treatment charges. With a low volume of episodes (most often the norm, and not the exception), this physician needs only a few higher-cost episodes then the peer group average to make his/her treatment pattern appear significantly higher than the peer group comparator.

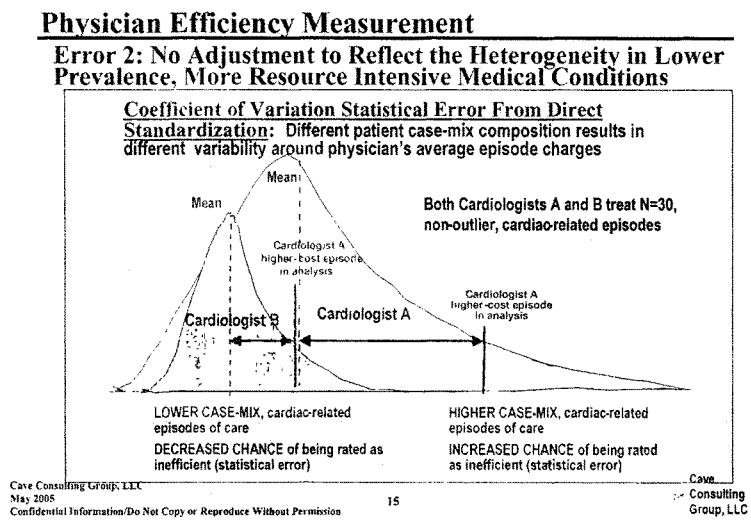
- However, a physician with lower case-mix patients treats episodes having less variability around average episode treatment charges. With a low volume of episodes, this physician's practice pattern will not be as influenced by one or two higher-cost episodes as compared to the peer group average. Consequently, his/her practice pattern does not appear (as often) significantly higher than the peer group comparator.

Using "direct standardization," a correlation analysis shows that lower-volume practitioners with a higher patient case-mix index for episodes treated are more likely to receive an inefficient score as compared to practitioners with a lower patient case-mix index.

Comparing Results From Direct Standardization and Indirect Standardization

The following graphical insert shows the medical condition episodes treated by Physician A and Physician B (both cardiologists). Notice that Physician A treats a higher case mix episode composition than Physician B. Also, notice the significant variance around Physician A's mean episode charges — attributed to Physician A's higher case mix patient population.

Next, we examine the above Physician A's actual weighted average episodes of care using "direct standardization and "indirect standardization". Whereby direct standardization uses each physician's episode distribution to comprise observed and expected efficiency results, indirect standardization uses an outside standard set of weights that is applied to comprise observe and expected efficiency results. This set of weights is applied in the same exact manner for all physicians of a given specialty type in determining the weighted average episode charges. Most often, the indirect standardization set of weights is formulated using the peer group's episode distribution.



Physician A's actual results using direct standardization are found in the top table immediately below. Physician A's actual results using indirect standardization are found in the bottom table immediately below. The example is fairly self-evident:

- You will observe that by using direct standardization, the cardiologist receives an efficiency score of 1.29. However, we will determine that this score is not accurate or reliable, and is based on only one SOI-2 episode of ischemic heart disease – which has significant heterogeneity.

- On the other hand, you will observe that by using indirect standardization, this same cardiologist's efficiency score is 1.04. This score is more accurate and more reliable. Indirect standardization controls for the significant heterogeneity found in the one non-outlier episode of SOI-2 ischemic heart disease assigned to the cardiologist.

- Note that only Column 2 in the below tables changes, which is the weights used to comprise the weighted average episode charges across all assigned episodes of care.

Cardiologist A's Efficiency Results (Patient Case-Mix Index = 1.25)

DIRECT STANDARDIZATION: PHYSICIAN A
Efficiency Score = 1.29 ($4,491 / $3,473) Non-Outlier Episodes = 32 Episodes
One (1) Ischemic Heart Disease SOI-2 Patient = $30,000 *Case Mix Index = 1.25*

SOI Level (1)	Medical Condition Short Description (2)	Physn A's *Actual* Episode Distribution (3)	Physn A's *Actual* Episode Average Charges (4)	Physn A's *Actual* Weighted Average Charges (5) = (4)x(3)	Peer Group Episode Average Charges (6)	Physn A's *Expected* Weighted Average Charges (7) = (6)x(3)
1	Ischemic heart disease	0.300	$2,450	$735	$2,550	$765
2	Ischemic heart disease	0.125	$14,500	$1,813	$5,500	$688
1	Diabetes with circulatory	0.200	$3,950	$790	$4,100	$820
2	Diabetes with circulatory	0.125	$8,250	$1,031	$8,500	$1,063
1	Hypertension	0.250	$490	$123	$550	$138
---	**Overall Sum**	**1.000**	---	**$4,491**	---	**$3,473**

INDIRECT STANDARDIZATION: PHYSICIAN A
Efficiency Score = 1.04 ($2,962 / $2,846) Non-Outlier Episodes = 32 Episodes
One (1) Ischemic Heart Disease SOI-2 Patient = $30,000 *Case Mix Index = 1.25*

SOI Level (1)	Medical Condition Short Description (2)	Indirect Standardization Episode Distribution (3)	Physn A's *Actual* Episode Average Charges (4)	Physn A's *Actual* Weighted Average Charges (5) = (4)x(3)	Peer Group Episode Average Charges (6)	Physn A's *Expected* Weighted Average Charges (7) = (6)x(3)
1	Ischemic heart disease	0.300	$2,450	$735	$2,550	$765
2	Ischemic heart disease	**0.025**	$14,500	$363	$5,500	$138
1	Diabetes with circulatory	**0.275**	$3,950	$1,086	$4,100	$1,128
2	Diabetes with circulatory	**0.075**	$8,250	$619	$8,500	$638
1	Hypertension	**0.325**	$490	$159	$550	$179
---	**Overall Sum**	**1.000**	---	**$2,962**	---	**$2,846**

CCGroup's approach to correct for the differences in variability around average episode charges examines a consistent set of medical conditions for each specialty type. The methodology uses indirect standardization for weighting together the episodes within the core group of medical conditions in a consistent fashion — thereby allowing each practitioner's efficiency performance to be more accurately compared to one another. That is, each practitioner now has the same chance for variability around his/her average episode treatment charges. The same standardized weights are applied, regardless of each practitioner's actual episode composition.

In effect, to eliminate, or greatly reduce, the variation statistical bias, each physician must have the same opportunity for the same heterogeneity (or variation) around his/her weighted average episode charges. As we will describe below, the Marketbasket System method with "indirect standardization" allows each physician of a given specialty type to have the opportunity for the same variation around his/her weighted average episode charges:

- The Marketbasket System efficiency measurement method is as follows. Each medical condition in a specialty-specific marketbasket is assigned a weight factor that reflects the importance or relevance of that medical condition to the marketbasket. The weight factors are used to compute the overall marketbasket weighted average value of a charge or utilization service category — across medical conditions — for a peer group or a physician ("indirect standardization"). The sum of the weight factors in a marketbasket equals 1.00.

- Therefore, regardless of a physician's (or physician group's) actual episode work effort, we standardize each physician's (or physician group's) actual work effort to a static set of weight factors – most often the peer group's episode composition. These weight factors represent the work effort that an average specialty-specific physician treats in medical practice — where work effort is a function of the prevalence rate and the average charges to treat an episode of care.

> Indirect standardization allows each physician (or physician group) of a given specialty type to have the "same opportunity" for the "same variation" around his/her weighted average episode charges.

Refer to the standardized weights in the last column of the following table, which shows many of CCGroup's copyrighted and patent-pending Family/General Practitioner Marketbasket medical conditions.

1. FAMILY AND GENERAL PRACTITIONERS

Order Number	Medical Condition Number	SOI Level	Medical Condition Short Description	Market-basket Weight
1	10 2	1	Hypertension	0.100
2	31.9	1	Low back pain	0.050
3	31.8	1	Cervical spine pain	0.025
11	9.7	1	Pneumonia	0.050
12	13.13	1	Noninfect gastroent & colitis	0.050
13	9.11	1	Asthma	0.025
14	10.13	1	Ischemic heart disease	0.025
15	36.19	1	Chest pain	0.025
16	13.6	1	Gastroesophageal reflux	0.025
17	13.5	1	Gastritis and duodenitis	0.025
18	19.4	1	Disorders of lipid metabolism	0.025
19	16.3	1	Hypothyroidism	0.025
20	22.3	1	Urinary tract infections	0.025
21	34.17	1	Nonpsychotic depression	0.025
27	36.17	1	Abdominal pain	0.020
28	29.6	1	Skin keratoses	0.015
29	29.1	1	Ill-defined integument sym	0.015
30	36.15	1	General presenting symptoms	0.015
			For All 30 Medical Conditions	1.000

Summary to Standard Deviation Statistical Bias Adjustment

A solution to controlling for standard deviation statistical bias is to employ "indirect standardization" when calculating a practitioner's average weighted episode charges. Otherwise, a statistical bias will remain because of the "Law of Low Episode Numbers" and the fact that physicians of a particular specialty type with a higher episode case mix have significantly more heterogeneity (or a larger standard deviation) around their weighted average episode charges. This heterogeneity causes a standard deviation statistical bias, which unfairly scores those physicians as inefficient that have a higher episode case mix.

Issue #3: Inadequate Episode of Care Severity-of-Illness adjustment

Severity-of-illness is defined as the probability of loss of function due to a specific medical condition. Some claims-based episode groupers and methods do not have a severity-of-illness index by medical condition. This issue is the third most important factor leading to efficiency measurement error because the episodes for a given medical condition have significant heterogeneity due to patient severity-of-illness. Consequently, the end result may be practitioner efficiency differences that are attributed to inaccurate episode severity-of-illness adjustment—and not to practitioner practice patterns variation.

Moreover, some claims-based episode groupers stratify formulated episodes for a medical condition by the presence or absence of a specific surgery or service (e.g., knee derangement with and without surgery; ischemic heart disease with and without heart catheterization). The

reason for performing this stratification is to reduce episode heterogeneity for a medical condition. In effect, the stratification serves as a sort of severity-of-illness adjustment.

However, the presence of surgery or a high-cost service results is not necessarily a reflection of differences in severity-of-illness, but often a difference in practice patterns. Stratification based on the presence of surgery or a procedure may result in at least two practitioner efficiency measurement errors:

- Obscure the practice pattern variation we need to examine to determine practitioner efficiency and effectiveness differences; and

- Divide episodes unnecessarily into smaller episode groups whereby practitioners may not have enough episodes to examine in any one smaller group.

Consequently, the stratified episodes based on surgery, or a high-cost event, need to be recombined for accurate practitioner efficiency and effectiveness measurement.

The following table shows an example of a procedure-based grouper (based on searching for specific CPT-4 and/or HCPCS codes to stratify episodes of care by medical condition):

- The columns on the right-hand side of the table show that this orthopedist had 100 non-outlier episodes of low back pain. Seventy (70) of these episodes had some type of procedure.

- When we examine those 70 episodes with a procedure, the results show that the physician's observed average charge per episode was $2,765. The physician's expected average charge per episode (based on the peer group of orthopedist results) was $3,568. Therefore, this orthopedist's efficiency score is 0.77 (or $2,765 divided by $3,568) – or the orthopedist appears to be a very efficient physician.

- However, this is contradictory to what we expect because the physician performed a procedure on many low back pain patients. The reason is as follows. Once you stratify based on a procedure, you can only study the practice pattern within those low back pain episodes that had a procedure. In this example, the orthopedist performed a procedure on many marginal patients (i.e., those that may not have needed a procedure). Consequently, the healthier patients with a procedure resulted in the orthopedist having a significantly lower average charge than the peer group. The result is that this orthopedist appears efficient.

This result is not accurate or reliable, and shows why an episode-of-care grouper cannot be based on the presence or absence of a procedure. Otherwise, the consumer may be inadvertently guided to the less efficient and less effective practitioners, when the actual objective of consumer health information is to direct consumers to the more efficient and more effective practitioners.

Area of Interest	Diagnosis Code-Based Grouper (Based on ICD.9 Codes)			Procedure Code-Based Grouper (Based on CPT-4 Codes)	
	Assume an Orthopedist has 100 episodes of Low Back Pain, and 70 of these episodes have a surgical event present (and, therefore, 30 episodes do not have a surgical event present).*				
	Epsiode Distribution			Episode Distribution	
	SOI-1	SOI-2	SOI-3	With Surgery	Without Surgery
Episode Distribution	86	12	2	70	30
Physician Observed Weighted Avg Results	$752	$2,143	$10,826	$2,765	$280
Physician Expected Weighted Avg Results	$308	$3,750	$14,598	$3,568	$297
Efficiency Score by Cell	2.44	0.57	Not examine because prevalence too low	0.77	0.94
Overall Efficiency Score	2.21 = Q4 for Low Back Pain			0.84 = Q1 for Low Back Pain	

Note: A surgical event may be a spinal fixation, spinal decompression, or a more routine surgery such as a spinal manipulation. Not all surgeries are significantly invasive and high cost.

Note: This orthopedist provides surgeries on many healthier low back pain patients. Consequently, the physician's average charges per episode are lower within the "With Surgery" procedure class.

An Appropriate Method for Episode Severity-of-Illness Adjustment

Accurate practitioner efficiency and effectiveness measurement requires an episode grouper that has a valid and tested severity-of-illness index by medical condition to reduce the heterogeneity in longitudinal episodes of care.

The grouper, such as the Cave Grouper™, should use a severity-of-illness index based only on ICD.9 diagnosis codes to assign a patient's episode with a severity-of-illness marker. On the other hand, the grouper should not define severity-of-illness by resource utilization within the patient's condition-specific episode (such as whether a surgery or a resource-intensive diagnostic test was present in the patient's episode of care).

Using this diagnosed code-based severity index, each patient's condition-specific episode is labeled with a severity-of-illness marker to reduce the heterogeneity of episodes within a medical condition. There may be three (3) or more severity-of-illness (SOI) levels for a medical condition, with SOI-1 being the least severe (routine, noncomplicated) and SOI-3 being the most severe. Some medical conditions have only one or two severity-of-illness levels, depending on the specificity of the ICD.9 coding for that medical condition of interest.

The above table shows an example of a diagnosis-based grouper (based on searching for specific ICD.9 diagnosis codes to stratify episodes of care by medical condition):

- The columns on the left-hand side of the table show that this orthopedist had 100 non-outlier episodes of low back pain. There were 86 episodes that fell into severity-of-illness Level 1 (SOI-1).

- When we examine those 86 episodes in SOI-1, the results show that the physician's observed average charge per episode was $752. The physician's expected average charge per episode (based on the peer group of orthopedist results) was $308. Therefore, this orthopedist's efficiency score is 2.44 (or $752 divided by $308) – or the orthopedist appears to be a very inefficient physician.

- This result is the appropriate, accurate result. The physician is providing too many procedures as compared to the peer group comparator of orthopedists.

From a consumer health information perspective, employing a grouper based on diagnosis codes is important to guide the consumer to the appropriate efficient and effective practitioners. This more accurate information will help to ensure the consumer's health outcome will be improved.

7. Effectiveness Measurement

For accurate and reliable practitioner effectiveness measurement, a methodology also should be employed that adjusts for the three main methodology errors/issues defined above for practitioner efficiency measurement. One technique is to utilize the Marketbasket System approach that employs a specialty-specific standard set of medical condition episodes and indirect standardization.

Moreover, an established set of criteria needs to be developed for selecting effectiveness measures by specialty type (e.g., PCPs, cardiologists, orthopedists, and other specialty types). These criteria need to "fit" within the method used to adjust for the three main methodology error/issues in efficiency and effectiveness measurement. Since I have selected the Marketbasket System as a suggested adjustment approach, the criteria listed below will fit to the Marketbasket System methodology.

The following rules may be used to determine whether a measure may be included, or not included, in the effectiveness analysis:

1. The effectiveness measure needs to apply to a condition-specific, episode of care environment.

2. The effectiveness measure needs to be quantified and analyzed using medical claims data, understanding the limitations posed by claims data such as often missing data. Many potentially sound quality metrics may not be used because they cannot be quantified using claims data.

3. The effectiveness measure, although often process of care oriented, should be tied whenever possible to the outcomes of patient care; this is a National Quality Forum (NQF) criteria as well.

4. The effectiveness measure should be obtained from an expert source to ensure physician acceptance. CCGroup uses four main sources to evaluate potential quality metrics by physician specialty type: (1) RAND Health Quality of Care Reports, a meta analysis of the clinical literature; (2) AHRQ/AHCPR condition-specific guideline measures; (3) NQF and Ambulatory Care Quality Alliance (AQA); and (4) NCQA.

5. The effectiveness measure should apply to a medical condition treated by various specialty types and, therefore, specialty-specific marketbaskets (e.g., quality metrics for hypertension apply to family/general practitioners, general internists, and cardiologists).

6. The effectiveness measure should be from a higher prevalence condition so the individual physicians may be compared to one another. CCGroup generally avoids lower prevalence conditions whereby most physicians cannot be compared on a condition-specific basis.

CCGroup currently maintains 108 different condition-specific effectiveness measures that meet the above six criteria. However, this number may differ based on the specific criteria being implemented to meet the needs of the methodology employed to adjust for the three main efficiency and effectiveness errors/issues. Many of the medical conditions with at least one effectiveness measure may be found in more than one specialty-specific marketbasket (a criterion listed above). Consequently, the 108 measures are found across many different specialty-specific marketbaskets.

CCGroup implements effectiveness and efficiency marketbaskets of medical conditions for each of the following 31 physician specialty types. Of the 31 specialty-specific marketbaskets, CCGroup maintains one or more effectiveness measure for 29 of these specialty-specific marketbaskets; only dermatology and oral maxillary do not have one or more measure(s). Note in the following table that cardiology has 48 measures, cardiothoracic surgery has 36 measures, endocrinology has 20 measures, etc.

Marketbasket Specialty Types for Efficiency and Effectiveness

Market-Basket Number	Marketbasket Specialty Type	Physician Efficiency Measurement	Physician Effectiveness Measurement	Current Process Measures
1	Family and General Physicians	Yes	Yes	51
2	General Internists	Yes	Yes	51
3	Allergy	Yes	Yes	10
4	Cardiology	Yes	Yes	48
5	Cardiothoracic Surgery	Yes	Yes	36
6	Chiropractic	Yes	Yes	26
7	Dermatology	Yes	No	0
8	Emergency Medicine	Yes	Yes	37
9	Endocrinology	Yes	Yes	20
10	Gastroenterology	Yes	Yes	8
11	General Surgery	Yes	Yes	11
12	Nephrology	Yes	Yes	16
13	Neurology	Yes	Yes	12
14	Neurosurgery	Yes	Yes	14
15	Obstetrics/Gynecology (OB/GYN)	Yes	Yes	17
16	Oncology/Hematology	Yes	Yes	17
17	Ophthalmology	Yes	Yes	15
18	Oral Maxillary	Yes	No	0
19	Orthopedics	Yes	Yes	32
20	Otolaryngology (ENT)	Yes	Yes	10
21	Pediatrics	Yes	Yes	17
22	Plastic Surgery	Yes	Yes	5
23	Podiatry	Yes	Yes	16
24	Psychiatry	Yes	Yes	10
25	Psychology	Yes	Yes	8
26	Pulmonology	Yes	Yes	21
27	Rheumatology	Yes	Yes	21
28	Sports/Physical Medicine	Yes	Yes	27
29	Urology	Yes	Yes	11
30	Vascular Surgery	Yes	Yes	15
31	Critical Care (Intensivist)	Yes	Yes	21

By utilizing the Marketbasket System approach, certain additional consumer health information objectives are achieved:

- First, every physician that receives an efficiency score should also receive an effectiveness score. This is important because a consumer will desire to understand both the practitioner's efficiency and effectiveness of care.

- Second, the same episodes examined in the efficiency analysis may be examined in the effectiveness analysis. Therefore, a consumer may more easily understand the basis for the practitioner's efficiency and effectiveness scores. I will present some practitioner efficiency and effectiveness results in the next section that illustrate how this information may be used to support consumer health information initiatives.

8. Examples of Consumer Health Information on Practitioners

One of the most important components of consumer health information is to ensure accurate and reliable efficiency and effectiveness measurement methodologies are employed in the measurement process. Otherwise, consumers may be inadvertently guided to the less efficient and less effective practitioners, when the actual objective of consumer health information is to direct consumers to the more efficient and more effective practitioners. The end result is that we will miss the significant efficiency and effectiveness improvements that may be realized from providing consumers with meaningful health information.

This material presents example results for a cardiologist using the Marketbasket System approach to physician efficiency and effectiveness measurement, which is one method for building accurate and reliable scores. Cardiologist XYZ has a lower effectiveness score and a lower efficiency score as compared to the cardiology peer group. The specific reasons for the lower effectiveness and efficiency scores are stated in the inserted tables below. In summary, Cardiologist XYZ may not be monitoring patients appropriately through effective lab and diagnostic testing, resulting in a higher hospital admission rate.

With respect to consumer health information, the health plan market is attempting to determine the most appropriate way to display this physician level (and physician group level) information to the consumer:

- A common method is to use a "star" system. For instance, Cardiologist XYZ would receive 1 Star for effectiveness, and 1 Star for Efficiency (where 1 Star indicates lower effectiveness and lower efficiency as compared to a peer group or best practice). Generally, feedback from consumer user groups has favored a simple starring system (or similar graphic display) to indicate practitioner efficiency and effectiveness.

- The next step is to determine a drill-down mechanism whereby the consumer can gain more meaningful information at the medical condition level. For example, in the overheads below, we observe that Cardiologist XYZ treats ischemic heart disease SOI-1 with lower efficiency and lower effectiveness than the peer group of cardiologists. By providing this information to the consumer, the consumer may be guided away from Cardiologist XYZ and towards cardiologists with better efficiency and effectiveness results.

This type of information is valuable in terms of improving the consumer's potential short-term and longer-term health status, while simultaneously improving the efficiency of the U.S. healthcare system.

In the following overheads, please observe that the same medical condition-specific episodes are being examined for the effectiveness and efficiency analyses. For example, Cardiologist XYZ has 8 episodes for ischemic heart disease, severity-of-illness one (SOI-1). There are 6 episodes for ischemic heart disease SOI-2. You will observe the results for these 8 episodes and 6 episodes on both the effectiveness and efficiency reports.

The marketbasket for cardiology and the indirect standardization weights (for efficiency and effectiveness measures) are provided in the following slide.

Physician Effectiveness and Efficiency Results

Marketbasket for Cardiologists

4. CARDIOLOGY (10 of 20 Marketbasket Conditions Have Quality Metrics)

Order Number	Medical Condition Number	SOI Level	Medical Condition Short Description	Market-basket Weight	≥1 Quality Process Measure?	Quality Marketbasket Weight
1	10.13	1	Ischemic heart disease	0.150	Yes	0.200
2	10.13	2	Ischemic heart disease	0.050	Yes	0.075
3	17.4	1	Diabetes with circulatory	0.050	Yes	0.100
4	17.4	2	Diabetes with circulatory	0.050	Yes	0.075
5	10.21	1	Acute myocardial infrct, active	0.075	Yes	0.125
8	10.5	1	Supraventricular arrhythmias	0.050	No	
9	10.4	1	Ventricular arrhythmias	0.050	Yes	0.100
10	10.1	1	Abnormal heart beat	0.050	No	
12	36.19	1	Chest pain	0.050	No	
13	10.10	1	Conduction disorders	0.050	No	
14	10.16	1	Congestive heart failure	0.050	Yes	0.100
15	10.17	1	Cardiomyopathy	0.050	No	
18	10.8	1	Angina pectoris	0.025	Yes	0.050
19	10.12	1	Rheumatic heart disease	0.025	No	
20	36.18	1	Dyspnea	0.025	No	
			For all 20 medical conditions	1.000		1.000

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Physician Effectiveness and Efficiency Results

Cardiologist #1: Poor Effectiveness and Poor Efficiency

[Practitioner ID = XYZ]

Effectiveness Score = 0.86 (Quartile 4) Higher is better
Efficiency Score = 1.11 (Quartile 4) Lower is better

- Poor effectiveness results influenced by:
  - Lower serum cholesterol monitoring: ischemic, diabetes
  - Lower IHD labs monitoring: ischemia heart, angina
  - Lower urine protein monitoring: diabetes
  - Lower HTN lab monitoring: hypertension
  - Lower diagnostic test monitoring: CHF, arrhythmias
- Poor efficiency results influenced by:
  - Higher hospital admissions
  - Higher professional inpatient services
  - Higher outpatient facility usage

Note: lower lab services than peers

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Testimony by Douglas G. Cave, Ph.D., MPH
President, CCGroup LLC

Physician Effectiveness and Efficiency Results

Cardiologist #1: Poor Effectiveness Results

Practitioner Name:
Specialty Type: CARDIOLOGIST
Practitioner ID: XYZ
Agg Group Name: Region 1
Marketbasket: Cardiology

Quartile: 4 (Less effective)
Decile: 10
Effectiveness Score: 0.86 (Higher is better)
Significant Difference: Yes
(P<0.25)

Effectiveness Per Episode of Care

Medical Condition Name	SOI	Episode Count	Weighted Average Rate	Effectiveness Measure of Interest: Measure	Description of Measure	Protocol Range	Your Rate Results	Peer Group Rate Results	Your Score: [You / Peer]	Your Rate Results in Protocol Range?
Peer Group Weighted Avg	–	4911	0.68	–	–	–	–	–	–	–
Practitioner Weighted Avg	–	45	* 0.58	–	–	–	–	–	–	–
Ischemic heart disease	1			Measure 1	Episodes with semi-annual check-up exam	70% - 100%	0.88	0.95	0.92	Yes
Peer Group Rate:		1305	0.62	Measure 2	Episodes with anemia lab monitoring	35% - 70%	0.38	0.26	1.42	Yes
Practitioner Rate:		8	0.54	Measure 3	Episodes with serum cholesterol monitoring	35% - 70%	* 0.25	0.47	0.53	No
Your Score [You / Peer]			0.92	Measure 4	Episodes with IHD lab monitoring	35% - 70%	0.63	0.58	1.08	Yes
				Measure 5	Episodes with IHD cardiac test monitoring	35% - 70%	0.75	0.82	0.92	No
Ischemic heart disease	2			Measure 1	Episodes with semi-annual check-up exam	70% - 100%	* 0.83	0.97	0.86	Yes
Peer Group Rate:		736	0.68	Measure 2	Episodes with anemia lab monitoring	35% - 70%	0.33	0.38	0.87	No
Practitioner Rate:		6	0.53	Measure 3	Episodes with serum cholesterol monitoring	35% - 70%	* 0.17	0.56	0.30	No
Your Score [You / Peer]			0.78	Measure 4	Episodes with IHD lab monitoring	35% - 70%	* 0.33	0.67	0.50	No
				Measure 5	Episodes with IHD cardiac test monitoring	35% - 70%	1.00	0.85	1.18	No

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Physician Effectiveness and Efficiency Results

Cardiologist #1: Poor Efficiency Results

Practitioner Name:
Specialty Type: CARDIOLOGIST
Practitioner ID: XYZ
Agg Group Name: Region 1
Marketbasket: Cardiology

Quartile: 4 (Less efficient)
Decile: 8
Efficiency Score: 1.11 (Lower is better)
Significant Difference: Yes
(P<0.25)

Marketbasket: CARDIOLOGY

Average Utilization Per Episode of Care

Medical Condition Name	SOI	Episode Count	Average Episode Duration (Days)	Professional Outpt and Ambulatory: Prof Visits	Diag Tests	Lab/ Path	Med/ Surg	Rx	Prof Inpt (Svcs)	Facility: Outpt (Visits)	Hosp Inpt: Admits	Hosp Inpt: Days	Altern Sites (Svcs)	Other Med (Svcs)
Peer Group Weighted Avg	–	13243	160.8	2.45	4.34	2.34	0.93	8.16	3.25	0.22	0.20	0.78	0.00	2.16
Practitioner Weighted Avg	–	137	* 163.7	2.46	4.24	* 1.64	0.94	* 8.70	* 3.73	* 0.48	* 0.22	* 0.88	0.00	1.90
Ischemic heart disease	1	8	180.0	3.25	7.88	1.03	0.75	8.88	2.13	1.38	0.13	0.38	0.00	1.88
Ischemic heart disease	2	6	180.0	2.83	4.50	0.33	0.33	7.17	11.00	1.00	0.50	2.33	0.00	1.17
Diabetes with circulatory	1	4	180.0	5.50	9.00	5.25	2.25	24.50	0.00	1.25	0.00	0.00	0.00	4.75
Diabetes with circulatory	2	1	180.0	4.00	3.00	0.00	7.00	17.00	18.00	0.00	1.00	4.00	0.00	0.00
Acute myocardial infrct, active	1	0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acute myocardial infrct, fup	1	0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NOTE: The efficiency score is calculated by dividing the physician's marketbasket weighted average charges per episode by the peer group's marketbasket weighted average charges per episode. The corresponding Physician Efficiency Charge Report (not presented here) shows the weighted averages as follows: Physician = $4,590 per episode; Peer Group = $4,148 per episode. The "efficiency score" equals 1.11 — shown in the above heading.

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Testimony by Douglas G. Cave, Ph.D., MPH
President, CCGroup LLC

9. Budget-Neutral Opportunity for Congress to Assist in Promoting Consumer Health Information

One of the highest-priority initiatives for Congress to assist in promoting consumer health information is to provide health plans and health insurance companies with access to the full CMS Part A and Part B Medicare claims databases, holding back only to the extent necessary to protect Medicare beneficiary privacy. Initial testing shows the CMS databases may be able to measure the efficiency and effectiveness of 80% of "all" (not just the health plan's network physicians) practicing physicians in a geographic region. This percent of physicians measured is more than enough to provide consumers with meaningful, physician-level efficiency and effectiveness information.

With respect to the full Medicare claims databases, current CMS rules restrict access to research studies that generally benefit the Medicare and Medicaid programs. However, in the view of most external legal experts, wider access to the full CMS claims data is not restricted by the statutory language of HIPAA or the Privacy Act – provided Medicare beneficiary privacy is protected.

Congress should clarify the HIPAA and Privacy Act regulations with CMS, and encourage CMS to revise its regulations to public access to the full CMS Medicare claims databases. The Medicare beneficiary identifiers must be encrypted for full protection of beneficiary privacy; other beneficiary protections can also be addressed to meet HIPAA regulations.

Without release of the full Medicare claims databases, many health plans and health insurance companies will fall short of their objective of providing consumers with physician-level efficiency and effectiveness information. Yet, this information is a requirement to drive competition in the healthcare system. Consumers need physician-level information to choose based on efficiency, effectiveness, and convenience. This fact is no different than in any other competitive industry.

Testimony by Douglas G. Cave, Ph.D., MPH
President, CCGroup LLC

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