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WHAT'S DRIVING HEALTH CARE COSTS AND THE UNINSURED?

HEARING

OF THE

COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

ON

EXAMINING HEALTH ISSUES RELATING TO HEALTH CARE COSTS AND THE UNINSURED, FOCUSING ON INEFFICIENCIES IN AMERICA'S HEALTH CARE DELIVERY SYSTEMS

JANUARY 28, 2004

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C O N T E N T S

STATEMENTS

WEDNESDAY, JANUARY 28, 2004

	Page
Gregg, Hon. Judd, a U.S. Senator from the State of New Hampshire	1
Holtz-Eakin, Douglas, Director, Congressional Budget Office, Washington, DC	2
Milstein, Arnold, M.D., Medical Director, Pacific Business Group on Health, and Physician Consultant, Mercer Human Resource Consulting, San Francisco, CA	5
Davis, Karen, President, The Commonwealth Fund, New York, N.Y.	6
Conover, Christopher J., Assistant Research Professor of Public Policy Studies, Director, Health Policy Certificate Program, and Senior Research Fellow, Health Inequalities Program, Center For Health Policy, Law, and Management, Terry Sanford Institute and Public Policy, Duke University, Durham, NC	8
Wilensky, Gail R., Senior Fellow, Project Hope, Bethesda, MD	10

ADDITIONAL MATERIAL

Statements, articles, publications, letters, etc.:	
Douglas Holtz-Eakin	32
Response to questions of the HELP Committee from Arnold Milstein, M.D.	41
Karen Davis	73
Response to questions of Senator Gregg from Christopher J. Conover	107
Gail R. Wilensky	109
Response to questions of the HELP Committee from CBO	114
Associated Builders and Contractors	115
National Federation of Independent Business	116
The Association Healthcare Coalition	117

WHAT'S DRIVING HEALTH CARE COSTS AND THE UNINSURED?

WEDNESDAY, JANUARY 28, 2004

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The committee met, pursuant to notice, at 10:24 a.m., in room SD–430, Dirksen Senate Office Building, Senator Gregg, chairman of the committee, presiding.

Present: Senators Gregg, Enzi, Alexander, Sessions, Kennedy, Dodd, Harkin, Murray, and Clinton.

OPENING STATEMENT OF CHAIRMAN GREGG

The CHAIRMAN. We are going to get started early because we have got, unfortunately, three votes that have been stacked around 11:30. As a result, this hearing will be disrupted significantly. I apologize to my fellow members for proceeding early, but I do think we should get going here. I appreciate Senator Clinton's being here. I know Senator Kennedy is going to be participating also. I think we will also pretty much forego opening statements because we really want to hear from the panel.

This hearing, just briefly to outline its parameters, is about the issue of health care and its costs, its affordability and the uninsured. It is part of a process that we are trying to go through to get some sort of hard data on what the issues are that drive the cost of health care and what the issues are that are creating our uninsured pool, which is getting larger and larger, unfortunately.

I don't think there is any issue that Americans face today from a standpoint of cost that they have more concerns about than their health care bills. Certainly, this committee has a very deep interest in trying to address that issue.

Let me introduce the witnesses before we start taking testimony. We are fortunate to be joined by the Director of the Congressional Budget Office, Dr. Holtz-Eakin, who obviously has some very hard and effective data that I know he intends to present to us on the issue of health care. His expertise is well known.

We are also joined by Dr. Milstein, who serves as the Medical Director of the Pacific Business Group on Health, the largest health care purchasing coalition in the United States. Dr. Milstein also serves as a worldwide partner at Mercer Human Resource Consulting, and Dr. Milstein's expertise focuses on, but is certainly not limited to, health care purchasing strategies, clinical performance

measurements, and the psychology of clinical performance movements.

We are joined also by Karen Davis, who has served for the last 9 years as President of the Commonwealth Fund, the Nation's fourth oldest private philanthropy, engaged in independent research on health and social issues. Dr. Davis is a nationally recognized economist with a distinguished career in public policy and research. She has served as Deputy Assistant Secretary for Health Policy for the Department of Health and Human Services.

We are also joined by Dr. Conover, who is currently the Assistant Research Professor of Health Policy Studies at the Terry Sanford Institute of Public Policy at Duke University, as well as a senior fellow at the Center for Health Policy, Law, and Management at Duke. He is also Director of the Health Policy Certificate Program at Duke. Dr. Conover's research focuses in the area of State health policies, estimating the magnitude of social burden of illness and health regulation.

Further, we are joined by Gail Wilensky, who is well known to this committee, having testified many times in this committee. She is a senior fellow at Project HOPE, the Health Opportunities for People Everywhere, and the International Health Education Foundation. Dr. Wilensky is Co-Chair of the President's Task Force to Improve Health Care Delivery For Our Nation's Veterans, which covered health care for both veterans and military retirees. She also served as Deputy Assistant for Policy Development for President Bush, advising the President on health and welfare issues. Prior to that, she served as the Administrator of the Health Care Financing Administration. Dr. Wilensky's research endeavors include developing and evaluating policies relating to health reform and to ongoing changes in the medical marketplace.

It now being 10:30, let us start the hearing. Senator Clinton, do you wish to make a statement or anything?

Senator CLINTON. No, Senator Gregg. I am just very grateful that you are holding this hearing and I want to thank all the witnesses. Obviously, this is a critical issue, one that we have to address, and I appreciate you taking the lead on doing it.

The CHAIRMAN. Thank you. Thank you very much. Obviously, this is an issue on which your expertise is unique, also, so it is very appropriate to get your input on this as we move forward.

Dr. Holtz-Eakin, if you could give us your thoughts, and then we will move down the line.

STATEMENT OF DOUGLAS HOLTZ-EAKIN, DIRECTOR, CONGRESSIONAL BUDGET OFFICE, WASHINGTON, DC.

Mr. HOLTZ-EAKIN. Mr. Chairman, Senator Clinton, thank you for the chance to be here today and talk a little bit about some of the work that CBO has done in this area. My written testimony, which I submit for the record, covers three topics. I will cover the same three topics briefly and we can turn to questions.

Topic one is characteristics of the uninsured. We will move from that to some facts and features of the growth in health care costs in the United States and then touch briefly on the connection between the two, although I will spend less time on that.

The first issue is just how many are there when you start counting the uninsured and there are really three different ways to measure the uninsured. One approach is to count how many people are uninsured over a particular period, say 1 year, and simply see how many remain uninsured over the entire year. A second approach would be to take that same period and count the number of people who have any spell of uninsurance during the year and, as a result, would count in that way. And the third is a mixture of the two, which is to look at any day during that year or week during that year and go out and count the number of people who happen to be uninsured at that point in time.

In work that the CBO did using data from 1998, we find that one gets very different answers if one takes different measures. Using those data, there are roughly 21 to 31 million uninsured for an entire year, in contrast to roughly 60 million individuals who would be uninsured at some point during the year, and then lying in between is the number that is conventionally used to count the uninsured, which is the number who might be uninsured at any point in time, and that is on the order of 40 million individuals in the 1998 data.

In work that has been done at the Agency for Health Quality and Research, those studies suggest that the same basic patterns prevail using more recent data, so that depending on the kind of measure that one uses, you can get numbers that differ a great deal.

Now, the difference between 20 million and 60 million suggests that there is a lot of dynamics under the surface of counting the number of uninsured, and in the testimony, we show some evidence from the Survey on Income and Program Participation of the duration of spells of uninsurance. In those data, one finds that 45 percent of the uninsured have spells that last for less than 4 months, and so they are relatively short spells and they turn over.

In contrast, there are about 26 percent of individuals who have spells that last between 5 months at a year. And then at the longer duration, 13 percent of individuals have spells of one to 2 years in length, and the remaining 16 percent have spells that exceed 2 years.

The characteristics of these individuals are, broadly speaking—I will leave the details, which are described in Table 1 in the testimony for further discussion, but roughly, one finds that adults are more likely to be uninsured and have longer durations than younger people and children especially, perhaps in part due to the provision of Medicaid as targeted toward the children, and that the vast majority are in working families, that about 75 percent of those individuals are uninsured because employers do not offer employer-sponsored insurance. And finally, low education and low income are associated with both a greater incidence of uninsurance and longer durations, as well.

One fact that has captured some attention is the rise recently in the number of unemployed or the fraction of uninsured, from 16 percent to 17 percent, roughly, over the past couple of years. That has been associated with a decline in employer-sponsored insurance from 67 percent to 64 percent. We simply note in the testimony that this kind of a shift in the coverage from employer-spon-

sored insurance has occurred in the past, and indeed, this is smaller than a comparable movement that occurred in the early 1990s.

I would suggest that there is one large message in these data and that message is that not all the uninsured are created equal. In fact, there appear to be two broad groups, one of which suffers short spells of uninsurance, perhaps driven by job market changes, and another group that has long duration spells of uninsurance, and that policies would be more effective if they were tailored to recognize the different characteristics of the different kinds of uninsured.

Turning to the broad trends in health care costs and health care spending in the United States, in 2002, U.S. expenditures on health-related goods and services were $1.6 trillion, a number that was reached by averaging real growth of over 4.5 percent between 1970 and 2002. Despite a slowdown in the mid-1990s, the most recent data are consistent with that long-run trend. We saw between 1997 and 2002 a growth that, in real terms, at 4.6 percent per year.

The result is that health care spending has doubled as a fraction of the national economy, rising from seven percent of GDP in 1970 to about 15 percent in the most recent data, and among the categories of health care spending, pharmaceuticals are rising most rapidly, on the order of 14 percent in recent data, although they still constitute only about ten percent of spending.

There are a lot of factors associated with this growth. We will return to them, I am sure. Some are technology, associated with technology and the incentives for innovation, deployment and utilization of those technologies, others associated with aging, higher incomes, and the nature of insurance. But one of the genuine results that we have seen is that people are unhappy with the current State of affairs, despite the increases in spending. We can come back to the sources of that.

And finally, in the link between increasing costs and uninsurance, there is very little hard evidence on this topic and I would simply make the observation, in many ways, rising health care costs should make insurance more valuable and the desire to protect one's self against the large costs of medical expenditures would increase the demand for insurance, other things equal.

Nevertheless, we have seen some declines in insurance and there is some intriguing evidence by David Cutler that, despite the fact that the share that employees are asked to cover has not gone up, the total amount that they cover is rising. As a result, although firms are offering, the take-up rate by individuals has declined and that may be part of the link between rising costs and uninsurance.

I would be happy to answer any questions. That is a brief summary of the written testimony that we submitted and I look forward to the discussion.

The CHAIRMAN. That is very good data and we appreciate it. We especially appreciate the written testimony.

[The prepared statement of Mr. Holtz-Eakin may be found in additional material.]

The CHAIRMAN. Senator Kennedy has joined us. I apologize for starting a little early, Senator, but we have got a series of votes

stacked and it is going to disrupt this hearing significantly, so I thought we should get going.

Senator KENNEDY. I am in complete agreement.

The CHAIRMAN. You are certainly here right on time, but we started a little early. Do you have any statement you want to make?

Senator KENNEDY. No.

The CHAIRMAN. You are back from New Hampshire and you are happy to be——

Senator KENNEDY. To be back.

The CHAIRMAN. Sad to have left New Hampshire——

Senator KENNEDY. Sad to leave New Hampshire— [Laughter.]

—but we have a good panel, Mr. Chairman, and I look forward to their testimony.

The CHAIRMAN. Thank you. Thank you, Senator.

Dr. Milstein?

STATEMENT OF ARNOLD MILSTEIN, M.D., MEDICAL DIRECTOR, PACIFIC BUSINESS GROUP ON HEALTH, AND PHYSICIAN CONSULTANT, MERCER HUMAN RESOURCE CONSULTING, SAN FRANCISCO, CALIFORNIA

Dr. MILSTEIN. I thank the committee for the opportunity to share my perspective that inefficiencies in health care delivery comprise a substantial fraction of current health spending, health insurance premiums, and that much of this inefficiency can be eliminated by facilitating the market's ability to identify and reward efficient, high quality physicians, hospitals, and treatment options.

There are two primary sources of inefficiency in the U.S. health care system. First, the provision of many health care services that offer no measurable gain in health or patient satisfaction. These services are well described in the Dartmouth research results, which I submitted with my testimony. This type of inefficiency occurs more in some communities than in others, but it occurs even in our most medically efficient communities, such as Minneapolis and Portland, Oregon.

Second is detailed in the Institute of Medicine's "Crossing the Quality Chasm" report, the provision of all health care services by antiquated clinical work methods that rely on faulty human memory and paper medical records. Since these methods of clinical work are severely mismatched to the challenges of delivering high-technology services to an American population with increasingly complex chronic illnesses, they offer a significant preventable waste of resources and preventable human suffering.

These two types of inefficiency are invisible to health care providers and to consumers because we don't routinely measure and report how physicians, hospitals, and treatment options compare on the average total health care spending that they incur when used to treat an episode of acute illness or a year's worth of chronic illness and preventive care. I will refer to this total average level of spending per illness as longitudinal efficiency.

We are also in the dark with respect to the level of quality achieved by particular physicians, hospitals, and treatment options. We do not lack methods by which to measure both longitudinal efficiency and quality of care, but most private sector health benefit

plans lack a sufficiently large database in any one community to make valid comparisons among physicians or specific hospital service lines, such as cardiac surgery.

The invisible hand of the market could transform the majority of these inefficiencies into significantly reduced rates of health insurance premium increase over a ten-year period with two catalytic ingredients from Congress. First, encouraging CMS to routinely and continuously share with the private sector the patient privacy protected CMS claims database so that all health plans, all health benefit plans, would be able to increase their precision in measuring the longitudinal efficiency and quality of physicians, hospitals, and treatment options. The patient privacy protected CMS claims database is a grossly underutilized national information asset with unnecessarily restrictive access rules for private sector health benefit plan sponsors.

Second, encouraging CMS and other health plans to reward clinical performance improvement by either more favorable payment for doctors, hospitals, and treatment options that offer superior quality and longitudinal efficiency, and/or by lower cost sharing for patients who preferentially use such providers and treatment options. For example, Congress could refine its specifications for the types of health benefit plans to which tax-advantaged portable spending accounts would apply to promote both of these health benefit plan features.

Americans have access to standardized longitudinal efficiency measurements for appliances and for automobiles, but not for the industry that consumes a much greater share of their income and benefits. Absence of such measurements keeps American hospitals, doctors, and patients in the dark with respect to comparative performance and unable to identify opportunities to make American health insurance much more affordable.

When paired up with standardized publicly reported quality of care measurements, longitudinal efficiency measurements would comprise a new navigational system by which all stakeholders could improve America's health and slow future increases in health insurance premiums. It would also send a constructive signal to new medical technology developers. The market will judge their innovations based not only on their unit prices and their health benefit, but also on their contribution to reducing total health care spending.

Thank you for the opportunity to share my perspective on how large, invisible, and substantially capturable inefficiencies in American health care delivery contribute to the unaffordability of health insurance.

The CHAIRMAN. Thank you, Doctor. Those are very interesting ideas which we will want to follow up on here.

[The prepared statement of Dr. Milstein may be found in additional material.]

The CHAIRMAN. Dr. Davis?

STATEMENT OF KAREN DAVIS, PRESIDENT, THE COMMONWEALTH FUND, NEW YORK, NEW YORK

Ms. DAVIS. Thank you, Mr. Chairman and members of the committee, for this invitation to join you this morning.

Rising health care costs are a problem for all Americans, but they weigh especially heavily on uninsured and underinsured individuals, who pay much of the cost of their health care directly out of pocket. We can no longer afford or tolerate wasteful spending on care that does not benefit patients. We can't have duplication of expensive procedures, medical errors, or the high administrative costs incurred by the Nation's insurers and providers.

Real solutions should directly target these sources of unacceptably high cost, not simply shift costs from employers to workers or from government to beneficiaries of public programs. Most fundamentally, we must act to achieve automatic and affordable health insurance for all, to ensure that the benefits of modern medicine are widely accessible and to ensure that investment in health care contributes to economic growth and a healthier, more productive society.

Health insurance premiums are going up 14 percent a year. That is faster than the 8.5 percent increase in early 2003 in benefits per enrollee, and that divergence between premiums and costs bears watching.

The U.S. has the highest health care spending of any country, and yet we are the only major industrialized Nation not to provide health insurance for all. I am particularly disturbed by the rapid increase in administrative costs. They went up 16 percent in 2002 and it made it the fastest rising component of national health expenditures.

Consumer-driven health care, which is the major private sector cost containment strategy, is unlikely to address the fundamental causes of rising health care cost. In fact, it is likely to have adverse consequences for patients. Consumer-driven health care contributes to excessive financial burdens on patients, particularly those with lower income, but also those who are sicker, and patient costs are already unacceptably high. Patient cost sharing is a blunt instrument for reducing utilization of services. It reduces the use of effective services that are already underutilized.

There are better alternatives for achieving economies in health care than shifting cost to patients. Costs are higher in the U.S. than in other countries because we pay higher prices for the same services, we have higher administrative costs, and because physicians prescribe specialized services that are not clinically justified.

If we were to adopt fundamental reforms, such as an integrated private-public strategy to purchase health services efficiently, demand quality performance, and streamline administrative costs, substantial savings could be achieved.

Short of fundamental reforms, practical steps that could be taken in the near term include reducing medical errors and improving care coordination through a major public-private investment in health information technology. Public reporting of cost and quality data, as Dr. Milstein stressed, knowing what costs are over an episode of care in quality, and studies show that they vary enormously from hospital to hospital, physician to physician, and area to area. If we are serious about doing better, we really need to know where we stand.

I also endorse Dr. Milstein's call for provider performance on quality and efficiency. Medicare needs to become a leader in paying

for performance. It needs to move quickly to reward those providers who are both high quality and low cost over the course of a patient's treatment.

We also need the development and promulgation of clinical guidelines and quality standards. Public programs and private insurers would benefit from a Federal agency charged with establishing the scientific basis for effectiveness not just of new drugs, as FDA does, but for specialty consultations, surgical procedures, and tests.

Better management of high cost patients. Ten percent of patients account for 70 percent of costs. If public programs and private insurers were willing to pay for services of nonphysician personnel that are needed for high-cost care management, we could reduce the cost. We also need to streamline administrative efficiency and test models there.

Finally, we need automatic and affordable health insurance coverage for all. Employers, Federal and State governments, and individuals must all share responsibility for achieving automatic and affordable health insurance for all. The most realistic strategy is a combination of group insurance options, including employer coverage, a new Congressional health plan, expansion of SCHIP to all low income below 150 percent of poverty, and the ability to get onto Medicare earlier for the disabled in a two-year waiting period and for older adults. But premium assistance based on income will be required to make premiums affordable for all enrollees.

Together, these steps would take us a long way toward ensuring that this country has a high performing health system worthy of the 21st century. Thank you.

The CHAIRMAN. Thank you, Dr. Davis. Thank you for those ideas.

[The prepared statement of Ms. Davis may be found in additional material.]

The CHAIRMAN. Dr. Conover?

STATEMENT OF CHRISTOPHER J. CONOVER, ASSISTANT RESEARCH PROFESSOR OF PUBLIC POLICY STUDIES, DIRECTOR, HEALTH POLICY CERTIFICATE PROGRAM, AND SENIOR RESEARCH FELLOW, HEALTH INEQUALITIES PROGRAM, CENTER FOR HEALTH POLICY, LAW, AND MANAGEMENT, TERRY SANFORD INSTITUTE OF PUBLIC POLICY, DUKE UNIVERSITY, DURHAM, NORTH CAROLINA

Mr. CONOVER. Mr. Chairman and members of the committee, it is a great pleasure to be here today.

How big a role does health services regulation play in explaining the extraordinarily high level of health costs in the U.S., and how many uninsured might be covered were we somehow to find a way to reduce this regulatory burden? My brief remarks today will provide some tentative answers to both questions based on the preliminary results of more than 2 years of research, conducted in part under contract to the Department of Health and Human Services.

There are two ways to answer the first question. First, we looked at the costs of regulation in other industries, such as airlines, railroads, telecommunications, other industries that have been long studied by economists, and we used their best estimates to calculate the percent of gross economic activity in those industries

that is attributable to regulatory costs. By applying these percentages to the health sector, we arrived at very rough, back of the envelope estimates of upper and lower bounds on the plausible magnitude of this regulatory burden.

As you can see on Figure 1, this so-called top-down approach suggests that in 2002 alone, health regulation may have imposed an annual cost of at least $28 billion, but as you can see, it may have been as high as $657 billion. Clearly, a 30-fold difference between our minimum and maximum cost estimates is no more gratifying to me as a researcher than it is to you as policy makers.

Moreover, it is easily possible that the regulatory burden in health care is even higher than a simple extrapolation from other industries might suggest. After all, according to University of Rochester health economist Chuck Phelps, the U.S. health care system, while among the most market-oriented in the industrialized world, remains the most intensively regulated sector of the U.S. economy.

So we also answered this question using a much more fine grained bottom-up approach. We looked at the literature for nearly 50 different kinds of Federal and State health services regulations, including regulation of health facilities, health professionals, health insurance, pharmaceuticals and medical devices, and the medical tort system. These various regulations covered the gamut from mandated health benefits to State Certificate of Need requirements for hospitals and nursing homes.

We systematically tallied both the benefits and the costs associated with these regulations, finding the expected costs of regulation in health care amounted to $335 billion in 2002. As shown at the bottom of Figure 2, our estimate of benefits for these regulations was about $207 billion, leaving a net cost of $128 billion.

Three areas account for the lion's share of this net burden. The medical tort system, which includes litigation costs, court expenses, and defensive medicine totals $81 billion. FDA regulation adds another $42 billion, and health facilities regulation adds yet another $29 billion. Thus, the States and Federal Government both have roles to play in finding ways to trim regulatory excess.

Now, how does this all relate to the uninsured? Our bottom-up look allowed us to determine that the net cost of regulation borne by the health industry itself is about 6.4 percent, meaning that health expenditures and health insurance premiums are at least that much higher than they would be absent regulation, or excess regulation. Based on consensus estimates about the impact of higher premiums on how many would likely drop health insurance, this increased cost implies a 2.2 percent reduction in the demand for coverage, and this translates into nearly five million uninsured whose plight might reasonably be attributed to excess regulatory costs.

But, of course, there is a different way to look at this burden, as well. In light of the $35 billion in subsidized care that is already provided to uninsured patients every year, researchers have recently estimated it would only cost $34 to $69 billion in added health spending to cover all of the Nation's uninsured.

In light of these figures, the potential opportunity costs of this regulatory burden become very clear. The average estimates from both our top-down and bottom-up look at this problem suggests

that we could cover this cost several times over. Admittedly, our estimates are still preliminary, and we are now engaged in a process of careful review of all of them. But it seems unlikely that the adjustments yet to come in our figures would alter this central conclusion. The net burden of health services regulation likely exceeds the annual cost of covering all 44 million uninsured.

So a legitimate policy question is whether any unmeasured benefits of this apparent excess regulation outweigh the benefits of coverage for all Americans. For example, in the context of the IOM finding, that 18,000 uninsured die every year due to lack of coverage, is maintaining the full extent of our current regime of health regulation worth letting that continue? This is not a question for me to answer, but I hope that you will seriously consider it as you wrestle with one of the most challenging health policy issues now on the national agenda. Thank you for your time.

The CHAIRMAN. Thank you, Doctor. Those are obviously fascinating findings that will have a significant impact on this debate, I suspect.

[The prepared statement of Mr. Conover may be found in additional material.]

The CHAIRMAN. Dr. Wilensky?

STATEMENT OF GAIL R. WILENSKY, SENIOR FELLOW, PROJECT HOPE, BETHESDA, MARYLAND

Ms. WILENSKY. Thank you, Mr. Chairman and members of the committee. I am going to try to step back and again focus on the larger issue of the relationship between increased health care spending and the decline in the number of uninsured and the major factors that are driving this increase and to put this back in the context of the strategies available to you to try to lower the number of uninsured. I am going to make about a half-a-dozen major points during my five minutes.

The first is that it would be useful to think about the uninsured as a chronic problem rather than an acute one, one that will require explicit policy decisions to change, but nonetheless a chronic issue, worse during periods of economic decline, somewhat better during periods with robust growth, but one that has seen secular declines in coverage over the last 25 years. About 25 years ago, 12.5 percent of the population was uninsured. That number is about 15 percent. The number that we have now, about 43 million, is about the same as existed in 1997-1998, a period of very robust economic growth.

There are two main reasons that have been cited in the literature about why we have seen this decline in coverage over time. The first has to do with the changing economic structure, movement more toward the service sector, part-time and entrepreneurial jobs, changes, frankly, that Members of Congress are not likely to be able to change.

But the second has to do with increased health care spending relative to growth and income. What we have seen looking at the long haul, the last 50 years, is that, on average, there has been a four percent increase per year per person in real spending on health care compared to an increase of about 1.5 percent growth in real terms per person per year in the economy.

There was an interesting diversion from that trend in the 1990s, when the growth in health care spending was closer to two percent per year in real terms, per person per year, and there may be some things for us to learn about some of the changes that allowed us to get off that long-term growth spending period in the economy for health care.

Now, in asking whether or not increased spending is really a problem, you tend to get different answers over time depending on who is being asked. At one level, you could say as long as people feel they are getting increased value for their health care spending, it may indeed be possible to continue spending parts or most of our increased growth in the economy on health care. But clearly, when it comes to matters regarding the uninsured, increased health care spending is a problem.

It makes it more expensive to try to lower the numbers of uninsured and we know that increased health care spending is itself associated with increasing numbers of uninsured. So while in general it may not be an issue if we actually feel we are getting increased value for the spending, when it comes to reducing the number of uninsured, it will make the problem much more difficult to resolve.

There are a number of issues in terms of why we have seen this health care spending. You have heard many of them mentioned already. I am just going to summarize them briefly.

Advances in medical technology, something that we are all proud of that this committee in particular has helped to promote. In health care, technology tends not to be associated with lower spending the way it is in other sectors of the economy, where new technology usually provides services at a lower rate as well as higher quality, or they are not adopted unless the payers are willing to pay more, and the question of why that doesn't happen in health care is an interesting and important one.

Medical liability, an issue that has been raised in Congress a number of times, the direct costs and practice of defensive medicine is an issue that drives health care spending. Lifestyle issues, particularly tobacco and now, as we know, obesity, has had a major impact in terms of increasing health care spending.

Our system of reimbursement, as we have already heard, that doesn't pay for performance, that, in fact, pays for the correction of defects as well as the provision of the defect in the first place, is part of the driver of health care.

And the way most of us get health care in the United States, employer-sponsored insurance, encouraged in large part by the tax exclusion, has been a driver in its own right in terms of health care and encouraging people to regard health care spending and the purchase of insurance as their employer's money rather than their own money as an employee.

There are a number of steps, and you have heard many of them already this morning. Trying pay for performance initiatives, something the government is doing to a small extent through the Centers for Medicare and Medicaid Services; providing better information on the cost-effectiveness of new technologies and therapeutics, an issue that Dr. Davis talked about this morning; meshing patient safety measures with tort changes as a way to try to bridge what

has been a very difficult impasse for the Congress; and exploring alternatives to the tax exclusion for employer-sponsored insurance.

There are also a number of ways to try to reduce the number of uninsured, and again, they have been mentioned this morning, trying to find ways to expand access to some of the public programs; using the waiver process to expand Medicaid and expanding Medicaid itself; providing financial subsidies to individuals and access to group insurance, either through fundable tax credits or through other strategies; and providing mandates either on individuals or on employers. And as we have seen in legislation that has been raised, it is possible to mix and match some of these strategies.

It is important, though, as you go forward in talking about these issues of reducing the number of uninsured to remember that any strategies that you find to reduce the rate of spending in health care will make it that much easier to provide coverage to the uninsured and will reduce the likelihood that you will have increases in the uninsured in the future solely driven by the increased health care spending. Thank you.

The CHAIRMAN. Thank you, Doctor, very much for that input.

[The prepared statement of Ms. Wilensky may be found in additional material.]

The CHAIRMAN. We have a large number of members participating in this hearing. That reflects the interest, obviously, and the importance of the topic. Again, we do have votes that are going to hit us here. So what I going to do is limit time to five minutes and hope members can stick to that. Then we can get everybody in before we start voting.

I will pass on my opportunity to ask questions and wait until the end here. If Senator Kennedy does return, he will obviously go to the top of the list, but the list as I have it by arrival would be Senator Enzi, Senator Murray, Senator Harkin, Senator Sessions, Senator Alexander, and Senator Dodd, in that order, so we will start with Senator Enzi.

Senator ENZI. Thank you, Mr. Chairman. I appreciate Dr. Holtz-Eakin coming 2 days in a row to the Hill. Yesterday it was banking, today a completely different subject. I appreciate the information that you provided both times.

In your testimony, I am a little confused between the three columns that are used, the uninsured at any time, the uninsured all year, and then the distribution of population uninsured all year. Are the first two columns the percentages of just the nonelderly people and then the last one is of the population as a whole, whether they are elderly or not? I wasn't sure what the third column represented.

Mr. HOLTZ-EAKIN. The first two columns are just for nonelderly. So, for example, for uninsured at any time during the year, 26.8 percent of those less than 19 were uninsured at any time during the year. Seven-point-three percent of those less than 19 were uninsured all year.

The final column tells you of all the ages. Out of all the people who are uninsured all year, nearly 25 percent were less than 19. Fourteen percent were between 19 and 24. And so all the ages will add up to 100 percent of those uninsured during the entire year.

Senator ENZI. The accountant in me made me wonder sometimes when it went over 100 percent in a category.

I found it very interesting that 25 percent of the uninsured make more than 200 percent of the Federal poverty level. That was from page five, and then on page six, there is a little different way of evaluating it, which is based on their health and not by age. Of those who consider themselves in excellent health, almost 29 percent don't have insurance. Very good health, 33 percent don't have insurance. And good health, 24.5 percent have insurance. So it looks to me like 86 percent of the people that are uninsured figure that they are in good enough health that they don't need insurance.

In the Medicare bill that we passed, we had a provision for health savings accounts. I am of the belief that they will help to take care of some of these people, so they put away a little money while they are still in very good or excellent health. Is that a feeling that you have, that the change that we made might make that kind of a difference? I noticed that there was an evaluation of how much that would cost.

Mr. HOLTZ-EAKIN. Well, certainly part of the message in the testimony is that to the extent that the final consumer of medical services is insulated from any cost consequences, it feeds into the system of a set of economic incentives which can adopt expensive technologies which may not be worth it, in some sense. We may decide to spend more on health care as a Nation, but you don't want to spend more than is worth it. Third-party payers, which insulate people from the cost consequence of their decisions, are part of that.

To the extent that health savings accounts put individuals in a position where they evaluate and have the information to evaluate the quality of what they are buying, so they get the benefits and cost tradeoff exactly right, then that is a step toward that direction. The flip side is you have to make sure that when people are young and in excellent health and they are in that, they are looking forward to the possibility they may not be and you don't just get a selection issue where only those people in excellent health take advantage of that for the tax advantages and the folks who are not in excellent health are in a different pool. So those are the issues in those kinds of accounts.

Senator ENZI. I appreciated Dr. Conover's statistics on the cost of regulation and hope that we can find some data that also will show how much of the costs are due to new technologies and medical liability insurance and those sorts of things.

Dr. Davis, you said that there was a major increase in the number of underinsured. That suggests that there might be some agreed upon level of insurance. Would that also mean that there are some that are overinsured? How is that level determined?

Ms. DAVIS. There was one major study in the Journal of the American Medical Association that defined underinsurance as being at risk of spending ten percent of your income directly out of pocket on health care. If everyone in this country had a $1,000 deductible health insurance plan, about a third of people would pay more than ten percent of their income if something serious happened like they were hospitalized. So that is kind of the rule of thumb.

In terms of your point about overinsurance, certainly there is some overuse of health care services. In our international surveys, we found patients reporting getting the same test more than once when they saw different doctors. A lot of that overuse is driven by physicians or the health care system that don't have electronic records to find the old test results and our compensation system that pays physicians more for doing more procedures. We don't really have clinical guidelines or standards to really indicate when insurance shouldn't pay for a service like an MRI because a cheaper test would have worked just as well.

Senator ENZI. I feel that there is a lot more information there, but my time has expired. I would ask for permission to submit some questions in writing and also to have a full statement in the record.

The CHAIRMAN. Absolutely. That, of course, is always a member's opportunity.

[The prepared statement of Senator Enzi follows:]

PREPARED STATEMENT OF SENATOR ENZI

Mr. Chairman, the United States has the best healthcare system in the world. Our main challenge is how to extend the blessings of this system to as many Americans as possible.

We need to eliminate factors that contribute to the rise in healthcare costs but don't contribute to improving the quality or availability of that healthcare. We can't make health insurance more affordable if we don't make healthcare services more affordable.

But healthcare today is complex. Changes in law and regulation often have unintended consequences, and we've seen this effect time after time in healthcare policymaking.

That's why I commend you for holding this hearing. We need to understand why healthcare costs are increasing before we take any major new steps aimed at reducing the number of people without health insurance. As a member of this committee and of the Senate Republican Task Force on Health Care Costs and the Uninsured, I am ready and willing to work with you on this critical issue.

We're going to hear testimony today about a number of the "cost drivers" that influence the rate of growth in healthcare spending. There are many factors which can be cited as cost drivers: patient demand, new technologies, provider expenses, litigation, government regulation, labor shortages, quality deficiencies, and cost-control incentives or the lack thereof, to name several.

Take medical litigation, for instance. The continued rise in medical malpractice premiums contributes to the rise in healthcare spending as physicians and hospitals pass those costs along to patients and their health insurers. Our medical litigation system also encourages costly "defensive medicine"—the ordering of unnecessary tests and procedures—as protection against lawsuits.

But the flaws with our current system of medical litigation go beyond rising premiums. Studies show that the likelihood and the outcomes of lawsuits and settlements bear little relation to whether the healthcare provider was at fault or whether the outcome of the procedure was avoidable—or unavoidable.

The absence of a strong association between payouts and negligence means that medical litigation does not provide much of a deterrent effect. Without this deterrent effect, providers won't have a true financial incentive to get to the bottom of our medical-error problem. We need to revamp our medical litigation system to ensure that the truly injured get just and timely compensation, while at the same time ensuring that the truly negligent providers are the only ones who are punished.

The nature of our medical litigation system is one of the outright problems with our system that must be fixed. The nature of some of the other "cost drivers" is not so clear-cut, however.

Take technology, for instance. We can all agree that the inappropriate or inefficient use of drugs, medical devices, and other new technologies contributes to some extent to the recent escalation in healthcare costs.

But technology can save money as well, not to mention improve the quality of our lives. Today, we can repair damaged hearts through tiny incisions in the chest, instead of by cracking someone's chest open. A lower risk of infections, a lessened need for medications, a shorter hospital stay, and a quicker recovery time—all of these are benefits of the modern technologies that enables these new heart procedures.

Technology is our best hope for new and cost-effective treatments for some of the biggest medical challenges—not just heart disease, but cancer, Alzheimer's, and diabetes as well. In our haste to ensure that money is spent wisely on technology, we must take care not to stifle the development of the next wave of medical miracles.

The list of cost drivers I cited earlier doesn't include perhaps the biggest cost driver of all—us. The decisions we make—and don't make—about our own health play a huge role in the cost of healthcare today. Unfortunately, this factor doesn't get the attention it should.

According to the Centers for Disease Control and Prevention, more than 90 million Americans live with chronic diseases. Roughly 75 percent of our annual $1.4 trillion in healthcare expenditures is attributable to chronic diseases.

The tragedy is that most chronic diseases can be prevented by good eating habits, proper exercise, and other positive behavioral changes. Obesity, for instance, is linked to diabetes, heart disease, stroke, osteoarthritis, cancer and other chronic diseases. According to a recent study, obese Americans accumulated $75 billion in weight-related medical bills in 2003, and Medicare and Medicaid directly paid for more than half of those costs.

I don't raise this issue to single out or point fingers at obese people. I recognize that some people have a strong genetic predisposition to obesity and have a difficult time losing weight on their own. My point is that if we all took greater personal responsibility for modifying our unhealthy behaviors, we'd collectively do more to reduce our overall healthcare spending than any government intervention could do.

We also need to be more responsible for our own healthcare utilization. Those of us with private and public health insurance need to recognize that a visit to the doctor or the pharmacy doesn't cost us 5 or 10 or 20 dollars—that's just the co-payment. We pay the

rest of the bill in the form of higher insurance premiums and higher taxes.

Most forms of third-party insurance distort the impact of our lifestyle decisions and healthcare choices. We would pay more attention to our personal behavior if we weren't insulated from the ramifications of our decisions.

That's one reason I supported a significant step we took in last year's Medicare bill toward reducing the number of uninsured in America. I'm referring to the expansion of health savings accounts (HSAs) from a pilot program to a full-fledged health insurance option for all Americans.

HSAs combine a high-deductible insurance policy for catastrophic expenses with a personal spending account that each HSA policyholder will control for his or her routine healthcare costs. Unlike flexible spending accounts, people who own HSAs will be able to roll over to the next year any unused funds in their personal accounts.

"Consumer-directed" insurance options like HSAs will encourage people to take greater ownership of their own healthcare decisions. A person who owns an HSA will have a greater incentive to invest in preventive care that will help him or her avoid unnecessary trips to the doctor or hospital. HSAs also create an incentive for people to make the types of lifestyle changes that will result in better health and fewer expenditures from their personal HSA spending account.

HSAs have already proven to be attractive to people without health insurance—four of every ten people who participated in the pilot program of medical savings accounts (MSAs) were previously uninsured. HSAs should be particularly attractive to younger and healthier people who don't think it's a good financial deal to purchase traditional third-party health insurance. This is a good thing, by the way—if more young and healthy people purchase health insurance, the overall health insurance risk pool will improve, and there will be fewer unpaid medical bills because of catastrophic injuries or illnesses among the uninsured.

The bottom line is that health savings accounts will allow people to design their own personalized insurance plans. People will use the money that they and their employers put in their own accounts to pay for the benefits they want, knowing that they will be protected from financial ruin in the case of a catastrophic illness. People deserve to be able to choose a lower-cost plan that gives them the freedom to balance value and cost, and HSAs will give them that choice.

This brings me to the final point I'd like to make before we hear from our witnesses. Everyone knows by now that there are approximately 43 million Americans without health insurance. What we don't often hear is that these 43 million Americans are uninsured for a variety of reasons.

Some of the 43 million Americans without health insurance can't afford the insurance plans that are available to them. Some can afford to buy a policy, but decide not to pay for it.

Some of the 43 million Americans without health insurance can't afford even a low-cost plan. Some can't find a low-cost plan because

the insurers in their state must offer a long list of mandated benefits, and therefore can't offer them a less-expensive alternative.

Some of the 43 million Americans without health insurance have been without it for a year or more. Some have only been without it for a few months.

We can't look at uninsured Americans as one big group in need of one big solution. We need to identify those who really cannot afford to purchase health insurance, and identify some solutions that would make health insurance more affordable for them, based on their particular needs. And we need to do this in the context of reducing healthcare costs for everyone.

Mr. Chairman, I again commend you for holding this hearing so that we can take a hard look at this issue before we leap into designing solutions. We need to keep in mind that uninsurance is a chronic problem. It didn't just suddenly appear. It's been a problem for decades. Eliminating the uninsured can't realistically be done in one bill or one session of Congress.

I believe we have already taken steps toward making health insurance more affordable. However, that doesn't eliminate our responsibility to continue making progress here in 2004. We need to keep moving to help extend the benefits of our healthcare system to more Americans. I look forward to working with you, Mr. Chairman and the members of this Committee as we strive to make healthcare and health insurance affordable for all Americans.

The CHAIRMAN. Senator Murray?

Senator MURRAY. Mr. Chairman, thank you very much for having this hearing. I think this is really important that we explore some of the costs behind the rising health care costs and the growing rates of uninsured and the testimony was, I think, excellent from everyone who is here. I think it is showing all of us that this is not a one simple solution issue, that there are a lot of different things to look at.

I think we have to recognize we are not just talking about the unemployed. We are talking about a lot of working families who simply don't get affordable health insurance. The jobless recovery that we are in is affecting a lot of people in my home State of Washington. We have 650,000 people who are uninsured today and we have one of the highest unemployment rates in the Nation. It goes hand in hand. So any kind of solution we find has to deal with a comprehensive approach and I think this is good to be able to explore some of this.

But let me ask a question because it is one that I think many of us often get hit with, that the solution is a cap on noneconomic damages in medical malpractice cases. I think we all agree frivolous lawsuits are a problem we need to deal with, but I fear that if we have a narrow approach, that we don't really address some of the roots of the problem with medical safety and overuse of testing, whatever it is, insurance reforms that we are simply going to put a band-aid on and not do anything.

Let me ask a direct question, Dr. Holtz-Eakin, because in your testimony, you said that medical malpractice insurance accounts for less than two percent of all health care related costs, and I heard Dr. Conover say it costs more than $81 billion. What is the

real cost of medical malpractice and will caps on noneconomic damages get to the real problems that we face with rising costs?

Mr. HOLTZ-EAKIN. In terms of the setting, I think it is important to distinguish between the level of any cost and any growth rates. To the extent that there is built into the level some impact from the tort system, there is less evidence that there is a rising trend that would affect the growth rate of national health spending.

CBO has done some work in this area, and indeed, in some circumstances, you can find that tort reforms, caps on damages, do have impacts on malpractice premiums. However, as you noted in your statement and as we note in our report, even fairly large changes in malpractice premiums constitute a very small fraction of overall health insurance costs and a small fraction of health spending in the United States as a whole. So that is not a dramatic avenue to change the total spending path in the United States.

Senator MURRAY. Would anybody else care to comment on that? Yes?

Ms. WILENSKY. I think you need to distinguish between two types of costs related to liability. The first is the cost you have been discussing, the cost of premiums and the total dollar of health care spending and I think that is relatively small.

What may be a larger cost, but it is unfortunately very difficult to measure, is the cost of what has been termed as defensive medicine, that is practices of tests and X-rays, imaging, etc, that are done for fear of having a bad outcome and not having done all testing possible. This is potentially much greater. It is difficult to estimate because it is difficult to define and because it is confounded by the reimbursement system. A lot of what we see reflects pressures to do more when doing less might be just as well, but you put yourself at risk as a physician. If a bad outcome occurs, the reimbursement system also——

Senator MURRAY. Well, is the only reason a doctor asks for additional medical because they fear liability or are there other reasons? Perhaps they profit from it. Perhaps the patients demand, and we see tons of advertisements on television, I know patients go in and demand things based on what they have seen. Aren't there other causes, as well for that?

Ms. WILENSKY. There definitely are. There is some indication that putting a cap in place will reduce somewhat the premiums. There are some proposals that have come out that attempt to link improvements in patient safety with ways to compensate for injuries that occur, avoidable injuries that occur, and it may provide some way to get over the impasse of only looking at capping malpractice awards made.

There is some indication that capping the award will provide some reduction in premium and therefore in spending, but it is far more complicated than that, as you have indicated.

Senator MURRAY. And if you don't deal with the fact of medical errors and patient safety, then we have turned the system on its head, as well, is that not correct?

Ms. WILENSKY. I agree.

Mr. CONOVER. I would like to make clear that in my figures, $25 billion of the medical malpractice is the insurance premiums and

another $70 billion is our estimate of defensive medicine costs. And I agree with Dr. Wilensky, it is very difficult to measure that.

Senator MURRAY. Dr. Holtz-Eakin?

Mr. HOLTZ-EAKIN. I just wanted to point out that defensive medicine is an ongoing area of research at CBO. We have been able to find some evidence of links between malpractice, defensive medicine, in areas associated with heart ailments. But in using the same research methods in other areas, we find less evidence. The most widely cited study finds that defensive medicine accounts for about one percent of overall health spending, so the magnitudes are useful to keep in mind.

Senator MURRAY. Thank you. I know my time has run out and I do have other questions I will submit. Thank you.

The CHAIRMAN. Thank you, Senator Murray.

Senator Harkin?

Senator HARKIN. Thank you, Mr. Chairman.

Well, let me see, I think it has been about 15 years now that I have been on this committee, 18 years maybe now, and we always have these kind of hearings and this goes on year after year, year after year, and we keep dancing around the issue. We talk about different things but we don't really get to the core of the problem.

What is driving health care costs and the uninsured? Well, the uninsured, obviously it is the fact of lack of a national health care system. But as Senator Murray said, this has many parts. But first, we have to realize we don't have a health care system in America. We have a sick care system. If you are sick, you get care, but there are absolutely no incentives, nothing in there to try to keep you healthy in the first place.

Now, Dr. Wilensky was the only one that mentioned it, lifestyles. The fact is, if we want to focus on what is driving health care costs, it is the lack of preventative health care in America. That is what is driving it, and we never get to it. Just take some examples.

Chronic diseases account for 75 percent of the Nation's health care costs each year and most are preventable. The annual costs of cardiovascular disease, $352 billion; obesity, $117 billion and rising; diabetes, $132 billion; smoking, more than $75 billion; untreated mental illness, $79 billion. In fact, major depression right now is the single leading cause of disability in the United States. So clearly, keeping people healthy is more cost effective than treating diseases related to unhealthy behaviors.

Let us assume for a minute I bought a new car. What would you think if I took that car and I drove it off the lot and I never changed the oil, I never checked it, I never checked the water, I never did anything to it and I just kept driving it and finally the engine seized up. I took it to the garage and they said, put in a new engine. Well, you would probably think I was a little crazy, not to mention a little irresponsible.

The same principles apply in health care policy. You either pay a little now or you pay a lot later. It is common sense. It is time our national health priorities reflected that. Our health system is in a downward spiral of paying a lot later. If we are going to bring down health care costs, what is driving it, we must give people access to preventative health care. Give them the tools to stay healthy and provide incentives.

I will mention a company in Des Moines, Iowa, Townsend Engineering. Ray Townsend a few years ago decided—a small manufacturing plant, not a stockholding plant. He owned it himself. He decided he was going to change his plan. He took all the people and he put them on a health program. He built a gym right next to his facility. He gave his employees benefits, bonuses, free vacations, if they cut down on smoking. He hired a full-time physical trainer for every one of his employees.

Guess what happened? Smoking went to zero. His sick days went down precipitively. His production went up. The productivity rate went sky high. But guess what didn't go down—his health insurance costs because he was in a pool with everybody else, but he realized that he was better off and his plant was better off and he was more productive and he was making more money because his people were healthy. But he did that on his own dime. There were zero incentives for Ray to do that.

Well, we could take a lesson from that and start providing those kinds of incentives, not only just for businesses, but for schools and everything else. In the coming months, again, I will be addressing these. I am going to introduce a package of legislation to folks on nutrition, physical activity in schools—kids don't even have physical activity in schools anymore. Eighty percent of the elementary school kids in America today have less than one hour of P.E. every week. Tell me why they are getting fat and obese when they get older. Focus on mental health, tobacco cessation, prevention and treatment, consumer awareness, responsible marketing practices.

I will tell you one other thing. We put $4 million in the last farm bill, $4 million. We took four States, 100 schools, elementary, middle, and high school, and we said, what would happen if you gave free fruits and vegetables to kids? Free during the day, anytime they want it. Pick up an orange. Pick up an apple. Pick up a banana, kiwi fruit, strawberries. Give them free fruits and vegetables, broccoli, cauliflower, celery, whatever.

Guess what happened? Now, we have only had about a year of this that it has been in effect, a little over a year. You check those schools in Michigan. You check them in Ohio. You check them in Iowa. You check them in Indiana. In every single one of those, kids are eating healthier. Some schools have taken out vending machines because the kids aren't putting money in the vending machines any longer. These are the kind of incentives we have got to start putting in there.

Food stamps—food stamps—you can still on food stamps, you can get Twinkies but you can't get vitamins or folic acid for women on food stamps. What sense does that make?

So again, we keep dancing around this all the time, and we can talk about insurance, we can talk about tort reform, we can talk about all the new equipment and stuff. I am telling you, until we start focusing on preventative health care, and until all you doctors and all you experts start telling us that we have got to build in incentives, we have got to start with kids early in life, and we can't keep going down this road any longer or we are going to be here another 15 years talking about this.

You are the experts out there. What is driving health care costs? It is the lack of preventative health care in America. It is chronic

illnesses. Seventy-five percent, as I mentioned, go to chronic illnesses and these are preventable.

My time has run out. I didn't have a question, I just had a statement. Thank you. [Laughter.]

The CHAIRMAN. That was excellent testimony. [Laughter.]

Senator Alexander? You can direct questions at the other panel members. [Laughter.]

Senator ALEXANDER. Thanks. Thanks, Mr. Chairman. I enjoyed Senator Harkin's statement. I have met Ray Townsend, and that is an impressive operation in Des Moines, Iowa.

We are beginning to discuss the reauthorization of higher education, and as we talk about costs of health care, I think it is important to remember that we don't have unlimited dollars in the country and we must make choices. As Dr. Wilensky was talking about the 1.5 percent increase in the economy but the four percent increase in health care costs except for part of the 1990s, I was thinking about what has been happening in my State. One of the consequences of the increased cost of health care has been, I think, to damage and underfund higher education.

For example, when I left the Governor's office in Tennessee in 1987, we were spending 50 cents out of every dollar on education and 15 cents on health care. Today, the State of Tennessee is spending 40 cents of every tax dollar on education and 31 cents of every tax dollar on health care. So it has gone from 15 cents to 31 cents on health care, and 50 cents to 40 cents in education, so you can see where that has gone.

The question I have—Dr. Holtz-Eakin and Dr. Wilensky, you may particularly have comments on this but others may as well—is if you have been thinking about solutions to the health care costs. I have been intrigued by suggestions for dealing with the uninsured. One solution we have heard about for a long time is a single-payer system. Another suggestion is that we move—that we disconnect the provision of health care from the employer, a practice we got into, I guess, in World War II, perhaps accidentally, and that we move toward a system that would require individuals to buy their own health care—basic insurance with the government perhaps helping the poor and providing some sort of catastrophic solution.

The reason I bring that up is I am thinking about the challenge that we have as a country of keeping our jobs in worldwide competition over the next ten or 20 years as we compete with China and Southeast Asia and other countries. Our businesses won't be able to provide those jobs if their costs are so much higher than businesses that operate outside the United States. One of the major costs they have is health care and they will have enormous pressures to decrease providing health care. We will have less health care, and we will have fewer jobs if the businesses continue to provide the brunt of the health care costs.

So how practical would it be to disconnect the health care system, health care insurance, from employers, not by shifting it to a single-payer government system but by shifting it to a system where individuals would buy an individual insurance policy and the private sector would still be involved? Dr. Holtz-Eakin, have you given any thought to that?

Mr. HOLTZ-EAKIN. We have not analyzed any specific proposals, but I think there are a couple of comments I can make in that area.

The first is, let me just touch on the notion of international competition and costs for employment. Costs are best measured relative to productivity, and indeed, U.S. workers are highly productive. So it is not just a cost comparison. It is always cost relative to what you get and our labor provides more than do comparable laborers around that globe and for that reason we can afford higher labor compensation in all forms, including health care.

It was interesting that in the example that the Senator cited his workers were more productive. I think that is part of a lesson there. It was not so much about health insurance but also about raising productivity of workers.

But the example is typical of the centrality of employer-sponsored insurance in our system. The data we provided indicate that a lot of short spells have to do with labor market transitions quite likely, and so for better or for worse, we have gotten the labor market and the health insurance market intertwined. There is no question about that.

And then I think the final thing that really stands out is regardless of whether you do it at the individual level or the employer level, the notion that individuals are insulated from the cost of their decisions. Again, to use the same scenario, if one were to treat their car in the way that Senator Harkin described, your auto insurance would not pay off. It wouldn't pay for that new engine and you would be cognizant of the costs of mistreating the car.

Whether it is in preventive care or in sick care, after the fact, an employer-sponsored insurance policy or an individual policy has to provide incentives for efficient utilization of the care and adoption of the technologies that are worth it, not just every technology that is invented. Those are less to do with being able to cover every person in the United States but more about what would be the impact on the efficiency of the system and the growth in health care costs.

Ms. WILENSKY. Let me respond more directly to the issue of whether moving away from employer-sponsored insurance may make people more sensitive. I think the answer is yes. There are a number of issues relating to employer-sponsored insurance. One of the most serious is that it tends to make people think they are using somebody else's money, their employer's money, as opposed to part of their own compensation package and that exacerbates the various factors we have talked about, about why health care spending is growing so rapidly.

But I think at a practical level, you need to decide what we are going to do to augment insurance because we are seeing it decline in the voluntary employer-sponsored market. Either you can try to require employers to do this or you can try to provide financial assistance and access to group insurance and let individuals choose. I think there is a lot of reason to go the second route, to make sure people actually get the kind of insurance that they want as opposed to what their employer might be choosing on their behalf, and to make them clearly aware that this is their money that is being spent and it ought to be used wisely.

You do have to be careful how you do this. The fact is, most of us have employer-sponsored insurance and you want to be careful about how you set up a system to live alongside this voluntary employer-sponsored insurance because it would be extremely disruptive if we just took away or pushed out all employer-sponsored insurance.

But the fact is, there has been a secular decline in insurance coverage. There is going to be continuing increases in the number of uninsured even with robust economic growth. That is what the 1990s proved to us, is that even with a decade of robust economic growth, the number of uninsured is likely to increase or only decline very slightly.

So what you do to help people without voluntary employer-sponsored insurance, because they are not offered it or they are in and out of the labor market or they are part-time or full-time entrepreneurs, is very important and that is the opportunity, if you wish to use it, where you could move away from employer-sponsored insurance, which, as you have indicated, is a vagary of history of World War II and trying to get around wage and price controls.

Ms. DAVIS. If I could make a couple of quick points. I think if we are really going to cover people, it is going to have to be a shared responsibility with both employers and public programs providing group insurance. Employers contribute $500 billion toward health insurance for workers. It covers 160 million people. So if you do away with it, you are going to have to do a lot on the tax side to substitute for that.

Our surveys show it is what people overwhelmingly prefer. They think employers do a good job of selecting plans. And it is more efficient because you pool risk, you can deduct premiums from paychecks, and you get lower administrative costs than you do in the individual market.

So I think you have to move very carefully to move it all the way from employer coverage. It is what people prefer. It makes them happy. And even low-wage workers want what high-wage workers have, which is good benefits on the job.

Senator ALEXANDER. Thank you.

The CHAIRMAN. Senator Dodd?

Senator DODD. Thank you very much, Mr. Chairman. Thank you for holding the hearing. Let me just make a couple of opening comments, if I can, and then try to get a couple of quick questions, if I could.

First of all, I thank all of you for being here and thank you again, Mr. Chairman. Let me first of all associate myself with the remarks of Tom Harkin. I think the notion of doing a better job in the area of preventive health is something we all would agree on. There is less of an incentive, obviously, within the professions associated with health care to move in that direction, but clearly we all understand the benefits of encouraging a better lifestyle for people and reducing the problems.

According to the Institute of Medicine, we lose 18,000 people every year, they die in this country prematurely because they are uninsured. Let me give you some idea of the cost to us. If you are not impressed by the financial implications, clearly losing 18,000 people in the United States prematurely because they are unin-

sured ought to startle everyone. I mean, to State this is a crisis is like preaching to a choir here. I think everyone here agrees this is growing in its magnitude. We have had a ten percent increase in the uninsured in this country since the year 2000, now at 44 million people.

I think it is important to understand who we are talking about here. Senator Enzi specifically talked about some aspects of this. Two-thirds of the uninsured are poor. They are poor. They are people who are living below 200 percent of poverty.

Second, these are people who are working. The assumption here, I think if you ask most Americans who are the uninsured, they think they are a lot of unemployed people. Eighty percent of the uninsured in this country hold jobs, in some families holding two and three jobs to make ends meet.

Third, there are 8.5 million of this number who are children. Twenty-one percent of the uninsured are kids in the United States that we are dealing with here. So that is setting the table in terms of the magnitude of the crisis and who, really, we are talking about.

So when I see some of the suggestions being made, and I say this with all due respect, but the idea that the answers to these issues are going to be tax credits or free savings accounts, if you understand who are the uninsured and you begin to think about the suggestions that are being offered, they hardly touch on the problem at all.

The idea of having sort of a tax credit approach, you are talking about people who don't have the disposable income here. The average premium for an employer-sponsored health insurance for a family was more than $9,000 a year. Now, does anyone realistically think that a tax credit approach is going to make much of a difference if you understand what the population is?

The same thing is true with these health savings accounts, with all due respect here. Again, who is likely to go into this area, who are the uninsured? And if you begin to match up who is going to move into a health savings account and who the uninsured are, it doesn't line up very well.

So the only two real suggestions we have had in this area, the tax credit approach and these health savings accounts, just don't really address the two-thirds of the uninsured being poor, being children, and being people who are working in places that just don't provide that kind of coverage.

Now, there are some ideas out there that are being bandied about and we need to take some of these ideas and work on them, and Dr. Wilensky addressed some of them here in the brief comments I heard her address. Obviously, they include employer and individual mandates, and this is always a painful area to get into, but I think we are going to have to really look at this very carefully because otherwise it is going to be very difficult to get this kind of coverage, and with subsidies for low-income individuals.

Expansion of existing public programs, I think is obviously an alternative or establishment of State purchasing pools. I was stunned that in this recent so-called prescription drug Medicare reform bill that we actually have a prohibition, a prohibition in that legislation of having purchasing pools when it comes to prescription drugs.

Not only is it a disincentive, we are prohibited from doing it—prohibited from doing it.

And here, we are talking about one of the major costs in rising health care is the cost of prescription drugs. A national bill on prescription drugs and Medicare reform and we have just banned, banned people from pooling together to try and reduce the cost of prescription drugs. What is this administration thinking about? It is incredible to me to move in that direction.

So the last couple of points I would just make here is, obviously, there are some principles I think we ought to keep in mind as we try to address this issue. First and perhaps most importantly is any successful program should be comprehensive and affordable coverage for low-income working Americans, since they are the bulk of what we are talking about here. We should adopt an approach that prevents discrimination by providers based on preexisting conditions and current health status. We should expand existing public health programs, such as Medicaid and the SCHIP program for children.

And finally, we need to pursue a proposal to address the rising cost of health care, including the use of inexpensive generic prescription drugs, better chronic disease management, preventive medicine, improving health quality and efficiencies.

I would like to just quickly address—is that the red light? I had a couple of questions on the information technology area. I want to ask you, Dr. Milstein, you talked about IT being a reason for rising costs. I wanted to get at the question of whether or not it is also reducing costs in some areas. I know Dr. Davis addressed that, but I wonder if you might address whether or not it could also be a cost reducer to move into IT more effectively.

Dr. MILSTEIN. Thanks. I was referring to high-technology medicine as a cost increaser. I think information technology, on balance, would substantially reduce health care costs.

Senator DODD. And Dr. Davis, do you——

Ms. DAVIS. We know that medical errors lead to longer hospital stays, increase charges by about $10 billion, contribute to 33,000 deaths. So certainly information technology that would reduce errors, whether it is medication errors, device errors, other types of medical errors, could be very beneficial in terms of reduced deaths, lower costs, improved efficiency. So yes, moving very rapidly toward the modern age in information technology is something I think all of us would agree with.

Senator DODD. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. There has been an awful lot of good information put on the table here today and we very much appreciate the witnesses' testimony.

On a couple of points, Dr. Davis, you said that, and I have heard this figure quoted a number of times in a number of different avenues, that ten percent of the population accounts for 70 percent of the cost of health care. Does anybody on the panel have a calculation that ties that ten percent as to what stage of life they are in? Is that in the final 3 months of life? Is it in the final 6 months of life that the majority of that ten percent of the population is in? Obviously, it is during an acute illness period because otherwise

their health care wouldn't be so expensive. But is there also a tie-in into a stage of life that that ten percent is in?

Ms. DAVIS. There is some evidence from the Medicare program that about six percent of beneficiaries die in a given year and account for 27 percent of costs. So that is a part of the story. But the other part of the story are high-cost people who are costly year after year. So it is not just end of life here. That is part of it, but it is broader than that. It is why, again, targeting disease management, high care cost management, better dealing with asthma—some children are in emergency rooms year after year, so managing asthma better, managing congestive heart failure better, being able to use nurses or even pharmacists sometimes can be monitoring people's compliance with medication, are effective strategies for really getting at who it is that is generating the high costs.

The CHAIRMAN. It would seem logical that if we wanted to address the issue of savings in the delivery of health care, that we would address this 70 percent of the cost, ten percent of the folks that are generating it, which is the acute care issue, which brings me back to Dr. Milstein's point, which was that we could significantly reduce costs by making available the information which HHS presently has in its databank. Can you go into a little more depth as to how that would occur? Is there a legislative requirement there? Why would that generate savings?

Dr. MILSTEIN. There are, in some of the examples that I cited, large private sponsors and union-sponsored heath benefit plans. In the rare instances in which they have enough data in a given geography to precisely profile the longitudinal efficiency and quality of doctors in different hospital departments, they have been able to save a lot of money on their health insurance costs by beginning to either incentivize physicians who perform well on quality and efficiency or incentivize their enrollees to begin using physicians and hospitals that score better on longitudinal efficiency and quality.

But most insurance carriers and most private insurance plan sponsors don't have big enough claims databases to precisely profile and compare the longitudinal efficiency and quality of different doctors and different hospital departments in their community. The only way that they would have access easily to a big enough database to be able to do this would be to give them access to the patient privacy protected version of the CMS claims database. That would allow every private sector health benefit plan sponsor to have enough data to precisely identify which hospital departments and which physicians were both more longitudinally cost effective in terms of total cost, as well as delivering higher quality care, and begin to either reward those providers with better payments and/or incentivize their enrollees through reduced out-of-pocket costs to preferentially use those providers.

The CHAIRMAN. We don't have time right now, but if you could give us that in a written presentation, but also the ethical implications of that when we get into this patient protection issue and how we as a committee would be able to address something like that.

Dr. Conover, you said that you got projections of saving $300 billion-plus, it sounds like, if we addressed regulatory activity and improved it. Do you have specific recommendations for doing that?

Mr. CONOVER. Well, no. First of all, it is $128 billion is the excess costs of regulation.

The CHAIRMAN. All right——

Mr. CONOVER. If you eliminated all regulation, you would save $335.

The CHAIRMAN. The net cost is $128, then.

Mr. CONOVER. Right. The areas that seem most promising to look into would be malpractice reform, FDA regulation, and facilities regulation, but our study wasn't designed to figure out what would you do in those areas because we covered 50 different areas of regulation. I don't have the expertise to tell you, okay, in area X, this is what you do and you could save so many dollars. All we can do is sort of highlight the areas where it looks like costs seem to be well in excess of benefits and those would be the targets to sort of shoot at.

Senator DODD. Mr. Chairman, did you find any cost savings as a result of regulation? Did you look at that, as well?

Mr. CONOVER. Yes. When we looked at the benefits of regulation, that is what the $207 billion in benefits, some of it, it relates to cost savings. So yes, we did take that into account.

Senator DODD. You did.

The CHAIRMAN. Which brings me to Dr. Wilensky. You were talking about, in the issue of tort reform, about trying to get over the hurdle of how we do tort reform, which has been a conundrum for us as a Congress. You are suggesting some sort of merger of patient safety with recovery activity, I guess. Can you give us some more definition of that concept?

Ms. WILENSKY. I do think capping awards is a component because I do think there is a reduction in the malpractice premiums, but it is more than that. There are avoidable injuries that occur and there needs to be compensation and there needs to be a tie with improving patient safety, and that is really the way that it may be possible to get the various parties together.

We have been talking today about costs associated with medical errors and about deaths associated with medical errors and the distinction of moving away from the jury trial to expert decision making in terms of——

The CHAIRMAN. You are talking about some sort of no-fault system, much as we have with automobiles in some States?

Ms. WILENSKY. Right. That would be a component of it, but it is mainly the tying together of improved patient safety with the changes in tort to try to provide assurance both to the Congress as well as to the public this is not just a question of protecting the providers but of actually improving and rewarding patient safety.

There have been—there are some individuals around the country who are doing some work. I would be glad to provide you with names or with summaries of the work that they have been doing if you would like to know more about this item.

The CHAIRMAN. What you really need to provide us with is 51 votes or 60 votes. [Laughter.]

Ms. WILENSKY. That may be somewhat beyond my capability.

The CHAIRMAN. Do people wish to ask a second round of questions? Is there anybody who has a second round?

Senator DODD. Just a couple. Could I follow up? You have obviously looked at California just on this medical malpractice issue, and there, they did cap awards.

Ms. WILENSKY. Right.

Senator DODD. They also did something else in California. They capped insurance premiums. Which of those two do you think had the larger impact?

Ms. WILENSKY. Well, the capping, I haven't looked at what has happened and I don't actually know the results of the insurance capping. One of the questions that you have to watch with regard to putting arbitrary caps in place is what else it does, and I don't know what it has done to the insurance system. I know that Kentucky, which had a number of active measures to change their insurance environment, has driven out most of the insurance in the State. And so what you do needs to be looked at in terms of not only the intended consequence, but the unintended consequences.

Senator DODD. I will just give you an idea. Just in my State, I hope I remember these numbers pretty well, but I think we have about 9,000 or 10,000 physicians, 31 hospitals, about 12,000 nurses. We have a screening process, a board that judges whether or not, if proven true, the facts would result in a malpractice conclusion.

As a result of that, I think we are down to around just a handful of malpractice suits being brought each year, and I am not exaggerating, just a handful. There is no premium reduction at all. So here, despite the fact we are screening, reducing the number of suits that are going as a result of the screening process, we see no return, no benefit yet that has occurred even though we brought the numbers way, way down in my State.

The CHAIRMAN. We may want to have a hearing on that, because obviously that is because Connecticut is pooled with some other States which maybe aren't so disciplined as Connecticut.

Senator DODD. Maybe that, as well. I don't know about that.

Let me ask one other question, just on these health savings accounts. I wanted to ask you, Dr. Davis. I made the point earlier that I thought this was going to be adverse to the poor because of who would qualify for health savings accounts. I wonder if you would address that. Am I right or wrong about that or do you have any other comments to make?

Ms. DAVIS. No, I think you are right to be concerned about that. First of all, only about eight percent of Americans now have $1,000 high deductible health insurance plans and those plans really aren't good for people because it keeps them from getting the preventive care that you talked about earlier. We certainly know the uninsured don't get preventive care. If you have got a $1,000 deductible, people aren't going to get preventive care.

So it is largely a tax break for higher-income people who can both afford a $1,000 deductible out of pocket and can afford to put away the $1,000, or even in the Medicare prescription drug bill as much as $2,600 every year, both excluding it from income, letting it grow tax free, and then taking it out to pay medical expenses tax free.

The other thing it does is split the risk pool. The experience with employers that are starting to offer an option of a $1,000 deductible

with a health reimbursement account is largely healthier people who had low expenditures to start with are the ones who go into it. So you pull the healthy people out of that and it drives up the premiums for other people who don't have those kinds of policies.

So I think it is very troubling and very much a move in the wrong direction.

Senator DODD. And it doesn't address the notion of who are the uninsured. Do any of you want to disagree with what Dr. Davis just said?

Ms. WILENSKY. My understanding of who is attracted to the medical savings accounts, it is both the healthy and the very sick. It is actually both extremes and not just the very healthy.

Senator DODD. On the tax credit ideas. Let me go back. You argue——

The CHAIRMAN. Can I break in here? I also have some questions and we are going to get a vote here, so let me ask a couple of questions and then we can come back to you.

Senator DODD. Oh, I am sorry.

The CHAIRMAN. Dr. Holtz-Eakin, you mentioned in describing the parameters or the demographics of the uninsured that there is a large percentage of people who are young and who have income and who are uninsured. What percentage is that of the—and then you broke the uninsured up into 20 million who are uninsured all year, 40 million who are at any point in the year uninsured, and so there is a group that is moving in and out of the uninsured pool.

Of that 20 million who are uninsured throughout the year, what percentage are under age 40 and have incomes higher than, say, 200 percent of poverty or something in that range?

Mr. HOLTZ-EAKIN. I don't have the number off the top of my head. We have the two pieces independently but not the place where they intersect.

The CHAIRMAN. Well, is it——

Mr. HOLTZ-EAKIN. We can certainly get that for you.

The CHAIRMAN. Is it a significant number that we are talking about? Basically, what I am looking at is what percentage of the people who are uninsured all year are people who basically are healthy and are deciding they don't want to buy insurance with their discretionary money?

Mr. HOLTZ-EAKIN. We have got about 80 percent who are 44 or younger, so there is a large number there.

The CHAIRMAN. Eighty percent.

Mr. HOLTZ-EAKIN. But those are——

Senator DODD. Eighty percent?

The CHAIRMAN. Are 44 or younger.

Mr. HOLTZ-EAKIN. Of those who are uninsured all year, ballpark numbers doing the math quickly. And then for those who have, say, 400 percent or more of the poverty line, that is about five percent, so it is going to be——

The CHAIRMAN. So 200 percent or more would be about how many?

Mr. HOLTZ-EAKIN. Four hundred percent——

The CHAIRMAN. How about 200 percent?

Mr. HOLTZ-EAKIN. Two hundred percent, you would have about 25 percent.

Ms. DAVIS. Our surveys show that of the uninsured, only five percent are uninsured because they don't want coverage.

The CHAIRMAN. Well, it is not a question of wanting. It is a question of whether they choose to do it. I think there is a percentage of our population that if they have a vehicle available to them which covers the catastrophic event of falling off their motorcycle or getting injured during bungee jumping, they might take that policy.

Mr. HOLTZ-EAKIN. It certainly can be a rational choice to be uninsured.

The CHAIRMAN. You take that percentage out of the base. What?

Mr. HOLTZ-EAKIN. It certainly can be a rational choice to be uninsured, there is no question about that.

Senator DODD. Let me jump back to the issue. I wonder if any of you would just debate with me if you disagree with me. In the Medicare prescription drug bill, banning the pooling—why am I wrong about that if you disagree with me?

Mr. HOLTZ-EAKIN. I am a bit curious. If you told me exactly which provision you are referring to—there is some confusion, at least in my mind.

The CHAIRMAN. The position you wrote a letter on a couple of days ago.

Mr. HOLTZ-EAKIN. It is the Secretary noninterference language?

The CHAIRMAN. Yes.

Mr. HOLTZ-EAKIN. The CBO's view on that is that if you have private at-risk prescription drug plans delivering this benefit, those entities have both the——

Senator DODD. What about Medicare, under Medicare?

Mr. HOLTZ-EAKIN. That is what I was talking about. This is the Part D benefit. Those firms have the incentives because they are at risk for their losses, and they have the tools, the ability to control things so that they would have tremendous ability to—an incentive to pursue deals with pharmaceutical companies and as a result don't get the best deal they can and it is not clear why the Secretary's intervention would produce a better deal. They have got all the tools and incentives that we can bring to bear. So we guessed it would be a negligible impact on the cost of the program.

Senator DODD. There is no ban?

Mr. HOLTZ-EAKIN. The language prohibits the Secretary of HHS. That is a ban. However, the fact is that we have the ability of the private drug plans to pool large amounts——

Senator DODD. Why wouldn't you at least try it? What is the point?

Mr. HOLTZ-EAKIN. Removing the language, the formal letter says removing the language would have a negligible impact on the cost of the program.

Senator DODD. Dr. Davis, do you agree with that?

Ms. DAVIS. Anytime you are a small buyer, you have less clout than if you are a big buyer. So if Medicare were to negotiate on behalf of all 40 million beneficiaries drug prices, they would get lower drug prices. If they were to negotiate on behalf of all 280 million Americans, they would get lower prices for all services. That is the experience of other countries and that is why the U.S. costs are a lot higher than they are in other countries. We pay higher

prices for drugs. We pay higher prices for medical services because we do not use the purchasing power of the government to achieve efficient care or good rates for services——

The CHAIRMAN. We are about to step into a debate on rationing and nationalization of health care here, which really wasn't the purpose of this panel. [Laughter.]

The CHAIRMAN. But we appreciate CBO's letter, which did clarify the point to some degree.

I want to thank the panel for their excellent testimony. This is a huge issue and I very much appreciate especially the attendance of so many Senators and the members of the panel for participating. Thank you.

The committee is adjourned.

[Additional material follows.]

ADDITIONAL MATERIAL

PREPARED STATEMENT OF DOUGLAS HOLTZ-EAKIN

Mr. Chairman and Members of the Committee, I appreciate the opportunity to be here today to discuss the characteristics of people without health insurance and the factors that contribute to the growth of health care expenditures. While more than 240 million people in the U.S. have health insurance today through a variety of private and public sources, millions of others do not have such coverage; and the percentage of Americans who are uninsured has risen in each of the last 2 years for which information is available. At the same time, health care spending has continued to rise.

In my testimony today, I will discuss some important characteristics of the uninsured population that have received relatively little attention but that have important implications for Federal policies to expand insurance coverage. I will also discuss factors contributing to increases in health care spending and will describe the relationship between health care costs and insurance coverage.

Characteristics of the Uninsured Population

In recent years, it has been frequently stated that about 40 million Americans lack health insurance coverage. That estimate, by itself, presents an incomplete and potentially misleading picture of the uninsured population. The uninsured population is constantly changing as people gain coverage and lose coverage. Furthermore, people vary greatly in the length of time that they remain uninsured. Some people are uninsured for long periods of time, but more are uninsured for shorter periods.

Policies aimed at increasing insurance coverage will be more effective if designed in light of the dynamic nature of the uninsured population as well as the distinction between the short-term and long-term uninsured. For people with short spells of being uninsured, policies might have the goal of filling the temporary gap in coverage or of preventing such a gap from occurring. For people with longer periods without insurance, policies might seek to provide or facilitate an ongoing source of coverage.

There are several alternative measures of the number of people who lack insurance coverage. One describes those people who do not have coverage for a sustained period (say, 1 year)—the long-term uninsured. Alternatively, another identifies how many individuals have experienced any episode of uninsurance during a particular period. Finally, the most commonly used measure (a mixture of those two others) counts the number of individuals without insurance on any particular day or week. Those different approaches yield different numbers because of the continual movement of people into and out of the uninsured population. The Congressional Budget Office's (CBO's) recent analysis [1] found that in 1998:

- Between 21 million and 31 million people were uninsured all year;
- At any point in time during the year, about 40 million people were uninsured; and
- Nearly 60 million people were uninsured at some point during the year (*see Figure 1*).

CBO conducted the analysis for 1998 because that was the most recent year for which suitable data were available to construct all three measures. More recent analyses by researchers at the Agency for Healthcare Research and Quality indicate that those three measures of the uninsured remained fairly stable in the subsequent period from 1998 to 2001.[2]

About 30 percent of Americans under age 65 who become uninsured in a given year remain so for more than 12 months, while nearly half obtain coverage within 4 months (*see Figure 2*).[3] Those estimates were obtained by CBO using data from the Census Bureau's Survey of Income and Program Participation for 1996 through 1999. They are very similar to the findings of previous studies that have examined earlier time periods.

People with less education, those with low income, and Hispanics are more likely than others to be uninsured (*see Table 1*). They are also somewhat more likely to remain uninsured for long periods. For example, people in families in which no one

[1] Congressional Budget Office, *How Many People Lack Health Insurance and for How Long?* (May 2003).

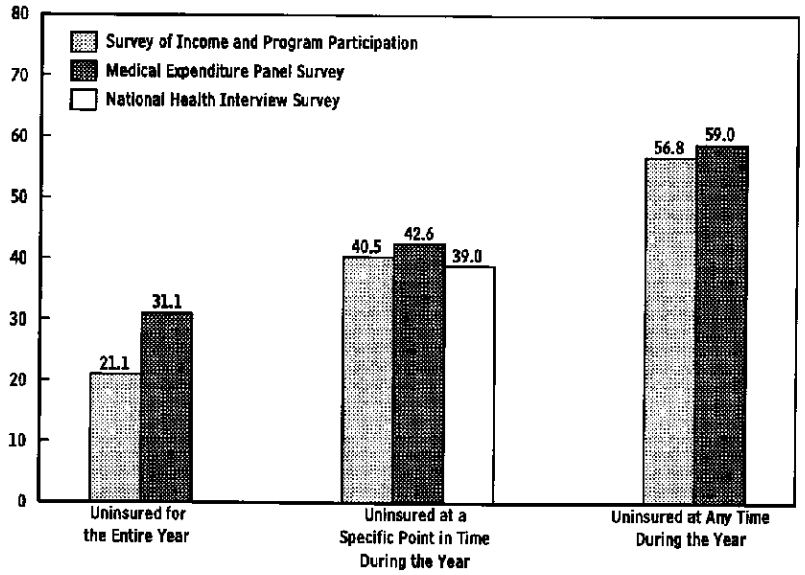
[2] Agency for Health Care Research and Quality, *The Uninsured in America—1996–2002*, Statistical Brief No. 24, available at www.ahrq.gov.

[3] Congressional Budget Office, *How Many People Lack Health Insurance Coverage and for How Long*?

attended college account for 64 percent of uninsured spells of more than 12 months but only 49 percent of uninsured spells that end within 4 months (*see Table 2*). That difference probably reflects, at least in part, the fact that people who did not attend college are less likely than others to have access to employment-based insurance.

Adults are somewhat more likely than children to remain uninsured for long periods. The availability of Medicaid coverage may explain some of that discrepancy: coverage is available to many children in low-income families, but the majority of low-income adults are not eligible for the program. In addition, evidence suggests that single adults without children may be less inclined to seek insurance, on average, than other adults are, which may lead them to experience long spells without insurance.

Figure 1.
Estimated Number of Nonelderly People Without Health Insurance in 1998

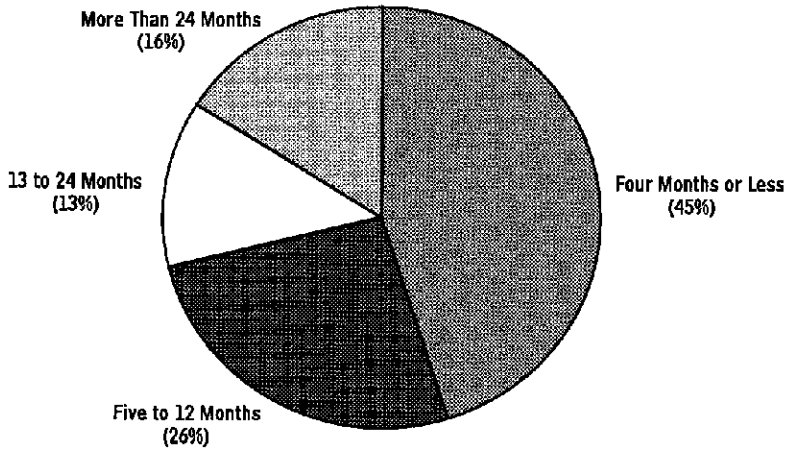


Source: Congressional Budget Office.

Note: The Survey of Income and Program Participation is conducted by the Census Bureau. The Medical Expenditure Panel Survey is conducted by the Agency for Healthcare Research and Quality. The National Health Interview Survey is sponsored by the Centers for Disease Control and Prevention, which reports only the point-in-time estimate.

The vast majority of the uninsured are in working families. Some 43 percent of the people who were uninsured all year in 1998 were in families in which at least one person worked full time all year, and 47 percent were in families in which at least one person worked part time or for a portion of the year (*see Table 1*, column 3). Studies have found that over three-quarters of uninsured workers are not offered insurance by their employer. Low-wage workers are less likely to be offered insurance by their employer and less likely to accept it if it is offered.

Figure 2.
Distribution of Uninsured Spells Among Nonelderly People in a Given Year, by Duration



Source: Congressional Budget Office based on data from the 1996 panel of the Survey of Income and Program Participation, which followed respondents over a period of 41 months (from March 1996 through July 1999).

Note: These estimates are based on uninsured spells that began between July 1996 and June 1997.

According to the Census Bureau's Current Population Survey, the number and percentage of Americans who are uninsured increased in 2001 and 2002, after falling the previous 2 years.[4] From 2000 to 2002, the number of nonelderly people who were uninsured increased from 39.4 million to 43.3 million, or from 16.1 percent of the nonelderly population to 17.3 percent.[5] That rise in uninsurance rates was associated with a drop in the percentage of nonelderly people covered by employment-based insurance (from 67.1 percent to 64.2 percent), which was partially offset by an increase in the percentage covered by Medicaid and the State Children's Health Insurance Program (from 10.4 percent to 11.9 percent). Those changes in coverage rates, while significant, are smaller than those that occurred in the early 1990s, when the share of the nonelderly population covered by employment-based insurance fell by more than 5 percentage points.[6]

[4] Researchers disagree about how the CPS estimates of the uninsured should be interpreted. Like many health care analysts, CBO believes that those estimates provide a close approximation of the number of people who are uninsured at a specific point in time. See Congressional Budget Office, *How Many People Lack Health Insurance and for How Long*?

[5] Paul Fronstin, *Sources of Health Insurance Coverage and Characteristics of the Uninsured: Analysis of the March 2003 Current Population Survey*, Issue Brief No. 264 (Washington, D.C.: Employee Benefit Research Institute, December 2003).

[6] From 1989 to 1993, the share of the nonelderly population without health insurance rose by 1.5 percentage points, the share covered by employment-based insurance fell by 5.1 percentage points, and the share covered by Medicaid rose by 4.0 percentage points. See Fronstin, *Sources of Health Insurance Coverage*.

Table 1.
Nonelderly People Without Health Insurance in 1998, by Selected Characteristics
(In percent)

Characteristic	Nonelderly People: Uninsured at Any Time During the Year	Nonelderly People: Uninsured All Year	Distribution of the Population Uninsured All Year
Age			
Less than 19	26.8	7.3	24.9
19-24	41.9	14.4	13.7
25-34	31.1	12.3	21.9
35-44	20.2	9.3	19.7
45-54	15.1	7.6	12.6
55-64	14.0	6.7	7.2
Race/Ethnicity			
White, Non-Hispanic	18.4	6.3	48.4
Black, Non-Hispanic	33.4	10.7	15.3
Hispanic	47.4	22.5	30.8
Other	31.1	10.9	5.5
Family Income Relative to the Poverty Level[a]			
Less than 200 percent	47.9	19.5	74.9
200 percent to 399 percent	17.4	5.3	19.8
400 percent or more	6.0	1.6	5.3
Education[a, b]			
No high school diploma	50.4	24.6	28.4
High school graduate	33.1	12.7	36.4
Some college coursework	22.1	7.3	26.6
Bachelor's degree or higher	9.9	2.6	8.7
Family Employment Status[a]			
At least one full-time worker all year	15.0	5.9	42.9
Part-time or part-year work only	46.1	16.1	46.6
No work	32.8	13.1	10.6

(Continued)

Table 1.
Continued

Characteristic	Nonelderly Americans: Uninsured at Any Time During the Year	Nonelderly Americans: Uninsured All Year	Distribution of the Population Uninsured All Year
Health Status[c]			
Excellent	23.7	8.9	28.8
Very good	25.1	9.3	32.8
Good	24.6	9.1	24.5
Fair	25.1	8.7	8.9
Poor	25.3	10.3	5.1
Memorandum:			
Total Nonelderly Population	24.5	9.1	100.0

Source: Congressional Budget Office based on an analysis of data from the 1996 panel of the Survey of Income and Program Participation.

a. For family-level variables, families are defined as health insurance eligibility units, which are composed of individuals who could be covered as a family under most private health insurance plans.

b. Education measures the highest education level among the adults in the family.

c. Information on health status was collected only for survey respondents who were at least 15 years of age.

Table 2.
Comparison of the Characteristics of Nonelderly People with Short Uninsured Spells and Long Uninsured Spells (In percent)

Characteristic	Duration of Uninsured Spell: Four Months or Less	Duration of Uninsured Spell: More Than 12 Months
Total	100.0	100.0
Age[a]		
Children	47.3	37.5
Adults	52.7	62.5
Race/Ethnicity		
White, Non-Hispanic	56.7	48.8
Black, Non-Hispanic	19.7	18.2
Hispanic	18.4	27.6
Other	5.2	5.4
Family Income Relative to the Poverty Level[b,c]		
Less than 200 percent	61.6	77.0
200 percent to 399 percent	26.7	21.0
400 percent or more	11.7	7.0
Education[a,c]		
No high school diploma	17.8	26.6
High school graduate only	31.0	37.6
Some college	35.5	26.8
Bachelor's degree or higher	15.6	9.0

Source: Congressional Budget Office based on an analysis of data from the 1996 panel of the Survey of Income and Program Participation.

Note: Estimates in this table are based on uninsured spells that began between July 1996 and June 1997. People with uninsured spells lasting more than 24 months had very similar characteristics to those of people with uninsured spells lasting more than 12 months.

a. Age and education were measured as of the first month of the uninsured spell. Education measures the highest education level among the adults in the family.

b. Family income relative to the poverty level was computed as the mean over the four-month period before the beginning of the uninsured spell.

c. For family-level variables, families are defined as health insurance eligibility units, which are composed of individuals who could be covered as a family under most private health insurance plans.

Just how much of the recent increase in uninsurance rates results from rising costs for premiums, rising unemployment, or other factors is unknown. Clearly, though, losing a job may put a worker's employment-based health insurance at risk. In preliminary results from a recent analysis, CBO found that health insurance coverage rates declined significantly among people who received unemployment insur-

ance (UI) benefits for at least 4 consecutive months in 2001 or early 2002. Some 82 percent of such workers had health insurance coverage (from any source) before they began receiving UI benefits, but only 58 percent had coverage by the final month of those benefits. Federal legislation (the Consolidated Omnibus Budget Reconciliation Act of 1985, known as COBRA) requires firms with 20 or more employees to continue offering health coverage to workers who separate from their firm. However, firms may charge former employees up to 102 percent of the full (group) premiums for that coverage. Therefore, unemployed workers may face a large increase in their out-of-pocket premiums under COBRA. The reduction in coverage estimated for recipients of unemployment insurance probably stems, in part, from many of those people opting not to purchase coverage under that law.

Rising health insurance premiums resulting from the recent large increases in health care spending overall offer a plausible explanation for at least some of the reduction in coverage. To explore that issue, I will now discuss the magnitude and causes of the spending increases and then turn to what is known about the relationship between health care spending and insurance coverage.

Historical and Recent Trends in Health Care Spending

Health care is a large and growing sector of the economy. The U.S. spent $1.6 trillion on health care in 2002, an amount more than five times as great in real (inflation-adjusted) terms as that spent in 1970. Per capita spending increased from about $1,300 in 1970 (in 2002 dollars) to about $5,450 in 2002, for an average rate of real growth of 4.5 percent per year (*see Table 3*). The economy as a whole has grown over that period as well, but not as quickly, with the result that health spending as a percentage of gross domestic product (GDP) has more than doubled, from 7.0 percent in 1970 to 14.9 percent in 2002. The mid-1990s saw a brief slowdown in real spending growth per capita (the rate was 2.6 percent per year from 1992 to 1997), but higher rates of growth have since returned: from 1997 to 2002, real per capita health care spending grew at an average annual rate of 4.6 percent—which is similar to its approximate long-term rate of increase.

Recent growth in real spending on prescription drugs has been especially rapid—at more than 14 percent per year on average from 1997 to 2002, making it the fastest growing category of health spending during the period. Despite the recent rapid increase in spending for prescription drugs, they currently account for only about 10 percent of all national health expenditures. That relatively small (but growing) share of expenditures should be kept in mind when evaluating whether drugs are a major driver of increasing costs.

Table 3.
Increases in Health Care Spending Between 1970 and 2002

	1970	2002
Total Health Care Spending per Capita (2002 dollars)	1,313	5,449
Total Health Care Spending as a Percentage of GDP	7.0	14.9

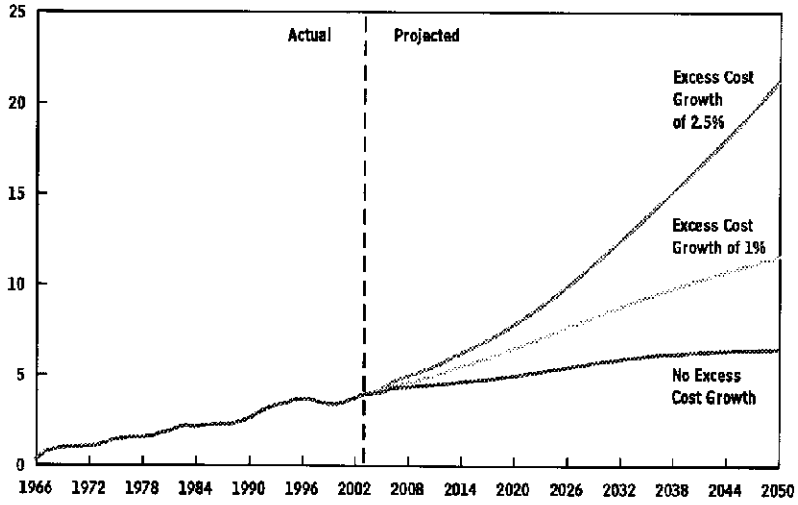
Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group.

Note: Figures were adjusted for inflation using the gross domestic product (GDP) implicit price deflator.

Federal spending on health care, principally Medicare and Medicaid, is subject to the same cost pressures facing the system as a whole. Total Federal health spending as a percentage of GDP was 1.7 in 1970 and 4.8 in 2002. If the recent rate of growth

in spending persists, Federal outlays on health care will continue to increase as a proportion of GDP. Projections of future spending on Medicare and Medicaid depend critically on the assumed rate of "excess cost growth."[7] Under an assumed rate of excess cost growth of 2.5 percent (a rate that is slightly lower than the long-term historical average), Federal spending on Medicare and Medicaid would climb to 21.3 percent of GDP in 2050 (*see Figure 3*).[8] Under a more optimistic assumption of 1 percent excess cost growth, Federal Medicare and Medicaid spending would reach 11.5 percent of GDP in 2050. To put those estimates in perspective, the entire Federal budget currently consumes 20 percent of GDP.

Figure 3.
Total Federal Spending for Medicare and Medicaid Under Different Assumptions About Excess Cost Growth



Source: Congressional Budget Office.

Note: Excess cost growth is the extent to which the growth of spending per enrollee in those programs exceeds the growth of per capita gross domestic product (after accounting for changes in the age and sex composition of the population).

Factors Behind the Continuing Growth in Health Care Spending

Most analysts agree that the perennial increases in health care spending that have occurred over recent decades are associated with the diffusion of new medical technologies, or as one analyst has described it, "the enhanced capabilities of medicine."[9] Recent advances, including pharmaceutical innovations, have made available to patients and physicians a wealth of new medical therapies, many unheard of in even the relatively recent past. The economic incentives for innovation and the development, deployment, and utilization of new technologies in the U.S. health care system has led generally to higher levels of spending. Some medical advances per-

[7] Excess cost growth is the amount by which per capita growth in spending on health care exceeds per capita growth in GDP, after accounting for changes in the age and sex composition of the population.

[8] Congressional Budget Office, *The Long-Term Budget Outlook* (December 2003).

[9] Joseph P. Newhouse, "An Iconoclastic View of Health Cost Containment," *Health Affairs*, vol. 12, supplement (1993), pp. 152–171.

mit the treatment of previously untreatable conditions, introducing new categories of spending. Others, relative to older modes of treatment, improve medical outcomes at added cost, expanding existing spending.

It is occasionally suggested that advances in technology can lead to reduced spending, and that may be the case in some instances. Vaccinations, for example, may sometimes offer the potential for savings, and certain types of preventive medical care may help some patients avoid costly acute care hospitalizations. But, overall, examples of new therapies for which long-term savings have been clearly demonstrated are few. Improvements in medical care that decrease mortality by helping patients avoid or survive acute health problems paradoxically increase overall spending on health care, as those (surviving) patients live to utilize health services through old age.

Even when a particular service becomes cheaper to provide over time, higher aggregate spending can still result as practice patterns emerge and the service is used with greater frequency. Comparing increased expenditures on computers and information technology with those on health care is instructive. As technological innovations permitted profitable computer processing at a fraction of the previous cost, total spending on computers did not decrease—it skyrocketed, as more consumers made more intensive use of what became available. Why do few people regard increasing spending on information technology as a problem requiring a remedy? Let me suggest that the reason is that the market for information technology works the way a market is intended to function: businesses and consumers weigh alternatives and face the full costs of what they use. In health care, two factors combine to produce a different result: payments made by third parties typically buffer patients from the full cost of the medical services they use, and the inherent complexity of medical practice forces patients to rely on the judgment of providers who, depending on the reimbursement system, may have an incentive to provide more care (under a fee-for-service arrangement) or less care (under capitation).

Other factors have also contributed to increases in health spending. One obvious example is the aging of the population. Among adults, medical spending generally increases with age. As the number of elderly people rises with the aging of the very large baby-boom generation, health spending will naturally grow. However, over the past half century, aging has played a relatively minor role in the very large increases in spending that have occurred.

Other contributing factors include the growth in personal income over time and the spread of health plans over recent decades. Because medical care is a desired service, people naturally purchase more of it as their income increases. And health insurance, as economists are fond of pointing out, effectively drives down the cost of care from the consumer's perspective, resulting in a higher quantity demanded than would otherwise be the case. But the best estimates of the effects of those two factors suggest that they, too, fail to explain much of the surge in spending in recent decades.

Claims are often heard about unwarranted expenditures. One example is so-called defensive medicine, which refers to medical tests or procedures of little or no clinical value that are ordered by physicians solely in the interest of avoiding lawsuits. Another example is what some people term physician-induced demand, which refers to spending that is brought about at least in part by providers' desire to augment their own income. While the magnitude of spending associated with such practices has been the subject of considerable debate, those factors do not appear to explain much of the growth in spending.[10]

What I have presented here is a simple discussion of a complex issue, and I do not intend for it to represent an exhaustive or definitive review of the subject. The association between technological change and rising medical expenditures is the manifestation of a complex system of economic incentives that need to be examined in more detail. A greater understanding of the possible role of the third-party payment system in creating incentives for innovation and the diffusion of technologies, for example, could inform public policy aimed at addressing the continuing increases in spending. At the same time, policymakers could choose to spend more in light of the quality enhancements resulting from the remarkable medical advances that have been made in recent years. The point to emphasize (and about which there is general consensus) is that the way new medical technologies have been adopted and

[10] An important distinction must be drawn between the level of health spending and its rate of growth. At any given moment, some amount of unneeded expenditure is likely, but regardless of the magnitude of that amount, few analysts believe that such expenditures can account for much of the large spending increases that have taken place. The elimination of unneeded expenditures, while certainly desirable, would offer only temporary relief from increasing expenditures, as the underlying source of spending growth can be expected to eventually reemerge.

utilized has generally led to more health spending over time; that factor lies at the heart of increasing expenditures for health care. In the absence of a change in overall incentives, those pressures can be expected to continue.

Rising Spending and Health Insurance Premiums

Health insurance premiums, like total spending, have undergone increased growth in recent years following a brief slowdown. Estimates from one survey of private firms show that growth in employer-based premiums has risen every year since 1996, exceeding 10 percent in real terms from 2002 to 2003.[11] According to that survey, the average annual premium for an employer-based policy for an individual is now about $3,400, and for a family, more than $9,000. Recent declines in employer-based coverage may be related to increases in premiums, though the relationship between premiums and the prevalence of coverage is not necessarily a simple one. While it is natural to believe that the purchases of any good tend to decline when its price goes up, the case of health insurance is complicated by the fact that a general upward trend in the cost of medical services can make insurance more appealing, because in the absence of insurance, covering potentially costly medical needs is more difficult. Furthermore, changes in premiums can present an incomplete picture if plan characteristics change simultaneously (and there is evidence that average deductibles have recently increased in certain types of plans).

Employee contributions for employer-based health insurance have remained a constant proportion of total premium costs in recent years; because total premiums are rising, however, the dollar value of employee contributions is rising as well. Perhaps related to the growth in employee contributions is a reported decline in the rates at which employees take up the offer of employer-based coverage. Three factors may drive changes in the number of covered workers: the number of firms offering health benefits, the proportion of workers eligible for health benefits among firms offering coverage (part-time workers generally are not eligible), and the rate at which workers accept coverage (if it is offered by their employer). Recent analysis shows that as much as three-fifths of the recent decrease in employer-based coverage is attributable to workers' declining to enroll.[12]

Conclusions

In sum, I have stressed that the commonly cited estimates of the number of people who lack health insurance present an incomplete picture of the uninsured population. That population is dynamic, and individuals vary greatly in the length of time that they remain uninsured. The varying characteristics of the uninsured should be kept in mind when developing policies to expand insurance coverage. I have also discussed the relationship between advancing medical technologies and increasing health care expenditures and noted that the correlation between technological change and expenditure growth needs to be better understood. Both Federal spending and private spending on health care are likely to continue to increase in the immediate future and to constitute a greater share of GDP.

PREPARED STATEMENT OF ARNOLD MILSTEIN M.D.

I am Dr. Arnold Milstein, Medical Director of the Pacific Business Group on Health and a physician consultant at Mercer Human Resource Consulting. I also head performance measurement activity at the Leapfrog Group. My comments this morning are my own and not intended to represent the views of these organizations.

The problem of healthcare uninsurance has multiple root causes. I will focus my remarks on one of these causes, large inefficiencies in America's healthcare delivery systems. Eliminating these inefficiencies would be feasible over a 10-year period, offset projected health insurance cost increases by as much as 40 percentage points, and make healthcare insurance more affordable for private sector purchase or public program sponsorship.

I will briefly outline what current science and expert clinical opinion tell us about the nature and magnitude of capturable healthcare delivery system inefficiency and link its persistence to our failure to collect, publicly report, and reward excellence in nationally standardized measures of efficiency for hospitals, physicians, and major treatment options. Throughout my remarks, I will use the term efficiency to refer to the total cost of all healthcare services used in treating an episode of acute illness or a year of chronic illness and preventive needs at a specified level of quality. This is a critical distinction, because some physicians, hospitals or treatment op-

[11] Kaiser Family Foundation and Health Research Educational Trust, *Employer Health Benefits 2003 Annual Survey* (September 2003).

[12] David M. Cutler, *Employee Costs and the Decline in Health Insurance Coverage*, Working Paper No. 9036 (Cambridge, Mass.: National Bureau of Economic Research, July 2002).

tions may carry a higher unit price, but incur for health benefits plans and consumers a much lower total cost of all healthcare services over the duration of an illness. I will refer to this form of efficiency as "longitudinal efficiency."

An inferable estimate of current waste in American healthcare spending is in excess of 40 percent. This estimate is rooted in two sources. First, analysis of Medicare data published by Drs. Elliott Fisher, David Wennberg, and other Dartmouth researchers shows that hospitals and physicians in the 10 percent of U.S. communities which spend the least per capita, (after adjusting for community differences in demographics, morbidity, and input price levels) achieve this result by providing much lower frequencies of specialist physician visits, tests and minor procedures, non-surgical hospitalizations, and admissions to ICUs. More important, they show that available indicators of quality of care, patient health status and patient satisfaction with care, are *the same or higher* than in the other 90 percent of communities that spend much more per capita. The researchers estimate that if hospitals and physicians in other communities adopted similarly efficient patterns of service use, U.S. per capita Medicare spending would be 30 percent lower (see Attachment A). Their unpublished work and estimates from other nationally respected researchers and actuaries suggests that similar inefficiencies exist for other American health benefit programs. They also show that even small degrees of improvement in physician efficiency could transform this waste into lower per capita health insurance costs (see Attachment B). This prediction has been confirmed by employer innovators such as Pitney Bowes and Union Carbide that have either incentivized physicians to improve their efficiency or incentivized their health insurance beneficiaries to utilize physicians with more efficient practice patterns, as identified through health insurance claims data analysis (see Attachment C).

The Dartmouth team estimates significant additional potential spending reduction opportunities in *all* U.S. communities from (1) adoption of the patterns of service use by the most efficient, high-quality providers within low-spending communities; and (2) allowing patients to make better informed decisions about high-cost, discretionary surgeries. These include surgeries such as elective coronary bypass graft that are on average no less frequent in low spending communities. Note that all of these analyses are predicated on preserving or improving quality of care.

A second large source of wasted spending is in the inefficiency with which we produce all treatments, however valuable. The Institute of Medicine's (IOM) Crossing the Quality Chasm report on opportunities to improve the performance of U.S. healthcare delivery systems details the types of inefficiencies that could be eliminated if best operational practices were consistently assured in producing all current treatments. These opportunities are embedded in six "care redesign imperatives," described in the IOM report. They include mainstreaming the use of interoperable electronic clinical information systems and other applications of operations engineering in assuring the reliable selection of evidence based treatments and error-free treatment administration.

The IOM report and many other scientific publications describe hospital and physician leaders who have begun to capture these operational efficiencies and achieve accompanying reductions in medical errors (see Attachment D). These leaders have persisted in the face of a market environment that does not distinguish or reward providers who capture efficiencies for CMS and health insurers, and often penalizes them. America's foremost experts on operations engineering in healthcare, such as Dr. Brent James of Intermountain Health Care, estimate such operational waste at 30 percent of current healthcare spending.

In essence, two largely separate 30 percent pools of waste are available for capture and redirection into funding wider American health insurance coverage. Since transforming these inefficiencies into reduced rates of spending will require offsetting investments such as improved electronic clinical information systems, I have estimated a net savings opportunity approaching 40 percent. Precise estimation is not possible for interventions in complex, adaptive systems such as U.S. healthcare.

I realize that these hearings focus on the problem of uninsurance, rather than its solutions. Suffice it to say that America's innovators in healthcare efficiency capture have generated savings far in excess of their costs and that a few strategic public policy changes would enable the market to encourage many more to follow their example. The most important of these changes are: (1) routinizing and publicly releasing longitudinal efficiency and quality ratings of doctors, hospitals, and major treatment options; and (2) encouraging CMS to share with private sector health benefits plans its patient privacy-protected claims data base, so that all health plans would be able to improve their precision in identifying the best performing providers and treatments options; (3) encouraging CMS and other health plans to reward clinical performance improvements either by more favorable payment for providers and

treatment options offering superior quality and longitudinal efficiency, and/or by lowering out-of-pocket costs for patients who preferentially use them.

Americans have standardized longitudinal efficiency measures for appliances and for automobiles, but not for the industry that consumes a much greater share of their income and benefits. Methods of quantifying longitudinal efficiency and quality for hospitals, physicians, and major treatment options are already developed and easily within the capability of American health services researchers to further refine. The National Committee for Quality Assurance (NCQA) plans to release standardized efficiency measures for physicians and hospitals during this calendar year.

Absence of such measurements keeps American hospitals, doctors, and patients in the dark with respect to comparative healthcare efficiency and unable to identify opportunities to make their health insurance much more affordable. When paired with standardized, publicly reported quality measurements, longitudinal efficiency measurements would comprise a new navigational system for patients, providers, and insurers to improve America's health and substantially reduce future increases in health insurance premiums. It would also send an important signal to new medical technology developers that market receptivity to new products and services will become more sensitive to their effect on the affordability of health insurance, in addition to their effect on health.

Thank you for the opportunity to share my thoughts on how large, invisible, and substantially capturable inefficiencies in American healthcare delivery contribute to the unaffordability of health insurance.

ATTACHMENT A

ARTICLE

The Implications of Regional Variations in Medicare Spending. Part 2: Health Outcomes and Satisfaction with Care

Elliott S. Fisher, MD, MPH; David E. Wennberg, MD, MPH; Thérèse A. Stukel, PhD; Daniel J. Gottlieb, MS; F.L. Lucas, PhD; and Eloile L. Pinder, MS

Background: The health implications of regional differences in Medicare spending are unknown.

Objective: To determine whether regions with higher Medicare spending achieve better survival, functional status, or satisfaction with care.

Design: Cohort study.

Setting: National study of Medicare beneficiaries.

Patients: Patients hospitalized between 1993 and 1995 for hip fracture (n = 614 503), colorectal cancer (n = 195 429), or acute myocardial infarction (n = 159 393) and a representative sample (n = 18 190) drawn from the Medicare Current Beneficiary Survey (MCBS) (1992–1995).

Exposure Measurement: End-of-life spending reflects the component of regional variation in Medicare spending that is unrelated to regional differences in illness. Each cohort member's exposure to different levels of spending was therefore defined by the level of end-of-life spending in his or her hospital referral region of residence (n = 306).

Outcome Measurements: 5-year mortality rate (all four cohorts), change in functional status (MCBS cohort), and satisfaction (MCBS cohort).

Results: Cohort members were similar in baseline health status, but those in regions with higher end-of-life spending received 60% more care. Each 10% increase in regional end-of-life spending was associated with the following relative risks for death: hip fracture cohort, 1.003 (95% CI, 0.999 to 1.006); colorectal cancer cohort, 1.012 (CI, 1.004 to 1.019); acute myocardial infarction cohort, 1.007 (CI, 1.001 to 1.014); and MCBS cohort, 1.01 (CI, 0.99 to 1.03). There were no differences in the rate of decline in functional status across spending levels and no consistent differences in satisfaction.

Conclusions: Medicare enrollees in higher-spending regions receive more care than those in lower-spending regions but do not have better health outcomes or satisfaction with care. Efforts to reduce spending should proceed with caution, but policies to better manage further spending growth are warranted.

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For author affiliations, see end of text.

See related article on pp 273-287 and editorial comments on pp 347-348, 348-349, and 350-351.

The inexorable growth of health care spending in the United States is widely believed to be due to the greater use of advanced technology of clear-cut benefit (1). Policymakers argue (and the public assumes) that any constraints on growth are likely to be harmful (1, 2). Studies of regional variations in spending and medical practice, however, call these assumptions into question. Earlier research has indicated that the nearly twofold differences in Medicare spending observed across U.S. regions are not due to differences in the prices paid for medical services (3, 4) or to differences in health or socioeconomic status (3, 5, 6). Recent research, some of which is presented in Part 1 of our study, indicates that regional variations in average per capita Medicare spending are not due to more frequent performance of major surgery (7, 8) and that regions with higher per capita spending are no more likely to provide higher-quality care, whether defined in terms of specific evidence-based services or in terms of greater access to basic health care (7, 8). The additional utilization in high-spending regions is largely devoted to discretionary services that have previously been demonstrated to be associated with the local supply of physicians and hospital resources (5, 6). These include the frequency and type of evaluation and management services provided by physicians, the use of specialist consultations, the frequency of diagnostic tests and minor procedures, and the likelihood of treating patients with chronic disease in the inpatient or intensive care unit setting.

Whether the specialist-oriented, more inpatient-based practice observed in high-spending regions offers important health benefits, however, is unknown. Although recent studies have found no benefit in terms of mortality (5, 9, 10), they had limited ability to adjust for possible case-mix differences, inadequate individual-level clinical detail, and limited outcome measures. Our study was designed to address these concerns. In Part 1, we reported on the relationship between regional differences in spending and the content of care, quality of care, and access to care provided to four cohorts of Medicare beneficiaries. In this article, Part 2, we describe associations between increased spending and mortality, functional status, and satisfaction with care.

METHODS

Design Overview

As described in greater detail in Part 1, we carried out a cohort study in four parallel populations using a "natural randomization" approach (11). In this approach, one or more exposure variables allow assignment of patients into "treatment groups" (different levels of average spending), as would a randomized trial. Because some of the regional differences in Medicare spending are due to differences in illness levels (enrollees in Louisiana are sicker than those in

Colorado) and price (Medicare pays more for the same service in New York than in Iowa), we could not use Medicare spending itself as the exposure. We therefore assigned U.S. hospital referral regions (HRRs), and thus the cohort members residing within them, to different exposure levels using a measure that reflects the component of regional variation in Medicare spending due to physician practice rather than regional differences in illness or price—the End-of-Life Expenditure Index (EOL-EI). Because regional differences in end-of-life spending are unrelated to underlying illness levels, it is reasonable to consider residence in HRRs with differing levels of end-of-life spending as a random event. The index was calculated as spending on hospital and physician services provided to a reference cohort distinct from the study cohorts: Medicare enrollees in their last 6 months of life. In the current paper, we also present several analyses with an alternative exposure measure, the Acute Care Expenditure Index (AC-EI), to decrease concern about possible residual confounding.

We confirmed that the exposures used to assign the HRRs achieved the goals of "natural randomization": 1) Study samples assigned to different levels of the exposure (the EOL-EI) were similar in baseline health status, and 2) the actual quantity of services delivered to the individuals within the study samples nevertheless differed substantially across exposure levels and was highly correlated with average per capita Medicare spending in the HRRs. We followed the cohorts for up to 5 years after their initial hospitalizations and compared the processes of care (Part 1) and health outcomes (Part 2) across HRRs assigned to different exposure levels.

Study Cohorts

The four study cohorts are described in detail in Part 1. Briefly, we studied fee-for-service Medicare enrollees, ages 65 to 99 years, who were eligible for Medicare Parts A and B. The acute myocardial infarction (MI) cohort was drawn from patients included in the Cooperative Cardiovascular Project, who had index hospitalizations between February 1994 and November 1995. The hip fracture and colorectal cancer cohorts were identified based on an incident hospitalization between 1993 and 1995. The general population sample included participants in the Medicare Current Beneficiary Survey (MCBS) who had initial interviews between 1991 and 1996 (for the survival analysis) or between 1992 and 1995 (for the other analyses) (see Appendix, section C, available at www.annals.org).

Each cohort member was placed in a spending group according to the EOL-EI (as defined in detail in Part 1) in their HRR of residence at the time of the index hospitalization (chronic disease cohorts), or initial interview (MCBS cohort). Characteristics of the study cohorts were ascertained from a variety of sources, as described in detail in Part 1, including Medicare administrative files and claims (all four cohorts), chart reviews (acute MI cohort), in-person interview (MCBS cohort), U.S Census data (attributes of ZIP code of residence, such as income, for the three chronic disease cohorts), and American Hospital Association data (to characterize hospitals).

Context

Per capita Medicare spending varies considerably from region to region. The effect of greater Medicare spending on mortality, functional status, and satisfaction is not known.

Contribution

Using end-of-life care spending as an indicator of Medicare spending, the researchers categorized geographic regions into five quintiles of spending and examined costs and outcomes of care for hip fracture, colorectal cancer, and acute myocardial infarction. Residents of high-spending regions received 60% more care but did not have lower mortality rates, better functional status, or higher satisfaction.

Implications

Medicare beneficiaries who live in higher Medicare spending regions do not necessarily have better health outcomes or satisfaction with health care than those in lower-spending regions.

—The Editors

Assignment to Exposure Levels

As we summarized here and described in detail in Part 1, we used two approaches to determine cohort members' exposure to different levels of Medicare spending in their HRR of residence. Previous research has shown that the dramatic differences in end-of-life treatment across U.S. regions are highly predictive of differences in total spending (8, 12) but are not due to differences in case mix or patient preferences (13). Our primary measure of exposure was the EOL-EI, which was calculated as age-sex-race–adjusted spending (measured with standardized national prices) on hospital and physician services provided to Medicare enrollees who were in their last 6 months of life in each of the 306 U.S. HRRs in mid-1994 to 1997, excluding any members of the study cohorts (Appendix, Section E, available at www.annals.org.) We also repeated the major analyses with an alternative exposure measure, the AC-EI, which was based on differences across HRRs in risk-adjusted spending during an acute illness episode (Appendix, Section F, available at www.annals.org). Both measures were highly predictive of average age-sex-race–adjusted Medicare spending at the HRR level ($r = 0.81$ for the EOL-EI and 0.79 for the AC-EI in the acute MI cohort) and, as was shown in Part 1, of the regional differences in utilization experienced by the study cohorts. For many analyses, we grouped HRRs into quintiles of increasing exposure to the expenditure indices.

Statistical Analyses

To assess the aggregate impact of any differences in individual attributes on average baseline risk for death across regions of increasing EOL-EI, we used logistic regression to determine each individual's predicted 1-year risk for death as a function of his or her baseline characteristics. The models had modest to excellent predictive ability (c-statistics were 0.61 for the colorectal cancer cohort, 0.68 for the hip fracture cohort, 0.77 for the acute MI cohort, and 0.82 for the MCBS cohort). We used these models to determine the average predicted risk for death across quintiles of Medicare expenditure indices.

Mortality Analyses

The association between the HRR-level expenditure index and survival was assessed by using Cox proportional hazards regression models (14), with the expenditure index measured both as a categorical variable (in which each HRR was assigned to a quintile of Medicare spending based on the EOL-EI) and a continuous variable (using the value of the EOL-EI in the HRR of residence as the exposure). The survival models included independent variables to adjust for patient characteristics, hospital characteristics, and attributes of the HRR. Model fit was assessed by using methods for Cox model residuals to examine overall model fit, to test proportional hazards assumptions, and to identify influential observations. The main survival models underpredicted mortality in the first 6 months, possibly because of short-term complications that could not be adequately predicted with the available data; however, the models provided excellent prediction of 1-year mortality rates for each cohort.

The models are presented in **Appendix Tables 6** through **9** (available at www.annals.org). To test whether the overall findings were consistent across subgroups of each cohort, we ran survival models stratified on all major variables. To test whether the findings were sensitive to our choice of the EOL-EI as our primary exposure, we repeated the analyses using the AC-EI. These sensitivity analyses are described in detail in the Appendix, Section F (available at www.annals.org).

Patients in the same hospital are likely to be treated similarly, so their outcomes may not be statistically independent. We adjusted for within-hospital clustering by using overdispersed survival models, clustering by hospital (14). Model fit was assessed by carefully examining the data to identify HRRs that influenced estimates, predicted values, and likelihood ratio tests. Two moderately influential HRRs, Manhattan, New York, and Miami, Florida, were identified, both of which had relatively lower mortality rates and higher spending than predicted. Excluding these regions would have resulted in hazard ratios greater than those we report for quintile 5 (in the categorical model) and overall (in the continuous models). Analyses, however, are presented with these two HRRs included. We used the STCOX routine of Stata 6.0 (Stata Corp., College Station, Texas) to perform survival analyses in the three chronic disease cohorts. For the analyses of the MCBS cohort, we used SUDAAN (Research Triangle Institute, Research Triangle Park, North Carolina) to account for sampling weights and the two-stage design (15).

Change in Functional Status

We used the Health Activities and Limitations Index (HALex) as the primary dependent variable in our longitudinal analyses of changes in functional status (16, 17). The HALex was developed by the National Center for Health Statistics as a composite health status measure that can be calculated by using the responses to the National Health Interview Survey. For our longitudinal analyses, we assigned a HALex score of 0 to respondents who died. Loss to follow-up in these analyses occurred when patients failed to answer enough questions to allow a calculation of the score, did not participate in the survey, or entered a nursing home. Loss to follow-up was as follows: quintile 1, 7.8%; quintile 2, 8.9%; quintile 3, 8.4%; quintile 4, 9.6%; and quintile 5, 13.4%.

The effect of HRR spending on HALex score was modeled by using generalized estimating equation methods for the analysis of continuous longitudinal data (18). The dependent variable was the respondent's annual HALex score for up to 3 years. Each model controlled for individual attributes (**Appendix Table 10**, available at www.annals.org) and included a variable for the time since the initial survey (0, 1, 2, or 3 years). Two sets of models were run, one including indicator variables for quintile of spending, the other including spending as a continuous variable. The principal hypothesis, that increased spending in the HRR of residence would be associated with a slower decline in health status, was tested through the interaction between the EOL-EI of the HRR and the length of time since the initial survey. Different model specifications were tested, both including and excluding interaction terms between time and the other control variables. All analyses yielded similar results for the tests of the principal hypothesis. The models are presented in **Appendix Table 10**, available at www.annals.org. We used the longitudinal sampling weight from the final interview for each respondent and then normalized across all cohort members so that the sum of the weights was equal to the total number in the cohort. The numbers of study participants reported incorporate these weights and are rounded to the nearest integer.

Satisfaction with Care

This analysis was restricted to respondents with at least one physician visit in the previous year. The MCBS interview includes 20 questions on satisfaction with care. Eight items rate the general satisfaction with care received from physicians or hospitals within the past year, while 12 questions are asked only of respondents with a usual physician

Table 1. **Crude and Predicted Mortality Rates in Study Cohorts according to Level of Medicare Spending in Hospital Referral Region of Residence***

Variable	Quintile of EOL-EI					Test for Trend†
	1 (Lowest)	2	3	4	5 (Highest)	
	%					
Hip fracture cohort						
Observed 30-day mortality rate	7.8	7.2	6.9	6.9	6.6	↓
Observed 1-year mortality rate	24.4	23.9	23.9	24.3	24.2	>0.05
Predicted 1-year mortality rate	24.5	24.1	24.1	24.1	23.9	↓
Colorectal cancer cohort						
Observed 30-day mortality rate	4.5	4.6	4.8	4.8	4.4	>0.05
Observed 1-year mortality rate	20.6	20.7	21.7	21.1	20.9	>0.05
Predicted 1-year mortality rate	21.1	20.8	21.2	20.8	20.9	>0.05
Acute MI cohort						
Observed 30-day mortality rate	18.5	18.4	19.2	18.2	18.5	>0.05
Observed 1-year mortality rate	30.7	31.3	32.6	31.6	33.3	↑
Predicted 1-year mortality rate	31.2	31.5	31.8	32.0	33.2	↑
MCBS cohort						
Observed 30-day mortality rate	0.2	0.4	0.4	0.3	0.2	>0.05
Observed 1-year mortality rate	4.6	4.8	5.0	5.1	5.3	>0.05
Predicted 1-year mortality rate	4.9	5.1	5.3	5.0	5.1	>0.05

* Crude mortality rates were based on 30-day and 1-year follow-up for all cohort members with no censoring (follow-up for mortality was complete at 1 year for all). Predicted mortality rates were based on logistic regression equations that included individual- and ZIP code–level variables only. EOL-EI = End-of-Life Expenditure Index; MCBS = Medicare Current Beneficiary Survey; MI = myocardial infarction.

† Arrows show the direction of any statistically significant association ($P \leq 0.05$) between the mortality rate and regional EOL-EI differences. An arrow pointing upward indicates that as spending increases across regions, the mortality rate increases. A P value greater than 0.05 was considered not significant.

(93% of the study sample) and focus on that physician's quality. Following the approach of others (19), we created two summary scores of general satisfaction with care (global quality and accessibility) and three summary scores focused on satisfaction with a usual physician (technical skills, interpersonal manner, and information-giving). To test for significant associations between the expenditure index and each summary scale, we used linear regression with each of the five summary scores as the dependent variable and the exposure measured as the HRR-level EOL-EI. The models controlled for age, sex, race, health status, and major U.S. region of residence ($n = 9$). We also compared satisfaction scores on these scales across quintiles of spending. The analysis of satisfaction was based on respondents' first interview.

RESULTS

Patient Characteristics

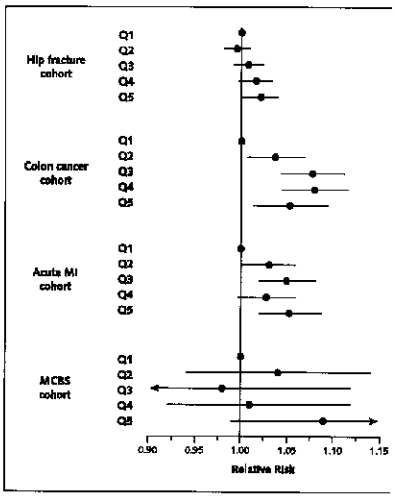
Tables 1 through 4 in Part 1 present selected characteristics of each study cohort grouped into quintiles according to EOL-EI level in their HRRs of residence. Because the sample sizes are large, many small differences for the chronic disease cohorts were statistically significant. Notable differences were found in racial composition (more black persons in higher-expenditure HRRs) and income (higher-expenditure HRRs had more beneficiaries in the highest and lowest income categories). Smaller differences across quintiles were apparent in age, sex, comorbid conditions, and cancer stage. For the acute MI cohort, patients in the highest quintiles had a higher prevalence of non–Q-wave infarctions and congestive heart failure but a lower prevalence of creatine kinase levels greater than 1000 IU/L. For the MCBS cohort, residents of HRRs in the quintiles with higher EOL-EIs were more likely to report being in fair or poor health but were less likely to live in a facility.

Crude 30-day and 1-year mortality rates and average predicted 1-year mortality rates for each cohort are shown in Table 1. For the hip fracture cohort, average predicted mortality rates at 1 year were slightly but significantly lower in HRRs with a higher EOL-EI. In the acute MI cohort, however, average predicted mortality rates at 1 year were higher in HRRs with a higher expenditure index. No significant differences were found in predicted mortality across HRRs with differing expenditure indices for the colorectal cancer or MCBS cohorts. These findings reveal no consistent trend toward greater illness burden in HRRs with a higher expenditure index. Observed mortality tended to be lower than predicted in the lowest quintile and equal to or higher than predicted in the highest quintile.

Mortality

Figure 1 presents the relative risk for death over 5 years for residents of HRRs in EOL-EI quintiles 2, 3, 4, and 5 (the higher quintiles) compared with residents of HRRs in the lowest quintile. In each cohort, an increase in EOL-EI was associated with a small increase in the risk for death. We repeated these analyses using the HRR-specific EOL-EI as a continuous variable both overall and in specific subgroups (Figures 2 through 4). A relative risk

Figure 1. **Adjusted relative risk for death during follow-up across quintiles of Medicare spending.**



Circles represent adjusted relative risk for death among residents of hospital referral regions in the specified quintile of the End-of-Life Expenditure Index (EOL-EI) compared to the risk for death among residents of hospital referral regions in quintile 1 of the EOL-EI; bars represent 95% CIs. MCBS = Medicare Current Beneficiary Survey; MI = myocardial infarction; Q1 = quintile 1; Q2 = quintile 2; Q3 = quintile 3; Q4 = quintile 4; Q5 = quintile 5.

greater than 1 indicated that residence in an HRR with a higher EOL-EI (higher expenditures) was associated with increased mortality. For every 10% increase in the EOL-EI, the relative risk for death over 5 years was as follows: hip fracture cohort, 1.003 (CI, 0.999 to 1.006); colorectal cancer cohort, 1.012 (CI, 1.004 to 1.019); acute MI cohort, 1.007 (CI, 1.001 to 1.014); and MCBS cohort, 1.01 (CI, 0.99 to 1.03). In none of the subgroups examined was a higher expenditure index associated with a statistically significantly lower mortality rate.

We repeated the mortality analyses using the alternate approach: assigning HRRs to different exposure levels based on the AC-EI. Residents of higher-spending HRRs, according to the AC-EI, had relatively similar baseline health status (**Appendix Table 17**, available at www.annals.org) and yet received substantially more care (**Appendix Table 18**, available at www.annals.org). The results of the mortality analyses are summarized in **Table 2**. For the hip fracture cohort, higher AC-EIs were associated with a small decrease in mortality rates. For all of the other cohorts, mortality rates did not differ or increased slightly in regions with a higher AC-EI.

Change in Functional Status

The average decline in functional status, as measured by using the HALex score, was about 2 points per year (on a 100-point scale) but did not differ across HRRs grouped according to quintiles of the EOL-EI (**Table 3**). In none of the models examined was an increased expenditure index associated with a statistically significant difference in the average rate of decline in health status (**Appendix Table 10**, available at www.annals.org).

Satisfaction with Care

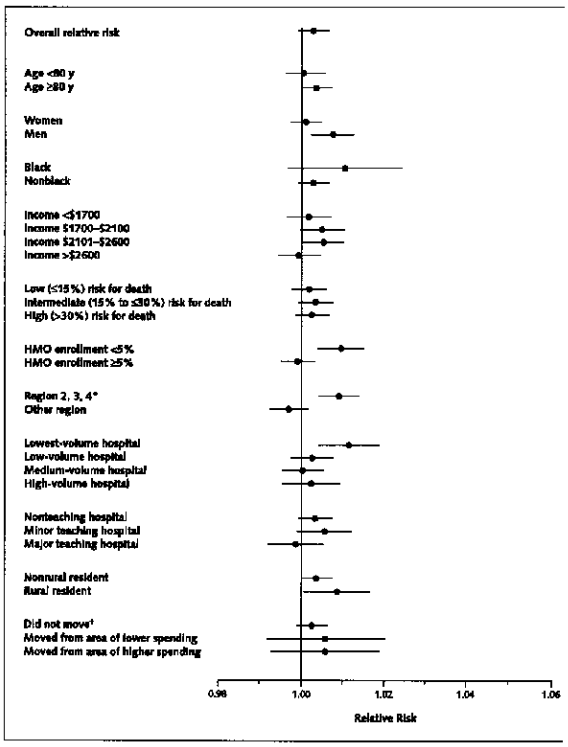
Figure 5 presents average change in adjusted satisfaction scores across quintiles (compared with quintile 1) for the five summary scales. Each scale ranges from 0 to 100, with higher scores implying greater satisfaction. We found substantial variation in satisfaction with care across the nine major U.S. regions (for example, Northeast and Mid-Atlantic), with satisfaction on each scale averaging over five points higher in the Northeast than in the South, controlling for other factors (data not shown). The differences in satisfaction across EOL-EI quintiles, however, were smaller than these regional differences and did not reveal a consistent pattern of greater satisfaction in HRRs with a higher expenditure index. The overall test for trend across HRRs indicated less global satisfaction with care and more satisfaction with interpersonal aspects of care in higher-spending HRRs. No differences were found across HRRs of differing expenditure indices for the other three measures of satisfaction with care.

DISCUSSION

We conducted a cohort study in four distinct samples of Medicare enrollees, comparing the outcomes of care across 306 U.S. HRRs that differed dramatically in levels of Medicare spending and utilization. The primary exposure variable in this study, the EOL-EI, was intended to measure the component of regional variation in Medicare spending that is unrelated to regional differences in illness or price. The goal was to ensure assignment of HRRs (and the patients within them) to "treatment groups" that were similar in baseline health status but differed in subsequent treatment. The validity of the approach was confirmed by our finding that illness levels in each of the four study cohorts differed little across quintiles but that health care utilization rates and spending (for our four study cohorts) increased steadily and substantially across quintiles. Regardless of the measure used to characterize spending, residents of the highest-spending quintile received about 60% more care than those of the lowest-spending quintile.

As shown in detail in Part 1, these differences in spending were explained almost entirely by greater frequency of physician visits, more frequent use of specialist consultations, more frequent tests and minor procedures,

Figure 2. Adjusted relative risk for death associated with a 10% increase in Medicare spending overall and among specified subgroups of the hip fracture cohort.

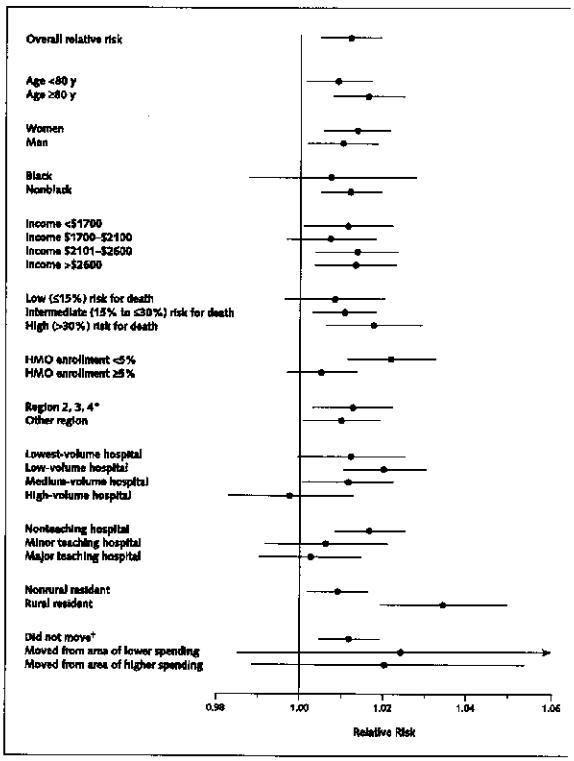


Income figures refer to the average monthly Social Security income of the patients' ZIP codes. Circles represent the adjusted relative risk for death associated with a 10% increase in the End-of-Life Expenditure Index across U.S. hospital referral regions; bars represent 95% CIs for the relative risk. *Mid-Atlantic, South Atlantic, and Great Lakes regions. †Did not change hospital referral region of residence in the 1 to 2 years before index admission. HMO = health maintenance organization.

and greater use of the hospital and intensive care unit in high-spending regions. In this paper, Part 2, we found no evidence to suggest that the pattern of practice observed in higher-spending regions led to improved survival, slower decline in functional status, or improved satisfaction with care.

In Part 1, we discussed the major limitations related to the analyses of utilization. Here we focus primarily on the limitations related to our analysis of health outcomes. First, because of the observational nature of our study, the small increase in mortality rate observed in regions with higher spending levels as assigned by end-of-life spending must be interpreted with caution. It is possible that the higher mortality rates observed in high-spending regions could be caused by the patterns of practice in regions where patients near the end of life are treated more intensively because of either relative overuse of such services as diagnostic tests and hospital-based care (for example, complications of treatment) or lower-quality care (for example, failure to provide such evidence-based services as immunizations).

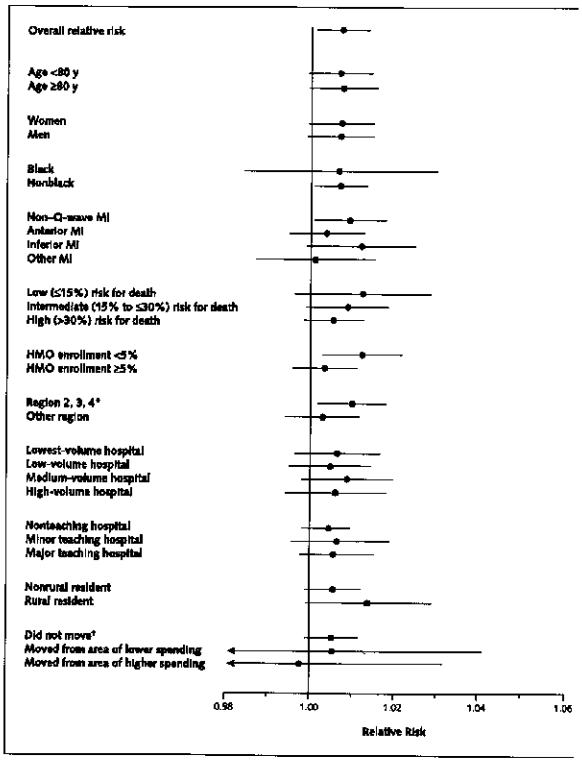
Figure 3. **Adjusted relative risk for death associated with a 10% increase in Medicare spending overall and among specified subgroups of the colorectal cancer cohort.**



Income figures refer to the average monthly Social Security incomes of the patients' ZIP code. Circles represent the adjusted relative risk for death associated with a 10% increase in the End-of-Life Expenditure Index across U.S. hospital referral regions; bars represent 95% CIs for the relative risk. *Mid-Atlantic, South Atlantic, and Great Lakes regions. †Did not change hospital referral region of residence in the 1 to 2 years before index admission. HMO = health maintenance organization.

On the other hand, it is possible that the increased mortality rate could be explained by unmeasured differences in case mix across regions of differing spending levels. We tried to account for this contingency in our study design (by use of the natural randomization approach) by controlling for numerous patient and regional attributes in our models. The stratified analyses (**Figure 2**) also suggest that unmeasured confounding is unlikely. Any potential confounder would have to operate similarly across all of these strata. Some might argue, for example, that even among similarly ill patients, those who are aware of increased risk might move closer to teaching hospitals or to higher-spending regions (that is, that differences in patterns of migration, with sicker retirees moving to areas where capacity is greatest, explain our findings). That our findings are consistent across patients in teaching and nonteaching hospitals and among patients who had recently moved and those who had not argues against such con-

Figure 4. Adjusted relative risk for death associated with a 10% increase in Medicare spending overall and among specified subgroups of the acute myocardial infarction (*MI*) cohort.



Income figures refer to the average monthly Social Security income of the patients' ZIP codes. Circles represent the adjusted relative risk for death associated with a 10% increase in the End-of-Life Expenditure Index across U.S. hospital referral regions; bars represent 95% CIs for the relative risk. *Mid-Atlantic, South Atlantic, and Great Lakes regions. †Did not change hospital referral region of residence in the 1 to 2 years before index admission. HMO = health maintenance organization.

founding. Nevertheless, the fundamental limitation of observational studies must be acknowledged: We cannot determine whether the small increase in mortality rate is due to the treatment differences (regional differences in practice) or to unmeasured differences in the comparison groups.

Our analyses using the AC-EI provide additional evidence that the regional differences in Medicare spending observed across the United States are unlikely to provide important benefits in terms of improved survival. These findings suggest that even when HRRs are stratified according to differences in how patients are treated during an episode of acute illness, regions that take the more intensive approach to acute care do not achieve better survival. For unmeasured confounding to have led to our findings, the unmeasured confounder would have to be correlated both with end-of-life spending and with regional differences in risk-adjusted acute care spending and would have to predict increased risk for death in all four cohorts. While this possibility must be acknowledged, it appears unlikely.

Table 2. **Adjusted Relative Risk for Death across Quintiles of Medicare Spending and Relative Risk Associated with a 10% Increase in Medicare Spending, as Estimated by Using the Acute Care Expenditure Index (Sensitivity Analysis)***

Cohort	Relative Risk (95% CI)					Continuous Models
	Quintile of AC-EI					
	1 (Lowest)	2	3	4	5 (Highest)	
Hip fracture	1.00 (referent)	1.003 (0.989–1.016)	0.998 (0.984–1.013)	0.993 (0.978–1.009)	0.996 (0.979–1.014)	0.990 (0.983–0.998)
Colorectal cancer	1.00 (referent)	1.024 (0.994–1.055)	1.028 (0.995–1.062)	1.022 (0.987–1.057)	0.995 (0.959–1.032)	1.000 (0.985–1.016)
Acute MI	1.00 (referent)	1.025 (0.999–1.053)	1.029 (1.000–1.058)	1.027 (0.997–1.059)	1.037 (1.004–1.071)	1.009 (0.996–1.023)
MCBS	1.00 (referent)	1.19 (1.04–1.36)	1.16 (0.98–1.37)	1.05 (0.92–1.18)	1.08 (0.95–1.23)	0.99 (0.94–1.05)

* Data were obtained from Cox regression models testing the association between residence in higher-spending hospital referral regions (defined on the basis of the AC-EI) and mortality for up to 5 years. For the quintile models, hospital referral regions were grouped into quintiles of increasing AC-EI levels. For the continuous models, data represent the relative risk for death associated with a 10% increase in the level of the AC-EI in the hospital referral registry of residence. For additional details, see Appendix, Section F, available at www.annals.org. AC-EI = Acute Care Expenditure Index; MCBS = Medicare Current Beneficiary Survey; MI = myocardial infarction.

The consistency of our findings across different measures of the exposure and different study cohorts argues that the increased Medicare spending in high-cost regions provides no important benefits in terms of survival.

A second limitation of this study is that we were able to examine functional outcomes and satisfaction with care only in the general population sample and not in our three high-risk, chronic disease cohorts. Although the quality of care provided to the three chronic disease cohorts appeared no better in higher-spending regions, it remains possible that the increased use of specialists, diagnostic tests, and hospital-based care led to better functional outcomes, quality of life, or satisfaction with care. Further research is warranted to address this possibility.

It is also possible, however, that the increased intensity of treatment provided to severely ill patients could lead to poorer quality of life and less satisfaction. The most striking differences in practice in higher-spending regions are found in the care of patients near the end of life, regardless of whether the definition of a "high-spending" region is based on one of the indices used here or on average per capita Medicare spending (8). Our findings suggest that the more aggressive patterns of practice observed in high-spending regions offer no benefit in terms of their major aim, which is improving survival. In addition, we know of no evidence to suggest that the nearly threefold greater use of invasive life support (intensive care unit utilization, emergency intubation, and feeding tubes) seen in high-spending regions results in improved quality of life or satisfaction with care.

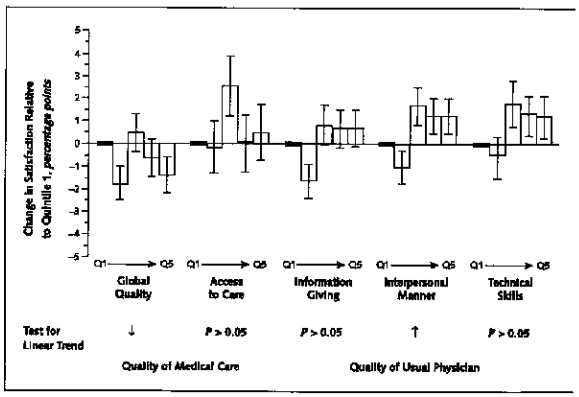
Finally, because our primary exposure variable is ecological, in the sense that residence in a region with higher Medicare spending is a characteristic of patients' environment, some may be concerned that our inferences are suspect because of the "ecological fallacy" (39, 40). The ecological fallacy occurs when one tries to answer a purely individual-level question (for example, Is high saturated fat intake associated with a person's risk for heart disease?) with data derived from groups of people (for example, the average risk for heart disease in a group). The fallacy lies in assuming that an association observed at one level of aggregation (for example, countries) automatically implies the association at a different level (for example, individual patients). It is most likely to occur when both outcomes and predictors of that outcome (including measures of exposure and measures used to adjust for group differences) are ascertained only for the groups and not for individuals. Our research interest was to determine whether a system-level variable—increased Medicare spending in a given region—leads to better care or better outcomes for the average individual Medicare enrollee residing in that region. We chose an ecological (system-level) exposure measure because it is the appropriate exposure measure for this specific research question. In addition, because we were interested in the effects of regional spending on the care of individual patients, our unit of analysis was the patient.

Table 3. **Average Change per Year in Functional Status on Health Activities and Limitation Index among Participants in the Medicare Current Beneficiary Survey according to Medicare Spending in the Hospital Referral Region of Residence***

Variable	Quintile of EOL-EI				
	1 (Lowest)	2	3	4	5 (Highest)
Change in functional status (95% CI)	−1.96 (−2.36 to −1.55)	−2.18 (−2.65 to −1.71)	−2.28 (−2.84 to −1.71)	−1.94 (−2.40 to −1.47)	−1.96 (−2.42 to −1.50)

* Scores on the Health Activities and Limitations Index at follow-up ranged from 0 (death) to 100 (excellent self-assessed health and no limitations). Results controlled for differences in age, sex, race, chronic conditions, residence in a facility, residence in a metropolitan region, whether respondent was bedridden, smoking status, income, education, marital status, and supplemental insurance coverage. EOL-EI = End-of-Life Expenditure Index.

Figure 5. **Satisfaction with care.**



An arrow pointing upward indicates a positive association between increased spending and satisfaction. Bars represent 95% CIs. Q1 = quintile 1; Q5 = quintile 5.

We measured outcomes and variables used to adjust for group differences at the patient level and could therefore control effectively for individual characteristics in the analysis. The ecological fallacy therefore applies neither to our design nor to our analysis. We can legitimately conclude that the average Medicare patient in higher-spending regions (and the average patient in each subgroup examined) receives much more care than those in lower-spending regions and that this additional care is not associated with better access to care, higher-quality care, or better health outcomes.

Previous research on regional variations in utilization and outcomes has been largely ecological in design, examining cross-sectional correlations at the area level between spending and utilization (5) or between spending or utilization and mortality (9, 12, 22). These earlier studies have been criticized for weak designs, inadequate individual-level measures to control for potential differences in case mix, insufficient clinical detail on the process of care to allow inferences on potential causal pathways to be drawn, and limited outcome measures. Our study addressed each of these concerns. We adopted a longitudinal design and obtained extensive baseline data on patients' health and socioeconomic status that allowed us to control for potential differences in need for care. We were also able to characterize in detail patients' access to care, use of services, and quality of care. Finally, we showed that these regional differences in utilization and outcomes were consistently seen in each subgroup of the samples. Black or white, poor or rich, high-risk or low-risk, patients in higher-spending regions received much more care (**Appendix Tables 12** through **14**, available at www.annals.org) but did not have better outcomes.

Our study provides limited guidance on the potential impact of reducing regional disparities in spending or the implementation of policies to constrain the use of these supply-sensitive services. From a clinical perspective, it is important to recognize that our study does not address the question of how the amount of care for an individual patient in a specific case would affect that patient's clinical outcome. What may appear to be relatively low-risk interventions (such as hospitalization or ordering a diagnostic test) may cause harm in some settings, just as failure to provide these or other services (such as bypass surgery in high-risk patients) may cause harm in other settings. From a policy perspective, our study does not tell us definitively that it is possible to reduce Medicare spending within a particular region without affecting patient care or outcomes. Previous research has shown that vulnerable populations may be harmed by reduced access to care (23, 24) or as a consequence of public hospital closures (25). It is not always clear, for example, whether services such as specialist consultations are wasteful or beneficial. The potential adverse impact of reductions in the use of beneficial services and disruptions in current practice patterns underscores the importance of further research on these issues and of the implementation and evaluation of demonstration projects intended to improve quality of care and promote conservative approaches to managing patients with chronic disease (8).

Debates over the need for further growth in medical spending and expansion of the medical workforce are

largely based on the assumption that additional services will provide important health benefits to the population served. Our study suggests that this assumption is unwarranted. Our study also underscores the need for research to determine how to safely reduce spending levels. If the United States as a whole could safely achieve spending levels comparable to those of the lowest-spending regions, annual savings of up to 30% of Medicare expenditures could be achieved (3). Such savings could provide the resources to fund important new benefits, such as prescription drugs or expanded Medicare coverage to younger age groups, or to extend the life of the Medicare Trust Fund to better cover the health care needs of future retirees.

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ATTACHMENT B

Consumer-Purchaser DISCLOSURE PROJECT Improving Health Care Quality through Public Reporting of Performance

More Efficient Physicians: A Path to Significant Savings in Health Care
July 2003

The Consumer-Purchaser Disclosure Project is a unique partnership of many of the nation's leading consumer, labor, and purchaser organizations. The Disclosure Project believes that the primary drivers of improvements to the health care system will be (1) consumers using valid performance information to choose providers and treatments, (2) purchasers building performance expectations into their contracts and benefit designs, and (3) providers acting on their desire to improve, supported with better information. The organizations involved in the Disclosure Project actively collaborate to achieve the following goal:

> *By January 1, 2007, Americans will be able to select hospitals, physicians, physician groups/delivery systems and treatments based on public reporting of nationally standardized measures for safety, timeliness, effectiveness, efficiency, equity, and patient-centeredness.*

The Disclosure Project advocates making information across all of the Institute of Medicine six performance domains available and actionable by providers, purchasers, consumers, and policymakers. One of those domains that has received strikingly little attention, given the cost pressures being felt by purchasers and consumers, is the relative efficiency with which care is delivered. In this context, efficiency refers to average per patient total health care spending, per episode of care or per year, associated with a provider's care, adjusted for differences in patient demographics and illness. To help inform the discussions both about Medicare reform and private sector efforts to reward more efficient physicians, the Disclosure Project sought out the opinions of leading actuaries and health researchers to estimate the potential savings to Medicare if either a small portion of beneficiaries began using more efficient physicians or a similarly small proportion of physicians improved the efficiency of their practice patterns. While using different bases for their analysis, the results were remarkably consistent: **Medicare and other purchasers could save from 2% to 4% of total costs if only one out of ten beneficiaries were to move from less efficient to more efficient physicians.** These results are also informed by separate research that has found that quality did not decline when providers practiced more efficiently. In fact, more efficient regions of the United States enjoyed better quality on some indicators than less efficient regions. The findings on potential savings were confirmed by three independent analyses:

- **Potential Reductions in Medicare Costs via Increased Efficiency in the Delivery of Health Care** (actuarial review by Milliman, USA, Mercer Human Resource Consulting and PricewaterhouseCoopers, LLP). This actuarial opinion assesses the implications of two scenarios applying the findings of the research by Dr. Elliot Fisher, et al., as described in articles entitled "*The Implications of Regional Variations in Medicare Spending.*" In the first scenario, savings of 3.1% of total Medicare costs could be realized if half of the care provided in the nation's highest-cost quintile is delivered with the combined efficiency of the other four quintiles. In the second scenario, a 5.7% reduction in total Medicare costs could be realized if half of the care provided in the two highest cost quintiles is delivered with the efficiency of the other three quintiles.

- **Estimates of Potential Savings To Be Gained by the Medicare Program if Risk-Adjusted Practice Profiles Were Applied to Facilitate Beneficiaries' Preferential Use of Efficient Physicians** (Jonathan Weiner, DrPH, Johns Hopkins University). This paper uses evidence derived from assessing physician practice patterns in commercial, Medicaid and Medicare settings, and assesses potential savings to Medicare both with and without a prescription drug benefit. The paper finds that if one out of ten beneficiaries switched from less to more efficient physicians, it would result in savings of 2% to 4% of total Medicare spending.

- **Estimate of Savings from Linking Health Insurance Plan Beneficiaries to More Efficient Physicians** (Arlene Ash, PhD, Boston University School of Medicine and DxCG, Inc.) This paper assesses practice patterns within a selected regional pool of physicians serving over 100,000 members based on inpatient and outpatient claims from 2001-2002. Optimistic assumptions about the potential savings suggest that moving about one out of ten beneficiaries (half of those being served by the least efficient thirty percent of physicians) could save approximately 2.5% of spending.

[illegible]

Potential Reductions in Medicare Costs via Increased Efficiency in the Delivery of Health Care

The Pacific Business Group on Health ("PBGH"), on behalf of the Consumer-Purchaser Disclosure Project, has requested actuarial estimates of the amount of potential reductions in Medicare costs that could be achieved through increased efficiency in the delivery of health care. PBGH has requested that these estimates be based on the research conducted by Dr. Elliot Fisher, et al., as described in articles entitled *"The Implications of Regional Variations in Medicare Spending."*[1]

Summary of Our Findings

We have estimated savings that would accrue in two scenarios:

- Scenario 1: Half of the care provided to Medicare beneficiaries in regions in the highest-cost quintile, as reported by Dr. Fisher, et al., is provided in such a way that the costs are in keeping with the costs in regions in the other 4 quintiles. All other care remains unchanged.

- Scenario 2: Half of the care provided to Medicare beneficiaries in regions in the two highest-cost quintiles, as reported by Dr. Fisher, et al., is provided in such a way that the costs are in keeping with the costs in regions in the other 3 quintiles. All other care remains unchanged.

Our findings are summarized as follows:

Percentage Reduction in Medicare Costs Through Increased Efficiency in the Delivery of Health Care to Aged Fee-For-Service Medicare Beneficiaries

Scenario 1	Scenario 2
3.1% reduction	5.7% reduction

A description of our methodology is shown in the Appendix on page 4 of this report.

Caveats

In performing our analysis, we relied on the research described in the articles by Dr. Fisher and, by extension, on the data underlying that research – including, in particular, the Dartmouth Atlas of Health Care, 1999. We have not audited or verified this research and data. If the research or underlying data is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete. If there are material defects in the research or data, it is possible that they would be uncovered by a detailed, systematic review to search for data values that are questionable or for relationships that are internally inconsistent. Such a review is beyond the scope of our engagement.

Our analysis is based on Medicare spending patterns in 1996. We believe that these patterns provide a reasonable basis for the findings in this report. However, it is possible that the patterns have changed since 1996 so as to affect the findings materially. It may be desirable to update our findings based upon an analysis of regional Medicare spending patterns in years later than 1996. Such a review is beyond the scope of our engagement.

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[1] Annals of Internal Medicine, Volume 138, Number 4, February 18, 2003.

The savings estimated would likely not be achievable immediately upon implementation of program changes; rather, they would occur over a substantial transition period. Actual savings achieved may be lesser or greater than our estimates, depending on the specific program changes adopted and measurement time periods.

Finally, the research reported by Dr. Fisher, et al., in the referenced articles detected little or no positive impact of increased Medicare spending on quality of care, access to care, outcomes of care, or patient satisfaction with care, and, by implication, little or no negative impact of decreased Medicare spending. We have not reviewed these findings and, although we have no reason to question them, we take no position as to their validity.

This report has been prepared for the internal business use of PBGH. We understand that the Disclosure Project intends to share these estimates with federal policymakers and their staff as input to their consideration of potential changes to Medicare. When provided to others, the report must be provided in its entirety. We do not intend to benefit and assume no duty or liability to any third parties who receive the report in this fashion.

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Appendix: Methodology

1. 1996 Medicare spending (fee-for-service, aged population only -- before adjustment for age, sex and race) was split into quintiles as defined in the research conducted by Dr. Fisher, et al., using backup data provided to us by Dr. Fisher.

2. For Scenario 1:

   a. Services represented by 12.5% of the Medicare spending dollars for Quintile 5 (the most costly quintile) were assumed to be provided at the level of efficiency represented in Quintile 4. To estimate the financial impact of this, we adjusted those dollars by the ratio of Quintile 4 adjusted per capita cost to Quintile 5 adjusted per capita cost, as reported by Dr. Fisher, et al., in the referenced report.

   b. Similarly, 12.5% of Quintile 5 dollars were assumed to be provided at the level of efficiency represented in each of Quintiles 1, 2 and 3.

   c. The adjusted dollars for the services assumed to be provided at more efficient levels were added to the unadjusted dollars (100% of Quintiles 1 through 4 and 50% remaining from Quintile 5) to arrive at the total adjusted 1996 Medicare spending.

3. Scenario 2 was evaluated using a similar method as that described above, except:

   a. 16.7% of spending dollars for Quintile 5 was assumed to be provided at the level represented in each of Quintiles 1 through 3; and

   b. 16.7% of spending dollars for Quintile 4 was assumed to be provided at the levels represented in each of Quintiles 1 through 3.

Estimates of Potential Savings To Be Gained by the Medicare Program if Risk-Adjusted Practice Profiles Were Applied to Facilitate Beneficiaries' Preferential Use of Efficient Physicians

By Jonathan Weiner, DrPH
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July 1, 2003

1) Goal of This Document:

To provide an estimate of potential cost savings to the Medicare program if risk-adjusted "efficiency" profiling were used to identify physician groups or "naturally occurring networks" made up of the most efficient physicians, and then a proportion of beneficiaries preferentially used these physicians over less efficient physicians. An assessment of the implications of such a policy on quality of care is also assessed.

2) Sources of Evidence:

Estimates are derived from evidence based on a decade of pattern-of-practice analyses using risk-adjusted efficiency profiling and assessment of the quality of care of "low cost" vs. "high cost" physicians and provider organizations. Dr. Weiner and colleagues at the Johns Hopkins University did this work.

The evidence is based on research at a private nationwide open panel IPA HMO; the Maryland Medicaid program, a large business coalition in the Midwest, and a study that accessed 100% FFS Medicare data files from three states (Iowa, Alabama, Maryland). Most of these data were from the 1990s.

3) Key Assumptions:

Summary of Existing Evidence on Physician Efficiency Differences

Difference in the case-adjusted efficiency between the 30% of physicians that represent the most efficient cohort, and the 30% that are the least efficient, was consistently at least .8 vs. 1.2 of average (average is set at 1.0) for all three databases. This means that the patients of the most "efficient" group of providers (after case-mix was taken into account) used on average 20% less services than expected while the patients of the least efficient cohort of physicians used services that were 20% more than expected.

Therefore, for this simulation, "risk adjusted efficiency ratios" of .8 and 1.2 were assumed. This ratio reflects a type of "observed to expected" ratio, where the actual costs of all patients treated by the cohort of physicians is divided by the "expected" costs. (The latter are based on the risk adjusted expectations for similar patients in the entire beneficiary population being studied.) The .8 and 1.2 assumptions can be considered reasonably conservative; actual evidence suggests that higher inter-physician efficiency differences are often seen.

This assessment focuses on patterns of practice around "naturally occurring" (i.e. in FFS practice) choice of primary physician or multi-specialty physician groups. That is, the estimates are based on observations of organized "physician teams" (e.g., multi-specialty groups) and primary care physicians and the specialists that comprise their natural referral patterns.

Research on specialty specific efficiency is more limited and patterns of practice of individual specialists is not considered here. However, estimates in this analysis embody all health plan covered costs. These include costs of all physician care (including specialist care), care provided by other providers, hospital costs, and pharmaceuticals where covered (in the commercial and Medicaid, but not Medicare populations).

These estimates are based on an average cohort of patients at all morbidity-burden/case-mix levels. More money could potentially be saved if the sickest patients were directed to the most efficient physicians, as their costs are considerably higher and any savings that accrue would be proportionate.

Cost of Care Assumptions

The average per year (2006) cost for each Medicare beneficiary was assumed to be $7,500. Thus applying the .8 and 1.2 assumption, the most efficient third of physicians would have an estimated average per patient cost of $6,000 and least efficient third about $9,000.

If pharmacy coverage were enacted (assuming $1,200 coverage per Medicare beneficiary) the estimated total per year per person cost with Rx added in each cohort would be approximately $7,000, $8,700, and $10,400 respectively. (Note: Rx variation is even greater among most and least efficient physician cohorts, but the same variation rate -- .8 and 1.2 -- was assumed to ensure conservatism in savings estimation).

Cost savings (without Rx) between the high and low efficiency physician cohort can be estimated at $3,000 per person. A more conservative 50% savings of $1,500 was also assumed in order to account for factors such as a degree of continued use of less efficient physicians (particularly in a PPO non-gatekeeper environment). With Rx added, the savings estimates between the efficient and inefficient physician group would be $3,400 and $1,700 respectively for 100% and 50% savings assumptions.

4) Projected Savings to the Medicare Program

What follows are the estimates of applying these assumptions for an estimated cohort of 42 million Medicare enrollees.

If the approximately 30% of enrollees who receive care from the least efficient cohort of physicians received care that was as efficient as that provided by the most efficient physicians, the overall savings could be estimated as follows:

For these 12.5 million individuals, for the non-Rx costs, the full potential savings (at $3,000 per patient) would be $37.8 billion (or approximately 12% of total program costs). Assuming projected savings is overestimated by 50%, the savings level would be about $18.9 billion (6% of program costs). With Rx costs added in, the overall savings estimates are $42.8 billion and $21.4 billion respectively.

If one assumes that instead of the entire 30% of enrollees (i.e. 12.5 million) with the least efficient physicians received more efficient care, only 10% of the population – one-third of those being seen by the least efficient physicians (i.e. 4 million enrollees) – would be directed to the most efficient physicians, then the cost savings (without RX) would be $12.6 billion at the 100% differential (between efficient and inefficient physicians; saving approximately 4% of programs costs) and $6.3

billion for the 50% differential (saving 2% of program costs). With Rx added, these "savings" figures would be $14.3 billion and $7.1 billion.

In sum, if one assumes a shift of 12.5 million enrollees from inefficient to efficient patterns of care, the savings (with Rx) could range from $42.8 to $21.4 billion; or 12% to 6% of total Medicare program costs. Assuming that only 10% (4 million) of the enrollee cohort shifted, the estimated savings would range from $14.3 to $7.1 billion or an estimated 4% to 2% of program costs.

The impact on the program would be proportional, depending on the number of enrollees affected and how many physicians were or were not included on "preferred physician lists." For example, within a program specifically serving 8 million enrollees, if the program shifted care for the 10% of patients now using the least efficient physicians to the most efficient physicians, and if one assumes the more modest 50% practice differential savings across these two physician cohorts, then an estimated $1,700 per patient (with Rx) could be saved. Thus, the estimated program savings would be $1.4 billion or about 2% of the estimated $69 billion program costs.

In sum, the most conservative "bottom line" estimates of savings of applying this strategy would probably be 1.0% to 3.0% of program costs. But this would involve several important assumptions, including: from 5% to 10% of enrollees will switch to the most efficient physicians and that there is adequate capacity for expansion among the more efficient physicians to add them to their practice rolls.

A full discussion of policy options that could be used to capitalize on the information gained from risk-adjusted physician profiling goes beyond the scope of this document. However, it should be noted that a variety of program interventions could be applied. For example, as an alternative (or in addition) to shifting patients to more efficient providers, other interventions could attempt to change the practices of the least efficient providers. Another approach could rely on payment re-design where a decreased fee schedule could be applied for less efficient providers. The Minnesota Business Coalition used a similar approach for a number of years. Efficient providers received an add-on factor to their FFS RVUs and the inefficient providers were paid a deflated standard RVU, that took into consideration their higher than expected billings.

5) Implications for Quality:

In an analysis within Maryland Medicaid (when it was a FFS program) when the low cost physicians were compared to the highest cost, they had better quality for adult diabetes and hypertension care, and adult well care. Their quality levels were the same when several other conditions were assessed. This research was based on detailed chart reviews (of all key primary and specialist physicians) and claims data analyses (see Starfield et al.).

A comparison of 18 medium to large private group practices participating in a employer coalition sponsored plan in Minnesota did not show any significant differences between those with highest risk-adjusted costs and those with lowest costs when HEDIS-like analyses using claims data were performed for several conditions (see Solberg et al.).

There is no evidence that quality of care would decrease if such a strategy were implemented.

6) Caveats & Next Steps:

These estimates are made with the best available data, but the bottom-lines presented should be viewed as "educated guesstimates."

These estimates could be improved if Medicare specific data runs were made using a recent 100% sample of Medicare claims data for selected regions. More comprehensive analyses of this type are recommended. They are quite feasible with data currently in the possession of the Centers for Medicare and Medicaid Services and I would be pleased to participate in such an analysis.

Further work on the cost-quality trade-offs and access to care issues (particularly in rural areas) is also warranted using actual Medicare patterns of care data.

7) References:

The references of research based at Johns Hopkins used to derive these estimates include:

Solberg, L, Lyles, A, Shore, A, Lemke K, Weiner J; Is Quality Free: An Evaluation of the Relationship Between Cost and Quality in 18 Provider Groups, Am J of Managed Care, June 2002.

Parente ST, Weiner J, Garnick D, Fowles J, Lawthers A, Palmer H, Profiling Medicare Beneficiary Resource Use by Primary Care Practices: Implications for Managed Medicare. Health Care Financing Review, Summer 1996 Vol 17, No. 4 .

Powe N., Weiner J., Starfield B., Stuart M., Baker A., and Steinwachs D. Assessing Provider Performance in a Medicaid Program: The Development and Testing of a Claims Based Approach for Evaluating the Care of Patients With Chronic Illness. Medical Care 1996: 34: 798-810.

Tucker A, Weiner J, Honigfeld S, Parton A. Profiling Primary Care Physician Resource Use: Examining the Application of Case Mix Adjustment, Journal of Ambulatory Care Management, 1996; 19 (1) 60-80.

Parente S, Weiner J, Richards T, Garnick P, Fowler J, Lawthers A, and Chandler P. Developing a Quality Improvement Database Using Health Insurance Data: A User's Guide with Application to Medicare's National Claims History File. Am J of Medical Quality , 1995; 10 (4) 162-176.

Weiner J, Starfield B, Stuart M, Powe N and Steinwachs D. Ambulatory Care Practice Variation Within a Medicaid Program. Health Services Research, 1996; 30:751-770.

Weiner J, Parente S, Garnick D, Fowles J and Lawther A. Variations in Office Based Quality: Claims Based Profile of Care Provided to Medicare Patients With Diabetes. JAMA, 1995; 273(19):1503-1508.

Starfield B, Powe N, Weiner J, Stuart M, Steinwachs D, Scholle S and Gerstenberger A. Costs Versus Quality in Different Types of Primary Care Settings. JAMA, 1994; 272:1903-1908.

Garnick D, Fowles J, Lawthers A, Weiner J, and Palmer RH. Focus on Quality: Profiling Physicians Practice Patterns. J of Amb Care Management, 1994; 17:44-75.

Also: Medicare program estimates were derived from recent (4/03) fact sheets developed by the Kaiser Family Foundation (KFF.ORG)

Estimate of Savings from Linking Health Insurance Plan Beneficiaries to More Efficient Physicians

Prepared by Arlene Ash, PhD
Boston University School of Medicine and DxCG, Inc

June 25, 2003

Scope of work: Estimate the potential cost savings that could be achieved if half the people who go to the "most inefficient providers" have their costs reduced to the levels achieved by the remaining providers.

Dataset: Anonymous/convenience data set containing over 100,000 members, each assigned to a unique PCP (from just under 120 physicians), covered by a managed care health plan from the Southeast. The population is privately-insured, primarily under-age-65 (Commercial), and costs are calculated based on inpatient and outpatient claims from 2001-2002.

Deliverables: Summary analyses by provider, looking at observed vs. expected cost (that is, O/E ratios). Expected cost was derived using DxCG risk scores, where 1.000 is average-single-member-cost for the health plan.

Caveats: The calculations provide optimistic estimates of potential savings, in that they implicitly assume the following: 1) high O/E ratios (the marker for inefficiency), even for providers with small panel sizes, are accurate (and repeatable) estimates of underlying efficiency, 2) the patients of "inefficient" PCPs who could be induced to move to more "efficient" doctors, are, on average, just as expensive as those who would not move, 3) "moving" would cause patients to incur the lower costs seen among existing patients of the more efficient providers, and 4) "moving" is cost free.

Results:
A summary of the findings is shown below in Table A. Assuming that people who moved from less efficient (higher O/E) providers to lower ones would experience the efficiency ratios of the lower providers, the savings (expressed as a percentage of total expenditures) to the plan would be: 0.5% if half the people in the upper decile (2.7% of the population) moved; 1.6% if half the people in the upper two deciles (5.8% of the population) moved; 2.8% if half the people in the upper three deciles (11.4% of the population) moved; 3.8% if half the people in the upper four deciles (15.8% of the population) moved; and 4.9% if half the people in the upper five deciles (21.6% of the population) moved. Linear extrapolation of these data assigns potential savings from moving 10% of people of 2.5%.

Table A: Estimated Savings From Linking Insureds to More Effieicnt Physcians

	Individual Decile Statistics						Savings Analysis	
Decile	# PCPs	# Pt Yrs	Pts/PCP	Mean E	Mean O	O/E	% of people moved	% of $ saved
10	10	5,484	548	$ 752	$ 1,085	1.44	2.7%	0.5%
9	12	6,568	547	$ 2,070	$ 2,587	1.25	5.8%	1.6%
8	12	11,395	950	$ 1,784	$ 2,033	1.14	11.4%	2.8%
7	12	9,123	760	$ 1,980	$ 2,138	1.08	15.8%	3.8%
6	12	11,989	999	$ 1,871	$ 1,908	1.02	21.6%	4.9%
5	12	10,802	900	$ 1,903	$ 1,890	0.99	26.8%	6.0%
4	12	10,427	869	$ 2,000	$ 1,921	0.96	31.9%	7.4%
3	12	15,800	1,317	$ 1,630	$ 1,503	0.92	39.5%	10.1%
2	12	14,657	1,221	$ 1,820	$ 1,514	0.83	46.6%	15.8%
1	12	7,004	584	$ 1,116	$ 764	0.68	-- N.A. --	-- N.A. --

Summary of health plan evaluation for change in provider effectiveness:

1) 118 Primary care providers split into "deciles" of effectiveness, as measured by Observed dollars / Predicted dollars (O/E) for patients under their care. The total population analyzed was 116,000 people, 103,000 patient years. Decile 10 is the most "inefficient," that is, it has the highest O/E ratio.

2) Savings calculated as "dollars saved if half the people in the upper 'k' deciles were treated with the O/E ratio that pertains for people in the lower '10 minus k' deciles", e.g. dollars saved if half the people in the upper two deciles (Deciles 9 and 10) were treated with the O/E ratio that pertains for people in the bottom two deciles (Deciles 1 and 2).

3) Percent savings equals savings from 2) above divided by total observed actual expenditure for the population.

CONCLUSION
Assuming that people who moved from less efficient (higher O/E) providers to lower ones would experience the efficiency ratios of the lower providers, the savings (expressed as a percentage of total expenditures) to the plan would be:
0.5% if half the people in the upper decile (2.7% of the population) moved
1.6% if half the people in the upper 2 deciles (5.8% of the population) moved
2.8% if half the people in the upper 3 deciles (11.4% of the population) moved
3.8% if half the people in the upper 4 deciles (15.8% of the population) moved
4.9% if half the people in the upper 5 deciles (21.6% of the population) moved

"Under these assumptions, if you could move about 20% of the people, you could save about 5% of dollars."

ABOUT THE CONSUMER-PURCHASER DISCLOSURE PROJECT:

The Consumer-Purchaser Disclosure Project believes that the primary drivers of improvements to the health care system will be (1) consumers using valid performance information to choose providers and treatments, (2) purchasers building performance expectations into their contracts and benefit designs, and (3) providers acting on their desire to improve, supported with better information. As a broad-based coalition of many of the nation's leading consumer, labor, and purchaser organizations, the Disclosure Project advocates making information across all six Institute of Medicine performance domains publicly available and actionable by providers and consumers. The organizations involved in the Disclosure Project actively collaborate to achieve the following goal:

> *By January 1, 2007, Americans will be able to select hospitals, physicians, physician groups/delivery systems and treatments based on public reporting of nationally standardized measures for safety, timeliness, effectiveness, efficiency, equity, and patient-centeredness.*

TECHNICAL SUPPORT PROVIDED TO THE CONSUMER-PURCHASER DISCLOSURE PROJECT BY:

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Attachment C

Methodology to Estimate Savings Potential From More Efficient Physicians[1]

To roughly estimate how more frequent use of efficient physicians might reduce health care spending, national efforts to apply this method were surveyed. This method differs from mainstream managed care methods, which select physicians primarily on their willingness to discount their unit prices and cooperate with utilization management methods.

Three natural experiments were conducted between 1994 and 2001, in widely varying geographies by Pitney Bowes, Union Carbide, and Regence Blue Shield. While each varied in its specific approach and degree of physician selectivity, they shared the characteristic of using software to analyze large health insurance claims databases and develop a health insurance plan network that promoted use of physicians whose practice style was associated with lower total morbidity-adjusted costs of care for which they appeared to be the primarily accountable physician. Physician efficiency in managing the total costs of health care that can be plausibly influenced by his or her services is termed "allocative efficiency." Attribution of costs to a primarily accountable physician was based on logic that considered the timing, frequency, and content of services that each physician provided. Each approach incorporated outlier thresholds in order to insulate physician efficiency ratings from the effects of very expensive illnesses.

None of the three natural experiments met criteria for scientific publication. Results were poorly documented and several confounding variables were inadequately account for. Accordingly, their results should be regarded as directional rather than definitive. Strikingly, all three approaches were associated with a similar-sized **12-17% reduction** in per capita health care spending in the subsequent 12-24 months when compared to the prior year's spending plus concurrent regional health insurance trend. These reductions were obtained starting from both weak (i.e., PPO) and strong (gatekeeper POS) states of baseline patient care management.

None of these early experiments attempted to compare the pre-existing physician network with the efficiency-selected network on quality of care measures. However, all three limited their efficiency-selected networks to physicians who had met quality credentialing standards in the pre-existing network. All assured that the efficiency-selected network included at least a proportionate number of physicians with strong reputations for high quality in the judgment of physicians who managed the pre-existing network. In estimation of savings, all three experiments attempted to account for the effects of any year-to-year changes in population risk, plan coverage richness, physician economic incentives, and utilization management programs. However, their methods and results were poorly documented and/or imprecise. Accordingly, the ~15% reduction in per capita health care spending achieved by all three health plan sponsors should be regarded as order-of-magnitude insight into health insurance economies achievable via health care plans that create incentives for consumers to select more efficient physicians. The Pitney Bowes experiment is the only one of the three to have been described in the published literature, and is summarized below.

[1] From "Improving the Value of Health Benefit Plans Through Consumer Driven Health Care," Mercer Human Resource Consulting, 25 April 2002.

The Pitney Bowes Experiment

The Pitney Bowes Experiment is detailed in an article entitled, "Pitney Bowes: Using Comprehensive Cost Information to Build Provider Networks" (published in Benefits Quarterly, Second Quarter, 1995). A pre-intervention analysis of physician efficiency (discussed below) was performed in 1993, and the efficient network was implemented in 1994 (grouper and methodology used: Diagnostic Clusters, published in Medical Care, 1995, 33(5), pp. 463-486, "Profiling Physician Practice Patterns Using Diagnostic Clusters"). A second analysis was performed and Pitney Bowes' efficient provider network was refined in 1996 (grouper and methodology used: Episode Treatment Groups (ETGs) from Symmetry Health Systems). Impact on per capita health care spending was measured in 1994 and 1995.

The arrangement at Pitney Bowes included two distinct components. First, the company reached out to the medical community for input and participation in crafting both a clinical and business partnership that would more highly value efficiency in health care delivery in Fairfield County, Connecticut (the company's home base of operation). Second, the company encouraged use of physicians with favorable efficiency profiles via a conventional point-of-service health plan, as well as an "exclusive" provider network health plan, which excluded coverage for out-of-network care, except in emergencies.

Plan Offerings Before and After the Experiment

In 1993 (the year before program implementation), Fairfield County employees were enrolled in three different health plans: MetLife (a PPO plan), Physician Health Services (PHS, an HMO with no out-of-network benefit), and ConnectiCare (CC, an HMO with no out-of-network benefit). Employee distribution in these plans was: 75% in MetLife; 20% in PHS; and 5% in CC.

The MetLife PPO plan was designed to direct employees to PPO providers, although the channeling incentive was not strong (approximately a 10% difference in coinsurance between in-network and out-of-network utilization). About 70% of employee expenditures were incurred through PPO providers. Similar to the experimental plans, the MetLife PPO plan had inpatient utilization review (UR) and large case management programs, and did not provide incentives for physicians to achieve utilization or cost reductions. Approximately 50% of the roughly 3,500 physicians in Fairfield County were in the MetLife PPO network. Physicians were paid on a discounted fee-for-service (FFS) basis, and hospitals were paid on a per diem basis. The reimbursement method and negotiated fees were judged by Pitney Bowes to be similar in the experimental plans.

The new health plan program became effective January 1, 1994. Pitney Bowes offered two plans, both administered by PHS: PHS point-of-service (POS) plan, and PHS exclusive provider organization (EPO) plan. Pitney Bowes discontinued the MetLife PPO plan, the PHS HMO, and the CC HMO.

The POS plan had a $10 office visit copay, 80%/20% out-of-network coinsurance, and no gatekeeper mechanism. The EPO had a $10 copay, no out-of-network benefit, and no gatekeeper mechanism. After the 1994 open enrollment, the distribution of Fairfield County employees was: 55% PHS-administered POS, and 45% PHS-administered EPO.

This constituted about two-thirds of the physicians in the MetLife PPO in which most Pitney Bowes enrollees had participated in the prior year. Like MetLife, PHS sought to contract with physicians providing cost-effective care; but PHS had not selected their 40% smaller HMO network of 1,000 physicians based on profiling their comparative efficiency. Most of the PHS physicians also participated in MetLife's 1,750 physician PPO network.

Pre-Experiment Physician Efficiency Study

In 1993, a study was performed to compare total health care costs per episode of illness for the 1,750 physicians in MetLife's PPO plan versus the 1,000 physicians in PHS's HMO. The top 20 specialty types were evaluated, including primary care physicians (general/family practitioners, general internists), pediatricians, OB/GYNs, general surgeons, and orthopedists.

The study included two populations of Fairfield County Pitney Bowes' employees (and their dependents). Both populations had complete individual claimant level ambulatory, outpatient, inpatient, and prescription drug data for the two-year period January 1, 1991 through December 31, 1992.

The first population consisted of Pitney Bowes employees and their dependents enrolled in the MetLife PPO. Approximately 75% of employees and dependents were enrolled in the MetLife PPO at the time of the study.

The second population comprised all members enrolled in PHS's HMO, not just Pitney Bowes employees (see 1995 Benefits Quarterly article for more information on plan design and physician reimbursement mechanisms).

Methodology and Pre-Experiment Study Findings

Details of the Diagnostic Cluster methodology are provided in the 1995 Benefits Quarterly article. For primary care physicians (PCPs), results of the analysis showed that PHS had succeeded in selecting more efficient physicians into their pre-existing HMO network. When compared on similar episodes-of-illness, average longitudinal episodes-of-care charges were 34% lower ($P<0.01$) for the PHS HMO PCPs as compared to the MetLife PPO PCPs. For specialists, results showed that average episode-of-care charges were 25% lower ($P<0.01$) for the PHS HMO specialists as compared to the MetLife PPO specialists. The efficiency study also identified the most efficient PHS physicians by specialty type. Pitney Bowes concluded that PHS physicians delivered care more efficiently than physicians providing care via the MetLife PPO plan.

Physician Composition of PHS POS and EPO Networks in the Experiment

PHS decided to move all employees to two variants of the PHS HMO physician network. To achieve this, Pitney Bowes offered two health plans, both administered by PHS:

- *PHS POS plan.* All 1,000 physicians under contract with PHS HMO remained in the experimental PHS POS network. No PCPs or specialists were eliminated. Under this plan, about 1,000 physicians provided care to POS-enrolled Fairfield County employees (and their dependents). The POS plan had a $10 copay, 80%/20% out-of-network coinsurance, and no gatekeeper mechanism.

- *PHS EPO plan.* This network was a subset of the PHS HMO plan. *The 100 least efficient PHS HMO physicians (i.e., who used significantly more resources to treat the same episodes) were not included in the EPO network.* This exclusion encompassed physicians from almost every specialty type. No additional physicians were added to the PHS EPO network. Thus, approximately 900 physicians provided care to EPO-enrolled Fairfield County employees (and their dependents). The EPO plan had a $10 copay, no out-of-network benefit, and no gatekeeper mechanism.

Monthly employee premium contributions were reduced for employees that enrolled in the EPO plan. Consequently, there was substantial enrollment in EPO plan in 1994, the first year of the experiment: about 45% of all Fairfield County employees. The remaining 55% enrolled in the PHS POS plan.

Representatives of Pitney Bowes reviewed the entire panel of EPO physicians with the medical director of PHS. The PHS medical director and Pitney Bowes representatives found a high concordance with anecdotal evidence of practice pattern efficiency and equal representation of physicians with favorable local reputations for high quality of care.

Savings from the Experiment:
The Combined Impact of Plan Design Changes and More Efficient Physicians

The program became effective on January 1, 1994. In the first year of implementation (1994), the company's per capita health care cost fell 9.3% compared to a 10% concurrent increase in premium trend in Connecticut, generating a savings estimate of 19.3%. Additional health plan administrative charges were negligible.

- In the pre-implementation year (1993), per employee costs were calculated by adding together the PHS and ConnectiCare HMO total premium costs and the self-insured MetLife indemnity plan costs. The MetLife administrative services charges were included. This total was divided by the total number of employees electing coverage in one of the three offered health plans.

- In the post-implementation year (1994), per employee costs were calculated by adding together the PHS POS and EPO costs (no fixed premiums were charged by PHS). The PHS administration services charges were included. This total was divided by the number of employees selecting POS and EPO plan coverage.

In year two of the experiment, Pitney Bowes's per capita health care costs rose at a rate that was 5% less than concurrent health insurance trend in Connecticut for a two-year cumulative savings of 24.3%. The current Medical Director at Pitney Bowes, Dr. Jack Mahoney, estimates that less than 30% of the 24.3% savings was attributable to greater enrollee point-of-service cost sharing due to the experiment's plan designs. Pitney Bowes judged potential savings from premium taxes, from elimination of favorable selection by the two insured HMOs offered in 1993, and year-to-year shifts in the total population's health status to be negligible. Dr. Mahoney felt savings could have been significantly greater with greater steerage to the EPO network via lower employee premium contributions.

The results suggest that a highly this well-implemented program to direct individuals to efficient providers generated savings equal to 17% (70% of the two-year cumulative 24.3% per capita spending reduction).

Postscript

Physician Health Services (PHS) was sold in 1996, the third year of program implementation. The new owner was unwilling to continue the contract, and the program was discontinued. Nonetheless, third year per capita costs remained lower than the community experience, indicating a carryover effect from linking the Pitney Bowes population to more efficient physicians. By year four, Pitney Bowes healthcare costs began re-approaching the community average.

The current Medical Director at Pitney Bowes, Dr. Jack Mahoney, who closely evaluated the experiment, believes that its results can be more widely generalized. He identified three success factors: First, there was a significant oversupply of physicians in every specialty. Second, the physicians were not organized into strong negotiating blocks. Third, physicians had no efficiency data with which to validate the Pitney Bowes ratings.

While physicians are more organized and have access to more data now in Fairfield County (and in many other places), Dr. Mahoney feels there is also greater physician acceptance of more sophisticated contracting strategies to constrain costs. He predicts that similar narrowing of networks via efficiency profiling could also be applied to hospitals where there is an oversupply of beds. Finally, he points out that there are now better quality of care measures, which can supplement network quality credentialing to assure consumers that quality of care is not being sacrificed by more efficient physicians.

Some employers have failed in efforts to encourage enrollees to select narrower network plans. Pitney Bowes succeeded by: (1) preserving enrollee choice via assuring a POS option; creating a significant incentive via consumer out-of-pocket cost for selecting an in-network POS provider; creating a significant incentive via consumer premium contribution levels to select the EPO plan

rather than the POS plan; and assuring that both plans were rooted in more efficient physicians, rather than in physicians selected for their acceptance of a discounted fee schedule and utilization management.

Many physician groups and managed care organizations have profiled the comparative allocative efficiency of individual physicians. Fewer have profiled their quality. However, almost none have shared ratings with consumers or rewarded consumer choice of more highly rated physicians within their group or network. While there are many valid concerns associated with making comparative provider quality and efficiency available to consumers* and a basis for creating incentives for higher value consumer selections, most can be solved or attenuated. In an industry in which individual physicians control the vast majority of national expenditures, efficient spending will require strong market reinforcement of physicians and multi-physician organized systems of care delivering superior customer value. Pitney-Bowes and other pioneering purchasers and health plans have shown it to be feasible and effective. It will be up to those that follow to integrate quality ratings, and to improve data feeds and analytic methods. These advances will enable improved customer value and greater market rewards for higher value providers.

* The challenges of validly comparing individual physician performance have been well articulated in publications by Greenfield, Hofer and others. Other authors have correctly pointed to the eventual importance of multi-physician systems of care in rating the quality and economic efficiency of health care.

RESPONSE TO QUESTIONS BY THE SENATE HELP COMMITTEE FROM ARNOLD MILSTEIN, M.D.

Question 1. Dr. Davis asserts that consumer-directed health care is just a way to shift more costs to consumers, creates more "under-insured," and harms consumers by leading them to skip necessary care. Can you please comment on this? Is consumer-directed health care just a fancy term for cost-shifting?

Answer 1. There are several forms of consumer-directed health care. "Blunt" forms that incentivize consumers to avoid health care of all types are likely to create

the problems that Dr. Davis described. "Precision-tailored" forms that incentivize consumers to use the most cost efficient, high quality physicians, hospitals, and/or treatment options are unlikely to create such problems.

Question 2. You mention innovative projects by Pitney Bowes and Union Carbide, which incentivize physicians to improve their efficiency and/or encourage beneficiaries to utilize physicians with more efficient practice patterns. Could you discuss cost reductions and improved patient satisfaction that result from such initiatives? If those benefits are realized, why has this practice not been incorporated into other privately sponsored insurance programs? Do you see any impediments in generalizing such practices?

Answer 2. These two employers captured a reduction in total per capita health care costs of roughly 17 and 9 percentage points, respectively. Employee satisfaction was not measured, but both employers described the impact on employee relations as low to zero. This practice has not spread because very few employers or insurers have enough claims experience with an individual physician to quantify and compare his/her total longitudinal cost efficiency and quality of care with other physicians in the same specialty and location. Giving self-insured employers, unions, and insurers access to the beneficiary—deidentified full CMS claims data base would remove this barrier and allow all health plans to recognize and reward better performing physicians and specific hospital service lines.

Question 3. Your mention methods for quantifying efficiency and quality for hospitals, physicians and major treatment options as "already developed" or within capability of American health services researchers to further define. Is there a consensus on these measures within the health care community? What, if any, is the role of the federal government in this regard?

Answer 3. There is not yet national consensus on how to quantify all of these parameters, although much progress has been made by the National Quality Forum (NQF) and others in quantifying hospital quality and hospital patient safety. The Federal Government should contract with (a) one or more of AHRQ's Evidence-based Practice Centers (EPCs) to develop standardized performance measures (cost-efficiency and quality) for treatment options; (b) JCAHO in partnership with one or more AHRQ EPCs to develop a full set of hospital quality measures; (c) NCQA to accelerate its effort to develop cost-efficiency and efficiency measures for hospital service lines, individual physicians, and physician groups; and (d) with the NQF to endorse current measures and others after they are developed via activities (a)–(c). Completion deadlines should not exceed 2 years for (a)–(c) and 1 subsequent year for (d).

Question 4. Among the changes required to capture efficiency, you describe sharing of efficiency and quality ratings of physicians, hospitals and major treatment options among private and public health plans. What, if any, are the impediments in sharing of data among health plans? Are there privacy and patient confidentiality concerns?

Answer 4. I recommend sharing the full Medicare claims database with private sector health benefit plan sponsors and letting them combine it with their own databases in order to compute such ratings. There are no patient confidentiality concerns as long as individual beneficiary identifiers in CMS databases are encrypted and all other beneficiary privacy protections provided for under HIPAA and the Privacy Act are strictly applied to the CMS database before CMS shares it with private sector health plans. Subject to these same protections, private sector plans could share their claims data with each other. However, they are understandably reluctant to do so because they fear that it would reveal, and thereby cause them to lose, their advantaged pricing with some providers. In a few communities, trusted intermediaries are serving the data aggregation and analysis roles.

Question 5. You suggest that CMS should share Medicare data about performance of providers, i.e. efficiency and quality ratings, of physicians and hospitals with health plans and insurance companies. Do you have concerns about accuracy and validity of data based on billing codes and captured by personnel not trained for the purpose of quality related data? How sensitive and specific are such data in distinguishing providers of varying quality? Is there a potential for abuse of such data?

Answer 5. I suggested that CMS share its claims data rather than rate and share provider performance. Claims data provided to CMS and insurers are too inaccurate and incomplete to support highly precise comparisons among hospitals and physicians. CMS could fix this problem by adopting more full and exacting billing data requirements as exemplified by recent recommendations of the Quality Work Group of the National Committee on Vital and Health Statistics. In the meantime, existing

billing data will support less precise performance comparisons that are far superior to assessing doctors and hospitals based on their unit prices and publicly advertised quality of care assertions.

Question 6. Dr. Milstein, should insurance companies have greater flexibility to offer incentives and disincentives for people to modify their behavior—for instance, to encourage people to take better care of themselves and control over their own health?

Answer 6. Yes, I believe that insurers should be given substantial flexibility to incentivize enrollees' participation in behavioral health risk reduction programs. Based on considerations of equity, insurers should be encouraged to gear the size of any negative incentives to the enrollee's income level, as is already done by several large self-insured employers in order to avoid economic coercion of low-income enrollees.

Question 7. One of the off-cited concerns with consumer-driven healthcare is that high-deductible insurance plans "would lead to a major increase in the number of underinsured individuals." This idea of uunderinsurance suggests that there is some broadly agreed-upon level of insurance to which everyone should aspire. However, if someone wants to buy a high-deductible policy to protect themselves against catastrophic injuries or illnesses, and then save the difference between the cost of a high-deductible policy versus the cost of "Cadillac coverage," why shouldn't they have that choice?

Answer 7. Like car insurance, consumers should have freedom to select varying levels of insurance. Since sicker consumers tend to select plans with better coverage, such freedom should be linked with rules for transferring income between insurance pools based on differences between pools in the health risk of their enrollees. Otherwise, this freedom would lead to concentrating the sickest consumers in insurance pools with unaffordable premiums.

PREPARED STATEMENT OF KAREN DAVIS

Thank you, Mr. Chairman, for this invitation to testify today on what's driving up health care costs and the rising numbers of uninsured. The recent announcement that national health expenditures jumped 9.3 percent in 2002, the fastest increase in a decade, is indeed troubling.[1] Even more so is the 9.5 percent jump in the number of uninsured Americans between 2000 and 2002, from 39.8 million to 43.6 million.[2]

Rising health care costs are a problem for all Americans, but they weigh especially heavily on uninsured and "underinsured" individuals, who pay much of the cost of health care directly out-of-pocket. Insured workers also feel the brunt, as employers are increasingly passing costs onto them in the form of higher deductibles, greater cost-sharing, and larger shares of employee premiums. Strife over health insurance is once again provoking employer-employee confrontations and eroding business and worker productivity.

Increased costs to patients also lead to underuse of appropriate care and greater financial burdens on the sickest. The direct financial impact on working Americans is undoubtedly one of the contributors to recent poll results showing that the affordability of health care is second among the public's concerns, after the economy and jobs.[3] And, of course, since 46 percent of all health expenditures come from government health programs such as Medicare and Medicaid, as well as those run by the Veterans Administration, the Department of Defense, and others, rising costs also mean increased government budgetary outlays. State fiscal pressures that are leading to cutbacks in Medicaid and the State Children's Health Insurance Program (SCHIP) are particularly troubling.

What we all want from our health care system is not necessarily cheaper care, but the efficient use of resources to provide high-quality care to all Americans. We can no longer afford or tolerate wasteful spending on care that does not benefit patients, the duplication of expensive procedures, medical errors, or the high administrative costs incurred by the Nation's insurers and providers. Real solutions should directly target these sources of unacceptably high costs, not simply shift costs from employers to workers or from government to beneficiaries of public programs. Promising long-run solutions include: rewarding health care providers that achieve de-

[1] Katherine Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs*, 23(1):147–159, January/February 2004.

[2] U.S. Census Bureau, *Health Insurance Coverage in the United States*: 2002, September 2003.

[3] Washington HealthBeat, *Affordable Care Second Behind Economy as Voter Concern*, January 14, 2004.

monstrably better quality and efficiency, improving high-cost patient care management, reducing medical errors, improving care coordination, and simplifying unnecessarily complex or duplicative insurance practices.

Most fundamentally, we must act as a Nation to achieve automatic and affordable health insurance for all, to ensure that the benefits of modern medicine are accessible, and to ensure that investment in health care contributes to economic growth and a healthier, more productive society.

Rising Health Insurance Premiums: Out of Reach for Many Americans

After 3 years of double-digit increases, health insurance premiums for employer-sponsored coverage have reached truly staggering levels. In 2003, the average premium was $9,068 for a family policy and $3,383 for an individual worker.[4] Employees paid $2,412 directly for family coverage annually—more than $200 per month—and $508 annually for single coverage. Some economists argue, furthermore, that the employer share is shifted backward onto workers in the form of lower wages; even if this is only partially the case, the cost to workers is considerably greater. When employers do not sponsor coverage, insurance premiums in the individual market for comparable coverage is even more expensive—when it is available at all. Half of American families make less than $50,000 per year;[5] few of them could afford more than $10,000 a year in health insurance premiums on their own.

The 13.9 percent increase in health insurance premiums in 2003 attracted particular attention.[6] Premiums would have been even higher if employee deductibles and other forms of cost-sharing had not increased, effectively reducing the comprehensiveness of coverage for the insured. At the same time, insurance spending for medical services—benefits—per enrollee are not increasing at double-digit rates. In fact, health spending per enrollee in the first half of 2003 increased 8.5 percent.[7]

Although many insurance companies are reporting record profits,[8] the divergence between premiums and underlying cost trends is probably a temporary phenomenon. In the underwriting cycle, premiums typically rise more slowly than costs when costs are accelerating and faster than costs when costs start decelerating. Market forces are likely to bring premiums more in line with costs in future years, but the issue warrants watching, especially given the consolidation within the insurance industry in recent years and the accompanying increase in insurers' market power.

Certainly, expenditures under the Medicare program, while also accelerating, are not matching the rise in private insurance premiums. Medicare outlays per enrollee for comparable benefits increased 6.2 percent over the 1999–2002 period, compared with 8.7 percent in private health insurance and 10.7 percent in the Federal Employees Health Benefits Program (excluding benefits not covered by Medicare or private insurance, such as prescription drugs, home health, and skilled nursing facility services).[9] It will be important, however, to monitor the effect of additional funds provided to Medicare managed care plans in recent legislation on future insurance company profits and total Medicare outlays.

The most serious consequences of rising health care premiums, particularly the rise in premiums paid directly by employees, is that some low-wage workers decline health insurance coverage even when it is offered by employers, while those with insurance are forced to forgo needed care because of high deductibles. Over one-fifth of uninsured workers—3.5 million people—are eligible for employer health insurance coverage but fail to take it up, largely because of the high cost of their share of the premium.[10] Low-wage workers are particularly apt to decline coverage when

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[4] The Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits, 2003*, 2003.

[5] U.S. Census Bureau, *Income in the United States: 2002*, September 2003.

[6] Jon Gabel et al., "Health Benefits in 2003: Premiums Reach Thirteen-Year High as Employers Adopt New Forms of Cost Sharing," *Health Affairs*, 22(5):117–126, September/October 2003.

[7] Bradley C. Strunk and Paul B. Ginsburg, *Tracking Health Care Costs: Trends Slow in First Half of 2003*, Data Bulletin No. 26, Center on Health System Change, December 2003.

[8] Dinah Wisenberg Brin, "U.S. Health Insurers Seen Posting Solid Earnings as Costs Moderate, *Wall Street Journal Online*, January 15, 2004 6:59 pm EST; Paula L. Stepankowsky, "Aetna Pres Reiterates At Least 15% '04 Profit Growth View," *Wall Street Journal Online*, January 14, 2004, 7:57 am. EST; Business Wire, Inc., "HMO Profits Jump 60% in First Quarter 2003, According to Weiss; More than 80% of Companies Profitable," January 20, 2004; Associated Press State and Local Wire, "Blue Cross Profits among Country's Fastest Rising in Early 2003," January 22, 2004; Glenn Singer, "HMO Profits Get Healthy Bounce in '03; Medical Costs Didn't Rise as High as Projected, Which Has Helped Boost Bottom Lines," South Florida Sun-Sentinel, December 30, 2003.

[9] Katherine Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs*, 23(1):147–159, January/February 2004.

[10] The Commonwealth Fund 2001 Health Insurance Survey.

eligible. Seventeen percent of workers making less than $10 an hour declined coverage, compared with 8 percent of those making $15 an hour or more.[11]

Higher deductibles also contribute to underinsurance. They cause the low-income insured to forgo needed medical care or create crippling medical bill problems. Over half of the uninsured and nearly one-third of low-income insured individuals reported problems paying medical bills in 2001.[12] In addition, more than half of the uninsured and over one-fourth of low-income insured individuals reported problems obtaining needed care.[13] With the marked rise in patient cost-sharing in the last 3 years, these problems are undoubtedly more severe today.

Trends in Health Care Costs

The important question is why health care expenditures are rising at such a rapid rate. In 2002, the Nation spent $1.6 trillion for health care, or 14.9 percent of gross domestic product (GDP). This is a major jump from 13.3 percent of GDP in 2000, due to accelerating health care costs as well as relatively weak nominal GDP growth. By 2012, health spending is projected to more than double.[14]

Health spending is a combination of increases in prices of individual services, increased numbers of services, or a shift in the composition of services toward more specialized, higher-cost services. In the mid-1990s, prices went up at a slower rate, reflecting to some extent moderation in economy-wide inflation but also reflecting discounted prices under managed care and budget cuts in Medicare and Medicaid. But since 1998, prices of services have been accelerating somewhat as providers decline to take sharply discounted managed care provider payment fees.

But most importantly, since the mid-1990s the quantity of services consumed has been increasing. This may reflect new technology and, to some degree, an aging population. However, it could also reflect some "provider-induced" demand—for example, as physicians attempt to generate additional income by providing more services, working longer hours, or ordering more tests. Some recent data for the Medicare program point to sharp increases in the provision of specialized services, such as pacemaker insertion.[15] This may be an attempt by physicians to gain back some of the reduction in physicians' real income that occurred in the late 1990s.[16]

Hospital spending is now the leading source of overall health services expenditure growth. In 2002, hospital costs accounted for more than one-third of overall spending growth, physician expenditures for one-fifth, and prescription drugs for one-sixth. As a result of rapid increases, the hospital share of total national expenditures has grown. Again, this may be an attempt by hospitals to recover from sharply discounted managed care fees and Medicare hospital savings in the mid- to late 1990s. For example, hospital costs grew annually at 8.8 percent in the late 1980s and early 1990s, and slowed to 3.5 to 4 percent from 1993 to 2000. But during 2000 to 2002, hospital costs again grew 8 to 10 percent annually, suggesting that the slowdown in the mid-1990s was not sustainable given the rising wages of hospital employees and the costs of supplies, including prescription drugs, purchased by hospitals. Some of the increase is clearly attributable to technological advances that improve health or maintain functioning and are highly valued by society.

Prescription drug spending has "moderated" somewhat, climbing at a 15.3 percent rate in 2002, down from 17.1 percent between 1997 and 2000. Drug prices are increasing at about 5 percent a year, with the remainder of the spending growth reflecting either a rise in the number of prescriptions or a shift toward more costly medications. While forecasts by the Centers for Medicare and Medicaid Services (CMS) suggest that prescription drug spending will slow to 10 percent between 2003 and 2011, much will depend on industry's response to the new prescription drug legislation. This is an area that merits close monitoring.

Finally, it is shocking that administrative expenses are now the fastest-growing component of national health expenditures. In 2002, the Nation spent $105 billion on private insurance and public administrative expenses, up 16.2 percent from

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[11] Analysis of 2000 Medical Expenditure Panel Survey by Sherry Glied and Douglas Gould of Columbia University for The Commonwealth Fund.

[12] The Commonwealth Fund 2001 Health Insurance Survey.

[13] The Commonwealth Fund 2001 Health Insurance Survey.

[14] Stephen Heffler et al., "Health Spending Projections for 2002–2012," *Health Affairs* web exclusive, February 7, 2003.

[15] Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy*, March 2003.

[16] Marie C. Reed and Paul B. Ginsburg, *Behind the Times: Physician Income, 1995–1998*, Center for Studying Health System Change, Data Bulletin No. 24, March 2003.

2001.[17] Over the last 5 years, increases in administrative costs have consistently outpaced increases in total health expenditures. Private insurance administrative costs are particularly high—12.8 percent of total private insurance outlays, compared with 4.9 percent for public programs and only 3.0 percent for Medicare. This does not include administrative costs within physician offices, clinics, or hospitals, where administrative costs have been rising due to ever more complex and fragmented insurance arrangements.

Is Consumer-Driven Health Care the Answer?

Given the public backlash against managed care, it has become fashionable to suggest that increasing patient cost-sharing is the best, or even the "only," private sector strategy remaining to slow health care costs.[18] But Americans spend far more out-of-pocket for health care than the citizens of any other industrialized nation, and all of these nations have lower health care spending per capita. In 2002, Americans spent $213 billion out-of-pocket, up from $147 billion in 1993 and $25 billion in 1970.[19] Despite improvements in benefits covered over time, rising health care costs and growing numbers of uninsured have kept patient out-of-pocket costs relatively constant as a percent of GDP, from 2.4 percent in 1970, to 2.2 percent in 1993, to 2.0 percent in 2002.

Increasing patient cost-sharing has well-known adverse consequences. First of all, it contributes to excessive financial burdens, particularly on lower-income and sicker patients. A recent study found that a $1,000 deductible, for example, would cause one third of all Americans to spend more than 10 percent of their income on health care if they were hospitalized.[20] A $2,500 deductible would cause two-thirds of all Americans to spend more than 10 percent of their income if hospitalized. Rates are far higher, of course, for those at the lowest end of the income scale. People with the potential for such high out-of-pocket costs in the event of serious illness are considered to be underinsured. No one could seriously advocate making one-third or two-thirds of Americans underinsured in the name of creating "cost-conscious consumers."

Even Medicare leaves many beneficiaries facing high out-of-pocket costs. The elderly as a whole spent 22 percent of their income on health care in 2000 from a combination of Part B premiums, Medigap premiums, cost-sharing for covered services, and uncovered services (including prescription drugs).[21] That proportion is projected to rise to 30 percent by 2025. While the new Medicare prescription drug legislation will assist many Medicare beneficiaries, there are gaps in benefits and beneficiary premiums that rise markedly over time.[22] For low-income Medicare beneficiaries or for those with serious health problems, the risk of severe financial hardship remains considerable.

An extensive literature documents that cost-sharing is a blunt instrument for reducing utilization of services. It reduces both those effective services that are already underutilized as well as services that are "supply-sensitive." The RAND Health Insurance Experiment, for example, found that low-income children facing cost-sharing had half the probability of receiving highly effective care for acute conditions that are appropriate and necessary compared with low-income children not facing cost-sharing. For low-income adults, these rates were similar. But even higher-income children and adults with cost-sharing had a lower probability of receiving effective medical care than comparable children and adults not faced with no cost-sharing.[23]

While the RAND study took place in the late 1970s, more recent studies confirm the effect of cost-sharing on receipt of essential care. A Canadian study found that cost-sharing for prescription drugs reduced use of both essential and less essential drugs, increased the risk of adverse events, and increased visits to the emergency

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[17] Katherine Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs*, 23(1):147159, January/February 2004.

[18] "David E. Rosenbaum, "The Nation: Do Some Pay Too Little for Health Care?" *The New York Times*, October 26, 2003. "As we've moved away from managed care as a cost-control device, we have no choice but to move to higher deductibles and co-pays," [quoting John F. Holahan, Urban Institute]; "Jonathan Gruber [MIT] . . . argues that to limit overuse of health care, people should have to pay enough of the cost out-of-pocket that it pinches."

[19] Katherine Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs*, 23(1):147–159, January/February 2004.

[20] Sally Trude, *Patient Cost Sharing: How Much is Too Much*? Center for Studying Health System Change, December 2003.

[21] S. Maxwell et al., *Growth in Medicare and Out-of-Pocket Spending: Impact on Vulnerable Beneficiaries*, The Commonwealth Fund, December 2000.

[22] New York Times, "Patches for the Drug Program," p. 14, January 25, 2004.

[23] K. N. Lohr et al., "Use of Medical Care in the RAND HIE," *Medical Care* 24, supplement 9 (1986):81–87.

department.[24] A recent U.S. study found much the same effect in an employer plan switching from a one-tier formulary to a three-tier formulary with increased enrollee copayments for medications.[25] Those facing increased copayments under all three tiers had a 16 percent decline in filling prescriptions for ACE inhibitors and a 21 percent decline in filling prescriptions for statins, compared with 6 percent and 11 percent for those experiencing no change in copayments.

What Alternatives Exist for Achieving Economies in Health Care?

Looking at the experience of other countries suggests that it is certainly possible to spend less on health care while achieving comparable or better health outcomes. The major reason U.S. health care costs are higher is not that other countries ration care; in fact, the U.S. has fewer hospital days per capita than other countries and about the same number of physician visits.[26] Rather, the reason is that costs are higher in this country because we pay higher prices for the same services, our administrative costs are higher, and Americans receive far more specialized services, such as MRls and invasive heart procedures.[27]

While the U.S. health system is the most costly, it is striking how similar the rate of increase in real health spending has been across countries in the last decade. Real spending per capita in the U.S. rose by 3.2 percent per year in the 1990s, compared with 3.1 percent for all OECD industrialized countries.[28] This finding suggests that trends may be more a reflection of technological change, or rising labor and other supply costs, than specific government policies.

Despite the U.S. reliance on managed care—which most view as successful in achieving at least "one-time" savings—other countries using alternative strategies had much the same experience. Spending growth per capita in New Zealand, for example, was 2.9 percent, perhaps owing to such policies as aggressive negotiation for lower drug prices and a long-standing system of no-fault medical malpractice. In response to general economic difficulties, Canada curbed Federal health spending markedly in the mid-1990s and experienced 1.8 percent annual increases in real health spending per capita. However, public backlash at the closure of hospital beds and reduced accessibility of services led to investment of new resources in Canadian health care in recent years. The United Kingdom had higher spending growth (3.7 percent annually in the 1990s), as a result of policy commitments to increasing the resources devoted to health care.

One of the lessons from the international experience is that health care is highly valued by the public, and government efforts to restrain spending often meet with opposition from the public as well as providers. In each country, public dissatisfaction with the health system seems to be particularly sensitive to policies that increase patient out-of-pocket costs or visibly reduce accessibility to health care services.[29] This suggests that greater success may be achieved over the long run by designing targeted policies that focus on administrative costs, duplication and waste, medical errors, or care that is both better for patients and lowers cost.

If the U.S. were more willing to use the power of government to negotiate prices for medical services and prescription drugs, it could probably achieve considerably lower prices. However, we seem committed to a pluralistic system of many different private insurers and public programs, each attempting to get the best deal it can on its own, rather than a concerted effort to purchase services collectively or all-payer rate-setting. Other countries also are more willing to use supply constraints—for example, limiting the number of physicians of different types who are permitted to practice—and to use salaried payment systems for specialists, which eliminate incentives to provide unnecessary services to generate income.

An alternative that may be feasible for the U.S. is to be more proactive about assessing when individual services are necessary and rewarding health care providers that provide the "right care" efficiently. For example, clinical criteria for the use of imaging tests such as MRIs and specialized procedures or specialist referrals could

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[24] R. Tamblyn et al., "Adverse Events Associated with Prescription Drug Cost-Sharing Among Poor and Elderly Persons," *Journal of the American Medical Association* 285:421–429, 2001.

[25] Haiden A. Huskamp et al., "The Effect of Incentive-Based Formularies on Prescription-Drug Utilization and Spending," *The New England Journal of Medicine* 349(23):2224–2232, December 4, 2003.

[26] Karen Davis and Barbara Cooper, *American Health Care: Why So Costly*? The Commonwealth Fund, June 2003.

[27] Gerard Anderson et al., "It's the Prices, Stupid: Why the United States is So Different from Other Countries," *Health Affairs*, 89–105, May/June 2003.

[28] Anderson et al., *Multinational Comparisons of Health Systems Data, 2002*, The Commonwealth Fund, October 2002.

[29] Cathy Schoen et al., "Health Insurance Markets and Income Inequality: Findings from an International Health Policy Survey," *Health Policy* 52(2):67–85, March 2000.

be developed and payment restricted to those instances in which the best available scientific evidence suggests the care will be effective.

Modern information technology also shows promise, in cutting administrative expenses, reducing medical errors, prompting physicians to order tests or services only when clinically warranted, and making it easier to retrieve clinical information so that tests do not have to be repeated. Better information systems would also make it possible to assess provider performance in order to identify physicians, hospitals, and other providers that provide either superior quality care or greater efficiency, or preferably both. Best practices could then be disseminated widely, encouraging others to achieve the same levels of performance or tailoring financing incentives to reward best practices.

Reducing Medical Errors and Improving Care Coordination

It has been almost 5 years since the Institute of Medicine released its study *To Err Is Human* and sounded the alarm about the seriousness of medical errors.[30] Yet, our Nation is far from broadly instituting procedures that are known to protect patients, reduce deaths, eliminate complications and costly hospital stays, and, in so doing, reduce health care costs.

A recent study of 18 patient safety indicators identified by the Agency for Healthcare Research and Quality (AHRQ) found that these medical errors account for 2.4 million extra hospital days, $9.3 billion of excess charges, and nearly 33,000 deaths.[31] When foreign objects are left in the patient after surgery, patients need repeat surgery, recover less quickly, and spend more time in the hospital.[32]

Information technology (IT) shows particular promise for reducing medical errors. One study found that the rate of nonintercepted, serious medication errors at one hospital fell by 55 percent with a physician computer order entry system.[33] The net savings for the hospital were estimated at between $5 to $10 million a year. And, of course, this does not measure the "savings" for the patients, which are not only desired but also yield economic benefits through increased productivity (e.g., fewer missed work days). Computer-based surveillance of adverse medical device events also shows promise.[34]

All providers should be encouraged to establish systems that reduce errors, whether they are computer-based or techniques such as bar coding. Government can facilitate these efforts through sharing in the costs of IT systems, promulgating IT standards, and requiring error reporting.

Private-sector efforts can also assist. For example, The Commonwealth Fund has provided support for the development, dissemination, and use of tools to help hospitals self-assess whether safe medication practices are in place. The Institute for Healthcare Improvement runs a Breakthrough Series that has demonstrated success, through a technique known as medication reconciliation, in reducing adverse drug events occurring when patients are discharged from the hospital and resume taking prior medications along with those given to them at the hospital. Yet, only a limited number of U.S. institutions have been trained in these techniques.

The U.S. is particularly at risk because of our more complex health system. U.S. patients take more medications and see more physicians, thus creating more opportunities for mistakes to occur. The 2002 Commonwealth Fund International Health Policy Survey of Sicker Adults found that 18 percent of U.S. adults with health problems reported experiencing a medical error that caused serious problems in the past 2 years, compared with 9 percent of U.K. patients and 15 percent of Canadians.[35]

The complexity of our health system not only leads to medical errors but leads to problems with coordinating care across health care providers. According to the survey, one-fifth of sick adults in the U.S. had a time in the past 2 years when they

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[30] L. T. Kohn, J. M. Corrigan, and M.S. Donaldson, eds., *To Err is Human: Building a Safer Health System*, Washington, DC: National Academies Press, 1999.

[31] C. Zhan and M. R. Miller, "Excess Length of Stay, Charges, and Mortality Attributable to Medical Injuries During Hospitalization," *Journal of the American Medical Association*, October 8, 2003:18681874.

[32] A. A. Gwande et al., "Risk Factors in Retained Instruments and Sponges After Surgery," *New England Journal of Medicine* 348: 229–235, 2003.

[33] David W. Bates et al., "Effect of Computerized Physician Order Entry and a Team Intervention on Prevention of Serious Medication Errors," *Journal of the American Medical Association* 280 (15):1311–1316, October 21, 1998.

[34] Matthew H. Samore, "Surveillance of Medical Device-related Hazards and Adverse Events in Hospitalized Patients," *Journal of the American Medical Association*, 292(3):325–334, January 21, 2004.

[35] Robert Blendon et al., "Common Concerns Amid Diverse Systems: Health Care Experiences in Five Countries," *Health Affairs* (May/June 2003):106–121.

were sent for duplicate tests by different health professionals.[36] One of four sicker adults reported that medical records or test results did not reach their doctor's office in time for appointments. When records are not available, patients may need to come back another time, wasting both patient and physician time. Information technology could improve efficiency by making records easily accessible when they are needed, reducing the need to repeat tests, and making sure that information is in the hands of providers at the time it is needed.

Paying for Performance: Quality and Efficiency

Poor quality extends beyond medical errors to include failing to provide patients with care that could benefit them or overuse of services without therapeutic benefit. A study by the RAND Corporation this year underscored concerns that clinicians are failing to provide many patients with the most clinically appropriate care.[37] Only 55 percent of Americans received recommended care. The results held for preventive care, care for acute conditions, and care for chronic conditions. For example, pneumonia patients received recommended care only 39 percent of the time, and hip fracture patients only 23 percent of the time.

Overuse of services is clearly an area where quality could be improved and costs reduced. But rarely is a specific procedure never appropriate; rather, procedures are appropriate under some circumstances and not others. Unlike several other countries, the U.S. does not have a Federal agency charged with developing and approving clinical guidelines based on the latest scientific evidence that govern when a particular procedure should be used. AHRQ has a National Guidelines Clearinghouse with professionally developed guidelines, but the agency no longer develops or recommends guidelines. Without such an effort, progress in reducing overuse is likely to be slow.

Just how variable current practice is has been underscored by several recent studies. An analysis of Medicare quality-of-care indicators by State shows widespread differences.[38] A team of investigators at Dartmouth College has found wide variations in Medicare costs per beneficiary and in the use of "supply-sensitive" services across hospital service areas.[39] But particularly interesting are new analyses that show wide variation in both quality and efficiency. For example, within the Premier network of hospitals, outcomes for coronary artery bypass graft vary five-fold and costs vary by three-fold. There is no systematic relationship between cost and quality.[40] Rewarding those hospitals that achieve high quality and low cost would be a spur to others to emulate best practices and would lead to improved care for all.

Better Management of High-Cost Patients

Health care costs are heavily concentrated in the sickest patients. Ten percent of people account for 69 percent of health care outlays.[41] In recognition of this fact, private managed care plans are beginning to concentrate their care management efforts on either those patients who are most costly or those who are predicted to be most costly in the future. Through predictive modeling techniques, plans can identify which patients are most likely to be on a trajectory toward high costs. For example, Partners HealthCare System in Boston identifies patients who make increasing use of emergency rooms and uses call banks of nurses to find out if patients are adhering to their medications and to screen for such problems as depression. Kaiser-Permanente health system goes beyond simple disease management; it tailors its monitoring practices differently for those patients who are at a stage where they can manage their condition on their own than for those requiring substantial assistance.

Many of these techniques require services and personnel not typically reimbursed by public programs such as Medicare or private insurers. Researchers at the University of Pennsylvania, for example, have documented that using advanced practice

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[36] Robert Blendon et al., "Common Concerns Amid Diverse Systems: Health Care Experiences in Five Countries," *Health Affairs* (May/June 2003):106–121.

[37] Elizabeth McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," *The New England Journal of Medicine* (June 26, 2003):2635–2645.

[38] Stephen F. Jencks, Edwin D. Huff, and Timothy Cuerdon, "Change in the Quality of Care Delivered to Medicare Beneficiaries, 1998–1999 to 2000–2001," *Journal of the American Medical Association* (January 2003) 289: 305–312.

[39] Elliott S. Fisher et al., "The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care," *Annals of Internal Medicine* (February 2003) 138: 273–287.

[40] Srephen Grossbart, Ph.D., Director, Healthcare Informatics, Premier, Inc., "The Business Case for Safety and Quality: What Can Our Databases Tell Us," 5th Annual NPSF Patient Safety Congress, March 15, 2003.

[41] A. C. Monheit, "Persistence in Health Expenditures in the Short Run: Prevalence and Consequences," *Medical Care* 41, supplement 7:1153–1164, 2003.

nurses to follow patients with congestive heart failure home from the hospital can be effective in reducing re-hospitalization and in lowering annual per capita expenditures—in this case, from $9,600 to $6,200 per patient.[42] The Commonwealth Fund is supporting an evaluation of an Aetna demonstration in the Philadelphia area to test this concept more broadly.

Another approach is "telemonitoring" patients who make intensive use of emergency rooms or hospital care. A pilot test of a handheld computer called the Asthma Buddy at New York City's Coney Island Hospital found that having children who are heavy users of emergency room services key their peak flow rate into the device and answer questions about their condition daily is successful in markedly reducing ER use and inpatient hospitalization. Again, The Commonwealth Fund is supporting an evaluation of a randomized controlled trial of this approach in five New York City public hospitals.

These strategies show great promise in markedly reducing costs for the most costly patients. However, to become widespread, public programs such as Medicare and Medicaid, as well as private insurers, will need to be more willing to cover the costs of non-physician personnel and supplies required for these high-cost care management programs.

Improving Administrative Efficiency

In addition to improving care management, using modern information technology to reduce the cost of administrative expenses should be a high priority for the future. When medical records are available electronically, fewer clerks are needed to file and retrieve medical records. Pharmacists need to make fewer calls to physicians to clarify prescriptions.

The Institute of Medicine committee on which I served recommended an electronic insurance clearinghouse be established at the State level.[43] If all insurance companies and public programs such as Medicare and Medicaid were to pool enrollee information in a single database, providers could easily verify insurance coverage through one system. Doing so could eliminate much of the cost incurred when people change insurance coverage.[44] It could eliminate much of the difficulty of conducting outreach to enroll eligible people in public programs by making it possible, for example, to cross-check lists from tax records against insurance coverage. It would also be an effective mechanism for electronic claims submission. Other ideas that would eliminate wasteful duplication of effort include a single database for provider certification and verification of physician licenses.

We have a very fragmented health insurance system that produces enormous churning in health insurance coverage. Over a 4-year period, 85 million people are uninsured. Two million people lose or change coverage every month.[45] The cost of enrolling and disenrolling and re-enrolling people contributes to the high administrative cost of the U.S. health system. Each insurer has its own approach to handling enrollment and claims payment. It also has its own rules for payment of providers, adding to the administrative costs of physician practices and hospitals. Reducing wasted resources on these administrative costs could be accomplished through statewide efforts to coordinate and pool administrative information.

Conclusion

If we have the world's costliest health system yet still fail to provide everyone with access to care—and fall far short of providing the safe, high-quality care that it is possible to provide—the conclusion that there is room for improvement is inescapable.[46] Only by facing this fact squarely and putting into action the best ideas and experiences across the U.S. and around world can we achieve a vision of American health care that includes: automatic and affordable health insurance for all, accessible health care, patient-responsive care, information- and science-based care, and commitment to quality improvement.[47]

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[42] M. D. Naylor, "Making the Business Case for the APN Care Model," report to The Commonwealth Fund, October 2003; estimated charges by Mark Pauly.

[43] Institute of Medicine, *Fostering Rapid Advances in Health Care*. The National Academies Press, November 2002.

[44] Pamela Farley Short et al., *Churn, Churn, Churn: How Instability of Health Insurance Shapes America's Uninsured*, The Commonwealth Fund, November 2003.

[45] Pamela Farley Short et al., *Churn, Churn, Churn: How Instability of Health Insurance Shapes America's Uninsured*, The Commonwealth Fund, November 2003.

[46] Karen Davis et al., *Room for Improvement: Patients Report on the Quality of Their Health Care*. The Commonwealth Fund, April 2002, and Karen Davis, et al. *Mirror, Mirror on the Wall: The Quality of American Health Care*. The Commonwealth Fund, forthcoming.

[47] K. Davis, C. Schoen, and S. Schoenbaum, "A 2020 Vision for American Health Care." *Archives of Internal Medicine*, Vol. 160, No. 22: 3357–62.

If we are to achieve a truly high-performance health system, bold action is required. The following steps would start us on this course:

• **Public reporting of cost and quality data on physicians, hospitals, nursing homes, other health care providers, and health plans**. The CMS has been a leader in posting nursing home quality data on its website, but this is just a modest beginning. The new Medicare prescription drug legislation also spurs reporting by hospitals of a limited set of quality-of-care indicators. If we are serious about doing better, we need to know where we stand, routinely collecting comprehensive quality measures across a broad range of providers.

• **Investment in health information technology**. Other countries are quickly surpassing the U.S. in the adoption of electronic medical records and electronic prescribing.[48] They are doing so because the government has been willing to invest in the infrastructure and establish the standards required to make this potential a reality.

• **Development and promulgation of clinical guidelines and quality standards**. It is long past time to simply pay for services rendered without establishing a scientific basis for effectiveness, not just for new drugs but for consultations, procedures, and tests. This could be accomplished through establishment of a new National Institute on Clinical Excellence and Effectiveness.[49]

• **Paying for performance**. Medicare and private insurers tend not to vary payment rates with quality. They pay for defects, whether those defects are surgeries that need to be repeated; infections that arise from failing to use state-of-the-art technology, such as catheters impregnated with antibiotics for heart valve patients; or medication errors. CMS has embarked on some modest initiatives to begin testing pay-for-performance rewards. Medicare can and should be a leader in promoting quality. These efforts need to be substantially expanded and best practices documented and disseminated. Medicare's leadership can be instrumental in moving private payers as well; to date, very few private insurers have instituted "value-based purchasing" strategies.[50]

• **Investment in research**. We urgently need to gather evidence on what works to improve care, eliminate waste and ineffective care, and promote greater efficiency, including use of modern information technology, team work, and improved care processes. Any industry that fails to invest in research to improve quality and efficiency is going to be a backward industry. The Federal Government pays $505 billion for health care but devotes only $300 million to the AHRQ budget to learning effective ways to improve performance of the U.S. health system. The report on U.S. health care quality recently issued by AHRQ is an important starting point. But it needs to be followed with an investment in research up to the task of ensuring that this Nation has a high-performing health system worthy of the 21st century.

• **Statewide electronic insurance clearinghouses**. It is important to move toward greater efficiency in the administration of our fragmented, complex system of health insurance coverage. Ultimately, solutions that would simplify eligibility for public programs and improve the stability of health insurance coverage are needed to cut the administrative cost in our system. Movement toward electronic administration of insurance can also achieve important savings. One particularly promising initiative would be testing statewide electronic insurance clearinghouses to pool together information on insurance eligibility.

• **Automatic and affordable health insurance for all**. Employers, Federal and State governments, and individuals must all share responsibility for achieving automatic and affordable health insurance for all. The most realistic strategy is a combination of group insurance options including: employer coverage for those who are working; a Congressional Health Plan, modeled on the Federal Employees Health Benefits Program, for small businesses and individuals; an expansion of SCHIP to low-income families and individuals with incomes below 150 percent of poverty; and an option for uninsured, older adults and disabled adults to obtain early Medicare coverage (e.g., by eliminating the 2-year waiting period for the disabled, covering spouses of Medicare beneficiaries, and permitting uninsured older

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[48] Gautam Naik, "England Plans Major Revamp of Health Care," *The Wall Street Journal*, December 3, 2003.

[49] Stephen C. Schoenbaum, Anne-Marie Audet, and Karen Davis, "Obtaining Greater Value from Health Care: The Roles of the U.S. Government," *Health Affairs*, November/December 2003.

[50] Vittorio Maio, Neil Goldfarb, Chureen Carter, and David Nash, *Value-Based Purchasing: A Review of the Literature*. The Commonwealth Fund, May 2003 and Neil Goldfarb, Vittorio Mario, Chureen Carter, Laura Pizzi and David Nash, *How Does Quality Enter Into Health Care Purchasing Decisions*? The Commonwealth Fund, May 2003.

adults to "buy in" to the program).[51] Premium assistance based on income is required to make premiums affordable for all enrollees. Mechanisms to ensure that everyone is automatically enrolled in one of these four group options would help millions of Americans who currently fall through the cracks of coverage. Action is imperative; continued paralysis is exacting an unacceptable toll. The Institute of Medicine has estimated that 18,000 deaths of adults ages 25 to 64 occur each year as a direct result of being uninsured. Moreover, the Institute of Medicine estimates the lost economic benefit at $65 billion to $130 billion a year.[52]

Thank you very much for the opportunity to join this panel. I look forward to learning from my fellow panelists and answering any questions.

EXECUTIVE SUMMARY

National health expenditures rose 9.3 percent in 2002, the fastest increase in a decade. Even more troubling was the 9.5 percent jump in the numbers of uninsured between 2000 and 2002, from 39.8 million to 43.6 million. Rising health care costs are a problem for all Americans, but they weigh especially heavily on uninsured and "underinsured" individuals, who pay much of the cost of their health care directly out-of-pocket. Higher costs to patients lead to underuse of appropriate care and greater financial burdens on the sickest.

We can no longer afford or tolerate wasteful spending on care that does not benefit patients, the duplication of expensive procedures, medical errors, or the high administrative costs incurred by the Nation's insurers and providers. Real solutions should directly target these sources of unacceptably high costs, not simply shift costs from employers to workers or from government to the beneficiaries of public programs. Promising long-run solutions include: rewarding health care providers that achieve demonstrably better quality and efficiency, improving high-cost patient care management, reducing medical errors, improving care coordination, and simplifying unnecessarily complex or duplicative insurance practices. Most fundamentally, we must act to achieve automatic and affordable health insurance for all, to ensure that the benefits of modern medicine are widely accessible, and to ensure that investment in health care contributes to economic growth and a healthier, more productive society.

• Health insurance premiums increased 13.9 percent in 2003, faster than the 8.5 percent growth in health care costs. Market forces are likely to bring premiums more in line with costs in future years, but the issue warrants watching.

• Health care expenditures in 2002 were $1.6 trillion, or 14.9 percent of the gross domestic product. The U.S. has the highest health care spending of any country, yet we are the only major industrialized Nation not to provide health insurance coverage for all.

• Medicare outlays per enrollee continue to grow more slowly than private insurance, averaging 6.2 percent over the 1999–2002 period, compared with 8.7 percent in private health insurance.

• Hospital spending is now the leading source of health care services expenditure growth. While some of the increase is undoubtedly attributable to technological advances that improve health, some is a catch-up from the unsustainably low rates of increase in the mid-1990s.

• Administrative expenses are now the fastest-rising component of national health expenditures. In 2002, the Nation spent $105 billion on private insurance and public administrative expenses, up 16.2 percent from 2001. Private insurance administrative costs are particularly high–12.8 percent of total private insurance outlays, compared with 3.0 percent for Medicare.

Consumer-driven health care, the major private-sector strategy for addressing rising costs, is unlikely to address the fundamental causes of rising health care costs. In fact, it is likely to have adverse consequences for patients.

• Consumer-driven health care contributes to excessive financial burdens on patients, particularly lower-income and sicker patients. If all Americans had a $1,000 deductible plan, one-third would spend more than 10 percent of their income on health care if they were hospitalized, with even higher rates at the lowest end of the income scale. High deductibles would lead to a major increase in the number of underinsured individuals.

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[51] Karen Davis and Cathy Schoen, "Creating Consensus on Coverage Choices," *Health Affairs* (April 23, 2003); Sara Collins, Karen Davis, and Jeanne Lambrew, *Health Care Reform Returns to the National Agenda*, The Commonwealth Fund, January 2004.

[52] Institute of Medicine, *Insuring America's Health: Principles and Recommendations*, The National Academies Press, January 2004.

• Patient costs are already unacceptably high. Indeed, they are a major reason why public opinion polls show that the affordability of health care is Americans' second-leading concern.

• Patient cost-sharing is a blunt instrument for reducing utilization of services. It reduces use of effective services that are already underutilized. Studies have documented that drug-tiering and higher copayments are leading patients to skip filling essential prescriptions, increasing adverse medical events, and raising emergency room use.

There are better alternatives for achieving economies in health care than shifting costs to patients. Costs are higher in the U.S. than in other countries because we pay higher prices for the same services; our administrative costs are higher; and physicians prescribe specialized services that are not clinically justified. If we as a Nation were to adopt fundamental reforms—such as an integrated public-private strategy to purchase health services efficiently, demand quality performance, and streamline administrative costs—substantial savings could be achieved.

Short of fundamental reforms, practical steps that could be taken in the near term include:

• **Reducing medical errors and improving care coordination**. A major investment in health information technology, with shared public-private funding, is needed to accelerate the adoption of life-saving and efficiency-enhancing technology.

• **Public reporting of cost and quality data**. Costs incurred over an episode of care and quality vary enormously from hospital to hospital, physician to physician, and area to area. If we are serious about doing better, we need to know where we stand. Much more extensive efforts are required to achieve comprehensive public reporting of cost and quality data on physicians, hospitals, nursing homes, other health care providers, and health plans.

• **Paying for provider performance on quality and efficiency**. Medicare needs to become a leader in "pay for performance" payment methods. While the demonstrations under way are important, Medicare needs to move much more quickly to reward those providers who are both high-quality and low-cost over the course of a patient's treatment. Doing so would spur the development of information about best practices and provide guidance to private insurers looking for effective ways to promote high-performance care.

• **Development and promulgation of clinical guidelines and quality standards**. Public programs and private insurers would benefit from a Federal agency charged with establishing the scientific basis for effectiveness not just of new drugs but of specialty consultations, procedures, and tests. A national institute on clinical excellence and effectiveness has shown results in other countries and is a model we should adopt. We also need a substantial investment in research and demonstrations, far in excess of resources currently devoted to the Agency for Healthcare Research and Quality.

• **Better management of high-cost patients**. Public programs and private insurance need to be willing to pay for services of non-physician personnel that are needed for high-cost care management, such as advanced practice nurses, pharmacist medication monitoring, and home "telemonitoring" of conditions such as asthma and congestive heart failure.

• **Improved administrative efficiency**. The U.S. has an extraordinarily complex and fragmented system of health insurance. Ultimately, solutions that would simplify eligibility for insurance and improve the stability of health insurance coverage are needed to cut the administrative costs in our system. Testing statewide electronic insurance clearinghouses to pool insurance eligibility and, potentially, claims payment in a single place should be a priority.

• **Automatic and affordable health insurance for all**. Employers, Federal and State governments, and individuals must all share responsibility for achieving automatic and affordable health insurance for all. The most realistic strategy is a combination of group insurance options including: employer coverage for those who are working; a new Congressional Health Plan, modeled on the Federal Employees Health Benefits Program, for small businesses and individuals; an expansion of the State Children's Health Insurance Program to low-income families and individuals with incomes below 150 percent of poverty; and an option for uninsured older adults and disabled adults to obtain early coverage under Medicare (e.g., by eliminating the 2-year waiting period for the disabled, covering spouses of Medicare beneficiaries, and permitting older adults to "buy in" to Medicare). Premium assistance based on income is required to make premiums affordable for all enrollees.

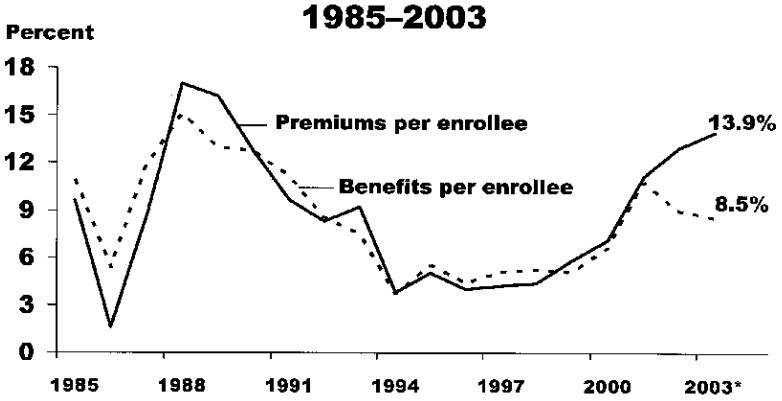
Together, these steps would take us a long way toward ensuring that this country has a high-performing health system worthy of the 21st century.

Making Health Care Affordable For All Americans

Karen Davis
President, The Commonwealth Fund
January 28, 2004

Hearing on What's Driving Health Care Costs and the Uninsured
Senate Committee on Health, Education, Labor, and Pensions

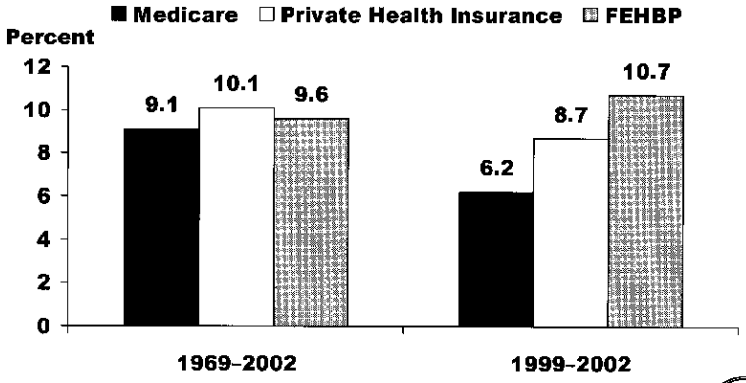
Growth in Per Enrollee Private Health Insurance Premiums and Benefits, 1985–2003



* Data for growth between Spring 2002 and Spring 2003

Source: S. Heffler et al., "Health Spending Projections for 2002–2012," *Health Affairs* (Web Exclusive February 7, 2003) for 1985–2001 premiums and benefits (historical data) and 2002-2003 benefits (projected data); *Employer Health Benefits 2003 Annual Survey*, The Kaiser Family Foundation and Health Research and Educational Trust, September 2003 for 2002–2003 premiums (historical data).

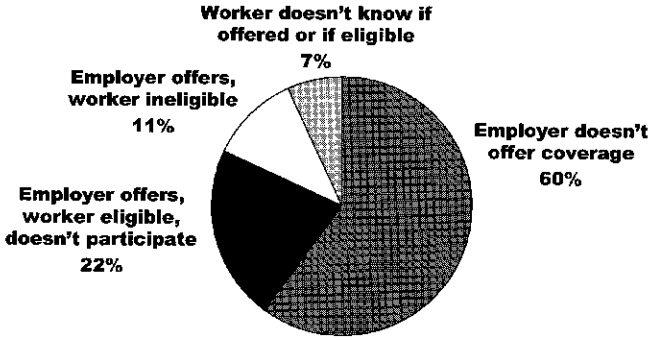
Percent Annual Per Enrollee Growth in Medicare Spending and Private Health Insurance and FEHBP Premiums for Common Benefits



Source: K. Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs* (January/February 2004): 147–159.

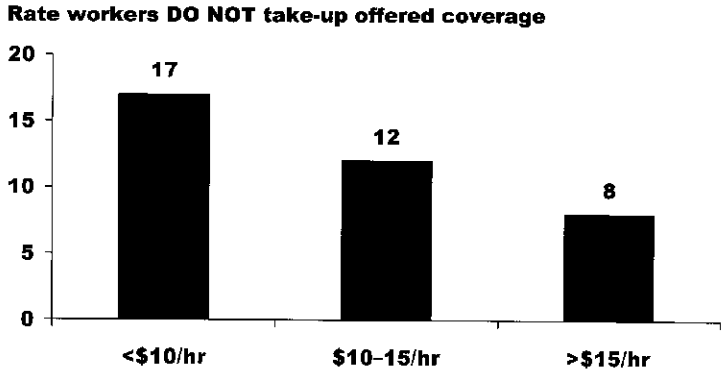
Uninsured Workers Lack Insurance Coverage for Multiple Reasons, Including Not Accepting Offered Coverage

Total 15.4 Million Uninsured Workers Ages 19–64



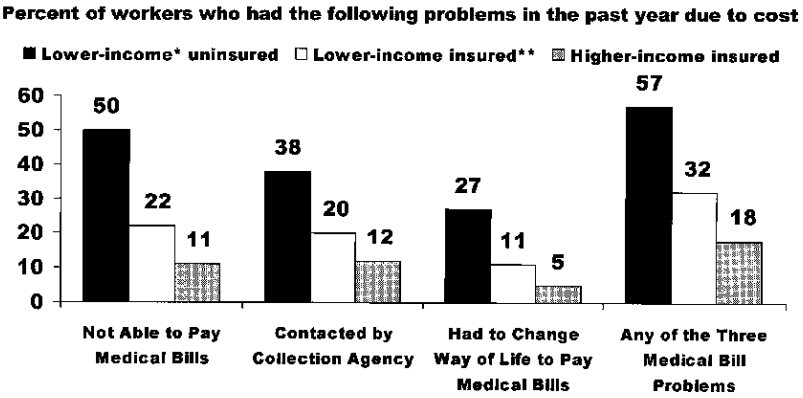
Source: S.R. Collins et al., *On the Edge: Low-Wage Workers and Their Health Insurance Coverage*, Commonwealth Fund, April 2003.

Low-Wage Workers At Risk for Not Accepting Employer Coverage When Offered



Source: Analysis of 2000 Medical Expenditure Panel Survey by Sherry Glied and Douglas Gould of Columbia University.

High Premiums and Out-of-Pocket Costs Create Financial Burdens On Patients

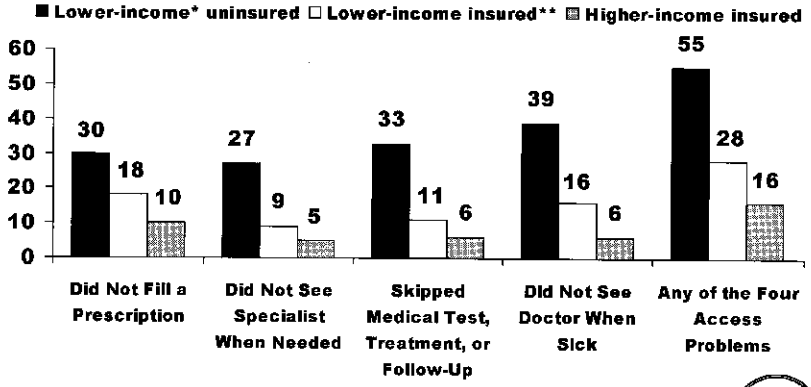


* "Lower-income" is defined as having annual family income of less than $35,000.
** "Insured" is insured all year.

Source: The Commonwealth Fund 2001 Health Insurance Survey.

High Premiums and Out-of-Pocket Costs Lead to Patients Not Getting Needed Care

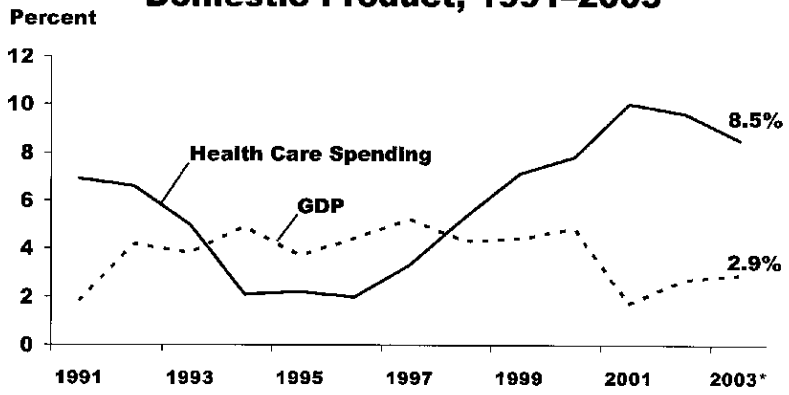
Percent of workers who had the following problems in the past year due to cost



* "Lower-income" is defined as having annual family income of less than $35,000.
** "Insured" is insured all year.

Source: The Commonwealth Fund 2001 Health Insurance Survey.

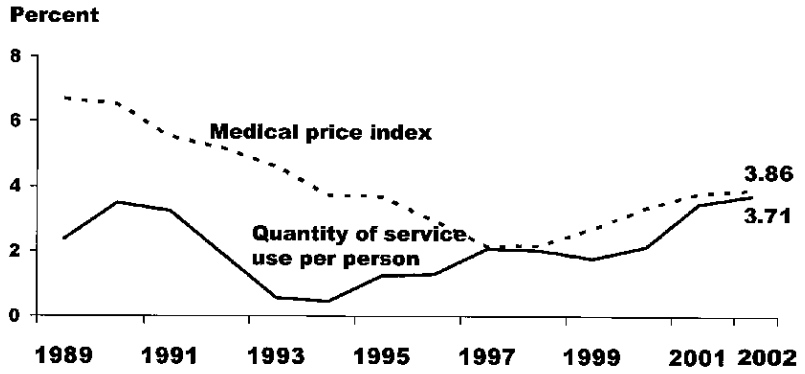
Annual Change Per Capita In Health Care Spending and Per Capita Gross Domestic Product, 1991–2003



*Data for January through June 2003, compared with corresponding months in 2002.

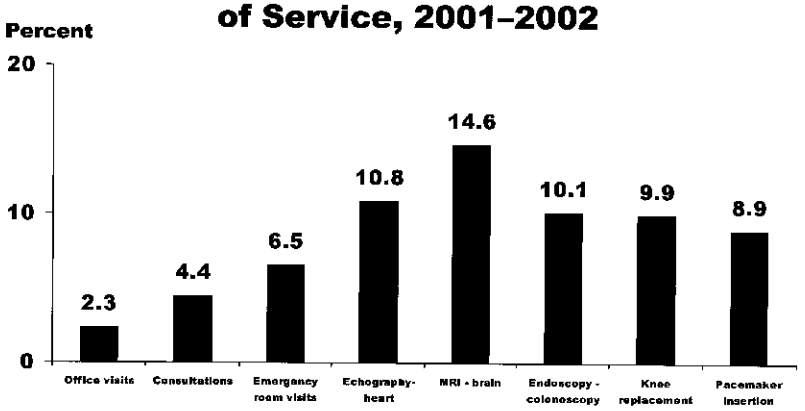
Source: B. Strunk and P. Ginsburg, "Tracking Health Care Costs: Trends Stabilize But Remain High in 2002," *Health Affairs* (Web Exclusive June 11, 2003); B. Strunk and P. Ginsburg, *Tracking Health Care Costs: Trends Slow in First Half of 2003*, Center for Studying Health System Change, December 2003.

Annual Percentage Change in Medical Price Index and Quantity of Service Use Per Capita, 1989–2002



Source: K. Levit et al., "Trends in U.S. Health Care Spending, 2001," *Health Affairs* (January/February 2003): 154–164 for 1989–2001; Center for Medicare and Medicaid Services, Office of the Actuary for 2002.

Percentage Growth in Medicare Per Capita Use of Physician Services, by Selected Type of Service, 2001–2002



Source: Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy*. March 2003.

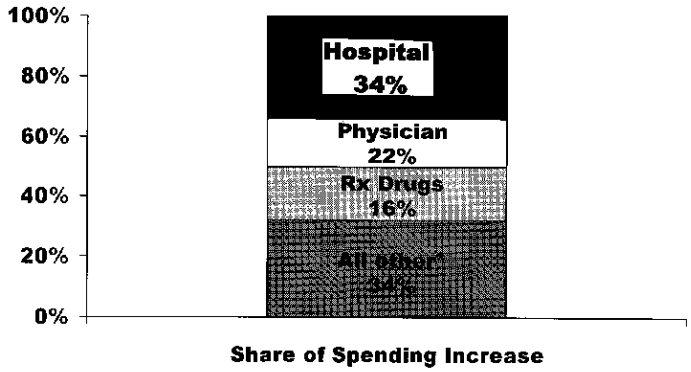
Physicians' Net Income from Practice of Medicine, 1999, and Percent Change, 1995–1999

	Average reported net income	Percent change in income, adjusted for inflation		
	1999	1995-97	1997-99	1995-99
All patient care physicians	**$187,000**	**–3.8%***	**–1.2%***	**–5.0%***
Primary care physicians	**$138,000**	**–5.4***	**–1.1**	**–6.4**
Specialists	**$219,000**	**–3.5*#**	**–0.6**	**–4.0*#**

*Rate of change is statistically significant at p<.05.
#Rate of change for specialists in significantly different from change for primary care physicians at p<.05.

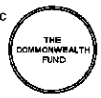
Source: M.C. Reed and P.B. Ginsburg, *Behind the Times: Physician Income, 1995–99.* Center for Studying Health System Change, Data Bulletin No. 24, March 2003.

Hospital Costs Are a Major New Source of Increased Outlays, 2002

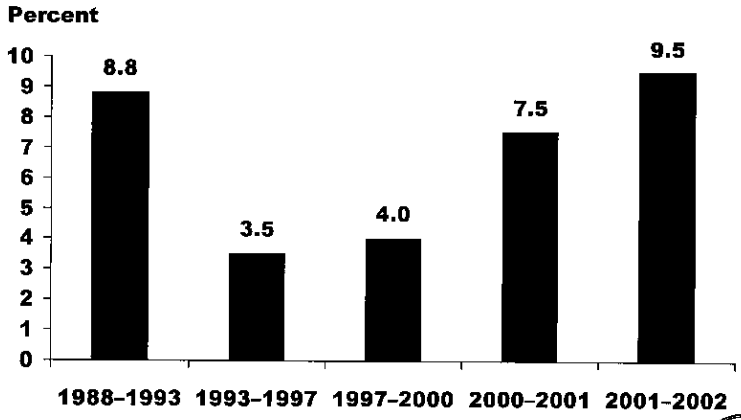


* Includes spending for dental, other professional, and other personal health care services; home health and nursing home care; durable and other nondurable medical products; administration and insurance net cost; government public health; medical research; and medical construction.

Source: K. Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs* (January/February 2004): 147–159.

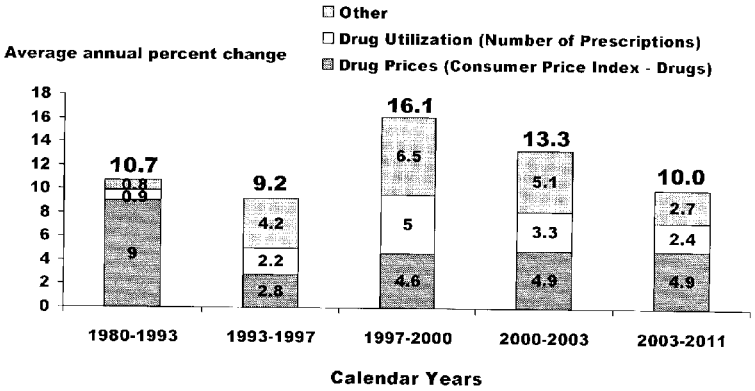


Average Annual Growth in Hospital Costs, 1988–2002



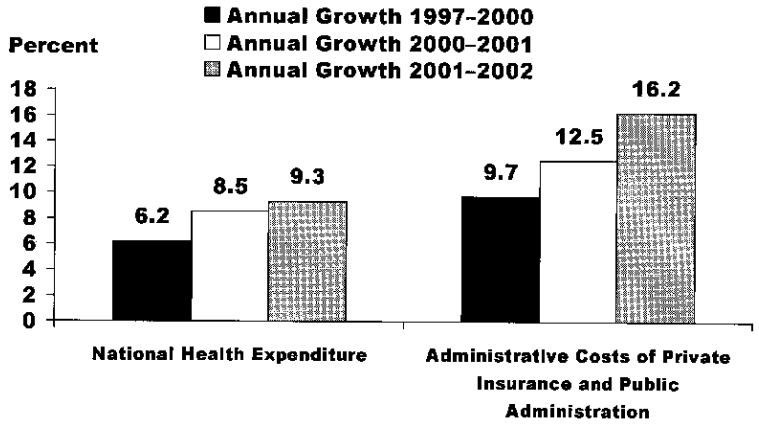
Source: K. Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs* (January/February 2004): 147–159.

Factors Accounting for Growth in Prescription Drug Spending per Capita, 1980–2011



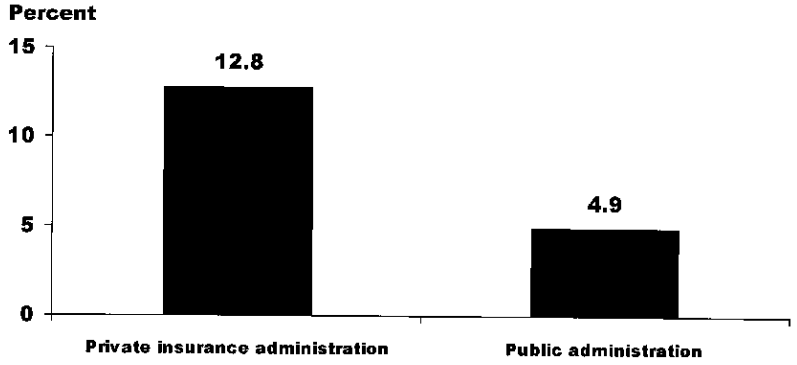
Note: Data for 2000–2011 are projections.
"Other" includes quality and intensity of services, and age-gender effects.
Source: Centers for Medicare and Medicaid Services, The CMS Chart Series, 2003.

Administrative Costs Are Surging



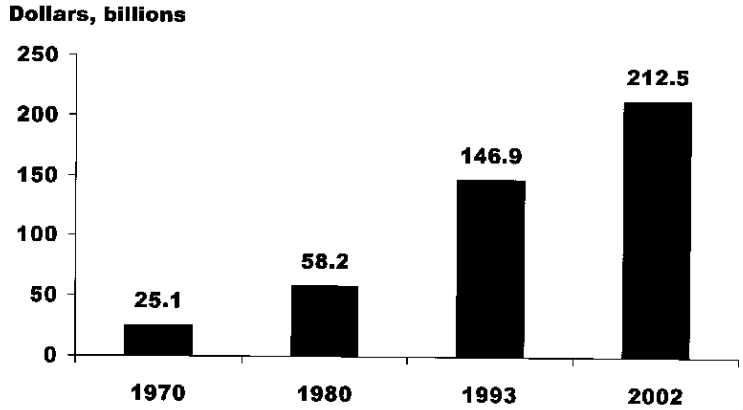
Source: K. Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs* (January/February 2004): 147–159.

Private Insurance Administrative Costs as a Percent of Private Insurance Outlays and Public Program Administration as a Percent of Public Outlays, 2002



Source: K. Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs* (January/February 2004): 147–159.

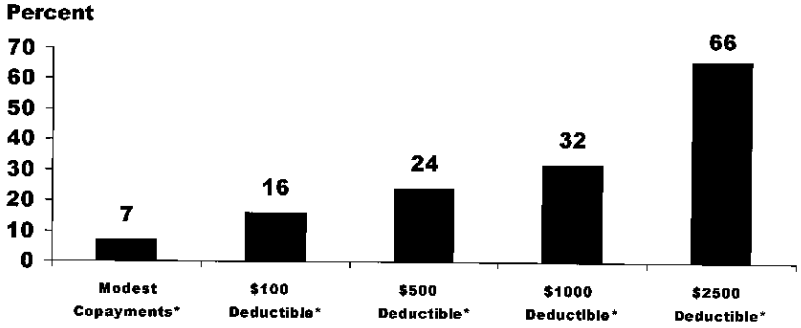
Out-of-Pocket Costs to Patients Are a Major Expense, 1970–2002



Source: K. Levit et al., "Health Spending Rebound Continues in 2002," *Health Affairs* (January/February 2004): 147–159.

17

Percent of Hospitalized Patients with Out-of-Pocket Costs Exceeding 10% of Income By Cost-Sharing Amount

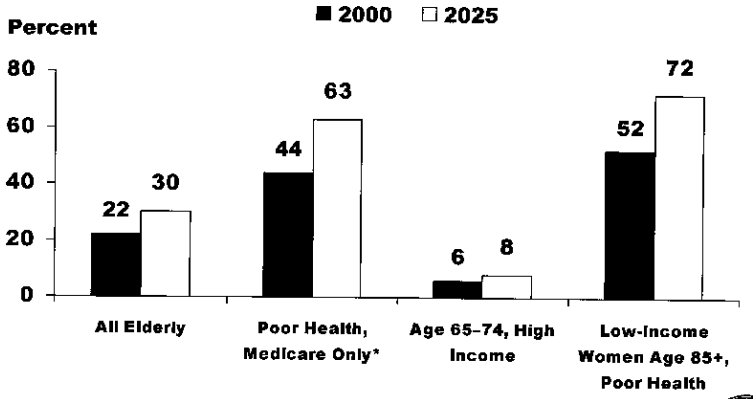


* Notes:
Modest Co-payments Option has $20 co-pay for physician visits, $150 co-pay for ED visits, and $250 co-pay per day inpatient hospitalization; $100 Deductible Option has 10% in-network coinsurance and 20% out-of-network coinsurance; $500 Deductible Option has 20% in-network coinsurance and 30% out-of-network coinsurance; $1000 Deductible Option has 20% in-network coinsurance and 30% out-of-network coinsurance; $2500 Deductible Option also 30% in-network coinsurance, 50% out-of-network coinsurance; Maximum out-of-pocket limits are set at $1,500 more than deductible for all options.

Source: S. Trude, *Patient Cost Sharing: How Much is Too Much?* Center for Studying Health System Change, December 2003.

Elderly Cost-Sharing is High

Projected Out-of-Pocket Health Care Spending as a Share of Income, 2000 and 2025

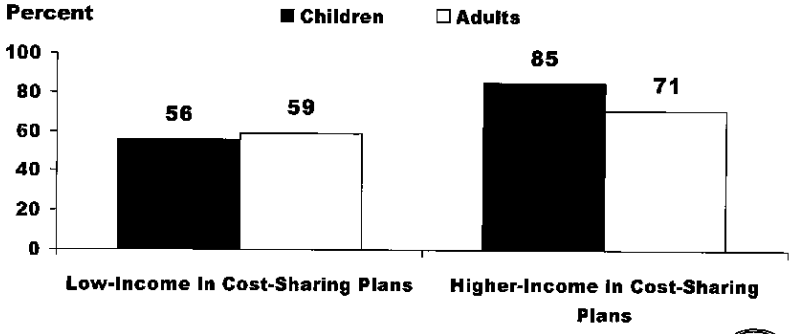


* No insurance beyond U.S. Medicare basic benefits.

Source: S. Maxwell et al., *Growth in Medicare and Out-of-Pocket Spending: Impact on Vulnerable Beneficiaries*, The Commonwealth Fund, December 2000.

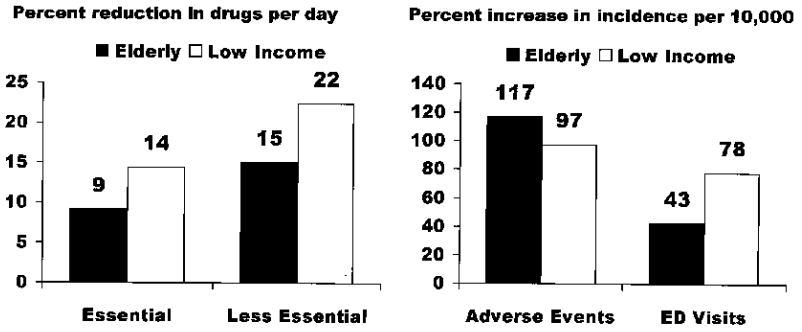
Cost-Sharing Reduces Likelihood of Receiving Effective Medical Care

Probability of receiving highly effective care for acute conditions that is appropriate and necessary compared to those with no cost-sharing



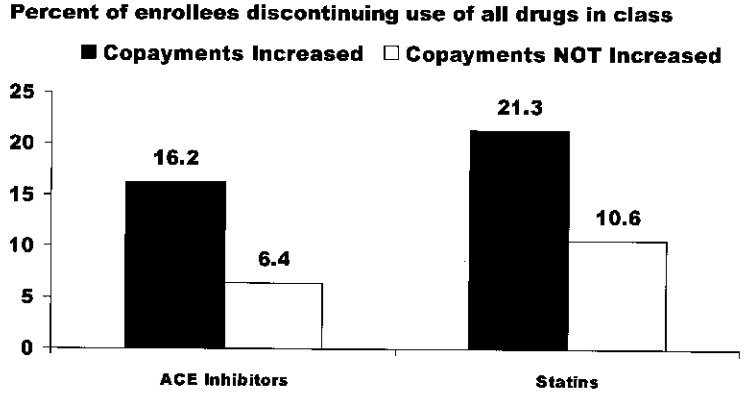
Source: K.N. Lohr et al., Use of Medical Care in the RAND HIE. *Medical Care* 24, supplement 9 (1986): S1-87.

Cost Sharing Reduces Use of Both Essential and Less Essential Drugs and Increases Risk of Adverse Events



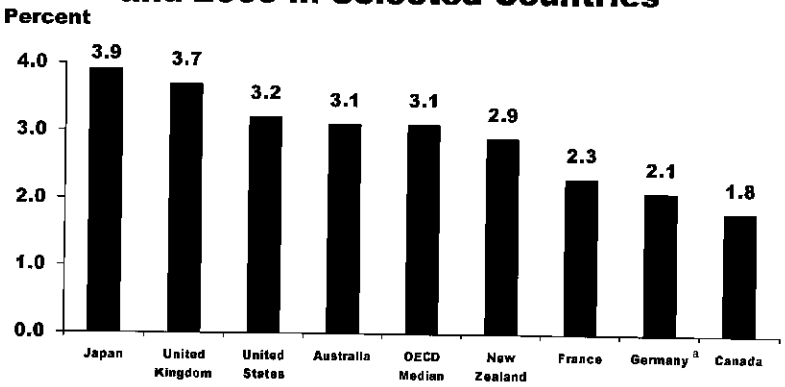
Source: R. Tamblyn et al., "Adverse Events Associated With Prescription Drug Cost-Sharing Among Poor and Elderly Person," *Journal of the American Medical Association* (January 24, 2001): 421–429, 2001.

Tiered Prescription Drug Cost Sharing Leads to People Not Filling Prescriptions



Source: H.A. Huskamp et al., The Effect of Incentive-Based Formularies on Prescription-Drug Utilization and Spending, *The New England Journal of Medicine* (December 4, 2003): 2224-32.

Average Annual Growth Rate of Real Health Care Spending per Capita Between 1990 and 2000 in Selected Countries



[a] 1992–2000
Source: G. Anderson, et al., *Multinational Comparisons of Health Systems Data, 2002.* The Commonwealth Fund, October 2002.

Medical Errors Pose Significant Threat to Patients and Costs to Society

Total 18 types of medical injuries account for 2.4 million extra hospital days, $9.3 billion excess charges, and 32,591 attributable deaths in the U.S. annually

Medical Error (examples)	Excess Length of Stay, Days per case	Excess Charge, $	Excess Mortality, %
Complications of anesthesia	0.17 days	$1,598	0.24%
Foreign body left during procedure	2.08	13,315	2.14
Obstetric trauma, vaginal birth with instrumentation	.07	220	0
Postoperative respiratory failure	9.08	53,502	21.84

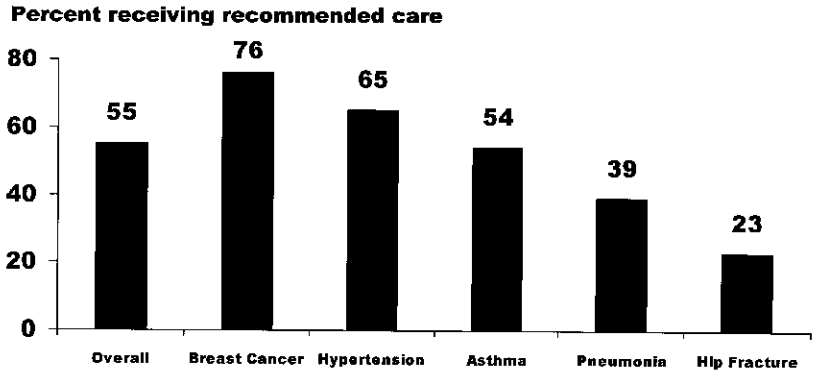
Source: C. Zhan and M.R. Miller, "Excess Length of Stay, Charges, and Mortality Attributable to Medical Injuries During Hospitalization," *Journal of the American Medical Association* (October 8, 2003): 1868–1874.

Care Coordination in Five Nations

In past two years, Percent of sicker adults:	AUS	CAN	NZ	UK	US
Sent for duplicate tests by different health professionals	13%	20%	17%	13%	22%
Medical records/test results did not reach doctor's office in time for appointment	14	19	16	23	25
Medical errors caused serious problems	13	15	14	9	18

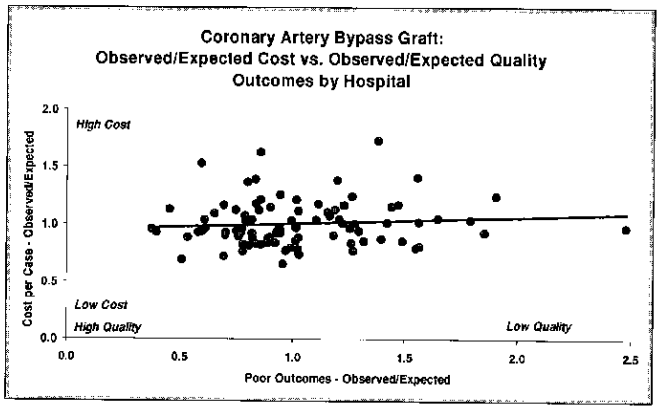
Source: 2002 Commonwealth Fund International Health Policy Survey of Sicker Adults.

Half of U.S. Adults Receive Recommended Care and Quality Varies Significantly By Medical Condition



Source: E.A. McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," *The New England Journal of Medicine* (June 26, 2003): 2635–2645.

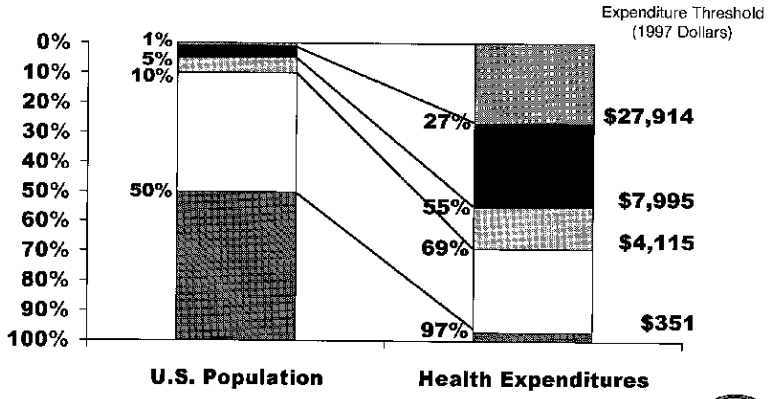
Cost and Quality Vary Widely Across Hospitals



Source: S. Grossbart, Ph.D., Director, Healthcare Informatics, Premier, Inc., "The Business Case for Safety and Quality: What Can Our Databases Tell Us," 5th Annual NPSF Patient Safety Congress, March 15, 2003.

Health Care Costs Concentrated in Sick Few[27]

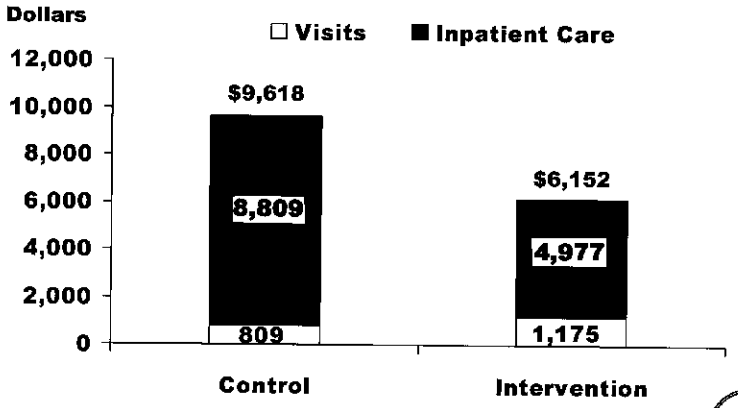
Distribution of Health Expenditures for the U.S. Population, By Magnitude of Expenditure, 1997



Source: A.C. Monheit, "Persistence in Health Expenditures in the Short Run: Prevalence and Consequences," *Medical Care* 41, supplement 7 (2003): III53–III64.

28

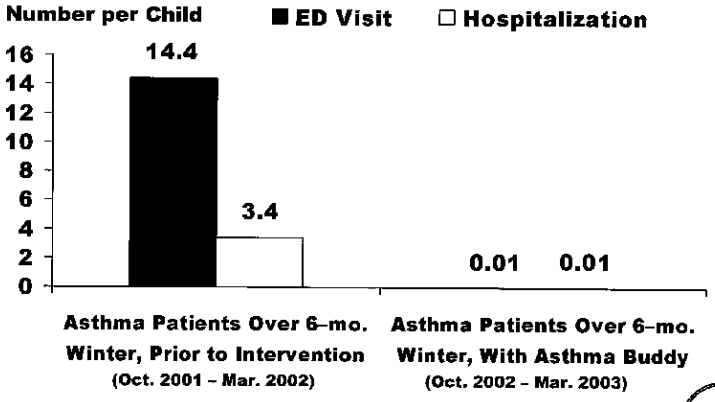
Effect of Advanced Practice Nurse Care on Congestive Heart Failure Patients' Average Per Capita Expenditures



Source: M.D. Naylor, "Making the Business Case for the APN Care Model," report to The Commonwealth Fund, October 2003; estimated charges by Mark Pauly.

29

Coney Island Hospital's Asthma Buddy Pilot: Effect on Asthma Hospitalization (69 Children Ages 8–16 years, 2001–2003)



Source: Coney Island Hospital, Asthma Buddy Pilot data, 2003.

30

Achieving a High Performance Health System: What it Requires

- **Enhanced federal role to promote quality and efficiency:**
  - **Public data on provider quality and efficiency**
  - **Federal agency to establish clinical guidelines, quality standards (e.g. NICE, NICS)**
  - **Financial rewards to providers for high quality, efficient care**
  - **Standards and incentives to adopt IT**
  - **Research and demonstrations on cost-effective care, new incentive payment methods**

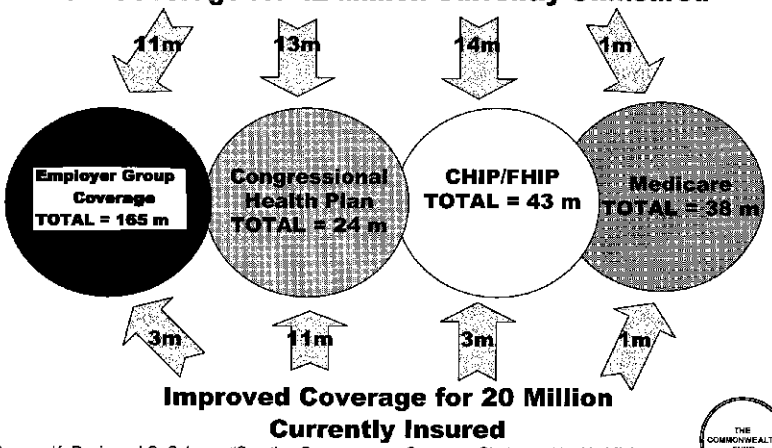
- **Public-private partnership:**
  - **Engage entire health care system in continuous quality improvement**
  - **Develop and disseminate quality improvement tools**
  - **Identify and spread best practices**
  - **Encourage learning collaboratives to improve care**
  - **Promote modern information technology**
  - **Reward quality and efficiency**

THE COMMONWEALTH FUND

31

Creating Consensus on Automatic and Affordable Health Insurance For All

New Coverage for 42 Million Currently Uninsured*



Improved Coverage for 20 Million Currently Insured

Source: K. Davis and C. Schoen, "Creating Consensus on Coverage Choices," *Health Affairs* (Web Exclusive April 23, 2003).

THE COMMONWEALTH FUND

PREPARED STATEMENT OF CHRISTOPHER J. CONOVER, PH.D.

Mr. Chairman and Members of the Committee: How big a role does health services regulation play in explaining the extraordinarily high level of health costs in the U.S.? And how many uninsured might be covered were we to somehow find a way to reduce this regulatory burden? My brief remarks will provide some tentative

answers to both questions based on the preliminary results of more than 2 years of research conducted in part under contract to the Department of Health and Human Services.

There are two ways to answer the first question. First, we looked at the costs of regulation in other industries such as airlines, railroads, telecommunications and other sectors that have long been studied and calculate the percent of gross economic activity in those industries that is attributable to regulatory costs. By applying these percentages to the health sector, we arrive at very rough back-of-the-envelope estimates of upper and lower bounds on the plausible magnitude of the burden. As shown in Fig. 1, this so-called "top down" approach suggests that in 2002, health regulation could have imposed an annual cost of at least $28 billion to as much as $657 billion. (See Figure 1).[1]

A 30-fold difference between the minimum and maximum cost estimate is no more gratifying to me as a researcher than it is to you as policymakers. Moreover, it is easily possible that the regulatory burden in healthcare is even higher than a simple extrapolation from other industries might suggest. According to University of Rochester health economist Charles Phelps, "the U.S. healthcare system, while among the most "market oriented" in the industrialized world, remains the most intensively regulated sector of the U.S. economy."[2]

So we also answered this question using a much more fine-grained "bottoms up" approach. We examined the literature for nearly 50 different kinds of Federal and State health services regulations, including regulation of health facilities, health professionals, health insurance, pharmaceuticals and medical devices and the medical tort system. These various regulations covered the gamut from mandated health benefits to State certificate of need requirements for hospitals and nursing homes.[3] We systematically tallied both the benefits and costs associated with such regulations[4] and found that the expected costs of regulation in health care amounted to nearly $335 billion in 2002. As shown at the bottom of Fig. 2, our estimate of benefits was about $207 billion, leaving a net cost of $128 billion. Three areas account for the lion's share of this net burden: the medical tort system, including litigation costs, court expenses and defensive medicine, totals $81 billion, FDA regulation adds another $42 billion, and health facilities regulation adds $29 billion. Thus, the States and Federal Government both have roles to play in finding ways to trim regulatory excess.

How does this relate to the uninsured? Our "bottoms up" look allowed us to determine that the net cost of regulation borne by the health industry itself is 6.4 percent, meaning that health expenditures (and health insurance premiums) are at least that much higher than they would be absent regulation. Based on consensus estimates about the impact of higher prices on how many would likely drop health insurance, this increased cost implies a 2.2 percent reduction in the demand for coverage. This translates into nearly 5 million uninsured whose plight might be attributed to excess regulatory costs.[5]

---

[1] See Figure 1 Supporting Documentation for details of these calculations.

[2] Charles E. Phelps. *Health Economics*, 2nd edition. Addison-Wesley Publishing Co. 1997: 539.

[3] Tables 1, 2 and 3 summarize all the topics that were included in our literature syntheses for health facilities, health professionals and health insurance respectively. An advisory panel of 20 national experts has provided guidance on the scope and content of this literature synthesis. We are confident that no major domain of health services regulation has been excluded. However, it might also be noted that our cost estimates do not include the costs imposed on health providers from continual changes in public payment policies.

[4] In many cases, the national dollar impact of a particular form of regulation never has been estimated per se, e.g., State certificate of need regulation of hospitals and nursing homes. In these cases, we synthesized the literature on the percent change in health costs associated with that form of regulated and then calculated the aggregate national impact by applying these estimated effects to aggregate health expenditure estimates for the States that still maintain such regulations. In some cases, our estimates also included mortality gains and losses reported in the literature. In these cases, we monetized such losses using conventional assumptions about the willingness-to-pay value of a human life. We used a standard value of a statistical life that amounted to $4.4 million for our average estimates, with $1.6 million and $6.6 million as lower and upper bounds. See Mrozek, James R. and Laura O. Taylor. "What Determines the Value of Life? A Meta-Analysis." *Journal of Policy Analysis and Management* 21, No. 2 (Spring 2002): 253-270 for a detailed justification of these values.

[5] Most recent estimates of the price elasticity of demand for health insurance lie in the −.4 to −.6 range (Sherry Glied, Dahlia K. Remler and Joshua Zivin, "Inside the Sausage Factory: Improving Estimates of the Effects of Health Insurance Expansion Proposals." Milbank Quarterly 80, No. 4 (2002): 611). Assuming an average overhead cost no higher than 15 percent, a 6.4 percent increase in health spending attributable to health industry compliance costs would be associated with a 5.4 percent increase in health insurance premiums, so applying the lower bound elasticity estimate yields a 2.2 percent reduction in demand for coverage. Leaving aside the non-elderly now covered by Medicare, Medicaid and military benefits, there are more than

But of course, there's a different way to look at this burden as well. In light of the $35 billion in subsidized care already being provided to uninsured patients,[6] researchers have recently estimated that it would cost only $34 to $69 billion in added health spending to cover the all of the Nation's uninsured.[7] In light of these figures, the potential opportunity costs of this regulatory burden become very clear: the average estimates from both our "top down" and "bottoms up" look at this problem suggests we could cover this cost several times over. Admittedly, our estimates are still preliminary and we now are engaged in a process of careful review of them. But it seems unlikely that the adjustments yet to come would alter this central conclusion: the net burden of health services regulation likely exceeds the annual cost of covering all 44 million uninsured. So a legitimate policy question is whether the benefits of regulation outweigh the benefits of coverage for all Americans. For example, in the context of the IOM finding that 18,000 uninsured die every year due to lack of coverage, is maintaining our current regime of health regulation worth letting that continue?

This is not a question for me to answer, but I hope you will consider it seriously as you wrestle with one of the most challenging health policy issues now on the national agenda. Thank you for your time.

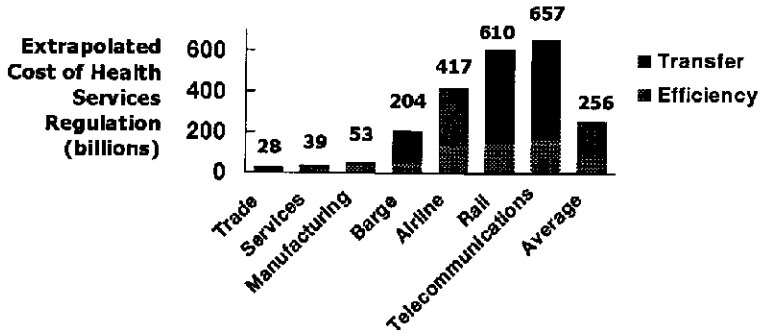
---

215 million adults and children in the private market for private health insurance: a 2.2 percent reduction in demand translates into 4.8 million uninsured. Using upper bound estimates of the net impact of health regulation (9.8 percent) and price elasticity (−.6) would imply that 10.7 million could be uninsured due to health regulation.

[6] Jack Hadley and John Holahan. "How Much Medical Care Do the Uninsured Use and Who Pays for It?" *Health Affairs Web Exclusives*, January–June 2003. February 12, 2003: W3-66.

[7] Jack Hadley and John Holahan. "Covering the Uninsured: How Much Would it Cost?" *Health Affairs Web Exclusives*, January–June 2003. June 4, 2003: W3-250-265.

Fig. 1. "Top Down" Estimate of Health Regulation Costs, 2002 (billions)



Source: Christopher J. Conover, Center for Health Policy, Law and Management, Duke University

Fig. 2. "Bottoms Up" Estimate of Health Regulation Costs, 2002 (billions)

Type of Regulation	Benefits	Costs	Net
Facilities	18.3	47.7	29.4
Professionals	22.4	29.5	7.1
Insurance	131.6	100.1	(31.5)
Pharmacy/Devices	1.8	43.7	41.9
Tort System*	32.5	113.7	81.2
TOTAL	206.6	334.8	128.2

*Includes costs of medical professional liability insurance, courts and defensive medicine. Claimants' costs not compensated through awards are excluded.

Source: Christopher J. Conover, Center for Health Policy, Law and Management, Duke University

Fig. 1 Supporting Documentation. "Top-Down" Estimates of Cost of Health Services Regulation (billions of 2002 dollars)

Industry	Source	Year of Estimate	Type of Cost		If Applied to Health		
			Efficiency	Transfer	Efficiency	Transfer	Combined
			Percent		Billions		
Airline	Hahn and Hird 1991	1988	8.9%	18.0%	137.7	279.1	416.8
Barge	Hahn and Hird 1991	1988	3.3%	9.9%	51.0	153.1	204.1
Manufacturing	Crain and Hopkins 2001	2000	2.4%	1.0%	37.1	15.5	52.6
Rail	Hahn and Hird 1991	1988	10.0%	29.4%	154.1	455.6	609.7
Services	Crain and Hopkins 2001	2000	1.0%	1.5%	15.5	23.2	38.7
Telecommunications	Hahn and Hird 1991	1988	10.6%	31.9%	164.3	492.9	657.3
Trade	Crain and Hopkins 2001	2000	0.8%	1.0%	12.4	15.5	27.9
U.S. Total	Crain and Hopkins 2001	2000	1.5%	1.0%	23.2	15.5	38.7
Summary							
Mean			4.8%	11.7%	74.4	181.3	255.7
Minimum			0.8%	1.0%	12.4	15.5	27.9
Maximum			10.6%	31.9%	164.3	492.9	657.3

Note: For estimates obtained from Hahn and Hird [S1], all percentages are calculated based on estimated regulatory costs reported by authors divided by GDP for each respective industry in the year shown. The industry categories used for the GDP estimates were a) transportation by air; b) water transportation; c) railroad transportation; and d) communications (which includes telephone/telegraph and radio/TV). These percentages were applied to estimated National Health Expenditures for 2002. Crain and Hopkins [S3] report regulatory costs as a percent of receipts, so these percentages were applied directly to NHE.

Parameters	Year	Efficiency	Transfer	GDP
Airline [S1]	1988	3.8	7.7	42.7
Barge [S1]	1988	0.3	0.9	9.1
Rail [S1]	1988	2.3	6.8	23.1
Telecommunications [S1]	1988	14.1	42.3	132.8
National health expenditures, US, 2002 [S:	1,547.6			

Sources

[S1] Hahn, Robert W., and John A. Hird. 1990. The costs and benefits of regulation: review and synthesis. *Yale Journal on Regulation* 8: 233.

[S2] Heffler, Stephen, Sheila Smith, Sean Keehan, M. Kent Clemesn, Greg Won, and Mark Zezza. 2003. Health Spending Projections for 2002-20012. *Health Affairs Web Exclusive* W 3: 54-65.

[S3] Crain, Mark W., and Hopkins, Thomas D. 2001. *The impact of regulatory costs on small firms*. Office of Advocacy, Small Business Administration.

Table 1
Health Facilities Regulation

Regulation	Locus
Access	
EMTALA	F
Hospital uncompensated care pools	S
Hospital community service requirements	
Hill-Burton	F
State community service requirements	S
State indigent care mandates	S
Hospital conversion regulations	S
Limited English Proficiency requirements	F
Costs	
Fraud and abuse	
False Claims Act of 1863	F
MedicareMedicaid fraud and abuse statute	F
Civil Monetary Penalties Law (CMPL)	F
Self-referral prohibitions (Stark I and II)	F
HIPAA fraud and abuse provisions (1996)	F
BBA fraud and abuse provisions (1997)	F
State fraud and abuse requirements	S
Medical records (includes privacy)	
HIPAA Privacy Rule	S
State privacy regulations	F
Organ transplant regulation	F
Hospital provision of transplant-related data	F
Organ transplant sales ban	F
Certificate of need	S
Hospital rate-setting	S
Pharmaceutical price regulation	
Medicaid Average Wholesale Price	F
State pharmaceutical price regulation	S
Other cost-related facilities regulations	S
Hospital discharge data systems	S
Patient Self-Determination Act of 1990	F
Quality	
Hospital accreditation and licensure	
Medicare conditions of participation	F
State accreditation and licensure	S
Nursing home accreditation and licensure	F
Medicare conditions of participation	F
Nursing Home Reform Act (OBRA '97)	F
State accreditation and licensure	
Other facilities accreditation and licensure	F
Medicare conditions of participation	F
Ambulatory Surgical Centers	F
Diagnostic Imaging Centers	F
Home Health Agencies	F
Renal Dialysis Centers	F
Pharmacies	F
Ambulances	F
State accreditation and licensure	S
Peer Review	
Quality Improvement Organizations (QIOs)	F
Health Care Quality Improvement Act (1986)	F
Clinical Laboratory Improvement Act of 1967	F
Other quality-related facilities regulations	
Regulation of blood banks (FDA)	F
Blood-borne pathogen requirements (OSHA)	F
Health outcomes reporting systems	S

Table 2
Health Professionals Regulation

Regulation	Locus
Access	
Medicare assignment rules	F
Costs	
Fraud and abuse	
False Claims Act	F
MedicareMedicaid fraud and abuse statute	F
Self-referral prohibitions (Stark I and II)	F
HIPAA fraud and abuse provisions (1996)	F
BBA fraud and abuse provisions (1997)	F
State fraud and abuse	
Medical records (includes privacy)	
HIPAA Privacy Rule	F
State privacy regulations	S
Medicare GME payments	F
Quality	
Medicare conditions of participation	F
National Practitioner Databank	F
Professional accreditation/licensure	S
Commercial limits on practice of medicine	
Corporate practice of medicine	S
Advertising restrictions	
FTC	F
State advertising restrictions	S
Resident duty hours limitations	S

Table 3
Health Insurance Regulation

Regulation	Locus
Access	
HMO Act of 1973	F
Anti-discrimination restrictions	F
Rehabilitation Act of 1973	F
Pregnancy Discrimination Act of 1978	F
Americans with Disabilities Act	F
Child Abuse Prevention and Treatment Act	F
Mandated health coverage	
Employer mandates	S
Continuation of coverage	
State requirements	S
COBRA (1985)	F
Mandated health benefits	
Mandated standards of care	S
Other mandated health benefits	S
Mental Health Parity Act (1996)	F
Newborns' and Mothers' Protection Health Act	F
Women's Health and Cancer Rights Act (1998)	F
Mandated providers	S
Person mandates	S
Insurance Market Reforms	
Small-group insurance reforms	S
Individual market insurance reforms	S
Community rating	S
Health alliances (voluntary & mandatory)	S
HIPAA (1996)	F
Health plan conversion regulations	S
High risk pools	S
Costs	
ERISA (1974)	F
HIPAA (1996) administrative simplification	F
Privacy regulation	
State requirements	S
HIPAA (1996)	F
Medicare as secondary payer (1980)	F
Medigap minimum standards (1990)	F
General Insurance/HMO Regulation	
General insurance regulation (solvency/rates)	S
General HMO regulation (solvency/rates)	S
Premium taxes	S
Quality	
Medicare + Choice conditions of participation	F
Managed care regulation	
Professional rights	
All products statutes	S
Anti-gag rules	S
Due process protections	S
Prompt payments statutes	S
Patient protections	
Any-willing-provider statutes	S
Continuity-of-care requirements	S
External review statutes	S
Drug formularies	S
Limits on financial incentives	S
Patient bill of rights	S
Bipartisan Patient Protection Act (2001)	F

CENTER FOR HEALTH POLICY, LAW AND MANAGEMENT,
DURHAM, NC 27708–0253,
March 8, 2004.

Hon. JUDD GREGG,
Chairman,
Committee on Health, Education, Labor and Pensions,
U.S. Senate,
Washington, DC 20510–6300.

DEAR SENATOR GREGG: I am writing in response to your letter of February 10 regarding my testimony on January 28.

Question 1. We have a recurring debate in the Senate about the cost impact of various legislative proposals on health care premiums, and the degree to which such increases drive up the number of uninsured. Often times, we get estimates from 1 percent (mental health parity) to 5 percent (PBOR). Some assert that such increases are "modest"—adding up to the cost of only a few extra big Macs per person per month—and that such a cost can easily be borne by the system. However, you conclude that excess regulatory costs can account for nearly 5 million uninsured. In your research, did you develop an assumption for how many people become uninsured for each 1 percent increase in premiums?

Answer 1. We sought to explain this in footnote 5 of my testimony, but I would like to correct an inadvertent error regarding the number of non-elderly with private coverage. The corrected footnote should read as follows: Most recent estimates of the price elasticity of demand for health insurance lie in the −.4 to −.6 range (Sherry Glied, Dahlia K. Remler and Joshua Zivin, "Inside the Sausage Factory: Improving Estimates of the Effects of Health Insurance Expansion Proposals." *Milbank Quarterly* 80, No. 4 (2002): 611). Assuming an average overhead cost no higher than 15 percent, a 6.4 percent increase in health spending attributable to health industry compliance costs would be associated with a 5.4 percent increase in health insurance premiums, so applying the lower bound elasticity estimate yields a 2.2 percent reduction in demand for coverage. There are 185 million adults and children currently covered by private health insurance (Mills, Robert, and Shailesh Bhandari. 2003. *Health Insurance Coverage in the United States: 2002*, U.S. Census Bureau. U.S. Government Printing Office, Washington, DC). A 2.2 percent reduction in demand translates into 4.0 million uninsured. Using upper bound estimates of the net impact of health regulation (9.8 percent) and price elasticity (−.6) would imply that 9.2 million could be uninsured due to health regulation.

Our figures imply that for each 1 percent increase in private health insurance premiums, there would be a 0.4 percent reduction in demand for private coverage, which at current levels of private coverage implies 740,000 newly uninsured.

There are several differences between our estimates and those used by CBO that are worth noting:

• Our estimates affect medical expenditures (and hence health insurance premiums) across the board; in contrast, Federal mental health parity and PBOR proposals would apply only to group health plans (leaving out 16 million non-elderly with individual coverage) and in some cases exempt small employers (20 or fewer in some bills, 50 or fewer in others), exclusions that may leave out as much as 30 percent of private sector employer-based coverage; see Jennifer Bowen, Jeanne De Sa and Stuart Hagen memorandum "Estimate of S. 543, the Mental Health Equitable Treatment Act" July 12, 2002). Moreover, CBO always takes into account States that may have already enacted similar mandates or protections as their purpose is to calculate the net effect of a change in Federal law. For all these reasons, the base of persons having coverage from which demand reductions are calculated is generally smaller in the CBO estimates than in ours.

• CBO assumes that 40 percent of premium increases would be effectively absorbed by employers and passed back to employees in the form of lower compensation; they assume the remaining 60 percent would be offset by changes in profits, by purchasers switching to less expensive plans, by cutting back on benefits or dropping coverage (see CBO, *Congressional Budget Office Cost Estimate: S. 1052 Bipartisan Patients' Bill of Rights Act* (as passed by the Senate on June 29, 2001), July 20, 2001). For all these reasons, the net amount of each 1 percent premium increase that is actually left over to influence demand for coverage is much smaller than ours (i.e., we take into account the full 1 percent).

The CBO approach makes sense when analyzing mandates that provide some sort of benefit at an additional cost since employees (and their employers who are presumed to reflect their preferences) presumably are willing to pay *something* for an additional benefit even if it is not the full cost. However, in our case, we had already netted out any benefits from regulation, so the residual $128 billion in costs should

more appropriately be viewed as the equivalent of an excise tax. As Dr. Holtz-Eakin has testified recently: "Clearly, an increase in premiums having nothing to do with the quality of the insurance benefit (a tax on premiums, for example) would lead to a reduction in the number of people with health insurance since the price increase would lead some people to drop their coverage" (Statement of Douglas Holtz-Eakin, Director of Congressional Budget Office, The Uninsured and Rising Health Insurance Premiums before the Subcommittee on Health Committee on Ways and Means U.S. House of Representatives March 9, 2004). In short, any differences between CBO estimates and ours I believe are more apparent than real.

Question 2. You conclude that some regulation and litigation are beneficial. What proportion of regulation is beneficial and how does this compare to the proportion of litigation that is beneficial?

Answer 2. This is an excellent question, but difficult to answer, in part because litigation permeates much of regulation of health facilities, health professionals and health insurance. For example, enforcement of fraud and abuse statutes relies in part on qui tam provisions that allow private parties to bring claims on behalf of the government. What is labeled "Tort System" in Fig. 2 applies **only** to the medical tort system, i.e., professional liability insurance for medical malpractice, associated court costs and the companion costs of defensive medicine. It would be very difficult to extract the equivalent legal costs from the other areas of health regulation shown on that chart.

That said, one can observe that the ratio of benefits to costs for the medical tort system is 28.6 percent whereas for all other health regulations, this ratio is 78.7 percent, but that might be viewed as an unfair comparison since defensive medicine makes up roughly 60 percent of the overall costs of the medical tort system. So if defensive medicine costs were ignored, the ratios would be much more similar. However, in our view, the behavioral response to the medical tort system is just as important a consideration in accurately assessing the effects of regulation as the behavioral response of taxpayers to changes in tax rates is to accurately assessing the effects of tax policy. We believe it would be misleading to ignore these costs. That said, our figures should not be viewed as implying that only 28.6 percent of litigation is beneficial, as some might misconstrue this to mean that only 1 in 4 medical malpractice cases meets some benefit-cost threshold. It might be that 90 percent of such cases have benefits exceeding their costs, but that in the remaining cases that fail a simple benefit-cost test, the excess of costs over benefits is so enormous as to produce a gross ratio (across all cases) of only $28.60 in benefits for each $100 of costs borne by society. The way in which we have compiled our estimates does not allow us to answer the question of what fraction of malpractice cases have benefits exceeding their costs.

Question 3. In your research you clearly make some judgments about whether regulations are beneficial or not. How did you conduct this analysis? What criteria did you use in making these judgments?

This too is an excellent question that is challenging to answer. With the caveat that our findings are still preliminary, to date we have found that in the domain of health facilities regulation, of the 16 types of regulation we studied, only 2 produced benefits that exceeded costs. Similarly, benefits exceeded costs for only 3 of 8 health professional regulations we studied and 7 of 19 areas of health insurance regulation. This is not equivalent to saying that we believe 31 areas of health regulation should be discarded entirely since in at least some cases, it is possible that regulatory reform could produce a better alignment of benefits with costs. The medical tort system is a good example of this. This system clearly produces some benefits, including compensation to patients and deterrence of medical errors. However, if there were a way to achieve the same or greater benefits less expensively—whether this be through caps on damages, alternative dispute resolution—this would be an improvement over the status quo.

It was not the purpose of our study to make recommendations on specific regulatory reforms to be pursued, either in medical torts or any other domain of health regulation. Instead, we were trying to provide something that has never been achieved previously: a "big picture" view of the overall impact of health services regulation with the intent of identifying areas where regulation might be excessive. For each of the areas so identified, one would have to rely on further study or experts in that domain to sort through the best approach to reform. My guess is that only in some of these cases would experts judge that we should dispense entirely with regulation.

I would like to take the opportunity of addressing two other points that came up in the January 28 hearing.

Question 4. What is the cost of care at the end of life?

Answer 4. The best estimates of this come from a 10 year old study by Emanuel and Emanuel implying that roughly 12.2 percent of all health expenditures occur in the last year of life (see Emanuel, Ezekiel., and Linda L. Emanuel. 1994. The economics of dying: the illusion of cost savings at the end of life. New England Journal of Medicine 330, no. 540). The authors estimate that if all Americans who died executed an advance directive, chose hospice care, and refused aggressive, in-hospital interventions at the end of life, their end of life expenditures would drop by 27 percent, producing maximum potential savings equal to 3.3 percent of health spending. The authors made clear this was a best possible case estimate and they themselves were not claiming it was achievable, both because it would cost something to educate/persuade all Americans to execute advance directives, because for a variety of reasons these advanced directives are not always followed and because not every American would opt for either hospice care or refuse aggressive interventions in any case. So while a promising area of savings, it seems unlikely this alone could be relied upon to finance universal coverage.

Question 5. Does prevention save money?

Answer 5. I enjoyed Senator Harkin's eloquent brief on the merits of preventive care and healthier lifestyles. There is no question that if Americans were healthier we could save a lot of money, but conversely, if they lived longer, we would spend more, so determining whether prevention actually saves money on balance is trickier than it may seem. In a superlative book written by nearly 20 years ago, a Brookings Institution researcher, Louise Russell showed that "preventive measures are not as simple as often depicted—while many do improve health, they are not without risk or cost, and in fact *rarely reduce medical expenditures*" (Is Prevention Better Than Cure? Washington, DC: Brookings Institution 1986). She reviewed a variety of preventive health services, ranging from vaccinations (who often *do* save medical costs), to screening for various diseases, to changes in lifestyle. While nearly 2 decades old, I believe her results instructive and would not change appreciably were she to replicate the analysis today. The bottom line is that prevention generally offers the prospect of achieving gains in life expectancy or other improvements in health at a very low cost per added year of life and typically prevention can be justified on grounds that it represents good value for the money. But to expect prevention to be self-financing through medical cost savings may be unrealistic and I would hope that the fate of the uninsured does not rest on such savings having to materialize.

I would like to thank you again for the opportunity to testify and the chance to provide this further information for the record. Your committee faces a daunting task and I look forward to seeing how things develop. If you have any further questions, please feel free to contact me (919) 684–8026 or e-mail conoverc@hpolicy.duke.edu.

Best wishes,

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PREPARED STATEMENT OF GAIL R. WILENSKY, PH.D.

Mr. Chairman and Members of the Committee: Thank you for inviting me to appear before you. My name is Gail Wilensky. I am a senior fellow at Project HOPE, an international health education foundation. I am also a former Administrator of the Health Care Financing Administration, now called CMS and a former chair of the Medicare Payment Advisory Commission, MedPAC. My testimony today reflects my personal views as an economist and a health policy analyst and should not be regarded as representing the views of Project HOPE.

My testimony focuses on the uninsured, the relationship between increased healthcare spending and the decline in the number of the insured and the major factors that are driving increases in healthcare spending. These are large and complex issues and my coverage of them will be in the nature of an overview of what is known about them rather than in depth treatment of any one of them.

The Problem

The numbers of the uninsured, the characteristics of the uninsured and the duration without insurance coverage has been well documented by the Census Bureau

and the Congressional Budget Office, as well as in other government reports. The number of uninsured has increased in the Census reports of each of the last 2 years, and according to the Census CPS report now stands at 43 million or approximately 15 percent of the population. While the precise number of uninsured depends on the particular survey being referenced and the duration of time being considered, it is important to note that the number of uninsured reported for 2002 is very similar to the number and percent of the population reported uninsured in 1997, a period of robust economic growth. This suggests that the uninsured should be considered a chronic problem rather than an acute issue, one that will become somewhat worse in periods of slow economic growth and slightly better following periods of robust economic growth. What should be equally clear is that to substantially reduce the number of uninsured will require an explicit change in policy. Several of the major policy choices will be summarized at the end of my testimony.

However, before considering the policy options available to reduce the number of uninsured, it is important to understand what has been behind the decline in insurance coverage. Even though, the persistence of a substantial uninsured population should be regarded as a chronic problem, it is a chronic problem that has grown somewhat worse over the last quarter century. In 1977, when the first of the National Medical Care Expenditure Surveys (now called the Medical Expenditure Panel Survey or MEPS) was conducted, the number of uninsured was under 13 percent of the population and it is now slightly greater than 15 percent of the population. Had the State Children's Health Insurance Program (SCHIP) not been enacted in 1997, the percentage increase would have been greater since it has been able to compensate for some of the loss in private coverage.

This leads to the question as to why the percentage of people covered by private health insurance has been declining and what, if anything can, can be done to try and mitigate the decline. Two factors are cited most frequently. The first is the change in the structure of the economy and the move towards jobs that are part time, in small firms and/or are part of the service sector. These structural changes in the economy are all known to be associated with a lower likelihood of employer-sponsored insurance. The second reason is the increasing cost of healthcare and more specifically, the fact that healthcare spending has been increasing faster than personal income. While both reasons contribute to the decline in insurance coverage, several studies including those by Lewin and Associates and by Kronick and Gilmer, find the largest factor is the increase in healthcare spending.

Is Increased Health Care Spending A Problem?

It has long been observed that the United States spends more on healthcare than any other developed country, both in absolute terms and as a share of our Gross Domestic Product. Over the last 50 years, healthcare spending in the U.S. has grown in real terms per person at a rate of about 4 percent per year while the GDP has grown at a real rate of about 1.5 percent per person. A notable exception to that trend occurred in the middle 1990's, when healthcare spending grew at a rate of about 2 percent per year, half of the historical rate. Whether there is more to be learned about how to sustain periods of lower growth without inciting the type of public backlash that occurred against the managed care industry in the late 1990's will be an important exercise for future health policy analysts.

This country seems to have had mixed views about whether the long term spending growth should be regarded as a problem. During some periods of our history, substantial time has been spent bemoaning the increased rates of spending, particularly when compared to other countries but as of late, this attitude in at least some quarters seems to have changed. Some are now saying that we can afford to spend a significant portion of the increased growth in the economy on healthcare if we choose to do so. Technically this is obviously true but it will also mean that we will have less of our economic growth to spend on other things. Rather than focus on the literal sustainability of our healthcare spending rate, the more important question is whether people feel that they are getting increased value for their spending-in either the quantity or quality of their life—or whether more is being spent because of unintended cost drivers in the way healthcare is financed or delivered.

Even if we conclude that we are truly getting value for the increase spending on healthcare, as some analysts have done and therefore should be less concerned about increased spending, it is clear that the increased spending will make it more difficult to reduce the number of the uninsured. It also means that if we can find ways to slow the rate of growth in spending, it will be less costly to cover the uninsured and that the rate of increase in the uninsured should decline.

Drivers of Increased Health Care Spending

There are a variety of drivers of healthcare costs, each of which is briefly described in the section that follows plus one over-arching factor that exacerbates the problems associated with the other factors. The most important specific drivers of healthcare are advances in medical technology, medical liability, medical errors and patient safety, life styles that drive up healthcare spending and a reimbursement system that encourages inefficiency and fails to reward quality.

The over-arching factor that exacerbates all of these specific factors is the dominance of employer-sponsored insurance, a dominance that has occurred because of the vagaries of history concerning the tax treatment of employer-paid premiums. As is well known by all of you, the rise of employer-sponsored insurance can be traced to the decisions of employers during WWII to provide their employees with insurance as a way to circumvent the then existing wage and price controls. A ruling by the IRS a decade later that such fringe benefits did not constitute taxable income has led to the present dominance of employer-sponsored insurance. As a result of the IRS ruling, payments of health insurance premiums by employers do not count as taxable income for their employees and are not subject to Federal or State income tax or to Federal payroll taxes. This treatment of income is referred to as the "tax exclusion" of employer-paid health insurance and its implications are also discussed below.

Medical Technology

New medical technologies and other medical advances have long been considered as a major driver of increased healthcare spending, particularly when viewed over the long-term. While some estimates have placed the increase due to technology as high as 50 percent, it is important to note that the effect of technology is frequently measured as a residual, after accounting for population and population aging, general inflation and medical specific inflation, changes in insurance coverage and other factors rather than measuring its effects directly. Nonetheless, it is clear that increasing medical capability has been a major factor in explaining the increase in healthcare spending.

An important question to consider, however, is why medical technologies rarely decline in price over time the way they do in other industries and also whether the adoption of new technologies in healthcare is subject to the same types of economic calculus that occurs elsewhere in the economy. In other sectors, new technology is adopted if it can provide a service better and cheaper or better but more expensive and with the payer willing to pay for the improved service. In healthcare, new technologies are frequently adopted as long as there is any improvement in the service provided or the quality of life produced. Why that is the case is rather complicated but reflects the financial incentives of the purchaser who is frequently not the end payer, lack of good information about either the benefits or the costs of the technology, financial incentives to the provider of the service and the medical liability system. It is not clear that advances in medical technology would have quite as much an effect on healthcare spending if these other factors weren't also present.

Medical Liability

Medical liability, which includes both medical malpractice and medical product liability, is another area that has long been thought to be associated with increased healthcare spending although there is a lot of debate about how much of an increase it causes. There are two types of increased spending that can occur because of medical liability. The first, which is easier to measure and probably the smaller of the two, is the increases in healthcare spending associated with increases in medical malpractice premiums. The second, which is likely to be both larger and more pervasive but very hard to measure, is the change in the practice of medicine driven by malpractice concerns. Because physicians claim they feel more at risk for errors of omission rather than errors of commission, assuming no adverse event associated with the committed act, the liability system is believed to exacerbate the increases in healthcare spending, particularly when combined with the current reimbursement system which pays more the more services the physician provides.

The debate about how to limit the increased spending associated with rising costs of malpractice premiums as well as the practice of defensive medicine and yet compensate patients who have experienced avoidable medical errors is continuing at both the Federal and State level. While there is some evidence that capping noneconomic awards is associated with smaller increases in malpractice premium increases, the strategy does not directly address the problems associated with the practice of defensive medicine. There is some thought that the increased focus of institutional and individual providers on patient safety and medical error reduction may not only provide direct benefits to patients in terms of improved care but also

may help break the impasse in resolving issues of medical liability. Since the release of the various volumes on patient safety and medical errors by the Institute of Medicine, increased attention has been focused on the costs of medical errors and the need for system changes to improve both the quality of medical care and the quality of patient safety. Experts in this area have also looked for ways to link effective patient mechanisms to strategies that would provide for timely and fair compensation of avoidable error that results in injury. If such a way can be found, it would help reduce the pressure on healthcare spending increases associated with both malpractice concerns and with the costs of correcting medical errors.

Lifestyle Issues

The lifestyle followed by many Americans is another driver of healthcare costs. A significant amount of attention has been devoted to the costs of smoking on the healthcare system as well as the costs to the economy from the increased absenteeism and decreased productivity associated with smoking. Only recently has it become clear that the increased costs from obesity may be even greater than those from smoking. This is particularly problematic because of the increased incidence of obesity across the entire age distribution, including the very young.

Reimbursement System

Finally, the reimbursement system used by most of the public and private payers is a driver of healthcare costs in its own right and reinforces the effects of some of the other cost-drivers described above. The primary type of reimbursement for physicians as well as for many other providers in the healthcare system is fee-for-service. As has been well documented, fee for service reimbursement rewards physicians or other providers of care for providing more services, whether or not providing more services results in better care. Fee for service reimbursement coupled with concerns about potential medical liability can be a powerful driver for providing more services, whether or not better care is being provided.

Neither fee for service reimbursement nor the bundled payments used by Medicare for hospitals, home care or nursing homes pay differentially for quality or performance. Medicare has spent most of the last 2 decades focused on modifying the DRG rate used for hospital reimbursement, the relative weights of the RBRVS system used for physician reimbursement, the calculations of home care episodes or on redesigning the RUGS classification used for nursing home payment. However, none of these systems reward better quality or performance, paying exactly the same for "best in class" and "worst in class". In fact, the current reimbursement system not only doesn't pay for quality, it pays more for defects since it pays for the initial service and then again for correcting any defect associated with the initial service.

Employer-Sponsored Health Insurance

Considering each of these various cost drivers, it is hardly surprising that healthcare has been experiencing the increases in spending that it has. While attempting to deal with the causes or effects of any one of them would clearly be helpful, most of these problems are exacerbated by the current reliance on employer-sponsored health insurance, which as previously indicated is tied to the current tax treatment of employer paid premiums.

There are several features associated with employer-sponsored insurance that cause it to exacerbate the other health cost drivers in the system. First, the tax exclusion increases the share of an employee's income that goes towards the purchase of insurance since it allows employees to use pretax dollars for health insurance but not for most other purchases including healthcare not covered by insurance. Second, it encourages the myth that insurance premiums paid by employers comes out of the employer's profits rather than being part of the employees compensation package, at least on average. Both of these features result in the purchase of more insurance than is likely to occur if the individual believes he is spending his own money and the expansion of insurance is, in turn, associated with increased spending on healthcare. In addition to being a cost driver, employer-sponsored insurance may not provide the employee with the type of insurance he would choose if the choice were the employee's rather than the employers.

In addition, the tax exclusion is an inequitable and costly way to subsidize the purchase of insurance. It is inequitable way since the value of the exclusion is worth more the higher the employee's income and it is also very costly to the Federal Government. Current estimates are that the revenue losses for Federal tax exclusion benefits in 2002 were almost $128 billion.

Most economists have advocated either eliminating the tax exclusion and substituting a refundable credit in its place or at least limiting the value of the tax exclusion. This action has proven to be very unpopular politically, in large part because so much of the current insurance provided to the under-65 population is de-

rived from tax-subsidized employed-sponsored insurance. However, the decline that is occurring in voluntary, employer-sponsored insurance provides an opportunity to develop an alternative source of subsidized insurance for the under-65 population.

Next Steps

There are a variety of actions that the Federal Government can take to help reduce some of the pressures on healthcare spending. Some of these actions may be most effective if undertaken along with similar actions in the private sectors. Other actions may require new legislation and can only be carried out by government.

Changing reimbursement so that performance and quality are rewarded is an activity that needs to occur in both the public and the private sector. The Federal Government can be helpful in jump-starting the use of innovative strategies through its Research and Demonstration authority and ultimately will need to change its reimbursement strategies to reward quality and performance but the private sector is likely to be much more nimble in terms of trying alternative strategies, discarding those that don't work and experimenting with those that work imperfectly. Assistance in providing better information on clinical and cost effectiveness of new medical procedures and therapeutics is an important role for government but this is another area that might be even more effective if done as part of a public/private partnership. State government and/or the Federal Government will need to take actions that change the nature of the tort system. Finally, any changes in the tax treatment of employer-sponsored insurance and any additional mechanisms that subsidize the purchase of insurance out of the employer setting will require governmental action.

Strategies to Reduce the Number of Uninsured

A variety of proposals have been introduced over the past several years that either open up public programs to populations that have previously not been served by a public program or that provides individuals with financial subsidies, outside of the employer-sponsored arena.

The SCHIP program, itself an extension of Medicaid or Medicaid-like programs to children above the income level covered by Medicaid, has been proposed for children above the current SCHIP income level and also for their families. Medicaid buy-in programs have been proposed for working populations just above the Medicaid cut-off and proposals have also been made to allow a Medicare buy-in for uninsured individuals who are less than 65.

Refundable tax credits of various amounts and structures have been included in legislative proposals in both Houses and in the Administration's budget proposals. The most recent State of the Union speech also included "above-the-line" deductibility of catastrophic health plans by individuals who don't have employer-sponsored insurance.

Periodically, proposals have also been made to use different types of mandates. Some mandates have been on individuals, with subsidies for the low-income, and some on employers, with subsidies for firms with few employees or low wage employees. A spin on the employer mandates has also been proposed periodically, called "pay or play" where employers who don't provide health insurance have to pay into a fund.

Given the variety of problems associated with employer-sponsored insurance described earlier, particularly in a mobile society where most households have two workers, adding on to employer-sponsored insurance seems to me to be a less desirable strategy. However, even those who would like to move away from employer-sponsored insurance need to do so carefully. Most workers and dependent of workers under 65 are insured through employer-sponsored plan, and it will be important how alternative policies are put in place so as to minimize the disruption to existing coverage.

Some proposals are now being developed that attempt to tie together pieces of these various strategies. In particular, proposals are combining expansions in public programs with refundable tax credits and access to group insurance. These strategies may hold the basis for future political compromises. The debate will be about who qualifies for which program, how much subsidy should they receive and how should the subsidy be funded. Actions that can also help slow the cost of healthcare will increase the likelihood that the numbers of uninsured will decline or at least increase at a slower pace while these strategies to expand access to insurance are being put in place.

Summary of Testimony

I. The uninsured is a chronic issue (not an acute one)
- Worse during economic decline; better with robust growth
- Secular decline in coverage over time

II. Two main reasons for decline in coverage

• Changing economic structure
• Increased healthcare spending relative to growth in income
III. Increased spending—a problem?
• Not for economy, as long as increased spending has value
• Problem for the uninsured
IV. Drivers of healthcare spending
• Advances in medical technology
• Medical liability
• Lifestyle issues
• Current reimbursement system
• Employer-sponsored insurance and tax exclusion—In its own right and exacerbates other drivers
V. Next steps
• Pay for performance initiatives
• Better information on C/E of new technologies and therapeutics
• Meshing patient safety measures with tort changes
• Exploring alternative subsidies to the tax exclusion
VI. Strategies to reduce number of uninsured
• Expanding access to public programs
• Providing financing subsidies to individuals and access to group insurance
• Mandates, on individuals or employers

CBO RESPONSES TO QUESTIONS FROM THE SENATE HELP COMMITTEE

*Question 1.*You said that third-party insurance "drives a wedge between what the consumer pays and the cost of what he uses" and this is one of the major factors contributing to the growth in health care spending. Can you please elaborate on this . . . and do you have any ideas for reforms that would eliminate this so-called wedge? Is it possible to remove this wedge and still maintain a role for third-party insurance?

Answer 1. Health insurance protects the individual from uncertain and potentially high medical costs by spreading the risk of these costs across a large pool of people. In offering this protection, however, health insurance gives rise to the possibility that the total level of health spending is higher than it would be if the consumers faced the full cost of theircare.

In most purchasing decisions, individuals bear the full cost of what they consume. Enjoying more goods or higher-quality goods means paying more for them, and a consumer will decide not to buy an item if the perceived value is less than the cost. The market for medical care services differs in that consumers (those with health insurance, at least) sometimes face no added cost for additional services or more intensive services. From the patient's perspective—as well as the physician's—there may be little reason to economize, and as a result, resource-intensive services may be provided even if their benefits are very small.

An expensive diagnostic test, for example, might be ordered even if there is a low probability that it will furnish useful clinical information. Faced with having to pay, an individual might choose to forego such a low-value service; facing no cost at all, he would likely opt for it. The cost of such services is borne collectively by all those who contribute premiums to the risk pool.

Two broad approaches are used to address overuse of medical care services. In traditional fee-for-service plans, deductibles and copayments help avoid overuse by making patients responsible for a portion of costs, creating some incentive to limit low-value spending. High-deductible policies offer protection from large losses—a principal motivation for purchasing insurance—while maintaining the consumer's incentive to economize on non-catastrophic expenditures. But while greater cost-sharing offers stronger cost-saving incentives, it also reduces the risk spreading advantage to the individual. An alternative approach focuses on the behavior of medical care providers rather than consumers. "Managed care" combines the functions of insurance services with those of medical care delivery, encouraging providers to direct resources away from services whose value is likely to be low relative to cost. Approaches like disease management or case management, when taking into account the cost of services, can provide better information and compliance with appropriate treatments.

Question 2. You stated that the relationship between premiums and coverage is "not necessarily a simple one." Is it fair to say there is a relationship and that, although we may not know the magnitude, there is a cause and effect relationship between increased premiums and decreased coverage?

Answer 2. In discussing the effect of premium increases on coverage, it is important to distinguish among different causes of such increases. While it is clear that an increase in premiums having nothing to do with the quality of the plan (a premium tax, for example) would lead to a reduction in the number of insured, the continuing increase in premiums over recent decades has been largely due to the advancing capabilities of modern medicine. Premium increases therefore have reflected, at least in part, changes in the product itself, leaving the effect of premiums on decisions to purchase coverage less clearcut. Other factors such as increased cost-sharing, expansions in public coverage, and demographic changes further complicate interpretation of the drop in coverage.

CBO has not performed an analysis specifically designed to identify root causes of the drop in health insurance coverage. On balance, however, simple evidence appears to suggest that increases in premiums have led to reductions in insurance coverage. From 1988 to 2001, the proportion of insured nonelderly Americans fell by more than 2 percentage points. A larger drop—more than 4 percentage points—was seen in the proportion covered by employer-based insurance. The bulk of the decrease occurred in the earlier years of this period, coinciding with a period of steep increases in real (inflation-adjusted) premiums. As annual growth in premiums slowed in the mid 1990s, so too did the drop in percentage of covered workers.

Question 3. You stated that "defensive medicine" and "physician-induced demand" don't explain much of the recent growth in spending. One can infer from this that these practices do, in fact, make up some proportion of national health care spending. Do you know what proportion of the 1.6 trillion spent on health care in 2002 can be attributed to defensive medicine?

Answer 3. CBO currently has no estimate of the proportion of total healthcare expenditures attributable to defensive medicine. Existing estimates rely on conjectural surveys of medical providers, and what is considered defensive medicine by one may be deemed prudent medicine by another.

In the absence of a reliable estimate on the level of spending attributable to defensive medicine, however, it may be possible to estimate changes in medical spending resulting from new State laws affecting malpractice litigation (e.g., caps on noneconomic and punitive damages), which might be interpreted as changes in the amount of defensive medicine being practiced. For selected disease categories, analysts have estimated reductions in spending possibly attributable to various reforms in State malpractice laws. In these analyses, reductions in spending that did not measurably affect health outcomes are considered to represent reductions in defensive medicine. One study estimated that for patients hospitalized for acute myocardial infarction (heart attack), tort reforms reduced Medicare inpatient spending by 5 percent; for those hospitalized for ischemic heart disease, the estimated reduction was 9 percent. Another study estimated a spending reduction of 0.27 percent for maternity patients. These results are specific to these clinical areas, and do not represent potential reductions in overall health spending from tort reforms. CBO continues to explore this issue.

PREPARED STATEMENT OF THE ASSOCIATED BUILDERS AND CONTRACTORS (ABC)

Associated Builders and Contractors (ABC) appreciates the opportunity to submit the following statement for the official record. We thank Chairman Judd Gregg (R-NH), Ranking Member Edward Kennedy (D-MA) and members of the Senate Health, Education, Labor and Pensions Committee for addressing the crisis of the uninsured in America. ABC urges the committee to follow up on this important hearing with an additional hearing to examine possible solutions to this growing epidemic.

ABC is a national trade association representing over 23,000 general contractors, subcontractors, material suppliers, and construction-related firms from across the country within a network of 81 State chapters. Our member companies represent over one million craft professionals and administrative employees. As the nation's second-largest employer, with over 6 million workers, the construction industry continues to create new and beneficial jobs each year. Construction spending has a stimulative effect on the economy. For every $1 million spent in construction, $3 million in economic activity is generated and 13 new permanent jobs are created.

To remain at the present level of activity, the construction industry needs an additional quarter of a million (250,000) workers per year to replace an aging and retiring workforce. One of the key elements to attracting and retaining workers and remaining competitive in any industry is to provide high quality, flexible health benefit plans. Providing quality health care benefits is a top priority for ABC and its

members, and maintaining cost effective health insurance plans is a key ingredient in achieving this objective.

Currently, there are more than 43 million uninsured Americans, and 60 percent of them are employed by (or family members are employed by) small businesses. Therefore, the problem of the uninsured does not solely lie with the unemployed, but also with the small businesses across the country who are unable to provide quality health care coverage due to skyrocketing costs. In fact, a new study by the Robert Wood Johnson Foundation found that more than one in three Americans under 65 was uninsured at some point over the past 2 years.

The 2002 Census Bureau statistics show that the share of the population covered by employer-sponsored health care coverage declined from 63 to 61 percent. The rising cost of health insurance premiums is the biggest factor in this decline and number one problem facing small business in this country. Faced with 15, 20 and even 50 percent premium increases annually for the past several years, many small businesses have been forced to reduce or even drop coverage.

Many factors have contributed to the cost increase of health insurance. Hospital costs, frivolous medical malpractice lawsuits, lack of competition and increased state regulation have all led to increased premiums. However, it is important to note that while health insurance costs have gone up at twice the rate of inflation, a vast majority of small businesses's productivity and profits have failed to grow at the same rate. One sector though, has enjoyed its greatest profit margins ever. The insurance industry, namely large health insurance companies, have experienced record-setting profits over the past few years.

A number of state reforms have actually led to increased rates, thus forcing employers to reduce benefits through higher deductibles and co-pays or eventually to drop coverage in order to comply with the law. State health insurance reforms and community rating laws have forced some insurance carriers to completely withdraw from the small group market for employers with less than 50 employees. When these and other state reforms occur, small employers are left with fewer alternatives for health insurance coverage for themselves and their employees.

Recent mergers of health insurance companies have also reduced competition and alternatives for employers who seek access to quality and affordable health insurance. Today, there is a great need to bring more competition back into the system rather than continually reducing it.

While there is no single solution to the problem of the uninsured, ABC feels that it is vital for Congress to examine the current market and to consider proposals that will provide market-based reforms. We believe that our current health insurance system, while flawed, is still the best in the world. Any solutions should help provide working families the best opportunity to obtain the quality, affordable health coverage they both need and deserve. Increasing competition within the small group market will help lower costs to employers struggling to continue to offer health insurance to their employees today.

ABC appreciates this opportunity to submit comments on such a vital issue. We look forward to continuing a constructive dialogue on how to increase access to affordable and competitive health insurance for small businesses and thus reducing the number of uninsured Americans.

PREPARED STATEMENT OF THE NATIONAL FEDERATION OF INDEPENDENT BUSINESS

On behalf of the 600,000 members of NFIB, we want to thank you for allowing us to submit testimony today about the worsening health care crisis that faces our country. The small business community is feeling hit the hardest. Since 1986, the members of NFIB rank the cost of health insurance as one their top concerns.

America's small-business owners, whose businesses create two out of every three new jobs in this country, continue to struggle with high cost of offering health insurance to their employees. Because of the current structure of the health care industry, too many small business owners and their employees do not have access to affordable health insurance.

A recent Census Bureau report shows that over 43 million Americans now lack health coverage. That is an increase of almost two and a half million people over the previous year and the largest annual increase in more than a decade. In 2002, over 8 in 10 uninsured came from working families with nearly 70 percent from families with one or more full-time workers. It's no coincidence that these events are taking place as the cost of insurance continues to skyrocket—double-digit increases year after year, pricing more and more small firms out of the market.

Many factors contribute to the overall cost of healthcare. Lack of competition in the small group market, litigation, and mandates are just some of the many cost drivers that have led us to where we are today.

Small employers are forced to purchase in the over-regulated small group market, and consequently workers in the smallest businesses that do provide health insurance pay 17 percent more on average for health benefits than workers at large companies. There is inadequate competition among insurance carriers. A GAO survey found dangerously high levels of market concentration among large insurance companies in the State small group markets. This concentration reduces competition and enhances insurers' underwriting gains; as competition decreases, prices increase.

We must also address the growing cost of benefit mandates. The idea that insurance should pay for the wide range of medical treatments and services covered by State mandates while laudatory, is unaffordable and therefore unrealistic. The Council for Affordable Health Insurance says that since January 1970, mandates have increased 25-fold.

Something must be done on the front of medical malpractice litigation. The cost of malpractice lawsuits has soared in recent years, pushing up insurance premiums and forcing physicians out of business.

A government-run healthcare system is not the solution, however it is still very much on the minds of some in Congress. The devil is in the details, whether it comes in the form of government-run health care, mandates on employers to provide it in the workplace, or individual responsibility with subsidies for the poor.

The problems facing small business owners, their employees, and families must be addressed as part of that debate. We understand that no one solution will help all of the 43 million uninsured. Therefore, we propose a multi-faceted approach that will help move countless numbers of Americans off the rolls of those without health care. We are aggressively urging enactment of legislation to permit Association Health Plans—AHPs—to operate nationwide. We support tax credits for the purchase of health insurance.

Association Health Plans will allow small business owners to band together across State lines through their membership in recognized trade and professional associations to purchase health care for their families and employees. Organizations such as NFIB, the U.S. Chamber of Commerce, Associated Builders and Contractors, and the National Restaurant Association would be able to offer insurance to their members.

AHPs would help rural States by giving employers who are members of associations or trade groups another option—particularly important in less populated areas where only one or two choices are available today.

Association Health Plans will make health insurance more affordable for small businesses. The Congressional Budget Office has estimated that small firms obtaining health insurance through AHPs will realize premium reductions of 13 percent on average. In fact, reductions range from 9 percent to 25 percent. It is estimated that more than 300,000, up to as many as two new million employers, employees and their families would be able to obtain health care coverage if given access to Association Health Plans.

Ours is by no means a complete solution to this most vital national challenge. Our goal as a nation must be to make certain that no person in need will ever be left unattended. We cannot afford to wait for the "perfect" solution. There is none. The longer we delay, the more we will hear the calls for government-provided health care, and certainly, *that* is not the perfect solution.

Thank you for holding this hearing today and we appreciate you allowing our testimony to be submitted on behalf of NFIB members.

PREPARED STATEMENT OF THE ASSOCIATION HEALTHCARE COALITION

The Association Healthcare Coalition (TAHC) commends Chairman Judd Gregg (R–NH) for holding this hearing to examine rapidly rising health care costs and the problem of the uninsured in America. TAHC believes that Congress must take action to address this issue during the 108th Congress.

Since TAHC represents trade and professional associations that exist to serve small and medium-sized employers, this statement will focus on examining factors in today's small group health insurance markets that serve to drive up health insurance premiums for small employers. This is directly related to the problem of the uninsured, since approximately 60 percent of all uninsured Americans are workers employed by a small business or the dependents of such workers. TAHC recognizes that there are many factors driving overall healthcare costs today, but also wishes to emphasize that the problem of extremely inefficient regulation in the State small group markets is a significant source of the dramatic, double-digit health insurance premium increases that continue to jeopardize coverage for millions of small business workers across the Nation.

The Role of Associations in Health Care

Bona fide trade and professional associations are a vital source of health care coverage for millions of American workers employed in small businesses. Some associations have been sponsoring health plans for over 50 years. TAHC's membership is composed of trade and professional associations organized for purposes other than selling health insurance, a critical distinction in the debate over the proper role of associations in providing health care benefits to small and medium-sized employers. Our members are not affinity groups or businesses that simply come together to purchase insurance. Rather, bona fide associations, established and run by their employer-members, exist to serve the needs of their members and workers. Bona fide associations have an outstanding track record in providing high quality health coverage to small businesses and their workers.

Associations are vital to enabling small businesses to provide affordable health coverage to their workers. Associations are able to purchase affordable health coverage for pools of small employers because they offer health plans that are specifically designed to meet the health care needs of their membership. Associations offer a wide variety of approved health plans and managed care arrangements, both fully insured and self-insured. AHPs have already demonstrated that they can reduce health insurance premiums for small employers, compared with the cost of small employers purchasing coverage directly from an insurance company without the benefit of an AHP. For example, the AHP sponsored by the American Council of Engineering Companies has administrative costs of about 9.5 percent of premium. In contrast, a small employer on its own is likely to pay administrative costs of anywhere from 20 percent to 35 percent of premium when purchasing coverage in the existing small group marketplace.

Associations are uniquely structured to be part of the employer-based healthcare delivery system. Because they are already structured to represent their members in other areas, they possess the infrastructure, administrative mechanisms, and experience needed to unify employers and employees into effective consumers of health services. By serving this need for small employers, associations add value to the health care system as a whole, as well as to their members individually.

Inefficient Regulation in Small Group Markets Raising Premiums

While associations have been serving small businesses and their workers with affordable health benefits for over 50 years, their ability to continue doing so is severely threatened in the current environment. As inconsistent government mandates and regulations continue to proliferate in many States, the increasing cost of compliance often outweighs the benefits that small employers can receive by joining together in an AHP to purchase health care benefits. The regulation of AHPs on an inefficient, state-by-state basis thus jeopardizes the ability of associations to continue providing dependable and affordable health coverage to small employers and their workers.

Another critical point is that excessive benefit mandates enacted by many States have driven insurance carriers out of many of the State small group markets. This has allowed a small number of remaining insurance companies to develop virtual monopolies in some markets. Given this unhealthy level of concentration in many health insurance markets, in addition to the overall level of rising health care inflation, it is not surprising that small employers are experiencing dramatic premium increases year after year.

In fact, many associations have had to close down their health plans, many of which have been in existence for decades, because health insurance companies do not wish to deal with the cost of compliance involved in providing coverage to AHPs in multiple States. Because of this, both multi-state and single-state AHPs have very few options due to a severe lack of competition among insurance carriers in the association market, and many AHPs have been hit with large premium increases for their small employer members. The current difficult regulatory environment also prevents associations that have not previously offered a health plan, but now wish to do so because of the difficulties their members face in obtaining coverage in the small group markets, from establishing an AHP, thus further limiting options for small employers. Excessive regulation and mandates in the State small group insurance markets has greatly hindered the ability of associations to serve small business members.

Large health insurance premium increases inevitably lead to some small employers simply discontinuing offering health benefits to their employees, or reducing the employer subsidy, due to the rising cost. This disturbing trend will continue to increase the ranks of the uninsured, and will exacerbate adverse selection problems as younger, healthier individuals are more likely to choose to be uninsured due to high costs. Congress must take steps to address this problem in order to avoid con-

tinued growth in the uninsured population and the adverse health care consequences that this entails.

Association Health Plan Legislation

In contrast to the regulation of AHPs on an inefficient state-by-state basis, large corporate and union health plans are exempt from State insurance regulations and mandates. It is time that Congress provided workers in small businesses with the same opportunities it has provided to their counterparts in large corporations and labor unions—affordable health care through economies of scale, greater bargaining power with large insurance companies, regulatory uniformity, and the freedom to design health plan options that meet working families' needs. This objective can be achieved by the enactment of the Small Business Health Fairness Act of 2003 (S. 545), introduced by Senators Olympia Snowe (R–ME), Jim Talent (R–MO) and Kit Bond (R–MO).

S. 545 will put small employers on an equal basis with workers covered by large employer and labor union health plans by providing similar uniform regulatory status to health plans sponsored by bona fide associations. The bill will greatly improve the ability of AHPs to design health plan options that meet the needs of their members and control the escalating cost of health coverage. The AHP legislation is the only policy option that levels the playing field between small business on one hand and large companies and union firms on the other.

If small and medium-sized employers are to compete in the marketplace against large corporations for high quality workers, it is vital that they have access to the same health benefit options as large corporations. As such, S. 545 is critical to the ability of small and medium-sized businesses across the Nation to obtain access to affordable health insurance.

Conclusion

An expansion of AHPs via S. 545 is a market-oriented solution that will foster growth and greater competition within the small group health insurance marketplace. This will ultimately bring about greater long-term price stability and help to reverse, or at least slow, the trend of skyrocketing health insurance premiums for small employers. Thus, AHP legislation is essential to efforts to expand access to affordable health benefits for small employers and their workers.

TAHC urges the Senate to expand access to affordable health insurance for working families by enacting S. 545. This legislation has already been approved by the House during the 108th Congress, and has the strong support of President George W. Bush, who urged Congress to enact the bill during his State of the Union message on January 20, 2004.

The time for elimination of the health insurance "double standard" for small business workers is long past due. TAHC looks forward to working with Chairman Gregg and members of the Senate HELP Committee to accomplish this goal.

[Whereupon, at 11:50 a.m., the committee was adjourned.]

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