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UNDERLYING CAUSES OF RISING HEALTH CARE COSTS

HEARING

BEFORE THE

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UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

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UNDERLYING CAUSES OF RISING HEALTH CARE COSTS

WEDNESDAY, OCTOBER 6, 1993

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:05 a.m., in room SD-215, Dirksen Senate Office Building, Hon. Daniel Patrick Moynihan (chairman of the committee) presiding.

Present: Senators Rockefeller, Daschle, Conrad, Chafee, Durenberger, Grassley, Hatch.

[The press release announcing the hearing follows:]

(Press Release No. H-37, October 4, 1993

FINANCE COMMITTEE ANNOUNCES HEARING TO EXAMINE UNDERLYING CAUSES OF RISING HEALTH CARE COSTS; LEADING HEALTH ECONOMISTS TO TESTIFY

WASHINGTON, DC—Senator Daniel Patrick Moynihan (D-NY), Chairman of the Senate Committee on Finance, announced today that the Committee will conduct a series of hearings on topics related to health care reform. The first hearing in this series will examine the underlying causes of the rapid rise of health care costs relative to other sectors of the economy. The Committee will hear testimony from leading private health care economists.

The hearing will began at *10:00 a.m. on Wednesday, October 6, 1993,* in room SD-215 of the Dirksen Senate Office Building.

"We know that overt the last thirty years health care costs have risen more than twice as fast as costs in the rest of our economy," Senator Moynihan said. "This trend adversely affects access to health care and reduces our ability to save and invest on both the public and private sectors. Before we move to reform our health care system, we must understand this fundamental problem."

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, A U.S. SENATOR FROM NEW YORK, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. A very good morning to our distinguished witnesses. We are in the opening phase of a large national debate, and much more importantly, a large legislative exercise. The kind of debate we have not had in 30 years, I would think you could say, with regard to the question of a national insurance system for health care.

Senator Packwood cannot be here this morning. It was understood that he would not be able to be present.

We are just beginning this exercise. This is the first hearing for purposes of the record. We are trying to establish what is known, and what is agreed and not agreed, what is problematic, in the area of medical economics.

The most important thing to be clear is that there is no bill as yet. And I, for my part, would like to lay it out that there is no hurry. We have been at this for half a century and if it takes another 3 weeks to get a bill that the administration is satisfied with, that is fine; and we are not going to pass it in this session of the Congress. We are going to have a long winter to work at it.

I would hope that there would be no sense that if a bill doesn't come up somehow we will lose momentum. We will not lose any momentum at all. To the contrary, a hurried bill could give a first appearance which would never be overcome. That can happen. We have all seen that in legislation.

I think there was some of that on display yesterday with our good friend, Secretary Shalala, when testifying on the House side, and was put in a position of having to answer questions for which, obviously, she had no answer—the decisions involved not having been made.

She said one thing which worried this reader of the New York Times. The story said, "Mrs. Shalala also played down the size of the bureaucracy that would be created under the proposal." "The National Health Board," she said, "would be a relatively minor oversight group."

Well, is it a relatively minor oversight group or is it the seven-person board that sets health prices for the Nation? That is not relatively minor. It will have a staff of about 100. And the health alliances that would negotiate insurance coverage for its members would be, she said, "lean and mean."

Do you want mean health alliances? [Laughter.]

The CHAIRMAN. I will bet you there are 100 persons working already in what is called the health delivery room, otherwise known as the war room in the EOB. But let's find out, how many people are there in the health delivery room. If they are more than 20 percent of the proposed size of the staff of the National Health Board, we ought to learn it now, I think.

But in any event, we have three wonderful witnesses here this morning. I am going to ask each of them, if they would not mind, if we could hear you as a panel because you are all collegial and know each other and know where you agree and know where you do not. We are more interested in where you do not agree. Well, we are interested in both.

If I then could ask if you would come forward. Dr. Altman. Stuart Altman is chairman of our Prospective Payment Assessment Commission. He is also the Sol Chaikin Professor of National Health Policy at the Florence Heller School. If I can just on a personal note, say that Sol Chaikin was a dear friend. It is wonderful that we have a chair named for him.

Dr. Davis is the executive vice president of the Commonwealth Fund, and a member of the Physician Payment Review Commission, which is not the Prospective Payment Assessment Commission.

Dr. DAVIS. I leave hospitals to Dr. Altman and work on physicians.

The CHAIRMAN. You work on physicians.

And Dr. Newhouse is the John D. MacArthur Professor of Health Policy and Management at Harvard.

We welcome you all very much. I am going to take the liberty of just making one further point and then I will cease. Which is, we were asking last week about the issue of zero growth. I asked the First Lady, will it be the policy that we purposely bring ourselves to zero real growth in per-capita health spending? The one table we have seen shows us down to the national rate of CPI plus population growth and for Medicare and Medicaid CPI population growth, 0.4 percent.

That is said then to continue indefinitely, not to resume as we had thought. But the proposition that there will be a series of one-time savings, which will bring down costs such that you will have no growth in a 5-year period, but then something like a normal "growth rate" would resume. The answer is that, no, there will be zero growth.

Suann Blackman, who is the Senior Research Assistant to William J. Baumol—I am sure known to each of you—at Princeton has sent us a chart, which we will put in the record a little bit later. But they start with the proposition that if you look at real health price growth rates for the OECD countries, the United States at 1.1—and you can sort of see this little black line. It is about in the middle.

And if you take out—in that setting the growth rate for over a 30-year period—this is 1960 to 1990—is 0.75 for the average of all countries. The United States is at 1.1 percent.

If you drop out of the 18 the 3 countries which had negative growth, the U.K., Finland, and France. Baumol's thought is that they had an inflationary situation which skewed health care costs. Then you get, rather interestingly, for the remaining 15 countries, a 30-year record at 1.0 percent per year. The United States is at 1.1. Canada is at 1.1.

These are numbers familiar to you, but they were not familiar to me. This suggests that in industrialized economies you have an expanding science in which information moves instantly. What is it? The JAMA publishes every 2 weeks, does it not, Dr. Newhouse?

Dr. NEWHOUSE. Every week. Almost every week. They skip a few weeks.

The CHAIRMAN. Yes, almost every week. It would have been a monthly journal 50 years ago, I think. That would be an interesting point to find out. Let us find out.

Dr. Podoff, the JAMA would have been a monthly journal 50 years ago, would it not?

Dr. PODOFF. I would say. I do not know.

The CHAIRMAN. The Library of Congress will decide. I bet you the flow of information is such that, you know, we may start having daily bulletins. These will instantly move from hospital to hospital around the world. So something like you have a common body of knowledge here being applied in situations where technology is not that changed. So maybe there is a "normal growth rate" and maybe there is not.

Dr. NEWHOUSE. Senator, we have already gone to an on-line journal to report clinical trials.

The CHAIRMAN. All right. We could use some of that around here. I have talked much too much. Dr. Altman, in our alphabetical order, you are first, sir, and we welcome you with much respect.

[The tables appear in the appendix.]

STATEMENT OF STUART H. ALTMAN, PH.D., CHAIRMAN, PROSPECTIVE PAYMENT ASSESSMENT COMMISSION

Dr. ALTMAN. Mr. Chairman, it is a privilege and a pleasure to be testifying before you for the first time in your new responsibilities as the Chairman of this Committee. I have had the privilege to know you for many years. I look back to my early days when you were in the Labor Department and I was at the Federal Reserve. We were on a statistical program together. And, of course, as you mentioned, you were a good friend of Sol Chaikin, who I am very privileged to bear his name as the Sol Chaikin Professor at Brandis University.

Now, let me, if you will, because I am the Chairman of the Prospective Payment Assessment Commission, and because much of the testimony comes from that committee, let me just spent 2 minutes——

The CHAIRMAN. Could you let me interrupt you, Dr. Altman. I am sorry. Tunnel blindness this morning.

Senator Durenberger?

OPENING STATEMENT OF HON. DAVE DURENBERGER, A U.S. SENATOR FROM MINNESOTA

Senator DURENBERGER. Mr. Chairman, I am just happy to be here and happy to see these three friends as your selection for the first set of witnesses. I know there will be many more. I just sat here and, as usual, am intrigued by your line of questioning. I hope we can keep that up all morning.

The CHAIRMAN. We will keep it up all morning.

Senator DURENBERGER. Thank you.

[The prepared statement of Senator Durenberger appears in the appendix.]

The CHAIRMAN. Senator Chafee, good morning, sir.

Senator CHAFEE. Good morning. I have no pearls of wisdom at this moment.

The CHAIRMAN. All right. Then we all sit at these various—I sat at the foot of—anyway, we will now proceed to learn.

Dr. Altman.

Dr. ALTMAN. Well, as I was saying, Mr. Chairman, let me just digress for 2 minutes from my testimony to introduce you to the Prospective Payment Assessment Commission. This is a Commission which set up in 1983 when Senator Durenberger was the Chair of the Health Subcommittee and this committee was actively involved in setting up the DRG payment system for Medicare.

The Congress decided that it was important that it establish a commission to advise it on this very complex way of paying hospitals under Medicare. So this commission was formed. It originally had 15 members and now it has 17. It has a variety of commissioners, some from rural America, others from teaching hospitals, plus physicians, economists, and several who are in the insurance business.

In addition we have a very good staff here in Washington and we have been privileged to appear before this committee many times, as well as the House, Ways and Means Committee, to re-

port, not only on hospital costs, but on facility costs in general and on how the whole health care economy is working.

My friend, Karen Davis, here is with a sister commission, the Physician Payment Review Commission, which was created a few years later to deal with physician payments. She may want to talk more about it. But I hope in the months and years ahead I have the privilege of appearing before you many times in that capacity. It is always a pleasure to appear before Senator Durenberger, who as I said, was really the father of PROPAC. Whether he likes to admit it or not, I like to feel a kinship to him.

The CHAIRMAN. Well, that is a very good relation to have on this committee, sir.

Dr. ALTMAN. Well, we are here this morning to talk about health care costs in general.

The CHAIRMAN. Can I just say one last interruption? We will put your prepared statement in the record.

Dr. ALTMAN. Thank you.

The CHAIRMAN. Proceed exactly as you like at the pace you like.

[The prepared statement of Dr. Altman appears in the appendix.]

Dr. ALTMAN. I will try to summarize my presentation. I have focused perhaps more heavily on the hospital side because I knew my colleagues would focus on other sectors. But let me focus on the big picture first. While you pointed out that our growth rate in health spending is not that much out of line with other industrialized countries, it still is an issue of real concern to this country when you look at our growth rate in reference to our GNP.

In the first chart that I have in my testimony, I show the cumulative growth rate in health care spending since 1970, where health care has gone up 1,000 percent, and where the gap is continuing to widen between the growth in health care spending and our growth in GDP.

When I started in Washington back in 1970 we were spending a little over 7 percent of our GNP on health care and now we are in excess of 14 percent. And if this growth rate continues and our GDP does not show a remarkable growth itself, we are going to be at 18 to 19 percent by the end of the decade.

So whether we are in line with other countries or not, the problem is, we are not in line with our capacity to support it and increasingly there is a growing feeling that health care is pulling to much from other sectors of our system.

The CHAIRMAN. Might that not be the case in those other OECD countries?

Dr. ALTMAN. It is not quite as bad. As a matter of fact, it is not as bad. For example, Germany has been able to keep its health care as a percentage of its GNP, GDP at a little over 8.5 percent; England around 6 percent. Canada has grown a little. It is in the 9-percent range. No country is above 10 percent and every one of them have kept it much more in line with their income, except us.

So do not be misled, if you will, by the similarity of growth rates. It is like a family who lives in a fairly wealthy community. And, unfortunately, that particular family does not have the income and they can say, well, I am spending what my neighbors are spending. The problem is, they have the income to spend it. We just do not.

So it is coming out of other sectors of our economy, whether it is profits and wages or other sectors of the Federal Government or State Government. So it is a serious problem and, unfortunately, it is getting much worse.

Therefore, I applaud you, the committee, the President, anybody who is willing to look at it. Those of us who have been lamenting this issue for a long time, it is good to find that we now have kindred souls around the country who recognize this problem.

As I indicated, not only is it growing, but if you look at its growth rate, while it parallels that of inflation—and in Chart 2, I show the growth rate over time of health care—it is several percentage points, I mean 3 and 4 percentage points on average over inflation. Therefore, it is growing much faster than our growth in prices in general.

The other thing that I focus on in my testimony is that there are significant differences by sector. While we need to look at total health care, I think it is important not to lose sight of the differential growth rates for hospital spending, for physician care, for outpatient care, for home care and what would happen if we forced the total growth down to just CPI.

In order to do that and bring on line new services, such as home care and prescription drugs, you are going to have to have substantial reductions in other sectors, such as hospital care and physician care.

The CHAIRMAN. Dr. Altman, say that once again because Senator Chafee——

Dr. ALTMAN. Well, we have these various sectors. It is important to recognize that they are not growing in parallel. Our largest——

Senator CHAFEE. Sectors being doctors, hospitals?

Dr. ALTMAN. Hospital care, physician care, outpatient care, home care, etc.

The CHAIRMAN. Yes.

Dr. ALTMAN. I do not want us to get into a mindset that worries about controlling each sector separately. Other countries have done that. I think it is a mistake. But I also do not think we ought to gloss over the fact that we have this health care system and it really does matter how the various sectors grow.

We at PROPAC have played around—that is a technical term—with what would happen to different sectors as you try to slow down each one to, say, CPI. And in some areas it is easy to do. But if you are dealing with home care, which is growing by 33 to 35 percent——

The CHAIRMAN. This is your Chart 3?

Dr. ALTMAN. Right. And if you say that this growth rate has to slow down and since most of it is coming from utilization, you can have real problems.

The CHAIRMAN. You are saying you are going to have to cut to get to——

Dr. ALTMAN. Oh, there is no question that hospital care and physician care would have to be cut substantially in order to maintain a CPI growth rate while you have increases in home care, out patient care, prescription drugs, running 20 to 30 percent.

So hospitals, which have been growing around 8 percent over the period in the chart, but as I indicated, nursing homes have been

growing about 17 percent, home health services about 30 percent and outpatient care around 17 percent.

So in Chart 4 we begin to look at the issue of the relative contribution of price increases and volume increases. Back in the early 1970's when we had price controls in health care, most of the inflation was price driven. So price controls could have an impact on price inflation.

But as you look at Chart 4, you notice that in certain key areas much of the growth is volume driven, which makes it more difficult to control its rate of growth by simply controlling prices. I will have more to say about that.

The CHAIRMAN. But we notice that hospital inpatient volume goes down.

Dr. ALTMAN. Absolutely. And it is one of the important positive——

The CHAIRMAN. Is that not what we have been working at?

Dr. ALTMAN. Yes. Well, two things about that. Back in the 1970's the argument was, if we can only control the rate of admissions to hospitals and length of stay, all of our health care cost problems would go away. And, in fact, we have done that.

I think the U.S. should take tremendous, positive pride in the amount of innovation it has generated in terms of using alternative sites. No country comes close to us in terms of the change in their health system.

I know you are going to have a panel on international expenditures. Look at the admission rates in these other countries to hospitals—much higher than the United States. Look at the length of stay in other countries—much longer than we are.

We have made more changes in this country in terms of hospital care than any other country that I know of. Nevertheless, we have seen a tremendous proliferation in alternative ways of providing health care—outpatient care, home care, the like, new tests, new procedures, new activities.

The good thing is that it is done in a site that most Americans like. What is difficult is, to control those growth rates is going to be very difficult because they are all over the place. I mean, hospitals, there are 7,000 or 6,000 some odd hospitals and they are standing objects. You know where they are, you can deal with them—hundreds of thousands of physician visits, millions of physician visits, outpatient care and so on.

Therefore, talking about reducing the rate of growth is not going to be an easy job. I do not care whether it is the government or the private sector. I want to make this very clear. No mechanism really exists out there to control volume of outpatient care the way we were able to control inpatient care.

That does not mean we are not working on it. I am a strong believer in managed care as doing a better job in this area than I think those of us in the government, but it is a much more difficult job than trying to control inpatient services.

Senator CHAFEE. Mr. Chairman?

The CHAIRMAN. Sir.

Senator CHAFEE. Could we ask questions?

The CHAIRMAN. I think we must ask questions because this is the kind of thing we are here for.

Senator Rockefeller, good morning.
Senator ROCKEFELLER. Good morning.
The CHAIRMAN. Dr. Altman is just beginning.
Senator CHAFEE. Doctor, just referring to Chart 4 of yours, when it has volume on hospital inpatient, are those comparisons −8, −6, −4, that is compared to the prior year or the prior——
Dr. ALTMAN. That is right. It is that period in time. That is right. So it is the average.
Senator CHAFEE. So in 1998 it dropped—well, let us see, that is a prediction, is it not?
Dr. ALTMAN. Right. These are projections.
Basically, what we have seen is a continued drop in admissions and a drop in length of stay. Now the length of stay has leveled off. But the expectations are, even though our population is getting older slightly and is growing, we are just making less use of the hospitals. As I pointed out, I think that is a very good thing in general.
The CHAIRMAN. If I could just interject. Is that not what this committee and others asked you to do?
Dr. ALTMAN. Well, I mean, everyone said, as I said in the 1970's, it would be just wonderful if we could keep people out of the hospital and low and behold, we did.
Senator CHAFEE. Though the DRG's were a factor.
Dr. ALTMAN. Well, I think it is a lot of things. DRG's contributed. But we also have had a substantial change in the practice of medicine. I think American physicians should take a lot of credit for it. After all, they were the ones that did not put people in the hospital.
Senator CHAFEE. Yes. Like a hernia operation that is now an outpatient procedure and once upon a time was a 5-day stay, not long ago.
But your point, as I understand it, is that when you do this, it bulges out some other place.
Dr. ALTMAN. Yes.
The CHAIRMAN. In the outpatient or home care or something?
Dr. ALTMAN. That is right. And we always used to make the point how much more efficient it would be to do it on the outpatient side.
Unfortunately, when you do it on the outpatient side, you wind up often doing a lot more things than you did on the inpatient side. So when you look at the total and the growth in the total, it does not look very different than it did before.
I know Joe Newhouse is going to talk a lot about technology. We have developed the capacity to do a lot of new things. A lot of these new things can be done on a outpatient basis. So we have seen a shift from price inflation on the inpatient side, to volume inflation on the outpatient side.
Senator CHAFEE. I do not want to beat this to death, but just using the hernia operation as an example. In the old days you would go in the hospital—not so long ago, 20 years ago—somebody would go in the hospital, stay there 5 days and come out.
Dr. ALTMAN. Right.
Senator CHAFEE. Now you go, I presume——

Dr. ALTMAN. They could probably do it on the golf course and not even miss a stroke.

Senator CHAFEE. Okay. But then what else happens that you say inflates this?

Dr. ALTMAN. It is not so much that. We have developed ability to fix knees and elbows with orthoscopic surgery. And many more people are doing that. So your elbow bothers you and it affects your tennis shot, before you would live with the pain, now you have an operation.

You are much more likely to do testing—MRI's and CT scans if its an outpatient procedure. There are literally thousands of new procedures that have come on line. Since it is easy to do and it is not invasive and it does not require a hospitalization, there is a much more willingness on the part of both the physician and the patient to do it.

While we have benefited on the herniorraphy—and I recently had a hospital that took a week that 3 or 4 years ago would have taken 4 weeks—the important point I want to make is, we have done, as Senator Moynihan indicated, we did what we said we wanted to do in terms of reducing hospital, but we did not see the kind of reduction in health care spending that we thought would happen with that.

Therefore, I think we ought to be sanguine about our real ability to understand the difference forces in health care. The other point I want to make is——

The CHAIRMAN. Sanguine or cautious?

Dr. ALTMAN. Yes, right. We want to be very cautious and we should not be so smart that we really know what——

The CHAIRMAN. Should not be so sanguine.

Dr. ALTMAN. Yes, that is right.

The second thing is as you move toward volume growth. Volume on the outpatient side it is much more difficult to understand and control than volume on the inpatient side.

So as I move on, in my testimony I looked at hospital as a case in point. I will not stress what we found, except to make the following generalization. Of the growth in hospital spending, which averaged around 9.5 percent over the period from 1985 to 1991, about 43 percent was due to general inflation.

That meant that 57 percent was due to non-general inflation. When we break down what that means, the important point here is to emphasize that a third of that growth was the result of providing more procedures and treating to the same kind of patients—not more complex patients.

But mostly important is that for the same procedure—so even that herniorrhaphy that you talked about, even though you were in the hospital for fewer days, a lot more services were provided to you on average—not maybe you—than would have happened back in the good old days. Now some of these services are very worthwhile and you would not want to stop them.

But there is growing amount of medical literature that suggests a lot of these tests and procedures have really marginal impact on the outcome. Some would even say zero or negative impact.

Senator CHAFEE. Do you think that is being driven by malpractice?

Dr. ALTMAN. It is being driven by many forces. Changes in medical expectations. Malpractice has clearly some impact. Economics has some impact. I do not personally believe that if the malpractice issue was solved—when I say that, I do not even know what that means, since given the nature of our general legal system, it is not just going to go away—even if it was substantially reduced, it does not mean that all this pressure would go away.

Most physicians, I think, would acknowledge that. Although they would love to see malpractice disappear from the face of the earth.

The other thing I want to bring up about hospitals is that on average hospitals are labor-intensive institutions, although they are less labor intensive than they used to. About 54 percent of hospital expenses are labor costs. But other sectors of the health system are much more labor intensive.

Senator Moynihan has discussed at other meetings the theory of Bill Baumol, who is a professor at Princeton. His argument—and he did some really path breaking work in terms of trying to understand why the costs in the performing arts continues to rise, you know, if you need an actor and an actress or if you need four members of a quartet, whether it is singing or playing, you need them.

And, therefore, their wages go up and no amount of productivity is going to change that. Health care is not quite the same. There is a lot of technology. There is a lot of room for productivity.

But nevertheless—Senator Moynihan and I have talked about this before—I am persuaded that a labor-intensive industry just will never be able to quite equal a capital-intensive industry in terms of the productivity advances.

So here we are in a situation where I believe that Professor Baumol did have some insight. As I said, health care is different than the performing arts. Technology is much more important. Productivity is important. But it is something that we just should not ignore.

Now when we talk about bringing down the rate of growth in health care spending and hospital spending we have to acknowledge that while some of the aspects of health care are outside the control of the system itself, many of the issues involved are within the control of the hospitals and the providers.

And they can change. And they are changing. And I do believe we need to keep the economic pressure on them to change. There are different ways—combinations of people that do things, different types of trained people that do it. There are administrative savings that can come about. So that there is no question that we can see substantial savings.

I think the issue before this committee and before this country is how far we can push the system down before we begin to see quality and access deteriorations. I am here to tell you that I do not know that answer. What is more, if you will forgive me, I do not think any of us know that answer.

We know we need to push it down, and I have been as aggressive as anybody, I think, along with my colleagues at this table, about arguing for the need to push it back. Because I do not think our country can sustain the growth rates that we have had. But how far and how quickly is the real debate. I think my view would be,

we keep pushing at it and we watch how it bounces back, and then we push further.

So personally, I am not a big fan of an arbitrary number, although I think goals and targets are very important. But I do believe human beings ought to be in charge of that level as we move into these unchartered waters.

Senator ROCKEFELLER. Mr. Chairman, are we allowed to intervene?

The CHAIRMAN. Please. I think the witnesses would appreciate that.

Senator ROCKEFELLER. Okay. It just occurs to me that if we could just sort of declare a committee of the whole here and add on this table, we could probably get this whole thing done in about an hour. [Laughter.]

My question, Stuart, is this. I have always sort of viewed health care as a province of its own. It is like one of those interior provinces in China whose name you cannot pronounce and you all know about it, and we are learning about it. But because it has been left alone, because it is discreet, because it is elite, because it is complicated, it really has never been subject to the pressures that everything else in this country has to reduce costs.

Dr. ALTMAN. Absolutely. Yes. I agree.

Senator ROCKEFELLER. So your question as to whether a goal will cause it to change its behavior—a couple of observations, Mr. Chairman, and I apologize for this indulgence.

The CHAIRMAN. No, no, you must not. You have to ask your questions to get the answers you are looking for.

Senator ROCKEFELLER. There was a very interesting interpretation, as Dave Durenberger and I are fully aware of, of RBRVS in the last administration on the so-called behavioral offset. There were two problems—there was the asymmetrical transition and there was the behavioral offset. HCFA went along with the asymmetrical transition and they balked on the behavioral offset, which was based, as you know, on the theory that if you control the amount that physicians who do not do as well under RBRVS will get, that they will increase their volume.

HCFA wanted to make the assumption, which their actuaries could prove, that the volume would go up. I said, but, Gail Wilensky—but, Gail, you have been going around the country for the last 2 years trying to have a good relationship with physicians. This is the one way to destroy it. Because what you are assuming is that they are greedy.

You assume that by saying that they are going to change their behavior and increase their volume. Now, you may have the actuaries, but some of the politics of health care reform are out there. Why don't you wait a year? And if it is the case, let them prove it.

Dr. ALTMAN. Right.

Senator ROCKEFELLER. Then you can come back to them and the country will understand. Point number one. Point number two, it is a fact that in the first quarter of this year that health care expenditures generally in our system decreased by approximately one-half, with the government having done nothing—14 to 7 percent.

Now they are edging up a little bit again now. But for that first quarter, that is quite an extraordinary statement, that health care, this elite, discreet providence in interior China sort of inadvertently reduced its costs by one-half for a short period of time. I do not know what that figure is in the second quarter. That is my second point.

The third point. There remains these fascinating—Hillary Clinton talks about the costs of the same operations in different parts of Pennsylvania. I tend to talk about Groton, CT and Lynn, MA. There are five times as many angioplasties in Lynn, Massachusetts as in Groton, CT. As far as I know, they are very similar towns. And there has never, I suggest to you, never been any kind of scrutiny on the health care industry to explain these variations.

So that when you are talking about holding down costs or what the effects on zero growth on Medicare would be don't we have to admit indeed as you just said that this field has never really been subject—this trillion field has never been subject—to other than academic and intellectual and intramedical scrutiny and pressure.

And, therefore, you could say the chances for change in behavior are not large. But you could also argue, as the first quarter indicated, that they might be really quite substantial.

Dr. ALTMAN. I agree with you wholeheartedly. I do believe that this industry badly needs an economic discipline. While I am a little leery about jumping on any one-quarter bandwagon, I watched in the middle 1970's when Karen was in the government, the industry promised that voluntary compliance was all that was necessary to control total spending, and for a couple of years we stayed at the same percentage of GNP and everybody sort of fell asleep and did not worry about it.

Then we woke up 1 day and it had just shot right through 9 and 10 percent so fast we could not even count it. Then we saw a period during the 1980's when we were hailing the end of health care inflation, the DRG's would solve all the problems, and everybody said, well, we do not need to worry about this problem anymore. And then it just——

Senator ROCKEFELLER. But, Stuart—and again I apologize to the Chairman—your everybody was, at that point, still a very discreet, limited group of people who followed it, who understood it, and who watched it.

What I am suggesting is that in the next 6 or 8 months, this country is going to go through—because of media attention, political attention, industry attention, and provider attention—something which it has never been through before. The whole industry is going to be opened up like a clam for public attention.

Dr. ALTMAN. That is my fear, Senator. You have now been involved in health care for a long time and I do not think of you as a newcomer. I think it is more dangerous when a whole new group of people are never having had health care as an important issue are in front of it and making decisions and they pick up, whether it is USA Today or some other area day publication, and they say, well, health care costs are not going up anymore and, therefore, we do not need to worry about this problem.

What I am trying to say is that, those of us who have maybe been around for too long and maybe are a little too skeptical say,

please be careful. If the inherent inflationary pressures are still there, do not be lulled into a good quarter or a half or a year that somehow this problem has gone away.

The CHAIRMAN. On that very important note, I think we might turn to another one of those travelers who have been to Sing Chung and has returned with wonderful slides of the natives and their costumes and their behavior.

Before Dr. Davis begins, may I report in the spirit that these hearings will continue, that the first hypothesis of the day, which was expounded about 10:15 has been exploded by 10:45. The Journal of the American Medical Association has been published weekly since 1883, its first year of publication.

That was my hypothesis, incidentally, that they have been speeding up. Although, Dr. Newhouse, you say there are on-line reports of clinical tests. So you can pick up in Oslo something that happened in Auckland the next day.

Dr. NEWHOUSE. And it is peer reviewed before it gets put in the computer.

The CHAIRMAN. Okay. Dr. Davis, good morning. We have already talked about our various functions. Go right ahead.

I will say good morning to Senator Hatch who has just joined us.

Senator HATCH. Good morning.

STATEMENT OF KAREN DAVIS, PH.D., EXECUTIVE VICE PRESIDENT, THE COMMONWEALTH FUND, MEMBER, PHYSICIAN PAYMENT REVIEW COMMISSION, NEW YORK, NY

Dr. DAVIS. Good morning, Mr. Chairman and members of the committee. I am delighted to be here today. The Chairman mentioned and Dr. Altman mentioned that I serve on the Physician Payment Review Commission, which was established by the Congress in 1986 to advise it on the development of a new system of paying physicians under Medicare, which I am pleased to see is now in place.

I would like to emphasize that I am here today as an individual and not officially representing the Physician Payment Review Commission or The Commonwealth Fund where I am based.

I am pleased to be before you, too, Mr. Chairman, in your role here on the Senate Finance Committee, and particularly since I moved to New York a year ago and now one of your constituents. So I am delighted to be here today.

I do think the issue you have chosen to address today is extraordinarily important. Rising health care costs are a major problem for our Nation's economy, for our Federal budget, for State and local government budgets, and it is a problem for American families who face the consequences of large medical bills that are often inadequately covered by insurance.

Rising health care costs do make American products more expensive than those of competitors in other countries. We talked about the international experience. That gets translated when our firms try to compete with firms abroad. It affects the real earnings of workers.

One study by the Service Employees International Union found that if we had just held the growth in health care spending to the rate of growth of the Nation's economy, the gross domestic product

since 1980 and real wages would not have gone down if those savings in health costs had been pushed over into higher wages.

We are also concerned with the issues of universal health insurance coverage. I will not dwell on them today, but I do think that that is an over-arching goal of any effort to reform our health care system, as well as dealing with the problem of health care costs and trying to bring costs in line with growth in our Nation's economy.

Today I would like to focus on the problem of health care costs, review some of the trends that have happened over the last few years, some of the causes behind those trends, and also offer some positive notes of what has worked to try to slow growth in health care costs in terms of some of the strategies that are proposed for the future.

The Chairman said I would bring you travel slides; I have exhibits at the end of my testimony that I would like to refer to. Exhibit I demonstrates the very rapid growth in the health sector relative to the gross domestic product in the United States.

We spent 5.3 percent of our Nation's economy on health care in 1960. That has grown to 13.2 percent today. It will grow to 18.9 percent by the year 2000 if we fail to take any action to slow the growth in health care spending.

Just to translate that to individual terms, on a per person basis in 1991, we spent over $2,800 for every man, woman and child on health care in this country. What that average conceals are important variations that depend on people's health and depend on people's age.

If you go to the next chart, you find that 10 percent of Americans account for 72 percent of all health care outlays. That is fairly stable over a long period of time. At the other end of the spectrum, the healthiest 50 percent of Americans account for only 3 percent of health care spending.

The CHAIRMAN. And that, too, is stable over time.

Dr. DAVIS. Yes. If you were to convert that into per capita terms for the 10 percent who are the sickest in a recent year, we would be spending over $20,000 per person. For the 50 percent who are the healthiest, we spent less than $200 per person. So it can range from $200 to over $20,000 depending upon where you are on this chart.

I stress that because there are three important implications of this wide variation in health spending. First of all, there is an implication, if you are unlucky enough to be in the top 10 percent and unlucky enough not to have good health insurance, are uninsured, or have inadequate health insurance, you could be paying many of those bills yourself.

Second, it is important because of the tremendous incentives that it gives for health insurers and for capitated health plans to try to enroll people who are in this bottom 50 percent, who are averaging $200 a year, and avoid people who are the sickest who are averaging over $20,000 a year.

I think it also drives home the point that the money in the health care system is not driven by consumer demand. It is driven by serious, chronic or terminal illness. It is large health expendi-

tures for very sick people that account for most of our health care spending.

If I could turn to the next exhibit, it is also the case of how spending varies markedly by age. This is looking at the cost to employers. The Commonwealth Fund supported a study looking at these costs, that was recently released.

Using data from 1987 on health expenditures and projecting it to 1994, health expenses of older workers, men between the ages of 55 and 64, are 5.5 times as high a cost to employers as hiring a man between the ages of 18 and 24.

In our current system, where we experience rate health insurance coverage, it is a tremendous disincentive to hire or retain older workers when they are so much more costly than younger workers. I think we all heard recently that Mercedes is planning to start a plant in Alabama. It will have very young workers.

Community rating, unlike our current system of experienced rating, would make all firms on the same playing field by having the employers pay the same rate regardless of the age of their workers.

The second problem we found in this study is the high cost of those between the ages of 55 and 64 who are retired or not working, no longer in the labor force. We found their average expenses were $8,100 per person and only a small fraction of those costs were picked up by retiree health insurance.

Again, a plant like the Mercedes plant in Alabama is not going to have retirees for 40 years. So you have tremendous differences in cost to employers based on the age composition of their workers and based upon the ratio of retirees, particularly those under age 65 to active workers.

Senator CHAFEE. Mr. Chairman, I would note that this is the very group, if you look on Exhibit 3, the group from 55 to 64, that the administration proposes the general Treasury pick up their health insurance—80 percent of it—of retirees from the automotive industry, the steel industry and so forth.

I am not quite sure—and you mentioned, Dr. Davis that it was—for males an average $8,100 a piece.

Dr. DAVIS. If they are not working. These are people who are working and costing employers.

Senator CHAFEE. Oh, I see, if they are not working.

Dr. DAVIS. If you look at the group that would be covered under the administration's plan because they are not working, not married to someone who is working for a man between the ages of 55 and 64, their average costs are $8,100. Only 17 percent of that is picked up by an employer retiree health plan. So you have——

Senator CHAFEE. So when the administration, or we, do our calculations of what that proposal might cost, you believe we should start with $8,100 per male retiree.

Dr. DAVIS. We asked Lewis-VHI to estimate the cost, not quite at the administration's proposal since we did that before they actually had their proposal, but of lowering the age of Medicare to age 55. They estimated that it would cost in terms of government expenditures $9.7 billion. It would save employers about $4.5 billion.

So that was the estimate of the Lewis-VHI study, which did look at a somewhat different proposal than is included.

The CHAIRMAN. Send us that, won't you, so we can make it part of the record?

Dr. DAVIS. We would be happy to share that with the committee.

[The information appears in the appendix.]

The CHAIRMAN. I note that the female costs go down in that last category.

Dr. DAVIS. Right. For working women between the ages of 55 and 64, costs are 2½ times as high as for women between the ages of 18 and 24. There is a gradient with age, but it is not as sharp a gradient.

Part of it, certainly in the 18 to 34 age range has to do with the costs related to pregnancy. So in younger ages women are more costly than men. In older ages, women are less costly than men, less likely to have some of the serious, chronic health problems that drive up costs for older men.

The CHAIRMAN. Could I just say without interrupting too much that we may be on to one of the aspects that has certainly mystified me, which is the stagnation or decline in real wages over the last 30 years. If the real wages reflect cash payments, but not health care payments, that may be—we had otherwise no such experience in American history. A generation goes by with no increase in "income."

Dr. DAVIS. Turn to Exhibit 4. Just as Dr. Altman focused on the breakdown of the growth in health care costs for hospital spending, this exhibit presents the composition of increases in costs for all health care spending on personal health care services between 1990 and 1992. The overall message is similar to what Dr. Altman said.

About 15 percent of the increase in costs can be attributed to population growth or aging of the population; 33 percent can be attributed to general economic price inflation. That leaves over half of the increase in health spending per capita as a consequence of the fact that health care is simply going up faster than the rest of the economy—prices, use of services, use of more complex, more intensity, more expensive services.

The reasons behind this growth in the health sector can be attributed to many sources. Technology obviously plays a role, as we have discussed today. Much of that technology I would underscore does improve the quality of life—hip replacements enable older people to enjoy mobility and an improved quality of life and some technology extends life expectancy.

Some of the growth in costs can be attributed to increases in the supply of physicians. Malpractice and aging in any 1 year are relatively modest contributors to health care costs. The primary cost, in my view, is an open-ended health care financing system without either effective competition or regulation to restrain the growth in health care costs.

When physicians and hospitals in this country are free to set their own fees, decide what services people will have, with the assurance that insurance, the government or patients will foot the bill, it is not surprising that we have this type of explosive growth.

We have a fragmented system of paying for health care. Unlike other countries, we do not have a major role for the government in setting physician fees or controlling budgets throughout the entire

health care system. We do know there are some things that work to slow increases in health care costs.

Exhibit 5 presents comparisons between the Medicare program and health spending as a whole. As Dr. Altman stressed, in the late 1980's Medicare spending on hospital services with the introduction of the DRG prospective payment system has slowed and is now running below that of the Nation as a whole.

Exhibit 6 presents some very new data prepared by the physician payment review commission on growth and Medicare physician outlays and has found that since the new system in Medicare payment for physicians came into place in January of 1992, Medicare physician outlays have slowed down markedly.

They average 5.6 percent in the first 10 months of 1993, compared with 9.5 percent in the first 10 months of the previous year. That is something called a 12-month rolling average basis. You see the very dramatic slow down that has come about because of the work of this committee and Congress in designing a new system of payment physicians and one that also has an incentive for efficiency, that has an incentive for primary care, it reduces the incentive for doing tests, for doing specialized procedures, by changing those relative values, and tries to move the health care system toward constraint.

I think there is a question in the long term whether Medicare can maintain this performance when it is now paying at 65 percent of what full private insurance charges, if we constrain what Medicare pays without looking at what we are paying under the rest of the health care system.

Senator ROCKEFELLER. What percentage of cost of procedure are they paying?

Dr. DAVIS. I am saying that the Medicare fee——

Senator ROCKEFELLER. I am not talking——

Dr. DAVIS. Is 65 percent of what a physician would charge basically.

Senator ROCKEFELLER. No, that is not the question I am asking. I asked, what percentage of the cost of the procedure is Medicare payment. I am not talking about——

Dr. DAVIS. Well, Medicare picks up less than half of the health care bills of the elderly. Medicare disallows about 20 percent.

Senator ROCKEFELLER. I am not asking that question, Karen. I am just saying, you are saying 65 percent of private insurance charges. But what about the cost of actually carrying out the procedure. Do you have any figures on that?

Dr. DAVIS. It is hard to figure because the net difference in the physician side, unlike the hospital side, is physician income.

Senator ROCKEFELLER. Right.

Dr. DAVIS. So I do not know whether to count that as a cost or a profit. But basically half of all fees go to cover all physician's practices costs—to cover their nurses, their office rent, et cetera—and then the rest of the fee, the other half of the fee, goes toward net income of physicians.

Senator CHAFEE. In your Exhibit 5, going to the hospital services, historically Medicare was growing more rapidly than the hospitals. Then in 1985 suddenly it was reversed, the hospitals were more than Medicare. I wonder if that is not a result of cost shifting.

In other words we are not paying our proper bills under Medicare. The hospital costs are going up 5.4 percent as opposed to the previous 5-year period at 4.5 percent. Do you think that is because of cost shifting?

Dr. ALTMAN. Let me jump in here, because we have this deal. I talk about hospitals, she talks about physicians, and we never fight. I think you are right, Senator Chafee, that there has been a fair amount of cost shifting. PROPAC, estimated that not only for Medicare, but Medicaid underpayments, as well as uncompensated care, in 1991 amounted to $26 billion. That is $26 billion of extra billing was put onto the private side.

I would, if you will allow me, just to qualify your comment just a bit. Now it is not a question of whether Medicare underpaid. You might say that Medicare believes it is paying the appropriate amount and hospital costs are too high. That is a debatable issue. Maybe Medicare is paying a little less than it should.

But one of the things that we found is that even though Medicare pushed down on its rate of reimbursement, hospital costs just continued to grow as fast as they were growing before PPS and that is what led to this number. So you are right, there is a lot of cost shifting going on. Because Medicare, even though it is a major payer, it is not the only payer, and hospitals naturally go toward the deeper pocket.

Dr. DAVIS. I think we both agree thought that you have problems when you are squeezing on one part of the health care system and not another, whether it is cost shifting or in the case of physician services. Over time it leads to reduced access to physician services by Medicare beneficiaries of physicians that simply collect a lot more from non-elderly patients than they can get paid for Medicare.

I would just briefly like to say about Medicaid, that story has not been quite as promising. Medicaid expenditures have been accelerating very sharply in the last few years. They were going up at 18 percent in 1989, projected to go up to 30 percent in 1992. I serve on the Kaiser Commission——

The CHAIRMAN. Did you say 30?

Dr. DAVIS. Right, 13 percent in 1989, 18 percent in 1990, 27 percent in 1991 and 30 percent in 1992.

The CHAIRMAN. And we are going to go down to zero in 1999?

Dr. DAVIS. I am not commenting on that. But I do——

The CHAIRMAN. But in all fairness, that is a gaming of the system. Everybody is in on it. Every self-respecting Governor, and some not so self-respecting, are in on shafting the Federal Government on Medicaid.

Dr. DAVIS. I would state it perhaps a bit differently, but the Senator is right in the sense that the Kaiser Commission on the future of Medicaid has found a third of the growth over this period is new enrollment. Part of that mandated, but a lot of it just more disabled or poor people.

A third of it is medical price inflation and a third of it is because Medicaid spending is simply going up faster than even inflation in the health sector generally. That is partly the fiscal pressure that states have been under that have led them to use provider taxes and increase provider payment rates, but also legal challenges

under the Boren amendment, which have found that they are not paying hospitals and other providers sufficiently well. So I think that is a special situation.

I would like to say something briefly about administrative costs in Exhibit 7. You see that administrative costs in private insurance runs about 16.5 percent compared with about 2 percent in Medicare. I do not think that the overall cost problem is primarily an administrative cost problem, but I do think it adds to costs.

I do think we need to learn more though about what is going on in the private side, including our managed care and how much administrative costs of utilization review of having preferred provider plans, for example, having their own contracts, own methods of paying hospitals and physicians, and the kind of costs that come from that kind of a system, as well as the kinds of profits that are earned, for example, by managed care plans.

Well, I would like to say something positive, not just about what the problems are, but about what works. I mention in my testimony a book that I wrote with some colleagues at John Hopkins University a couple of years ago that looked over time at what had worked to slow down health care costs.

The Nixon Economic Stabilization Program did slow down spending in the health care system relative to the rest of the economy. As Dr. Altman mentioned, in the late 1970's when the Carter Administration proposed hospital cost containment and industry mounted a voluntary effort, health spending slowed relative to the rest of the economy.

And as you see in Exhibit 8, when Maryland instituted an all-payer rate setting system for hospitals in the mid-1970's, their costs were 25 percent higher than the national average. Today they are 14 percent below the national average in large part as a result of that system.

Senator DASCHLE. Mr. Chairman, could I go back to the Exhibit 7 question?

The CHAIRMAN. Would you, please?

Senator DASCHLE. Dr. Davis, I think this is a very revealing chart. I have a couple of questions. Does the percentage given private insurance include advertising and the kinds of promotional efforts that they undertake?

Dr. DAVIS. Yes. That includes not just claims administration, which is what you might think about.

Senator DASCHLE. Right.

Dr. DAVIS. But it includes advertising.

Senator DASCHLE. Marketing.

Dr. DAVIS. It includes commissions for sales people, which can be quite substantial for individual insurance in a small group. And it includes profits that those companies make.

Senator DASCHLE. That is the issue that is often raised as you try to compare apples and apples here. If we were to attempt to realistically compare administrative costs, what would that chart read?

Dr. DAVIS. I can supply that to you. The Congressional Research Service has actually put together a breakdown. It is roughly half, as I recall, that is really claims administration for small firms. It

varies by size of firm. But that is some information that we can get to you.

Dr. DAVIS. I think one point in some kinds of health plans, you might have increased marketing, you might have increased advertising, as plans try to attract certain people into their plan. So I would not just assume that is going to go away in all kinds of plans. Those that rely on competition among competing plans may have more pressure to advertise.

Senator DASCHLE. Is it accurate to say that even if one compares administrative costs in Medicare and Medicaid with private insurance costs that are only administrative, that Medicare and Medicaid administrative costs are lower?

Dr. DAVIS. Yes. If you looked, for example, at large firms, you would be talking more about 8 to 10 percent administrative costs and most of that is pure administrational. A lot of that is self-insuring large firms that are just hiring companies to pay the claims.

Senator DASCHLE. There is a myth out there that government programs are more bureaucratic, more administratively expensive and less efficient than private programs. It is important as we discuss our options that we try to confront this myth.

If we make decisions assuming that government is less efficient, more bureaucratic and entails higher administrative costs, we may be making some incorrect decisions in the allocation of significant resources.

It is important that we discuss this, and I would like to have more of an opportunity to evaluate apples and oranges, administrative costs in the private sector versus administrative costs in the government.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, sir.

Dr. Davis, I think at this point we were at your last chart and we would probably move on to your colleague here.

Senator CONRAD. Mr. Chairman, might I ask a question of this witness before we go on?

The CHAIRMAN. Of course, you may.

Senator CONRAD. I thank the Chairman.

One of the questions that I keep coming back to is looking at our expenditure now—14.6 percent of GDP on health care. I asked to have this chart prepared, which shows that the current course we are on, which takes us up to 18.9 percent of GDP by the year 2000.

The administration's plan actually takes us initially on a higher plain of cost relative to GDP and then supposedly levels off at 17.3 percent of GDP. That raises a series of questions in my mind. I would be very interested in your response.

One of the things people are saying is, we are at 14.6 percent of GDP and that is too much. Our competitors spend 10 percent for Canada, roughly that; less than 9 percent for Germany and Japan. And yet by the administration's own description, we are headed for 17.3 percent of GDP if this plan is enacted; 18.9 without it.

What is your reaction to that in terms of, is this sufficient cost control. Is 17 percent of GDP when we are 14.6 now, some twice as much as our competitors, the best we can do?

Dr. DAVIS. Well, I think Dr. Altman said, nobody can know for sure what the right number is. But I think to just comment a bit

on that chart, I think first of all it is, you have to face the fact that spending is likely to go up. As you cover 37 million uninsured, you are going to use services that they need, that they are not now getting.

So I think to see some blip up, you should not be alarmed by that. In terms of the period after that, I think the question is, what is the mechanism by which you get there, is it a unified approach, does it build on what we know works, like in the Medicare program with the prospective payment system; and then how quickly can you start slowing down a very large inch of growth.

The goal of trying to constrain spending to be in line with the overall economy is one that I share. Whether you could go down to the 8 percent that all European countries now average or whether we ought to be aiming for stabilization, I personally think aiming for stabilization is a more realistic near-term goal.

Senator CONRAD. Just a final question if I could, Mr. Chairman.

The CHAIRMAN. Please.

Senator CONRAD. When the administration says we are going to go to zero growth in Medicare and Medicaid, how realistic a prospect do you think that is?

Dr. DAVIS. Well, I am troubled by focusing on Medicare and Medicaid and not having similar kinds of provisions across the board. I am troubled by how quickly and how tight those controls are. CPI plus population growth, is much tighter than even GNP, which has always some real productivity, real economic growth built into it.

So it is a very tight constraint that is implemented very quickly from what I understand. And with mechanisms on the public side that we know work because we have a legislative vehicle by which to do it. Where it is not so clear, is what would really happen on the private side and whether Medicare would deteriorate relative to the private side is a source of concern.

Senator DURENBERGER. Mr. Chairman?

The CHAIRMAN. Senator Durenberger.

Senator DURENBERGER. I have been hesitating to interrupt because the collective wisdom of these three people might be even better than individualism, although I admire all three of them. But I could not let the question by my colleague from South Dakota go by without endorsing the question itself. I think it is a very important question about apples and apples and apples and oranges.

When, as Karen Davis indicated, we have an average administrative expense in the indemnity side, I guess that is the nonpublic side, perhaps you can expand it even to include some HMO's, to 16 percent, we have to remember, if that is an apple then the 30 and 40 percent figures that politicians throw around is a rotten orange or a rotten banana or something like that. So that was the first important point that both of you made.

I think the second is that we might look closely at the Medicare expenditures of 2 or 2.1 percent and find out if that includes all of the compliance expenses as well, and maybe Karen knows the answer to that.

Third, it would be important to note that Kaiser and people like that have average expenses that are approximately the same as those in Canada, somewhere in the 6 to 8 percent average range.

Fourth, I think the really critical issue here, and maybe each can respond to it, not now but at the end of the presentation, the issue of efficiency. However we characterize it; it is really critical.

Karen expressed an appropriate concern, a legitimate concern, about not taking too much out of a Medicare/Medicaid system. Because she realizes as do the doctors and hospitals in South Dakota and Minnesota, when you talk about which system works best, you talk about apples and apples. You talk to the rural doctors and the inner city doctors about the penalties on them for dealing with special populations or trying historically, particularly in low-cost communities to keep their costs down.

Ask the people from 32 States in this country who are already below the national average for Medicare and Medicaid how it feels to continue to be penalized by a government-run system for their efficiencies while money is being sent to the more profitable States.

Ask the elderly about the efficiency of a system in which they are forced to take Part A. They get an election, which they all take, to take Part B, but they do not get drugs. They do not get catastrophic. They do not get certain kinds of chronic care. Then they all spend $168 a month filling a gap. That is not an efficient system either.

You know, Mr. Chairman, I raised the issue last week with Mrs. Clinton about the disparity in the way government pays New York more for its risk contracts and Minnesota less—which is not to pick on New York, but it is just to say that my colleague from South Dakota touches something that everybody on this committee cares a lot about, that is how do we do efficiency and it is a whole lot more than 16 percent administration expenses versus 2 percent.

The CHAIRMAN. Could I just say on that, as Senator Durenberger suggested, we will get to this question when we have a general round.

Dr. DAVIS. If I could just respond to one thing specifically, though.

The CHAIRMAN. Yes, please.

Dr. DAVIS. You mentioned Kaiser's administrative costs as 6 to 8 percent, which I think is about right. It is important to remember Kaiser is a nonprofit HMO. If you look at the annual reports of publicly traded for profit HMO's, they average about 20 percent. So most of the major publicly-traded HMO's are not at the Kaiser rate.

The CHAIRMAN. By publicly traded, you mean for profit, owned by stockholders?

Dr. DAVIS. Right.

The CHAIRMAN. Well, we will get back to that. And we must. There is surely such a thing as too small an administrative cost; is there not?

Dr. ALTMAN. Absolutely.

The CHAIRMAN. I would just say, you have no administrative expenses if you just have a barrel full of money and say come and take what you think you deserve.

[The prepared statement of Dr. Davis appears in the appendix.]

The CHAIRMAN. Now, we have a traveler who has returned from Sing Chung, with the report that there is no there there. Dr. Newhouse has sent us his wonderful paper which is an iconoclastic

view of cost containment. Would you proceed, sir, just tell us what you think we ought to know.

STATEMENT OF JOSEPH P. NEWHOUSE, PH.D., JOHN D. MACARTHUR PROFESSOR OF HEALTH POLICY AND MANAGEMENT, HARVARD UNIVERSITY, BOSTON, MA

Dr. NEWHOUSE. Thank you, Senator, and thank you for inviting me today. I should say that I am also on the Physician Payment Review Commission and nothing I say should be construed to represent the Commission.

The CHAIRMAN. I think I also should establish for the record that PROPAC is not a K Street organization.

Dr. ALTMAN. I think that is right.

The CHAIRMAN. There are no contributions, other than to the public welfare.

Dr. ALTMAN. Right.

Dr. NEWHOUSE. I compliment the Chairman on his opening statement and the Senators on their questions. I think a lot of my message has already sunk in.

My first point in thinking about health care costs is to distinguish the level of spending at a point in time from its rate of growth. And a lot of our intuition that there is waste, that there is some kind of taint on medical spending, comes from thinking about the level because our intuition is better developed about that.

So I set out to try to explain the increase in real per person spending over time. I have a bunch of tables which I hope you may all have in front of you.

The CHAIRMAN. Have you given them out to us individually, the tables? We have all been following your other tables with great interest. You have tables in your paper.

Dr. NEWHOUSE. I do. Maybe I can refer to that, if that is what you have in front of you.

The CHAIRMAN. That is what we have in front of us. I am sorry.

Senator DASCHLE. Mr. Chairman, I do not think some of us have them.

The CHAIRMAN. All right. Let us get some papers down at the end. Our administrative expenses are kept very low in this committee.

Dr. NEWHOUSE. Great.

The CHAIRMAN. That is because we do not have a Xerox machine.

Dr. Newhouse, proceed.

Dr. NEWHOUSE. Are we looking now at the handout of tables or at the article, so I can refer to one or the other? Because I can do either.

The CHAIRMAN. Do both.

Dr. NEWHOUSE. All right. This is Exhibit 2 in the article.

The CHAIRMAN. Yes.

Dr. NEWHOUSE. I show here that in every decade since 1940 spending has gone up about 4 percent per person per year in real dollars, except for the 1960's when it went up 6.5 percent. That should not be surprising, given that in that decade we introduced Medicare and Medicaid.

The CHAIRMAN. So really from 1940, you had a 4 percent curve?

Dr. NEWHOUSE. Right.

The CHAIRMAN. Before that you did not have a lot of medicine or maybe even before that you had a depression.

Dr. NEWHOUSE. I think both are true.

The CHAIRMAN. The tables have arrived.

Dr. NEWHOUSE. One clue about what could be causing the increase in spending is its steadiness; it has gone on for roughly 50 years in this country. For something to cause an increase, there should be something that is changing. So we need to look at things that are changing. That is what I am going to come to.

But the second table shows a similar data from the G-7. There have been some other numbers from the OECD. I do not know about the numbers Bill Baumol sent you because my numbers are considerably higher than his 1 percent. (His 1 percent may refer to real price and mine to real spending.) This is the second page of the table.

The CHAIRMAN. Yes, we have that right here.

Dr. NEWHOUSE. What you see there is data from a 30-year period, the OECD numbers start in 1960. Everybody's going up at more or less the same rate, except the Japanese who are going up faster largely because they had a tremendous growth rate in the 1960's.

The CHAIRMAN. And then they squeezed that down, did they not?

Dr. NEWHOUSE. Well, their economy also grew at 11 percent per year in real terms in the 1960's, which makes it easier to accommodate health care cost growth, which is the point Stuart made.

But in any event, whatever is causing the increases here in the United States to be causing them elsewhere. So some favorite explanations that have to do with idiosyncrasies of the U.S. system, I tended to discard.

What I did for methodology was to use a methodology that Ed Dennison at the Brookings Institution used for the economy as a whole when he tried to explain growth in the economy. He discovered that growth in the labor force, growth in capital stock could not seem to explain it.

The CHAIRMAN. And it was human capital.

Dr. NEWHOUSE. Human capital and technology more generally.

The CHAIRMAN. And more generally. That was done in the 1960's?

Dr. NEWHOUSE. Yes, and 1970's.

The CHAIRMAN. And the 1970's, yes.

Dr. NEWHOUSE. Now, on the third page of the handout I have some factors that I looked at that could account for this increase. Many of these have been mentioned already this morning and I will not dwell on them in any detail.

We can quantify the effects for some of them better than for others. The elderly, for example, spend three times as much as the non-elderly, but if you work through the arithmetic about how their numbers grew, it turns out that they can only account for a 7 percent increase and we are trying to explain something that grew by a factor of 8.

The CHAIRMAN. Can you find a table for us on this? We have your factors examined.

Dr. NEWHOUSE. That is just in the text of the article.

The CHAIRMAN. All right.

Dr. NEWHOUSE. Let me skip on to say that there is a traditional decomposition of the spending in this field. Indeed, Stuart did it for you here. I am quarreling with that decomposition. In fact, I think there is a problem with the Federal statistical system in this decomposition.

Traditionally, we have said spending growth is due to four things. The first two I have no quarrel with at all—one is general inflation and one is population growth. Then the last two are increases in price above general inflation in medical care; and then there is a residual category, which we call service, volume, and intensity increases.

My point is that I do not think we have a good measure of how much medical care prices have gone up. We tend to use the medical care consumer price index. I go into the problems with this in my paper. But let me just give you one.

If we wanted to know how the price of say bananas has gone up over time, we go into a supermarket and we would price a banana.

In medical care, I think the natural thing to ask is how is the price of a treatment for a given problem gone up, somehow adjusted for quality. The somehow is a problem, but let me put that aside.

If I have a heart attack, how much is it costing to treat me? The problem with the price indexes we have is that we price things like the price of a day in the hospital; the price of a visit to the doctor.

Now if the length of stay in a hospital changes and falls as it has, that is probably a fall in the price of treating my heart attack. But it does not register in the CPI because they are just pricing a day. In fact, it may go the other way in the CPI because the average sickness level in the hospital may go up. So they may charge more per day.

Similarly, if my cataract operation is now no longer in the hospital, but is done on an outpatient basis, and may be cheaper, that is not registered either. And if my ulcer is treated by a drug rather than by surgery, that is not registered just because of the way the index is constructed.

So I conclude for this and other reasons that we really do not know how much of this increase is inflation, in the sense that the economist would use that term to mean a pure price increase, and how much is a volume increase.

In any event, my bottom line after looking at all these factors is that there is a big residual we cannot explain. My belief is that the changed capabilities of medicine account for the bulk of that residual. But since I cannot measure those capabilities with any number, I cannot rigorously prove it.

I could just say if it is not that, then what in the world is it because I think I have looked at most of the things that——

The CHAIRMAN. It could be greed. We keep hearing that.

Dr. NEWHOUSE. It could be greed. But greed should have been there in 1950 and 1960 and so forth.

Senator CHAFEE. Greed is a later occurrence in our society? Post-1960?

The CHAIRMAN. No, 1980's, I remember it. [Laughter.]

Senator CHAFEE. Along came greed.

Dr. NEWHOUSE. Economists would not deny the importance of greed. But let me go on.

Let me give you a little bit of supporting evidence for the notion that changed capabilities could be what is behind things. One is that the increase in hospital spending has not been in days at all. As has been mentioned, days per thousand have gone down.

But things like aging and the growth of income and so forth would tend to increase days. The increase has all been in the dollars per stay, which fits my story. As is mentioned in Karen's testimony, the rate of increase in HMO's is the same, as best we know it, as the rate of increase in fee for service. That is a tricky comparison because it is hard to hold populations constant and hard to hold benefit composition constant.

But as best we know it, the growth rate is about the same. And as I mentioned, the growth rates of other countries are about the same. Technology would fit all of that. I then turn to a more controversial issue, is this how people have wanted to spend their money. I mean, was this increase a good thing or a bad thing? This is where the iconoclastic comes into my title.

There is not much evidence here. Unlike the evidence that there is a fair amount of waste in the level, there is not much evidence about the increase. But the fact that other country's rates have gone up and that the HMO rates have gone up at about the same rate suggest to me that it is possible that people have, in fact, wanted this. This is, if confronted with the question: would you pay more on your premium to get these additional capabilities, the answer generally would be yes.

Now all that having been said, Stuart's initial point is quite right—that as our share of GDP goes up, we are pulling resources into medical care, from presumably more and more valued uses. It gets ever more painful, in effect, to put more and more resources into medical care.

Is that what we want to do and how do we decide what we spend? Well, that is what the committee, I suspect, will be wrestling with, not only in this session of Congress, but for many sessions to come.

Let me make a couple of points in closing in anticipation of what has been said or what might be asked. One is a point on international competitiveness and health care costs. I am very skeptical of the view that health care costs have anything to do with our international competitiveness. I have two reasons for believing that.

First, most economists, I think, believe that the incidence of increased health care costs, falls on worker's wages. That is, if you think about OPM setting compensation for Federal employees for next year, they will look at health care costs and make a projection of what has happened there.

If those costs are higher or lower, they may adjust what they are recommending for an average rate of increase accordingly. I am sure that——

The CHAIRMAN. Our international competitiveness, we have had flat wages for 20 years and higher health costs.

Dr. NEWHOUSE. Right.

The CHAIRMAN. The higher health costs just lower wage costs.

Dr. NEWHOUSE. Yes.

The CHAIRMAN. It is a wash.

Dr. NEWHOUSE. That is right. That is exactly right. That is my point. What affects us with competitiveness, however, is presumably our prices and the fact that the employees take their compensation in the form of health care rather than cash does not much affect our competitiveness.

Even if you did not believe that, and you believed that, in fact, prices were going up faster in this country because health care costs were going up faster, that should also not affect our competitiveness in the usual sense of that term because exchange rates should adjust for that.

The exchange rate adjustment would affect different industries differently. But overall the competitiveness of our economy should not be much affected. So there are reasons to be concerned about increases in health care costs; then lower cash wages. They take resources that we could use for other things. But I do not think that we should worry about it for reasons of competitiveness.

The other issue that I might comment on is a big imponderable for me. It has come up already this morning. When we take this industry that has been growing at 4 percent per year for five decades down to whatever we take it down to, the issue is what will be cut. And there is an implicit assumption, sometimes explicit, I think, (a) that there is a lot of waste out there, and we can produce evidence that supports that; and (b) that when we do these cuts, that is what will go.

Now there is a couple of straws in the wind that give me some misgivings about that. One is, there is a natural experiment in the United States of a sort, in that different areas have very different incidences of procedures. And, indeed, that is some of the evidence that there is waste.

But a surprising finding out of the research is that when physicians go in and look at and assess what is appropriate and what is inappropriate that the high rate areas and the low rate areas seem to have the same percentage appropriate and the same percentage inappropriate.

Now if——

The CHAIRMAN. Dr. Altman is agreeing.

Dr. ALTMAN. yes, that is right.

The CHAIRMAN. There is some literature on this?

Dr. NEWHOUSE. There is some literature, yes.

Now I would have more comfort that the cuts would all be waste if I saw the percentage inappropriate going up in the high rate areas.

The second——

Senator CHAFEE. Well, see if I understand that.

The CHAIRMAN. Let us all see if we all understand that.

Dr. NEWHOUSE. Let me make one final related point, which is that when these studies have been done in other countries that are also—similarly high inappropriateness rates have been found. So when countries that are spending absolutely less than we do and by a lot—we spend a lot more, as you know, than other countries—the other countries are not necessarily having high rates of appropriate service.

Senator CHAFEE. Well, we have all heard, I suppose, former Secretary Califano give his talk about his work with Chrysler and the attempt to bring down the usage and see what is appropriate and what is not; and that certain—if the employees, the retirees of Chrysler go to a certain hospital in Detroit, the chances are that there will be an operation on the individual's foot that is inappropriate to Califano. And by sending them elsewhere the operations were greatly reduced.

Now, as I understand—then Senator Rockefeller, I believe, has the illustration of New London versus somebody else. What you are saying is, where there is a lower rate of the procedure versus another section of the country where there is a very high rate, that the inappropriateness percentage is the same for both.

Dr. NEWHOUSE. Yes, that is what I am saying. And I have no quarrel with Joe Califano——

The CHAIRMAN. Well, are you not saying then that there are two different populations?

Dr. NEWHOUSE. These are both Medicare populations. These are all Medicare populations. So it is not a population——

The CHAIRMAN. No, but in terms of what ails them.

Dr. NEWHOUSE. Oh, these are typically for certain procedures. So for a given procedure, I go look at the medical record and then I make a judgment about whether this procedure was appropriate or inappropriate.

The CHAIRMAN. You have twice as many operations in this city as against that city.

Dr. NEWHOUSE. Right.

The CHAIRMAN. And peer review says inappropriateness is about the same level in both cases. It must mean there is more need for that operation.

Dr. NEWHOUSE. Well, that is certainly an inference one could make.

Senator CHAFEE. What other inferences are there?

Dr. NEWHOUSE. Well, what other inferences? Why would you not conclude that peer review turns out just a certain percentage of inappropriateness, period.

The CHAIRMAN. That is a fair point.

Senator CHAFEE. Yes, and maybe they have a graph.

Dr. NEWHOUSE. I mean, I think that is really what is going on.

Senator CHAFEE. Always find 12 percent inappropriateness.

Dr. NEWHOUSE. By the way, these percentages are high. So Joe Califano's statement that he can get some costs down is something I agree with. These numbers support that statement, too.

The CHAIRMAN. How high? Give me a number, please.

Dr. NEWHOUSE. Typically 20 to 25 percent for the procedures that have been looked at. But the procedures that have been looked at I do not think are randomly selected procedures. They are procedures that people pick because they thought they might find high inappropriate rates there.

Dr. DAVIS. I do not disagree with Dr. Newhouse's basic argument that when we try to cut costs we do not necessarily wind up cutting the inappropriate. On the other hand, there are studies, such as one we supported in New York State that looked at inappropriate specialized cardiac procedures using clinical criteria.

In New York State, which has had a very extensive review and system of setting up requirements for those types of complicated procedures, has had much lower inappropriate specialized cardiac care services than other areas.

So I think there are ways of trying to get at inappropriate use that have been found to work. But I do not quarrel with his basic point that a lot of meat cleaver approaches do not differentiate appropriate and inappropriate use.

Some work that he and his colleagues at Rand did on cost sharing, for example, found that when people have to pay out of pocket they get less care. But that is not a good way of sorting out appropriate and inappropriate use, that it reduced appropriate care among those who had to pay as well as unnecessary care.

The CHAIRMAN. Could I say to the Senators, we are going to have a hearing on this subject, too. Could I also say that anybody who wants a panel on anything, let us know and we will do it.

Dr. Newhouse, why don't you continue? A few more things we were not prepared to hear and then we will ask questions of all of you.

Dr. NEWHOUSE. I think I have finished. Thank you.

[The prepared statement of Dr. Newhouse appears in the appendix.]

The CHAIRMAN. Your point is then that the residual accounts for this 4 percent because there is better medicine out there?

Dr. NEWHOUSE. Or at least different medicine. But I would think better also yes.

Now exactly what percentage this accounts for is a little murky because it is a residual. Stuart and PROPAC have tried to make an estimate each year of how much Part A costs go up from technological change. And the numbers as I read them usually come out around 1 percent of Part A costs. But they go at it trying to identify specific technologies that have spread and count the costs from those.

The CHAIRMAN. Is that 1 percent in terms of a total of 5 percent?

Dr. ALTMAN. We are looking at technologies that are not ingrained in the DRG system yet. So we are looking at what hospitals need in terms of extra payments beyond what the DRG system is already giving them. So 1 percent is not, I think——

Dr. NEWHOUSE. It is not the same——

Dr. ALTMAN. It is not the same apples. I think the number is probably closer to 2 to 3 percent if you added them altogether.

Dr. NEWHOUSE. Let me give you an example of how new technology just is not new machines, it just is not new drugs and it is not even just new procedures. Between 1981 and 1985 in this country coronary by-pass surgery among the over 75 tripled.

Now you can say, wow, doctors are exploiting the Federal Treasury. But it also tripled in Canada, although Canada has half the level that we do. But my interpretation of that, largely because it did triple in Canada, is that what is going on here is that doctors were getting more comfortable doing this procedure among the very old and they were probably getting better results. I have not seen those numbers, but that is a form of what I mean by technological change.

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If you just went around and counted what we were doing that we new, you would have said, well, we have done by-pass surgery for many years before that. It really is not new. But in a sense it was new among the over 75.

The CHAIRMAN. Yes.

Dr. ALTMAN. Let me jump in on this.

The CHAIRMAN. Dr. Altman?

Dr. ALTMAN. I think Joe has touched on a very important point that I would like to emphasize in a slightly different way.

I know where I am and I think they may share this. Clearly, as we begin to put an economic discipline into health care as Senator Rockefeller has suggested there are two areas that have always been brought up on the screen as areas that have to go first.

One is unnecessary administrative costs; and two are unnecessary and inappropriate procedures. And everyone feels good about that. Boy, if we can just do those things, we get rid of something we do not want and we reduce costs with quality and access not affected.

All of us want to see that. But my expectation is, as we bring about this economic discipline you have to expect a lot more changes to occur than just losing those two unimportant aspects of the health system.

Now there were two words that I never learned in economic training. One is greed and one is immoral. Economists do not know what that means. Now it is probably some defect in our education. But, you know, there is no question that if, all of a sudden, squeeze the amount of money in health care is reduced, wages are going to go up less rapidly, employment is going to go up less rapidly, profits are going to go up less rapidly.

Whether that is greed or not, it depends on whether they are making more money than I am. But there is no question that the whole balloon will just compress. And I think that is appropriate given the fact that this balloon has grown much faster than other sectors.

The second thing is this whole area that I talked about in my testimony and I didn't get a chance to talk about.

The CHAIRMAN. Dr. Altman, I am going to have to say that that image escapes me, the compression of a balloon. Say it again.

Dr. ALTMAN. Well, we have taken the health care sector and we have continued to flow financial air into it, almost unconstrained. And it has been growing relative—excuse the analogy, maybe it is not a good one—to the balloons of the other sectors of our economy, which are being forced to contract to send the air into the health balloon.

What I am saying is, that as you—we need to take some of that financial air out of that balloon and when we do that, it will not only reduce administrative costs and reduce inappropriate procedures, but I believe it will effectively reduce the whole sector as wages will go up less rapidly or could go down. Employment will go up less rapidly or could go down. Some needed care also might be cut back.

But the one area we have not talked about, which I think is a big drag on our health system, is the amount of excess capacity

that sits out there. Thirty-five percent of our hospitals are vacant in any given day. In southern California——

The CHAIRMAN. Thirty-five percent of beds.

Dr. ALTMAN. Beds.

The CHAIRMAN. Not hospitals.

Dr. ALTMAN. Fifty percent—well, that is true. Sorry.

Senator DASCHLE. Dr. Altman, can you calculate excess capacity in technology?

Dr. ALTMAN. Again, there is no question that when we look at the amount of technology we have available per person, it is so much higher than any other country. Then we have to fall back on this issue of whether that extra MRI procedure was needed or not.

But also we have to say how high a price does each MRI test have to be to generate the return for the people that invested in that. So it is not only the inappropriateness of the use, but it is also that we have to generate all this extra money to keep those extra beds and the extra technology and the extra people that run them going.

The issue before the House, I think, is, can we expect this extra availability of services and beds and so on to contract by itself or do we need some external forces. One of the underlying battlegrounds in this competition versus regulation is, if we pull the money out and these competitive health plans do battle, then the capacity will shrink.

On the other side, there is a group of somewhat less vocal people today that used to be more vocal that believe ultimately we need some over arching community or State or national group to help compress that. Because the view that I think both of us share, whether you are on the regulation or the competition, we will never get that blue line down there until we bring that excess or large capacity out of it.

If Senator Conrad had been here, I would say if we maintain that capacity, we cannot see the blue line coming down, unless we are prepared to do real serious negative cuts in services.

The CHAIRMAN. Could I just make a point before turning to other Senators? The Federal Government first got involved in health care through hospital construction; is that not about right?

Dr. ALTMAN. Yes.

The CHAIRMAN. Hill-Burton.

Dr. ALTMAN. Aside from merchant seamen and——

The CHAIRMAN. Yes, we have some merchant seamen from the 18th century, the fever hospitals.

And we subsidize the construction of hospitals, even though 35 percent of beds are empty in any given day.

Dr. ALTMAN. Now, that came about for some very good reasons. One is that have the lowest admission rate and length of stay in the world. And even though we have been pulling beds off the market, the number of beds are falling, our use of those beds are falling faster. So the occupancy rate is actually being, still continuing to fall.

Senator DASCHLE. That was the point of my earlier question. If we know what the excess capacity of beds are, and what the excess capacity of other kinds of facilities are, to what degree do we know

what the excess capacity of technology is? Because that is really what is driving this.

It is no secret that the proliferation has had to do with the incredible array of technological responses to health care that exist today. But we have no idea of how much technology is enough.

Dr. DAVIS. I think the Senator is right, that it is duplication of the technology. We have not had a regionalized approach to health care. I think even if you think about competing plans, they are all going to want their own MRI's, their own systems of care.

So the question of whether you can lower costs by having fewer of these specialized facilities that serve a large population is a very real one.

The other point that I would make is on the physician supply side. I know many rural areas still have a problem with having primary care physicians. Overall we are certainly continuing to train more and more physicians and that, too, fuels this health care cost inflation because physicians are trained to do things and they are out there trying to earn an income and there are patients with needs and things to identify that they can do.

So just as the bed capacity contributes to this cost, I do think training at the rate we have been training physicians is a problem for controlling costs.

Dr. NEWHOUSE. Let me give you an example of why it is so hard to say what the excess capacity in technology is. About 10 years or so ago now my then 12-year-old son was playing in a soccer game on Saturday and he was kicked in the head. He was prostate for about half a minute, then he got up and came out for a while, but then he went back in the soccer game. We did not think anything more about it.

On Monday the school called and the school said, Eric is feeling sleepy and we are sending him home. What does this mean? I am not sure what quite inspired me, but I called a neurologist friend and I said, what is going on. The neurologist said, well, it is very unlikely, but your son could have a subdural hematoma.

And if he has that, that could be fatal. You better go in to UCLA and get a CAT scan. So my wife and Eric trundled him off to UCLA. The resident, it turned out, did not want to do the CAT scan, did not think after taking the history it was necessary, and everything turned out to be fine. Eric did not, in fact, get the CAT scan.

Senator CHAFEE. He did or did not have it?

Dr. NEWHOUSE. Did not. But the point is, Senator, what probability of something does something have to be at to justify the CAT scan. I do not think anybody can really say, you know, do not do it if it is 2 percent, 3 percent. Even if they could, you think about a regulation out there, I mean, anybody can say, well, in my opinion it is——

The CHAIRMAN. Is there anybody who would go back to that hospital having taken their 12-year-old in and the doctor said, he is probably not going to die and to find out for sure you just put him through a machine. Would you not all be upset?

Dr. DAVIS. In that situation, UCLA would have made more money if they had done the tests. I think one of the things to think about in a managed care world is that a plan is being paid on a

capitated basis, will make more money if they do not do the test. So that the dangers become that we move toward under utilization when it is appropriate, whereas in a fee-for-service system we obviously have incentive for over utilization.

I think having a genuine choice between those two kinds of system is very important for people so that they can sort out the kind of system, and that they understand the incentives that are present in that kind of a plan.

Senator DASCHLE. So as not to miss the point here, it seems to me like your choice was not only to go to UCLA. You may have gone to 30 other facilities in Los Angeles. It was recommended to go to UCLA.

But the question really is, do you need a choice of 30 CAT scans in Los Angeles, and are all 30 being utilized? To what degree is this excess capacity generating the additional cost. What if your choice was only two CAT scans in California but they were being used 24 hours a day. Would that be a cost efficiency factor that we would want to figure into the overall cost of the growth of the health care?

Senator ROCKEFELLER. Mr. Chairman, can I add two points?

The CHAIRMAN. Please.

Senator ROCKEFELLER. One, a question that I want Dr. Newhouse to think about. Then a comment I want to make to Karen. Your article is iconoclastic and you do discount, from my point of view, many of the things that most people who look at health care believe contributes to out of control health care costs.

Let me just ask you the question. Do you think that the rate of growth in health care spending has brought enough benefits to justify the continuation of that rate of growth? Let me just give you a chance to think about that.

You brought up the question of, if we ratchet down money or we have gatekeepers or pay a capitated rate, et cetera, the incentive is on the doctor to intervene early, but maybe, the doctor will do too little.

I think this is an incredibly important point to dig into because there is an automatic other side to the statement that we get all that we need today. You could say that we get more than we need. Well, at least you can say that we get all that we need. Nobody could argue with that.

Therefore, the other side of the argument becomes, if we begin, through gatekeepers or capitated payment rates or other preventive incentives, to decrease amounts available, there is the assumption that services needed will not be given.

I really need to challenge that theoretical presumption, and ask the three of you to respond to that, because it is so easily said, it is so logically fungible, that I think it is a devastating potential argument against the whole concept of restraining the growth of health care. Not just can you prove that the benefits justify that we keep on going the rate we have. But that by doing something counter to what we are now doing, that we are actually going to end up depriving people, giving them less care.

Now I do not start out believing that. I think that if we have gatekeepers and that there are incentives for doctors to intervene in people's lives and make sure they have had prostate exams and

mammograms and well-baby checkups and all the rest of that, that is one a very good thing.

Second, I think all of us would agree that we are doing too much medicine—not just MRI's but too much in general—that Americans assume there is no limit. But then to say if there is a limit, even if the limit is a mixture of incentives, I do not make the assumption or I choose not to make the sole assumption that it will deprive us of care that we, in fact, need.

The CHAIRMAN. All right. Senator Rockefeller asked if each of our distinguished witnesses would respond. Dr. Davis, I think you were asked first.

Dr. DAVIS. You know, from a theoretical point of view, a plan that is paid a fixed amount of money, like a health maintenance organization, has an incentive not to provide services, even if they are needed; and certainly not to provide inappropriate services.

In a fee-for-service system, the incentive is to provide more services. What do we know in practice? First of all, with regard to health maintenance organizations, we do know that they do a slightly better job at getting preventive services to people.

We did a survey of women's health and found that——

The CHAIRMAN. Preventive is what you said.

Dr. DAVIS. That women enrolled in health maintenance organizations had higher rates of mammograms and pap smears, so that they were getting the appropriate preventive care and there was under use of that in the fee-for-service system.

We also found that women in those plans were less likely to rate their physician as excellent. We are currently, mounting a survey to look at this issue of access to specialists. Whether if you have a very serious chronically ill patient, or whether a health maintenance organization can, and will, give the full array of services for those. Those patients, I think, are the issue.

I started off by talking about the fact that 10 percent of Americans account for 72 percent of all health care costs or over $20,000 a person. So my concerns about health maintenance organizations is how well they work for chronically ill, complex patients and whether they will have a disincentive (1) to enroll them at all; and (2) to serve them well when they are in there.

I think it is an unknown. What I am saying is that it is not that——

Senator ROCKEFELLER. But you are also saying a health maintenance organization, in today's context, has to set itself up to attract customers as being the opposite of the fee-for-service system (i.e., come in and save money).

But what if you have an overall system in which incentives are built in for preventive care as well as financial incentives to keep the money if my health care ends up less than you expected per year? If you put HMO's into a more disciplined health care system, does the motivation not change just a little bit?

They may not have to be quite as opposite. They might not be able to provide as, you know, those customer unfriendly doctors or whatever, as easily as they can now.

Dr. DAVIS. I think we are going to have to differentiate among different types of HMO's. If you look at Kaiser, it is a nonprofit

group and staff model HMO. It has lower costs and good quality care.

There was one study again that Dr. Newhouse and his colleagues at Rand that found in one HMO low-income people did not fair very well in that HMO and their health status was worse. I think we are going to have to differentiate what kind of a plan it is, how does it pay its physicians and what is its track record. I do not think we are going to be able to lump them altogether.

There is a very real danger there of under use. We have had that experience with some Medicaid HMO's.

Senator ROCKEFELLER. But the difference is, there has not been an emphasis on quality as there would be under the President's plan. Quality information would be pumped to the consumer, comparing HMO's with other plans, providing information about its previous behavior, and about what it currently appears to be doing in terms of friendliness.

Dr. DAVIS. I think that is a very good point. In fact, our Foundation is proposing to support——

Senator ROCKEFELLER. That is what alliances are for, to tell people about those deficiencies if they exist and to recommend they not go there. Is that not right?

Dr. DAVIS. Right. And we are very much committed to that. I think that is an important feature. The question is: What is the state of the art currently for providing quality information and letting people make informed choices on the basis of that? How quickly can you really rely on that as a mechanism?

We personally are supporting research in this area to develop quality indicators on which to compare maintenance organizations. There are organizations out there like the National Committee on Quality Assurance who are starting to accredit HMO's and develop a set of 60 clinical indicators so you can differentiate among plans.

I am trying to say, it is not quite yet there in order to be able to attract that kind of performance. So I think being careful about how quickly you go to that and being careful about how many choices people are given, and whether that is the only choice. Then in some places like in Medicaid where they said everybody has to go into this HMO, you have not gotten good results.

So those are the caveats I am raising. I am not differentiating the desirability of it.

Senator CHAFEE. Mr. Chairman, is that complete?

The CHAIRMAN. Dr. Altman and Dr. Newhouse.

Dr. ALTMAN. I just wanted to align myself in one part with Karen. But I think in support of Senator Rockefeller as well.

Karen made the point at the end that it is very important and I would share it, that we maintain a strong and vibrant fee-for-service system as well as a more integrated plan.

I know both in the President's bill and Senator Chafee's bill that is maintained. I think it is a strength. In the beginning it was the HMO that was testing the fee-for-service system and forcing it to a new standard.

I think in the new world that we are heading into, I think it may be the fee-for-service system that will keep the managed care world honest and good competition between them is very important.

I would just ask you as you go through this legislative process, you do not penalize the fee-for-service system too much and put too much of a load on it. That is unfair. I think it would be better for us all that we have two evenly matched competitive systems out there and let us see which does a better job.

The CHAIRMAN. A nice point. Fee-for-service becomes your quality control.

Dr. ALTMAN. Absolutely.

The CHAIRMAN. Dr. Newhouse, to Senator Rockefeller.

Dr. NEWHOUSE. Well, let me stay on this point, because this discussion reflects, I think, the way we seem to think about these as sort of pure systems. Over here, pure fee-for-service; and over here, pure what in our jargon we call capitation or paying a lump sum per person per month.

In my view, we have an inherent trade off of evils here. The capitation system gives the maximum incentive to be efficient. If capitated I do not order the unnecessary scan. It also gives the maximum incentive to shun the bad risk, to say uh-oh here comes trouble if a person with a chronic disease walks in the door and to try to persuade that person during the next open season to go down the block. The fee-for-service system mitigates both of those—less efficient, less incentive to select.

My own view, this gets into the rather arcane subject of risk adjustment that you will probably get into, is that we are probably going to have to experiment with some mixtures of these, where we actually pay partly on the basis of capitation, partly on the basis of fee-for-service. If you will, fee-for-service becomes its own kind of risk adjustment.

But this is an area that really is a frontier. At the moment, all I would like you to see, is that we may have to do some experimentation and we may want to think about things that are not pure cultures of either.

The CHAIRMAN. Thank you.

Senator Chafee?

Senator CHAFEE. I would just like to ask a couple of quick questions. Dr. Altman talked about the excess capacity in hospital beds. I think you said it might be as high as 25 percent.

Dr. ALTMAN. Thirty-five percent.

The CHAIRMAN. Thirty-five percent.

Senator CHAFEE. Thirty-five percent. Wow, that is big. But, so what, is my question. I am asking the question. It is there. Presumably, if it is excess there is not staff sitting around waiting for somebody to come in the door, it just lies there.

Now maybe you have to heat the space. But I do not think—you cannot say you can save 35 percent of the hospital's costs if you did not have that. But I do not know how you get rid of it.

Dr. ALTMAN. Well, you are absolutely right. It is not a proportional reduction. But it is not a moth balled fleet either. These beds are all over the place and you just cannot close them down. It is not like, well, we will just close this unit and therefore we have no expenses.

They kind of permeate throughout the institution. So there are costs associated with keeping them going.

Senator CHAFEE. You mean heating and cleaning?

Dr. ALTMAN. Well, it is more than the staffing.

Senator CHAFEE. But presumably the hospital is aware of this and does not have a staff for 100 percent of the capacity of the hospital.

Dr. ALTMAN. That is true. I did not mean to imply that we could cut 35 percent of hospital costs if we did away with those extra beds. I did not make that clear.

The CHAIRMAN. Who is going to give us a number? Try to put a number on it.

Senator CHAFEE. But I do not know what you can do about it. I mean, there is Rhode Island Hospital sitting there. They are not building a new one. They are not building new wings. There is Miriam Hospital sitting there and each one with 35, 25 percent excess capacity. The only way you can get rid of it, I suppose, is to tear down half the building.

Dr. ALTMAN. Well, it is not just there. I mean, if it was just there, and with no cost, then you would say you are absolutely right. There are costs associated with keeping this capacity. And as I said, there are two ways that we need to pull this over time. It is just like the extra building of office buildings that we went through both in Providence and in Boston.

Then all of a sudden rents went down, and construction stopped, and the market really took a toll to force that down. The question before this collective group is, can we count on the market to extract the toll that forces that capacity down quickly or do we need some over arching regulation.

It depends on the day. Karen raised a point that I have usually been associated with. We have in this country halfway competitive markets and ineffective regulation over our history. The truth is, we do not let them work because they start generating bad things. Then we started to say, well, wait a minute, we do not like that.

All I am saying is that unless we get at that, as well as Senator Daschle's point about bringing the technology availability down, only focusing on inappropriate care is not the right way to go. We could provide all the care we now provide, all the care we now provide, at much less cost if we could get the price per unit down.

Joe did not talk about this, but he has done some very good work looking at Canada, as does Victor Fuches. What they found was that it is not so much that the Canadians do less by-pass surgery, they do somewhat less per capita, but they make much more efficient use of the technology they have. They run them 24 hours a day. They do not have them all over the place. They do not have every institution in trying to fill up their beds build a bypass unit.

That is what has happened in our country. You can get by-pass surgery at institutions that 10 or 20 years ago you would never think that they would have gone into that business. Joe may want to talk about that use or that inefficient use of our technology. That is what I was trying to say.

Senator CHAFEE. Just a final question. It is astonishing to me—coming from the Northeast and not familiar with the South—these for-profit hospitals that are on such a roll and these mammoth mergers are all centered around Tennessee apparently for some reason.

But what about it? Are they more efficient or are they cherry picking? What happens? I know this might be a 30-minute answer.

The CHAIRMAN. Well, we have more than a 30-minute problem.

Senator CHAFEE. Dr. Davis, why is that? Why are they so successful that they can do things that apparently a charitable hospital, non-profit hospital, cannot seem to do?

Dr. DAVIS. Well, I think certainly up until now it has been just a very open-ended health care financing system that does not penalize excess capacity, does not penalize inefficiency, and the way to succeed in this kind of market is to cherry pick. It is to take the healthier patients, to avoid those who have AIDS, and those who are substance abusers.

I think we do need to really look at the performance of our health care system. I think some of what is going on right now is change in anticipation of more of a competing capitated health plan and a sense that if you can get a lock on all of the physicians in Oklahoma City, if you can get a lock on all of the beds in central Tennessee, that you are going to be the only plan available and you will continue to be able to dictate the terms under which you are paid, even in an capitated, managed competition world.

So I worry about what may be happening now is what we would call monopoly power on the part of the providers of services in some areas. So I think I would be cautious about anti-trust laxness or relief and really be concerned about when 150 physicians in a town like Oklahoma City go into one health plan.

Senator CHAFEE. Thank you.

The CHAIRMAN. Has that happened? Did you hear that has happened in Oklahoma City, that all the physicians went into one health plan?

Dr. DAVIS. Well, 150, which is a big chunk of the market.

Senator CHAFEE. Thank you very much. This is a good panel, Mr. Chairman. Could I ask one final question? Are you planning hearings next week?

The CHAIRMAN. Yes, sir. Do you not have a list?

Senator CHAFEE. We are not going to be in session apparently.

The CHAIRMAN. We will get you schedules. And again, to say anybody who wants a panel of a particular subject or has a person they would like to hear, please let us know.

Senator Durenberger?

Senator DURENBERGER. Mr. Chairman, thank you very much. I do not want to take a lot of time asking the question. But I am leading up to a question on medical technology. I cannot help but start with a base.

I spoke to a large group of gastroenterologists up in New York on Monday afternoon, a couple thousand gastroenterologists all waiting for me to say something about flexible sigmoidoscopy coverage and basic benefit package and things like that.

We got to the Q&A part of this and I think the third question was, Senator, I do not know why you keep talking about markets because medicine is not a commodity that can be bought and sold in a marketplace. It is a social good and so forth.

A lot of gastroenterologists who have benefited from the current marketplace in one way or another such as it is applauded. I think I give you that example because we all know—and I am not going

to ask any one of the three of you unless you feel compelled to do that, to answer the question I wanted to ask an hour and a half ago—that is, what is a market and can we do it in medicine?

I have already answered that question to my own satisfaction, to the satisfaction of people in Minnesota, by saying that it is a commodity, if you will. It is a service. It is a good. It can be bought and sold. And unless we can put prices on it, we will never be able to measure value and we will never have a consumer capable of helping us influence the behavior of the system. So that is just my version of it.

Now, one of the things that is very important from my experience to observe about studies and all of these observations, that all of our experience, whether it is with HMO's or multi-specialty clinics, like Mayo, which we brag up, now have the First Lady bragging up, or other things, all of it taking place in dysfunctional markets.

There is not a community in America that is not broken down in which somebody who wants to do good does not really get rewarded. But if they are big enough, like the Mayo Clinic, they just keep plugging away and they can get their rewards.

When we talk about the disparities between—I mean, there is an implication in what Dr. Davis said about nonprofits that I felt, which is that somehow or other they are better than for-profits. I do not believe that at all. I have seen for-profits in various parts of this country make a lot of money.

In my own low-cost, high-quality State, United Health Care is making lots of money because even in our market there is money to be made. Not by skimping on quality, but simply there is so much fat in the way employers buy into the system today and the way the system works, that anybody can make money on it, even in Minnesota.

So I think, Mr. Chairman, it is much too early to even imply that profit, non-profit status—it is true, I mean, the good side of a human experience, I remember Louisville about 6 or 8 years ago. They went and they bought the public hospital in Louisville and paid for it. But the first thing that they did was open up a couple of outpatient centers so that all the people were not coming into the ER of the big expense of, you know, overpriced public hospitals.

You cannot do that in New Orleans, even though you have a Aschner Clinic there ready to help you show how to do it, because there is no one to say, stop doing it. A charity hospital is a good hospital. But it can be run much better.

I have been to Houston and, the highest rates for the same kinds of procedures are at the outer suburban for-profit hospitals. And as you walk downtown, the rates go down. Not because they are non-profit, but because there is nobody in the suburbs who cares about what they are paying the doctors and hospitals. But it is not the for-profit or not-for-profit status that distinguishes them.

The second observation——

The CHAIRMAN. You mean that the people who do not care about costs are the insured?

Senator DURENBERGER. All of us. We do not really care. If the employer buys the health insurance for us and the insurer just pays the bills, there is nobody caring.

All of this deals with an issue that each of these three has mentioned at one time or another and that is the current dysfunctional system practices risk avoidance. Even a lot of the so-called managed care HMO organizations, unless they are in a community where there is genuine, competition at the what am I getting for my money level, practice risk avoidance.

If you can avoid taking somebody that you can dump in a self-insured plan or something like that, you do it. The future, the one that Senator Rockefeller was describing here earlier, really is to be premised on risk assumption. Which gets us not to the health alliance, it gets us to the accountable health plan, which seems to always get lost in this discussion about national health care reform.

The CHAIRMAN. The accountable health plan.

Senator DURENBERGER. The accountable health plan is the new insurance plan, if you will. That in effect—and whether it is an HMO or it is something else does not make much difference to me. But it is at that level that we have to find a way if we want this system to work, we have to find a way that those plans are practicing risk assumption rather than risk avoidance.

That kind of gets us to the heart of the problem—will markets work or they will not work. They are not going to work as long as there is somebody in that market who can sort of get out of taking their share of it. That is why we get towards community rating or community rating within these systems as well. That is where we are going to have the debate, I guess, over should health alliances have exclusive territories and stuff like that.

But the third and last point leads up to technology, and especially Dr. Newhouse. When I addressed the medical technology issue, I have, of course, a selfish interest because I represent 500 medical device manufacturers in the State of Minnesota. But I also represent Earl Bocken, you know, who invented the pacemaker and is now into holistic medicine. he is going to change Hawaii with a brand new concept of a hospital.

He goes around the world talking about all of the waste in the current system in just the way we think about health. Ed is a wonderful man.

I think I represent a lot of people like that. Medical technology I compare with airline technology; and maybe somebody will be sensitive about this. But nobody sets aside airline technology and deals with it separately from the airplane itself. It is the electronic information systems that get us, you know, the right seat when we want it through a whole maze of thousands of options.

It is the electronics and the technology inside that plane that can get some place faster, safer for less price. It is technology that does that. And in medicine, we have drugs, devices and hospitals, which are the sort of high tech end of the business. And somehow or other the implication is that is different from medicine. And it is not.

Dr. Altman said earlier that what he was in the hospital one week for he would have been in 3 weeks for. That is true and that is technology that has made that possible. But it is also true, as he or someone else observed, that they did more things to him while he was in there in that one week; and that is the perverse use of technology.

The fact that we use CAT scanners on every athlete in America that has a pain in the knee or a joint or something like that is a perverse use of sort of free technology.

Whether it is CAT scanners or whatever it is, it seems to me technology used wisely in a functional marketplace is going to bring your costs down. In a dysfunctional marketplace, you always use too much of it.

In our own experience, Mr. Chairman, and I think about eastern North and South Dakota—which is represented by my two colleagues here, and Minnesota and western Wisconsin—we see a lot of hospital competition. We are down to in the metropolitan area of the Twin Cities, 2.5 million people, we are really down to about three hospital companies right now. We were once at 46 percent of capacity; we are now at 65 percent of capacity.

And John asked the right question. What difference does capacity make? Because in a dynamic marketplace, you are going to have fluctuations in capacity because you want the market to keep reinventing itself all the time.

So something is always going to be obsolete. But even in that marketplace, we are competing at the wrong end. We do have five bone marrow transplant centers and we do not need them. We have competition for the Level 3 trauma center and we should not.

The high cost, high tech, low frequency use really should not necessarily be part of a marketplace. So I would—I hope I am getting to a question, Joe. But it seems to me that if, in fact, we see technology as we see it in every other industry—and I just use airlines as an example—as a way to get something better and more of it for a lower price, then it is a question of whether or not we can find in a particular community a real functioning market.

For those who say, you know, it is a social good and it cannot be priced and we are going to lose out, there is an airline in America—I do not know whether it is Southwest or whatever it is—that is cutting their rates. But they cut them by not having the meals and things like that. They do not cut it out of the cockpit. They do not cut it out of safety because one accident will kill them.

So the notion that you are going to have to sacrifice safety or, you know, an excellent outcome in a functioning market, I cannot quite figure out. In a dysfunctional market, yes. I mean, we have plenty of examples of somebody that is going to skim to get the price down.

But if people are able to buy price and quality and value from a choice, why would they not?

Dr. NEWHOUSE. Let me give you a little example of why just controlling technology does not necessarily control health care costs, but rather gives you a one-time reduction.

Let us suppose you have country one that spends $1,000 a head and country two that spends $500 a head; and a new machine comes out that costs $10. This example is in the paper. Country one buys 10 machines at $10 each, spends $100 more, their costs go up 10 percent. Country two buys five machines. The same populations. Their costs go up $50, 10 percent.

It is possible, let us say for the sake of argument, that the extra five machines that country one buys do not do anything. I mean,

they are just waste. All right, so now country one adopts the model that henceforth we are only going to buy five machines.

Let's suppose innovations keep coming out. For awhile country 1 will cut its rate of growth of costs. But after awhile they are going to be going up at the same rate that country 2 was going up.

The CHAIRMAN. This is our question.

Dr. NEWHOUSE. That is consistent with these data that we have been looking at. They show different levels of spending but similar rates of growth.

The CHAIRMAN. Can I just before—we have a vote called and I want to have Senator Grassley get a chance. You know, I mentioned earlier the OECD figures regarding the United States, right in the middle there.

Well, in your column on the G-7 growth rates, the United States is right smack in the middle. We are number four.

Dr. NEWHOUSE. Yes, we are highest by a little bit in the 1980's. But in the other two decades we are in the middle.

The CHAIRMAN. The other 30 years, we are four.

Senator Grassley?

Senator GRASSLEY. You had a discussion with Senator Rockefeller about discrimination. I wanted to ask a question that is similar to that, but also a point that you made about the effects of pricing errors probably have been mitigated in part by medical ethics. I would like to have some further explanation of what you meant and whether or not we should expect medical ethics to change or erode in a system with administered prices. If you think so, why.

Dr. NEWHOUSE. Well, what I meant by my comment about medical ethics was that there are a lot of cross subsidies in medicine. You have had charity care at some level for many years. We have alluded to the Medicare differentials that have existed. I think most of us think that there is not a big difference, if any difference, in the quality of care that Medicare beneficiaries get relative to non-Medicare beneficiaries because of those differentials.

So that is what I meant by the system has tended to ignore the differentials, though it has not completely ignored them. Cardiology services have the reputation of being profitable and low and behold, as has been said, we have a lot of cardiology services in the land. Social services have a reputation of being unprofitable and maybe a hospital will think twice about going into that. But what I meant was, when a doctor or a nurse sees a patient coming in, the first thing that probably leaps to their mind is not, am I going to lose money, but what is wrong with the patient. In general. I mean, I would not want to push that too far. But I do think that medical ethics about treating patients tends to blur some of the predictions about behavior.

My point in the paper was, if budget constraints get very tight, the bottom line may become more significant. So I do not really disagree. No economist could disagree with Stuart's comments that more discipline would be a good thing and that there is waste in the system.

At the same time, I think it puts more of a burden on pricing to get the prices more correct than we have in the past. So that is what I meant by that comment.

The CHAIRMAN. On that note, Senator, I think we are going to have to slip away.

Could I ask our witnesses if they could remain? I will be back in 6 minutes and we will have you out of here, I promise, by 1:00 if not before. We will stand in recess until then.

[Whereupon, at 12:30 p.m., the hearing recessed, to resume at 12:47 p.m., the same date.]

The CHAIRMAN. The committee will come to order. I really have imposed on our distinguished panel for having to ask you to hold while we went off and voted on the Department of Transportation Appropriations Act.

You could tell from the questions that were asked you by other Senators how important we feel your testimony has been and how it opened a number of areas for our purposes. We are just starting this. And if you could have heard the comments about your testimony, you would be very pleased. All the real conversations in here take place on those trolleys.

I have heard you, Dr. Altman, say that this talk about, you know, if everything we are going to do here is going to come out of savings from administrative costs and inappropriate—what did you say?

Dr. ALTMAN. Care of service, the use of services.

The CHAIRMAN. Use of services.

Now I have heard you point out those striking figures on employer health care costs. It has been very illuminating to me because when Stuart and I first knew each other I was in the Labor Department. I have been wondering how can real wages have been flat and stayed flat for a quarter of a century as in no comparable experience in our economic history?

Well, the answer is they have not. Compensation has gone up. Not perhaps as fast as it has done previously, but it has been diverted in this form, not taxed, et cetera. Your iconoclasm is very helpful indeed, sir.

Dr. NEWHOUSE. Thank you.

The CHAIRMAN. We have been running at 4 percent growth for 30 years. I will get Dr. Blackman to straighten out their views, to compare their information with yours. But what is identical is that we are all in the same cluster.

The United States is exactly in the middle in that particular column of yours, with Japan having the higher economic growth as first. But it is Japan first; Italy second. Well, they have had a very good economic growth. France three; the United States four; Canada five; Germany seven. There is some randomness about it, other than Japan.

I would just like to say, before I let you go, we hope that we will see you again and that we can call on you regularly through this process which is going to be long and, in time, painful. I do not know if there is any cure for that. I doubt there is. But you certainly helped us get started with a sense of clarity. As you can see, there is not a partisan sense around here at all, just a concern that we try to do this right. You have all three agreed that in the past we have had the experience of being surprised at unanticipated consequences.

With that, great thanks, and thanks to all involved, and to our ever faithful reporter, and to our cameras. We will call the hearing to a close.

[Whereupon, at 12:51 p.m., the hearing was adjourned.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED

PREPARED STATEMENT OF STUART H. ALTMAN

Good morning, Mr. Chairman. I am pleased to appear this morning to discuss the rising growth in health care costs and factors responsible for that growth. During my testimony, I will refer to several charts. These charts are appended to the end of my written testimony.

Much of the information I am going to present today, Mr. Chairman, was developed by staff of the Prospective Payment Assessment Commission (ProPAC). Although I am Chairman of the Commission, my testimony this morning reflects my own views, and not necessarily those of the Commission.

HEALTH CARE SPENDING

Mr. Chairman, as members of this Committee know, spending for health care services is growing at an unsustainable rate. Despite increasing attention to controlling costs, national expenditures for health care increased over 250 percent between 1980 and 1990, from $250 billion to $675 billion. If this current trend continues, annual expenditures will exceed $1.6 trillion by the year 2000.

As Chart 1 indicates, the rate of growth in health care expenditures has far exceeded the rate of growth in our Gross Domestic Product (GDP) and the gap has been widening over the past several years. Since 1970, health spending has increased by more than 1000 percent. This is more than twice the rate of growth in GDP over the same time period. As a result, health care spending as a percent of our national output has grown from 9.2 to 12.1 percent in the last decade and in 1992 reached 14 percent. It is projected to rise to almost 19 percent of the GDP by the year 2000.

Chart 2 shows that health care spending growth parallels general inflation plus population growth, but the spending increases are much greater in every single year. Health care expenditures are increasing much faster than would be necessary to maintain a constant level of services per capita for a growing population.

HEALTH CARE SERVICES SPENDING

Mr. Chairman, to better understand the increase in health care spending, it is useful to look at the spending growth for specific health care services. Chart 3 shows the spending trends for various facility-based services from 1970 to 1993.

As you can see, while hospital inpatient care is the largest source of spending, its projected rate of growth over the past three years has been the lowest of any category listed—8.1 percent. In contrast, spending for hospital outpatient, nursing facility, and home health services increased at double digit rates—16.6, 11.9, and 33.5 percent, respectively. I should point out, Mr. Chairman, that all of these rates were well above the increases in GDP or inflation plus population growth during that time period.

Spending for physician services also has undergone substantial growth. Between 1990 and 1993, expenditures increased 9.9 percent, totalling $171 billion in 1993.

Health care spending increases either because the price of services increases, the volume of services increases, or both. As you can see in Chart 4, the relative contribution of price and volume differs substantially by service type. It is estimated that over the next five years, all of the growth in inpatient hospital spending will be due to price increases. Price also will be the major cause of spending increases in nursing facilities, although to a lesser degree than hospitals. By contrast, volume will be a substantial determinant of spending increases for hospital outpatient serv-

ices, physician services and home health care. These projections reflect the growing trend for the health care industry to deliver more services out of the hospital inpatient setting.

FACTORS RESPONSIBLE FOR INCREASING COSTS OF HOSPITAL SERVICES

Mr. Chairman, because of the special responsibility of ProPAC to focus on hospital and facility payments, I now would like to discuss the major reasons for spending increases for hospital services which, incidentally, continue to be the largest component of health care expenditures. These include factors related to price and volume, and cost shifting.

Price and Volume Factors

ProPAC has developed a model that separates hospital cost increases (including both inpatient and outpatient services) into eight components (Chart 5). These components can be grouped together depending on whether they influence the volume or price of health care services. Certain of these factors—such as population growth—are beyond the industry's control, while others—such as intensity of services furnished—are more influenced by hospital behavior.

As Chart 5 reveals, between 1985 and 1991, the average annual increase in total hospital costs was 9.5 percent. Population growth was responsible for about 10 percent of this increase, or one percentage point per year. By contrast, the number of cases (admissions and visits) per person declined, by 0.3 percentage points annually. This decline most probably is a result of utilization review programs in the public and private sectors and the shifting of services to less expensive sites of care.

The largest single contributor to hospital cost increases over this time period was general inflation, which contributed 4.1 percentage points per year, or 43 percent of the total. Price inflation specific to the hospital industry accounted for an additional 0.8 percentage points each year, or 8 percent of the total. Hospital inflation includes hospital wages and salaries, pharmaceutical prices, and malpractice premiums.

The increase in the complexity of the patients treated in the hospital setting accounted for 1.8 percentage points of cost growth annually, while the intensity of services furnished to these patients accounted for 1.3 percentage points of cost growth annually, or about 14 percent of the total. ProPAC has estimated that about one-half of the annual cost increase from intensity was due to advances in technology while the other half of the increase was due to a greater use of established tests and procedures.

ProPAC also estimated that hospitals' use of higher skilled employees—registered nurses instead of licensed practical nurses, for example—contributed 0.1 percentage points to annual hospital cost growth. Finally, hospital productivity declined over this period, thus contributing 0.3 percentage points of additional spending growth.

Hospitals are labor intensive, with wages accounting for about 54 percent of hospital expenses. Other sectors of the health care industry are actually more labor intensive. In some, such as physician services and home health care, labor might equal 70 to 80 percent of total costs. This factor makes it more difficult for the health sector to take advantage of productivity advances in lowering total health costs.

This phenomenon was first explored by Professor William Baumol in his analysis of why the costs in the performing arts rose faster than other sectors of the economy. While health care does benefit more from technological advances, potential productivity advances, and more effective use of labor than the performing arts, some of the insights of Professor Baumol are relevant to the health care sector and should be acknowledged as we attempt to control overall health spending.

I would like to return briefly to the issue of hospital expenses. For a number of years, the wages and salaries of hospital workers, including administrative staff, nurses, and technologists, have increased substantially faster than general inflation. Non-labor operating costs, including pharmaceuticals, food, supplies, and insurance, are responsible for about 38 percent of expenses. The prices of pharmaceuticals and liability insurance have been the fastest growing items in this category. The remaining 8 percent of expenses is due to capital costs for the physical plant as well as new technology and equipment.

Mr. Chairman, this information shows that a variety of factors contribute to the growth in hospital costs. Other studies have shown that a similar set of factors is responsible for cost increases in other health services. There is considerable debate about the degree to which each of these factors is within the control of the provider. Hospitals cannot control inflation in the general economy. They do, however, have some influence over the wages and the mix and type of their employees. Studies also have shown the potential for savings if we could streamline patient billing, record

keeping, and other administrative activities. We also know that hospitals are not efficient users of expensive technologies and service capacity. The inefficient use of technologic capacity to perform tests and procedures adds to capital costs as well as the labor needed to operate underutilized facilities and equipment. There also is evidence that many tests and procedures add little value to patient outcomes. Clearly, providers can exert considerably more control over the growth in their health care costs—how much, of course, is a hotly debated issue and ultimately affects issues such as quality and access.

To be fair, Mr. Chairman, it is difficult for individual hospitals to generate efficiencies and totally control their costs when they are operate in an environment in which the entire industry is experiencing substantial excess capacity. For example, on any given day, more than 35 percent of the hospital beds in this country are unfilled and in some parts of the country where health care costs are the highest, some institutions have more than 50 percent of their beds unfilled. The current situation is a result of some good and legitimate reasons, but nevertheless it needs to be addressed—and addressed quickly—if we are to see real efficiency savings in the entire system. The question is whether downsizing can occur voluntary or whether it will require external pressure. Equally important is time it will take to downsize the industry and insuring that it occurs in the right areas.

The issue, Mr. Chairman, is not only too much capacity in terms of hospital beds, but also too many institutions doing too many highly complex procedures. ProPAC has analyzed the growth in the number of institutions that have expanded their services in an attempt to solidify their financial position. Ironically, such proliferation of services often leads to the opposite result, forcing more institutions into financial difficulty as they try to meet the cost of these endeavors. This situation is likely to become worse in the future as Medicare and other large health care purchasers attempt to save money and improve quality by concentrating their patient populations into "Centers of Excellence" for complicated procedures.

Cost Shifting

Mr. Chairman, while the factors I have just discussed are important in understanding the growth in hospital costs, cost shifting by hospitals also has allowed health care costs to increase despite efforts by public programs and some private insurers to control payments.

As you know, there is tremendous variation in levels of payments among the various payers for health care services. Such variation allows providers to obtain additional revenue from some payers to offset losses from other payers, or "cost shift." As a result of this ability to shift costs, many health care providers do not have to directly confront financial pressures imposed by payment restrictions imposed by one payer, or a limited number of payers.

The Medicare program's prospective payment system (PPS) is a good illustration of the cost-shifting phenomenon. Medicare program expenditures constitute more than one-third of all health care spending. As the largest single payer for health services, Medicare policies have a strong impact on the health care system.

The Medicare prospective payment system has been very effective in reducing the growth of federal health care spending (see Chart 6). During the 1970s, prior to the implementation of PPS, Medicare expenditures per enrollee were growing faster than national expenditures per capita. Since the implementation of PPS, the rate of spending has slowed such that by the end of the 1980s, the rate of Medicare spending growth was below that of national health spending.

Despite Medicare's financial pressure on hospitals to control their costs, hospital costs have continued to grow rapidly. Since the first year of PPS, Medicare operating costs per hospital discharge have increased at an annual rate of 9.4 percent, almost 80 percent faster than Medicare payments.

The problem, Mr. Chairman, is that while Medicare is a major player in hospital reimbursement, it is not the only player. Rather than reducing costs as Medicare payments were limited, hospitals obtained additional revenue from other sources to maintain their financial position. Much of hospitals' additional revenue comes from charging privately insured patients more than the cost of their care. Consequently, the Medicare program is now paying less than the cost of treating Medicare patients while private payers are paying more. As Chart 7 indicates, in 1991, private insurers paid hospitals almost 30 percent more than the costs of treating their patients. With much of the private insurance market unconstrained, the Medicare program does not provide adequate leverage to hold down the increase in overall hospital costs.

The lesson from the Medicare experience, Mr. Chairman, is that to be truly effective, cost control efforts must be comprehensive. By this I mean that cost controls must apply to private as well as public payers. If they do not, hospitals can avoid

the financial pressure from one payer to slow cost growth by obtaining additional revenue from other payers. Health care reform also must apply across all provider sites and settings. Decreases in hospital admissions and lengths of stay in the past decade helped to slow the growth in spending for inpatient hospital care. Total spending continued to rise rapidly, however, because hospitals and other providers quickly increased the capacity to furnish services in ambulatory and other settings.

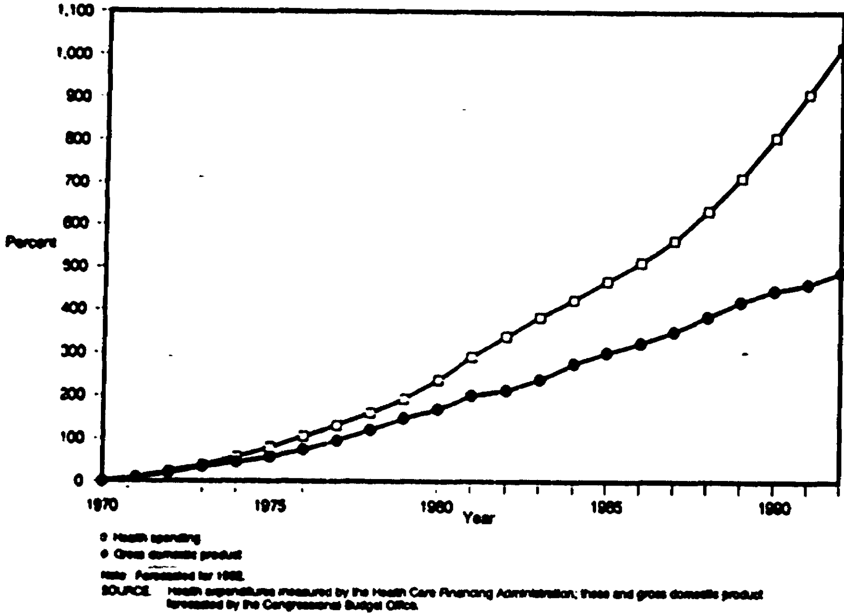
SUMMARY

Mr. Chairman, the information I have presented today illustrates the severity of the health care crisis confronting this country. Health care costs are increasing at a rate that clearly is unsustainable in the long run. While several of the reasons for this growth are beyond the control of the health care industry, a substantial portion of rising costs are within its control.

Another important issue is the fact that studies show that for some segments of the health industry, much of growth in costs is not due to price increases, but rather is due to increases in the volume and intensity of services provided. Such increases are much more difficult to control using traditional expenditure constraints. In my view, they require a change in incentives at the provider and patient level, as well as controls which go beyond specific sectors of the health industry. One mechanism for doing this is to place limits on the growth in total spending rather than sector specific limits. Specifically, I favor a global budgeting system which limits the total flow of funds to the health sector. One mechanism for doing this would be to place limits on premium increases for private health plans as well as place controls on government health spending. The key to containing costs under health care reform is to implement policies that foster a cost-controlling environment that encompasses the entire payment structure. Only then will true cost savings be realized.

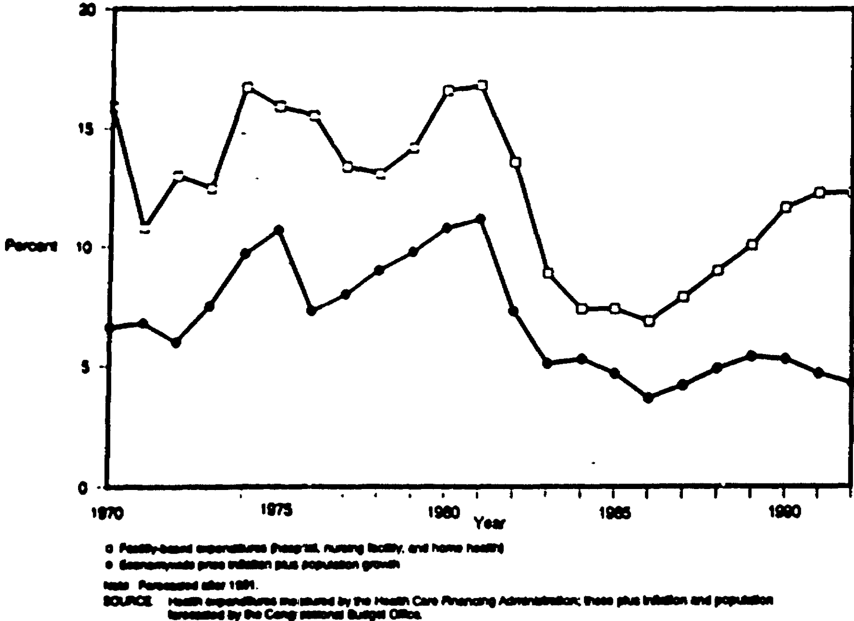
Attachment.

Chart 1. Cumulative Change in Health Spending and Gross Domestic Product, 1970-1992



Note: Forecasted for 1992.
SOURCE: Health expenditures measured by the Health Care Financing Administration; these and gross domestic product forecasted by the Congressional Budget Office.

Chart 2. Annual Change in Facility-Based Health Spending and Inflation Plus Population Growth, 1970-1992



Note: Forecasted after 1991.
SOURCE: Health expenditures measured by the Health Care Financing Administration; these plus inflation and population forecasted by the Congressional Budget Office.

Chart 3. Trends in Facility-Based Health Spending, 1970-1993

Measure	1970-1980	1980-1983	1983-1987	1987-1990	1990-1993[a]
Expenditures (last year of period, in billions):					
Hospital inpatient[b]	$ 69.1	$104.4	$130.0	$166.5	$209.3
Hospital outpatient[b]	10.4	17.0	31.5	51.2	81.2
Nursing facility[c]	20.0	28.9	39.7	53.3	74.8
Home health[c]	1.3	2.8	4.1	7.6	18.0
Total[d]	100.8	153.1	205.3	277.6	383.3
Annual change in expenditures:					
Hospital inpatient	14.6%	14.7%	5.6%	8.4%	8.1%
Hospital outpatient	18.7	17.8	16.7	17.5	16.6
Nursing facility	15.2	13.0	8.3	10.4	11.9
Home health	25.1	28.3	9.7	22.5	33.5
Total[d]	15.1	14.9	7.6	10.6	11.4
Inflation plus population[e]	8.5%	7.8%	4.4%	5.2%	4.1%
Gross domestic product	10.3	7.9	7.4	6.7	4.2

[a] Forecasted after 1991

[b] Community hospitals only

[c] Free-standing facilities only

[d] Independent ambulatory care facilities, such as ambulatory surgery or imaging centers, are not included in the analysis.

[e] Inflation and population change combined multiplicatively to yield total growth rate. Inflation represented by the GDP deflator.

SOURCE: Health expenditures measured by the Health Care Financing Administration; these plus inflation, population, and GDP forecasted by the Congressional Budget Office.

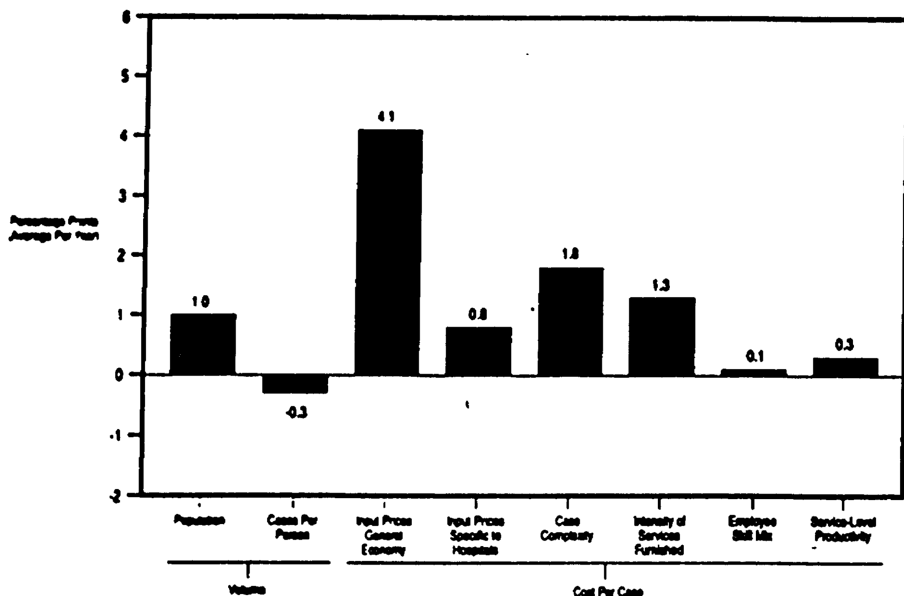
Chart 4. Contribution of Price and Volume Changes to Growth in Health Spending, by Sector, 1994-1998

Sector	1994	1995	1996	1997	1998
Hospital inpatient					
Price	114%	111%	108%	106%	104%
Volume	-14	-11	-8	-6	-4
Hospital outpatient					
Price	57	60	60	59	58
Volume	43	40	40	41	42
Nursing facility					
Price	80	78	77	75	75
Volume	20	22	23	25	25

Note: Volume refers to the number of health facility units of output (inpatient days, outpatient visits, or nursing facility days). Price refers to the average payment made per visit or day.

SOURCE: Price and volume relationships developed by the Health Care Financing Administration, Office of the Actuary, and projected by the Congressional Budget Office.

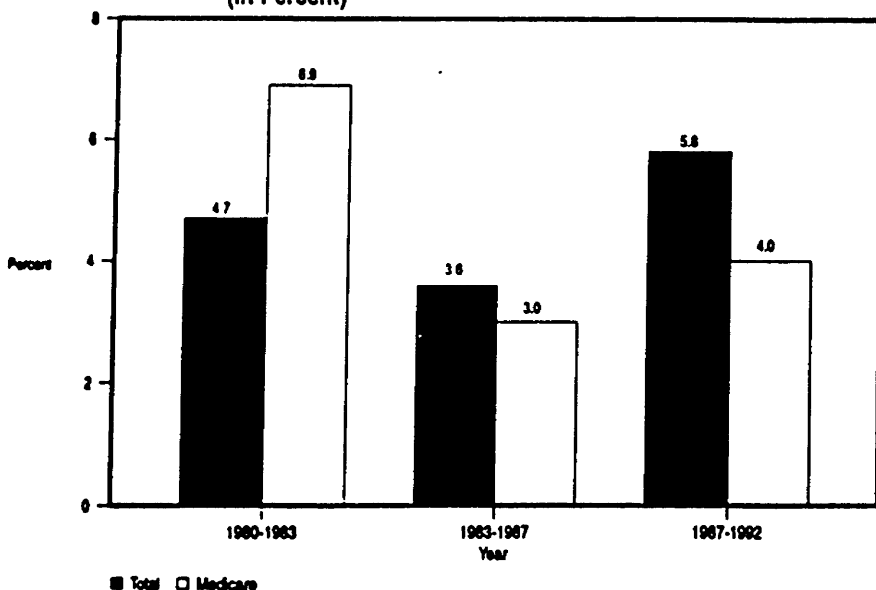
Chart 5. Eight Factors Contributing to Growth in Hospital Costs, 1985-1991



Note: The average annual increase in total costs was 9.5 percent. The eight factors explain 97 percent of this change, leaving an unexplained residual of 0.3 percentage points per year.

SOURCE: ProPAC analysis based on data from the American Hospital Association, Health Care Financing Administration, and Department of Labor.

Chart 6. Real Annual Change in Total Health Care Expenditures Per Capita and in Medicare Expenditures Per Enrollee, 1980-1992 (In Percent)



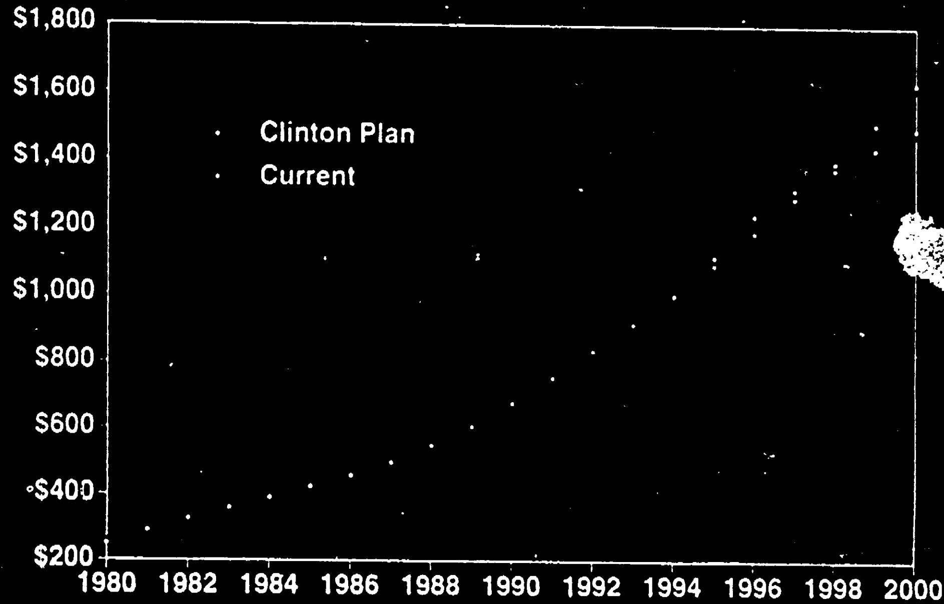
SOURCE: Health Care Financing Administration, Office of the Actuary.

Chart 7. Gains and Losses on Payment for Hospital Services, by Source, 1991

Payment Source	Payment to Cost Ratio	Gain or Loss (In Billions)
Below-cost payment		
Medicare	88.4%	-$10.0
Medicaid	81.6	-5.1
Uncompensated care	19.6*	-10.8
Total		-25.9
Above-cost payment		
Private insurers	129.7	26.1
Other government payers	100.1	0.0
Total		26.1

* Operating subsidies from state and local governments are represented as payments for uncompensated care.

SOURCE: ProPAC analysis of American Hospital Association Annual Survey data.



[Submitted by Senator Kent Conrad]

PREPARED STATEMENT OF KAREN DAVIS

Thank you, Mr. Chairman, for this opportunity to testify on one of the most serious problems facing the U.S. health care system—rising costs. The nation's economic problems can not be solved without addressing out-of-control costs in the health care sector. Rising health care costs are undermining the competitiveness of American products, contributing to a reduction in the real earnings of workers, imposing intolerable burdens on federal, state, and local government budgets, and inflicting real financial hardship on uninsured or inadequately insured American families.

Health care reform must achieve two overarching goals—universal health insurance coverage and bringing increases in health care expenditures in line with growth in the nation's economy. No health care reform plan can be considered acceptable unless it covers all Americans—ensuring access to needed care and providing financial protection against burdensome health care bills.

Today, however, I would like to focus on the second goal of health care reform and examine the trends and underlying causes of growth in health care expenditures, review what has worked to slow growth in costs, and examine major strategies that have been proposed to combat this rise.

TRENDS IN NATIONAL HEALTH EXPENDITURES

In 1991, the U.S. spent 13.2 percent of its Gross Domestic Product on health care, up from 5.3 percent in 1960. As shown in Exhibit 1, the Congressional Budget Office projects that this will increase to 18.9 percent of Gross Domestic Product by the year 2000 if we fail to take effective steps to alter this course.

On a per capita basis, health spending in the U.S. averaged $2,868 per person in 1991. This average, however, conceals the fact that health care bills vary markedly by age and health status. Ten percent of Americans each year account for 72 percent of all health care outlays (see Exhibit 1). Truly the sickest among us are the most vulnerable to financially devastating health care bills—and consume the greatest proportion of health care resources.

Age is also an important factor. A Commonwealth Fund study of health care expenses of older workers conducted by Lewin-VHI recently found that costs to employers of working men ages 55 to 64 are 5.5 times as high as for working men ages 18 to 24 (see Exhibit 3). For older people who are not working, often because of poor health, costs are devastatingly high. Nonworking men between the ages of 55 and 64 average $8,100 annual medical expenses. Only 17 percent of these expenses are covered by a former employer's retiree health benefits.

Growth in health care spending may be broken down into growth attributed to population growth, aging of the population, general price inflation, and growth in health care spending in excess of general price inflation either because of higher prices or intensity and complexity of care. As shown in Exhibit 4, the Congressional Research Service estimates that between 1990 and 1992 population growth and aging of the population together accounted for 15 percent of the growth in personal health care spending. General price inflation accounted for another 33 percent. The remainder occurred because health care prices rose faster than general price inflation and because Americans received more complex and expensive care.

The reasons why health care costs continue to spiral at an alarming rate are many. New technology that improves the quality of life and extends life expectancy is one major contributor. The expanding supply of physicians contributes to cost. Malpractice expenses and population aging are relatively modest contributors.

But the primary cause, in my view, is an open-ended health care financing system without either effective competition or regulation. When physicians and hospitals are free to set their own rates and decide what services to provide with assurance that insurers, public programs, and patients will foot the bill, it is not surprising that this system of financing care leads to such rapid growth in costs. The U.S. is the only major industrialized nation that does not have a major role for government in setting or negotiating health care fees and budgets. To date the payers of health care in the U.S. have had little unified power to set or negotiate the terms of payment, nor has market competition worked to restrain growth in health care spending.

MEDICARE VS. PRIVATE HEALTH SPENDING

This has begun to change in recent years. The passage of the Medicare hospital prospective payment system in 1983 and the implementation of a new Medicare fee schedule for physicians subject to expenditure targets in January 1992 have begun to have an impact in slowing Medicare outlays for hospital and physician services.

The Congressional Research Service has calculated annual rates of real growth in expenditures for hospital and physician services over the period from 1970 to 1991. As shown in Exhibit 5 between 1970 and 1985, Medicare hospital spending rose more rapidly than hospital spending in the nation. But with the switch from cost reimbursement to prospective payment per patient based on diagnostic case-mix, Medicare averaged a real growth in hospital spending of 3.2 percent between 1985 and 1991 compared with 5.4 percent for the nation.

From 1970 to 1991 Medicare spending on physician services outpaced that of the nation. But beginning in 1992 Medicare physician outlays have abated sharply. As shown in Exhibit 6, preliminary data on Medicare Part B outlays for the first ten months of 1993 show outlays increasing at about 5.6 percent (on a twelve month rolling average basis) compared with 9.5 percent in the first ten months of 1992.

The decelerating trend in Medicare expenditure growth is a remarkable accomplishment. It demonstrates that government can curb rising costs if it is willing to use its powers to set provider payment rates. But it also demonstrates that the way in which these rates are set can promote efficiency in the health care sector.

The Medicare prospective payment system for hospitals bases payments to hospitals on a fixed rate depending on the diagnosis-related group of the patient, rather than the actual cost of caring for the patient. This creates a major incentive for hospitals to increase efficiency, eliminate unnecessary services, and discharge patients as soon as possible. By establishing a limit on the rate of increase in Medicare payments per hospital patient over time, the Medicare prospective payment system has also had a major impact on controlling the growth in hospital outlays for the care of beneficiaries.

The Medicare fee schedule for physicians subject to an overall expenditure target also provides incentives for physicians. Fees are based on the relative cost of providing services, redressing the long-standing imbalance in greater payment for specialized services at the expense of primary care. Overall expenditure targets, or volume performance standards, provide a mechanism for ensuring that desired budgetary goals are met and outlays are slowed to achieve a predetermined rate of spending growth.

The question over the longer term, however, is whether Medicare can maintain this performance when the private sector is not subject to similar restraint. Medicare physician fees now average 65 percent of private charges. If Medicare is tightly constrained without a similar system of restraint under the rest of the health care system, access to care for Medicare beneficiaries could eventually be compromised.

MEDICAID

Less encouraging has been an explosion in spending under the Medicaid program. A recent report by the Henry J. Kaiser Family Foundation Commission on the Future of Medicaid, on which I serve, found that after a decade in which Medicaid spending lagged both Medicare and private sector spending, Medicaid expenditures began to accelerate sharply, increasing 13 percent in 1989, 18 percent in 1990, and 27 percent in 1991. Spending increased 30 percent in 1992, reaching $120 billion.

The Kaiser Commission found that between 1988 and 1991, the growth in Medicaid spending could be attributed one-third each to expanded enrollment, increases in medical care price inflation, and one third to higher Medicaid reimbursement and utilization of services.

Increases in spending per beneficiary above medical price inflation reflect greater demand for services as Medicaid has served a sicker population including persons with AIDS and substance-dependent babies, higher payments to providers in response to legal challenges based on the Boren amendment which requires that payments to hospitals be reasonably related to costs, and stepped-up state efforts to obtain Medicaid matching funds through provider taxes and donations, disproportionate share payments, and intergovernmental transfers. The use of these new financing mechanisms reflects the fiscal pressures that states are facing as they struggle with the increasing burdens of Medicaid, and are indicative of society's growing demands on the Medicaid safety net to compensate for the gaps in social welfare programs. Medicaid is not only paying for the care of its enrolled population, but is indirectly paying for the care of other indigent populations through its support of uncompensated care.

ADMINISTRATIVE COSTS

While administrative costs are not the major source of rising health care costs, the increasing complexity of our health care financing system does contribute to higher costs. As shown in Exhibit 7, administrative costs of private insurance average 16.8 percent, compared with 2.1 percent for Medicare, and 4.2 percent for Med-

icaid. Canada with its single payer system averages 1.2 percent administrative costs.

Small firms are especially vulnerable to high administrative costs, averaging over 40 percent of premium dollars for firms with fewer than 5 workers, and 25 percent for firms with 20 to 49 workers. These costs include not only claims administration, but marketing costs, sales commissions, and profits.

A lot of attention has focused on the paperwork associated with our fragmented health care system. It is true that different claims forms add to the complexity of medical billing. But it is not really the forms that add to costs, but the fact that the rules for payment vary from one plan to the next. Recently, one California hospital administrator told me that he had 140 different contracts with managed care plans, each with its own contractual basis for payment. Utilization review plans that are confidential and different for every insurer are an enormous burden on health care providers who can never be sure what is covered and how much the insurance will cover.

If we are to really make a difference in administrative costs, more careful examination will need to be given to the administrative costs imposed by utilization review and by multiple systems of paying physicians, hospitals, and other health care providers. We will also need to learn more about administrative costs and profits earned by managed care plans.

WHAT WORKS

It is tempting to get discouraged and believe that nothing can be done to really curb unacceptable growth in health care costs. But there is evidence, within this country, of effective approaches. In a book I co-authored for the Johns Hopkins University Press on *Hospital Cost Containment*, we found that in fact substantial slowdowns in growth in real health care spending did occur in 1972 to 1974 during the Nixon Economic Stabilization Program of wage and price freezes on the economy, in 1978 to 1980 when the Carter Administration hospital cost containment legislation was under consideration and the hospital industry mounted a Voluntary Effort to control costs, and in the late 1980s under the Medicare prospective payment system.

There is also an accumulation of evidence that state-level hospital all-payer hospital systems have been effective in slowing the growth in hospital costs. Maryland's cost per hospital admission under its all-payer rate setting system has dropped from being 25 percent above the national average in 1976 to 14 percent below the national average in 1992 (see Exhibit 8).

STRATEGY FOR CHANGE; MANAGED COMPETITION

One strategy that has been advanced to slow the rise in health care costs is managed competition. Under a system of managed competition employers or health purchasing alliances would give families a choice of health plans, including capitated health maintenance organizations.

While managed care can be part of a reformed American health care system, it cannot be the only response. Ninety-five percent of all working families are already enrolled in some type of managed care plan, including 20 percent who are enrolled in health maintenance organizations.

But there is no solid evidence that managed care achieves consistent savings over time. The Congressional Budget Office analyzed the impact of managed care in 1992, and reported mixed results. It found that savings varied significantly depending upon the type of managed care plan. Staff model HMOs, which employ their own physicians and operate clinical facilities, seem to generate modest savings compared with traditional fee-for-service health care. IPA models (Independent Practice Association) which contract with physicians in private practice, show little or no savings. It is unlikely that the capacity of staff model HMOs could be expanded rapidly enough to cover significant portions of the population in the near term.

Finally, it is particularly troubling that studies to date have found no difference in the rate of increase in health care costs over time between HMOs and indemnity insurance plans. A long range strategy must be capable of altering the upward trend in health care spending as a percent of GDP.

STRATEGY FOR CHANGE: USING MEDICARE AS A MODEL

The truth is we do not know enough about the impact of managed care on costs or on quality to embrace it as a national system. This issue is too crucial to turn to a system that has not been fully tested.

A far sounder approach would be to build on the Medicare experience. Physicians, for example, could be paid using the Medicare fee schedule in private insurance

plans as well as Medicare. Expenditure targets could be established to control the rate of increase in total health expenditures. If spending rose in excess of targets, any overage would be subtracted from future physician fee increases.

Such a system is not inconsistent with offering patients a choice of capitated HMOs and could easily be integrated with such a system. A Medicare-type plan could be offered to all employers and non-working families through a national Medicare purchasing alliance or through regional alliances. Expenditure targets per capita would be established for all persons enrolled in such plans. The level of the fee schedule would be adjusted over time, as it is now in Medicare, to achieve budgetary expenditure targets. Care of patients enrolled in capitated HMOs could be subject to separate per capita expenditure targets.

A system of expenditure limits has strong advantages over a "pure" managed competition approach. It guarantees budgetary savings and restraint in growth in health care outlays over time. It is a system which has been tried in other countries, and currently exists in the Medicare program.

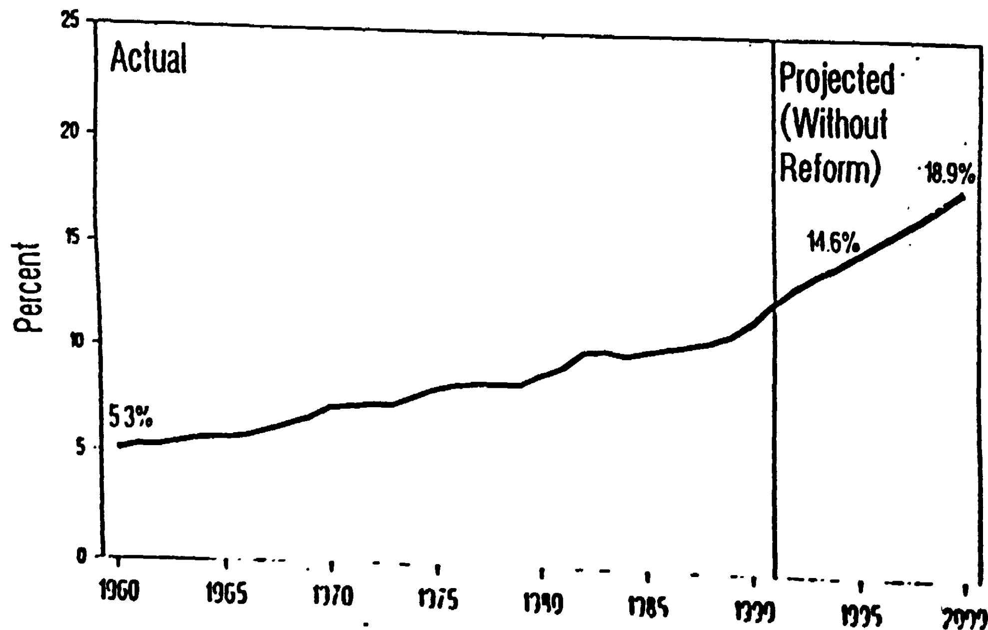
Most importantly it would continue to offer patients a wider array of choices. They could continue to be cared for by their own physician without incurring severe financial penalties. The option of enrolling in either a capitated HMO or a fee-for-service plan should help assure better care in both systems. If HMOs were not responsive to patient concerns, had long waiting times, and substandard providers, patients could disenroll and be cared for in the fee-for-service system. If expenditure limits and price limits made fee-for-service unattractive to physicians, they could join HMOs. The best competition should come from having attractive alternatives, rather than forcing all Americans into capitated health plans.

CONCLUSION

The crisis of inadequate health insurance coverage and escalating health care costs must be addressed. The nation can not afford to continue on its current course. But neither can it afford to rely on an untested approach which is unlikely to generate substantial savings over the near term and in which patient choice of physician and access to quality care is not assured. What the nation desperately needs is not another fragmented approach, with each state and each payer or each health plan going its own way, but a simplified, unified system that will build on what we know works to improve efficiency while assuring access to quality care for all Americans.

Attachments.

National Health Expenditures as a Percentage of Gross Domestic Product, 1960-2000



SOURCE: Congressional Budget Office

Exhibit 1

Exhibit 2

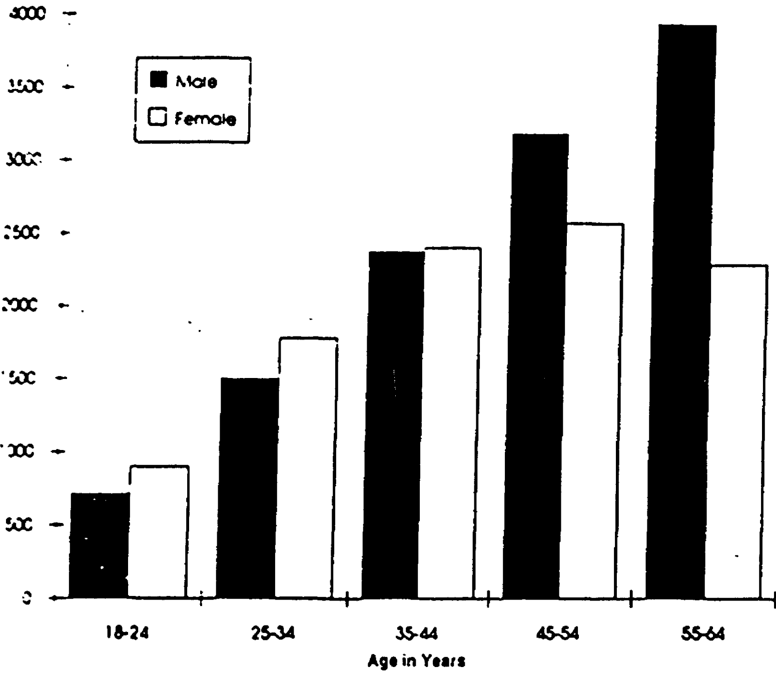
Exhibit 1
Distribution Of Health Expenditures For The U.S. Population, By Magnitude Of Expenditures, Selected Years, 1928–1987

Percent of U.S. population ranked by expenditures	1928	1963	1970	1977	1980	1987
Top 1 percent	–	17%	26%	27%	29%	30%
Top 2 percent	–	–	35	38	39	41
Top 5 percent	52%	43	50	55	55	58
Top 10 percent	–	59	66	70	70	72
Top 30 percent	93	–	88	90	90	91
Top 50 percent	–	95	96	97	96	97
Bottom 50 percent	–	5	4	3	4	3

Source: Health Affairs / Winter 1992

Exhibit 3

Employer Health Care Costs Increase With Worker Age*



*Estimates are based on analysis of 1987 NMES data, inflated to 1994 values by the overall rate of growth of health expenditures per capita. Regression analysis was used to smooth estimates and to control for region, urban/rural, race/ethnicity, industry, and benefits.

Source: Lewin-VHI Estimates.

The Commonwealth Fund

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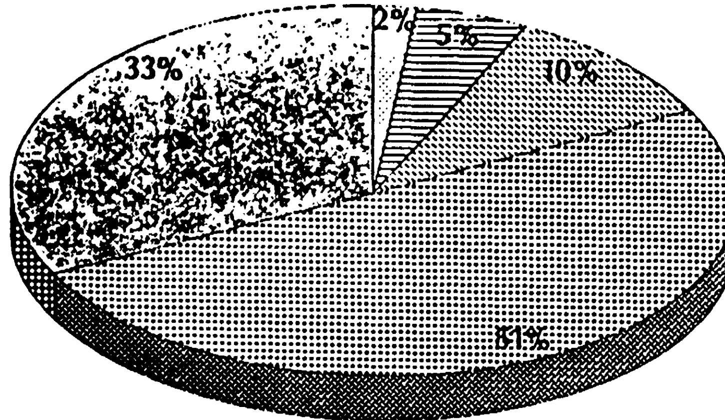
FACTORS CONTRIBUTING TO THE 1990-1992 INCREASE IN PERSONAL HEALTH CARE SPENDING



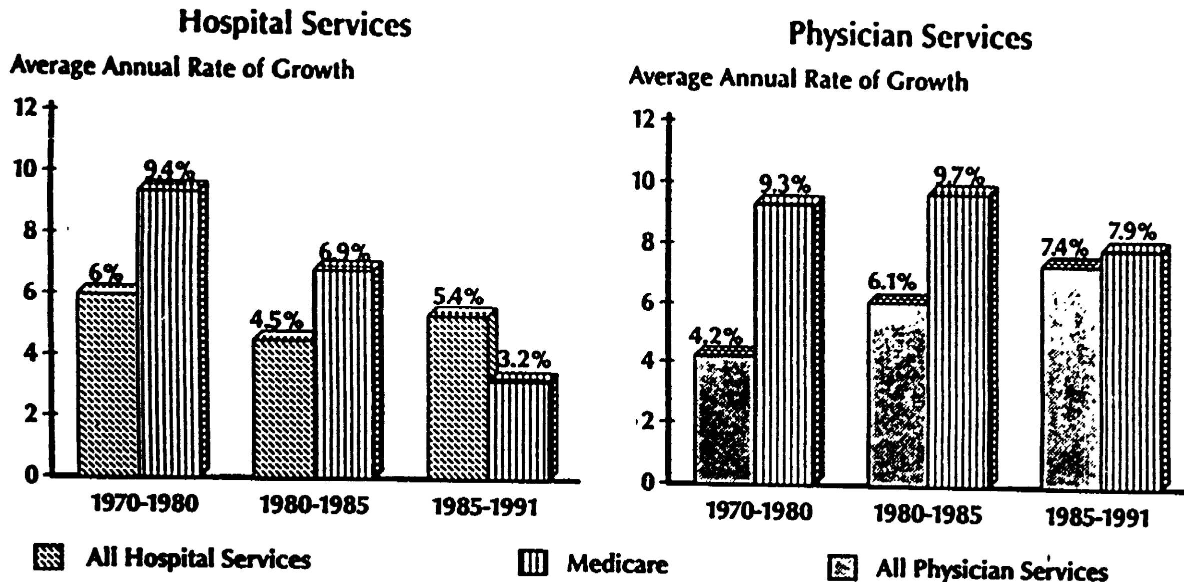
- General Price Inflation
- Population Growth
- Use Per Person
- Medical Prices & Intensity of Services
- Demographic Composition

Source: Figure prepared by Congressional Research Service based on a Congressional Budget Office analysis of actual and projected health spending

THE COMMONWEALTH FUND

Exhibit 4

AVERAGE ANNUAL GROWTH RATE OF REAL NATIONAL AND MEDICARE EXPENDITURES FOR HOSPITALS AND PHYSICIAN SERVICES, 1970 - 1991



Source: Figure prepared by CRS based on National Health Expenditure data, Office of the Actuary, Health Care Financing Administration

THE COMMONWEALTH FUND

Exhibit 6

TOTAL SMI CASH OUTLAYS BY MONTH, FY 1992-93 (through July 1993)

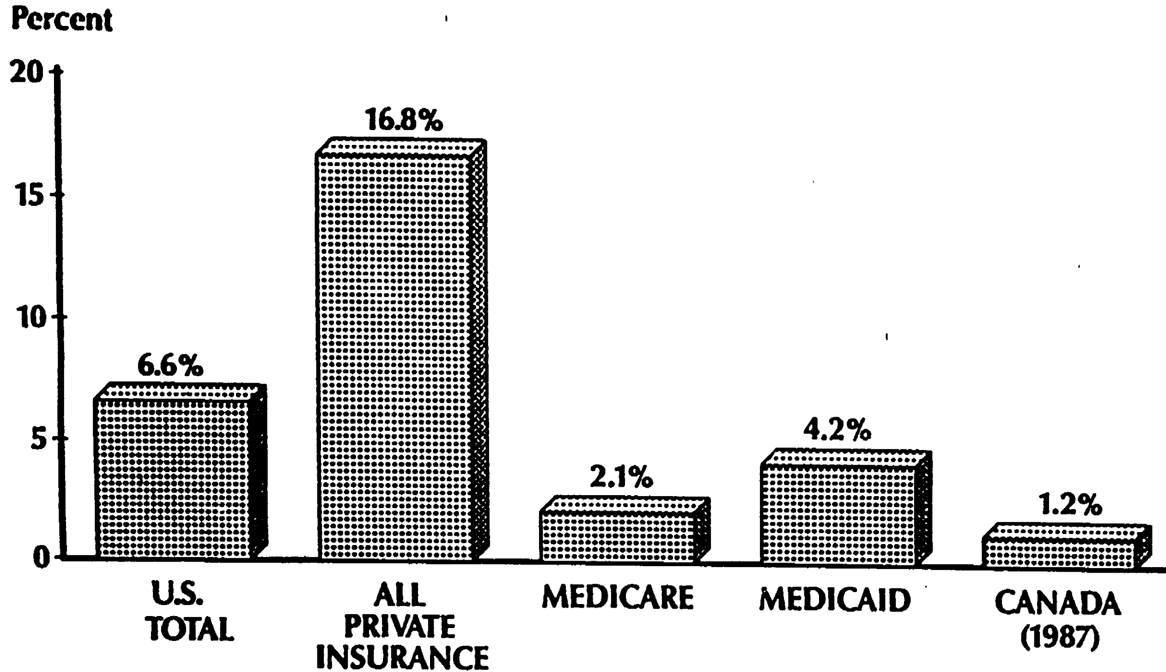
FISCAL YEAR 1993

Month	93 Ben	93 Ad	93	93 YTD	rolling 12 month total	% change 12 month total
October	4748	103	4851	4851	50736	5.8
November	3725	48	3773	8624	50227	4.3
December	4876	109	4985	13609	50831	4.0
January	3548	132	3680	17289	50054	1.0
February	3675	137	3812	21101	50224	1.0
March	4572	173	4745	25846	51861	5.0
April	4667	141	4808	30654	51913	3.9
May	3841	119	3960	34614	51790	4.4
June	5004	116	5120	39734	52896	5.7
July	5047	103	5150	44884	53203	5.6
August						
September						
Total					est.	5.6

FISCAL YEAR 1992

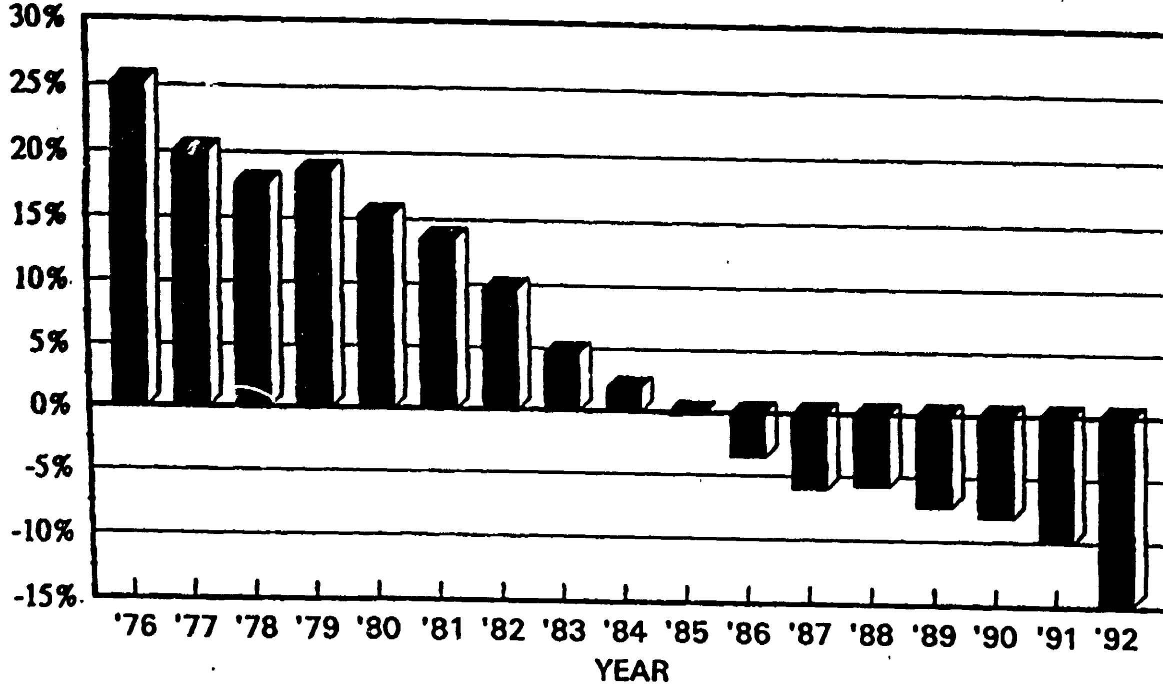
Month	92 Ben	92 Ad	92	92 YTD	rolling 12 month total	% change 12 month total
October	4298	104	4402	4402	47932	11.1
November	4168	114	4282	8684	48170	10.4
December	4250	131	4381	13065	48878	11.1
January	4332	125	4457	17522	49577	12.0
February	3487	155	3642	21164	49745	11.5
March	2983	125	3108	24272	49381	11.0
April	4610	146	4756	29028	49971	10.2
May	3856	227	4083	33111	49605	7.7
June	3894	120	4014	37125	50028	9.5
July	4705	138	4843	41968	50394	9.5
August	3848	120	3968	45936	49876	7.8
September	4198	153	4351	50287	50287	6.9
Total	48629	1658	50287			6.9

ADMINISTRATIVE COST AS PERCENT OF BENEFITS, VARIOUS PROGRAMS, 1991



Source: U.S. data from HCFA Office of the Actuary; Canada from Health and Welfare Canada

THE COMMONWEALTH FUND



SOURCE: HSCRC Annual Disclosure Report and AHA
Panel Survey Data

Exhibit 8

THE COMMONWEALTH FUND

HARKNESS HOUSE
ONE EAST 75TH STREET, NEW YORK, NY 10021-3692
(212) 535-0400 FAX (212) 249-1276

January 10, 1993

Senator Charles E. Grassley
United States Senate Committee on Finance
Room SD-205 Dirksen Building
Washington, DC 20510-6200

Dear Senator Grassley:

I am writing in response to the questions you raised following my testimony before the Senate Finance Committee on October 6, 1993, regarding the costs of behaviors such as legal and illegal substance abuse, AIDS and other sexually transmitted diseases, violence, accidents, and adolescent/teen pregnancy.

In October 1993, The Institute for Health Policy at Brandeis University published a report entitled "Substance Abuse: The Nation's Number One Health Problem: Key Indicators for Policy" which highlights these issues. This report estimates the total economic costs of substance abuse at $238 billion, of which drug abuse accounts for $66.9 billion, alcohol abuse $98.6 million, and smoking $72 million. Of the $238 billion total, $34 billion is spent on preventable health care expenses attributable to substance abuse. The remainder represents costs associated with productivity losses caused by premature death and inability to perform usual activities, and costs related to crime, destruction of property, and other losses.

While many chronic diseases result from drug and alcohol abuse, there are also substantial costs incurred through high risk behaviors associated with abuse, such as AIDS and other STDs, teen pregnancy, birth defects, violence, and crime. The Brandeis study also estimates that every man, woman, and child in America pays nearly $1,000 annually to cover the costs of unnecessary health care, extra law enforcement, auto accidents, crime and lost productivity resulting from substance abuse.

Under the leadership of Joseph A. Califano, Jr., the Center on Addiction and Substance Abuse (CASA) at Columbia University is addressing these issues. They have just released their first in a series of reports analyzing the cost that substance abuse imposes on America's health care system. While this first report deals specifically with Medicaid hospital costs associated with such abuse, the figures are significant, and further studies will seek to determine whether costs to other insurers are comparable.

Based on 1991 statistics, CASA's study found that of the $21.6 billion Medicaid paid for hospital care, $4.2 billion, just under 20 percent, was for care attributable to substance abuse. They acknowledge, however, that this figure is likely to be an underestimate of the true cost due to problems with identification and reporting of substance abuse by patients and

providers, and the need for additional epidemiologic research on the health effects of substance abuse. Major findings suggest that:

- Substance-abusing Medicaid patients who are admitted to the hospital for other reasons generally stay twice as long as others with the same primary diagnosis but no substance abuse problem.

- Half of pediatric AIDS cases are caused by parents' intravenous drug use.

- Eighty-seven percent of lung cancer is attributable to smoking; 72 percent of chronic pancreatitis is due to alcohol; and 65 percent of strokes among younger Americans could be prevented if cigarette smoking and cocaine use were eliminated.

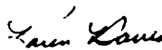
- Treatment of burns, pneumonia and other conditions requires hospital stays more than twice as long for patients who are also substance abusers than for those who are not.

Since smoking, drug, and alcohol abuse are problems affecting all segments of our society regardless of income, race, or social status, it is reasonable to believe that many of these extraordinary expenses are also incurred by other payers.

A recent OTA report on International Health Statistics indicated that nearly one in five deaths in developed countries can be attributed to smoking. For the U.S. in 1990, more than one-fourth of deaths from cancer, nearly one-fifth of deaths from cardiovascular disease, and one-half of deaths from respiratory disease were attributable to smoking (for a total of approximately 419,000 deaths.) The nation's efforts to date to combat substance abuse through such efforts as anti-smoking campaigns have produced encouraging results and changes in public attitudes. Casual use of drugs and alcohol is on a decline, though heavy use of some substances continues unchanged. Many Americans want treatment for their substance abuse problems, though only one in four get it. Joseph Califano has advocated including substance abuse treatment benefits in any health care reform proposal, and estimates the expense at $12 billion a year, about $8 billion more than is now being financed by health insurance.

Clearly, the costs of substance abuse to the health care system contribute to overall health care spending. I am pleased that you are focusing on these important issues and hope these figures are helpful in clarifying the magnitude of the burden which substance abuse places on the nation's health care system.

Sincerely,



Karen Davis
Executive Vice President

HEALTH CARE COSTS AND OLDER WORKERS

EXECUTIVE SUMMARY OF THE FINAL REPORT

Prepared For:

THE COMMONWEALTH FUND

Prepared By:

David C. Stapleton
David L. Kennell
Richard Iovanna

Lewin-VHI, Inc.

September 29, 1993

EXECUTIVE SUMMARY

Rising health care expenditures are especially burdensome to persons age 55 to 64. Many in this group have very high health care expenditures and others are at very high risk. While employer health insurance pays a large share of expenditures for those covered by employer insurance, there is some evidence that rapidly growing employer insurance costs are hurting the employment opportunities of older workers. Those who are not covered by employer insurance are especially vulnerable. Among this group are many who are not employed because of a serious, and expensive, health problem. Some must finance their high expenditures themselves, often exhausting their resources. Yet, unless they are disabled for at least two years, they will not qualify for Medicare until age 65.

The potential impacts of health care reform on older persons are important to policy makers both because of the needs of those in this age group and because the proportion of the labor force that is over age 55 is expected to increase by 20 percent from 1990 to 2005. Proposals for financing health care reform that would disproportionately increase employer costs for older workers could substantially diminish the employment opportunities of older workers. This would not only be a hardship to those in this age group, but could also hurt economic growth, reduce tax revenue from this group, and increase government expenditures for their health and welfare. Proposals that would reduce employer costs for older workers would benefit this group, increase their contributions to tax revenues, and reduce their reliance on government health and welfare services.

The Commonwealth Fund commissioned Lewin-VHI to study the health care expenditures and employer health care costs of older workers, using data from the 1987 National Medical Expenditure Survey (NMES). NMES is the most recent national database that provides detailed information on health care expenditures and sources of payment for individuals as well as on their demographic and socioeconomic characteristics. The study examined: (1) the relationships between age and health care expenditures and sources of payment; (2) the relationship between employee age and employer health care costs; and (3) the relationships between age, gender, employment status and sources of payment for the health care expenditures. The report then compares the impacts on older workers of three

different ways of financing health insurance for workers and their dependents and also examines the impacts and costs of reducing the age of eligibility for Medicare to 55 for those who are neither workers nor dependents of workers. Key findings are reported below.

Under the current system, employer health care costs for insured male workers between the ages of 55 and 64 are more than quintuple those for insured male workers under the age of 25; the ratio for insured female workers is 2.5 to one.

As shown in Exhibit ES.1, the study estimates that average employer costs for insured males between the ages of 55 and 64 will be almost $4,000 in 1994, or about 5.5 times the amount employers will pay for insured males between the ages of 18 and 24. Employer costs for insured women also increase with age, but at a lower rate. This is largely due to two factors: average health expenditures for women are higher than those for men when they are young, due to maternity costs, but expenditures for men are higher at older ages, due to higher incidence of cardiovascular diseases; and the share of insured females who have dependent coverage declines with age relative to the share for insured males. Average employer costs for insured females between the ages of 55 and 64 in 1994 are estimated to be $2,300, or about 2.5 times those for insured females between the ages of 18 and 24.

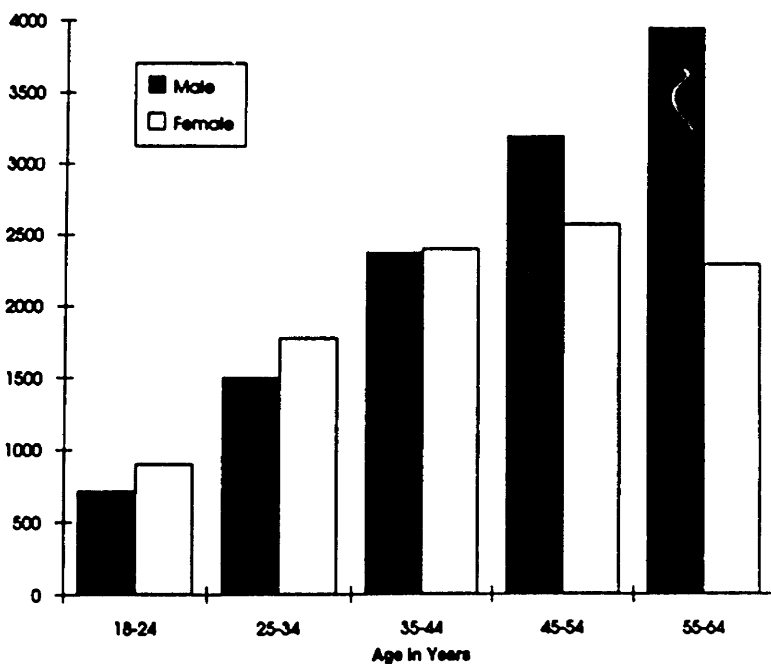
Employer health care costs for insured male workers between the ages of 55 and 64 are equal to almost 15 percent of the workers' earnings.

Estimated employer health care costs as a share of insured worker earnings are shown in Exhibit ES.2. The 14.5 percent share for males between the ages of 55 and 64 is almost twice the overall average of 7.5 percent and much higher than for any other age/gender group.

Measurement of health care costs as a share of insured worker earnings gives a more accurate picture of the burden of health care costs on employers than the simple level of costs; health care costs of, say, $3,000 for a worker who earns $75,000 a year are relatively minor in comparison to the same costs for a worker who earns $25,000. Since earnings increase with age at most age levels, employer health care costs as a share of earnings generally increase with age at a slower rate than the level of costs, as can be seen by comparing Exhibits ES.1

Exhibit ES.1

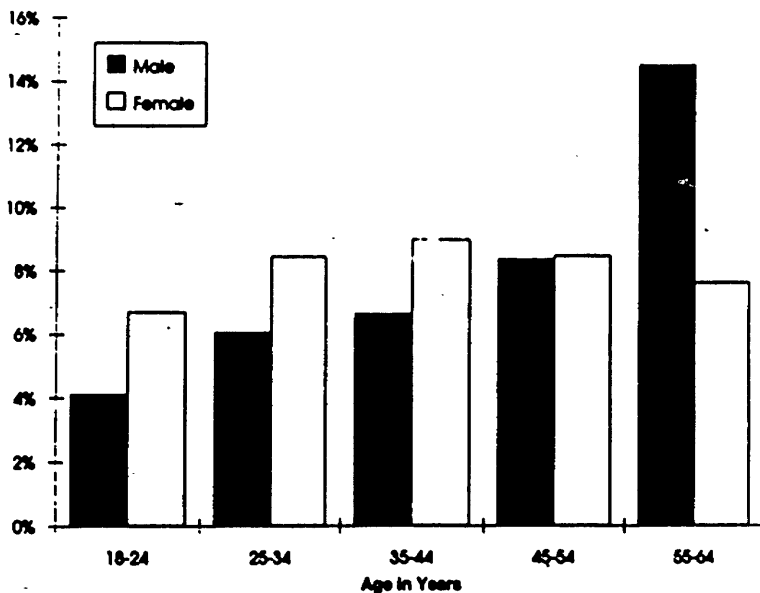
Employer Health Care Costs Increase With Worker Age*



*Estimates are based on analysis of 1987 NMES data, inflated to 1994 values by the overall rate of growth of health expenditures per capita. Regression analysis was used to smooth estimates and to control for region, urban/rural, race/ethnicity, industry, and benefits.

Exhibit ES.2

Employer Health Care Costs as a Share of Earnings Increase With Worker Age for Men, But Not for Women*



*Estimates are based on analysis of 1987 NMES data, inflated to 1994 values by the overall rate of growth of health expenditures per capita and deflated by the rate of growth of nonagricultural earnings per capita. Regression analysis was used to smooth estimates and to control for region, urban/rural, race/ethnicity, industry, and benefits.

and ES.2. As has been documented in many wage studies, however, earnings stop increasing with age at around age 55, and then decline somewhat before retirement. The change from earnings growth to earnings decline is greater for men than it is for women. As a result, the very high health care costs for older male workers stand out even more starkly when they are measured as a share of earnings.

Health care expenditures for those between the ages of 55 and 64 who are not employed are twice as high as for those who are employed, and a much smaller share of their expenditures is paid by private insurance.

Males age 55 to 64 who are not employed have expenditures that are, on average, 2.3 times those for males who are employed; for females, the ratio is 1.7 to one (see Exhibit ES.3). These ratios reflect the importance of health in determining the employment status of persons in this age group, especially for men.

While private insurance pays over 60 percent of health care expenditures for employed men, it only pays just over 30 percent of expenditures for men who are not employed. Medicare, Medicaid, and other public sources pay almost 55 percent of the expenditures for those men who are not employed, compared to only 11 percent for those who are employed. Qualitatively similar, but quantitatively smaller differences are found for women: private insurance pays over 60 percent of the expenditures for those who are employed versus just over 45 percent for those who are not employed, and public sources pay over 30 percent of expenditures for those who are not employed compared to less than 10 percent for those who are employed.

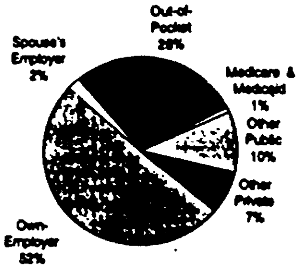
The above findings, along with others that appear in the report, suggest that different methods of financing health care reform vary widely in their impacts on older persons. The report examines three ways of employer financing of health care insurance for workers and their dependents, as well as a method for providing coverage to persons between the ages of 55 and 64 who do not work.

Exhibit ES.3

Health Care Expenditures for Persons Between the Ages of 55 and 64 Who Are Not Employed Are Twice as High as for Those Who Are Employed, and a Much Smaller Share Is Paid by Private Insurance*

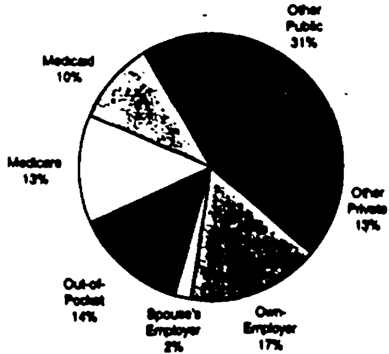
Men

Employed
Expenditures per capita: $3,640



Number of men: 7.2 million

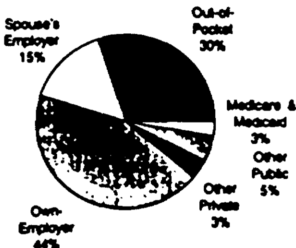
Not Employed
Expenditures per capita: $8,100



Number of men: 3.2 million

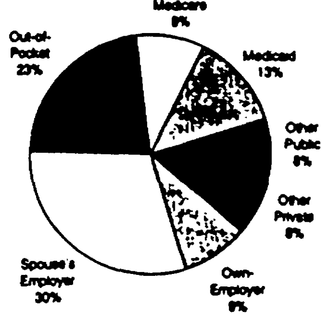
Women

Employed
Expenditures per capita: $3,050



Number of women: 5.8 million

Not Employed
Expenditures per capita: $5,300



Number of women: 5.8 million

*Expenditures are estimates based on analyses of the 1987 NMES data, inflated to 1994 values by the overall rate of growth of health expenditures per capita. Shares for sources of payment are 1987 estimates. Areas of pies are proportional to expenditures per capita.

The three financing methods considered are:

- **Experience-rated premiums** - Experience-rated premiums are based on the actual or expected claims experience of a firm's workers. For self-insured firms, premiums are actual costs paid for employee health care plus administrative costs and minus worker contributions. For other firms, premiums are based on factors that are predictive of claims costs, including the age and gender composition of the firm's work force, the firm's location and industry, and experience in previous years. For employers who already provide insurance, there would be little change from current practice under experience-rated premiums.

- **Community-rated premiums** - Under community-rated premiums, there is one premium rate for all workers with no dependents to be covered, and a higher rate for all workers with at least one covered dependent; workers in all age and gender categories pay the same premium for each type of coverage.

- **Payroll tax** - Under a payroll tax, employers would pay a fixed percentage of the worker's earnings, regardless of age, gender, dependent coverage, or any other factors.

The three financing methods do not include modifications such as subsidies for employers of low wage workers, age-gradation of community-rated premiums (employers pay one rate for all workers in a given age group), or a maximum limit on the payroll tax. The purpose of examining these unmodified financing methods is to highlight the dramatically different effects that they have on employer health care costs for older workers. Modifications to these methods could substantially dampen differences reported here. Proposals for financing health care reform may include one of these methods along with modifications that have been designed to result in a different distribution of the burden of financing health care.

The comparisons made are based on the 1987 NMES data, which were "aged" to 1994 to reflect known and projected changes in demographics and health care expenditures under the current system. The simulations of the three financing mechanisms use a common set of assumptions about minimum benefits, aggregate costs, the employer-employee premium split, and assignment of dependents.[1] Because employer costs under experience-rated and

---

[1] A modest minimum benefit package is assumed, and employers pay 80 percent of premiums. For two-earner couples, each spouse is covered under his or her own employer and dependent children are assigned to their parents' employers by the "birthday rule"; i.e., children born in the first half of the year are assigned to their father's employer, and those born in the second half are assigned to their mother's employer. In some families, employers of both parents would provide dependent coverage. An alternative rule would assign children to the parent with the highest earnings. This would substantially reduce the number of female workers with dependent coverage and, to a lesser extent, increase the number for males. Rates for dependent coverage would increase relative to those for single coverage because the same number of child dependents would be covered by the policies for a smaller number of workers with dependent coverage.

community-rated premiums are partly determined by whether the employee has dependents, but payroll taxes are not, comparisons among the three financing mechanisms show different results for workers with dependents than for workers without dependents.

For older workers with dependents, employer costs are highest under experience-rated premiums and lowest under a payroll tax.

Employer costs for older workers with (covered) dependents are highest under experience-rated premiums and lowest under the payroll tax. As shown in Exhibit ES.4, in 1994 employer costs for older (ages 55 to 64) male workers would be $2,300 per year (45 percent) less under a payroll tax than under experience-rated premiums. For older female workers, costs would be an extraordinarily large $6,500 per year (80 percent) less. Experience-rated premiums for older workers with dependents are very high because of the high expected expenditures for both the workers and their spouses. Under a payroll tax, employer costs for older workers are low because they are determined only by the worker's earnings; expected expenditures and dependent coverage do not matter.

There are two reasons that the difference is much larger for women than for men. First, under experience-rated premiums, costs for older women with dependents would be $2,700 per year (almost 50 percent) higher than for older men. This is because the dependents of older workers are in many cases husbands who are not working because of a serious, and expensive, health problem. In contrast, dependents of older male workers are most often wives who are not working for reasons unrelated to health -- many are "housewives." The second reason that the difference between costs under the two financing mechanisms is much higher for older women with dependents is that older women's earnings are only about half as great as those of older men, making the women's costs under the payroll tax 50 percent lower.[2]

Currently there are very few older female workers with dependent coverage. Many do not have coverage from their own employer at all, and few of those who are covered by their own employer have dependent coverage. If experience-based financing is used, health care reform that requires employers to insure older female workers will result in extraordinarily high

[2] Note that if age-gradation of community rated premiums were used employers would pay the same rate for older persons with dependent spouses, irrespective of gender, but costs for older female workers would still be twice as large as those for men when measured as a share of earnings. The large gender difference in earnings for this age group reflects the fact that older female workers typically have had many fewer years of work experience than older male workers.

Exhibit ES.4

Employer Costs for Older Workers with Dependents Are Lowest Under a Payroll Tax

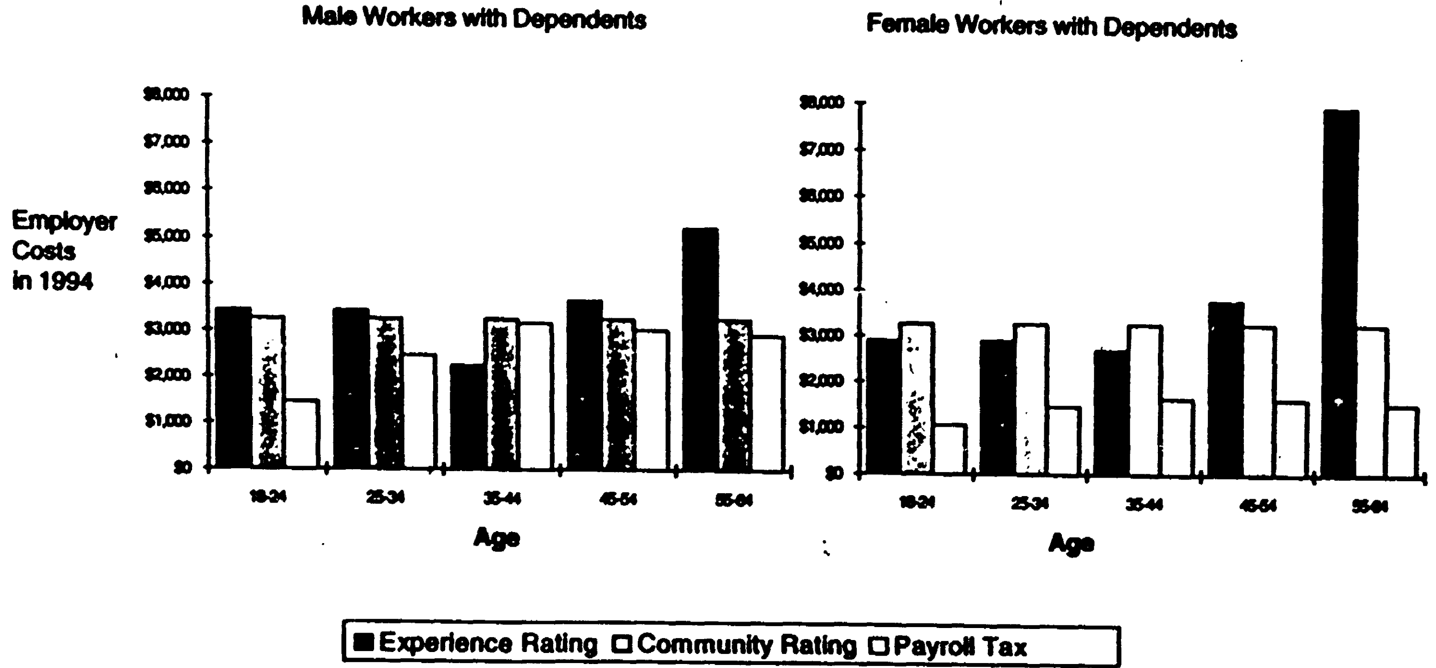
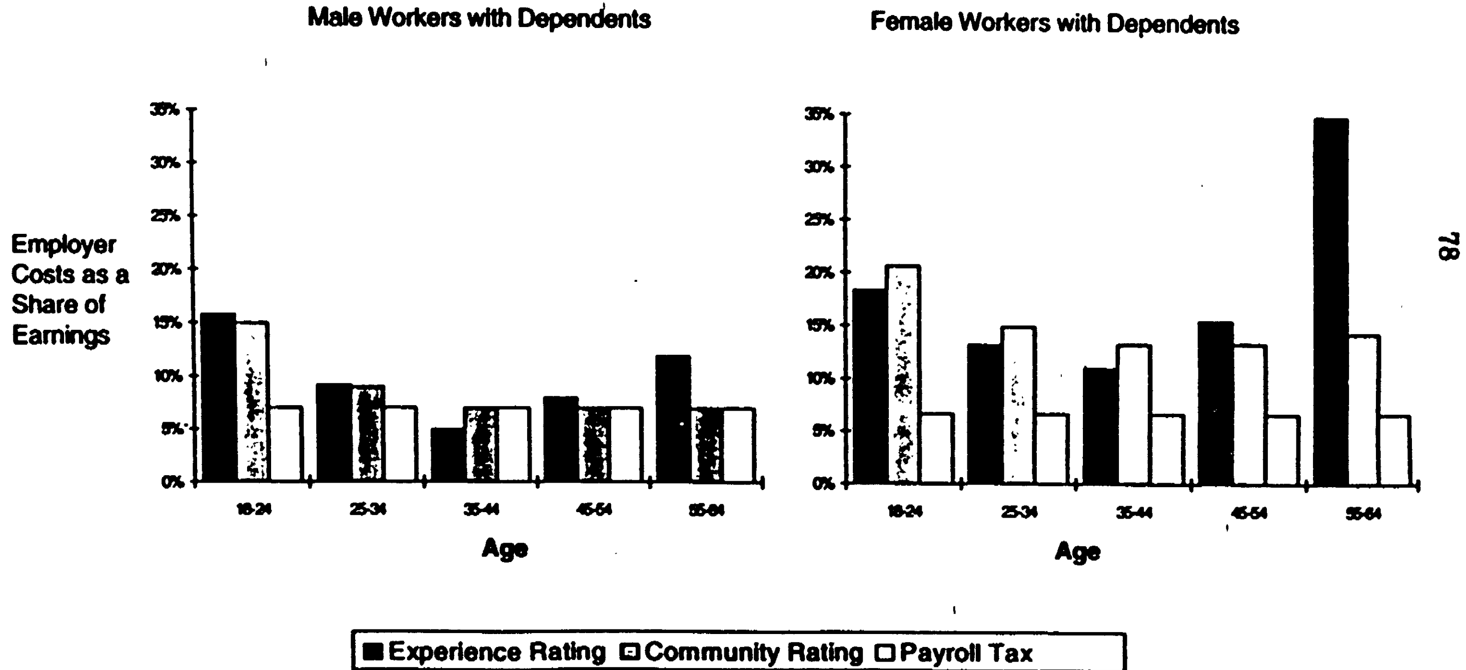


Exhibit ES.5

As a Share of Earnings, Employer Costs for Older Female Workers Would Be Extraordinarily High Under Experience Rating



employer costs for older women who have dependent husbands. As shown in Exhibit ES-5, we estimate that employer costs for these women would be, on average, 35 percent of their earnings. It would be surprising if such a large cost relative to earnings did not have a substantial effect on their employment opportunities. Employers of these women who are not currently providing insurance would also experience higher costs under payroll taxes, but these would amount to less than seven percent of earnings.

Under either experience-rated or community-rated premiums, government subsidies to firms with low average wages could greatly reduce the substantial age and gender disparities in employer costs as a share of earnings.

It should be noted that age-gradation of community-rated premiums would yield rates for each age group that would be very close to the average experience-rated premiums for the age group that are shown in Exhibit ES.4. The main difference is that all employers would pay the same rate for workers with high health care costs in an age group as for those with low health care costs. Rates would not vary by gender, but would be higher for workers with dependents than for workers without dependents.

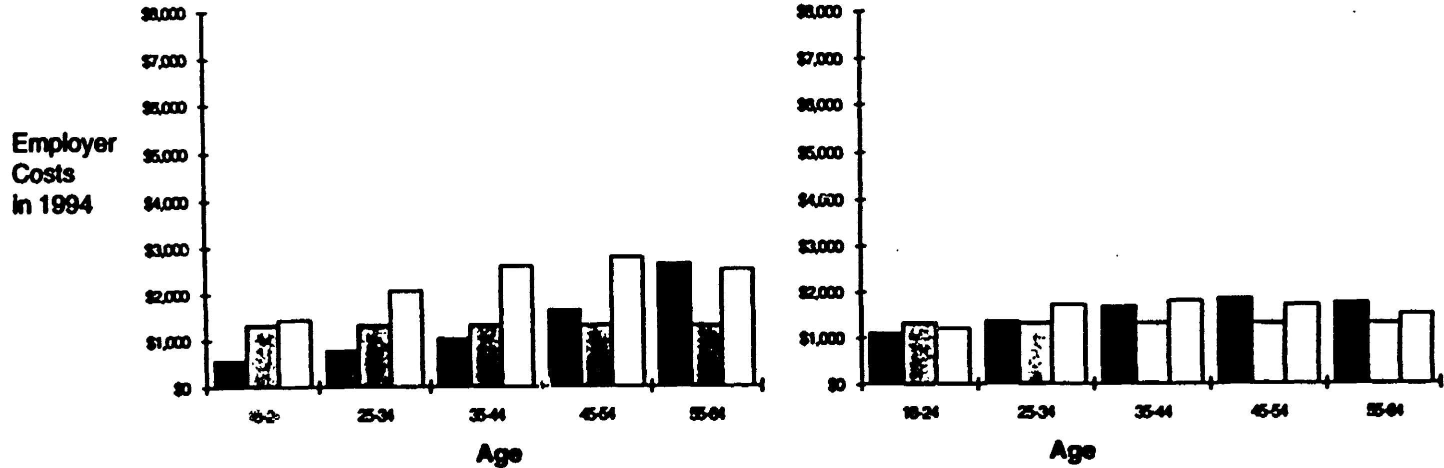
For older workers without dependents, employer costs are highest under experience-rated premiums and lowest under community-rated premiums.

Employer costs for older workers without dependents are also highest under experience-rated premiums, but are lowest under community-rated premiums. As shown in Exhibit ES-6, costs for men are about $1,400 (50 percent) less under community-rated premiums than under experience-rated premiums and costs for women are about $400 (25 percent) less. Costs for men without dependents are also much less than under the payroll tax, by about $1,200. The reason is that under community-rated premiums employer costs for a worker are higher if the worker has covered dependents, but under a payroll-tax employer costs are not influenced by whether or not the worker has dependents. Costs for older women without dependents are also lower under community-rated premiums than under payroll taxes, by $200 (13 percent). The difference is much smaller than for men because the lower earnings of women have a favorable effect on their employers' costs under the payroll tax.

Exhibit ES.6

Employer Costs for Workers without Dependents Are Lowest Under Community Rating for Males

Male Workers without Dependents | Female Workers without Dependents



■ Experience Rating □ Community Rating □ Payroll Tax

Under community-rated premiums, employer costs for male workers without dependents decline with age relative to earnings until age 45, then level off, as shown in Exhibit ES.7. This contrasts sharply with experience-rated premiums, which rise with age as a share of earnings, especially after age 45. By definition, payroll taxes are a constant share of earnings. For female workers without dependents, costs as a share of earnings vary little with age under either experience-rated or community-rated premiums.

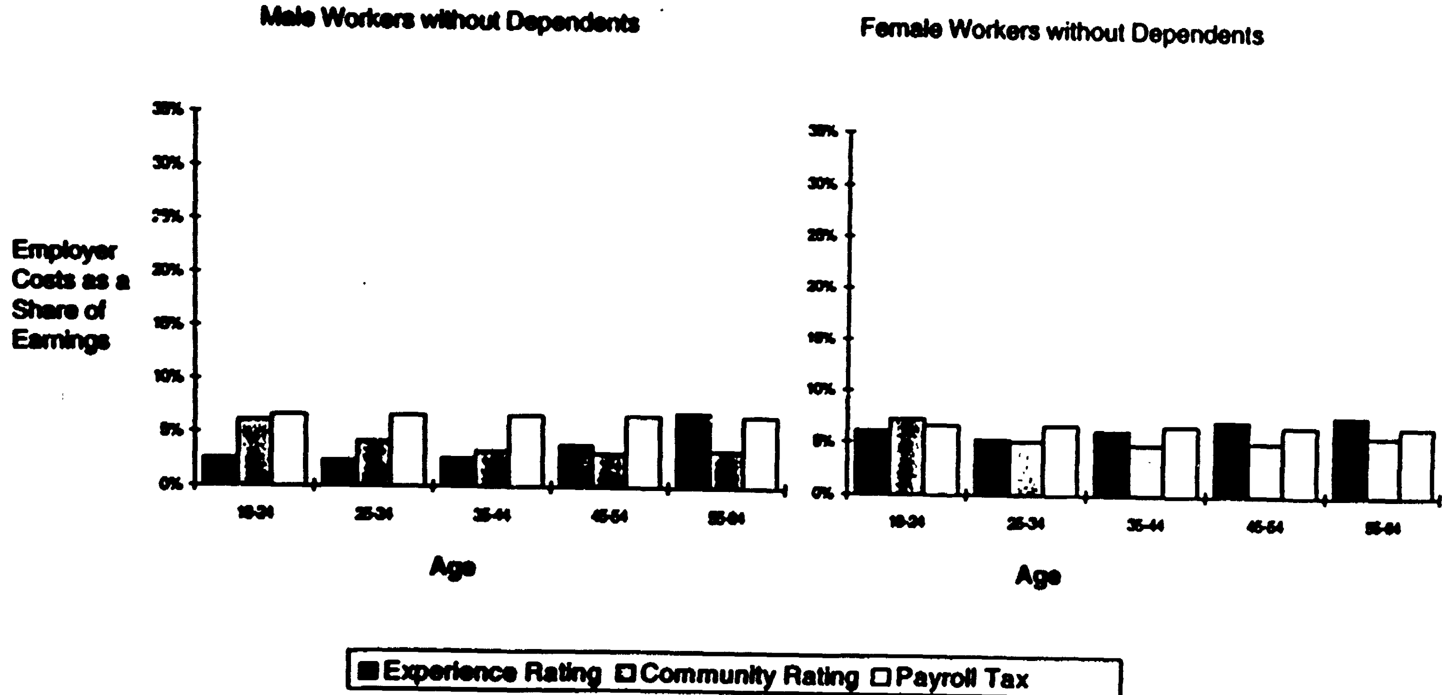
Effects on wages and employment could be substantial.

These results are, of course, estimates and rely on the many assumptions necessary to age the 1987 data to 1994. It is unlikely, however, that possible violations of these assumptions would change the rankings of the three financing methods, or even change the order of magnitude of the differences. Of more importance is the potential shifting of changes in employer costs onto workers through wage changes, which is not considered here. Actual shifting is likely to vary depending on industry, the nearness of the worker's wage to the minimum wage, and the enforcement of laws aimed at preventing wage discrimination on the basis of age alone. In general, to the extent that employer costs are shifted onto workers, the differences in employer costs reported above overstate the differences in the true burdens on employers, even if the estimated differences in employer costs are correct. Shifting would, however, increase the health care cost burden on workers in the same manner as estimated for employers in the absence of shifting.

In addition, employment effects can be expected to reduce the actual differences in costs. Some low wage workers with especially high costs are likely to lose their jobs under experience-rated premiums; this will reduce the average costs for those workers remaining in each age/gender group. This effect may be especially strong for older female workers with dependents.

Exhibit ES.7

As a Share of Earnings, Employer Costs for Men without Dependents Increase Rapidly with Age after Age 45



Lowering the age of Medicare eligibility to 55 for those who are neither working nor married to a worker would provide insurance coverage to a needy group and help relieve the burden of retiree health care costs on employers at a net cost to the government of just under $10 billion.

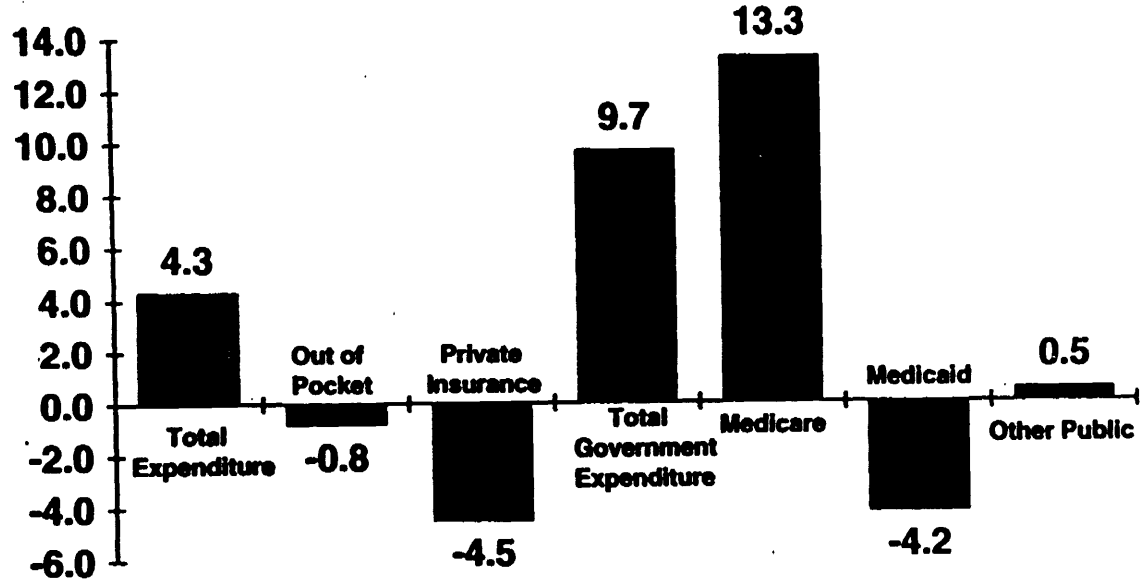
The three financing mechanisms discussed above would pay for the insurance of all workers and their dependents, but would not provide coverage to those who are neither workers nor the dependent of a worker. There are about six million people between the ages of 55 and 64 who would not be covered. As discussed earlier, many of these individuals have very high health care costs. Reducing the age of Medicare eligibility for this group would meet their needs and would also provide substantial relief to employers who are burdened by high costs for retiree insurance. While the added costs to the government would be substantial, they are not as high as might be expected because Medicare already covers two subgroups who have very high costs: those who have been Social Security Disability Insurance beneficiaries for at least two years and those with end-stage renal disease. In addition, added costs to Medicare would be partially offset by reductions in Medicaid and other public program expenditures.

The report estimates the impact that implementation of this proposal would have on health care expenditures and sources of payment were it fully implemented in 1994 (see Exhibit ES.8). This policy would increase total health care expenditures by $4.3 billion in 1994, or just over $700 per person for the approximately six million people to be covered. Payments by private insurance, which are largely financed by former employers, would be reduced by $4.5 billion dollars. The out-of-pocket expenditures for those in this group would be lowered from $800 to $650 per capita, a 19 percent reduction. This average hides the fact that those with the greatest need would experience much larger reductions in expenditures. The net cost to the government is estimated to be $9.7 billion. This includes an increase of $13.3 billion in Medicare expenditure, a reduction of $4.2 billion in Medicaid expenditures, and an increase of $0.5 billion for other public health expenditures.

The estimates presented above are based on an estimated utilization increase of 14 percent. The impact of this policy on utilization is very difficult to predict, and could be higher or lower. Some other factors could also have a major effect on costs. Costs would be increased if the new policy induced an increase in early retirements, although this might be limited by rules that would penalize early retirement. Modifications that would limit eligibility to low and middle income families would reduce the government's costs, but would also do less to relieve employers of the burden of retiree health benefits.

Exhibit ES.8

Expenditure Impacts of Lowering the Age of Medicare Eligibility to 55 for Those Who Are Neither Working Nor Married to a Worker*



Change in 1994 (Billions of Dollars)

*Estimates are based on analysis of 1987 NMES data, inflated to 1994 values by the overall rate of growth of health expenditures per capita. Actual values could vary by +/- 14% of estimates presented depending on the utilization effect.

Exhibit ES.9

Estimated Employer Health Care Costs per Insured Worker in 1994*

	Male		Female	
Age in Years	Cost	% of Earnings	Cost	% of Earnings
18-24	$710	4.1%	$900	6.7%
25-34	$1,500	6.1%	$1,780	8.5%
35-44	$2,380	6.6%	$2,410	9.0%
45-54	$3,200	8.4%	$2,580	8.5%
55-64	$3,960	14.5%	$2,300	7.7%

*Estimates are based on analysis of 1987 NMES data, inflated to 1994 values by the overall rate of growth of health expenditures per capita and, for percent of earnings, deflated by the rate of growth of non-agricultural earnings per worker. Regression analysis was used to smooth estimates and to control for region, urban/rural, race/ethnicity, industry, and benefits.

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Exhibit ES.10

Employer Costs Under Three Financing Methods

Workers with Dependents

Age	Males						Females					
	Experience Rating		Community Rating		Payroll Tax		Experience Rating		Community Rating		Payroll Tax	
	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings
< 25	$3,440*	15.7%	$3,270	15.0%	$1,450	6.6%	$2,900*	18.3%	$3,270	20.6%	$1,050	6.6%
25-34	$3,440*	9.2%	$3,270	8.8%	$2,480	6.7%	$2,900*	13.2%	$3,270	14.9%	$1,460	6.7%
35-44	$2,250	4.7%	$3,270	6.8%	$3,180	6.7%	$2,710	11.1%	$3,270	13.3%	$1,630	6.7%
45-54	$3,680	8.1%	$3,270	7.2%	$3,030	6.7%	$3,790	15.5%	$3,270	13.3%	$1,630	6.6%
55-64	$5,240	11.9%	$3,270	7.4%	$2,920	6.7%	$7,960	35.0%	$3,270	14.3%	$1,510	6.7%

Workers without Dependents

Age	Males						Females					
	Experience Rating		Community Rating		Payroll Tax		Experience Rating		Community Rating		Payroll Tax	
	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings	Costs	% of Earnings
< 25	$570	2.6%	$1,320	6.1%	$1,430	6.6%	$1,110	6.1%	$1,320	7.3%	$1,200	6.7%
25-34	$790	2.5%	$1,320	4.2%	$2,080	6.6%	$1,360	5.3%	$1,320	5.1%	$1,710	6.7%
35-44	$1,050	2.7%	$1,320	3.4%	$2,620	6.6%	$1,680	6.2%	$1,320	4.9%	$1,800	6.7%
45-54	$1,650	3.9%	$1,320	3.1%	$2,790	6.6%	$1,870	7.2%	$1,320	5.1%	$1,720	6.7%
55-64	$2,670	7.0%	$1,320	3.5%	$2,540	6.6%	$1,760	7.7%	$1,320	5.8%	$1,510	6.7%

*Due to small sample sizes, experience-rated premiums for males and females with dependent coverage in the two youngest age groups are averages for the two age groups.

PREPARED STATEMENT OF SENATOR DAVE DURENBERGER

Mr. Chairman, I appreciate the opportunity to explore the issue of health care costs with these three witnesses today. In the course of my 15 years here, I have gotten to know all three of these witnesses and I look forward to our conversations.

This is not the first time that this committee has considered issues of costs in health care. We've been at health care cost control in some form since the 1970s.

My recollection is that we tried to control costs in the 1970s by restraining the supply of providers in this country. In the 1980s, we tried to control costs by designing a variety of averaging systems. We did DRGs right in this committee as well as the RBRVS system. We did not touch Medicare itself, just tinkered with how we pay doctors and hospitals.

Now it is the 1990s, and we are in the era of limits, so to speak. We are now engaged in a battle about what those limits should be and how to accomplish them. What is news in 1993 is that we have a President who is serious about health reform and we have several plans on the table that are serious about controlling costs.

I think we would all agree that we do have to get serious about costs. But, we also have to face the fact that we don't have a lot of agreement about what causes health care cost increases—even our witnesses today disagree on that score.

Whatever the cause, however, there are plenty of proponents for a cure. In my mind, there are two paths that arguably lead to lower costs—more government OR markets.

We know where government will lead us—and several of our witnesses will tell us that is the right way to go. Government will put limits on payments, limits on procedures, limits on premiums. That will give us less service, rationing, no new products, and stagnation. Or, we can try to get costs under control through market competition. The private sector can give us what we desperately need—that is MORE CARE for LESS COST. That is productivity.

We get productivity when we change the incentives so that we reward the responsible providers who give us higher quality at a lower cost. That is what managed competition is all about.

Managed competition, where prices fall and quality rises, is not a theory. It is alive and well in Minnesota. In fact, I want to give all the witnesses a copy of my paper, "The Minnesota Health Care Market: Competition Works."

We don't need to rely on CBO's inability to estimate savings associated with behavior changes. We don't need to be told it doesn't work. We know it does. On every parameter—Medicare spending per capita, Medicare risk contracts, indemnity insurance, and on and on, Minnesota ranks at or near the bottom in terms of spending on health care.

And no one questions the overall quality of our care in Minnesota. Statistics indicate we are the healthiest state in the nation. We are not deprived of the latest technology—we are home to the Mayo Clinic and other world class medical institutions.

And we have not needed government to accomplish this. Neither the federal government, nor the state of Minnesota can take credit for our achievements. It is due to the creativity of our health care community, our business leaders, and our citizens. The First Lady has noted these features and praised them.

I will not opt for what appear to be quick solutions to very difficult problems, solutions that will not solve the cost problem and will create additional adverse side effects that will damage the health care options of the American people.

PREPARED STATEMENT OF SENATOR CHARLES E. GRASSLEY

Mr. Chairman, I don't have a statement, except to say that it is certainly appropriate to focus our hearing today on increases in health care costs.

The congressional budget office projects that health care spending could reach $1.3 Trillion dollars by the year 2000. This would be around 19 percent of gross domestic product. That compares to 14.3 Percent in 1991.

Surely, these levels of expenditure are not only too high, but intolerable. As many people have pointed out, the marginal dollars that are going into health care are dollars that are not going to satisfy other needs.

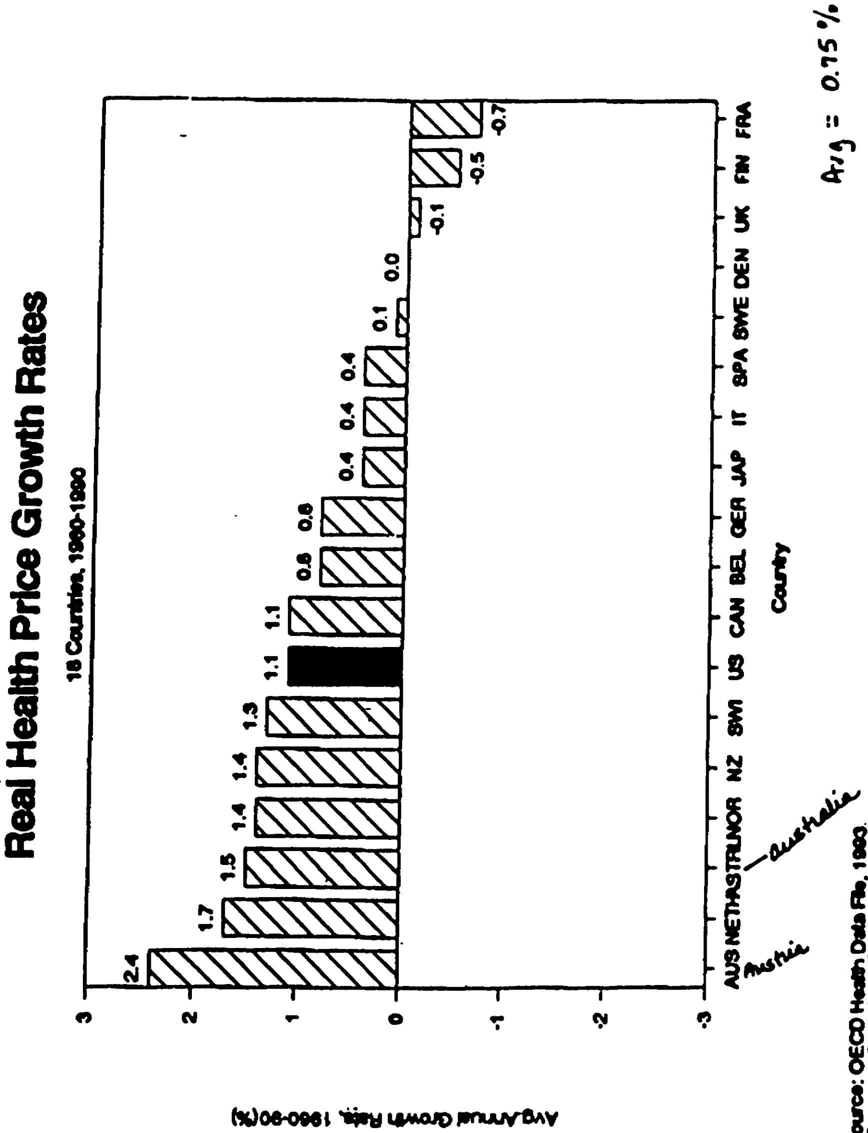
But I'm not convinced that individual Americans are ready to make the sacrifices probably needed to get health care costs to more reasonable levels. The public's view contrasts emphatically with the view of the people who are paying for these services mainly government and business—who are desperate to get health care costs under control.

It seems to me that a big part of the problem is to get the American people to understand that we simply can't do everything for everybody in health care, or in anything else, for that matter.

In order for us to be able to do something about health care costs, reality is going to have to intrude into this health care dreamland—as one writer calls it.

We really shouldn't help to perpetuate this dreamland by promising a big menu of benefits for everybody and arguing that any shortfall in the funding to pay for those benefits is going to be made up just by eliminating waste.

[Submitted by Senator Daniel Patrick Moynihan]



AN ICONOCLASTIC VIEW OF HEALTH COST CONTAINMENT

by Joseph P. Newhouse

Prologue: *It is widely believed that American health care costs are spiraling upward at a rate that is unsustainable. Or are they? In this essay Joseph Newhouse, one of the country's leading health economists, argues that the health cost containment crisis may be overstated. One by one, he debunks widely held perceptions of why health costs are increasing: an aging population; wasteful administrative costs; the spread of health insurance; a surplus of physicians, which increase induced demand for health services; more defensive medicine; expensive care for the terminally ill; and so forth. Instead, Newhouse argues that the main cost driver is new technology and its ability to increase the capabilities of medicine. To date, the scant available evidence has shown that Americans have been willing to pay more for such increased capability. Assuming that Newhouse's premise is correct—that increased medical capability is the major cost driver—then managed competition alone (without global budgets) "will not, apart from a transitory period, slow the rate of increase in medical care costs," he writes. Newhouse is John D. MacArthur Professor of Health Policy and Management at Harvard University and director of the Division of Health Policy and Research Education. He holds a doctorate in economics from Harvard and is founding editor of the* Journal of Health Economics. *Newhouse spent the first twenty years of his career at the RAND Corporation, where he designed and directed the RAND Health Insurance Experiment, a research venture that has had a profound impact on health insurance policy debates. Highly respected by his peers, Newhouse has received numerous awards, most recently the 1992 distinguished investigator award from the Association for Health Services Research.*

Abstract: Calls for medical care cost containment are all around us. Although the evidence that costs are too high is strong, the evidence that they are rising too quickly is much weaker. The principal cause of increasing costs appears to be the increased capabilities of medicine; the scant evidence available suggests that to date the public has wanted to pay for most of these capabilities. Effective global budgets would address the rising opportunity costs of health care. However, they would threaten ongoing innovation and probably would increase distortions from pricing errors.

The casual newspaper reader—or even the not-so-casual reader of this journal—could be forgiven for assuming that medical care cost containment is one of the most urgent tasks facing the nation. The belief in the importance of this task seems to rest on a few facts: (1) The level of spending on health care in the United States greatly exceeds that of any other country.[1] At the same time, U.S. mortality rates do not compare favorably with those of other countries, suggesting that the United States does not buy anything useful with its extra spending on health care. Some people believe that administrative waste is a prime source of the extra spending. Others believe that even if the United States is getting value for its health care dollar, high health expenditures damage the American competitive position.[2] (2) The growth rate of health spending exceeds the growth rate in the economy, resulting in an ever-larger share of gross domestic product (GDP) devoted to health care and, consequently, a smaller share of the pie available for other worthy activities.

A perhaps more subtle reason for the current push toward cost containment lies in the dynamics of Medicare and Medicaid spending. As the last row of Exhibit 1 shows, public spending on these two programs since their inception has grown even more rapidly than personal health care spending as a whole, and this is especially true of Medicaid after 1990. This leaves those in Congress and the executive branch with three choices: First, they could raise taxes to finance the increased expenditures, thereby risking the wrath of an antitax electorate, or finance them by adding to the deficit (although this is not possible for Part A of Medicare). Second, they could lower costs for only these programs. As has happened with Medicaid, however, this could reduce beneficiaries' access to services, thereby risking the wrath of beneficiaries and those concerned with their welfare. Alternatively or additionally, they could allow costs to be shifted to private payers, which might be considered a form of a tax, to finance the programs. Third, they could try to contain health care costs across the entire system. The historical response has been a combination of the first two options. Neither is palatable at the moment, so attention has begun to focus on the third.

In this paper I argue that the rhetoric about the urgency for cost containment may well be overstated. In so doing I concede that a nontrivial part of U.S. health spending supports inefficiency, waste, or worse, iatrogenic

Exhibit 1
Real Spending Growth In Medicare, Medicaid, And Total Personal Health Care, 1967–1993

	Medicare	Medicaid[a]	Personal health care spending
1967–1970[b]	8.2%	13.5%	7.3%
1970–1975	9.2	12.5	4.8
1975–1980	9.7	5.7	5.3
1980–1985	8.0	4.0	5.1
1985–1990	5.3	8.5	5.8
1990–1993[c]	3.2	23.5	–[d]
1967–1990	8.1	8.4	5.5

Sources: For Medicare and Medicaid spending through 1990, K. Levit et al., "National Health Expenditures, 1990," *Health Care Financing Review* (Fall 1991): Table 3 (deflated by GDP deflator). Spending figures for 1993 Medicare and Medicaid are from Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 1993*, 108, 144. Personal health spending figures are from various health expenditure reports in *Health Care Financing Review*, various years.
[a] State plus federal.
[b] Data for 1966 are not used because of half-year startup.
[c] Calendar year 1990 to fiscal year 1993. Fiscal year 1993 figures are budget estimates. Medicaid total is estimated assuming 57 percent federal share. Figures are averaged over 2.75 years to correct for calendar/fiscal year difference; assumes annual growth of 3.5 percent in gross domestic product (GDP) deflator.
[d] Not available.

illness. On an absolute scale the amount of this inefficiency is large and certainly worth trying to address. Nor do I contest the truisms that health care costs cannot grow forever at a rate faster than GDP and that the growth in health care costs comes at an ever-larger price in terms of forgone opportunities elsewhere, such as in education, infrastructure, and the like. Indeed, the strongest case for effective global cost containment in my view would rest on the following two arguments: (1) Current financing arrangements do not provide sufficient incentive to reduce costs, because insurance makes the budget constraint too soft, and nothing will provide such an incentive short of a regulatory intervention; and (2) we have reached the point at which the opportunity costs of putting another dollar in health care are simply too large (that is, social needs in other areas are simply too great).

These arguments raise the natural question, What benefits would we buy for another percentage point or two of GDP invested in health care, and is that how we want to spend our money? I argue here that what we are likely to buy is various types of medical advances and that, although at some point our ability to generate medical advance will probably outrun our desire to pay for it, the scant evidence available suggests that at least up to now, we have been willing to pay for those advances. We may no longer be so willing to pay, although I am somewhat skeptical of this.

Part of the difficulty in the debate over medical costs is a confusion

between the issues of the proper level of costs at a point in time and the proper rate of growth over time. As a result, the fairly strong evidence that the level of costs is too high is used to infer that the rate of growth in costs is also too high. More generally, I am returning to a distinction William Schwartz has repeatedly made—between the level of spending and its growth over time.[3]

Level of spending versus rate of growth. Why is growth in medical care spending cause for concern? After all, many sectors of the economy have grown over the years; the computer and telecommunications industries are two obvious examples. Indeed, just as we spend more on health care than any other country, we may well spend more per person on personal computers, fax machines, and cellular telephones as well. Yet no one I know is calling for cost containment for these industries. What makes medical care spending different?

I suspect that at least some of the taint on medical spending has been supplied by economists, who have been emphasizing for at least twenty-five years that the subsidy provided by health insurance induces excessive spending.[4] The impact of the insurance subsidy was quantified by the RAND Health Insurance Experiment, which showed that full insurance resulted in some 40 percent more spending than a large deductible ($1,000 per family per year in late 1970s dollars), with negligible benefits for the health of the average person.[5] The argument that insurance induced too much spending was further refined in the 1970s to focus on the favorable tax treatment of employer-paid insurance premiums, which was said to induce excessive insurance, which in turn led to excessive spending.[6]

Importantly, however, all of these arguments pertain to the level of health care spending rather than to its rate of growth. In the past ten years economists have begun to consider whether health insurance might affect the rate of growth in spending as well, but empirical results are scant.[7]

It is the rate of growth in spending, however, rather than the level that most concerns the body politic and its leaders. In this essay I examine what drives the rate of growth in health spending and whether that increase has bought commensurate benefits.

Quantifying Possible Causes

A high rate of increase in medical care spending is nothing new. If one starts in 1940 and proceeds decade by decade, the annual increase in real health spending has been roughly 4 percent per year in each decade, except in the 1960s, when it was 6 percent (Exhibit 2).[8] Thus, any effort to quantify the causes of higher medical spending must consider factors that have been operative for over fifty years.

Exhibit 2
Growth In Real Health Spending, Gross Domestic Product (GDP), And Number Of Physicians Per Person, By Decade, 1929–1990

	Growth in real health spending per person	Growth in real GDP per person	Growth in number of physicians per person	Health share of GDP at end of period
1929-1940	1.4%	0.0%	0.6%[a]	4.0%[b]
1940-1950	4.0	3.1	-0.1	4.5
1950-1960	3.6	1.5	-0.1	5.3
1960-1970	6.5	2.5	1.1	7.3
1970-1980	3.8	1.7	2.4	9.1
1980-1990	4.4	1.7	2.0	12.2

Sources: For health spending figures, various health expenditure reports from *Health Care Financing Review*, various years. Deflated by GDP Personal Consumption Expenditure Deflator from *Economic Report of the President*, 1991, Table B-3. Population figures are from *Statistical Abstract of the United States*, 1990, Table 2 (1929 figure interpolated geometrically between 1925 and 1930). Physicians per person are from *Health, United States*, 1989, Table 85; the figure for 1990 is a projection. Figures for 1930 and 1940 are from *Physicians for a Growing America. Report of the Surgeon General's Consultant Group on Medical Education*, Table 1.
[a] 1930-1940.
[b] For 1929, 3.5 percent.

Elsewhere I have tried to quantify the effects of a number of commonly mentioned causes of increased spending.[9] I conclude that the enhanced capabilities of medicine most likely account for the bulk of the increase, a conclusion reached by William Schwartz and Burton Weisbrod before me. Because the effect of these capabilities on costs cannot be measured directly, however, I arrive at this conclusion indirectly, by showing that the commonly mentioned causes of increased spending most likely do not account for very much of the increase if the capabilities of medicine (medical technology in the broad sense) had remained constant. Moving from the more to the less quantifiable, these commonly mentioned causes include the following.

Aging of the population. Of course, the elderly spend more on medical care than the nonelderly, and, as we all know, the proportion of the elderly in the population is rising. In fact, those over age sixty-five spend about three times as much per person on medical care as do those under age sixty-five, but their share of the population has only grown from about 8 percent in 1950 to 12 percent in 1987. If one works through the arithmetic, one finds that if nothing else changed, the increase in the elderly population could account for a 7 percent rise in medical spending—a trivial part of the total increase. Accounting for spending among the oldest old raises this figure only a small amount. Thus, aging has been a real but quantitatively unimportant factor in the overall rise in health spending.

The spread of health insurance. This is a favorite factor among economists, as already noted. The 40 percent increase in demand from the

RAND experiment cited above gives an indication of how much total spending would rise from more first-dollar insurance, absent any change in the capabilities of medicine. It turns out that the change in insurance coverage that induced this 40 percent increase in overall spending within the RAND study sample was roughly of the same magnitude as the additional insurance coverage nationally over the postwar period. Thus, absent any change in medical capabilities induced by the spread of insurance, the spread of insurance can account for only a modest part of the spending increase, perhaps one-tenth.

Increased income. It is not surprising that wealthier citizens are more likely to seek care than are poorer citizens. As nations become wealthier, therefore, medical spending can be expected to go up. By how much is difficult to pin down if medical technology does not change, but the range of estimates in the literature suggest that increased income could account for somewhere between 5 and 25 percent of the increase. I believe the appropriate number is closer to the smaller of these figures.[10]

More physicians and physician-induced demand. If increased insurance coverage is economists' favorite cause for increased health spending, more physicians is the favorite of many others. In this scenario, more physicians induce ever more demand for their services, thereby adding to medical bills. Sometimes it is even suggested that each physician adds a fixed amount to medical spending. Trying to pin down the role of additional physicians is difficult, because the growing number of physicians could partially reflect any of the three causes that have already been discussed—more elderly, more insurance, and more income—rather than being an independent cause of increased spending.

Nonetheless, the increased number of physicians does not appear to be an important independent cause of increased spending. Exhibit 2 shows the decade-by-decade increase in physician numbers compared with the corresponding increase in medical care costs. Clearly there is no correlation. In particular, the substantial jump in the number of graduating medical students beginning in the 1970s is not reflected in any notable jump in the rate of increase in medical spending.

More defensive medicine. According to this view, a large increase in malpractice claims has induced physicians to perform a variety of tests and procedures that they would otherwise not perform, thereby increasing the cost of medical care. As in many of the other explanations, there is a grain of truth here, but as best as one can tell, defensive medicine is not an important factor in the overall health spending increase. It is admittedly difficult to estimate the cost of defensive medicine. The most widely cited estimate pegged it at around 1 percent of total spending in 1984—clearly a tiny fraction of increased medical care costs.[11]

Administrative costs. Administrative costs have received much comment in the past five years. The data, however, are sparse. Program administration and the net cost of health insurance grew from 4 percent of total spending in 1940 to 6 percent in 1990, so that is clearly not a major source of the increase.[12] We do not have a similar data series for administrative costs of hospitals and physicians. Even if we did, we could not know to what degree growth in administrative costs has reduced spending that did not justify its benefits—a major problem in health care.

Another piece of evidence regarding administrative costs is that the ratio of U.S. to Canadian (real) spending on health care was about the same in 1990 as it was in 1960. Because the Canadian health insurance plan took effect after 1960, Canada would have captured the savings from any reduction in administrative waste during those thirty years by moving to a single-payer system. I do not doubt that there are administrative efficiencies to be gained in our financing system, but those are effects on the level of costs, not their rate of increase.

The terminally ill. Spending on the terminally ill is another prime suspect in the medical care cost mystery. The grain of truth behind this suspicion is that these dollars account for a disproportionate share of the spending. Among the elderly, the 6 percent who die in any one year account for 28 percent of the expenditures in that year and the preceding one.[13] But three factors suggest that spending on the terminally ill is not a major factor in the cost increase.

First, the share spent on people who died, 28 percent, was stable between 1967 and 1979.[14] This factor thus did not contribute disproportionately to the cost increase. Second, of those who died in 1978, only 6 percent had more than $15,000 of medical expenses, which does not fit the notion of a great deal of money being thrown at a great many terminally ill patients.

Third, and in many ways most importantly, it is not necessarily obvious before the fact that those who died were certain to die. To test whether many resources were devoted to hopelessly ill patients, a study was done in the late 1970s of patients admitted to an intensive care unit.[15] Physicians were asked to predict patients' short-term survival probabilities upon admission, and data on subsequent spending were collected. The researchers found that the people who were expensive were disproportionately the surprises: those who were expected to die but lived, and those who were expected to live but died. In other words, if a physician expected a patient to live and that patient started to deteriorate, more resources were expended than if that person were expected to die. Thus, of the 6 percent who died and who had more than $15,000 in expenses, many may not have been expected to die, that is, may not have been terminally ill in the popular sense. Although there no doubt is waste in the treatment of the terminally

ill, these data do not suggest that this group is a major culprit behind rising medical care costs.

Productivity in a service industry. This is another favorite explanation of economists. If productivity in an industry lags behind that of the economy as a whole, the prices of its products tend to go up. An example is men's haircuts. A similar quality haircut probably takes about as much of a barber's time now as it did fifty years ago. But real wage rates have risen, reflecting the general increase in productivity in the economy. If wage rates do not keep up in industries where productivity lags, fewer workers will enter those industries. Hence, for products of those industries in which productivity lags (such as haircuts), relative prices must go up to keep attracting workers.

In general, productivity is thought to lag in service industries such as medical care. This implies increased prices, which in turn increase spending if demand does not commensurately fall, as in health care. But ascribing increased medical spending to lagging productivity assumes that productivity in medical care has not changed much over time.[16] This seems obviously true only for long-term and home care—about 10 percent of the health sector. Acute care has changed so much that it does not seem reasonable just to assume that its productivity lags behind the economywide rate of increase. To take the three most common causes of death, neither heart disease, cancer, nor stroke is treated today anything like it was fifty years ago. A direct test of this argument is seemingly at hand, however: What has happened to medical care prices relative to other prices?

The Medical Care Component Of The Consumer Price Index

The best-known measure of medical care prices is the medical care component of the Consumer Price Index (CPI), which has risen more rapidly than almost any other, consistent with the argument that lagging productivity has caused—and presumably will continue to cause—medical care spending increases.[17] Indeed, the CPI for medical care has so many measurement problems associated with it that I do not think it can be used to decompose expenditure increases into price and quantity changes. In fact, it is not even intended to be so used. Because of the widespread view that above-average increases in the medical care component of the CPI demonstrate that there has been considerable price inflation in medical care, I digress in this section to sketch some of the problems with using the CPI in this fashion.

Perils of pricing. The first problem was described over twenty-five years ago by Anne Scitovsky.[18] What the patient really seeks when consulting a physician is the treatment of a medical problem. The price index, however,

does not price the treatment of a heart attack or breast cancer or lower back pain; rather, it prices certain services, such as the price of a day in the hospital, a visit to a physician, or a particular drug. Suppose for a given medical problem, such as normal delivery, cataract surgery, or peptic ulcer, the treatment protocol changes so that there is a decrease in length-of-stay, a shift to outpatient surgery, or a change from surgery to medical treatment. Suppose the changes in the mode of treatment reduce the cost of treating the problem, and the final outcome for the patient's health is the same as before. A true price index would register a fall in price.

Unfortunately, the CPI would not reflect this decrease. The direct impact on the index would be nil; none of these things in the first instance need change the price of a day, a visit, or a drug. Indeed, their indirect impact on the CPI could be perverse. If, for example, the decrease in length-of-stay or the shift to outpatient surgery means that the average patient in the hospital is sicker, the price per day might even rise, whereas the price for the stay might fall. Indeed, the large changes in the mode of treatment in the 1980s such as reduced stays and shifts to outpatient surgery might explain why the change in the medical care component of the CPI exceeded the change in the all-items CPI by a much larger margin in the 1980s than in the three previous decades (Exhibit 3).

Discounting. Second, the price index has historically been based on charges (list prices). In the 1980s, as discounting spread, fewer and fewer patients actually paid these list prices. One study of California hospitals found that from 1983 to 1988 list prices rose 70 percent, but transaction prices rose only 40 percent.[19] In other words, the price index overstated the actual increase by almost a factor of two. Because discounting in California was probably greater than elsewhere, this calculation may exaggerate the national picture, but it emphasizes that the bias could be large. Also, the index historically has not included prices paid by Medicare and Medicaid. Thus, to the degree that there has been cost shifting from these programs to private payers, the private prices included in the index would be rising faster than a proper deflator for the medical economy as a whole.

Exhibit 3
Excess Of Increase In Medical Care Consumer Price Index (CPI) Over Increase In All-Items CPI, 1950–1990

	Medical care	All items	Difference
1950–1960	4.0%	2.1%	1.9%
1960–1970	4.3	2.7	1.6
1970–1980	8.2	7.8	0.4
1980–1990	8.1	4.7	3.4

Source: *Economic Report of the President*, 1992, Table B-56.

Changes in quality. Third, it is always difficult for a price index to incorporate quality enhancements. If a nurse is added to a hospital floor, thereby enhancing response times but adding to cost, this will likely register as a pure price increase, whereas a proper price index would net out the value of the quicker response times. Adjusting for quality change may be even more of a problem if one were to try to shift the index to the cost of treating an illness episode. Suppose a noninvasive test replaced an invasive test but at a higher cost. How much should be netted out to adjust for any reduction of pain or risk of side effects from the new test? Suppose a new drug increased the expected quality of life of someone with acquired immunodeficiency syndrome (AIDS) but at an added cost; how much should be netted out? Or say the quality of an artificial hip, pacemaker, or intraocular lens was improved; how should this be priced out? These questions should make it clear just how pervasive and difficult the necessary adjustments would be in arriving at a quality-adjusted price index, but ignoring them clearly biases the index up.

Improper weighting. Finally, the medical care price index, like any price index, is computed by attaching weights to the prices of each medical good or service included in the index and averaging. To accurately decompose increases in medical spending into price and quantity increases, the weight on each good or service must be proportional to spending on it. Hospital spending is roughly twice as large as physician spending. In the medical price index, however, the weights for hospital and physician services are approximately equal.

This weighting is not a mistake but reflects the underlying purpose of the CPI, which is to adjust consumers' disposable income for changes in the cost of living. The weights in the CPI therefore reflect how consumers spend their disposable income on various goods and services. Because hospital services are well insured, the amount spent on them out of pocket is low relative to their share of total medical spending, whereas physician services are not as well insured, so the weight is relatively higher.

Although the weighting problem is easily remedied, the other problems are not. The Bureau of Labor Statistics, working with tight budgets, is trying to improve the medical care component of the CPI, but in my judgment we do not have a meaningful measure of what has happened over time to medical care prices and therefore no adequate empirical basis for saying how much of the expenditure increase should be attributed to price increases (inflation) and how much to quantity increases. This argument also implies that a traditional decomposition of spending increases into population change, economywide inflation, excess medical-specific inflation, and intensity is only partially legitimate. In my view, the last two components cannot be reliably distinguished.

The Residual: The March Of Science?

The thrust of the foregoing argument is that the various factors listed above do not account for the bulk of the cost increase, leaving a large residual or unexplained cost increase. What does that residual represent? To me, the most plausible candidate is the enhanced capabilities of medicine. Some of the enhanced capabilities have reduced cost, the polio vaccine being the most prominent example, but almost surely, on balance, innovations such as noninvasive imaging, invasive cardiology, transplantation, monoclonal antibodies, and renal dialysis have increased cost. Readers should have little trouble coming up with their own list of technological advances that increase costs.

Although labeling a residual is inherently arbitrary, I can make at least three arguments to try to make it plausible that enhanced capabilities account for much of the cost increase. First, the factors mentioned earlier—more elderly, more insurance, more income—would raise demand for hospital days and office visits even if technology did not change. But it is striking that the rate of patient days and visits is now about where it was in 1960. The great increase in hospital cost has not occurred because more people have been going to the hospital but because they spend more when they arrive. This is consistent with the perception that more is being done to them or for them when they get to the hospital and not consistent with the notion that medical care costs are a simple tale of increased demand from more elderly or more insurance with no technology change.

A second argument is the roughly similar rate of increase in costs of HMOs or capitated systems as of medical care as a whole. Although it is difficult to adjust premium increases in HMOs and fee-for-service plans for changes in the risk mix insured, as well as for changes in cost sharing and benefits covered, as best we know, the costs of HMOs and fee-for-service medicine are rising at a similar rate (although group- and staff-model HMOs are at a lower level of cost at each point in time).[20] Thus, whatever is driving up costs in fee-for-service medicine has been driving them up in HMOs as well. Technology is a factor that applies to both.

Finally, the rate of increase in the United States in real medical care costs (using a GDP deflator to convert to real dollars) is not so different from the rate of increase in other countries (Exhibit 4).[21] Thus, whatever is behind the rate of growth in health spending appears to be common across developed countries. Improvements in medical technology are, of course, common across these countries.

Suppose one accepts this conclusion. Then the key question becomes, Have consumers been willing to pay for the costs of these capabilities, or have they mainly been induced to purchase them by excessive health

Exhibit 4
Real Per Capita Growth Rates In Health Spending, And Difference Between Growth Rates In Health Care And GDP, Seven Countries, 1960-1990

	Annual growth in health spending per capita[a]			
	1960-1990	1960-1970	1970-1980	1980-1990
Canada	4.7%	6.1%(2.8)	3.7%(0.5)	4.3%(2.5)
France	5.5	7.8 (3.5)	5.3 (3.0)	3.3 (1.7)
Germany	4 4	5.6 (2.2)	6.3 (3.9)	1.4 (-0.4)
Italy	6.1	8.9 (4.1)	6.2 (3.4)	3.4 (1.3)
Japan	8.2	14.0 (5.1)	7.1 (4.2)	3.7 (0.1)
United Kingdom	3.7	3.7 (1.5)	4.4 (2.9)	3.1 (0.8)
United States	4.8	6.0 (3.6)	4.2 (2.5)	4.4 (2.9)

Source: Calculated from G J. Schieber et al., "U.S. Health Expenditure Performance: An International Comparison and Data Update," *Health Care Financing Review* (Summer 1992): 1-88. Gross domestic product (GDP) deflator for country used to deflate.
[a] Difference between health and GDP growth rates, in percentage points, is shown in parentheses.

insurance, spawned by the favorable tax treatment of health insurance? And even if consumers were willing to pay in the past, are they still?

Paying For Medical Advances

Whether consumers would pay for the various enhanced capabilities of medicine is the economist's standard test of whether we would be better off without these advances and their attendant costs. Let me put aside one possible misunderstanding at the outset. It is not sufficient to say that most of these capabilities would not have been adopted without the subsidy from health insurance—and therefore consumers are not willing to pay for them. The true test is: Are consumers willing to pay the expected costs of these capabilities if they are covered by a health insurance policy? To take a concrete example, the question is not, Would I, an uninsured consumer, be willing to spend my life savings on a liver transplant if my liver failed? The question is, Would I, a healthy consumer, be willing to pay the premium for an insurance policy that would cover a liver transplant if my liver failed?[22] That question, and similar questions using other technologies, is exceedingly difficult to answer. But if I am right that much of the cost increase is attributable to the enhanced capabilities of medicine, that question lies at the core of the debate over medical care cost containment.

The cost factor. So suppose we had successfully contained costs and reduced the rate at which new capabilities were introduced. Would we have been better off? Although the notion of too much technological change may strike clinicians as strange, let me try to sketch the argument of why there might be too much medical technology, an argument Weisbrod has

spelled out in detail.[23] In the traditional American health care market of fully or near fully insured consumers, the test of any medical innovation is whether on average it promises any health benefits, not whether those benefits are commensurate with the cost of the innovation. By contrast, in most of the rest of the economy, cost is a factor in whether an innovation succeeds.[24] If high-definition television sets were to cost $50,000 each, it is unlikely that they would have been developed for the household market, however much better their picture was than that offered by existing television technology. With high-definition medical imaging, however, the analogous question was typically not asked; the prime question in the past was whether the image was sharper. Because of the lack of the usual cost test, especially for technology used in the hospital, the presumption is that there might be too much technology and too much innovation.

But this is still a theoretical argument. We need empirical data to confirm it, because it is possible that consumers would have been willing to pay for much of this innovation even if the usual market test had been present. Unfortunately, but not surprisingly, the empirical data are thin. All I can provide are some indications that suggest that the public heretofore has been willing to pay for much of the increase in medical capabilities.

International comparisons. I think the most powerful data are the international comparisons shown in Exhibit 4. Suppose that the capabilities of medicine are behind a good bit of the cost increase everywhere, including in countries such as Canada that make an explicit budget decision on health spending. If countries with very different financing institutions than those in the United States show similar rates of cost increase, they are evidently willing to pay for the technology, albeit not to the same level of intensity.

The point about reduced intensity can be illustrated with a stylized example. Suppose two countries are otherwise alike but Country 1 spends $1,000 per person and Country 2 spends $500 per person on health care. Suppose a new machine or procedure is developed and marketed in both countries; each machine or procedure bought adds $10 per person to medical care bills. If Country 1 buys ten procedures and Country 2 buys five because it is restraining technology, both countries' costs go up 10 percent. The same exercise may be replayed next year with another kind of procedure. In a nutshell, that describes what has happened around the world.

Another piece of evidence on willingness to pay for new capabilities is the similar rate of cost increase in HMOs. HMOs are the closest thing we have to a market test of willingness to pay. Yet in general we have not seen HMOs not offering recent medical advances in exchange for lower premiums.[25] To be sure, HMOs are constrained from doing so by malpractice law. But if the explosion in medical care capabilities vastly exceeded consumers'

willingness to pay, it seems a little surprising that we have not seen some organization seeking to enter the market without offering all of these capabilities.

Yet another piece of evidence is public opinion polls. When asked whether the nation should be spending more on health, 69 percent of the public said that we are spending too little on "improving and protecting the nation's health."[26]

Global Budgeting

Medical care costs cannot grow forever at a 4 percent per person (real) rate when the economy grows at a 1 to 2 percent rate.[27] This truism, together with the sense that there is a distorted market test for medical innovation, has led to a sense that "something must be done" about medical care costs and financing arrangements.

According to some, that "something" should be managed competition; according to others, global budgeting. In what follows I discuss a reasonably strong version of global budgeting. This is not meant to slight managed competition with no global budget. Suppose, however, that managed competition functions exactly as its advocates foresee, a best-case scenario. If it continues to be true that much of the cost increase reflects enhanced medical capabilities that society is mostly willing to pay for, managed competition will not, apart from a transitory period, slow the rate of increase in medical care costs. In other words, if consumers do not now want to trade a reduction in the rate at which new medical procedures and technology are introduced in return for reduced costs, then in the long run managed competition will not necessarily "contain" costs at something like the rate of increase of GDP. Of course, if one believes in allowing consumer choice, this is not a problem. Nonetheless, if managed competition functions well—a large "if," but properly the subject of another paper—it should reduce the amount of waste and inefficiency and provide a test of people's willingness to pay for further medical advances.

What about global budgeting? To make headway, one needs to define terms. Although global budgets could take many forms, let us assume for the sake of being concrete that Medicare's prospective payment system (PPS) and resource-based relative value scale (RBRVS) apply to all payers, and a National Health Board controls the dollar conversion factor with a mandate to keep expenditure increases, at least for hospital and physician services, at the rate of GDP growth.

Sufficiently hawkish cost containment to keep expenditure growth at the level of GDP growth will surely not be easy; with the exception of Germany in the 1980s, none of the countries listed in Exhibit 4 has managed to

achieve it in any of the past three decades. But let us assume for the sake of argument that such a global budget can be implemented and would keep growth in costs at the level of GDP growth. What existing problems would that not solve, what existing problems would that solve, and what new problems would be created?

Global budgets by themselves would not necessarily do much about the waste in the current health care system; examples include inappropriate procedures, overmedication, self-referral, and high loading charges in the small-business market.[28] Some hope that global budgets will induce physicians to triage patients, so that reductions are mainly among inappropriate procedures. This may not happen, however, for three reasons. (1) There is currently substantial variation in rates of procedures across areas, but the percentage that are inappropriate is reasonably constant.[29] This finding does not square with the notion that the additional procedures in the high-rate areas are done to patients who will benefit less. Outcomes research may help with this problem. (2) Even if the medical staff of a hospital could agree on who derived the most benefit, there is little reason to expect that the allocations of budgets to hospitals will not have errors, so that the incremental procedure done in one hospital will have a different benefit than in another. (3) The inevitable errors in setting fees will leave incentives in place to perform procedures that may have little patient benefit; alternatively, if fees are replaced by pure capitation, there will be a different set of distortions.

Even if global budgets would not do much to reduce waste, however, by freeing resources for other purposes, they would address the problem of the ever-increasing opportunity costs of medical spending. Moreover, one could keep access to care for Medicare beneficiaries (and maybe even Medicaid beneficiaries) on some kind of par with the nonelderly without a tax increase or expansion of the deficit.

These advantages are not to be taken lightly, but the argument assumes that because of the high opportunity costs, the public would rather see another billion dollars not spent on health care. The burden of my argument is that the public may well want to buy the fruits of medical progress as they come tumbling out onto the market in the next decade. Although these fruits could in theory be accommodated for a while at the expense of reducing waste in the existing system, it seems unlikely that this could be true in the long run and might not happen in practice even in the short run.

What new problems would global budgets create? One reasonably widely discussed issue is rationing, and I have focused on a subissue within the rationing debate: the continued enhancement of medical technology. There is, however, another potential problem from harder budget constraints that has received less attention: the increase in potential distortions

from administered price systems.

Much of the debate seems to proceed on the assumption that the regulator, whether it be government or a private insurer, knows the economic costs of a medical service (or in a capitation world knows the expected annual costs of a patient) as well as does the provider. This is simply not the case. That it is a trivial technical task—except for the politics—to set prices in line with costs is belied by the history of administered price systems in all industries, especially those characterized by rapid technological change, as is the case with medical care.

This is not to disparage past efforts to develop and continued efforts to refine the alphabet soup of pricing systems that Medicare now uses: PPS, RBRVS, and adjusted average per capita cost (AAPCC); they are very likely better approximations to economic cost than what went before them. Nonetheless, there can be little doubt that both public and private administered price systems still contain important errors in estimating economic costs at the procedure or patient level. And even if they contained no errors today, they would contain them tomorrow, when the method of treating a disease had changed but the pricing system had not been updated.

There is, of course, no real alternative to administered prices; widespread insurance, which is surely desirable, makes their use inevitable. In my view, managed competition does not necessarily escape the problem of administered prices because the revenue a provider receives for a patient may not match that patient's expected cost as perceived by the provider.[30] Even negotiated budgets face this problem because they will have implicit prices for case-mix and volume that will differ from economic prices.

My fear is that harder budget constraints will cause the distortions in behavior induced by pricing errors to become more pronounced than they are now. We already see some effects from price distortions. Many hospitals and physicians, for example, try to keep down the number of uninsured patients they treat; many physicians do not accept new Medicaid patients. The most straightforward explanation of such behavior is that revenue does not match cost. On the other side of the ledger, providers seek out "profitable" services and "private paying patients." And we have some evidence that organizations paid by capitation disproportionately attract healthy patients (or healthy patients within a category); another description of such patients is "profitable."[31]

Up to this point, however, the effects of such pricing errors on actual behavior probably have been mitigated by the softness of the overall budget constraint and by medical ethics. With tighter budget constraints, I suspect that we may see discrimination against financially undesirable patients becoming finer and more sophisticated. In the past we have tended to equate access to care with being insured; in the future we may see problems

of access for those who are insured but for whom reimbursement falls short of cost. Chronically ill patients, for example, may find that organizations paid by capitation subtly encourage them not to enroll in the first place or, once enrolled, to disenroll.

Thus, we face two nasty trade-offs. First, the ability of medicine to benefit patients and the attendant costs may be growing more rapidly than our willingness to pay, although the thin evidence suggests that to date this has not been the case. Second, we face a trade-off between the hardness of the budget constraint and the consequences of pricing errors. For that reason a strong cost containment initiative is not likely to be a "surgical strike" that affects only waste; any such strike is likely to generate collateral damage. Whether we wish to accept that damage is the question of the moment.

So What Is To Be Done?

Although much of the focus of the debate will surely be on the merits and demerits of a global budget, I conclude by sketching four kinds of initiatives that might be desirable, irrespective of whether a global budget is imposed.

A public or quasi-public plan for the small-business market. The small-business market vividly illustrates problems of selection: preexisting condition clauses; certain firms or industries unable to purchase insurance; instances of extreme annual swings in premiums because of experience rating on a small group. Simple mandates on employers to provide insurance will not necessarily solve these problems. If comprehensive insurance is to be available to employees of small businesses, it may well be the case that there needs to be a public or quasi-public agency that pools risks in this market; that is, employment-based insurance may not be very practical for the self-employed or small firms.[32]

Elimination of the federal match at the margin for Medicaid. Medicaid spending is currently growing much faster than Medicare spending. This disparity suggests that something more than general increases in medical spending is driving the federal health budget upward. One possibility is that states have begun to exploit the federal match for Medicaid in ways that are not necessarily intended (for example, the gifts and donations regulations). If so, one can address the problem in two ways: the Medicaid program can be federalized; or, if decision-making authority continues with the states, the federal contribution can be capped, so that any additional dollars come from the states. (The federal contribution should continue to be more generous for poorer states; additionally, if the states continue to be responsible for chronic long-term care, I suggest that the contribution be more generous for states with more elderly citizens.) The general principle is that the decision-making authority should face full costs at the margin. Canada

made an analogous change in its health insurance program in the late 1970s, when the central government ended its fifty-fifty match with the provinces.

A cap on employer-paid premiums that are tax free. Some kind of universal entitlement undermines the rationale for favorable tax treatment of employer-paid premiums, which is to combat selection by offering an incentive for good risks to join a plan at the workplace. (The tax subsidy, however, still may be important if the universal entitlement is only to a narrow range of services and supplementary coverage is relied upon for other benefits.) Some believe that removing the subsidy to the marginal dollar would end a substantial distortion of consumer choice toward more expensive insurance plans that do not return value for money. Suppose that they are wrong, however, and that consumers are reasonably insensitive to premium differences. Then capping the premium that is tax free would make a healthy contribution toward reducing the deficit or financing new benefits such as care of the currently uninsured.

A tax increase to help finance Medicare and Medicaid. An important and value-laden concern is the degree to which the upper part of the income distribution wishes to purchase the costly advances of modern medicine for themselves but not pay for their similar availability for the bottom part of the income distribution. If the privately insured population under age sixty-five and the wealthier elderly want to buy the fruits of medical advances, it will be necessary to increase taxes if access for the beneficiaries of public programs is not to deteriorate further.

NOTES

1. G.J. Schieber, J.P. Poullier, and L.M. Greenwald, "U.S. Health Expenditure Performance: An International Comparison and Data Update," *Health Care Financing Review* (Summer 1992) 1–87
2. Both of these claims are controversial, and the competitiveness claim is particularly dubious. On administrative cost, see K.E. Thorpe, "Inside the Black Box of Administrative Costs," *Health Affairs* (Summer 1992): 41–55. On competitiveness, see U.E. Reinhardt, "Health Care Spending and American Competitiveness," *Health Affairs* (Winter 1989) 5–21 Reinhardt argues, in my view persuasively, that there is little or no excessive increase in American price levels because changes in health care costs will be offset by changes in other parts of the compensation package, especially cash wages. But suppose for the sake of argument that this conclusion were incorrect and that there were a not negligible effect of health care costs on price levels. Although specific industries could be adversely affected, there should still not be an effect on the overall American competitive position because such a change in prices would be compensated for in the aggregate by a change in exchange rates. In other words, although some industries would hurt, others would be favorably affected.
3. W B. Schwartz, "The Inevitable Failure of Current Cost Containment Strategies: Why They Can Provide Only Temporary Relief," *Journal of the American Medical Association*

257 (1987): 220–224.

4. M.V. Pauly, "The Economics of Moral Hazard," *American Economic Review* 58 (1968): 231–237; and M.S. Feldstein, "The Welfare Loss of Excess Health Insurance," *Journal of Political Economy* 81 (1973): 251–280.
5. W.G. Manning et al., "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review* (June 1987): 251–277; and J.P. Newhouse, "Controlled Experimentation as Research Policy," in *Health Services Research: Key to Health Policy*, ed. E. Ginzberg (Cambridge, Mass.: Harvard University Press, 1991).
6. For a review of the literature, see M.V. Pauly, "Taxation, Health Insurance, and Market Failure in the Medical Economy," *Journal of Economic Literature* 24 (1986): 629–675.
7. See B.A. Weisbrod, "The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment," *Journal of Economic Literature* 29 (1991): 523–552. I found some evidence for excessive rate of growth, but the results depend on the validity of the CPI, which, for reasons described below, I now doubt. The tests in that paper compared price growth over time for hospital, physician, and dental services, as well as for drugs. In principle, the tests could be repeated using expenditure growth rather than price growth, but because exogenous factors affect expenditure growth in the sectors differently (for example, the decline in the decay of teeth, the growth of AIDS), I am not optimistic about that approach. J.P. Newhouse, "Has the Erosion of the Medical Marketplace Ended?" *Journal of Health Politics, Policy and Law* (Summer 1988): 263–278.
8. The 1960s saw the introduction of Medicare and Medicaid, so it is not surprising that the rate of growth in spending was higher then.
9. J.P. Newhouse, "Medical Care Costs: How Much Welfare Loss?" *Journal of Economic Perspectives* (Summer 1992): 3–21.
10. The smaller figure results from using the observed income elasticity at the household level in the United States, the larger from using the elasticity internationally. The former is presumably smaller because of widespread insurance, which probably should be assumed for present purposes.
11. R. Reynolds, J.A. Rizzo, and M.L. Gonzalez, "The Cost of Medical Professional Liability," *Journal of the American Medical Association* 257 (1987): 2776–2781.
12. The 1940 figure is from R.M. Gibson, "National Health Expenditures, 1978," *Health Care Financing Review* (Summer 1979): 1–36. The 1990 figure is from K.R. Levit et al., "National Health Expenditures, 1990," *Health Care Financing Review* (Fall 1991): 29–54
13. J. Lubitz and R. Prihoda, "The Use and Cost of Medicare Services in the Last Two Years of Life," *Health Care Financing Review* 5 (1984): 117–131. We do not have comparable data for the nonelderly, but the elderly account for more than 70 percent of deaths, so it is unlikely that including the nonelderly would change the conclusions in any material way.
14. Ibid.
15. A.S. Detsky et al., "Prognosis, Survival, and the Expenditure of Hospital Resources for Patients in an Intensive Care Unit," *The New England Journal of Medicine* 305 (1981): 667–672.
16. The lagging productivity concept is behind an argument made by Morris Barer and colleagues that the share of GDP rather than real health expenditure should be used to compare across countries. M.L. Barer, W.P. Welch, and L. Antioch, "Canadian/U.S Health Care: Reflections on the HIAA's Analysis," *Health Affairs* (Fall 1991): 229–236 In addition to the argument in the text, the following empirical fact is not consisten with their argument: Wages for hospital workers in Canada are above those in th United States despite lower real incomes in Canada. S.G. Haber et al., "Hospita

Expenditures in the United States and Canada: Do Hospital Worker Wages Explain the Differences?" *Journal of Health Economics* (forthcoming).

17. Notice that this argument, if correct, implies that health care costs could rise more rapidly than GDP and nothing would necessarily be amiss.
18. A.A. Scitovsky, "Changes in the Costs of Treatment of Selected Illnesses, 1951–1965," *American Economic Review* 57 (1967): 1182–1195; and A.A. Scitovsky, "Changes in the Costs of Treatment of Selected Illnesses, 1971–1981," *Medical Care* 23 (1985): 1345–1357. Scitovsky finds that the costs of treating the illnesses she studied increased faster than the medical care CPI, but she does not endeavor to adjust for quality.
19. D. Dranove, M. Shanley, and W.D. White, "Does the Consumer Price Index Overstate Hospital Price Inflation?" *Medical Care* 29 (1991): 690–696.
20. H.S. Luft, "Trends in Medical Care Costs: Do HMOs Lower the Rate of Growth?" *Medical Care* 18 (1980): 1–16; and J.P. Newhouse et al., "Are Fee-for-Service Costs Increasing Faster than HMO Costs?" *Medical Care* 23 (1985): 960–966.
21. The similar rate of growth in U.S. and Canadian real (per capita) health costs implies that the ratio of those costs was not very different in 1990 than it was in 1960.
22. Actually, the question is even more complicated, because one must take account of the fact that insurance may itself induce more consumption. See J.H. Goddeeris, "Insurance and Incentives for Innovation in Medical Care," *Southern Economic Journal* 51 (1984): 530–539; and J.H. Goddeeris, "Medical Insurance, Technological Change, and Welfare," *Economic Inquiry* 22 (1984): 56–67. Further, perhaps tastes change when one is sick or disabled; in the debate over the Oregon Medicaid proposal, for example, some argue that the preferences of people who are not disabled cannot be used to evaluate various states of disability.
23. Weisbrod, "The Health Care Quadrilemma."
24. Defense at times may have been an exception.
25. Although I am not aware that this has occurred, I could imagine an HMO not offering the latest technology as a selection device; for example, not offering a costly advance in cancer therapy so that cancer patients will choose to go elsewhere.
26. National Opinion Research Center, *General Social Survey, 1992*. Also see R.J. Blendon et al., "The Implications of the 1992 Presidential Election for Health Care Reform," *Journal of the American Medical Association* 268 (1992): 3371–3375.
27. However, suppose 20 percent of the growth in the economy each year is spent on medical care. Then the share of GDP spent on medical care will stabilize at 20 percent.
28. M. Chassin et al., "Does Inappropriate Use Explain Geographic Variations in the Use of Health Care Services?" *Journal of the American Medical Association* 258 (1987): 2533–2537; J. Avorn et al., "A Randomized Trial of a Program to Reduce the Use of Psychoactive Drugs in Nursing Homes," *The New England Journal of Medicine* 327 (1992): 168–173; and J.M. Mitchell and J.H. Sunshine, "Consequences of Physicians' Ownership of Health Care Facilities: Joint Ventures in Radiation Therapy," *The New England Journal of Medicine* 327 (1992): 1497–1501.
29. Chassin et al., "Does Inappropriate Use Explain Geographic Variations?"
30. The issue is how good risk adjustment can be. Perhaps a health insurance purchasing cooperative (HIPC) can keep selection problems at a tolerable level, but I am skeptical. Not insisting on pure capitation would help to mitigate selection.
31. K. Langwell and J.P. Hadley, "Evaluation of the Medicare Competition Demonstrations," *Health Care Financing Review* (Winter 1989): 65–80.
32. One may object that it is unfair to employees of firms who are on average good risks to subsidize employees of other firms who are bad risks. This ignores the possibility that a good risk today may be a bad risk tomorrow and may want insurance against the increased premiums that bad risks would face.

Growth in Real Health Expenditure and GDP, by Decade
(% per Year)

Growth in Real Health $, per capita		Growth in Real GDP per capita	Health Share of GDP at end of period
1929-1940	1.4%	0.0%	4.0%[a]
1940-1950	4.0%	3.1%	4.5%
1950-1960	3.6%	1.5%	5.3%
1960-1970	6.5%	2.5%	7.3%
1970-1980	3.8%	1.7%	9.1%
1980-1990	4.4%	1.7%	12.2%

Sources: Health care expenditure figures: Personal Health Care Expenditure 1929-1950: Health Care Financing Reviews, Summer 1979, Table 3. 1960-1980: Office of National Cost Estimates, "National Health Expenditures, 1988," Health Care Financing Review, Summer 1990, Table 14. 1989: Lazenby and Latsch, "National health Expenditures, 1989," Health Care Financing Review, Winter 1990, Table 13. Deflated by GDP Personal Consumption Expenditure Deflator, Economic Report of the President, 1991, Table B-3. Population: Statistical Abstract, 1990, Table 2, (1929 figure interpolated geometrically between 1925 and 1930). Real GDP from Economic Report of the President, 1991, Table B-2.

[a]1929:3.5%

G-7 GROWTH RATES OF REAL HEALTH EXPENDITURE PER CAPITA, 1960-1990 (%/YR, GDP DEFLATOR)

	1960-1990	1960-1970	1970-1980	1980-1990
CANADA	4.7%	6.1%	3.7%	4.3%
FRANCE	5.5	7.8	5.3	3.3
GERMANY	4.4	5.6	6.3	1.4
ITALY	6.1	8.9	6.2	3.4
JAPAN	8.2	14.0	7.1	3.7
U.K.	3.7	3.7	4.4	3.1
U.S.	4.8	6.0	4.2	4.4

SOURCE: CALCULATED FROM DATA IN SCHIEBER, POULLIER, GREENWALD, 1992

Decade-by-Decade Growth in Numbers of Physicians per Person and Real Spending per Person (Annual Rate of Increase, % Per Year)[a]

Year	Physicians	Spending
1930-1940	0.6	1.4[b]
1940-1950	-0.1	4.0
1950-1960	-0.1	3.6
1960-1970	1.1	6.5
1970-1980	2.4	3.8
1980-1990	2.0	4.4

[a]Source: Health, United States, 1989, Table 85. The figure for 1990 is a projection. 1930 and 1940 figures from Physicians for a Growing America: Report of the Surgeon General's Consultant Group on Medical Education, Frank Bane, Chairman, Table 1. Spending figures from Exhibit 2.

[b]1929-1940.

PER CAPITA EXPENDITURE ON HEALTH AND HEALTH ADMINISTRATION, 1990

COUNTY	HEALTH	ADMINISTRATION
Canada	$1770	$23
France	1532	24
Germany	1486	102
U.S.	2566	149

Source: Poullier, 1992, "Some misgivings are felt about the comparability... but the dispersion ...[is not just] statistical vagaries..."

Real Spending Growth in Medicare, Medicaid and Total Personal Health Care[a] (Percent per year)

Years	Medicare	Medicaid[b]	Personal Health Care Spending
1967-1970[c]	8.2%	13.5%	7.3%
1970-1975	9.2	12.5	4.8
1975-1980	9.7	5.7	5.3
1980-1985	8.0	4.0	5.1
1985-1990	5.3	8.5	5.8
1990-1993[d]	3.2	23.5	n.a.
1967-1990	8.1	8.4	5.5

[a]Source for Medicare and Medicaid spending through 1990 is Levit et al., "National Health Expenditures, 1990," Health Care Financing Review, Fall 1991, Table 3. Deflated by GDP deflator. 1993 spending figures for Medicare and Medicaid from Congressional Budget Office, "An Analysis of the President's Budgetary Proposals for Fiscal Year 1993," pp. 108,144. Personal health spending from Levit et al. and Robert M. Gibson, "National Health Expenditures, 1978," Health Care Financing Review, Summer 1979.

[b]State plus federal.

[c]1966 data not used because of half-year startup.

[d]CY 1990 to FY 1993. FY 93 figures are budget estimates. Medicaid total estimated assuming 57 percent federal share. Averaged over 2.75 years to correct for calendar-fiscal year difference. Assumes annual growth of 3.5 percent in GDP deflator.

Answers to Senator Grassley's Questions

1. What portion of total health costs are caused by these kinds of behaviors?

I know of no overall estimate. Dorothy Rice, of the University of California at San Francisco, has estimated certain components. She estimated that in 1985 $6.3 billion was the cost of treating alcohol abuse and $1.9 billion was the cost of treating drug abuse. These are small percentages of the $371 billion spent on personal health care in 1985. Rice, together with Ellen McKenzie at Johns Hopkins, has also made an estimate for injuries, which I do not have readily at hand. Anne Scitovsky at the Palo Alto Medical Clinic has made estimates of the costs of AIDS. There is, however, a danger of double counting if dollars are accounted for in this way and simply added up. For example, excess alcohol consumption is associated with injuries; smoking and drinking are correlated; drug abuse and AIDS are correlated, etc.

2. Won't we still experience high health care costs in a reformed health care system because of these things?

I agree. As a minor caveat, I would say that there may be some economies through such things as more widespread case management, but I would expect any savings to be modest at best.

3. Don't we have to address these problems if we want to get health care costs under control?

Although I certainly think these problems greatly lessen the quality of life in our society and that we should be addressing them and that they have something to do with high health costs, it is less obvious that they have much to do with rising health costs. To the degree the problems are spreading, the spread will increase costs. But to the degree their prevalence is stable or falling (e.g., smoking rates are falling), their existence would only explain a cost increase to the degree specific new expensive therapies are developed for them. There are certainly examples of such therapies, such as AZT for AIDS and NICUs for low-weight infants, but it is not obvious to me that new expensive therapies are disproportionately for these problems.

Joseph P. Newhouse
October 22, 1993