RECORD OF SOCIETY OF ACTUARIES 1991 VOL. 17 NO. 3B

CURRENT ISSUES IN SOCIAL SECURITY AND OTHER GOVERNMENT HEALTH PROGRAMS

Moderator: JOSEPH N. ROMANO
Panelists: STEPHEN G. KELLISON

DAVID R. WEST*

Recorder: JAMES A. DUNLAP

Medicare – controlling cost – Parts A and B

Medicaid – covering the uninsured

Social Security

Trust fund buildupActuarial balances

Long range issues

MR. JOSEPH N. ROMANO: I'm a consultant with Milliman & Robertson. I am going to talk about Medicare — controlling cost issues; Dr. David West will talk about the Medicaid program; Mr. Stephen G. Kellison will talk about the Social Security program and certain aspects of financing in both the Social Security and the Medicare programs.

With respect to Medicare, if you've been to any of the sessions on Medicare or if you've heard Governor Lamm's introductory speech, you'll know that the volume of dollars expended for the Medicare program has increased tremendously over time. Appreciate the magnitude to get at the issue of controlling cost. First, all these numbers are from the 1991 Trustees' Report and they're all going to be benefit payments in billions of dollars. In 1970 the Hospital Insurance (HI) program or Part A disbursed about \$5.1 billion. In five-year periods the increases were approximately 120% from 1970-75, 122% from 1975-80, 90% from 1980-85, and then 39% from 1985-90, ending up at about \$66 billion by 1990. Notice the significant increase in the rate of growth of the HI program subsequent to the Prospective Payment System or Diagnostic Related Groups (DRGs).

On the Supplementary Medical Insurance (SMI) side, the expenditures in 1970 were about \$2 billion with an increase of about 115% to 1975, in the next five years 47%, 116% to 1985, and then a declining increase to 85% by 1990, for about a \$42 billion current expenditure. If you look back in 1970, SMI costs relative to HI costs were about 39%. By 1990, they're about 64%, so the concern has obviously shifted in the Medicare program from the HI to the SMI program.

From the HI Report, the Board of Trustees notes that, "Promising steps to begin reducing the rate of growth in payments to hospitals have been taken, including the implementation of prospective payment and Diagnostic-Related Groups. Initial experience under the Prospective Payment System for hospitals suggest that this payment mechanism can be an effective means of constraining the growth in the hospital payment and improving the efficiency of the hospital industry." That last

* Dr. West, not a member of the sponsoring organizations, is Director, Division of Programs, Colorado Medicaid Program at The Colorado Department of Social Services in Denver, Colorado.

phrase is very important. It's more worrying about what Medicare does as opposed to the total system.

A similar conclusion from the SMI Report or Part B was that the Board notes with concern the rapid growth in the cost of the program. "Growth rates have been so rapid that outlays of the program have nearly doubled in the past five years. For the same time period the program grew 37% faster than the economy as a whole." That kind of quote has been in the Trustees' Report for the Part B program almost every year for the past 10 years and it's indicative of the fact that the thrust has changed, certainly with respect to where Medicare is going to look to control cost.

The way of looking at Medicare and controlling costs is to look at it with two respects. One is in terms of reducing costs and another one is in terms of shifting costs. As well as worrying about the hospital industry, it's important to note that generally the trustees of Medicare are looking at controlling costs or shifting costs only from Medicare's point of view. If there's some impact on the system as a whole, generally, it's an unintended impact or an indirect impact. It's not something that the Medicare program is directly attempting to accomplish. It just is happening because they're such a big payer and player in the industry.

Look at some of the methods within those two broad areas, reducing costs and shifting costs. At this point in time, through 1991, we have the evidence of two aspects of it. We have the Prospective Payment System and we have the Physician Payment Reform. We have had one or two other sessions here at the meetings on R and the change to a Resourced Based Fee Schedule. In the Medicare program, there are some other major pieces that Medicare is looking at and has been looking at over the past several years in terms of trying to do the same control – the Skilled Nursing Facility (SNF) piece, the Home Health piece, and the Outpatient piece. The reasons for looking at those are somewhat different, have been somewhat different, and have mainly been a function of some of the fallout from the existing Prospective System, the DRG.

The build of the decrease in rate of growth of the HI or the Part A program from 1980-90 can be attributed to the Prospective Payment System. Yet it is not prospective, but rather retrospective control. The control is as the system is updated through the market basket update, which sets the payment levels for future years. Well, if the payment levels are increasing or if the growth in the program is increasing at a higher than desired rate, one of the results is Congress comes along and will reduce the rate of increase. So you could look at that as being a type of retrospective adjustment, although there really is no going back and making a different payment to the hospitals. It's just a volume control or a total payout control mechanism. The controlling in that aspect of controlling Medicare was certainly not without problems. Certainly anybody who lived through that knows there are things that were not included in the Prospective Payment to hospitals and one of them was capital costs. The Health Care Finance Administration (HCFA), at this point in time, has proposed new regulations to basically bring the capital costs, or what they call pass-through items for things that were outside the Prospective Payment System, back into Prospective Payment System so that there is a return to a system where they control the total payout.

Another aspect of controlling this payout is reducing the cost through inadvertent, at least from HCFA's point of view, but probably deliberate from the provider's and the insurer's point of view, shifts to other payers and other modes of treatment — certainly, a shift to the Part B outpatient program as well as maybe a cost shift to the private payers (I know that latter one is somewhat controversial). But in terms of shifting to the outpatient setting, what HCFA has done through Congress is to expand the DRG payment window to include a greater period of time for services rendered in an outpatient setting prior to a hospital admission. So instead of being a Part B reimbursable outpatient service, it comes back and is a Part A DRG reimbursable service. So for the same payout they've now shifted dollars and services back into the DRG system.

The other aspect of controlling costs is that they can't shift it all back into the Part A Prospective and want to introduce a Prospective for Part B. The Omnibus Budget Reconciliation Act of 1990 (OBRA 90) included provisions that require reports to Congress about the idea of implementation of an Outpatient Prospective System with the goal to parallel basically the DRG system for the Inpatient System and allow a payment per unit of service or payment per an "admission" for an outpatient service similar to the inpatient Prospective. The control through a prospective system permits Medicare to limit the payment. They can't limit it, heighten it to an extreme, or predict exactly what they're going to pay out because there are still movements within the system; there is coding creep or changes in the way hospitals and providers can code services and increase the reimbursement. The prospective system changes fundamentally the way Medicare has historically reimbursed providers, making it a system that essentially comes down to an update of one number, whatever the update factor is for the Prospective Payment System. For inpatient, it's the market basket update. For an outpatient, there would be one other updating factor. To the degree that Medicare constrains that updating factor, they constrain their total increase in costs.

On the Part B side, you obviously have the Physician Payment Reform going into effect. The aspect of control on Physician Payment Reform is what's been called the Medicare volume performance standards. The update factor, a conversion factor, sets the level of the payout from the Medicare program, and a retrospective adjustment effectively adjusts future updates based on what past levels of payouts were. The impact on that has been discussed in previous meetings. The question is: will there be cost shifts, will there be shifts among Medicare providers, or will there be shifts to the private sector? There is certainly a concern that in reducing Medicare payment the system will shift costs to the private sector.

The other aspects of the Medicare program, the SNF and Home Health, are also being addressed within OBRA 90. Specifically, the SNF benefits have increased tremendously as a result of Medicare Catastrophic Law changes and the transitions from catastrophic and definitional changes. Medicare through OBRA 90 has in place a situation where a prospective system for the Skilled Nursing Facilities will be talked about, studied and, hopefully, implemented from their point of view. Home Health, the other aspect, again a Prospective Payment System, is being studied for recommendation to Congress and implementation by 1992 or 1993.

The bottom line is that by 1993 the Medicare program could effectively become a program, at least for these five major pieces, where very simplistic changes by Congress can drastically affect the rate of increase and drastically affect the level of payment that Medicare will make. I think any time you worry about the level of payment that Medicare can make in a system that is as big as Medicare, you need to worry about the cost shifting. That aspect of cost shifting has one or two directions. One which is a direct cost shifting to private payers and HCFA and the Medicare program would certainly be very open about these. This includes things like the working aged, disabled continuation, end-stage renal disease (ESRD), and auto liability. These are all provisions that over time have been introduced and have been strengthened to expand the opportunities for Medicare to say that they are no longer primary, they are secondary, and that the group employer is the primary payer for these areas. Interestingly, this started very small, as Prospective did. In one sense, it started with inpatient. Now you've got something for physician. You're ultimately going to have something for the other pieces. It started very small for ESRD. Initially, Medicare was the secondary payer for the first 12 months. The latest law has increased it to the first 18 months. The working aged started very small and currently covers both employees and spouses older than 65 years, regardless of the age of the worker. The point is that to the degree that Medicare has been unable to reduce its costs, it has been able to shift directly costs to the private sector by way of provisions that make itself secondary.

Another aspect of cost shifting is the fact that Medicare or HCFA has become very aggressive for the carriers or the intermediaries, the fiscal payers of the Medicare program, to track down situations where Medicare is the secondary payer, setting very aggressive targets for these carriers to meet, being very vocal when they don't meet these targets, and putting a fair amount of pressure on them to go out and find situations where Medicare should be the secondary payer and not the primary. Another provision starts to tie in to the IRS data and allows Medicare to identify situations where it should be secondary. The result is a pattern of shifting to the greatest degree away from the Medicare program to a group insurer or to the private sector and that is certainly a direct impact of reducing costs or of controlling costs from the Medicare program.

Detail is not needed to realize the main concern is the fact that dealing with the Medicare program alone is not enough. You really need to look at its impact on the total health care system. It has had an impact in terms of actions it has taken to reduce Medicare costs. It has also had an impact in terms of actions it has taken to shift Medicare costs and that kind of pattern is going to continue. People working in the non-Medicare market need to be acutely aware of this because there are multiple aspects of this cost shifting that need to be considered when you're doing your rating development or experience analysis for private sector business.

Now Steve Kellison will talk about Social Security. Specifically, some of the issues regarding the trust fund buildup, actuarial balances, both the short-term and long-term issues, as well as some of the financing on both the Social Security and the Medicare programs, and finally, some actuarial opinions.

Steve is the chairman of the Department of Risk Management and Insurance at Georgia State University. For several years he was the Executive Director of the

AAA, and he is currently a member of the SOA Board of Governors, Chairman of the Academy Committee on Social Insurance, and is working on the second edition of the textbook, *The Theory of Interest*.

MR. STEPHEN G. KELLISON: The Trustees' Reports for OASDI, for HI and SMI are statutorily required to come out around April 1. They ran late this year. I have a number of charts that should bring you current information in case you're an early recipient of the Trustees' Reports as to where these various systems are. Also, I have been involved in some work on some technical panels that have produced some recommendations and also some information that do not appear in the Trustees' Reports.

Under the Social Security Law, there is an Advisory Council to Social Security that's set up on a quadrennial basis. The current one is appointed as the year 1991, although it's been operational for about the last two years. Past quadrennial Advisory Councils have convened technical panels of actuaries and economists in the past back in the 1970s. I think if you go back to 1979, 1975, and as far back as 1971, there were technical panels appointed at that time. But the prior two cycles to this, 1983 and 1987, the Advisory Council did not appoint technical panels. The 1991 Advisory Council did appoint a technical panel again, which in a sense was really the first one in 12 years and, in particular, the first one since the 1983 Social Security amendments. I was privileged and honored to serve as Chairman of that group which included five actuaries and four economists. It was a very interesting group to try to get consensus out of five actuaries and four economists when it came to assumptions and methodologies on Social Security. It was quite an interesting experience, and we did produce a published report.

As we were about 80% of the way through that we decided to convene a new panel and look at Medicare as well. I agreed to be one carryover member for continuity. So I sat through another eight months of a report to deal with Medicare financing issues and that report also looks like the first one. Both reports can be ordered from the Advisory Council's office in Washington. Never in the past have the technical panels really gone at OASDI and Medicare separately. I think both technical panels really did come up with some interesting conclusions, many of which really did have an impact on the Trustees' Reports.

I will discuss the key recommendation that the first panel, the OASDI Technical Panel, made. Several of them did find their way into the final Trustees' Report (see Chart 1). The first issue is the 75-year project period. It essentially reflects a generation from the entry into the work force until a large portion of that generation has passed from the scene. This seems like a reasonable period over which to do the projection.

The second point there is that a contingency reserve at least equal to 100% of annual expenditure should be built and maintained throughout the 75-year projection period. This is something new that our panel recommended and this was adopted by the trustees this year. In essence, prior to this year, the Trustees' Reports were using a target of zero. In essence, if everything worked out as the assumption would indicate, the end result would be zero and we believed that we really should be shooting at a target that would have a contingency margin for the following year; 100% of the above developed based on some studies. You can look at measures

CHART 1 Summary of Recommendations

Evaluation of trust fund soundness and presentation of results:

Seventy-five years is an appropriate period over which to evaluate the soundness of the system.

A contingency reserve equal to at least 100% of annual expenditures should be built and maintained throughout the 75-year projection period.

A summary measure of actuarial balance should continue to be used and should:

- Continue to be used based on the present-value method of summarizing income and cost rates; and
- Be modified to include the cost of building and maintaining a contingency reserve equal to 100% of annual expenditures throughout the projection period.

The Panel recommends that the Trustees' Report highlight four additional measures of the system's financial well-being.

- The year in which the trust funds are projected to exhaust their reserves, as well as the first year in which the reserves fall below a fund ratio of 50%.
- The amount of any tax or benefit changes needed to bring the system back into long-range actuarial balance.
- The amount of transfers to and from Federal general revenues needed as special Treasury obligations are purchased and redeemed.
- The size of any difference between the cost rate and the income rate in the 75th year of the projection period, which is a measure of ultimate balance in the system.

A short-range test of the soundness of the OASDI system is necessary. The Panel recommends a test that applies to the first 10 years of the projection period and indicates whether the system:

- Has a contingency reserve or fund ratio at the beginning of each year of more than 50%, or
- Is projected to achieve a fund ratio of more than 50% within five years and remain at or above that level, and
- Has revenues sufficient to pay benefits in each month at the beginning of that month.

CHART 1 (Continued) Summary of Recommendations

A long-range test of trust fund solvency is also needed. It should cover the 75-year projection period and should:

- Summarize actuarial balances for all valuation periods up to 75 years including both the beginning trust fund balance and the cost of building and maintaining a contingency reserve equal to 100% of annual expenditures throughout the five-year period.
- Apply a tolerance level for an actuarial deficit of 5% of the summarized cost rate over the full 75-year period and grading uniformly to zero at the beginning of the first projection period.
- Use a present-value calculation.

The projection set now labeled "alternative II-A" that is based on Federal budget assumptions should be eliminated and the remaining three sets should be labeled "low cost," "best estimate," and "high cost."

Assumptions

The Panel recommends that the ultimate best-estimate (II-B) real wage growth assumption be decreased from 1.3 to 1.0% and that the low- and high-cost projection assumptions be set at 0.4 and 1.6%, respectively.

The Panel recommends an increase in the ultimate best-estimate (II-B) inflation rate from 4.0 to 5.0% and increases in the low- and high-cost assumptions to 3.0 and 7.0%, respectively.

The Panel recommends an increase in the ultimate best-estimate (II-B) real interest rate assumption from 2.0 to 2.8% and an increase in the low-cost rate from 3.0 to 3.3%. The Panel recommends no change in the high-cost assumption of 1.5%.

The Panel makes no suggestions for changing the level of the mortality assumptions. It does, however, suggest an assumption of continued increase for several years beyond 1990 in deaths from the Acquired Immune Deficiency Syndrome (AIDS) in the low-cost projections.

The Panel recognizes the uncertainty of future fertility trends. A majority of the Panel considers the ultimate total fertility rate of 1.9 as appropriate for the best-estimate assumption, but would also consider 1.8 reasonable. The Panel recommends that the ultimate fertility rate for the high-cost projection be reduced from 1.6 to 1.4, in light of current experience of certain developed countries.

The Panel recommends a net increase of 150,000 in the number of immigrants assumed in the low-cost projections.

The Panel suggests that consideration be given to using separate first marriage and remarriage rates.

CHART 1 (Continued) Summary of Recommendations

The Panel makes no recommendation for changing the present retirement rate assumptions.

Projection Methodology

The panel recommends that additional resources be allocated to an in-depth analysis of the projection methodology.

Other Policy Issues

Because of the complexity inherent in the OASDI system of taxes and benefits, changes in that system generally should be considered primarily on their own merit, rather than in the context of short-range budget debates.

The current investment policy for the OASDI and DI trust funds seems reasonable.

The current statutory basis for an actuarial opinion should be continued and the statement of opinion should remain in the Trustees' Report.

The automatic stabilizer in current law is of limited effectiveness. Further analysis of the role of stabilizers should be done.

A group with appropriate expertise should be convened to review technical and communications issues related to SSA's Personal Earnings and Benefit Estimate Statements.

SSA should explore ways to communicate financial information about the system to the general public in a more understandable way.

A new technical Panel should be convened within the next 4 to 8 years.

FINANCIAL IMPLICATIONS

The Panel has made offsetting recommendations, the implementation of which would both improve and worsen the forecast of the future health of the OASDI system. The recommended increase in the interest rate assumption has a significant positive effect on the long-range actuarial balance because that measure takes account of interest the trust funds are earning during this period of reserve accumulation. Two other recommendations — the decrease in assumed productivity and the maintenance of 100% contingency reserve — would place increased financial demands on the system and would worsen its apparent financial well-being according to measures that do not take account of interest.

Specifically, using the Panel's recommended changes in the best-estimate (II-B) economic assumptions and implementing its recommendation to include the cost of maintaining a 100% contingency reserve throughout the 75-year projection period would result in a summarized long-range (75-year) actuarial balance of -0.70% of payroll (a deficit), compared to -0.91% under the Trustees' 1990 best-estimate (II-B) assumptions. The effects of the Panel's recommendations are shown in Table A.

TABLE A Effects of Panel Recommendations

Recommendation	Effect on the Long-Range Actuarial Balance (Percent of Payroll)
Decrease the ultimate real wage differential best- estimate (II-B) assumption from 1.3 to 1.0%	-0.30
Increase the ultimate inflation rate from 4.0 to 5.0%	+0.20
Increase the ultimate real interest rate from 2.0 to 2.8% and phase in the ultimate period, rather than the first 10 years as assumed by the Trustees	+0.43
Effect of Assumption Changes (subtotal)	+0.33
Include the cost of building and maintaining a contingency reserve equal to 100% of annual expenditures over the 75-year projection period	-0.12
Total Effect of Recommendations	+0.21

either on a year-by-year basis or you can look at them on a summary basis. If you summarize them there are various methodologies. This panel recommended the continuation of a present value methodology which probably sounds pretty automatic and correct to everyone in the audience. It turns out that this is highly controversial within the actuarial profession. When we get to Medicare, this is a source of considerable controversy between the actuaries at Social Security and the actuaries at HCFA. But this panel recommended that it be done on a present value basis and include a 100% trust fund ratio.

Other highlights, adopted in the Trustees' Reports, include the year of trust fund exhaustion, as well as an earlier year when it would fall below a safe contingency margin. Another is the amount of any tax or benefit changes needed to bring this system back into long-range actuarial balance. The point is that the timing of those kinds of increases is important. Clearly, the later they're made, the larger the correction that will be needed. A bullet in Chart 1 talks about the amount of transfers to and from general revenues needed as the Treasury obligations are purchased and redeemed. This is important because, at the present time, many of you know this gets into the trust fund buildup issue that Social Security is not running on a pay-as-you-go basis. If Social Security were running on truly a pay-as-you-go basis, this would not be a significant fact. There is going to be a large trust fund buildup followed by a large draw down if present law is not changed and, therefore, you cannot disassociate the effect that this program has on the rest of the federal budget and that's significant. So to highlight that, we believed that disclosure was important.

And finally, the fourth bullet concerns the size of the difference in the cost rate and the income rate at the end of the 75 years, in the ultimate period, after a lot of intervening events that happened. How closely in balance is the cost and the income rate. There are serious deficiencies at that point in both OASDI and in the HI program. The HI one is much more serious, but they're both considerably deficient so that the ultimate tax rate is not sufficient to pay for either one of these programs. The net effect is that every time you do a new 75-year projection, you bring in a new year at the end of the 75 years, which is essentially a negative year. There's a chronic bias in all of these methods, because every year they have to work in a bad year that's new and there's that persistent drag every year.

Our panel recommended a short-term test of actuarial condition of the system. Social Security has never had a short-range test of actuarial condition before. It was our panel's view that even though the system right now is in good shape and the balances are growing rapidly, this is something that would still be desirable to have. If we had that in the late 1970s, our panel believed that some of the things that led up to the 1983 amendments might have been highlighted a little earlier and possibly dealt with in a little more, hopefully, rational basis than in the crisis legislation that happened just as they were about to run out of money.

The trustees actually adopted a short-range test in their 1991 report, which is the first time they've ever done that, and they actually toughened the one that we suggested. The one that they actually adopted talks in terms of requiring that the System get to at least a 100% of the next year's outlays within the first five years of the projection period and maintain that for another five years. So, over a 10-year period you're guaranteed to get to at least 100% in the first five years and be able to maintain that

for a second five. Now, that's not going to be important in Social Security until somewhere out in the year 2040. If nothing changes it will become very significant. However, they've also adopted the same test for Medicare Part A HI. This test would become effective in just the next few years, because right now Medicare will meet that, but in just about two or three years it will fail this test. So, this will come into play in the very near future for the HI program even though the HI program today satisfies this.

We also came up with a long range test that has some similarities to the old test and also some differences. I'll illustrate that graphically later, but basically it has a tolerance level. The old test of close actuarial balance was a tolerance level between 95% and 105%. If the income rate were between 95% and 105% of the cost rate, the system was deemed at being close actuarial balance. We have modified that slightly by taking off the top end and by running the test over the entire 75 years rather than just at the terminal point. This will become a lot clearer shortly. We've also built in a 100% trust ratio, whereas, the old test was basically targeting for zero.

Buried down here rather inconspicuously is something called Alternative II-A and II-B. Ever since about 1981, from the old three-part set of projections, (alternatives I, II), and III), II-A and II-B were created. The demographic assumptions between the two were the same, but the economic assumption is different. Our panel recommended that the distinction between II-A and II-B be eliminated and go back to just a single II. We did not expect that to happen. We recommended it. It turns out the trustees did it. So now, there is no longer a II-A and a II-B. They're now back to just a three-alternative-type structure. Again, our panel did have some considerable influence.

In the area of assumptions we reviewed all the major assumptions in both economics and demographics under the system. After a considerable amount of spirited discussion, in the end we recommended really no changes in the demographic assumptions. The biggest demographic assumption is really fertility. This is the one that actually drives the cost of the system. This essentially drives the aging in the population and the number of workers to beneficiary's ratio. The long-term costs of both Medicare and OASDI on the demographic side are largely driven by the fertility rate, to some extent by immigration, and to some extent by mortality rates. But the real driving force here is fertility rates and we finally decided that the assumption of 1.9 was reasonable.

On the economic side, however, our panel did recommend three changes in economic assumptions and one of them was the real wage assumption, which is the difference between wage increases and the CPI. The trustees have been using 1.3. Our panel believed that the differential was too optimistic based on the experience in the last 20 years and we recommended a factor of 1.0. In the area of CPI, the trustees are using 4.0%. Our panel recommended 5.0%. In the area of the real interest rate the trustees had been using 2.0% and our panel recommended 2.9%, which is a pretty significant increase. The rationale for that was from some of our economists who believed that there were a couple of factors at work here. One is much better intermediation in the financial markets where some artificially low interest rates that used to prevail in the past really don't prevail anymore. The people are much more market savvy than they used to be. You can move money around with a computer

button very easily. Also, the large and chronic federal deficits have probably racheted up the real interest rate a little bit, so we recommended that.

One other page from this report (see last page of Chart 1) that is really rather interesting. This shows the net effect of all of our panel's recommendations in the cost of the system. Changing the real wage differential from 1.3-1.0 increased the deficit by 0.3% (a minus is basically a loss and a plus is basically a gain) of payroll, which is essentially because that's a less favorable assumption in terms of salary growth. The increase in the inflation rate 4.0-5.0% interestingly enough had a positive effect on the system. One of the perverse things about Social Security is that in terms of the cost estimates, increasing the rate of inflation actually has a net gain on the system and that sounds a little backwards, but what happens is that you get the extra income from the taxes earlier than you have to pay out the extra benefits on those salaries. In effect, there's a lag involved and the net effect is if you increase inflation assumption, you actually have a positive impact on the cost of the system. Now, that clearly would not be true for Medicare. It's true in OASDI where the benefits are related to salary, but nothing is comparable to that for Medicare. Increasing the real interest rate also has a positive balance on the system because you're basically running surpluses in the early years and deficits in the later years. So if you increase your rate of discount, the net effect of that is positive because of the incidence of where you're getting your pluses and where you're getting your minuses. On the other hand, from an economic point of view, you could say that for the economy as a whole, an increase in the real rate of interest is not necessarily a good thing, because that really illustrates a higher cost of borrowing in real terms for the economy as a whole. Note that from an economics point of view stepping away from the system, all three of these are essentially negatives in terms of the economy, to have real wage gains drop, to have inflation go up, to have real interest rates go up. All three of them are negative for the performance of the economy as a whole and yet two of three of them actually produce lower costs for Social Security.

Chart 2 shows some recommendations from the Medicare Panel Report, and I will highlight the areas of difference. In terms of page 1, the big recommendation is to essentially project SMI costs over 75 years, whereas, in the past SMI costs have been projected really only over three years. But as Joe mentioned, they also comment about the fact of concern about the rapid growth in SMI costs that have grown much faster than the rest of the economy. Our panel basically believed that some of the distinctions between HI and SMI are getting blurred, even though the financing is different. To look at the program costs as a whole, you need to look at them over the same period of time. So we recommended a 75-year projection period for SMI instead of a three-year projection period. The trustees did not go for that, although the Trustees' Report on SMI that just came out does have some tables that go out as far as the year 2000. So, they have run some numbers out for 10 years at least for people to look at, but they did not go anywhere near 75-year projections that our group recommended.

In Chart 2, again, just highlighting the areas that are different between the two technical panels, I think the only area here that would be different is in the real wage assumption. The second panel, the Medicare panel, recommended dropping the real wage assumption from 1.3 all the way down to 0.7. So, they believed that the earlier panel that had recommended going to 1.0 had not dropped it enough, that it

CHART 2

Summary of Findings and Recommendations

The Panel's findings and recommendations throughout the six chapters of the report follow.

INTRODUCTION

The Panel recommends that a new technical panel be convened in the next 4 to years to review the Medicare program at that time.

MEDICARE PROJECTIONS

The Panel recommends that HI revenues and costs continue to be projected over a 75-year period.

The Panel recommends that the current information in the SMI Trustees' Report be supplemented with projections of the expected cost of the SMI program over a full 75-year projection period.

The Panel recommends that certain long-range projections of HI and SMI be made on a compatible basis so that the combined long-range obligations of the Medicare program can be clearly portrayed.

The Panel finds that the methods used to construct incurred experience are reasonable given the limitations of available data.

The Panel concludes that:

- The projection work by OAct is highly competent;
- Given the limitations of available data, no better models are evident;
- Better data are needed to measure past experience as a basis for projecting future costs; and
- Because of data limitations, the projections for SMI are less sophisticated than for HI.

The Panel recommends that more resources be devoted to enhancing projections for the SMI portion of the Medicare program.

The Panel recommends that more work be done to compare past Medicare cost projections with actual experience.

The Panel recommends strong Federal support for conducting research to develop long-term projections on the use and cost of health care services.

ASSUMPTIONS USED FOR MEDICARE PROJECTIONS

Assumptions Common to OASDI and HI

The Panel supports the recommendation of the Social Security panel to drop the II-A projections for HI as well as for OASDI and to rename the remaining projections: "low-cost" (I), "best estimate" (II), and "high cost" (III).

CHART 2 (Continued) Summary of Findings and Recommendations

The Health Technical Panel defers to the finding of the Social Security Technical Panel that the Trustees' intermediate, or best-estimate, demographic assumptions are reasonable.

The Health Technical Panel defers to the recommendations of the Social Security Technical Panel to change the ultimate long-term economic assumptions for the intermediate, or best estimate, projections by: raising the real interest rate to 2.8%, and raising the inflation assumption to 5%.

The Panel recommends that the Trustees' ultimate best estimate real wage assumption be lowered from 1.3 to 0.7%.

Medicare Utilization and Payment Assumptions

The Panel concludes that assumptions used to project HI and SMI costs for the next 25 years are based on reasonable extrapolations of past trends, enhanced by informed judgment about the potential effect of recent legislative and regulatory changes. The Panel concludes that both the assumptions and the resulting projections are reasonable.

The Panel recommends that long-range assumptions about the growth in HI and SMI payments after the first 25 years be monitored closely to ensure that the projections conform to trends developing under the prospective payment system (PPS) and the new resource based relative value scale (RBRVS).

The Panel recommends that the next Health Technical Panel include in its review the alternative I and III assumptions used to project the status of Medicare.

CONTINGENCY RESERVES

The Panel recommends that the HI Trust Fund maintain a contingency reserve at a minimum level of 100% of the following year's expenditures.

The Panel also recommends that the cost of building and maintaining HI reserves at 100% of annual expenditures be included in the projected long-range cost and balance of HI.

The Panel recommends that SMI Trust Fund reserves (assets on hand minus liabilities for incurred but unpaid cost) should be allowed to range as high as 25% of the following year's projected incurred costs over an amount sufficient to cover deviations between projected and actual experience in the year.

MEASURES OF THE FINANCIAL STATUS OF MEDICARE Hospital Insurance

The Panel recommends a test of the short-run soundness of HI that requires a 100% trust fund ratio throughout the first 10 years of the projection period.

The Panel believes a test of long-range balance similar to that recommended for OASDI could usefully be applied to HI, particularly at a time when the HI system is closer to being in balance than it is now.

CHART 2 (Continued)

Summary of Findings and Recommendations

The Panel concludes that both the present value method and the HI method of calculating the HI actuarial balance have value and should be reported. It further concludes that the controversy over the methods used to calculate the actuarial balance has deflected attention away from the far more important issue; namely, how to deal with the huge long-range financial deficit in HI.

The Panel recommends that the Trustees' Report clearly portray the magnitude of the imbalance in the HI program over the 75-year period by showing the projected deficit as a percent of the projected cost.

The Panel believes that the following measures should be highlighted for HI.

- The year in which the trust funds are projected to exhaust their reserves, as well as the first year in which the reserves fall below a fund ratio of 100%.
- The size of any difference between the cost rate and the income rate in the 75th year of the projection period, which is a measure of ultimate imbalance in the system.
- The amount of any tax or benefit changes needed to balance income and outgo over the long-range period.

Supplementary Medical Insurance

The Panel recommends that the following specific measure of SMI costs be portrayed over the long-term period.

- Total SMI costs as a percent of gross national product (GNP) and as a percent of HI taxable payroll.
- SMI premiums as a share of the average OASDI benefit paid to the elderly.
- SMI costs net of estimated premium income as a share of GNP and as a share of HI taxable payroll.

Measures for HI and SMI Combined

The Panel recommends that:

- the HI Trustees' Report include projections of the combined costs of HI and SMI over the 75-year projection period; and
- the OASDI Trustees' Report supplement projections of OASDI and HI as a percent of GNP, with projections of OASDI, HI and SMI as a share of GNP over the 75-year period.

ALTERNATIVE SOLUTIONS

The Panel recommends that policymakers should consider options for improving the financial status of Medicare not solely in terms of annual budget policy, but rather in terms of structuring the best possible health program for the aged and disabled given the amount of resources society is willing to allocate to it.

really should be dropped even further to 0.7. This would have a significant adverse impact in both OASDI and Medicare. My name is on two reports, one recommending 1.0 and another recommending 0.7. I filed no minority opinions, so I had to tell people, well, that's my tolerance range. My minimum number is 0.7 and my maximum is 1.0, so I've been tweaked a few times about signing off on both of these reports. But that was a very contentious issue in the report.

Again in Chart 2, there's some special Medicare assumptions. This panel also recommended a 100% trust fund ratio for HI and possibly a 25% trust fund ratio for SMI, which is significantly larger than the trust funds that SMI has run. They tended to be significantly less than 25%.

Further in Chart 2, in this method of actuarial balance between the HI method and the present value method, basically there's a real controversy between the actuaries at the Social Security Administration and the actuaries at HCFA. The actuaries at the Social Security Administration and the trustees in essence used a present value type calculation. The actuaries at HCFA have a strong position that that's inappropriate and they have developed an alternative method, sort of a modified average cost method that does not use a discounting type process. So you do have the chief actuaries in the two agencies using different methodologies and there's been some considerable controversies about that, which we'll get into when we get into some of the actuarial opinions. This panel spent so much time talking about this they finally decided that they couldn't take a position on it and they finally decided to sanction both of them, in essence, and say they both have interesting information. However, they felt paralyzed to actually try to pick between the two and that was under some very heavy pressure from the HCFA chief actuary, who was pushing very hard to scuttle the present value method and use the HI method.

In a nutshell, his concern is that when you have a system that's running big deficits as HI is running, then you use a present value calculation that, in essence, assumes that you're going to put in an immediate tax increase, build up a huge trust fund, and pay for a lot of these benefits out of interest earnings and that's not going to materialize. So, in essence, the HCFA chief actuary is looking at this as not as an index as much as it is a program for funding, and he believes that a present value calculation works in a lot of interest that is never going to materialize.

It's not a position that the Social Security actuaries agree with in general. After discussing a present value method, you discover that there's an interesting dynamic in these panels because the actuaries are genuinely ambivalent about it after they think about it and see all of the reports and they can see the pluses and minuses both ways. There's much more of a knee-jerk reaction from the economists that present value benefit is correct than you get from the actuaries. There's some interesting articles that have been written that appear in the appendices of these reports.

Also, in the section "Measures for HI and SMI Combined" in Chart 2, we made some recommendations on SMI and HI basically to show various kinds of disclosure of these costs in terms of percentages of GNP, in terms of percentages of taxable payroll and, also, to look at measures for HI and SMI combined so that you can really assess the total cost of Medicare as a whole, again, trying to get away from the way

it's financed and to really looking at the overall cost sort of basis where you can compare them.

The Comparison of Major Economic Assumptions (Table 1) is a summary of what the trustees actually did on these various economic assumptions. You can see the 1990 Trustees' Report, what the first panel recommended, what the second panel recommended, and then what the trustees actually did. They went from 1.3 down to 1.1. I think there was some sentiment that they wouldn't have gone even that low had it not been for both technical panels coming on very strongly that this 1.3 is too optimistic. They raised the real interest rate a little bit up to 2.3, not the 2.8 which both panels had recommended. However, they held fast on the CPI at 4.0% and that was basically considered to be nonnegotiable by the Treasury Department, which was one of the three trustees, and for whatever reasons, economic, political, what have you, the Treasury Department is adamant that 4.0 is the right CPI number.

TABLE 1
Comparison of Major Economic Assumptions

	1990 Trustees' Report	OASDI Panel	Medicare Panel	1991 Trustees' Report
Real Wage Differential	1.3	1.0	0.7	1.1
Real Interest Rate	2.0	2.8	2.8	2.3
Consumer Price Index	4.0	5.0	5.0	4.0

They wouldn't consider signing on anything greater than 4.0. So this, in essence, is what happened in the 1991 Trustees' Reports on these economic assumptions.

Now when you put all of this together for OASDI you get Table 2. The top two numbers are basically the income and cost rates in the 1990 Trustees' Reports. The bottom two numbers are the comparable numbers for the 1991 Trustees' Reports. You can see that there was a deterioration of -0.17% of payroll as you go from 1990-91. However, ~0.16 of this 0.17 is attributable to using a 100% target trust fund ratio at the end of the 75-year period. That's a new feature since you're building in the cost of a 100% trust fund ratio instead of 0%, that accounted for nearly all of the change. The rest of it are some small pluses and minuses that essentially almost totally washed out. So, in effect, there was very little dynamic change in the OASDI system during the past year. Actuarial balance in 1991 report widened to -1.08% of payroll, which in terms of the total cost rate is about a -8%. Therefore, the system is not in close actuarial balance based on the definitions that we used to have. We used to say the system was in close actuarial balance if the income rate was between 95% and 105% of the long-term cost rate. Right now it's about 92% and so, therefore, it's slightly out of close actuarial balance on the negative side; 13.11 divided by 14.11 is about 92%, which does not meet the 95% criterion for close actuarial balance.

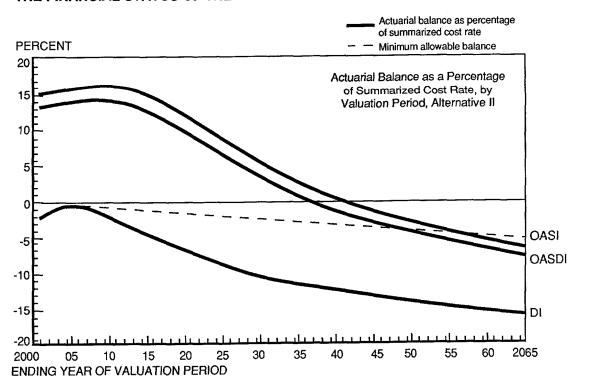
TABLE 2

Shown in last year's report under alternative II-B: Income rate Cost rate Actuarial balance		13.04 <u>13.95</u> –0.91
Changes in actuarial balance due to changes in: Legislation Valuation period Demographic assumptions Economic assumptions Disability assumptions Methods	+0.17 -0.05 +0.04 -0.11 -0.01 <u>-0.06</u>	
Subtotal for above changes Cost of reaching ending trust fund target	-0.01 -0.16	
Total change in actuarial balance		<u>-0.17</u>
Shown in this report under alternative II: Actuarial balance Income rate Cost rate		<u>-1.08</u> 13.11 14.19

Note: Totals may not equal sums of components, due to rounding.

If you look at this over the 75-year period, there is a considerably different picture than that summary number might indicate. Chart 3 from the Trustees' Report is a set of calculations that compute the actuarial balance over every period of time from 2000 up to 2065, the 2065 being the 75-year projection period. If you use the middle graph, which is OASDI (the other two separate the OASI and the DI), you've got the actuarial balance at the end of the 75-year projection being down there at about -8%, which is basically the number that we had before. The rest of this graph shows you what the numbers would be if you'd use projection periods shorter than 75 years. You can see that if you use shorter periods it looks much better. And then every year you add, of course, it looks worse because of the serious imbalance that exists where right now we're paying more than the cost of the system and at the end of the period we're paying much less than the cost of the system. This is the kind of pattern that you get if you would look at it over all of these intervening periods. There's a (dashed) line going right from zero that grades down to 2065. That's a sliding tolerance line from zero down to -5%, that basically uses the 95% criterion for close actuarial balance at the end of 75 years, but it uses a sliding scale that is tighter if you use less than 75 years. So the first year under this new test where the system is not an actuarial balance happens about 2046-47. If you use any period shorter than that, the system would be in close actuarial balance. If you use any period of time longer than that, then the system would not be in close actuarial balance.

THE FINANCIAL STATUS OF THE DI PROGRAM



CURRENT ISSUES IN SOCIAL SECURITY

CHART 3

Chart 4, out of the Trustees' Report, shows the number of covered workers per beneficiary. This is largely driven by demographics. Basically, in the cost of Social Security, the economic assumptions dominate the short run. The demographic assumptions dominate the long run. In the long run it's really the number of workers per beneficiary and it drops from currently being around 3.3 or 3.4 down to something just under 2.0. That's where the big cost increases in the system are going to come from.

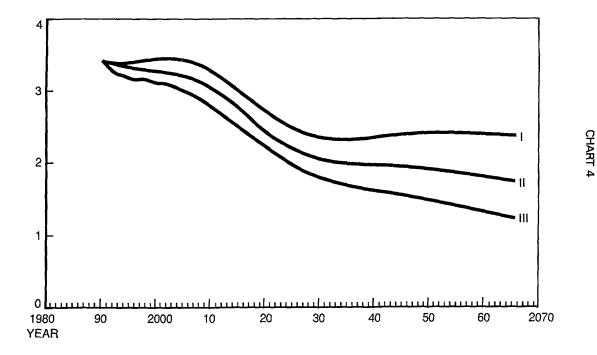
Chart 5 is a comparison of the income rate and the cost rates. These are not summarized 75-year numbers. These are year-by-year numbers. There's a (dashed) line there at about 12.6 up to about 13, which is basically the FICA tax rate, plus a slight amount of income tax revenue from the taxation of benefits, so it isn't exactly flat. You can see that the current cost rate is really down about just under 11%, so right now we're paying more than the cost of the program. There's a crossover at about 2017 and then rapid increase and, ultimately, the cost rate reaches about 17% of payroll at the end of the 75-year projection period. You see the effect of the baby boom generation. It's relatively flat between now and about the year 2007 or 2008 and then it starts rising very rapidly and most of the increase comes in the next 20 years between about 2007 and about 2027 and then it plateaus again at a much higher level. The effect of the baby boom generation is to rachet this thing up very substantially, but it doesn't fall back down when the baby boom generation goes. It basically plateaus at a much higher level than it ever was before and that basically reflects the low fertility rates that have existed since the 1970s and the flat fertility rates that are expected to continue. There are people who thought, once we get through the baby boom generation then things will revert to normal. Normal in the post-baby boom generation will be a much higher level unless fertility rates over the next several decades change very dramatically.

Chart 6 shows the contingency fund ratio, the trust fund ratio. Here is the big trust buildup and the draw down. Look at alternative II and you get to a peak of just over 400% of a year's outlays around the year 2015 and then, ultimately, you reach trust fund exhaustion in the year 2044. These are huge sums of money. The 400% of a one-year's outlay in current dollars is nearly \$1 trillion, because the one-year's outlays right now are \$200 billion plus. This trust fund buildup would be an enormous amount of money. Should it be allowed to happen? Should we adjust the tax rate to keep it on more of a pay-as-you-go basis? And this is, obviously, a big political football. There are really three schools of thought.

One of them is Senator Moynihan's school of thought which is to return to a pay-as-you-go system, which is to lower the tax rates now and raise them later when you need to and avoid the trust fund buildup. That point of view says this kind of a buildup and the draw down is going to cause enormous dislocation in the financial markets. It will be a real temptation to politicians to play around with this money and so forth and so this should not be allowed to happen. This is what will happen under current law.

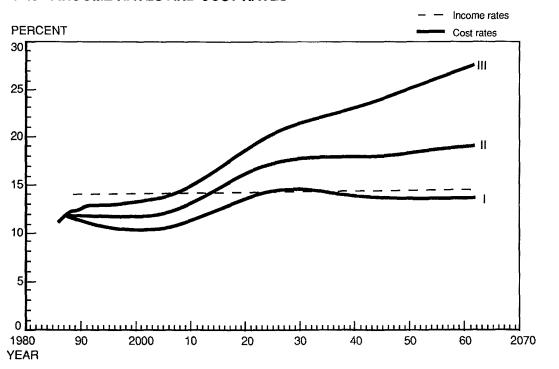
The second alternative is to just let current law operate and let this happen. If that does happen you will have this huge buildup, followed by a rather rapid draw down. That will produce a lot of dislocations in connection with the rest of the federal budget, because right now all these Social Security surpluses are financing a lot of the

NUMBER OF COVERED WORKERS PER BENEFICIARY



CURRENT ISSUES IN SOCIAL SECURITY

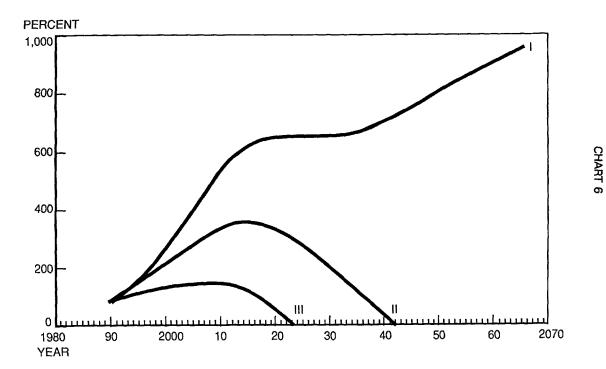
OASDI INCOME RATES AND COST RATES



PANEL DISCUSSION

CHART 5

LONG-RANGE CONTINGENCY FUND RATIO



CURRENT ISSUES IN SOCIAL SECURITY

rest of the budget deficit so that the real budget deficit and the rest of the government are much worse than the numbers that you see. This is what infuriates the politicians like Moynihan and others. After 2017 just the reverse will happen. Once Social Security starts going downhill then it will become a drain on the rest of the federal budget rather than the positive effect that it has today. The reverse will be vicious because it will go just the opposite way suddenly and it will go downhill just as fast as it went up. The effect of the rest of the federal budget will be enormous.

The third school of thought says we should have a trust fund buildup and leave it there. The economists who argue for that are basically arguing for this being a way to increase savings in the economy and there's a lot of debate within the economic community as to whether that would really achieve additional savings. The point is that the U.S. has the lowest savings rate in the industrial world. It's about half of what it was 10 years ago; our savings rate is not adequate for long-term productivity in the economy, and savings in the private sector would be best, but if we can't get that maybe we can save something in the public sector. There are other economists who say that isn't really going to work.

Chart 7 (Appendix H) included Harry Ballantyne's actuarial opinion on the OASDI plan which is a totally boilerplate opinion. Last year he qualified his opinion because he said he wanted to disclose actuarial balance and the OASDI didn't. This year they put it back in and he put in a standard opinion. When we get to HCFA you'll find out that there's a considerably different thing that happened with HCFA.

CHART 7 Appendix H - Statement of Actuarial Opinion

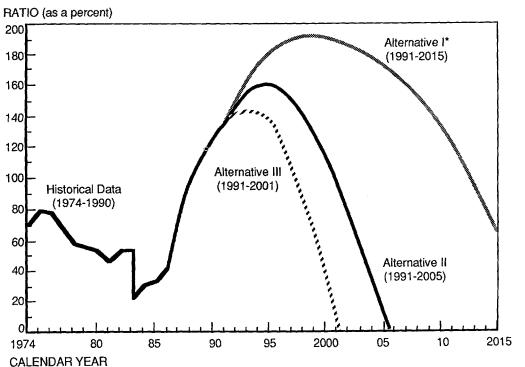
It is my opinion that (1) the techniques and methodology used herein to evaluate the financial and actuarial status of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds are generally accepted within the actuarial profession; and (2) the assumptions used and the resulting actuarial estimates are, in the aggregate, reasonable for the purpose of evaluating the financial and actuarial status of the trust funds, taking into consideration the experience and expectations of the program.

Harry C. Ballantyne, Associate of the Society of Actuaries Member of the American Academy of Actuaries Chief Actuary, Social Security Administration

Now, Chart 8 is your short-term trust fund ratios for HI and you can see you get something considerably different for HI than you do for OASDI. Here we run out of money just after the year 2005, some 14 years from now.

As you know, last year Congress agonized at great length over a tax bill and they made a lot of changes in Medicare which were perceived to be major changes in Medicare, including raising the FICA tax base to \$125,000, plus making a lot of other changes in reimbursements and so forth. The net effect of all of that was to buy about three years. It extended a point at which HI is going to go broke from about

SHORT-TERM HI TRUST FUND RATIOS



CURRENT ISSUES IN SOCIAL SECURITY

CHART 8

* The trust fund is depleted in 2018 under Alternative I.

The trust fund ratio is defined as the ratio of assets at the beginning of the year to disbursements during the year.

2003 or 2004 up to about 2006 or 2007. All of these changes that everybody perceived of as such major changes in Medicare are just a drop in the bucket in terms of trying to deal with the real financing problems facing HI. They really only extended the point at which the fund goes belly up to about 2005 or 2006.

Table 3 shows comparable numbers for HI showing how much more seriously out of balance HI is compared with OASDI. The key number to look at here would be in the third block down. You're talking about the 1991-2065 summarized tax rate, summarized cost rate, and actuarial balance. There is a 2.90 tax rate, cost rate of 6.25, the actuarial balance at -3.35. That is, the current tax rate over the next 75 years is going to pay only about 46% of the cost of the HI program. That's how seriously out of balance the HI costs and the HI tax rate are that the current tax structure is not sufficient to even pay half the long-term costs of HI. It will pay only about 42% of it as compared with Social Security where the long-term tax rate will pay about 92% of it. So, obviously, HI is a different animal than OASDI.

Chart 9 is another chart of the financing for HI cost rate and tax rates. Again, these are annualized numbers. These are not summarized numbers and show that under Alternative II, the tax rate stays flat at about the 2.9% level. The ultimate cost rate gets up in the vicinity of close to 9%, so that there's nothing even close to being a balance between the tax rate and the cost rate under HI over this period of time. Again, there is a very rapid increase up until about the year 2030 and then it slows down a little and begins to plateau but at a much higher level.

Table 4 shows the change between the 1990 and the 1991 HI Report and, again, over this one-year period of time there was slight deterioration between the two reports. The legislative changes that Congress did pass contribute enough to make up for a number of minuses in other areas pretty much, so they did keep the status quo for about one year.

Chart 10 (Appendix E) includes Guy King's opinion for HI. He qualified his opinion in two ways. One is on an assumption where he basically indicated that the 1.3 down to 1.1 change in the real wage assumption wasn't enough. He wants a number considerably less than even 1.1. The other thing is his statement about the funds of the projection technique of the present value calculation. He also made a statement that the modified average cost method is the appropriate method for summarizing the long-range actual status of the program, which basically puts him in direct contrast and opposition to what the Social Security actuaries did in their report and, also, what the trustees did. The end result of this is that two of the five trustees, the two public trustees who are not governmental employees, wrote a rather stinging rebuttal of this statement of actuarial opinion that also appears in the Trustees' Report. So for any of you who think that statements of actuarial opinion are usually cut and dried and not very interesting, get this year's HI Trustees' Report. You'll find some rather interest pyrotechnics in there. The two pages that follow this are a rather stinging rebuttal of this actuarial opinion, so we really do have quite a controversy going on which has some professional actuarial overtones to it. In fact, Guy King is doing a rebuttal to the rebuttal. I mean he's writing his explanation of why it is a correct opinion, so this is a very controversial issue. It's a fascinating issue to go into these two techniques and try to work your way through them.

TABLE 3
Actuarial Balances of the Hospital Insurance Program under Alternative Sets of Assumptions

	Alternative		
		11	III
Projection periods: 1991-2015: Summarized tax rate ¹ Summarized cost rate ² Actuarial balance ³	2.90% 3.03 -0.13	2.90% 3.86 -0.96	2.90% 5.06 –2.16
1991-2040: Summarized tax rate ¹ Summarized cost rate ² Actuarial balance ³	2.90 3.48 -0.58	2.90 5.39 ~2.49	2.90 8.86 -5.96
1991-2065: Summarized tax rate ¹ Summarized cost rate ² Actuarial balance ³	2.90 3.71 -0.81	2.90 6.25 -3.35	2.90 10.93 -8.03
25-year subperiods: 1991-2015: Summarized tax rate ¹ Summarized cost rate ⁴ Actuarial balance ³	2.90 3.06 -0.16	2.90 3.82 -0.92	2.90 4.91 -2.01
2016-2040: Summarized tax rate ¹ Summarized cost rate ⁴ Actuarial balance ³	2.90 4.03 -1.13	2.90 7.28 -4.38	2.90 13.45 –10.55
2041-2065: Summarized tax rate ¹ Summarized cost rate ⁴ Actuarial balance ³	2.90 4.53 -1.63	2.90 8.84 -5.94	2.90 17.53 –14.63

As scheduled under present law.

- Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis, included the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.
- Difference between the summarized tax rate (as scheduled under present law) the summarized cost rate.
- Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, commuted on the present-value basis. Includes neither the trust fund balance at the beginning of the period nor the cost of attaining a nonzero trust fund balance at the end of the period.

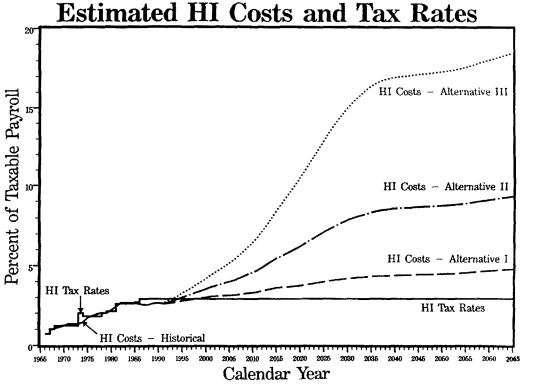


CHART 9

Note: HI projected costs shown are expenditures attributable to insured beneficiaries only, on an incurred basis, without an allowance for maintaining the trust fund balance at a desired level.

TABLE 4 Change in the 75-Year Actuarial Balance Since the 1990 Report

1.	Actuarial balance, alternative II-B, 1990 report ¹	-3.26%		
2.	Changes: a. Valuation period b. Base estimate c. Legislation since the 1990 report d. Economic and demographic assumptions e. Hospital assumptions f. Definitional change ² g. Net effect, above changes	0.09 0.22 +-0.68 0.22 0.15 0.09 0.09		
3.	. Actuarial balance, alternative II, 1991 report ³ –3.35			

- The actuarial balance in the 1990 report was computed on the present-value basis (then referred to as the level-financing basis), including an offset to cost due to the beginning trust fund balance but without the cost of attaining a nonzero trust fund balance at the end of the period.
- The definitional change is the inclusion of the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures; see footnotes 1 and 3.
- The actuarial balance in the 1991 report is computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

CHART 10 Appendix E Statement of Actuarial Opinion

Subject to the comments noted below, it is my opinion that (1) the methodology used herein is based upon sound principles of actuarial practice and (2) the assumptions used and the resulting cost estimates are, in the aggregate, reasonable for the purpose of evaluating the actuarial and financial status of the Federal Hospital Insurance Trust Fund, taking into account the experience and expectations of the program.

Appendix B summarizes the long-range actuarial status of the HI program using the modified average-cost method. Because this method is consistent with the trust fund projections, particularly with regard to the recognition of interest credited to the trust fund, I consider it to be the appropriate method for summarizing the long-range actuarial status of the program.

There has been virtually no net increase in real earnings during the last 22 years. In my opinion, projected real earnings assumptions that are more consistent with historical experience would be more appropriate than the assumptions adopted by the Trustees.

Roland E. King Fellow of the Society of Actuaries Member of the American Academy of Actuaries Chief Actuary, Health Care Financing Administration

Table 5 looks at the 75-year projection period, showing a comparison of income and cost rates. Another way to look at this is to strip out the next 75 years and take a look at the ultimate. As a result, basically, the OASDI income rate is about 75% of what it's going to take to pay the ultimate cost of the program. The HI tax rate is about 31% of what it's going to take to pay for the estimated long-term cost of the program. This gives some idea of the magnitude of the problem in the long run of paying for these costs.

TABLE 5
Ultimate Rates at End of 75-Year Period

	Income Rate	Cost Rate	Ratio
OASDI	13.22	17.74	75%
Н	2.90	9.30	31%

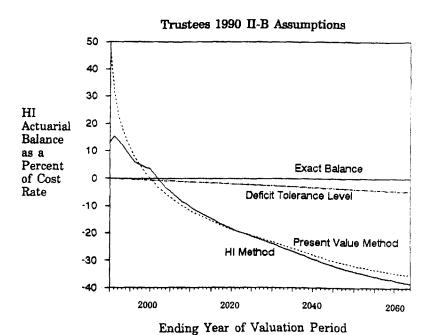
Chart 11 is a chart that our technical panel on Medicare put into our report. The trustees did not adopt this because they didn't want to scare people about how bad Medicare was. But the same type of graph for HI as for OASDI, shows very graphically where the exact balance would be, the deficit tolerance level, and how seriously out of balance the HI funding is. The trustees didn't really like putting a graph like this in their report, but our technical panel did. All this controversy about the HI method and the present value method when you look at something like HI isn't all that big a deal. True, there is a difference, but under either measure HI is so hopelessly out of balance under either of these two methods. The real issue is how seriously underfinanced HI is.

Chart 12 is another graph they didn't put in the Trustees' Report that our technical panel put in. Again, a comparison of the income and cost rates on HI shows in a different way how seriously out of balance they are.

Table 6 shows some numbers we had run for our technical panel that have not appeared in the Trustees' Report. We've run out SMI numbers for 75 years just to try to get some idea as to what this really amounts to and you can see some rather interesting things here. First of all, SMI is increasing faster than HI for about the first 25 years. After 25 years all these costs are assumed to inflate at the same rate, so there is sort of an artificial 25-year period after which there is no difference in the rate of growth. But during at least the first 25 years, SMI will continue to increase faster than HI, as it has in the last few years. Well, really as it has since the inception of the program. SMI was a very nominal part of Medicare in 1965 and you can see that now it's about 0.82% of GNP, whereas HI is 1.15, and that difference will continue to narrow until SMI becomes almost as big as HI as a percentage of GNP. Another interesting thing is to compare the size of Medicare with the size of Social Security. Right now it's about 1.97 versus 4.56 as a percentage of GNP. In 75 years Medicare will be a bigger program than OASDI, based on all of these projections, in terms of ultimate costs. It is crucial to deal with long-term program costs in Medicare. This is a bigger percentage of GNP, which if allowed to happen, affects the percentage of GNP devoted to health care in total. Right now that's at 12% and rising rapidly and no end in sight. When you look at numbers like this you get pessimistic of really getting that under control in a big way any time soon.

PANEL DISCUSSION CHART 11

TEST OF LONG-RANGE HI BALANCE



HI ANNUAL INCOME RATES AND COST RATES, 1990-2060

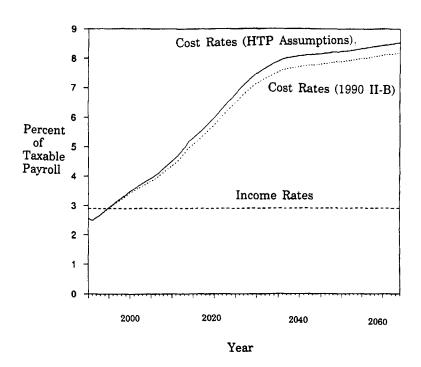


TABLE 6

HI, SMI and OASDI Outgo as a Percent of GNP, $1990\mbox{-}2060$

(1990 II-B Assumptions)

Calendar	Program Outgo as a Percent of GNP			
a/ Year	HI	SMI	HI and SMI	OASDI
1000		0.00	1.05	4.50
1990	1.15	0.82	1.97	4.56
1995	1.39	1.04	2.43	4.54
2000	1.62	1.39	3.01	4.45
2005	1.80	1.73	3.53	4.45
2010	2.04	2.02	4.06	4.61
2015	2.36	2.24	4.60	5.06
2020	2.64	2.51	5.15	5.67
2025	2.96	3.81	5.77	6.21
2030	3.22	3.06	6.28	6.54
2035	3.37	3.18	6.55	6.61
2040	3.42	3.21	6.63	6.52
2045	3.43	3.20	6.63	6.44
2050	3.44	3.21	6.65	6.45
2055	3.45	3.27	6.72	6.51
2060	3.46	3.34	6.80	6.53

a/ Estimates reflect HI and SMI changes enacted in OBRA 1990 and updated HI admission assumptions.

Source: Office of Medicare and Medicaid Cost Estimates, Office of the Actuary, HCFA, December 1990

Table 7 shows basically the same data projected as percentages of taxable payroll instead of as percentages of GNP. This recognizing SMI is not financed this way, shows total program costs that denominates everything on the same basis so the comparison gives essentially the same kind of information as when expressed as a percentage of GNP.

Table 8 is another table on SMI with two conflicting objectives with SMI. One is to have the beneficiaries pay 25% of the premium cost and the other is to have the premium increase at the same rate as the cost of living adjustment (COLA) under Social Security, to avoid charging a bigger percentage of their retirement checks. Well, those are obviously conflicting objectives. Something has to give and this table runs out both ways of doing it. One is to hold the premium income at 25% of the SMI cost and show what that will do over a period of time is increase the amount of the Social Security check that they have to pay in premiums each month or conversely the other approach is to keep that fixed at the Social Security COLA which then means that by the end of the 75-year projection period the Federal Treasury would have to pick up 95% of the costs and the beneficiaries would only be paying 5% of the costs. But the policymakers really want to have both of these things happen simultaneously. Keep the beneficiaries paying 25% of the costs and keep the rates not increasing faster than the Social Security COLA. You just can't do that as long as you have health care inflation rates. Under SMI they're increasing faster than the rest of the economy.

Table 9 shows some other numbers that basically say the same thing. I've tried to give you a very quick overview. All of these tables are from governmental published documents. In other words, if you get the Trustees' Reports and order these two technical panel reports, you'll have all of this and a lot more. It was a fascinating experience for me to be part of groups like this and to look at Medicare in an integrated way with SMI and HI in combination. It is fascinating in the financing side to review the total picture.

MR. ROMANO: Our final panelist is Dr. David West, who is the Director of the Division of Programs at the Colorado Medicaid Program. David's responsibilities include the management and operation of the program functions for the Colorado program and he has been involved in the development and ongoing operation of the Colorado Primary Care Physician Program, who's major purpose is the enhancing of access to primary care and cost containment. He's also been involved in the design and implementation of the Colorado Baby Care Program which would serve low-income pregnant woman and children and essentially address the issue of access to care for this population. David will talk about the Colorado Medicaid Program as well as the issue of federal mandates on increasing the number of eligibles for the states.

DR. DAVID R. WEST: I want to put Colorado's Medicaid Program in context for you in terms of what's going on in Medicaid nationally. Every state, by and large, has a different Medicaid program. Medicaid is a partnership between the federal government and state governments where in most states there's about a 50% state general fund contribution to the cost of the program and Uncle Sam comes up with the other half of the match, the other half of the program. There are certain benefits to the poor population in every state that Medicaid programs have to provide. Yet

TABLE 7

HI, SMI and OASDI Outgo as a Percent of Taxable Payroll a/ 1990-2060 (1990 II-B Assumptions)

Calendar Year		Program Outgo as a Percent of Taxable Payroll b/			
	HI	SMI	HI and SMI	OASDI	
1990	2.56	1.82	4.38	10.60	
1995	2.90	2.17	5.07	10.67	
2000	3.42	2.94	6.36	10.56	
2005	3.82	3.67	7.49	10.59	
2010	4.34	4.29	8.63	11.08	
2015	5.07	4.81	9.88	12.25	
2020	5.73	5.44	11.17	13.86	
2025	6.48	6.15	12.63	15.33	
2030	7.13	6.76	13.89	16.28	
2035	7.53	7.09	14.62	16.62	
2040	7.72	7.22	14.94	16.55	
2045	7.80	7.27	15.07	16.52	
2050	7.90	7.40	15.30	16.70	
2055	8.00	7.59	15.59	17.00	
2060	8.11	7.81	15.92	17.23	

a/ Estimates reflect HI and SMI changes enacted in OBRA 1990 and updated HI admission assumptions.

Source: Office of Medicare and Medicaid Cost Estimates, Office of the Actuary, HCFA, December 1990

b/ Taxable payroll used for HI and SMI reflects the OBRA 1990 increase in the HI taxable earnings base (to \$125,000 in 1991) while taxable payroll used for OASDI reflects the OASDI taxable earnings base (\$53,400 in 1991). Estimates for the two programs are not additive because of the difference in the taxable earnings bases for the two programs.

TABLE 8

SMI Premium in Relation to the Average Retired-Worker Benefit and to SMI Costs Under Two Assumptions About Premium Increases After 1995, 1990 - 2060

	SMI Premium Premium Incor						
Calendar	(in current	As Percent of Ave.	As A Percent of				
Year	dollars)	Retired-Worker Ben.	SMI Costs				
	Premium Set at 25 Percent of SMI Costs						
1990	\$28.60		24.5				
1995	46.10	6.6	24.2				
2000	82.50	9.4	25.0				
2005	131.50	11.9	25.0				
2010	188.50	13.4	25.0				
2015	243.50	13.5	25.0				
2020	310.50	13.3	25.0				
2025	398.60	13.3	25.0				
2030	518.60	13.5	25.0				
2035	681.60	13.9	25.0				
2040	894.30	14.3	25.0				
2045	164.20	14.5	25.0				
2050	509.30	14.6	25.0				
2055	963.40	14.7	25.0				
2060	2572.80	14.8	25.0				
	Premium Adjusted by Social Security COLA						
1990	28.60	5.2	24.5				
1995	46.00		24.2				
2000	56.20		17.0				
2005	68.20		13.0				
2010	82.90	- · · · · · · · · · · · · · · · · · · ·	11.0				
2015	100.80		10.4				
2020	122.60		9.9				
2025	149.10		9.4				
2030	181.50		8.8				
2035	221.00		8.1				
2040	268.80		7.5				
2045	327.10		7.0				
2050	398.00		6.6				
2055	484.20		6.2				
2060	589.10		5.7				
2000	009.10	, 0. 2	5.7				

a/ The \$28.60 premium is 25 percent of SMI per capita costs of the aged, but only 24.5 percent of total SMI per capita costs.
Source: Office of Medicare and Medicaid Cost Estimates, Office of the Actuary, HCFA, December 1990

TABLE 9

SMI Non-Premium Outgo as a Percent of GNP and as a Percent of HI Taxable Payroll under Two Assumptions About SMI Premium Increases After 1995, 1990 - 2060

Calendar		SMI Non-Premium Outgo a GNP		of: a/ Payroll
Caronaa	25%	COLA	25%	COLA
	Premium b/	Premium c/	Premium	Premium
1000	0.01	0.00	* 05	1.00
1990	0.61	0.62	1.37	1.38
1995	0.78	0.79	1.62	1.64
2000	1.04	1.15	2.19	2.43
2005	1.29	1.50	2.74	3.18
2010	1.51	1.79	3.21	3.80
2015	1.67	2.00	3,59	4.29
2020	1.87	2.25	4,06	4.88
2025	2.10	2.54	4.59	5.55
2030	2.28	2.78	5.05	6.14
2035	2.37	2.91	5.30	6.49
2040	2.39	2.95	5.40	6.65
2045	2.39	2.96	5.43	6.73
2050	2.40	2.99	5.52	6.88
2055	2.44	3.06	5.67	7.09
2060	2.49	3.13	5.84	7.34

a/ Estimates reflect HI and SMI changes enacted in OBRA 1990.

Source: Office of Medicare and Medicaid Cost Estimates, Office of the Actuary, December 1990

b/ Future premium amounts assumed to be set to equal 25 percent of SMI costs for the elderly.

c/ Premium amounts after 1995 assumed to be adjusted by the cost of living adjustment (COLA) in Social Security cash benefits.

over and above that states can choose to provide optional benefits and still draw down on that federal match, but they don't have to do that.

In Colorado we have our statute on the books around Medicaid and we have a number of benefits that are covered in that statute. First, inpatient and outpatient hospital services, the laboratory and roentgenographic services, physician services, nursing home services. Let me stop on nursing home services for just a moment. Throughout our country the primary vehicle that finances nursing home care through the U.S. is Medicaid Program. In Colorado for about three of every four people who reside in a nursing home, the bill is being paid by Medicaid. It's a huge program that is a little more than half of our Medicaid budget in the state of Colorado.

Prescribed drugs is a benefit. Surprisingly prescribed drugs is not a required benefit in Medicaid. States can provide prescribed drugs as an option. It's difficult to imagine asking a physician to provide services to someone and provide a complete regimen of treatment without drugs, but it is an anomaly that it's an optional benefit.

Home health care, transportation, durable medical equipment, Early Period Screening Diagnosis and Treatment (EPSDT) are all important aspects of Medicaid programs that are mandated throughout the country. There is a system of screening where young children are brought in and assessed for their health care problems. Those are identified early on in life so that they may be addressed, hopefully, solved so those people will become more productive citizens as they grow up and also, hopefully, be less costly to the health care system as time goes on. Family planning clinic services, rural health services, and a new burgeoning area called alternative to long-term care where more and more Medicaid agencies are challenging themselves. The federal government is challenging Medicaid agencies to find more cost-effective ways to treat people rather than institutionalizing them in the nursing home. Can we place them in the home? Can we bring in the home health nurse? Can we bring in aides? Can we bring in different kinds of allied health care professionals at a much reduced rate than placing them in the nursing home at \$35 a day? This is real area of active growth in the Medicaid program throughout the country.

As Joe mentioned, there have been some recent changes to the Medicaid programs throughout the country that are dramatic and they're dramatic enough that you will continue to hear about them. First and foremost are the changes that have been mandated through OBRA 87, OBRA 88, OBRA 89, and more recently, OBRA 90 around coverage for pregnant women and children in the Medicaid programs. Previously in Colorado before some of these mandates came down, people were covered under Medicaid if they were pregnant and had children up to about 54% of the federal poverty level. To put that in context for you, for an individual with a family of four, the federal poverty level was about \$12,000 a year. A couple of years ago we saw the expansion to 75% of the federal poverty level. The federal government required this expansion, then to 100% of the federal poverty level and then, lastly, to 133% of the federal poverty level for pregnant women and children up to their sixth birthday.

These are wonderful things from a public health perspective in terms of access to care for this population that really needs these services, but the problem is who pays for it and where does the money come from? States throughout the union, like

Colorado, have struggled to try to come up with innovative financing mechanisms to provide the care and services to these people. In Colorado the most recent expansion added about 3,000 pregnant woman, about 3,000 infants, and about 12,600 children up through their sixth birthday to the Medicaid program. Putting this in terms of cost, each of those pregnant women runs about \$2,500 per six months event of eligibility in the program. The infants can be as expensive on an individual basis as \$100,000-200,000 if they're a "bad" baby requiring level three nurseries and all kinds of intensive care. On the average an infant can cost right around \$1,200 a year and a child can cost right around \$600 or \$700. These numbers are enormous from a state's perspective and they are enormous from a national perspective in terms of how we finance these things.

Governors throughout the U.S. together have written to Congress, written to the Bush Administration asking that they slow this down because it's having an enormous impact. Throughout the country Medicaid is about 12% of every state's general fund budget and it is growing very quickly through these federal mandates. In spite of these pleas OBRA 90 again increased coverage. Requiring new coverage called continuous eligibility for infants and a new concept called presumptive eligibility for pregnant women to where if they come into a hospital or come into a health care provider's office and we think they might be eligible, we have to provide the services to those women and Medicaid has to pay the bill. The whole idea again being a very good one to get these women in very early in the course of pregnancy for good primary care and good prenatal care to give us a better chance of a good health outcome upon birth, but the price tag is enormous.

There have been some other changes that the federal government has mandated to Medicaid as well:

- A. On the top of the list is federally qualified health clinics, known as FQHCs, which include community health centers, rural health clinics, and other look a likes or organizations that can make themselves look like a community health center. There is new federal law requiring Medicaid programs to pay them at 100% of their cost of doing business. A much different concept than Medicaid has dealt with in the past. Let me give you an example. Physicians, by and large, in the Colorado Medicaid program are being paid about half of their usual and customary fees. These FQHCs before last year were being paid roughly the same. This is going to have a dramatic impact on our state in terms of new dollars being flowed through the Medicaid program to these clinics by federal law. Colorado's kind of an anomaly here, too, in that the world's largest FQHC sits in Denver, Colorado, called Denver General Hospital. It's our equivalent of St. Elsewhere for lack of a better term here in Colorado and the costs are enormous to the state in terms of providing for this at 100% of cost.
- B. EPSDT driven need for service. What that means is if a child goes through the EPSDT program and a need for service is identified in that screen whether or not it's a service that Colorado Medicaid pays for or any other state Medicaid program pays for, there is a federal mandate that we provide it anyhow. Areas of enormous exposure are orthodontia, prosthetic braces, etc., that are going to have a very large price tag as time goes on. Direct payment for nurse practitioners is now part of the law. Instead of having those people pay through

their doctor, pay through the hospital, pay through the outpatient department, we must now allow those people to bill the Medicaid program directly and pay those bills.

- C. Direct payment for family and pediatric nurse practitioner services.
- D. Pass-throughs for nurse aide training and certification. For every nursing home we have a mandate from the federal government that we must pay an additional add-on to their rate to cover the cost of federally required training for the nurse aides in those facilities.
- E. Reduction in drug ingredient costs from average wholesale price. Congress has mandated that we pay all pharmacies the entire list of drugs for the companies that have sent in an application to the HCFA and agreed to give the federal government and the state their rebate. If we get a list from the federal government saying that one of these manufacturers is on there, we have to pay for their drugs. We may no longer have a limited formulary as we have had in the past in this Medicaid program and in many other Medicaid programs. We believe that just in Colorado alone the impact of that could be as much as \$6 million a year more, that the rebate would certainly help in terms of paying less money for the drugs, but there will be an enormous opening of the formulary in many more drugs and many more manufacturers will be represented in terms of the different products that we pay for.
- F. Inpatient hospital payment reform. Have any of you ever heard of the Boren Amendment or been involved in any litigation around the Boren Amendment? There is a new amendment that's several years old now in the Social Security Act that requires states to pay hospital the costs of the efficiently and economically operated facility when making inpatient and nursing home facility payments. Before a recent lawsuit here in Colorado we were paying about 54% of cost. We lost in court because we were challenged on this Boren Amendment and we now had to revise our entire hospital payment methodology and are paying much more for the same services we were receiving before with a 54% contractual allowance. This is an enormous issue for Colorado and for other states.
- G. Durable medical equipment payment reform.

Popping down to some future Medicaid issues:

A. Prioritization of health care services is becoming a national issue for debate. The Oregon Plan has received national press. Dr. Kipsauber, the President of the Senate in Oregon, has been known nationally now as Doctor Death in terms of his trying to prioritize health care services, make decisions about what Medicaid will and will not pay for on a financial basis. What he has done has convened groups of citizens and medical experts to prioritize health care procedures and put them in priority order, put down the frequency distribution of each procedure and how often it's provided, and how much each one costs. And when you get so far down the list you come to the limit of your budget, you whack off the

rest of the services and don't provide them. The HCFA is also very interested in this direction.

- B. The role of Medicaid and economic development is also becoming a very new and important issue. Historically, I have always worked from the premise that our Medicaid program was to be a lean and mean health care financing machine to take care of poor people and that was our job. But very recently this has changed in terms of all players wanting a chance to eat at the public trough. We have discussed issues like selective contracting, issues like competitive bidding, etc., where we choose only a few providers at a discount or provide them certain amounts of volume of service. We have not been successful in that area because of those who say a tax-based program should be open to all people who participate in it as a provider of service and receive those tax dollars and payment.
- Financing additional mandatory coverage groups. How are we going to finance all of these new mandatory groups? The federal government last March tried to issue regulation that would stop states from providing or from assessing provider-specific taxes and accepting voluntary contributions from health care providers to generate the state general fund match, leverage the federal match and, therefore, finance some of these new mandates. The states of Pennsylvania, Alabama, Kentucky come to mind immediately. I believe Georgia is involved in some of this, too, where they provide an enormous burden to the federal government by taxing providers, creating as much as \$100-200 million in general fund revenue, matching that with the federal government and turning their \$200 million into \$400 million, paying back the healths care providers that they took the tax on, paying them back their \$200 million and keeping the \$200 million in federal match to finance new programs, putting the cost back on to the federal government. This has become highly controversial. We're studying how to do that here in the state of Colorado, as well. I would not be surprised at all if in the upcoming session of Congress, they start looking at legislating some limits on these kinds of systems that are growing very quickly. I know in the New York Times and in the Washington Post there have been a number of articles recently where the HCFA and Office of Management and Budget (OMB) officials are reacting quite negatively to these plans.
- Using patterns of practice to select providers for participation and/or target educational efforts.

The uninsured is another area of concern. Not everyone who is uninsured qualifies for Medicaid. Many people don't qualify for Medicaid because their income is too high, they have too many assets and can't pass those assets tests, or they don't know about it, don't want to be associated with the stigma of being in the welfare system and being taken care of by the Medicaid program. Their health care needs don't go away and their ultimate need for health care becomes a burden on all of society. In Colorado we believe we have about 238,000 people that remain uninsured and many of those uninsured are children. The children that we're going to rely on to make our economy strong 20 and 30, 40, and 50 years from now. The health status of the uninsured poor is similar to that of the insured poor, but their access to care is much diminished. They don't have access to care by virtue of being

able to provide a Medicaid card and assure payment, or be able to have their insurance company pay it, or by any stretch of the imagination write out a check for their health care. Many physicians don't want to serve these people. There are perceptions that they are more open to liability judgments from these poor people if they go ahead and serve them as a good samaritan. There are a number of public policy issues we need to be exploring in this country to make sure that we are addressing the health care needs of this population because while it may take an upfront investment on all of our part now, there would be an immense payoff in the future.

