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How will actuaries fare under health care Reform: What can/should the actuarial Profession do to optimize these opportunities?

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Panelists will discuss and stimulate audience discussion on the potential roles and opportunities for actuaries during and after health care reform.

MR. BENJAMIN H. MULKEY: This session is sponsored by the Actuary of the Future Section of the Society of Actuaries (SOA). And with that in mind, we want to focus on the future of the profession and on the future of actuarial careers as they might be affected by health care reform.

I first started thinking about this session in January, when I agreed to do it. At that time it wasn't clear to what extent the Clinton health plan or some other sort of federal health care reform might progress. At that time the Clinton plan hadn't gone very far, and its progress has tapered off since then. But I don't think its reduced progress is too important with regard to the future of the actuary. There are all sorts of health care reform programs going on even as we speak. States have enacted various kinds of reforms. And, perhaps even more important, is the movement toward managed care. In fact, in California you might even call it a stampede toward managed care. That means that many of us who have practiced health work in the traditional setting will have to change how we practice. So there is a lot of reform, and we need to figure out how to deal with it.

This is billed as an interactive forum. Originally I thought it was going to be an open forum, and I think it's going to turn out like that. The idea is to have a lot of audience participation. With that in mind, we're going to have relatively short remarks by the three speakers, and then we'll open it up for comments and questions from the audience. So I hope you'll think about comments that will help clarify our future and be prepared to offer them.

We have three speakers. The first speaker will be Bob Berin. Bob is President-Elect of the Society. He's going to give us a perspective on how the profession might approach health care reform. Bruce MacDonald is the second speaker. Bruce has spent his career as an actuary in Canada. He retired from Mercer in 1990. He had done mostly pension consulting for quite a while, but he spent the first 15 years or so of his career working for insurance companies in Canada, where he did a lot of health actuarial work. He also had considerable involvement with health around the time that Canada enacted its Medicare, which was Canada's national health care reform. Bob will give us a Canadian perspective, and he will give us a lot of food for thought about what we ought to be thinking about in the U.S. The third speaker is Hau Doan. Hau is an actuary with Family Health Plan (FHP), which is a large regional health maintenance organization (HMO) based in southern California. Hau agreed to

speak when John Fritz, who was originally on the program, found that he could not be here.

MR. BARNET N. BERIN: As an actuary, my first job responsibility was in the health field, and I never lost interest in this specialty. As Present-Elect since September 1993, I've been an interested spectator and occasional participant in the discussions of health care and the profession's response to this important national issue. In my role now, and later as President, I want to share my knowledge of such issues with you, the members of the SOA. In this sense, I'd like to discuss health care and our profession's response to this very public issue. My views, of course, are my own. Others may agree or disagree. But what follows is my assessment of the present situation and what can be done in the future.

The actuarial profession's response to the health care issue was late in coming and not, in my judgment, focused sufficiently on our strengths. Essentially, the problem was that the resources and commitments were not sufficiently in place to support a response involving many committees and the allocation of funds. This timing gap has to be weighed against a May 1991 senatorial race in Pennsylvania, in which a political unknown running on the issue of health insurance reform defeated a former governor and U.S. attorney general in what was considered a stunning upset. Then there was the 1992 presidential campaign, which prominently included this issue with the details announced in October 1992, a few weeks before the election. In September 1993, the presidential speech to both houses of Congress, which was very well received, outlined the administration's health care proposal.

As for focus, my preference was a quantitative response by the actuarial profession. In addition to the qualitative response, represented by a series of well-done issue papers, commencing in October 1993, it was gratifying that a quantitative approach was taken in April 1994 by the Academy, which presented a cost for the Clinton plan. As independent nonpartisan and that's an important word, professionals quantifying the various proposals, Republican and Democrat alike, would have established our position and made an important contribution to national understanding of this issue.

I reject the contention that health care costs do not matter. A prominent conservative economist made a statement earlier that the costs do not matter; what matters is trust. I'm not sure what that means, but it confuses me. Costs matter very much. Knowing the level of cost is crucial to understanding the nature of a commitment and to determining how we're to deal with the cost. Knowing that one plan or one feature is more costly becomes crucial to designing the program.

On a positive note, I believe there are four significant steps that the profession could take. And, since this is a meeting of health and pension actuaries, I should point out that these concepts apply equally well to pension actuaries. All indications are that the private pension system is next in line after health care is resolved. Regardless of specialty, we all benefit from public policymakers recognition and use of sound actuarial input on important societal issues.

Here are the things we can do now. First, the SOA could sponsor research leading to a macrodemographic model of the U.S. population that would allow health care or

pension cost estimates to be developed nationally. The results would be of major interest to the Congress and to the Executive Branch. Development of this computer model is time-consuming and expensive. It's a considerable undertaking. However, health actuaries within the federal government have made their model available, and a private nongovernment organization has also indicated that we might work together. These prospects need to be explored thoroughly, and they will be, so that the model is available on a continuing basis. The model has applications to many fields involving payments to various segments of society, such as welfare, unemployment insurance, and worker compensation.

The second thing that health actuaries can do now is to contact their clients and find those willing to develop the costs of various health care proposals as they are introduced. As a research project, the Health Section of the SOA can then develop health care cost aggregates that reflect small plans, medium-sized plans and large plans, summarizing the cost effects on a before-and-after basis. The frequency distribution of these results should be of interest. These compilations could be done quickly and interpreted, and the analyses could be released on a timely basis. These analyses would be noticed, and they would be of interest.

Third, groups of health care actuaries should band together by city or state and form circles of common interest and concern. These volunteers could react as individuals to some of the articles appearing in newspapers and magazines, and they could respond to requests for appearances on radio and television talk shows and participate in town hall-type discussions. As a profession, our response in this area has been limited, and I think that's an understatement. As interested individuals, we could respond quickly. These circles could come from Health Section listings developed by the SOA staff to emphasize the importance of the effort and the difficulties involved. Initially, only health actuaries with significant experience should participate, and interaction and peer review should be stressed as an integral part of the process. The SOA should help prepare these circles to deal with the press, a difficult but necessary task. Otherwise, we're left out of the process completely.

Fourth, we need an educational seminar on health care issues that is focused on an audience of members of Congress, their key staffers, members of the Executive Branch, and the press. These seminars, perhaps one or two a year, should be held in Washington, D.C. The SOA continuing education staff could provide invaluable help in making this happen.

These are four steps that could be taken to bring the actuarial profession into any national debate in which we have the requisite expertise, but it will not occur easily or naturally. The structure of the SOA, with its emphasis on Special Interest Sections, means that a bottom-up response has the best chance of generating any real action.

If you agree with what I've said, or if you have other ideas, let the leadership of your Section know. This is the time to decide whether our profession will look inward or look outward. It's time to decide whether we are to be part of a discussion of important public issues or to be left out. Not in 60 years, since the advent of Social Security, have we had such an opportunity to contribute as a profession. Let's rise to the occasion and not lose our way.

MR. J. BRUCE MACDONALD: I intend to describe what has happened in Canada and the effect it has had on health insurance actuaries and the effect that I think it should have had upon them. I'm not trying to tell you that what we did in Canada was right or wrong. I'm just hoping that, by telling you what happened in Canada, you can deduce things from it that will be applicable in the U.S. because some form of health reform is coming. And, when I use the term *Medicare*, I will be using it in the Canadian sense, which is the description for the overall hospital medical plan in existence in Canada. It isn't the American sense. I decided I was too old to invent a new term to describe what we call Medicare in Canada, although I know that what you call Medicare in the States is somewhat different.

The first thing one has to realize is the differences between Canada in the early 1960s, when Medicare came into effect, and the U.S. in the 1990s. And the differences, to some extent, are not the differences between Canada and the U.S., but the differences between the 1960s and the 1990s. The whole business of health care wasn't nearly as sophisticated or as well-developed then as it is now. And there were fewer actuaries around, not just health insurance actuaries, but many fewer actuaries. At that stage we used to make jokes about unemployed actuaries because they didn't exist. It isn't a joking matter anymore. Further, there were very few health insurance actuaries working for the consulting firms at that stage. They were all working for insurance companies, just as I was. The other thing to remember is that actuaries in the Canadian companies were also doing business in the U.S. So even though we lost our market for health insurance in Canada, we were still going strong in the U.S.

Some of the initial actuarial assignments we had were preparing cost estimates of Medicare for certain provinces. Second, we measured the effect on physicians' incomes for both the medical profession and for the provinces that were implementing Medicare as the doctors and the provinces wanted to know what the effect was going to be. Unfortunately, neither of these jobs was widespread. I was involved in some of them, but certainly there were not many actuaries involved in them. Even worse, most of these jobs were not ongoing. We didn't continue to be involved. To an extent, this is because the provinces raised the fees by five percent across the board when they negotiated a new tariff for the doctors. If you're doing something like that, you don't need an actuary to tell you that the costs will go up by 5%. But there were certain things that actuaries possibly should have been doing.

When Medicare was introduced, demographic projections were made, predicting that there would be 37,000,000 Canadians by the end of the century. Well, it looks like the figure is going to be 27,000,000. Hospitals were built to meet the needs of 37,000,000 people, but we've only got 27,000,000 people. As a result, we are now closing beds, simply because we've got more beds than we need. Closing these beds doesn't mean that Canadians are going without care. This was a mistake in the demographic projections. Whoever did the demographic projections for Medicare was not like the actuaries who are doing it for Social Security; the latter were then refining it regularly and taking the tremendous drop in birth rates into effect. The demographic projections were done some time in the 1950s and remained engraved in stone and nobody ever looked at the projections and said, we've got many more beds than we need.

To understand how things work in Canada, here's a brief description. The Canadian Medicare is provincially administered, because under the Canadian Constitution this is a provincial responsibility. However, it's partially federally funded. So the federal government sets guidelines under the Canada Health Act. If these guidelines aren't met, the federal government does not pass money on to the provinces. The Canada Health Act requirements include the following:

- Administration on a nonprofit basis by a public authority
- Coverage of necessary hospital and medical services, including surgical, dental services and hospitals
- Universality, portability within Canada and payment for services outside Canada at the rate paid in Canada
- Accessibility.

When Medicare came in, some provinces elected to cover more things than other provinces did. There are many services that are not required to be covered under Canadian Medicare, such as glasses and eye refractions solely for the purpose of prescribing glasses, dental procedures in dental offices, long-term care, hospital room and board above the standard basic ward level, coverage for 100% of the cost of services incurred outside Canada, drugs, special nurses, etc. That's just an indication of what may not be covered under Medicare, although it may be covered under some provincial plans.

Some provinces covered some of these items, such as eye refractions for glasses, chiropractors, osteopaths, and other paramedical services (oxygen and blood). Some provinces established drug insurance plans, which are universally called Pharmacare, but these were usually only for senior citizens or for those members of the population with low incomes. A few provinces established dental insurance plans for children. These plans weren't subject to the Canada Health Act, so the provinces could make changes in covered items unilaterally.

I should have mentioned earlier that under the Canada Health Act any co-pay feature is forbidden, although you can charge premiums for it. I'm not quite certain how a deductible of \$50 differs from a premium of \$50, but our legislators think it does.

As a result of all this, health insurance actuaries no longer had to cost or design coverage for basic hospital, surgical or medical insurance. But there was still plenty of scope for health insurance actuaries to develop and cost plans to cover what Medicare didn't, and these might even be more interesting and challenging assignments than costing basic hospital, surgical and medical.

Now some of the provincial Medicare plans, for financial reasons, have started to cut back services to the extent that is allowed under the Canada Health Act. Examples include the following:

- Payments for treatment outside of Canada are being cut back. The joke had always been, if you get injured in an accident in Florida, charter a plane and get home because Canadian Medicare is probably not going to pay all the charges of the hospitals in Florida. We used to.
- Coverage and payments under Pharmacare are being cut back.
- Deductibles (which are allowed) are being raised.
- In one province, at least, they're making private plans the first payer.

- Plans are beginning to eliminate eye refractions that are solely for the reason of prescribing glasses, and plans are also beginning to reduce and cut out benefits to people like chiropractors and osteopaths.
- All the children's dental programs have virtually vanished by now.
- The latest thing that is causing a problem in Ontario is that Ontario is no longer paying for medical examinations required by third parties, for example, if somebody is away sick and the employer asks for a note from the doctor to confirm that the person was very sick and couldn't work. And now either the employer or the employee has to pay if Medicare says it is not medically necessary. There was quite an upheaval about this in the papers.

Some of these cutbacks may or may not affect claims under private insurance, depending upon the contract wording. So the health insurance actuary has to be vigilant in monitoring the effect of these claims to determine whether they're going to enlarge the claims being paid under the contracts that use the actuary. I'm afraid I have to say that I think most Canadian actuaries have missed the opportunity to have an effect upon Medicare. There are many things that can be done in Medicare in the area of cost containment, in the area of claims analysis and in the area of managed care. But as a profession in Canada, we have let this be done by the Medicare bureaucrats, and very few of us have become involved in the debate about what we can do.

Health insurance actuaries certainly have not been in the forefront of analyzing claims. Some companies are very sophisticated in their claims analyses, and they could tell you all sorts of interesting things and come up with methods to correct them. Other companies are quite primitive. Their idea of claim control is to get the premium up high enough so that it covers the claims. And few, if any, actuaries are working for or with the Medicare agencies. If I weren't an actuary, I would say there are none, but I'm sure there's somebody out there someplace I don't know about.

There are many things we could be doing with claims analysis in Medicare. Less can be done in the private side because most of the coverage in the private side for which the data are statistically valid, are largely limited to drugs. Even so, some companies have become quite adept at identifying abuses. There is much greater opportunity for actuaries to do claims analysis inside the Medicare system, and there are many interesting questions. Why are hysterectomies, for example, much more common in Winnipeg than in Toronto and in rural areas rather than in urban areas? As Jane Fulton, whom I'll mention later, said, "If you're a middle-aged lady, don't go to Winnipeg." You're going to be hijacked by a gynecologist. They've got too many of them there. Why are prostatectomies much more common on the West Coast than on the East Coast? Does this result from inherent differences in the population or from the environment, which would make it justifiable and explainable? Or does it simply result from different medical practices, which would make the necessity of some of these procedures guestionable. I understand that private health care in the states is raising a lot of these questions and analyzing them. But, certainly in Canada, when you have only one provider, a lot of these things could be studied and a lot of valuable work could be done but certainly these things have not been done by actuaries.

I'd particularly like to recommend that you read some of the work and publications of Dr. Jane Fulton. Bob and I were both at a Canadian Institute of Actuaries (CIA)

meeting at Toronto at which she spoke, we were both highly impressed, and Bob is hoping to get her to speak at the Annual Meeting. I even broke down and spent \$115 (Canadian) for her book. It's about \$80 U.S. It's not that much. But I found the most interesting things that she said in the workshop, which was not on tape. If you write the Canadian Institute of Actuaries, you'll be able to get, subject to the usual fee, a tape of her address. I even bought it, having heard it. She is a very dynamic person with many ideas. And for a nonactuary, she thinks that we actuaries should get involved, unlike a lot of nonactuaries who don't want to let us get anywhere near the field.

I think that a health insurance actuary should be better able to analyze these matters than a statistician or a doctor because we're trained to project the effect of changes in practice or in the reimbursement level on the experience. We know that when you put a deductible on something, claims go down by much more than the amount of the deductible. We also know that if a benefit is paid by the underwriter directly to the pharmacist, the claims are still lower than if you have to accumulate the receipts and mail them into the insurance company. I think actuaries are in the best position to suggest methods of cost containment that don't reduce the quality of care. And I think that actuaries have a better overall grasp of the problem than other professionals, because our training is to put a dollar value on probabilities affecting humans. If you get anything resembling Canadian Medicare, the work of the health insurance actuary is obviously going to change, but it should be even broader and more challenging and more rewarding than it is now.

MR. HAU T. DOAN: One possible aspect of health care reform is more managed care, and that may mean more HMOs, bigger HMOs, and HMOs commanding a bigger market share. I'd like to talk to you about my experience in the traditional HMO and why those organizations think they may need or may not need actuaries and what kind of opportunities there are for us.

First, there are opportunities in terms of the future environment in HMOs. The negative side is: I have observed that the management of traditional HMOs, like Kaiser or Family Health Plan (FHP) (not those HMOs that are owned by insurance carriers, which have always recognized the value of the actuaries) is not used to actuaries. And the first thing to understand about traditional HMO management is that it may not understand the scope of the things that actuaries can do. And, they tend to think of us as underwriters doing risk selection more than anything else. And, to the extent that health care reform eliminates or reduces risk selection, it may be thought that we don't have much of a role there.

A couple of months ago, a senior executive in our company asked our chief actuary exactly that kind of question. He asked what actuaries will do since, if the Clinton plan goes through, there will be community rating. I don't quite know what the chief actuary's answers were, but the next thing we had to do was to prepare a very detailed strategic plan for the actuarial department, explaining to management what value actuaries can add to the company.

Another aspect of traditional HMOs is that they may not think that they are in the risk business because of capitation and different forms of provider reimbursement. A lot of risk is shifted to the providers, so they tend not to think of themselves as in the

risk business. And the management information that tends to be looked at consists of very rudimentary measures of average per-member, per-month revenue and cost. And people are more concerned about enrollment volume than any risk involved because of the idea that a member is a member. The one need was for the HMO to get the highest possible margin for overhead and profit, and that can be achieved through being a skilled negotiator and obtaining a good deal from providers. So the way management looks at how the business should be managed might not have a lot to do with risk management. And the detailed and sophisticated rating and financial analysis that actuaries used to do may not be perceived as adding a lot of value in that context.

The third negative side of that environment is that there are a lot of other types of health care professionals competing with us in terms of the general number of skills that we're bringing to the table. And we have physicians, nurses, pharmacists, all clinicians, and other people like health economists, biostatisticians and, of course, the accountants, who all think they know more about the health care delivery system than actuaries do. Unfortunately, they are often right in that respect, and they're all pulling their own statistics through utilization review systems and things like that. The doctors look at the concurrent patient review system to get their utilization data. They all get their own statistics and look at them and look at utilization and cost in some way, and they don't necessarily think that actuaries can do a better job of analyzing cost utilization than they do. So these are the aspects of that environment that are not favorable to actuaries.

On the positive side, I think a number of things have been developing that can help actuaries be more valued in HMOs. The first thing is, oddly enough, that we're going to get some help (maybe a lot of help) from government because of the increased level of regulation that we've seen at the state level. And we can expect more of it, some from the federal level. It usually creates certain technical complications in rating, which require help from actuaries for compliance. And, with regulation to comply with, at the very least we can be considered as necessary evils. In that respect, I personally haven't seen any competition from all those other experts in the HMO, so we are secure there.

The other areas where I think there's a good opportunity are health care data and data issues, which should become more and more important in the upcoming environment. We'll see large employers requiring more and more sophisticated data, the HEDIS type of data. People are going to have health alliances, and they are all going to want the same kind of data from health plans. Actually, in California, the Health Insurance Plan of California requires exactly the HEDIS type of data as a condition for participation in the plan.

HMOs in general don't have a lot of claims data because a lot of it is capitation. Because of that, they don't get a lot of utilization data from the providers. And, when they do get utilization data, it tends to be incomplete or inaccurate. One thing actuaries are well-positioned to do is to help specify the kind of data that's needed and that is demanded by the clients. More importantly actuaries are well-positioned to help evaluate the quality and meaning of the data that we're getting. People tend to use the data and take it at face value, and it's very unfortunate that the conclusions that they're drawing from it are less than valid. So that's an area where HMOs

need our help. But, above all, I think the greatest opportunity for us lies in getting involved with the provider issues, because, by and large, HMOs consider themselves more in the business of health care delivery than in health care financing.

Now, in the HMO that I work for, there are many different types of delivery systems. There are all kinds of Individual Practice Associations (IPAs), and we have a staff model and so forth. Many different types of reimbursement schemes exist within each of the delivery systems. Our provider contract people came to us, saying that they don't know what a good deal is anymore because of all that variety. There doesn't seem to be any rationale or any logic for the kind of capitation we're paying to those providers. So they're turning to us and asking us for some rational basis or for some benchmark to help them through the contracting process. I think that actuaries can and do need to develop better tools and better techniques to evaluate the different delivery systems. We need to learn more about medical practice and what drives cost under different practice patterns and delivery systems. In that way, we can demonstrate to HMO management that we're actually helping them manage cost and manage risk in a rational way. As a consequence, we're managing bottom line. We have to talk about money and profit and what we are doing there instead of being viewed as though we're just there to comply with some regulations.

Overall there has been a trend, as I have noticed, of increased employment of actuaries in HMOs. Of course there are not many them out there. In my company a couple of years ago there was one. The first actuary hired by my company was John Fritz. Two years down the line now we have, including FSAs, ASAs and near-ASAs, seven people on staff. That's not too bad for a two-year period, and I see that trend continuing.

So I think the actuaries getting involved in traditional HMOs have to sell their skills to HMO management. And we can do it. It's not going to be given to us on a plate. We have to demonstrate our value. Many other kinds of people are competing to work on the same kind of issues. But, due to our training, I think we can demonstrate that we bring in a more disciplined and a more rational approach to managing risk in the business. We can actually convince the HMO management that we are in the risk business.

MR. MULKEY: We now have time for comments and questions.

MR. ALAN P. HOFFMAN: Bob, you talked about the opportunities for actuaries now and in the future with health care reform. It was a very good talk, but was it emphasized that, for about eight months, actuaries have been in the forefront at least publicly in getting their viewpoints across? They're now developing monographs that are going to Capitol Hill. Shouldn't the actuaries publicize the availability of those monographs for other people to get and/or summarize some of the results of each of those monographs in *The New York Times, The Washington Post* or *The Wall Street Journal?*

I got the impression that the actuaries are acting like, or are seen almost, as backroom actuaries. People are waiting for the Congressional Budget Office (CBO). They don't know what the American Academy of Actuaries (AAA) has investigated, and they don't know what kind of comments or conclusions the AAA has made. For

instance, for months, the rates for the Clinton fee-for-service plan were advertised as \$1,800–\$4,200. These were later increased by about 3%. I just realized yesterday that those numbers were developed by the Health Care Financing Administration (HCFA) and not, as said before, by a group of seven people, six of whom were actuaries. Although I understood, in very small print, maybe a line in some of the major newspapers, that we didn't do that. I do think that the actuaries have not gotten their views put forth and that they've been overlooked. I think we're very important in this, but I don't think we've had an impact on the biggest thing that's happened in this country in a long time and something that actuaries could really have an imprint on for a long, long time.

MR. BERIN: I'm a little puzzled, because I happen to agree with you completely, and I thought that was the thrust of my talk. I think, in general, everything you said I could find no fault with. When I was elected President-Elect of the SOA, I started on the job six weeks early because I was very concerned about the things you were talking about. When I heard about the cost estimates prepared for Clinton and when it was announced that actuaries had participated in the process, I quess, like everybody else, I was excited. When one of the leading economists in the country questioned the costs and said he was disappointed that actuaries were involved, | called around to try to get somebody to answer him. Finally someone from government took me aside and said the costs are flawed, that there were a lot of problems with the cost. I found that last September the emphasis was on a qualitative approach, not a quantitative approach. And the quantitative approach was only taken last April, and it is now June. The quantitative results of the Clinton plan were announced and they were picked up in the press, but they had no impact. If that had been done nine or ten months earlier, it would have made the front page of every paper around the country, because it said essentially that the plan cost was 20% understated, although it was actually expressed in terms of a range.

I think the actuarial response, as I said, was not timely and did not emphasize our strength, which is the quantitative side. I think there is an enormous opening, an enormous deficiency, in the sense that we've only costed one plan which was a Democratic plan. We should cost every plan. And when they add or subtract a feature, we should cost that. And that isn't easily done. The people who costed out the Clinton plan gave up their jobs for at least one month, full time, to do it. I think it's late in the game for the actuarial profession in terms of health care, but not late in the game for the pension system.

MR. HOFFMAN: You made a point earlier, that those \$1,800–2,200 figures weren't quite true, and that they actually said it wasn't quite true, but they made the front page. You can also say right now that's not quite true and make the front pages. I still don't understand that kind of thinking. If we thought it was wrong, why couldn't we make the front pages now? That's a very important thing, because the administration has been getting out worksheets to small business groups saying that this is what the cost is going to be and comparing it to current costs. That may be misleading. Why can't we make the front page now? Why can't we, for instance, advertise some of the results in a nontechnical way and explain things to the public? We can make the front pages, especially with the fact that those numbers may be understated by an appreciable amount.

MR. BERIN: We're not talking about the \$1,800 number; we're talking about the cost aggregates for the covereds and the uncovereds in the population. But you're preaching to the converted. I mean, the way the actuarial profession is set up in the U.S., the SOA does education and research, and the Academy is the public interface, which translates into the Academy taking this kind of action. When I became President-Elect, I was automatically on the Academy board. And I will tell you that I made myself very unpopular because I was pushing hard for a quantitative approach. I don't think I can tell you any more than that. It's out there, and nobody is interested in the cost of the Clinton plan at this stage. So the work done in April was more of a curiosity than anything else.

The Clinton plan is effectively dead. I mean, it's been changed, and it can change daily. That's not to say that the Academy couldn't rise to the occasion and tomorrow come out with the cost of all these other plans. I hope so, but I don't know that they are. I hope I haven't depressed the group.

MR. MARC D. COHN: We've heard statements indicating that the Clinton plan is very unlikely, or that any plan proposed by federal government is very unlikely to be passed. I've also been to a seminar where they talked about all kinds of health care reform on a state level, like Florida, New Jersey. When you talk about how health care reform is going to affect the careers of actuaries, how much emphasis is being placed on the state versus the federal level?

MR. DOAN: Well, my remarks were general. We come from California, and as mentioned earlier, there's a stampede towards managed care. Personally, I tend to think that will spread later to the rest of the country, maybe three years to five years from now. Every state is enacting some kind of reform. In New Mexico, for instance, I think they have a bill for small group that calls for community rating by 1995. But what I was talking about is that, with or without federal or state regulation, the private sector, at least in California, has already reacted to potential reform in the provider community in particular, and the carriers are positioning themselves as well. There is a lot of positioning to deal with the consequences that reform would have.

So, as we talk about future actuarial opportunities in health, these are the kinds of skills that will be in demand, from the HMOs or from other managed care organizations. These are the kinds of things we're talking about, and not necessarily in these particular states.

MR. MULKEY: As a consultant, I have been fairly busy reacting to some of the state regulations, especially some of the small-group laws, and I've helped carriers develop new methods of rating small groups. I think that's maybe relatively unimportant, especially in the long term, compared to getting ready to operate as a managed care actuary. I've been in consulting now for about six years. Before that I worked for insurance carriers, working with traditional health plans. I do more and more work in managed care, and I feel that my future depends on my ability to talk to providers as though I know their business and to talk to HMOs as though I know their business.

MR. DAVID WILLIAM DICKSON: I would like to attempt to answer the question, because I asked the very same question of some Academy representatives recently in a private conversation. The answer that I got was they didn't have the staff resources to address every state initiative. I believe that we're not going to get federal legislation, and that all the action in the next few years will be at the state level. You see that Washington passed Clinton light here recently, and California is doing things already. In Kansas last year we dodged a poorly thought-out community rating bill.

The second answer I got from the Academy was that all the work that they're doing with all the committees is available to you. You can get the monographs, you can get the papers, and then you can use them in your efforts in working on your local state level. But it's going to be up to you, me and everybody else to get involved in the state legislatures, to become more vocal, and not to take sides, but to help the legislators see the impact of what they may be proposing. Community rating is not good or bad, but we must look at the consequences. It's how it's implemented and whether it's implemented in a well-thought-out manner. And, reform is coming, and I'll tell you the states are going to do it before the federal government does.

I guess I'm going to preach here a little bit. It's incumbent upon all of us to get involved and not sit back and wait for the Academy or for the Society to do something. But, I think you're going to have to do something soon.

MR. MULKEY: I think that may be consistent with one of Bob's recommendations, which is that we form groups at the local or regional level, because then we could be prepared not only to respond to whatever the federal government is up to, but, also maybe even more importantly, to respond to what our state governments are doing.

MS. KELLEY MCKEATING: Is there any possibility that any of these states will attempt to implement a system like the Canadian Medicare system? Or is that just too far out for Americans?

MR. MULKEY: In California, there's a single-payer initiative that's going to be on the ballot in November. Just as an example, in California we have unadulterated democracy. You can just get a few signatures, and then everybody votes, so who knows what will come out of that. I think it's certainly a possibility. I don't keep track in many other states. Any other responses to that?

MR. BERIN: The question was, do you see the Canadian system ever coming-is it applicable?

MR. MACDONALD: I don't know. I think there is just too much ingrained objection to it, though I think most of the people who object to it don't know how it works. Certainly the differences are going to be between the cultures of the two countries. I, like most Canadian actuaries, thought that the Canadian system was going to bankrupt us, and that it was going to be tremendously expensive. Well, maybe it is bankrupting us, but it's taking an awful lot longer than we predicted. And part of the expense was because of expansions in the system.

I think the point was made that everybody who has put in a single-payer system, be it Canada or be it the European countries, did it at a stage when the health care delivery system was much simpler than it is here in the U.S. That, I think, may very well stop a single-payer system, although my friend Charlie Habeck in Milwaukee is convinced it's the only way to go.

MR. FRANK J. ROBERTSON: Bruce, you said there was the opportunity for ongoing claim analysis in Canada. Who do you see paying for that analysis?

MR. MACDONALD: What I see is that the actuarial profession should have made sure that we have actuaries working with the various Medicare agencies. Frankly, we have just turned our back on them. I think there are enormous job opportunities there, but nobody has ever got around to saying what actuaries could do. I think they're discovering it now. I didn't mean to suggest that the profession should be doing this because they are the people who have the statistics. But, as a profession, we have to sell them on the concept that it's useful to have an actuary. Just as 100 years ago, we sold the insurance companies on the idea that it's useful to have an actuary on staff.

MS. JULIE M. BOSWORTH: What I've been hearing everybody say is that the opportunities are in HMOs, with the government, or inside your own insurance company, but that the opportunities involve doing some different things, such as going into different products and that kind of thing. Can any of you, or anybody in this room, speak to any roles, outside of the normal traditional actuarial consulting firm and insurance company, that we might be able to play with health care reform?

MR. ROBERT C. GRIGNON: Quebec Medicare works fairly well. We all complain, but it works fairly well. The person who designed the law is an actuary. The person who put the administrative system together is an actuary. Right now I personally represent the general practitioner physicians, and another actuary represents the physician specialists. I represent general practitioners to negotiate rates with the government, and the government is represented by a bunch of actuaries. So there are a number of roles that we can play there.

MR. MACDONALD: Once again, this is proving that Quebec is not a province like the others, I mean, certainly in the area of Medicare. And working for the Regis D'Vant, the Province of Quebec has made much greater use of actuaries than any other province, and I think they have to be commended for that. They found uses for actuaries. Now I suppose part of it may be because Lavalle University turns out good actuaries at a great rate, and they've got the supply. But you know, I say I'm always impressed by what the Quebec actuaries are doing.

MR. BERIN: It's difficult to answer the question, because health actuaries have been doing many different things for a long time, I guess, that are not traditional in the sense that they were early discoverers of comparing actual claims to expected claims, pinpointing areas where there were problems either with physicians or hospitals, and redesigning plans. They got into budget analyses in HMOs where they're calculating revenue streams and expense streams and bracketing them, and then put it in legislation. Health care actuaries have been involved in operations research questions for a long time. I think the real question is what will it be like in the future. I think

there will be a proliferation of state plans. It's hard to believe that we will not have a federal plan. We'll see what happens as a result of the last election. And a best-case scenario would be that there would be more work than ever. And that was the first speaker of this particular meeting. The worst-case assumption is the kind of situation that Bruce MacDonald described. As long as you have the revenue coming in, you don't worry about the other side of the equation.

What I fear is that actuaries will not be part of the discussion and the debate. I think they're only starting to get involved. From my point of view, if the actuarial profession does not get substantially involved, they'll lose an opportunity and lose part of the future, in the sense that others will get involved. And the kind of work that we do best will be done by somebody else, probably not as well. That's my worry.

MR. MULKEY: One other comment. This is more a nontraditional employer than a nontraditional assignment. But there are a lot more consulting opportunities with providers than at any time in the past, to hospitals especially and, to some extent, with groups of physicians. I find that we do more or less traditional actuarial sorts of things for providers. But because of the way a lot of HMOs operate when they capitate providers, they're basically transferring the risk to the providers. So the providers have the risk, and essentially, they are the risk-takers, and so they're likely to be the ones that need our help. We can manage the risk.

MR. DOAN: I'll second that by saying that I haven't seen a full-time actuary on staff of any provider yet. But I wouldn't rule out the idea, because large provider systems are now banding hospitals and physician groups together. They have recently taken a few people from our company—not actuaries, but other health care professionals. This is the first time that a large physician group, for instance, has hired somebody on its staff full-time to do things that HMOs or insurance companies used to do. So it's possible that, as they get to a certain size, they may use their own actuaries instead of using consulting actuaries.

MS. LINDA M. KAHN: A couple of comments and questions, first for Bruce and maybe for Bob. To the extent that history is a valuable teacher, for those of us in the U.S., can you quickly summarize the effect on job opportunities for actuaries in Canada as a result of Canada Medicare?

MR. MACDONALD: There was practically no effect, and that was simply because there were so few health actuaries around. At that stage, I was the group actuary for a Canadian company. I was responsible for group pensions, group life and group health, and we operated in the U.S., so maybe one-sixth of my work vanished. But this was simply because there were so few actuaries. This was back in the days when you considered it a bad week if you hadn't had two job offers. And we're no longer in that short supply. I think the social conditions were so different, that you can't extrapolate them to today.

MS. KAHN: We of course are very concerned about changing job opportunities for the actuarial profession, and that's one of the reasons for being part of the Section that's sponsoring this particular session today, the Actuary of the Future Section. We hope that, if you haven't joined the Section, you will shortly. Bob, you said that you

feit that there will sooner or later be a federal system for health care, maybe not in the next decade, but sooner or later.

MR. BERIN: Sooner than that.

MS. KAHN: All right. Even sooner than that. One of the specific things you suggested for the Society to do was to conduct seminars in Washington, D.C. Do you perceive that these seminars should include special interest groups such as the American Association of Retired Persons (AARP) or the general public? Or would these seminars be for Congressional representatives or just for the actuarial profession? Would you care to expand upon how we can spread the word on how the actuarial profession should be involved?

MR. BERIN: I think that we should do at least one seminar a year, maybe two, but I see it as a very narrow audience. The audience would be members of Congress who choose to go (and there will not be many of those) and staffers who work for these people (and I think a lot of them will go). That's a very important group because congressional representatives and even Senators come and go. Staffers stay forever, or it seems like that, and they are the ones who do the work and implement things. And then I would invite people in the Executive Branch. The "name" players will not go but, again, the staff will go. And then I would view it as an educational opportunity and get right down to basics, try to be helpful and thoughtful and not try to promote the profession in any sense or in any way. But I would stay very much away from other groups. If the press wanted to come, they'd be welcome to come, and they probably would come, but I wouldn't invite AARP or any other group.

I think what we're trying to establish is that we know something in this field, and I believe our strength is quantitative. It's very helpful to generate a lot of very well done, excellent brochures, but I would term that as a very slow process and more of a qualitative and inward approach because I think an actuary needs brochures and will get a lot out of them. But a nonactuary reading these brochures will not react in the same way. Whereas, if we say the Clinton plan costs so much, and the Dole plan costs so much, and the Cooper plan costs so much, and if we establish what we do, we accomplish two things. We demonstrate that something very useful for society is happening here and that costs matter. If you notice, costs really usually don't get into the debate. And, most of the time, if it gets in at all, it's a Congressional Budget Office (CBO) estimate, and the CBO hedges an awful lot.

And the second thing is that the profession gets identified for what it is. We're still not well-known. And, again, we're talking about our future. We shouldn't give up this particular role, because we do it well. And, if we're not out there, we will lose it.

MR. DAVID A. PEPPLER: My question has to do with the clinical practice of medicine. There's a lot of money spent each year on research within the medical profession to determine how to treat chronic diseases. Has there ever been any input from actuaries on how we can help the medical profession try to better determine or gain more consensus on how to treat chronic diseases?

MR. DOAN: I guess our role as actuaries is not so much about clinical practice itself or how medicine should be practiced, but to be able to quantify the cost impact if

you have a certain pattern of treatment. I don't think our job is to get involved in the clinical aspect itself, rather to measure the financial impact of it.

MR. PEPPLER: You work for an organization that not only finances medical care but delivers medical care, so your organization's responsibility is to do that in an effective and a cost-efficient way, so I think they're kind of integrated there.

MR. DOAN: That's right. But then, again, I wouldn't dream of actuaries telling the physicians how they should treat their patients.

MR. PEPPLER: Certainly there would be a lot of resistance from the medical profession.

MR. DOAN: Plus, I don't think it's safe for us to get involved in clinical practices.

MR. PEPPLER: Do you think there's anything that actuaries could add to that research process to try to gain consensus on best way to treat chronic diseases at all?

MR. BERIN: I think the medical profession sometimes misuses mathematical and statistical techniques. And I think there is a role in places like National Institutes of Health and large medical centers for actuarial expertise. I think they would find it valuable.

MR. PEPPLER: I'm sure statisticians are used to some extent in research studies.

MR. BERIN: For example, the medical profession used to utilize life expectancies in terms of treatment of care for older patients. If there was a five-year turnaround before you could be sure that the patient was cured and if the life expectancy was less than five years, maybe they didn't want to carry out the treatment. But at the time they were probably using outdated 19th century mortality tables and outdated tests. I mean, they have a long way to go in understanding that sort of thing. But, with the biomedical statistical stuff, the actuaries certainly could help.

MR. PEPPLER: My perception as a consumer of medical services is that there is a wide variation for the same symptoms or diseases as to how different physicians approach treatment, and that certainly has an impact on medical costs. If one block of doctors treats a disease a certain way that is inefficient, you can certainly have a wasteful cost effect.

MR. BERIN: There are some people who are trying to get out a book (it's only in the request for proposal (RFP) thinking stages) on the subject of the kinds of training that actuaries have that lead them to be useful in solving those kinds of problems. It would be an operations research-type textbook, and medicine is on their short list of topics to which they believe that actuaries could make a contribution.

MR. DICKSON: Were you thinking that this seminar in Washington D.C. for the government would be something sponsored by the AAA or by the SOA? Also, since I've already been told that the AAA doesn't have the resources, would the SOA be willing to help organize, say through some of the local actuarial clubs, seminars in the

state capitals for the legislators rather than just in Washington, D.C. for the Congressional representatives?

MR. BERIN: I think the SOA would be interested in helping those seminars whether they're state-by-state or federal government. On the other subject, you made a very difficult point. The actuarial profession in the U.S. is fragmented. You would never create a profession like this if you were starting from scratch. The SOA is 15,000 strong; the Academy is 11,000, a lot of whose members are members of the SOA even though they don't know for sure why they're members of both. The Conference of Actuaries in Public Practice is about 1,000; the Casualty Actuarial Society is about 2,000; and the American Society of Pension Actuaries is about 800. When those five groups meet, it's a lot like the United Nations without a security council and without a veto. Each of those organizations gets one vote, and when it comes to expenses, they're handled proportionately, as you can guess. So what happens is, you get a lot of talk, but very little action. And things that are important slip through the cracks.

Right now the Academy's function is public interface, and it's not clear what that means. It seems to mean public relations and lobbying. The Society's function is education and research, but I don't think the Society feels that if they do research in the health care area, they should be silent or have to bring everybody else into it. It's not a healthy situation; it's not a good situation. The problem is that most of the members of those organizations don't even realize that the distinction between the AAA and the SOA exists. But you're starting to sense it with the discussions that you had yesterday and the things we're talking about today.

MR. DICKSON: Well, if an individual actuary like myself wanted to get more involved, do you think it would be wise to work through the local actuarial club to get a local seminar going? Or should I just organize something where maybe you got a Blues actuary, commercial actuary and a consulting actuary who are presenting different options, or the cost?

MR. BERIN: I would work within the Health Section of the SOA because I think they would be receptive to those kinds of thoughts.

MR. DICKSON: OK.

MR. DANIEL E. WINSLOW: I have more of a comment than a question. I want to expand on what we were talking about earlier about actuaries being involved in researching medical outcomes. The opinion I had, which you seem to share very much, is that actuaries are very well-trained. If an item like medical were put into an online database and if someone were to actually assemble a large volume of medical records and analyze the results over time, that would be a natural extension of what actuaries do. We're used to assembling and analyzing large databases. That's something, Mr. Doan, that I always kind of thought would be valuable in an HMO. I guess I had a false impression. I thought that was already happening.

MR. DOAN: Perhaps you're right, that's something that's certainly valuable, and everybody wants it. The problem is that gathering the data of the amount and type that you need to do outcome studies is enormous. I think that's the main difficulty,

and it's industry wide. As far as I know, even Kaiser has done only limited studies like that on specific conditions once in a while. And that's certainly something where actuaries can help, and we need to pitch ourselves in case the data are available. We are used to working with incomplete data and assessing what's usable and what's not usable, the value, and what you can do with it. And that part of it is where actuaries can provide a very valuable input.

MR. KERRY A. KRANTZ: If getting the actuarial profession out front on issues is important, I think Bruce came up with a great sound bite today, "putting a dollar value on the probabilities affecting humans." I think that the press would eat that up as a sound bite. And, if we had to vote on a new slogan for the Society, I think I would have voted for that one.

MR. MACDONALD: That reminds me. There's one statistic l've heard often that I haven't heard here. It's something like 80% or 90% of the medical costs of a human being are incurred in the last three months of life. To be facetious, we could solve all the costs of Medicare if we could only encourage people to die three months sooner. But you begin wondering whether this money is well spent, whether we are just doing heroic things to keep people alive in a very uncomfortable state, rather than doing something for the quality of their life or to extend their life span.

MR. DAVID A. SHEA, JR.: I like to follow up on your statement and get your reaction to something. Mr. Krantz mentioned that you had a real good sound bite. Whether we like to admit it or not, we're in a sound bite kind of world. Admittedly, there are many complex issues. They're so complex that you almost throw up your hands and say, "well, I can't possibly communicate these to people." However, I would argue that we could communicate in different ways. Do you think actuaries should work more towards thinking about presenting technical issues to nontechnical people, because that's our audience? Our audience is no longer other actuaries, it's people who really need to understand what we do and how we do it, but we're having a difficult time explaining that. Your reactions? Comments? I would appreciate it.

MR. MACDONALD: I couldn't agree with you more. We are losing the technique of communicating, which is something that I think we had 40 or 50 years ago. I think dropping the English examination from our syllabus was a mistake. I'm doing a major job now, trying to put all sorts of complicated things into English, so that both the politicians and the general public can understand the Canada Pension Plan and its problems. I've been reading all the technical literature they've given me. It's all right, and is all correct, but I have trouble understanding it. And I'm not sure I would have finished wading through it if I wasn't being paid to do it. I mean, I read a report by a distinguished economist who takes five pages of mathematics to prove that a tax credit is not worth as much as a tax deduction for somebody in a high-income bracket. I think that, for most of the things he said, I would say "it is intuitively obvious that."

MR. BERIN: I always thought that was what consulting is about. It was about people and numbers; you took technical concepts and you explained them to nontechnical people. I thought that was the fun part of it. The government,

however, seems to operate in a very strange way, particularly in the pension field, and I'm sure it's true in the health field. They have managed to write things that people can't read and that they don't understand. It's written almost in a foreign language, and it's very disturbing. And some of us went to them five or ten years ago and offered to rewrite it. The offer was made graciously, but we were turned down very quickly.

It's a very big problem in the pension field, because not only can you not interpret it, but also the language is baffling, the individual reviewers around the country don't know how to deal with things, the answers are not unique anymore, etc. It's an epidemic problem around the country. If you go into a glove compartment in a car and read the manual on detecting things like that, what in the world are they talking about? And then if you try to set your VCR, you know, very few people can do that. I don't know who writes these things. And it's true about personal computers. I mean, people learn it by trial and error basically, rather than from manuals. But I think that's the fun part of consulting, to take that on and deal with it.