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ACTUARY'S ROLE UNDER A NATIONAL HEALTH INSURANCE PLAN

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Panelists:	FREDERICK B. ABBEY*		
	Roland (GUY) E. King		
	KEITH S. WEAVER		
Recorder:	DARRELL D. KNAPP		

- What role will actuaries play if the U.S. implements some form of national health insurance?
- What is the role that Canadian health actuaries play under that national program?
- How can actuaries help to shape the health-care environment in the U.S.?

MR. DARRELL D. KNAPP: In the general sessions we've heard a lot about the changing paradigms of the actuary. That seems to be especially true for the health actuary. In fact, our whole foundation could get blasted away. Our panelists are going to discuss some of the changes and some of the impacts that they see on actuaries. Our first speaker is Fred Abbey of Ernst & Young. Fred is the National Director of Legislative and Regulatory Affairs in Ernst & Young's health-care practice. Prior to Ernst & Young, Fred spent some time in special project work with the Health Care Finance Administration (HCFA). So he's had involvement in both government and private practice. In the opening session Bill Hsiao stated that the new actuary would need to be forward-looking, would need to lead change, would need to be consumer-oriented and be mentally agile and intellectually flexible. I think that Fred's comments regarding his perspective on health care in the U.S. and what the actuary will need to bring to that environment will echo Bill's remarks a great deal.

Our second panelist, Guy King, is the chief actuary of HCFA. He's going to discuss the actuary's role in shaping public policy and how he'd envision the government actuary operating under at least one form of a national health-care program.

Our third speaker is Keith Weaver. Keith is the group life and health vice president with Manulife in Canada. In addition to that, Keith worked with the Ontario Economic Council in the health economics area as the national health insurance program was implemented in Canada. He has a unique perspective having lived through some of the issues that are currently being addressed in the U.S. Keith's going to mainly address the private insurance environment in Canada from a group-insurance perspective and how that industry looks running complementary to the national health-care program there.

MR. FREDERICK B. ABBEY: I will present the context of the way Washington is trying to look at health care and some of the other competing demands. We will also look at some of the drivers in health-care policies -- all with the perspective to give you a sense of the kinds of changes that Washington will have to face in the years

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ahead and the kinds of decisions to think about in your own mind and your own careers about what the effect might be on your own profession.

The expectation in the public is that we're going to have reform of the health-care system. There are many people who are involved in this reform debate, and we need to remember the varying degrees of perspective all the time. The debate is on three generic types of issues: cost, access, and quality. Generically there are a number of players including the governments, employers and consumers. These all are converging at the same time with varying points of view. Another driver in health policy is the U.S. federal budget deficit: how are we going to pay for health-care reform? On a family level the cost is going through the roof at \$1,600 a family. On a federal budget level, which is the principal driver that makes Guy's life miserable year after year, is the idea that there's a fixed pie, and that the federal budget is running at 27% in the red; its outlays have to create a lot of competing demands. There's a public expectation that there's a lot of fat in government that, from my perspective, is not there.

So where do we go? Medicare is growing at a particular rate; the mandatory programs are hands off; the banking community is hands off. Where are we supposed to get the money from? Interest rates are down but interest expenses are up, and it will continue to get worse over time moving from about 14% of our annual budget going to interest expense to about 16%. By 1997, 75% of our debt will be our gross domestic product. Consumers, hospitals and providers have trouble conceiving how much is \$1 billion or \$1 trillion. One of the ways I've been able to portray it is in a very biblical context. The idea here is that in the 1980s we went into extreme debt. And we need major structural reforms in our financing system. So let's suppose we have miracles. We have a balanced budget amendment. In five years we take in and spend no more in terms of annual deficits. In the sixth year we start paying off \$100 billion a pop, and we want to be at the debt level of 1981. It will take 40 years for Moses to lead us out of this kind of dilemma with a \$5 trillion debt with the mandatory programs that exist. This is important because the directions that we've been in the past will continue to be followed in the future. Budget policy in Washington is going to be driven by some preconceived notions, and that will include the desire to control the Medicare program.

I'm probably the only nonactuary who reads the hospital-insurance trustee's report. The potency in there has never been picked up in Washington. The cost-containment activities that we've been through in Washington have major effects on the providers of care and major effects on the insurers. It is an expectation within the provider community and some parts of the payer community that this is doing some good when in fact perhaps it's not. The kinds of changes that we're talking about to put programs in actuarial balance are very significant. The Omnibus Budget Reconciliation Act of 1990's five-year legislative program saved about \$44 billion, more or less what we need to save on an annual basis beginning now. How do you go into a health-care-reform debate when a major payer is about to run out of funds after setting up the expectation that you were doing some good in terms of the solvency of the program and the commitment of the program? The effect of this is a number of hospitals in the country have negative margins. Some 30% of the hospitals in this country are losing money.

provider level. Alternatively, some might attest that's good news. That means 70% of the hospitals do have money that you can still take funds away from.

My view of change in Washington is rather dramatic beginning with the next session of Congress. We have set an expectation here in the political environment that our health-care problems can be attacked and can be addressed. When you look at what some of the issues are involving public opinion, we know that we're not going to have national universal health insurance overnight, and it's going to be a long struggle. There are going to be two struggles going on simultaneously and probably inconsistently. We'll have a health-care-reform path that adds on various elements of healthcare reform depending upon the emphasis: cost, quality, access. We will look at the same dimensions of the Medicare program taking what we can get to shore up the program with additional funds. You're going to see consistent change over time. The difference between the future and the past is that we won't have the luxury of time to debate the issues clearly. Washington is becoming uncomfortably comfortable with making expedient rash decisions based on a little amount of information.

From a straight standard point of view there are probably three types of clusters or proposals: national health insurance; employer-based proposals -- whether they're mandatory or whether there's some group purchasing for employers in terms of premiums; and incremental changes that run the gamut. The public expectation, however, is that there are three choices over here in terms of an approach, not a multitude of approaches. The question becomes, what will Congress do in 1993 with health-care reform? I submit that the whole legislative process is not going to change overnight. We're not seeing a legislative reform in the next session of Congress. You'll have 150 relatively new members of Congress going into an old structure with old committee assignments, and we'll probably have the same outcomes. What we've had in this session of Congress is a lot of lip service given to the reforming of our health-care system in terms of the number of bills. I suggest to you that, not until we look at the Medicare and Medicaid expansion and the tinkerings with the existing system and eliminate the political need to tinker with the Medicare program, will we really truly achieve national health insurance, universal health insurance or a comprehensive approach to looking at our health-care problems. Some 145 bills were introduced to expand benefits at the same time we were talking about cutting costs. Congress was responding to a political need. On a practical basis those bills won't be legislated, but it's important to understand that we're working and living in a political dynamic. I see a number of phases coming out. There are legislative phases as well as regulatory.

The kinds of things that will be on Guy's plate and others in HCFA are reforming our medical education program; instituting new ownership restrictions having to do with the unnecessary services of physicians that may achieve some savings and utilization reductions; reforming our health-care system by looking at where the dollars are on the outpatient basis; creating a greater expansion of the diagnostic related group payment window on a postdischarge basis trying to bundle services around the hospital admission; implementing deficit reduction items in terms of creating ways to legitimize cuts in price; and continuing to feed the outpatient arena by stressing the system and adding permission for the ambulatory surgery environment to perform and be paid on a fixed-rate basis versus a cost basis. As we see the new census data come in and new wage information come in, you will see the providers fight over a

very fixed pie, and more requirements for HCFA in terms of making the decisions and collecting more information about the patient, about the provider, and about the cost of services.

As the Congress becomes more comfortable legislating, it will probably look at extending balance billing limitations to other kinds of payers; increasing federal encroachment on insurance; moving those facilities from a Medicare-programs perspective that is still on an other-than-a-fixed-payment basis on to a prospective-payment-type of system on the hospital side as well as the other types of providers making the next quantum leap from the high-ticket items of radiology and ambulatory surgery and outpatient to the other forms of fixed payments on outpatient reform; coming up with a new payment system which will set the expectation of immediate savings and controls in utilization while the information may not be available to make that judgment; expanding further the scope of keeping the hospital as the accountable contractor for that patient's care even as patients are treated in and around hospitals differently; and again, cutting prices.

In the future on a regulatory mode we will see more selected contracting, more adjustments to the existing price. As money gets tighter the industries will look to create adjustments to the price based on, for example, nonlabor adjustments. Consolidation of all those who have been paying bills over the last 20 some odd years – the agency will consolidate those providers, will provide a new opportunity for new types of payment associations which will change existing relationships both on a cash-flow basis on a provider level as well as an information basis to everyone else who's using and studying the Medicare program.

As we move forward, probably more toward the end of the century, in the legislative cycle we will see more selected contracting, perhaps even on an episode of illness, and ultimately perhaps there will be a requirement of a primary-care gatekeeper function within the Medicare program.

One of the most telling issues about all of these kinds of changes is what public opinion is. Leaders can only be leaders to the extent that there are followers. If you look at the information that we have about what the public's expectations are of our health-care system, you see some troubling information. We're split. We don't know. Not only do we not know whether we want universal, national or incremental change, but also when we bundle the approaches to even more clear solutions, do we want a regulatory price-setting model? Some 40% of Americans say yes. Do we want a free-market approach? Some 39% of the Americans say yes. The rest are no opinion or leave things as they are. How is Congress going to reconcile this major conflict? I submit it's not, and as a result we'll have incremental change. When we ask the public about which way it should ultimately finance the system, you see the numbers are strikingly similar. Some 31% want pay or play, 32% single payer. When you look at information having to do with the insurance community, there's very troubling information about the public's concern about its lack of knowledge about insurance instruments as well as its skepticism about being disappointed in its coverage at the most crucial time. The public is worried about its coverage both currently and for the future.

Ultimately what do I think is going to happen next year? I think the Democrats and the Republicans will get themselves together, in my belief, under a Democratic presidency and put the issues together where they agree and put the issues aside where they are not in agreement. We'll make some changes in the tax laws to increase the deductibility of health insurance for the self-employed. We'll create small-group markets for employers in changing the way insurance is regulated and available. There will be some sort of malpractice reform but new roles for malpractice attorneys to practice their work outside of the court in arbitration settings. We'll create massive changes with the expectation that these administrative efficiencies both on a claim-processing basis and a utilization-review basis can yield some real savings. We'll put greater investment dollars in practice guidelines and new regulation of utilization-review programs or a national basis. Whatever the government can do in terms of fostering primary care, it will do.

MR. ROLAND (GUY) E. KING: Decisions made in Washington on health-care reform that are made during the next couple of years are going to have a substantial effect not only on the delivery of health-care services but also on the career of every health actuary in the country. Surprisingly enough, health actuaries haven't had much input in the debate, even though we're uniquely qualified to do so. Those of you who were at the health-section breakfast heard people outside the actuarial profession tell us that we're uniquely qualified. We do have our own perspective to bring to it, and we do have our own expertise. We're not the only experts, but we do have a lot of room for input, especially in the cost area and the area of designing efficient healthcare plans. In other words, we work with health-care plans on a daily basis, designing them and making them cost effective, and we ought to have input in the debate. Health-care reform actually raises two very important questions in my mind with regard to the soundness of the decision-making process, the role of health actuaries and the future of the health actuary specialty.

The first question is, will the policymakers get advice on what they're doing on health-care reform, and after they begin implementing health-care reform, how will they proceed from there? That's the most important question, but then there's the secondary question of, what impact will it have on the careers of health actuaries? Will there be a greater demand, or lesser demand or will they devise some sort of system where they don't need us or they don't need very many of us? The role and scope of the health actuary in the future is going to depend on what form health-care reform takes. I can't really tell you for sure based on everything that's out there. I can't really predict what's going to be the ultimate kind of health-care reform we're going to get.

We can take a look generically at the different kinds of major reform, and we can try to talk about what kind of a role the actuary will play in each one of those kinds of health-care reform. The first one is the so-called managed-competition approach. The Bush administration plan fits into this category and so, probably, does the latest evolution of the Clinton plan. Under this approach I think that the role of the health actuary will be retained and even enhanced. The health actuary will be playing a considerable role in setting up risk pools, assessing the impact of health-risk adjusters on blocks of business, measuring risk and managing the competition among health insurers. Since managed competition retains a role for all insurers, each one of those insurers is going to have to employ either the same number of health actuaries or

more health actuaries in order to protect its interest. I think the real danger of the managed-competition approach as envisioned by the Bush administration is that health insurance companies might have some inappropriate or inequitable system of healthrisk adjustments forced on them without having any input into whether the system is any good or not. For example, the administration's plan for risk pooling is to use health-risk adjusters in order to determine whether plans would pay into the pool or take money out of the pool. If your block of business had a healthier than average population according to these health-risk adjusters, then you would pay money into the pool. If your plan had a less healthy than average block of business, then you would take money out of the pool. Financially, the healthier blocks of business are supposed to subsidize the less healthy blocks of business. At least qualitatively, if not quantitatively, this has exactly the same effect as mandatory community rating. Many people have their doubts about whether mandatory community rating is the right way to go and whether it follows proper risk principles. Even though I said the role of the actuary would be retained under managed competition, please don't get the idea that I said that it was the way to go. I don't necessarily think that that's the way to go, but I do believe it will enhance the role of health actuaries.

Another kind of approach that health-care reform could take would be a centralized national health insurance plan managed by the federal government. The role of the health actuary would, of course, be considerably reduced under a plan like that compared to what it is now. You'll hear in a moment about how Canada's national health insurance plan affects the role of the health actuary. I think Canada's plan leaves enough holes in it so that the role of the health actuary isn't as diminished as it possibly could be; there's still plenty of private sector roles for health actuaries. Under a truly central-government-run national health insurance plan, I think that privatesector health actuaries, under the worst of all circumstances, could be eliminated. This would have an adverse effect also on the kind of advice that policymakers would get on their national health insurance plan. There's a great deal of interaction between HCFA and actuaries in the private sector now. We use our colleagues in the private sector to bounce ideas off of, and there's a lot of exchange of information and knowledge back and forth. All of that would come to an end if we had a national health insurance plan run by the federal government. It makes me think twice about what kind of advice people could get. There could be a serious deterioration of the government's actuarial work if the health actuarial specialty were nothing but a deadend government job.

Then there's the play-or-pay approach to health-care reform. The role that the actuary would play in that kind of a plan really isn't quite so clear. Under play or pay, some people have said, if the payroll tax rates are set too low, play or pay could just deteriorate into national health insurance. If taxes were set at a level where the employer had to make a real decision whether or not he was going to play or pay, then I think that there would be that much more work for health actuaries, and it would be that much trickier to help companies determine every year whether it was in the best interest of the employer to pay you or whether it was in his best interest to pay the tax.

Making sure that decision makers get sound, credible actuarial advice regarding healthcare reform is going to be a real problem. There are a number of ways in which good advice doesn't get into the system or it gets misused, misinterpreted or just

plain ignored. Sometimes this is for political purposes, sometimes by design, and sometimes by accident. I could give you lots of examples from my own personal experience in the government with the Medicare program, but let me give you a few examples that relate just to health-care reform and our input into the decision-making process. First of all let's look at play or pay. When you think about play or pay, common sense will tell you that it's going to result in an increase in the budget deficit. The employer is making the decision - he has his choice of whether he's going to play or whether he's going to pay. He's not going to pay the payroll tax unless it's to his benefit to do so in most cases. That means you're guaranteed that there will be an increase in the federal budget deficit if you adopt a play-or-pay proposal. Yet none of the cost estimates that have been done by any of the think tanks for play-or-pay proposals have ever included any cost at all. They've always just automatically assumed that the system was going to be budget neutral. Originally Clinton's plan was play or pay. However, after the plan was discredited partially as a tax increase but also because of the budget problems that might arise, Governor Clinton began to back away from play or pay. In September 1992 he gave a speech where he abandoned play or pay altogether. In that speech he said, "This is a private system. It is not play or pay. It does not require new taxes." However, I can show you the April, 1992 campaign white paper by the Clinton campaign that made it very clear he was adopting play or pay. This kind of change in policy is an example of good advice that was only belatedly taken or taken in time before someone actually put play or pay into effect or before somebody got too far behind it.

My second example involves our office's participation in the development of the administration's health-care reform plan. When the Office of Management and Budget (OMB) developed the administration's white paper on health-care reform, it asked a number of different offices, including our office and technical offices within the federal government, to do an evaluation of just exactly what kind of plans could be offered for the \$1,250, \$2,500 or \$3,750 tax credits in the administration's proposal. The OMB got advice from several organizations and our advice was considerably less optimistic. In other words, our analysis showed that in many areas of the country you could offer a full service health plan for \$1,250 for an individual, but on the average throughout the country you would have to offer plans that had very high deductibles and very high coinsurances or else very slender benefits in order to offer a plan that could be paid for by \$1,250 a year. The other office built in some questionable assumptions about the savings from managed care. It wasn't even guaranteed that the kind of plan you were going to have was going to be a managed-care plan. Then OMB took those estimates and massaged them further until they had some very favorable looking health-care plans that could be offered for these amounts. Well, the policy officials in HCFA, the secretary in Health and Human Services (HHS) and the administrator of HCFA, didn't know that OMB hadn't put our analysis into the white paper. When they were questioned at the hearings that immediately followed the publication of the white paper, they assured the congressional committees that those numbers had been looked at by the actuaries and that we stood behind those numbers. In fact those analyses weren't done by us, they were done by another organization. This is what I'd call an example of skewing the analysis in order to favor a particular proposal. Of course, it's done all the time in Washington, and this is why we have \$300 million budget deficits even though we've met our Gramm-Rudman targets every year. I certainly would argue that it would have been appropriate for OMB to reject our analysis if there was a question of

the quality of the analysis, but OMB never told us that there was any question of the quality of the analysis. It was just this other analysis was much more favorable. Then, once it gets into the system, you're stuck with it.

A more recent example of a misleading analysis is one done for a bipartisan panel that looked into the Clinton and the Bush health-care reform proposals. This analysis added up the savings for both proposals and came to the conclusion that Clinton's health-care-reform proposal would save \$746 billion over the next eight years while the Bush administration's plan would save \$157 billion over the next eight years. And that Clinton's proposal would cover all 35 million uninsured in the process, but the Bush administration's proposal would leave 27 million uninsured. Well, something looks strange about these numbers: Clinton's proposal can save \$600 billion more and yet cover 27 million more uninsured people. I decided to take a look behind these numbers and see what was driving them. A very prominent Washington politician said that he'd stake his reputation on these numbers. When we look behind the numbers, the savings for the Clinton plan are highly misleading. The Clinton plan talks about a goal of putting a ceiling on health-care spending, but there is no plan for how to achieve that goal. It's just a goal that the plan designers wanted to achieve. The cost estimates are all based on the assumption that the plan will achieve those goals. It will put a cap on health expenditures at 13% of GNP, what it's projected to be in 1993. The plan designers used our health-care projections in order to produce the estimates. I think this points up a difference in the way some of the think tanks would approach this problem compared to the way we as actuaries would approach the problem. If the plan designers had asked our office for estimates for this proposal, my response would have been, "You don't have a proposal, you have a policy goal without a policy on how you're going to get to that goal. Tell us what the policy is, and then we'll price out the policy." That gives you another example of how the input that we have, even if it's good input, just gets ignored or doesn't get taken into account in the process. Ironically enough, (I'm not endorsing the Bush plan) the Clinton plan really, in my estimation, includes even fewer legitimate costcontainment features than the Bush proposal. It merely creates this cost commission whose goal is putting a ceiling on health-care costs. Of course, we have a little experience in the Medicare program with commissions created to contain health-care costs. We have the prospective payment assessment commission (PROPAC) set up to make recommendations on hospital payments, and we have the physician payment review commission (PPRC) set up to make recommendations on payments to physicians. I think that PROPAC has been in existence for a lot longer than PPRC has been in existence, but in virtually every case, whether it's been PROPAC or PPRC, they've been advocates for higher payments to the providers than HHS and HCFA have advocated.

What's my assessment of what will occur in the area of health-care reform? Well, I'm not a political seer, but I'll give you my assessment anyway. I think there will probably be substantial private sector involvement in whatever version of health-care reform gets enacted. Fred described public opinion polls that have shown that the public wants health-care reform. The public may even say it wants national health insurance, but it doesn't want the government involved. The public's instincts are that, if the government gets involved, it will make things worse, not better.

I think health-care reform will undoubtedly increase the health insurance coverage of the uninsured. Politically, covering the uninsured is a very easy thing to do. It doesn't offend the providers. It certainly doesn't offend the uninsured. As long as you don't get around to talking about how you're going to pay for it, it's a desirable thing to do. You're not going to have anybody opposing that. Either by accident or design, policymakers will continue to receive bad advice on the costs and consequences of their health-care-reform plan. That probably means that the cost-containment aspects, which are the aspects of health-care reform that are really going to offend the providers of health care, are going to be very weak and very ineffective. However, somebody will tell them that they will be effective and that's whose advice they'll take. They won't take the advice of somebody who tells them that they'll be ineffective.

MR. KEITH S. WEAVER: I'm to talk about the role that the actuary plays in groupinsurance business in Canada - specifically, what happens when government takes over the funding of basic health care and what are the consequences for actuaries? Clearly the consequences are enormous. How could it be otherwise? Nationalized health care means major changes in funding, markets, products and risks. My role is to describe that. I think you in the U.S. as actuaries need to decipher which areas are applicable to some of the things that are happening for you. There are many colors of nationalized health care, and the Canadian approach is only one shade, and elements will differ among them. To understand these issues I will need to provide an overview of the Canadian system and within that context the roles for the industry and actuary. Finally, I'll present some interesting statistics on where actuaries practice in the two countries and draw a few conclusions. There are three aspects of our system that I'll review with you. These are the delivery of care, the funding of care, and also a brief discussion on who covers what in the two systems.

In Canada doctors are mainly independent practitioners. The majority are on some form of fee for service and in fact defend this right vigorously. On a couple of occasions they've gone on strike. Hospitals are on a nonprofit basis as are many nursing homes. With tight funding constraints, for-profit nursing homes are wondering if they are in the right line of business. This is also true for laboratories. A major laboratory in Ontario hasn't had a fee increase for three years.

One of the characteristics of the system is that there is very high freedom of choice. There are virtually no restrictions on which doctor or hospital Canadians can go to, particularly within the same province. For all practical purposes everyone in the country is covered. The 1% not covered consist of a variety of individuals who perhaps are new to the country or for other reasons do not have coverage.

For comparison, in the U.S. approximately 33% of the insureds are involved with an HMO or PPO. There are some hospitals that are actually making a profit. Under some plans, care is only allowed from specific hospitals or panels of doctors. The freedom of choice for the claimant is lower. Some 87% of the U.S. population is covered. Now interestingly in Canada, although 99% of the population is covered for basic health care, only 74% of the population has some form of group health insurance (as estimated by the Canadian Life and Health Insurance Association). Now clearly there are implications to these differences. Group insurance products, risks and markets are completely different between the two countries.

Where does the money come from to pay for our health care? Our system is funded through a variety of personal and corporate taxes. Approximately 25% is funded through specific payroll taxes or individual premiums. Health care is in the jurisdiction of the provinces, so the federal government provides some funding via transfer payments to the provinces. These funds have strings attached. These strings include the principles of our universal health-care system specifically universality, portability, accessibility, comprehensiveness and public administration. The provinces fund hospitals, doctors, laboratories and other providers directly. Hospitals are funded through a strict budgeting system. Doctors are mostly paid on a fee-for-service basis although there have been some attempts to move to a capitation style of compensation. Table 1 shows the relative share of funding by the various public bodies in Canada and in the U.S.

	Canada (1990)	U.S. (1988)
Federal Provincial/state WCB	26.7% 45.1 0.7	29.2% 11.1 1.7
Total public	72.5%	42.1%

TABLE 1			
Health Care Expenditures			
by Source of Funds			

In Canada, the federal share is the transfer payment that is made to the provinces. The only direct share is those that go into the Indian care system. It's very small. The Canadian figures are from the National Health and Welfare Publications, and the U.S. figures are from the Health Insurance Association of America (HIAA) Source Book of Health Insurance Data. An interesting implication is if the U.S. adopted the Canadian system, there would be a dramatic increase in cost from a state-focused system.

Table 2 shows the breakdown in funding between public and private sources. In Canada not much is left for private insurers because the 27.5% listed includes not only group insurance benefits but also out-of-pocket expenses. So who covers what services? Government funds the majority of basic medical and hospital care. This involves all medically necessary services provided by hospitals and physicians. Services not considered necessary would include, for instance, elective cosmetic surgery. Depending upon the province there are a variety of additional programs that are not required as part of the federal provincial agreements. These might include drug programs for seniors, various types of vision or dental care for children or some part of the fees for optometrists or chiropractors. Private insurers on the other hand cover services that are specifically not covered by the government. These are mainly supplementary services. For example, hospitals are allowed to charge extra for semi-private or private rooms. These extra charges are insurable. The difference between what a chiropractor charges on his fee schedule and what the government would pay is another example of an insurable service.

by source of Funds		
	Canada (1990)	U.S. (1988)
Public Private	72.5% 27.5	42.1% 57.9%
Total	100.0%	100.0%
Expenditures	\$62 Billion	\$540 Billion

TABLE 2 Health Care Expenditures by Source of Funds

Also, most insurers cover the difference between what the provincial plan pays for medical care given outside of Canada and what is actually charged. In the medical and hospital area there is not much left for private insurance.

I'd like to now turn to the description of how the Canadian group-insurance industry coexists with the government sector. I will review the products that we offer, the size and characteristics of the market and how well we are doing financially. We have a list of traditional benefits. Group life includes basic life insurance, dependent life, optional life and AD&D. Group permanent life insurance is not a common product at all in Canada. Short- and long-term disability are common benefits offered by most insurers. Specialty players like UNUM are active in Canada but play overall a relatively minor role. Extended health care or supplementary medical is the wraparound piece to the government. The major piece of this, about 70% is drugs. It also includes vision, semiprivate, private hospital, paramedical, private-duty nursing and out-of-Canada coverage. The other category might include employee assistance plans, as an example, or other benefits. Although some plans are contributory in Canada, noncontributory plans predominate.

The total premium of the Canadian group-insurance business including premium equivalents is approximately \$6.8 billion. You need to recognize there's an 8.7 to 1 population differential between Canada and the U.S. The \$6.8 billion is only for the group-insurance companies in Canada. It does not include Blue Cross, which exists in Canada but is not nearly as big as it is in the U.S. The \$192 billion is only the group-insurance premium for U.S. insurance companies. It does not include Blue Cross/Blue Shield, self-insured and HMO plans. In Canada we do not have self-insured plans. Remember, in comparing the numbers, the 8.7 to 1 population factor. In Canada there is a small amount of business available, and there are relatively few companies that are involved, with the top 10 taking 60% of the market. The sales approach in Canada has some unique characteristics. Group insurance is widely available. Some types of business might not have much choice in terms of where they would get the business, but they could get coverage in some way.

Little medical underwriting is done except at the small end of the business and primarily for group life and LTD. There is virtually no medical underwriting for medical insurance. Persistency is critical, and management of relationships from group offices through to brokers and clients is very important in order to retain client cases as long as possible. Experience is often available and utilized in the proposal down to 20 lives. My understanding is the approach in the U.S. has some key differences. The

group-insurance business has a high-transaction, low-claim-amount orientation. For instance, for a typical mid-sized carrier covering a quarter of a million employees from 6,000 groups, there are approximately one and a quarter million claims with an average size of \$50, 100,000 phone calls, 75,000 bills, and 150,000 coverage adjustments. The implication of this orientation is that expense studies and careful pricing are very important to be successful in the business.

In the U.S., medical insurance dominates the total employer premium on a fully insured plan. The U.S. numbers on Table 3, as with the Canadian, are very approximate. They're more the rule of thumb and are meant to be viewed at a high-level comparison. As I mentioned earlier a typical Canadian plan would also include weekly income and LTD, which would bump the average premium up to between \$1,000-1,200.

	Canada	United States
Life Medical Dental	20% 40 40	10% 80 10
	100%	100%
Premium per employee	\$800	\$3,000

TABLE 3			
Group Insurance Industry			
Typical Mix of Premium			

Table 4 compares persistency rates between Canada and the U.S. For the U.S. these are approximate. For Canada these persistency rates would be for the better insurers, and they are based on premiums. Persistency is very important, particularly at the smaller end of the spectrum.

TABLE 4			
Group Insurance Industry			
Persistency Rates			

	Canada	United States
<50 Lives	80%	
50-100	85	75%
100-300	88	85

Each year one of the large group-insurance companies in Canada takes a profitability survey. Table 5 shows the results for 1991, which are expressed as a percentage of premium. Clearly retention business is less profitable as expected. Nonretention cases are mainly smaller groups, and the margins are good. Although the overall numbers are similar to previous years, LTD results tend to fluctuate between years. These results reflect in total the traditional view that large groups cover the cost of the overhead, but you make your money on small cases. It is difficult; you can't simply get out of one end of the market and concentrate on a small segment, because the market in total is relatively small.

TABLE 5			
Canadian Group Insurance			
Profitability (% of Premium)			

	Life	Health	LTD
Retention	(0.90)	(2.88)	1.16
Nonretention	12.28	3.32	11.89

The group actuary plays a key role in the insurance industry in Canada. He or she is involved in pricing, expense analysis, valuation, product development and monitoring of legislative developments. In terms of pricing, most benefits are reviewed annually. Trend factors and rate levels for reimbursement benefits are set annually. Dental pricing is done at about the same time as new rate schedules are announced by the various provincial dental associations each year. Detailed pricing analysis is only done every several years. Provincial differences are important, but anything more detailed, for instance by city or county, would be infrequent. In Canada, rates are effectively quaranteed for a case for 12 months. It is rare for there to be off-anniversary renewals. Renewals are developed using the last nine months of experience with the cycle starting three months prior to the renewal date. This pricing activity is important but does not have the significance that would be present with the different benefits and risks in the U.S. In Canada, retention agreements are not common below 200 lives. Minimum premium and ASO arrangements are common only over 1,000 lives. In the U.S., as I have been told, there is much more sophistication in that alternate funding arrangements are offered down to 25 lives. With a high percentage of business that is self-insured, there is frequent utilization of stop-loss insurance. Stop loss in Canada is virtually nonexistent. With the simplicity of products and funding arrangements and with a much lower risk level, the actuary in Canada plays a much smaller role in reviewing and establishing funding agreements. In Canada, credibility is applied mostly on a theoretical basis. These factors shown in Table 6 are for extended health care and dental, the reimbursement benefits. The factors should be relatively high because of the high frequency of claim and the low variance of claim amount. There are some companies that pool experience for smaller cases, particularly under 50 lives. Credibility for U.S. groups is often used as a selection device: higher credibility is used in order to reduce the risk of acquiring groups with poor experience.

	Canada	United States
<100 Lives	0-70%	Mix-Pools
100-250	100	50-100%
250 +	100	100

TABLE 6 Group Health Insurance Credibility

Table 7 shows the results of a survey on acceptable loss ratios that we participated in earlier in 1992. The premium shown is for dental and for extended health-care benefits. Are these comparable to actual loss ratios in the U.S.? I don't know. With the smaller premium and tight competition, the actuary is heavily involved with

detailed expense studies in order to manage carefully the revenues and expenditures. As an example of this, we recently completed a detailed analysis of allocations across our block of business. We have been able to determine that certain types of groups are losing money on expenses. Specifically, for groups representing only 5% of our total block, we've been able to determine that we have losses on expenses of about 2.5% of total expenses.

TABLE 7 Acceptable Loss Ratios Medical and Dental Canada (1992)

Size	Premium	ALR
10	\$ 5,280	69%
50	26,400	78
150	79,200	83
300	158,400	84

Interestingly enough there is another difference between countries. The outline in my presentation was to be reviewed by a Society of Actuaries lawyer concerned with activity that could be construed as price fixing. It's part of the reason why I didn't show the acceptable loss ratios for the U.S. In Canada, we are free of this kind of scrutiny and regulation although we have some legislation.

For valuation in Canada, heavy emphasis is placed on the analysis of LTD and disability waiver reserves. We review these items every year and pay close attention to changes in interest rates. One of the exhibits in the Canadian annual statement analyzes LTD underwriting gains and losses by year of claim. This is used as a test for adequacy of reserves. We would review medical claim run offs and incurred but not reported factors only infrequently. In terms of product development over the last few years, there has been a fair degree of activity in the disability area. This includes seamless adjudication of claims with weekly income and also partial disability and rehabilitation benefits. Rehabilitation in Canada in solely focused on long-term disability in order to get claimants off claim.

In extended health care, drug plans are an area that we'll see a lot of development over the next few years as more companies take advantage of the features of the extended drug insurance drug claim networks which are more and more being put in place. In dental benefits some companies have been successful at developing costcontainment alternatives, but they have not been very popular yet. This will likely change in the future. Employee-assistance plans have started to attract some interest, and out-of-Canada coverage is a hot item as coverage by provincial plans has been reduced. This development has primarily been in the area of toll-free telephone numbers by which the individual is directed to certain hospitals and doctors. The service may even negotiate with care providers for cost reductions. One of the major players is World Access, which is owned by the Washington, D.C. Blue Cross service. It's located in Washington, and it services two or three of the larger insurance companies in Canada. The service may even negotiate with the care provider for cost reductions. PC-based administration systems have been developed recently

that allow clients to tap into the database of the insurance company. The actuary plays a role in all of these developments trying to price appropriately the various coverages and options and in trying to assess where the risks are and who is covering them.

Legislative monitoring is another area the Canadian group actuary is involved with. We have ten provinces, each of which have their own unique aspects to their healthcare plans. With recent funding restrictions, legislative activity has heated up, and it is becoming common for government to cut back coverage and shift health-care cost to the insurance industry. In Canada this is what we call cost shifting. Human rights activity is also high. As a result of support of human-rights legislation, we have seen reductions in underwriting parameters and legislated coverage. Recent examples include the banning of mental and nervous limitation in LTD benefits, and because of a recent case ruling, employers and subsequently insurers may soon be required to include same-sex spouses as dependents. The actuary plays a key role in responding to and anticipating these needs and figuring out what the financial impact is on our block of business.

I would like to now turn to how these differences in activity are reflected in the areas in which actuaries practice. Now the statistics in Table 8 and 9 are based on the annual SOA areas of practice survey as of 1991. This survey is not meant for this type of analysis. Instead it is used primarily for elections where certain positions are reserved for certain areas. It will give you some idea of the differences between the two countries. There are fewer actuaries proportionately working in the health field for insurance companies in Canada. However, we must be careful with the interpretation of these numbers. There are more actuaries in the other category in Canada than in the U.S. Other would include not only management but also if there were a number of areas of practice. I should also add that there are proportionately more actuaries in Canada than in U.S. According to the Society of Actuaries directory there are almost 10,000 actuaries in the U.S. and over 2,500 in Canada. In other words there are over twice as many actuaries per capita in Canada than in the U.S. The difference for consulting is even greater, 1.5% of the actuaries responding were in the health area in Canada compared to 12.8% in the U.S. The other category is not as significant as for insurance companies.

Areas of Practice	Canada	United States
Health	8.7%	23.6
Life	50.7	55.5
Pensions	11.7	7.9
Other	28.9	13.0
Total	100%	100%

TABLE 8 Distribution of Actuaries Area of Practice: Insurance Companies

TABLE 9 Distribution of Actuaries Area of Practice: Consulting

Areas of Practice	Canada	United States
Health	1.5%	12.8%
Life	8.5	12.7
Pensions	82.7	69.2
Other	7.3	5.3
Total	100%	100%

If national health care came to the U.S. in the same way that it is in Canada, there would be a big upheaval in the profession. Initially the demand for actuaries would be very high, particularly on the consulting side as employers and insurers sort out the implications of the change. However, after the dust settled, there would be substantially fewer areas concentrating in this specialty. I'm confident that the demand for all actuaries would continue to remain high. Coming from a country where there's twice as many actuaries per capita, I'm sure there's lots of room to grow here. In conclusion, there remains an active role for actuaries in the group-insurance business even with nationalized health care, but there are vast differences in the activities and emphasis. Canadian group actuaries spend a large proportion of their time on expense analysis, disability, both pricing and valuation and continued monitoring of legislative developments.

MR. KNAPP: Before we open it up for questions, I wanted to make one comment on thoughts that I had during Fred's presentation. As he went through and looked from a governmental and from a policy side at all of the different impacts on health care in the U.S. from the Medicare side and from the health-reform side, I was sitting here in my role and thinking about the pricing of insurance products and our actuarial training and techniques of examining last year and then trying to project forward on some broad-based analysis of trends. There seems to be a need for a change in the basic skill sets that we as actuaries bring to the table. We have to recognize the impacts of many more forces and rapid changes in those forces over the next decade and look at a much more dynamic model as we're trying to develop projections.

One of the frustrations that I hear from a lot of actuaries was in the example that Guy gave. Oftentimes in the policymaking arena it seems as if the interest is not so much in what's correct but in the appearance and in coming up with what was preconceived as the appropriate answer. How can we as actuaries try to filter through that frustration, or is there any hope of doing that?

MR. KING: I've been working in the government many years and trying to filter through that question, and I don't think I've mastered it yet. This is what in Washington they might refer to as the silly time because this is just before an election. Nothing of substance matters right now, it's just all politics. I hope after the election is over and the politicians go back to governing for a short time before they begin preparing for the next election, they'll be concerned about substance, and when

they get serious about health-care reform, somebody will be genuinely serious about what the cost implications are of health-care reform. For the last 12 years it's been a Republican Administration and a Democratic Congress. The Republican Administration has been very interested in our views on Republican proposals that effect the Medicare program, and they've made sure that our views get into the system because usually our views are more pessimistic than the Congressional Budget Office's views. It's been so long since we've had both an Administration and a Congress of the same party that I can't even remember how things worked back then.

It is a very difficult problem for everybody. There are numerous think tanks in Washington, D.C., there are organizations in the federal government, and there are organizations in the Congress. They know what answers the politicians want to hear. Sometimes it takes a lot of courage to tell the politicians exactly what they don't want to hear; but somebody said to me the other day that is the role of the in-house actuary. Often you're asked to comment on the what. What do we want to do? We want global budgeting, and you look at the details and they're not there. You can't do your job, and this relates to the political process. You get buy-in at the what. Are we going to have global budgeting? Sparing you the details because the minute you put a detail down, 16 different people are on different sides of the issues. With 800 trade associations here in Washington, you don't put down the how. In the policy legislative process we need to deal with the how, and it needs not to be done at 3:00 A.M. when you're sleeping. How do you impute logic and substance into that process? I think it can be done. There has to be a willingness to do that after this buy-in phase.

MR. KNAPP: If either as a private citizen with an actuarial background or the profession as a whole were to come to a point of saying we feel that the government addressing health care is serious enough that we need to definitely get involved, how would we most effectively go about beginning that involvement or initiating some effort to provide the advice that I think the actuarial profession could very adequately provide?

MR. KING: Whenever the politicians undertake a major legislative task like health-care reform, there are always going to be hearings. When enough actuaries come forward at these hearings, then the Congressional staff says these people really do have something to offer, and then the staff people start calling those actuaries up and asking them their opinions and asking them to bring other people in.

What happened on the most draconian versions of small-group reform is that enough actuaries who had interest in the process came through and told the politicians about the adverse consequences of small-group reform that two very influential Congresstional Representatives on the health side decided that they didn't want to be responsible for another piece of legislation that got repealed like catastrophic or Section 89. They decided that they weren't going to go forward with small-group reform. Something that's less draconian than what was proposed may go forward, something that the insurance industry finds acceptable. That was a good example of enough actuaries being involved. I think quantity is almost as important as quality. If enough actuaries come forward, then the Congressional staff will say, there's something to this, so maybe we ought to look into it.

MR. ABBEY: There's another dimension to that, and that is the organizations that you work in and your ability to assess, judge, and guess what the outcome of the legislative process might be in terms of a caution to your own organization. Sometimes CFOs of different organizations in the same industry will have different positions. They're advocating to the same single source, and the member of Congress who is trying to coordinate the industry in order to regulate and legislate is confused. The respect for the integrity of the actuarial profession is still there in Congress, but it needs to be supported, and I think you have ample opportunity to do that in your own organizations, creating an opportunity to go forward in the process.

MR. KNAPP: I have one question for Keith. You described in your presentation how the Canadian system looks. What was the process of getting from here to there?

MR. WEAVER: The Canadian system took about ten years to come into place. It started with initial transfer of administration of the claims, and everything was left to the private insurance industry. Then the government provided funding and eventually took over the administration of the plan. The financing of it took a lot of years to work through. It's an ongoing source of negotiation between the provinces and the federal government. In terms of the future, currently you can have all sorts of choice in terms of where you can go and what the doctors can do. That's going to start changing. I think that's an area that is going to move into some form of managed care. I don't understand what that would mean in a Canadian context, but I know that one of the key planks of the Ontario government's strategy for health care in the future is to move doctors toward a salary basis to try to control those types of costs and to control the type of service that's being provided.

They're also investing in some very sophisticated computer system software that would help control some of the abuses that are in the system. An interesting example of that is the Ontario government has put out the specifications for its seniors' drug program which covers about 2 million Ontario seniors and about 10 million claims a year. The government is going to control the access. Its expectation is that by managing it this way, the government is going to save \$200 million a year because of minimizing overutilization. There are some very interesting things that as a single payer the government has all sorts of flexibility to do, and it is going to take advantage of those as much as possible. So the system is going to change.