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THE APPOINTED ACTUARY—WHAT DOES IT MEAN?

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What are the appointed actuary's professional responsibilities? What is a Section 7 opinion? What is a Section 8 opinion? What does this mean for the actuary responsible for health valuations?

MR. JAMES T. O'CONNOR: If you came here to learn about the appointed actuary and health insurance, you're in the right place.

This session will explore some of the general issues applicable to the appointed actuary: What it means. How it developed. What your duties are as an appointed actuary. To whom you are responsible. What kind of product you have to produce as an appointed actuary. In particular, we'll look at that from the eyes of a health insurance actuary. Some of us will undoubtedly be responsible for multiline business. Others may be from companies that strictly sell health insurance and maybe some small group life.

The need for the valuation actuary stems back a number of years ago. The savings and loan crisis was one catalyst. There was a great deal of concern that what happened to the savings and loan industry could happen to other financial institutions, namely insurance companies. The insolvency of several major insurance companies certainly brought much more attention to the insurance industry. The Dingell Report highlighted that. So it was thought that there was a need for introducing tighter regulation.

The Canadian experience with appointed actuaries has proven to be a successful and good operating model. And so several years ago, the National Association of Insurance Commissioners (NAIC) adopted its new valuation law, introducing the concept of the appointed actuary. Following NAIC adoption, states started passing the valuation law, and today, we have appointed actuaries and all the things that appointed actuaries need to do.

QUALIFICATIONS

The first requirement is to be qualified. Qualification requires a number of things:

- You must be a good standing member in the American Academy of Actuaries (AAA).
- You must meet the AAA standards to sign those statements:
  - A basic education requirement
  - A continuing education requirement
  - A work experience requirement
- You've got to know the laws of the states. That certainly is a challenge because the laws have many subtle differences. Some states have adopted the new model laws and some have not. So it's important that, as the appointed actuary, you become familiar with the laws of each state for which you're going to file an opinion.

You must meet these criteria before you can actually become an appointed actuary.

THE APPOINTMENT PROCESS

Technically, to become an appointed actuary, you need to be appointed by the Board of Directors of the company or by an executive officer designated by the board. It should be done in writing. The designated officer or the board needs to notify each state in which you're going to be filing an opinion statement. I respond in writing with my acceptance of that appointment.

The next requirement of the appointment process is that if and when the company decides to replace you, it needs to again inform each state about that replacement and also list the reasons why that replacement is occurring. Those reasons, of course, will keep the regulators informed and, to a certain degree, will give you, the appointed actuary, some sense of independence in terms of being able to do your job when there may be some pressure about the level of the reserves you determine.

THE APPOINTED ACTUARY'S DUTIES

The appointed actuary has four major duties.

1. The first is to issue a reserve opinion at the end of each year.
2. If the reserve opinion is required under the Section 8 of the valuation law, you need to issue that opinion in light of the assets of the company. That is, you need to consider the adequacy of the assets, as well as the adequacy of the reserves.
3. An actuarial memorandum needs to accompany your work after you issue your opinion.
4. You must document your work in an organized fashion, so that another trained actuary could come in and follow exactly what you've done without too many questions. This may be the one area where many of us are weakest.

PARTIES TO WHOM APPOINTED ACTUARIES ARE RESPONSIBLE

To whom are you responsible? Well, that responsibility is first to your company management. It's important that they know what the state of affairs are in terms of the reserves that they need to hold. Second, you are responsible to the regulators. Part of your appointment is to represent the regulators, letting them know that the company you are representing is, in fact, holding adequate reserves in light of the assets being held. Along with the regulators, of course, you're also representing each of the policyholders of the company. As you know, ultimately that's where your responsibility truly lies. You do not want any of your policyholders ever not to receive the benefits for which they have contracted by paying their premiums. You also have a responsibility to the actuarial profession. You certainly want to make sure that, if somebody is acting as an appointed actuary, they are following the standards and principles that we as actuaries want to uphold.

So these are an appointed actuary's duties and responsibilities. We are going to discuss these in much more detail.

APPLICABLE LAWS

What are the laws about which we need to worry? The standard valuation law, passed several years ago by the NAIC, has now been adopted by a number of states. It requires an annual opinion by a qualified actuary. The law calls for that opinion to be based on the standards established by the Actuarial Standards Board (ASB). It

applies not only to life and annuities, but also to individual and group health insurance. The law itself is kind of interesting in that regard. It makes that statement and proceeds to talk about life and annuities for ten pages. And then there is one little section at the end, Section 10, that addresses health insurance. All it says is that the state will adopt a regulation related to health insurance. It provides no other guidance.

The second piece of the NAIC model that was adopted was the Actuarial Opinion and Memorandum Regulation. It requires us to follow up our opinion with much more detail as to the basis of the opinion and provide considerable supporting documentation that the opinion is in fact reliable. There are two key sections in the actuarial opinion and memorandum regulation. Section 8 is the regulation that basically addresses the need for doing asset-adequacy analysis in the work that you perform for evaluating the liabilities of a company.

Section 7 is a section which, for certain companies, particularly small companies, will allow that company to be exempted from doing the asset-adequacy analysis. When I refer to Section 7 or Section 8, that's what I am talking about. Section 7 companies are those companies that are exempted from doing asset-adequacy analysis. We will talk a little bit more about the differences between Section 7 and Section 8 companies later.

The Minimum Reserve Standards for Individual and Group Health Insurance Contracts is a third applicable regulation. Not all states have adopted the minimum health standards, so we need to default to something. Generally the default is the NAIC model law. Many states have adopted minimum standards, and these generally are older laws on the books that are applicable only to individual forms. Traditionally, most of us who deal with group health insurance have not felt the need to establish certain reserves for group health, on the basis that, if there is a problem, premiums could be changed or the business could be terminated. That is not so true anymore, particularly if we're dealing in the small-group medical market.

More and more states, as well as the NAIC in its new model health valuation law, have included group health insurance, along with individual health insurance. So we have a mix out there in terms of which laws and regulations states have adopted in response to Section 10 of the valuation law (which says that they will adopt something). Most of what we have was already out there before the new valuation law was enacted. So, as an appointed actuary, we need to be aware of the various laws of each state. There's a real mix of laws for health insurance, in particular. An awareness really needs to be fostered for those of us who have traditionally not considered some of the reserve implications that are present for group health insurance. I think we need to be aware of which states have adopted the new health valuation laws that include group insurance under their umbrellas.

Each of the standard health laws that have been enacted address the minimum requirements in terms of morbidity, mortality, and interest rates that need to be met as a basis for our reserves. I think most of us are probably familiar with those types of requirements.

In order to help us sort out all these various laws, the Society of Actuaries has researched the various valuation laws of each state and put together a compendium of those laws and their differences by state. You can contact the Society if you are interested in obtaining a copy.

APPLICABLE ASB STANDARDS OF PRACTICE

The appointed actuary should also be familiar with the ASB *Actuarial Standards of Practice (ASOP)* and guidelines. There are a number of these standards of practice that are directly applicable to valuation work, as well as some that are more or less indirectly related.

- The first on my list is *ASOP 5* which concerns incurred health claim liabilities. This standard addresses various aspects and methods that are to be considered when evaluating the adequacy of health claim liabilities.

- *ASOP 7* is the standard of practice that deals with cash-flow testing for insurers.

- Related to *ASOP 7* is *ASOP 14*, "When to do Cash-Flow Testing." The two of these standards address the concept of cash-flow testing as being an excellent vehicle for the appointed actuary to use in his adequacy analysis for both the reserves and the assets that support those reserves. We will talk more about cash-flow testing and the appropriateness of cash-flow testing for health insurance later.

- *ASOP 11* concerns the treatment of reinsurance transactions. Most companies have some reinsurance; therefore, reinsurance cannot be ignored when doing adequacy testing.

- *ASOP 16* somewhat indirectly addresses some of the concerns of the valuation actuary. Health actuaries are becoming more and more involved with managed care health plans. We need to be aware of how managed care affects a company's needs for more or less reserves.

- *ASOP 18* is the practice concerning long-term care. This will affect some of us in this room, although probably not too many at this time.

- *ASOP 21*, "The Actuaries Responsibility to the Auditor." It says that, as an appointed actuary, we need to keep in touch with what the auditors are doing on their side, so that there's good communication between the two parties. Through that communication, there is likely to be a greater assurance that nothing falls through the cracks in terms of the review of the financial statement.

- *ASOP 22* is one of the newest standards and an important one for appointed actuaries. It addresses statutory statements of opinion based on asset-adequacy analysis by appointed actuaries for life or health insurers. It provides us with guidance in terms of how we address Section 8 opinions.

- The final standard of practice that I have on my list is ASOP 23, which concerns data quality. I'm sure many of us have faced this concern. Is the

data complete? How usable is the data? Does it have the types of details and summaries that can help support my opinion and my analysis of the liabilities. I think this gets a little more interesting in the managed care area. When dealing with some health maintenance organization (HMOs), the data quality has at times been very questionable. Much work often needs to be done, including follow-up work, to get better data in order to do the needed analysis. I think data quality is a very important standard of practice of which we need to be aware and follow.

The ASB has also adopted what it calls, compliance guidelines. There is one compliance guideline that is kind of the sister to the Section 8 standard of practice (*ASOP No. 22*). Guideline No. 4 addresses statutory statements of opinion but does not include an asset-adequacy analysis by appointed actuaries. It might be clearer to call it the Section 7 compliance guideline. The guideline addresses the areas of consideration we need to look at when providing a Section 7 opinion. These really go hand in hand with the actuarial opinion and memorandum regulation that also goes through many of the same issues, steps and requirements that we need to follow when issuing either a Section 7 or Section 8 opinion.

Finally, as I referred to earlier, there is the qualification standard for public statements of actuarial opinion. We must make sure that we are qualified before we start signing our name to anything. Part of that qualification that is addressed in the AAA document calls for continuing education, such as a meeting session.

In addition to the standards of practice and guidelines, the Academy also published health practice notes in 1993. There are seven health practice notes that were created in 1993 by a number of task forces, under the auspices of the Academy. The practice notes are:

1. Basic Principles and Issues
2. Individual Major Medical
3. Small-Group Medical
4. Large-Group Medical
5. Disability Income
6. Long-Term Care
7. Medicare Supplement and Limited Benefits

If you haven't seen these practice notes, I suggest you obtain a copy from the Academy.

The first one, "Basic Principles and Issues," is a global practice note for health insurance. It addresses items applicable to all types of health insurance, and addresses some of the reasons for doing this type of work. The notes discuss what needs to be done when doing this work and a number of other general type questions that might arise in the process. It's important to note that these are practice notes. Practice notes explain the practices that are being used in the industry when doing a particular type of valuation work. They are not requirements. They are not dictates. They are published to help you get some ideas as to what other actuaries have considered when they are addressing some of the issues and questions that arise from time to time when doing a certain type of work, such as when to cash-flow test.

There's a practice note for each of the different types of health insurance product types. There is some repetition in them, because, as you might guess, small group and large group medical have a great deal in common. But there are certain things that are different, and these are pointed out in each of the practice notes.

SECTION 7 VERSUS SECTION 8

I'd like to talk a little bit about Section 7 versus Section 8 now. What is the difference? I mentioned some of those differences already. First, Section 7 does not require asset-adequacy analysis. That's the key difference. Actuaries, as a group, typically have not been too involved with the evaluation of assets. Health actuaries, in particular, have not been too involved with the evaluation of assets. And you know, because of the general insensitivity of health insurance to fluctuations in the investment arena, health actuaries have not been exposed to much of the asset-adequacy-related problems. But, as appointed actuaries, we now need to address assets to some degree unless you're issuing an opinion for a Section 7 company.

Interestingly enough, Section 7 does not even require an opinion statement on reserve adequacy. That's different than the traditional reserve opinion we were issuing before the new standard valuation law came into being.

Section 7 does not require a comprehensive actuarial memorandum as needed for Section 8 opinions. However, even if not required, it is a good practice to communicate with company management regarding those reserves, through some kind of memorandum, whether it be a Section 7 or a Section 8 opinion.

Section 7 opinions require in the opinion a demonstration that the company is eligible for a Section 7 opinion.

Those are the four key differences. The reason for Section 7 is because of the cost factor of performing that extra asset analysis. There was a great deal of concern on the part of small companies that the cost would be prohibitive. That was the major reason that Section 7 opinions were allowed. However, eligibility requires more than just size to be looked at in order to qualify as a Section 7 company.

In terms of the size, the actuarial regulation places companies into four different categories.

- Category A: $20 million or less in assets
- Category B: $20–$100 million
- Category C: $100–$500 million
- Category D: $500 or more

How many of us in this room are Category A companies? Just a handful. How about Category B? Just a few more. So you are the lucky guys. Category C? A few more. Category D is the majority. Each of these categories needs to meet different tests to be exempted from Section 8 opinions.

Other than the size criteria, the eligibility tests generally are not too difficult to meet for health insurers. This is simply because most health insurance is rather insensitive to interest rate movements. There are four key tests.

1. The ratio of capital and surplus to your cash and invested assets has to be at least 5% for a Category C company, 7% for Category B, and 10% for Category A company.

2. The ratio of annuity and deposit reserves to admitted assets has to be under 30%, 40% or 50% for category A, B, or C companies, respectively. That is very easy for a single-line health insurance company.

3. The ratio of book value of noninvestment grade bonds to the sum of capital and surplus needs to be less than 50%.

4. The company must not have been designated as a first priority company by the NAIC, in any of the prior two years. In other words, the NAIC has not put you on its watch list, in terms of its concerns about your solvency.

Those are the four tests that you need to meet in order to qualify for Section 7 eligibility.

Any Category A or Category B company that meets all these criteria will be exempt from submitting an opinion based on asset adequacy. Class C companies need to submit a Section 8 opinion the first year, and every third year thereafter, if they meet those criteria. So there's some relief for Section C companies. You have to only provide a Section 8 opinion every third year. Category D companies need to annually submit Section 8 opinions. There is no exemption for a Category D company. Of course, the commissioner reserves the right to remove an exemption that a company has if he's concerned with the financial stability of that company.

CONTENT OF OPINION STATEMENT

In terms of the content of the statement of opinion, it would be somewhat old hat for any of you who have written an opinion. For those of you who haven't written an opinion, the first thing you need to do is identify yourself. Who are you? Who do you work for? How are you affiliated with the company for whom you're issuing this opinion?

Second, identify the qualifications or those qualifications we talked about. Are you a member in good standing in the AAA? Have you met its qualification standards?

If you're one of the companies that's exempted and you are issuing a Section 7 opinion, state up front that this is a Section 7 opinion, so the reader knows right away that this opinion is not based on any evaluation of the assets. Later in the opinion, you're also required to provide a demonstration that you are, in fact, eligible to do a Section 7 opinion. That demonstration includes the tests we just reviewed. You make the statement that you meet each of those tests.

Also included in the opinion is a statement of reliance. For the statement of opinion, you can rely on others for data and for investment information, but you cannot rely on the opinion of another actuary as your opinion. You must form your own opinion. For those of you who are primarily life insurance valuation actuaries, and who have a block of health insurance that needs to be considered, you need to arrive at your own opinion as to whether or not the health insurance reserves are adequate, particularly in

light of the assets that back them. That's not to say that you can't have other people working on that block of business. Those other people can give you their opinion. But only the appointed actuary shoulders the responsibility of issuing the opinion. This is your opinion statement; it's not the statement of some other actuary who said that those health reserves look fine. The appointed actuary must come to that conclusion.

FROM THE FLOOR: From your example where you talk about a little block of health business, mostly life business, do you have to opine that every piece is adequate or that the reserves in total are adequate?

MR. O'CONNOR: That's a good question. In your opinion you need to opine on various items but the real key is that the reserves in the aggregate for all your business are adequate.

The reserve opinion also needs a tabulation of the reserves included in that opinion, simply a listing of the reserve amounts, the statement references, and whether the reserve item was tested with some kind of asset-adequacy analysis. There may be some blocks that will not be asset adequacy tested. For example, there may be a small amount of health insurance. You may choose to forego an asset-adequacy analysis for that little block because it's insignificant in terms of the total reserves that need to be held.

You need a material change statement. Have there been any changes since the end of the year that may affect your opinion? If you're issuing your opinion on March 1, has anything happened in the previous two months that would cause some concern in terms of whether the reserves are still adequate? The concern is, if there are material changes since the prior year end that you are aware of, that these changes will affect whether or not those reserves held at year-end are adequate. You have the advantage of some hindsight. If the company has taken some actions that will affect the financial viability of the company, as an appointed actuary, it makes no sense for you to wait ten months before you start getting concerned about those actions. The reserves need to be adequate. This is your responsibility to the company and to the other parties to whom you're responsible.

A statement of exceptions should be included if appropriate. Is it a qualified statement? Is there an area of concern that needs to be stated in the opinion? You would want to elaborate on any exceptions in the actuarial memorandum supporting the opinion.

Most of the other opinion items follow the general content that we've seen for years. Statements that are required are:

- The reserves are computed in accordance with the accepted actuarial standards.

- Reserves based on assumptions that produce reserves at least as great as those required by the contract provisions.

- Reserves meet requirements of the insurance laws and regulations of the state of domicile.

- Reserves are also at least as great as the minimum aggregate amounts in those states in which you're filing your opinion.

- Reserves are computed consistent with prior-year assumption bases.

- Reserves include a provision for all reserves, which ought to be established.

These opinion statements have traditionally been part of the statement. A statement of reserve adequacy, when considered in the light of assets held, must be made for Section 8 opinions only. The reserve adequacy statement is notably absent from Section 7 opinions.

FROM THE FLOOR: What is considered to be a change in assumption bases?

MR. O'CONNOR: We need to be careful as to what it means to change the basis for assumptions. Just because you're changing some morbidity assumptions due to an updated analysis of experience, particularly for a new block of business, it doesn't necessarily mean a change in basis. But if you're going from one valuation table to another valuation table for a given block of business, you would need to state that is a change in basis.

You do not want to go into a great deal of detail in the opinion, particularly for a Section 8 opinion, where you're going to issue your memorandum. In the memorandum you are expected to go into much more detail, in terms of what that change in basis is, why it was done, and what the implications of that change mean to the reserves of the company.

FROM THE FLOOR: Is changing completion factors from one year to the next considered a change in basis?

MR. O'CONNOR: Changing completion or lag factors is not usually a change in basis. You are reevaluating and should be reevaluating the appropriateness of your lag factors constantly. Many things change in a health operation which could certainly alter the lag for processing claims. So that is not considered a change in basis. That's a good example for health insurance.

MR. JIM ROBERTSON: My question relates to variance of the language on the statement of adequacy. In particular, I was questioning the use of the statement "fairly stated." I'm unclear on the definition of "fairly stated." I don't know if there's any consensus in the profession or any guidance on it or its application. That becomes a question to me, in my mind, when the recorded amounts are clearly adequate, but they're extremely adequate, and have a degree of margin in them. I don't know if there's any thought process that we could go through to determine at what level you could no longer say "fairly stated."

MR. O'CONNOR: I think for statutory statements, particularly on the side of redundancy, there's not as much concern as there is for what you need to consider in a tax reserve or for generally accepted accounting principles (GAAP) reserves. So I don't think reserve redundancy is an issue. At least I haven't considered it to be a concern. I'm always very happy when I see a conservative, redundant reserve for a

statutory opinion. Signing the GAAP opinion is another story. There you have to really worry about both sides. You don't want to overstate your reserves to a point where they're terribly redundant and certainly you don't want to understate the reserves.

MR. ROBERTSON: I'm talking strictly about a statutory opinion. I interpret the term "fairly stated" as saying that there may be a degree of conservatism that would no longer be acceptable. I don't know if that's just my interpretation.

MR. O'CONNOR: I have not felt that in making the statement for statutory statements.

RESERVE ADEQUACY TESTS

Let's talk about some of the methods of testing for reserve adequacy. I've listed the common ones that people use.

- Cash-Flow Testing. Most Section 8 companies that primarily have blocks of life and annuities are performing cash-flow testing. My sense has been that most companies that primarily have health insurance have not been doing cash-flow testing. The question is when should cash-flow testing be done or when should we rely on one of the other types of testing.

- Claim-Liability-Estimation Techniques. Certainly most of us are familiar and use different claim-liability-estimation techniques. I mentioned the use of developmental methods and lag factors. The use of these methods is very typical for most medical insurance. The use of reserve tables is typical for disability income and long-term care.

- Gross-Premium Valuation. There are some other ways that we can look at the adequacy of our reserves, particularly when we're looking at the adequacy of active life reserves. Cash-flow testing is just one way. Performing a gross-premium valuation is an excellent alterative to cash-flow testing in a health insurance environment that includes products that are not interest sensitive.

- Reliance on Premium Review Work. In the pricing of our health insurance products, we've gone through a great deal of analysis in terms of setting assumptions to establish those premiums. We can use that same work in helping us evaluate the adequacy of the reserves for that business, simply by evaluating how good those assumptions are somewhere down the road. That sometimes takes much more work if you have different health insurance products and you've priced them separately in different ways. So it can be a challenge, but it can provide useful information, especially looking at the adequacy of your premium rates as they correlate to this work.

- Reliance on Corporate Financial Plan Work. Many of us are involved in not only signing statutory opinions, but also doing corporate planning for the year, and perhaps the next couple years following that. Since you are going through the process of projecting your business, oftentimes there's enough detail in doing that work that you can piggyback on to do an evaluation of your reserves.

- Risk Theory Applications. For certain blocks of business, some of us may be using some kind of risk theory applications, and there may be some other methods that are being used.

It's very clear that cash-flow testing is not necessarily required when doing Section 8 opinions. *Standard of Practice 14* says it is not always necessary. The risk elements in short-term products may be more appropriately analyzed by other means. For example, accident policies may be better suited to using some other type of technique when there's a small frequency of high-cost claims. Another example given in *ASOP 14* is that, if you can demonstrate that a block of business is relatively insensitive to influences such as changes in economic conditions, you may determine that cash-flow testing is not needed in order to support the opinion or recommendation given. The key question is, what do they mean by economic conditions? Generally that's been interpreted to mean impact on investment income. For many types of business, that's fairly easy to demonstrate, particularly for group or individual medical business. For other types of health insurance, such as disability income and long-term care, it's not as easy to demonstrate and very often cannot be demonstrated because these lines are affected by changes in the interest rate environment.

A third reason given is that variation in benefit and expense experience for disability income and medical expense reimbursement policies may arise from uncertain secular trends in the experience, and they may be better analyzed using other techniques and by looking at historical data to predict what's going to happen.

Those reasons are in *Standard of Practice No. 14.* We don't always have to do cash-flow analysis for health insurance, but it depends on what kind of health insurance we're talking about. We have long-tail health business, and we have short-tail business. Long-term disability and long-term care usually fall on the long tail business side. That business is apt to be much more sensitive to the interest rate environment, much like a life insurance policy might be.

Short-tail business consists of the following coverage types: medical, short-term disability income, accident, dental, and Medicare supplement. Short-tail business is relatively insensitive to what happens in the interest rate environment.

FROM THE FLOOR: Health insurance products seem to be changing rapidly today in this health care reform environment. We need to be careful because long and short-tailed products may become merged. For example, workers compensation coverage could be included with medical coverages.

MR. O'CONNOR: That's an interesting point. We live in a changing world in terms of health insurance. As appointed actuaries, we constantly need to be aware of what the impact of these changes might be on our reserves and on our responsibilities as valuation actuaries. An example I'd like to give in terms of that sensitivity is the impact of managed care on our work. This can also have real implications on the way we want to test our reserves and on some of the things we need to consider in testing those reserves.

In general these are the breakdowns between the long-tail and short-tail business. Whether or not we really have business that's sensitive to a changing interest rate

environment, the overall question is, will the assets along with the premium income produce the cash needed when it's needed? How can you demonstrate that? If you can demonstrate that without doing cash-flow testing, then chances are your methodology is fine, and you do not need to cash-flow test. But you need to be able to answer this question for yourself when doing the Section 8 opinion, as well as for the regulators and anyone else who's going to be looking at your reserve opinion. That's the key test.

ASSET ANALYSIS

One of the things that the opinion regulation states for Section 8 opinions is that, even if you're not doing cash-flow testing, you still need to consider the reserves in light of the assets. It just so happens that you may not need to do cash-flow testing. You still need to examine the assets. For medical business, I look at how good the assets are, particularly if you're in a multiline company, and if the assets for that company are being divided and assigned to various blocks of business for this evaluation. What has been assigned to the health block? You must be careful that the dregs of the assets are not being thrown into the health block. There can be a tendency to do that in some companies, because the business is relatively insensitive to the interest rate environment and will not be cash-flow tested. I look at the duration of the assets. Do they really fit with the business being evaluated? Short-tail business should not hold terribly long assets. It's fine if the asset durations are somewhat longer than that of the tail, because you do have premium income coming in to support much of the cash flow needs. But in general, you don't want to have 30-year bonds out there supporting medical business, that has a run off of, at most, 18 months. So that's one of the things that I look at.

FROM THE FLOOR: In a multiline company, how can you decide that your health business does not require cash-flow testing if, for example, your life insurance business does, even if you have segregated assets, because all assets are available to support all business?

MR. O'CONNOR: If you are doing cash-flow testing in a multiline company, and your health block is of a reasonable size that would cause you to be concerned about the adequacy of those reserves, in terms of the assets backing them, my suggestion is that you do cash-flow testing on all your significant business. The reason is the assets are in a general pool of assets. Even if you're assigning various assets to different blocks, it's key to be able to evaluate the company as a whole.

However, you do need to assign your assets to the various blocks that you're testing. You have choices as to whether or not you're going to evaluate your reserves on an aggregate basis or evaluate each block separately and aggregate them afterwards. To the extent that you're assigning assets to a particular block of business, lets say it is your annuity block of business, and the annuity block of business passes all its tests so that you have a good comfort level with the adequacy of those assets supporting your annuities, the need for cash-flow testing your health block will diminish. Now if you have a great deal of concern about the assets supporting your other lines of business, like your annuities, perhaps being borderline (e.g., maybe they pass most of the interest rates scenario tests that you need to do, but not all), you may then feel a need to do a better cash-flow test on all your blocks of business, not just the life and the annuity portions. I think that's a judgment call that you need to make as an

appointed actuary. The analysis test that you do need to provide is a demonstration of adequacy.

The quality and type of the assets should be considered. Are you talking about triple A bonds and government bonds, or are you pretty heavy into real estate? Real estate backing medical reserves doesn't make a great deal of sense. So you want to look at the quality of the assets. How good are they? What is their duration? And what kind of yields do they produce? I think the key point is that just because we may not be doing cash-flow testing, we are not exempt from doing asset-adequacy analysis.

THE ACTUARIAL MEMORANDUM

I want to talk about the actuarial memorandum and the general requirements of what needs to be included. It must be prepared by the appointed actuary. He may rely on others. This is different than what I said concerning the opinion statement. For the opinion statement, you cannot rely on the opinion of others. It must be your opinion. But in your actuarial memorandum, you can talk about and point out whom you relied on to do some of the work, to prepare it, and provide you with opinions, in order for you to arrive at your opinion. The memorandum has to be available for examination, but is not considered a record of the insurance department.

However, there is a clause in the standard valuation law, or in the memorandum law regulation, that states if you use any part of that memorandum, in terms of your marketing or making it public, the commissioner has the right, if he wishes, to disclose any portion of the actuarial memorandum that he deems to be an appropriate disclosure. That's an interesting power that he has, considering the confidentiality of the actuarial memorandum. You do have to provide some confidential information in these actuarial memorandums because it calls for a great deal of support documentation. But the memorandum is not required to be sent to the commissioner or to the insurance department unless requested. There are states that are requesting it routinely though. California requests it routinely. Illinois is requiring an executive summary of the actuarial memorandum from which they will decide whether they want the detailed memorandum.

If you don't have a memorandum, the commissioner can get one by hiring somebody like me to look at the reserves and prepare an opinion. Those are some general requirements.

Other things that need to be included are a description of your product; the methods and bases that you used in evaluating your reserves; the sources for your information (where you got it, who you got it from); a description of the reinsurance arrangements; the impact of federal income tax on your reserves; and information on the assets. You also need a description of the asset portfolio that backs the health insurance reserves. Those who have done this work for life insurance are familiar with this type of thing. But what are the assets? What's their distribution in terms of duration? In terms of type of asset? And what are their quality rankings?

How were the assets supporting the health insurance block that you're analyzing selected out of all the assets of the company? What's your investment strategy going forward? Are you going to be investing in the same types of assets, or is the

investment strategy different? Are you going to go longer? Go shorter? Depending on what the interest environment is offering at the time and to the extent there are negative cash flows, how are you going to handle those? What are your sources for your asset information? Who did you rely on for that information? So that's the description of the assets.

What's the analysis methodology that you used? You need to describe what you have done in some decent detail, in order to evaluate the reserves and related actuarial items that you're opining on in the statement. You must address, in your opinion memorandum, the rationale for inclusion or exclusion of different blocks in an asset-adequacy analysis. Then address whether or not you aggregated everything together and looked at it as a whole, or whether you aggregated them after evaluating each separate block.

FROM THE FLOOR: In your description of the analysis, on a standard HMO or Blue Cross plan, you're dealing mainly with claim lags. Can your description of analysis be a copy of the floppy disk? Must you have so much verbiage?

MR. O'CONNOR: You want to make your description with some supporting results from the various tests that you may have run. If you're just doing a claim-liability analysis, for example, you probably have looked at various sensitivity analyses. In looking at these and talking about the results of your analysis, in terms of the reserves that have been established, you want to give some comfort level to the reader that you've done the leg work, in coming up with your opinion. You just haven't signed an opinion without really demonstrating that you have, in fact, been able to demonstrate that the reserves are adequate with a good amount of confidence.

There are a number of adequacy issues that need to be examined. The claim-reserve analysis, especially for us in the medical business, is really the major portion of the reserves that we examine. So the various methodologies that we use for doing claim-reserve analysis are important and should be described in our memorandum. Developmental methods, lag factors, completion factors, loss-ratio methods, or any combination of those things are typically used. People probably use a number of other types of methods in evaluating their claim reserves. Various run-off methods are used.

Active-life-reserve analysis may need to be done, particularly for individual policies. Where you are holding additional guaranteed renewable reserves? What reserve bases are you using? Are those bases adequate going forward? In terms of medical business, one of the issues that has been discussed in recent years is the need for durational reserves, particularly in the first few years when the business is very profitable from a morbidity point of view, where the loss ratios are significantly lower than what your ultimate loss ratios are going to be. Depending on your rating methodologies, are durational reserves something that you should be considering for that group or individual business? That debate is still going on, and we each have to look at our own blocks of business to determine that. With various new rating laws that are coming out, that concern is diminishing, and probably will, to some degree, go away.

We've already talked about the basis of assumptions. We've talked about data quality. Appropriate projection period. If you're doing cash-flow testing, or if you're doing a gross premium valuation for your testing, how long of a projection period should you use? Again, that gets back into your long-tail/short-tail questions. The task force that created the practice note for the medical business felt that the projection period should be no longer than three years. First of all, you realize, if there were anything beyond three years (even beyond one year), it is just guess work at best. Nobody knows what's going to happen beyond three years in terms of morbidity cycles and such things. More importantly, there's a great temptation if you have a block of business that may not be healthy at the point of valuation, to get it to be a very healthy block over a ten-year period through the actuary's choice of projection assumptions. That can cloud the results related to the health of the business. The immediate year or 18 months is really the crucial period on which we're opining. It can change quickly. So the small group task force arrived at nothing longer than three years because it was what most of the people were using.

Certainly for long-term care, for long-term disability, you're going to use projection periods that are considerably longer, 20 or 30 years, to see what you really need for reserves. If you're holding policy reserves for certain contracts, you'll probably want to use longer projection periods for them.

The impact of new business. We're opining on in-force business. We are not opining on new business. Therefore, new business cannot be included in your analysis. However, it definitely can impact gross premium valuation or cash-flow testing results because of the relative good health in those first years for new business. Many of us depend on that in terms of having a profitable block of business, because much profit is front-ended. So that's a challenge that we need to face. How do we do a cash-flow test, or a gross premium valuation when we know that much of our profitability depends on new business? That's a tough question to answer. And one of the things you do have to consider is how new business affects expenses, and how you're going to allocate those expenses appropriately between your in-force block, which you are evaluating, and your new business block.

HEALTH CARE REFORM CONSIDERATIONS

Well, we're quickly running out of time. One more thing that I do want to list before you go is my concern about some of the health care reform issues that we are facing, and how they affect health insurance valuation. These are some of the things that we need to worry about as health insurers.

- If you're in the Medicare supplement business, you need to be concerned with the refunds because loss-ratio requirements are on a by-plan, by-state, basis; it's a real challenge to price those appropriately so that everybody reaches that 65% minimum loss ratio. You're very likely at least for some states and plans to need to have refunds or loss ratios in excess of 65%. Recognition of those refunds in your reserves may be needed.

- Small group insurance. We see a great many state reinsurance pools to be set up. There are likely to be assessments associated with those reinsurance pools. We need to recognize those in doing our work, particularly if they're going to be significant.

- Guaranteed issue. There's a whole new ball game in this area. We need to be concerned about what the impact is on our reserves if, all of a sudden, we have to go to guaranteed issue products.

- Community rating offers the same type of concerns, particularly if it's accompanied by a risk-adjustment pooling requirement.