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## Session 25PD Financial Reporting Issues for Health Insurers

Track: Health/Financial Reporting

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Summary: Along with asset-adequacy analysis, as required by the elimination of Section 7 opinions, and the appropriate levels of provision for adverse deviation, in light of codification's "best estimate" requirement. Panelists also discuss modifications to purchase accounting and treatment of goodwill, the new health blank and provider-solvency analysis.

**MR. DARRELL D. KNAPP:** I'm the chair of the American Academy of Actuaries' Health Practice Financial Reporting Committee, and since we are talking about financial-reporting issues for health insurers, it seems appropriate to give an update on what is going on with The Academy activities. We'll also talk a little about appointed and opining actuary changes. Mr. Brown will give some accountingindustry perspectives. He will also talk about accounting for goodwill and Statements of Standard Accounting Practice (SSAP) 84. And Mr. Crooks will deal with considerations in determining best estimates.

On The Academy issues, the Health Practice Financial Reporting Committee has three currently active projects. We are doing some analysis for the NAIC about consistency of actuarial opinions across legal entities. Right now, there is quite a bit of difference in wording between a life-insurance opinion, a health opinion that would be filed with the health blank, and a property and casualty (P&C) opinion. Each of those actually has different standards of practice that are applied. Given that it's all the same basic business, the NAIC has had a work group that's been

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looking at the differences for those opinions. Should we clean those up and get to one common opinion language?

A second project that we are working on jointly with a sister committee from the property-and-casualty financial reporting area is trying to address the concept of best estimates. There are very different viewpoints that health actuaries and property and casualty actuaries have traditionally had with respect to setting liabilities and best estimates.

The property and casualty actuary does an opinion that says that the reserves are reasonable, while the health actuary does an opinion that says that the reserves are good and sufficient. This basic opinion language has two very different meanings, and that flows down through to the best estimate language. So it is a very different analysis. What we are trying to do in that work group is create a two-phase process. The first phase is putting together an educational white paper that identifies what the differences are, what the source of differences is, and outlines common principles that we can derive as an actuarial group, not separately as health actuaries and P&C actuaries. The second phase is going to be saying, "Given that this is where we're at, where do we really think it would be appropriate to go, in terms of the best-estimate analysis?"

The third active project is a response to some NAIC questions regarding grosspremium-valuation reserves and premium-deficiency reserves. We did a paper for a subgroup and are currently responding to questions from the subgroup.

A couple of things that we have on hold with the Health Practice Financial Reporting Committee is a revision of the health-practice notes. Most of those were written in about 1995, and a lot has changed, especially with the new actuarial-opinion-model regulation. We are going to try to look at revising those.

We are also tracking developments in the accounting for the post-employment benefits. That may be one of the next accounting scandals on the front page. There are very large liabilities that a lot of organizations have set up on their books that, to an outside observer, could be viewed as somewhat loosely defined, or having a lot of assumptions revolve around a very large liability. A few major corporations have made very significant changes to their balance sheets by changing some of their policies related to those liabilities. So I think there may be some call for cleaning up the accounting.

Way on the back burner would be looking at a comprehensive review of statutory reporting requirements. The statute has evolved over time. We might want to go back and take a look at first principles, to find what really needs to be reported in a statutory annual statement, in order to give the regulators the information that they need to regulate. Are we really doing what we need to do, or are we doing more than we need to do? Do we need to do additional things?

A couple of other Academy issues that I wanted to mention—Mr. Brown will talk quite a bit more about the Sarbanes-Oxley Act, but Dan McCarthy, the President of The Academy, has sent a letter in to the SEC. Basically, one of the provisions in Sarbanes-Oxley is that they specifically mention actuarial services as a service that cannot be provided by the audit firm. But if you read through Sarbanes-Oxley, it is really the only profession that's identified, and it does not accompany a good definition of actuarial services. McCarthy basically sent a letter on behalf of The Academy saying that we think they really ought to spend some time trying to define what actuarial services are. Taken to a broad extent, if it's any service performed by an actuary, that has fairly significant ramifications, not only for those actuaries working for public accounting firms, but some feel that it could get expanded into a regulation of all consulting actuaries. So there is some interest in really trying to do something about that right now.

The second significant Academy issue that we have got going is looking at qualifications. The Qualifications Committee, in response to the Society of Actuaries' Exam System 2000, which largely took a lot of the nation-specific material off of the exams, established a Life and Health Actuarial Qualification Seminar. The Academy said that prior to that, you essentially met the basic education qualifications by attaining fellowship in the Society of Actuaries. Under the new exam system, for those who attain fellowship under the new exam system, you did not, de facto, meet the basic education qualifications. As a means to bridge that gap, The Academy is conducting a Life and Health Actuarial Qualifications requirements, such as working for other actuaries. I believe the Canadian Institute of Actuaries also has a similar qualifications course that they have instituted as part of the follow-up to the SOA's Exam System 2000. As many of you are looking at being "signing actuaries," you should note that there might be an additional qualification standard to be met.

At a recent meeting, the Academy indicated that there will be a new proposal on professionalism coming out soon. It will get rid of the concept of a public statement of actuarial opinion and significantly broaden the types of documents or types of work to which qualification standards will apply. From the Academy's perspective, I think that they're really hoping that a lot of people will take time to comment when that comes out. So I'd encourage all of you to try to respond to that. I believe that they thought that would be out either by the end of this year, or early next year. One of the primary drivers of trying to broaden that concept is to try to encourage more actuaries to obtain continuing education. As I understood it, the Committee on Professionalism discussed a number of proposals; this was a compromise to another proposal that would require all members of the Academy to have some continuing education.

A big change of subject, a couple of words on the appointed and opining actuary changes: For anyone that's signing a life blank, there's a new actuarial-opinion-

model regulation that basically does away with the Section 7 opinion. So, in all actuarial opinions, you have to do asset-adequacy analysis.

As far as I am aware, no state has yet passed the new Actuarial Opinion and Memorandum Regulation (AOMR), but the NAIC has adopted the AOMR in an appendix to codification. So effectively, if you're filing a Section 7 opinion, even though you're allowed to do that by the state, you'd be having a permitted practice under the statutory accounting, which means that you'd have to have some disclosure requirement in your statutory financial statement. The NAIC, which basically does the statutory accounting requirements, and the states, which have the actuarial-opinion-model regulation bill, aren't in sync right now. So, especially if you're doing a Section 7 opinion, you need to be aware of potential disclosure issues.

Last year was the first year, I believe, of the new health blank. In 2003, the blank will ask if you are primarily involved in health business. If you meet the health-insurance primary test for two consecutive years, then the year after the next year, you will begin using the health blank. You will file the health blank, as opposed to the life blank or the P&C blank. There are a couple of states that have early migration on special Blue Cross/Blue Shield plans, largely at the request of the plans to file a health blank, because it makes more sense for their business. But by 2005, we would expect to see a lot of life carriers or property and casualty carriers that have been filing life or P&C blanks but are almost exclusively health writers migrate over to the health blank.

Premium-deficiency reserves and provider liabilities are areas where we saw a lot of activity in the last year-end. The regulators are really attuned to what's going on in premium-deficiency reserves and looking for some responses. A number of states are looking for a line on the actuarial opinion even if you are booking zero for premium-deficiency reserves. They want to see premium-deficiency reserves is zero, specifically listed on the actuarial opinion. A number of states are focused on the provider liabilities and a solvency analysis. To the extent that you have capitated providers, what are you doing to assure that, when you pass the risk off to those providers, it won't come back to you as the primary contractor?

**MR. DAVID L. BROWN:** I am going to talk about some of the emerging legislation (specifically Sarbanes-Oxley) related to the current business marketplace. Then I will deal with some issues related to Financial Accounting Standards (FAS) 141 and 142, which are being adopted this year. I will close with some brief comments on health-care receivables, as well as some issues that we are seeing in practice on a best-estimate perspective.

Regarding the Sarbanes-Oxley Act, what started out as a statement dealing with the Enron issue has become much bigger, with some of the other financial restatements with WorldCom, Inc., Tyco International Ltd., Adelphia Business Solutions and Qwest Communications International, Inc. The Sarbanes-Oxley

legislation is one of the most expansive and changing for the accounting industry, maybe ever. We've been meeting with all of our clients and with the audit committees and boards on a daily basis, trying to get them up to speed on the impact that Sarbanes-Oxley is going to have. Obviously, we've been meeting with our public clients, but a number of non-public clients have been looking at what elements of Sarbanes-Oxley they're going to implement into their corporate governance. So it really affects everyone. It creates new financial reporting requirements, new criminal laws, a new Public Company Accounting Oversight Board. It mandates corporate governance reforms, enhances the role and independence of audit committees, and creates new auditor independence restrictions.

President Bush signed the Sarbanes-Oxley legislation into law in July. The Public Company Accounting Oversight Board had to be established within 270 days of the enactment. Then, all of the accounting firms had to register with the board within 180 days after that. The board is a five-member board, and no more than two people on the board can be accountants.

Just related to accounting firms, obviously this is having a significant impact on our business. I am going to hit on some of the highlights. One of the big items is going to be a new five-year partner-rotation plan. If you recall, both the SEC and the NAIC currently have a seven-year partner-rotation plan. And although this is affecting just SEC clients, at this time, I am anticipating that the NAIC is going to adopt a number of the Sarbanes-Oxley provisions. I would not be surprised at all if, down the road, the five-year partner-rotation provision will apply to all insurance companies.

Another thing that's going to affect our business is the one-year employment restriction. So, if someone was working on an audit client, they cannot leave for certain higher-level jobs for a period of one year. There is a one-year cooling-off period to go to a client that they actually served. One significant item that is going to take effect this quarter with the 10Qs is an internal-control assessment. You've heard about the CEO and chief financial officer (CFO) certifications of the financial statements in the paper, but now the executives are going to have to certify that they have an internal control system in place that's appropriate. It still is being worked out on the specifics, but your independent accountants, your auditors, will have to attest to that certification, related to internal controls. So there are certainly some big changes from that perspective. And once again, it's SEC right now, but it would not surprise me at all if it doesn't transcend into all insurance companies through the NAIC process.

Another significant item that will affect both clients and auditors is the fact that the audit committee will have to pre-approve all audit and nonaudit services. I have been meeting with the audit committees, and they are trying to visualize how they are going to do that. In general terms, what I'm seeing is that audit committees are delegating the authority to one person on the committee, maybe the chairman, and

then that person has the authority to preapprove services, to the extent that they feel comfortable. If not, they would check in with the rest of the audit committee, and then all audit and nonaudit services would actually be reported to the full audit committee at the next periodic meeting.

Also, as many of you are aware, we recently have been required to not only talk about the reasonableness of accounting principles, but also the quality—how aggressive or how conservative an accounting policy is. The new guidance in Sarbanes-Oxley says that we have to go one step further—actually communicating what the alternative accounting policies might have been, and what their impact would have been.

The key provisions for issuers are primarily the same ones that affect the accountants. I see the internal-control report as being one of the biggest CEO and CFO certifications. There are some new whistle-blower protections for employees. They are putting protections in place for whistle-blowers. They are also increasing the penalties for violations. I was reading in yesterday's paper that someone said that the best board candidate may be somebody who is not afraid to wear stripes. Hopefully it will not come to that, but certainly the responsibility is serious.

With respect to the CEO and CFO certifications, the SEC can bar unfit officers and directors from holding similar positions for life. The SEC would have the authority to freeze pay to executives in certain situations and actually to take back bonuses if there were restatements after the fact. So, significant power is given to this Public Company Accounting Oversight Board and the SEC, which oversees this board.

This is just related to the audit committee. I told you that we have been meeting quite a bit. Generally in the past, we really met with management, in accord with management's expectations. The audit committee meeting was an afterthought. That is changing. We meet quarterly with, at least, the audit committee chairman. They are taking direct responsibility under the act for auditor appointment, the compensation as well as the oversight.

One other interesting thing about audit committees is that they have to have at least one financial expert. That definition is still evolving a little bit, but essentially it is someone who has expertise in financial statements and in the auditing process. Once again, we have already talked about the pre-approval of both audit and nonaudit services by the audit committee and the fact that they can delegate that power or authority to one member on the committee.

It was said that the goal of Sarbanes-Oxley is really to put a clear line around what the auditor can and cannot do and provide additional clarification of the services we can and cannot perform. Figure 1 lists all of the nine prohibited services under the Sarbanes-Oxley Act. All except three previously were prescribed under SEC literature. The three new ones are IT consulting, internal-audit outsourcing, and providing expert services. The definition of expert services is still being defined through the SEC process, but what we expect is that it would be expert services in the context of some type of litigation or legal matter.

### Figure 1

### Services Prohibited Under the Act

- Bookkeeping or other services 5. related to the accounting records or financial statements of the audit 6. client;
- 2. Financial information systems design and implementation;
- Appraisal or valuation services, fairness opinions, or contributionin-kind reports;
- 4. Actuarial services;

- 5. Internal audit outsourcing services;
- Management functions or human resources;
- Broker or dealer, investment adviser, or investment banking services;
- 8. Legal services and expert services unrelated to the audit; and
- Any other service that the Public Company Accounting Oversight Board determines, by regulation, is impermissible.

Just for your information, I'll give a brief overview of what our firm is doing, related to a couple of these new items. On the IT consulting side, we actually were ahead of the curve; we sold our consulting unit about two-and-a-half years ago to Cap Gemini. Related to internal-audit outsourcing, we already had made the decision not to accept any new internal audit outsourcing engagements for our public audit clients before Sarbanes-Oxley. So that is how we are dealing with it.

What we're seeing in the marketplace with respect to actuarial services, and what I'm telling our clients, is that we can still do reserve certifications, as long as companies have competent actuaries, either internal or external, that can calculate reserves and take responsibility for the amounts that are recorded in the financial statements. I think the guidance is going to look at situations where we might calculate the reserves and audit the reserves. There is going to be some give and take, but I think that is where it's going to come out in the end. Clearly, we can do a number of actuarial services, and we can do projections in a number of scenariomodeling situations, as long as the company is not using those specifically for the booking of reserves.

Regarding the preapproval requirements in Sarbanes-Oxley, one of the key areas is that audit committees can preapprove as many as they want to, in advance or at

one time. Also, for those of you with public companies, you actually have to disclose these preapproved services in the periodic filings with the SEC.

Obviously, the legislation in Sarbanes-Oxley is significant. If you are trying to contend with this, the CEO and CFO certifications are going to be a new challenge, with the internal control of valuations that are going on. On the internal control of valuations, the SEC has been pretty specific in saying that companies have to have their own evaluation and documentation for the internal controls. The auditor will come in and assess the system, as opposed to a company relying primarily on an auditor to do all of the documentation of internal controls. As I mentioned earlier, the role of the audit committee continues to change, broaden and strengthen, and we will continue to work with and assist the audit committees of our clients.

Under the new accounting guidance under FAS 141 and 142, regarding business combinations, the key thing to remember is that poolings are no longer allowed. All transactions are now accounted for as a purchase, and the guidance in Actuarial Practices Bulletin (APB) 16 continues to be around. Goodwill amortization stops. This was one of the topics that caused this project to delay out for years. So, when this was effective, as of the beginning of this year, all of the old goodwill amortization really stopped. Instead, it was replaced by an annual-impairment test. Also, FAS 141 and 142 defined what it was to have an identifiable intangible, and how a company would go about evaluating whether that was a good asset, the measurement, and any impairment issues related to that.

I mentioned that poolings are gone, and the reason is that in the past, two similar transactions could be accounted for very differently, just through a very small technicality: whether it was a pooling or a purchase. The accounting results and the income in future years would be significantly different, and the investor world said it was just too confusing for investors to understand. So, we needed to have just one way to account for it. That was really the premise for FAS 141 and 142.

Because the purchase-accounting method is used on all acquisitions now, you have to identify an acquirer in every business combination. It sounds simple to come up with the acquirer, but in many transactions, it is difficult to do so. Under APB 16, we focus primarily on the voting rights of the combined company. Which of the older companies had the voting rights going forward? However, the guidance in FAS 141 indicates that you would have to look at some other items in addition to voting. Obviously, voting is still significant and probably the most important, but you would also have to look at the board composition of the new company and the senior-management composition of the new company.

One of the significant items discussed in the deliberation process was whether goodwill was actually an asset or not. After much heated debate, they determined that it was a non-amortized asset, and all goodwill would have to be allocated to the reporting unit or one level below the reporting unit. There would be an annualimpairment test that many of your companies may be going through right now. I know all of my clients are actually going through step two, at this point in time, to the extent that they had to go to that step.

Concerning the operating segment level, I said that everything had to be measured at a reporting-unit basis. The guidance in FAS 131 related to segment reporting is the guidance that FAS 141 and FAS 142 refer to for how the goodwill would be allocated. It says that you would either do it on the segment level, as defined in FAS 131, or one level below that. You can probably think, within your own companies, how your divisions are and how you report publicly, and under that there might be some subsections. And those would be what we have considered the components.

The component that I just mentioned can only be used if it does constitute a business. There is some guidance under Emerging Issues Task Force (EITF) 98-3 that defines what a business is. There has to be discreet financial information and segment management must regularly review the operating results of the company. There has been a lot of debate on what discreet financial information really is. Many people say that it at least has to have a balance sheet. The FASB really clarified, through some issue papers, that discreet financial information could be simply operating results. There are some complexities to that. You would have to review the operating results of what the chief operating decision-maker authorizes. Then, similar to the guidance in the segment reporting, components may be combined if they have similar economic characteristics.

If you do evaluate on the component level, you would not necessarily be able to take components from one side and offset it with components on the other side. At certain levels within a segment, you would actually be able to take good guys and bad guys and sort of net them and make up for some places where you might otherwise have had some impairment. The SEC probably will challenge how you evaluate any impairment loss and how the goodwill is allocated.

What do you need to start the process? You need the book value of the reporting unit, just the assets and liabilities that make that up. One key is being able to allocate 100 percent of the goodwill to the reporting units that it really relates to. If there is some type of synergy involved in a business combination (hopefully there is if it was a good transaction), they are going to ask what the real economics are. Where should the goodwill be placed? The reason that you need to allocate 100 percent of the goodwill is that you want to make sure that the book value and the fair value are really on an apples and apples basis, so you can compare them.

Now you would test for impairment, and there's a two-step process on that. Step one is easy. You look at the book value compared to the fair value. If the fair value is greater, you're done. That's step one, and that had to be completed, I believe, by June 30 of this year, at least for the public clients.

Step two gets a little more challenging because you get into actually having to push the assets down to these operating segments and do purchase GAAP accounting. But what you do in step two is determine what the implied value of that goodwill is by comparing the fair value of everything in that operating segment to the fair value of just the identifiable assets, both tangible and intangible. That gives you the implied value of goodwill, which you compare to the goodwill that is recorded in your books. To the extent that fair value is less, an impairment charge should be recorded. The first year can be recorded as the cumulative effect of change in accounting principle. After that, it would go through the income statement.

The impairments are required to be done on an annual basis, except to the extent that you have something big going on that would indicate that there's a problem with your goodwill at an interim date. This would happen if you saw things such as a significant adverse change in legal factors, competition, loss of key personnel.

In addition to goodwill, the guidance in FAS 141 also defined what an identifiable intangible asset is and what criteria it has to meet to actually be separate from goodwill. It meets the criteria if it arises from a contractual or legal right—a patent or something similar that gives you value that could be separately identified. If it does not meet that criteria, you look to see if it can be sold separately or exchanged, if it can be separated from the company. To the extent that it meets that requirement, then it would be allowed to be shown as a separate identifiable.

There are certain identifiable intangibles that would have been separate before that no longer meet these criteria. Those now have to be included in goodwill. It's very important, as far as the differentiation between goodwill and these identifiable assets, intangibles, because, in general terms, the goodwill is no longer amortized, while the identifiable intangibles would be amortized over some period, over their useful life, unless they have an indefinite life.

Finite-lived identifiable intangibles are amortized over their economic life, and there is no maximum, like there used to be. It must be tested annually for impairment under the FAS 144 guidance. Indefinite lives—and many people confuse indefinite with infinite—but I think that the key here is that people need to continue to monitor whether something has a value. A state insurance license is an example of something that might have an indefinite life, something that really does not lose its value necessarily, and would go on. But if it does have an indefinite life, there is no amortization. You would have to do the impairment testing, similar to what you do with regard to goodwill, in current times.

In addition, if you had a situation where, for simplicity, there is an identifiable intangible that you included in with goodwill, you would reclassify that to an identifiable intangible, if it was ascribed fair value separately and was accounted for separately up until this point. If it was kept on a separate spreadsheet or a separate general-ledger account, but if for financial reporting purposes it was combined with goodwill, that would be reclassified. Customer relationships are an

example of an identifiable intangible. An assembled workforce would not meet the criteria of an identifiable intangible.

There are three approaches to valuing intangibles. The income approach and market approach are what are best known and what most companies are using right now. I have a client that's actually using the model that they use to look at their mergers and acquisitions (M&A) to value their operating segments. If a similar company, similar size, was sold recently, the market approach is another great opportunity. The cost approach gets a little more subjective.

I think you have probably already seen the effects from adoption in the papers. In the next couple of years, earnings per share should be somewhat higher, because people will not be having this amortization for goodwill that they had had in the past. Also, the price-earnings ratios (P/E) will decrease as a result. Another item that should be taken into effect is the fact that there will be the extraordinary gains, recorded as a result of any negative goodwill.

There has been a significant amount of press related to this issue this year. A lot of net worth is going to melt away. I think you saw that with America Online and a number of other companies, related to their FAS 142 charges this year, especially with the downturn of the technology and energy markets. Figure 2 shows examples of some transactions, both from a purchase and pooling perspective in the insurance industry. You can see the magnitude of some of the goodwill that was recorded as a result of those acquisitions.

Recen	t U.S. Ir	nsura	ance A	<b>Cquisitio</b> Goodwill at	ons
<u>Buyer</u>	<u>Seller</u>	Price	<u>Goodwill</u>	12/31/2000	<u>Type</u>
Purchases ACE Ltd Berkshire AG Lincoln	: Cigna Gen RE West. Nat'l Aetna (life)	\$ 3.45 \$ 21.4 \$1.16 \$ 1.0	\$ 1.75 \$ 14.5  \$ .2	\$ 2.8 \$ 18.0 \$ 1.4 \$ .2	Cash Stock Split Cash
<b>Poolings:</b> Travelers AIG Unum St. Paul	Citicorp Sun America Provident USF&G	\$ 37.4 \$ 18.0 \$ 5.0 \$ 3.7	N/A N/A N/A N/A	N/A N/A N/A N/A	Stock Stock Stock Stock

### F

Figure 2

Once again, just on the implementation issues, the identification of the reporting units is a very important first step, the transition reclassifications that we talked about. There are a few other important issues related to fair value and dealings with the equity-method investments, to the extent that you have any of those.

I want to mention that the Insurance Companies Task Force is developing a statement of position regarding insurance-related purchase business combinations. I work with someone on that task force, and they're in the process of developing the SOP to deal with a number of issues, primarily to deal with whether something is a purchase of a business versus an assumed reinsurance transaction. Some of the specifics that we talked about earlier related to identifiable intangibles, further defining what those are and are not. All of that should come out in the next year. There is actually a second business-combinations project. All of that will come out together and the final statement of position is going to be issued –in the fourth quarter of 2003.

The next section of my talk relates to certain health-care receivables (and I am sure this affects many of you), primarily related to pharmaceutical rebates, claim overpayments, loans and advances, capitation arrangements, risk sharing, and amounts receivable under government-insured plans. These are admitted assets, to the extent that certain requirements with respect to billing have to be invoiced, have certain contractual arrangements, and have timely collections and reconciliations. If that is applicable to you, be mindful of the guidance.

Lastly, I will make a point related to best estimates. For some of the things that we are seeing out in the marketplace, a best estimate is required for unpaid claims and claim-adjustment expenses. Many companies have had a margin on top of what their best estimate would be, and that is really prohibited by the SSAP 55. What we need to do, as companies, is make sure that we can document why there would be any additional amount over what the actuaries had come up with in their projections related to recording the best estimate. Guidance is still developing to a certain degree, but that is going to be significant.

Certainly, the working group in Interpretation 01-28 said that the concept of conservatism is inherent and should not be prohibited, but it would not necessarily be a specific requirement to record such a margin. One other item that we are seeing a lot is the fact that under the SSAP 55, companies should be recording their best estimate by line of business. I think that companies still are playing around with this a little bit. From an auditor perspective, we audit the financial statements as a whole, and to the extent that companies are not segment reporting by product or by line or something of that nature, we would be okay.

However, the guidance says that the financial statements are in accordance with statutory accounting principles as defined by the SSAP. As a result, we are having discussions with our companies—and this is something that I think state insurance examiners will probably be focusing on as they are coming in for this next set of triennials—making sure that companies do not have big redundancies in one place and big deficiencies in another. The fear is that auditors would say that it is okay to have a redundancy, but a deficiency would have to be made up. We encourage companies to take a close look at recording the best estimate by line of business, and then ensuring, if there is any margin recorded, that there is proper documentation to support what is recorded.

**MR. JOHN MICHAEL CROOKS:** Given the current financial environment, is what we are doing to set liabilities adequate anymore? I am going to contend that it probably is not.

This is an overview of what I plan to cover today. I think that we have been over the current environment already in some detail, as well as regulatory changes. I will talk briefly about current practice. Then I am going to talk about some of the limitations that I see in our current practice in health, such as primarily using lag triangles to set liabilities. Then I am going to talk about some studies of specific payment issues and how they affect the triangles. I will try to quantify some of the impact on lag methods of some basic kinds of payment issues that we see every day. Then I will talk about future direction.

So, as was mentioned, everybody knows what's going on, as far as the troubles that companies have been having. There have been a lot of consequences already, and the Sarbanes-Oxley Act that we have been talking about is one. The SEC, before that, had already issued statements saying that the top 1,000 companies'

chief officers were going to have to sign statements under oath, certifying that their financial numbers are correct, so that they can be criminally charged for perjury and other things.

Large variances in liability estimates can be seen as intentional. They may not be, but they could be seen that way, especially if it just so happens that they coincide with a downturn in your business. So there's really going to be a lot more scrutiny on the liabilities.

In terms of regulatory changes, they've already instituted the Sarbanes-Oxley Act. Potentially, it will impact actuaries in that the bill includes statements to the effect that actuaries cannot provide services to their audit clients. As I said, they are going to discuss and hopefully amend some of that, but there's also an impact in that if you're a CEO or CFO or are simply signing the statements, you can bet that what's going on is going to impact your life.

I want to talk about codification from an actuarial perspective. The SSAP says that more than one method should be used. Most people are probably doing that already. Management should book best estimates. But that's still left sort of vague. In fact, unless you have a range of estimates (and that range has to be a continuous range, an equally probable range), then the mid-point is not a required point that you should book. I might generate 20 numbers. In some early language, it implied that management needs to pick the middle of that range, although it has been clarified that that number would not normally be considered best. Management has to support what they decide to select and, if they're selecting a conservative point, there needs to be some documentation on why they consider that their best estimate, as opposed to a number that's somewhere else in that range.

There also was some clarification saying that financial reporting requires substantial judgment, and in order to provide a margin for protection, the concept of conservatism should be followed when developing estimates. So there is some language in the practice notes that would support saying, "My best estimate is a conservative estimate, and here is why." But it is going to come down to you and your accounting firm, and possibly your regulators, as far as what number you choose.

So let's talk a little bit about current practice. Most people use lag triangles. As I mentioned before, most people are probably using multiple models, generating many numbers. Then they sit down and pick a number. What's your best estimate? They probably consider a lot of other factors that are going on. They may look at claim inventory levels, admission records, large claims, and a number of other factors that might be coming into play.

There are some problems there, some limitations. Typically, the process of selecting the best estimates is pretty subjective. I mean, I have talked to a lot of

different people on what they do. Some of them talk about having three or four actuaries sit down around a table and discuss it. They may have some financial people in. They may have some marketing people in. They talk about what the best number is and why. Then at the end of the day, they pick one. But they may have different rationales every month for the number they pick. Again, depending on how this is documented and what the process really is, you're looking at something that might not bear scrutiny all that well. Given the current environment, that could be a real problem for you. It requires a tremendous amount of actuarial judgment to adjust for a lot of external factors.

So you're trying to deal with all these other things that aren't directly considered your models. "How much do I adjust for the backlog that I know exists in my claim inventory?" "How does that reflect the fact that I have a backlog, I know it is increasing and maybe my liabilities should go up?" "Because of the health-care management bill we are talking about, my admissions are down. So maybe I should offset liability a little bit in that direction." There is a lot of judgment that comes into play when you are trying to pick the best number. Because of that, I think there is this perception from upper management that the number is kind of soft. Well, you have this range of numbers, and you pick this one, and that is going to cause the company to have a \$2 million loss for the month. Why didn't you pick this one down here that makes us break even? What is your justification?

That can become a real problem for a lot of people in companies. In today's environment, I think we are all fairly risk-averse, conservative people. Our first response is to add a little more, pick a little bit toward the higher end of the range. I think that we will come increasingly under fire as we attempt to do that. On the other hand, you're going to have CEOs that may be looking at it saying, "Maybe I do want to take a higher number, in that I have to attest to this number, and if it comes out deficient, that could put me in jail."

Let's move on to the specific limitations of lag triangles. You go through all this work to generate lag factors, and you create these numbers, but as much as 80 percent of that number is plugged. If you're doing what most people would do, which is that you recognize that the first three, four, five completion factors aren't terribly credible, you plug them in some fashion, either per member per month times membership, or loss ratio times premium. You are using some number, some way of plugging that front portion of the triangle. So you go through that elaborate method, but really, half or more of the liability is just plugged off the sheet, based on whatever you're coming up with for a per-member cost.

The flip side is a tail does not work out that well either. One \$10,000 claim two years out on the tail can hit you for a quarter of a million dollars on your liability, when it may be a lone instance, and wouldn't be reflective of a true liability. Likewise, if you go through one of these pay-up/pay-down cycles, once you pay the cycle down, the tail remembers that for a long time. You may be completely paid up, but it may take you six months, a year, or longer to clear that long-lag

information out of the back of your tail. So you're overestimating during that entire time period.

It also incorporates a tremendous lack of information. There are only about three or four items of information that are included. You've got an incurred date, a paid date, a claim amount, and, potentially, a member number or some other measure that really is only going into that first plug. It is not even really a part of the lag triangle calculation.

The final piece is that it fails to mitigate the impact of variations in the input, to address this issue of fluctuations in payment levels and changes in payment levels. That is the exact opposite of what you would want it to do. Payments go down, liability goes down, when in fact, the liability should go up. Likewise, payments go up, liability comes down, and your liability goes up when it should come down. So, you have got a model that actually reacts in the wrong direction to changes in the inputs. That is a poor condition for any model.

In preparation for this presentation, I created a claim model based on actual claim incidence, severity and submission patterns from claims data that I had. I controlled the payment speed in the model, because that is what I wanted to look at. I generated 10 years of data for 100,000 members. Using a Monte Carlo simulation, I generated approximately 1.3 million claims. The reason I did 10 years was so that I have good "run-in/run-out." I looked at the middle portion of that, but I wanted the payments already to have come up to speed by the time we hit the study period, as opposed to having to deal with it like it was a new startup company.

I excluded other factors on purpose. There's no trend. There's no seasonality. There were no contractual changes. All the things we deal with in real life are excluded just to try to look, in particular, at this issue of payment patterns. And I looked at three payment patterns. One is just steady state. Given the claim model, how well we do with an idealized model that's only varying based on random fluctuations. How well does the model work? What happens when you make payments once a week? Is there an impact on that? Are there some things we could do to look at it? One of the things you need to consider is whether it is a four-week or five-week month, and how do you adjust for that?

Finally, we get to lag payments. I reduced payment speed to build a backlog and then paid it off three months later, and studied the impact. I looked at three-month, six-month, and 12-month completion factors. I looked at some different adjustments in the front section, and what I found was pretty well in keeping with my prior industry experience. About 25 percent of them fell outside of the 10 percent range, outside of the range of the liabilities that were being generated. In this case, large claims, as well as just the random variance in the claim levels, were the major cause of the error.

Figure 3 shows the missed numbers that were generated. It was nice to use pregenerated claims, so that you knew what the right answer was going to be ahead of time.





In this case, the model started out generating high estimates, came in line for a while, and then missed again when the liability dipped down for a month. All in all, not bad, but missing 25 percent of the time. We might say that is okay, but in today's environment, that may not be considered a good enough answer.

I just looked for some simple adjustments. What can you do to fix this? One possibility that I thought of was adjusting my claim size. The smaller claims are a lot less volatile. Large claims seem to be causing a lot of the impact. I found that, in fact, when I broke it into two segments—one under \$10,000, one over \$10,000—I got a slight improvement in the estimates. Figure 4 shows the results. Overall, there was about 7 percent reduction in error, simply from busting up the claims by size.



Figure 4

The next thing I tried was the weekly payment pattern. I used the same incurred and received dates on all these studies. It is just a matter of how the claims were paid, and how fast they were paid. I forced the model to pay everything on Thursday, and reran the same models to see what the impact to the reserve was. Essentially, the main impact was that, because you actually had a slightly longer lag, all the estimates went up. Now the incurred dates are the same. The liabilities are exactly the same. But the estimates changed because of your lag being slightly longer, because claims didn't come up with a pay date until Thursday.

I decided to try weekly lag factors, as opposed to monthly, and that was sort of a tedious process to go through because you had a 210-cell lag triangle. But for the one month that I did it, which was December, the liability went from missing by 12.4 percent to only missing by 4.1 percent. It is only one valuation date, so it is not necessarily conclusive, but it was an interesting result that, simply by breaking the triangles up into smaller cells and rerunning the data, I got a better response. It makes sense in that if you are rolling all your claims down to one weekly cell, if your study modeled that, you might do a better job of responding.

Finally, and this is the most important one, I did the inventory buildup and payoff. Payment rates were slow for three months, and then level for three months, and then increased for three months, to get back to normal levels. Again, original incurred claims were used in the same lag models. As you might expect if you have done this before, the model severely mis-estimated the liabilities during the entire

time period. The effect, as I mentioned before, lasted long after the backlog was eliminated. The worst mis-statement actually occurred at the time when the inventory had been completely paid down. Some people would take inventory levels and say that their inventory is 10,000 claims above normal, therefore, they need to hold a liability for that. Those people would be holding no additional liability at that timeframe when, in fact, they should have been.

Figure 5 illustrates the results. You can see at the very end of the pay-down that the estimate is missing by 25 percent, an overestimate of the actual liability. Figure 6 shows the results in graph form. The range of estimates is growing tremendously. But also, during large periods of this, the actual estimate is not falling anywhere within the range that the models are generating. If you look in that early time period, as the liability is building up, the liability is being missed by 10 percent or more. Then the divergent point—you can see where, all of a sudden, the liability starts getting paid down, but your high estimate actually continues to go up for a long time before it comes down. Even once it comes down, if you look at the width of the range that remains at the end, there's still a lot of additional uncertainty there, because essentially you've got all these claims with long lags sitting back in your claim pattern.

	Low Est.	High Est.	Mid			% Error
		\$ 25,770				-1.7%
			\$ 25,320			-0.5%
			\$ 27,150			-4.8%
Oct-06				\$ 29,336	\$ (826)	-2.8%
Nov-06				\$ 30,075	\$ (2,890)	-9.6%
				<b>\$</b> 31,474	\$ (3,109)	-9.9%
Jan-07				<b>\$</b> 32,113	\$ (3,438)	-10.7%
Feb-07				<b>\$</b> 32,822	\$ (1,587)	-4.8%
Mar-07				<mark>\$</mark> 32,948	\$ (2,978)	-9.0%
				<mark>\$</mark> 29,015	\$ 1,865	6.4%
May-07				<mark>\$</mark> 27,014	\$ 4,376	16.2%
Jun-07				<mark>\$</mark> 25,175	\$ 6,190	24.6%
				<b>\$</b> 25,124	\$ 4,501	17.9%
Aug-07				<b>\$</b> 24,985	\$ 2,670	10.7%
Sep-07				<b>\$</b> 25,296	\$ 564	2.2%
Oct-07				<b>\$</b> 24,794	\$ 1,556	6.3%
Nov-07				<b>\$</b> 24,788	\$ 1,972	<mark>8.0%</mark>
Dec-07				<mark>\$</mark> 24,367	\$ 1,903	7.8%

Figure 5

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So depending upon how you are looking at it, you might be overestimating. The liability itself is lying below or at the low end of the range, which was really being generated by three-month completion factors. To me, it is very disturbing. Through judgment alone, would I be making a proper adjustment to those liabilities? Would I make an adjustment that is large enough or appropriate, and can I justify it to my management? How do I explain this to management when I want to add an additional \$2 million, \$3 million, \$4 million dollars to the liability, 10 percent? Likewise, when claims are going down, now, all of a sudden, they are ultraconservative.

Basically, the problem is lag models do not use the information that is needed, such as information about claims numbers—numbers of claims being processed, admission data, things like that. That is all external to the models. Those are things that you currently have to adjust for independently. Again, I mentioned several things are done in practice. You estimate the backlog, add a fixed amount. You can allocate a backlog amount over a triangle or manually adjust it, but all of those are really subjective. I challenge whether or not you would have made adjustments of the level of 25 percent or more to liabilities when looking at something that's not as simple as just a payment-pattern shift; you also had claim-costs changes, trend changes, differences in seasonality, etc.

In terms of future directions, what can we do? Currently, I know the Health Risk Management Task Force, both the solvency and modeling subgroups, have

expressed concerns about the current state of incurred but not reported (IBNR) claims modeling. The modeling subgroup is looking into the issue, but it is a really early stage of the task force. They have had a couple of meetings so far, and it is unclear what will come out of the group for now. There's some talk about a white paper. But what we do know is that everybody had concerns. What we have not heard yet are solutions.

So where can we go? Well, we could continue to tweak things. I just, off the top of my head, came up with a couple of things that seemed to make minor improvements to the estimations. But when it came down to major issues, like payment lag changes from changing your claim systems, it was down for a month. Minor tweaks were not adequate. Ultimately, I think we need a major overhaul to how we are looking at the liabilities. We have detailed claim databases. We have access to all kinds of information. We have the ability to process huge amounts of information today. So it's not really necessary to consolidate all of our information down into claim triangle cells and lose all the detail that's there, prior to trying to make an estimate of the liabilities. Some things that I know that are out there, obviously, that are used in other disciplines, include time-series analysis. The possibility exists, for instance, of using neural net technology to pick among a lot of different input variables and a lot of different models. You can set up neural nets that take the output from a number of models, and based on historical information, predict which one of those models is giving you a better answer.

So there are some things out there that are possible, but I think that, as a whole, we need to take better advantage of what's there, what other disciplines have come up with in the technique of forecasting data. Despite the collapse of the stock market, I think that there are a lot of analysis tools in use there that could be adapted to our uses. I think that we need to use the wealth of information that we have available to us in our claims databases, in our admissions databases and within our companies to do a better job of projecting health liabilities.

Personally, I do not think the current state of modeling is in a position to provide the degree of accuracy that we are going to need. It's not going to fit the bill. If we're missing our liabilities consistently by 10 percent, 15 percent going forward, that probably isn't going to work in an environment in which you have CEOs having to attest to it and looking at "wearing stripes" if their numbers turn out to be inadequate. I believe that there have to be models that exist that will do a better job. I mean, we're just not utilizing the information that's out there, and we need to figure out a way as a professional body to better utilize the information to come up with better numbers.

**MR. DARRELL KNAPP:** We can open this up to some questions. I would like to get feedback from Mr. Brown. To the extent that you laid out what was required under Sarbanes-Oxley, a lot of things that are going on, are there any changes that you'd foresee in the audit processes for this year? Is there a change in the philosophy in the industry?

**MR. BROWN:** It is a good question. I don't think there's going to be any necessary change, any kind of audit approach or audit process. I think, at least within our firm, we felt that we were doing quality audits, and we will continue to do quality audits. What I see is a situation in which we probably have increased consultations on significant issues. I know, within our firm, we have required consultations when the reserve range is wider than a certain amount, and when the reserve changes within a range (i.e., from the top to the bottom) in a given period. And going back really to what Mr. Crooks was alluding to, is a company trying to manage earnings by moving within a range? And so I think, related to reserves specifically, but related to any significant issue on revenue recognition or things of that nature, we're going to have more consultations with technical experts.

**MR. KNAPP:** I think that, that is what I am seeing, too. One of the big things that seems to have hit very hard for both Enron and WorldCom was the lack of consultation through the process. I think that all of the firms are talking about doing a lot more consultative type of issues. For example, there was one accountant who was making a lot of decisions on his own or was aware of issues that weren't being brought forward or being listened to. And I think we'll see a lot more consulting activity.

**MR. BROWN:** I think you might see some of the firms going to an approach more consistent with ours. To the extent that I consult on an issue with our national practice or our office technical person, I am bound by that advice from the higher-level body. Whereas I think the other firms, especially Andersen, had a situation in which they could take that advice or not. But I think you'll see more structure around consultations to be a significant issue.

**FROM THE FLOOR:** Are you concerned that the new requirements that limit the use of experts by the auditors would actually decrease your ability to go internally in your firm to get the expert advice, specifically from actuaries, as far as what you would need to review someone's financial statements?

**MR. BROWN:** Just related to the specific prohibited service that's listed as expert services, the definition that we believe will apply will be that we can't provide expert witness or expert services in the context of litigation related to assisting a company. Specifically related to getting actuarial expertise within our firm to assist us on audits, that will not change at all. We will continue to utilize our actuaries just as we've used them in the past and continue to work through issues with our clients on reserve ranges, etc., but I don't see the provisions in Sarbanes-Oxley changing the way we work with our actuaries internally on audits at all.

**FROM THE FLOOR:** Your assumption then is that the definition of actuarial services will not be found to include any work by an actuary, but that they'll still be allowed to provide some sort of review.

**MR. BROWN:** That is correct. Let me clarify my beliefs. To the extent that our actuaries calculated the reserves for a client, and no one in management was competent enough to make a decision outside of just taking what the auditor/actuary gave them in booking it, I would say that will create the accounting firm's difficulty going forward under the Sarbanes-Oxley guidance. But that is really no different than the SEC guidance that currently exists. But related to Sarbanes-Oxley, I believe we will continue to be able to assist in scenario modeling and providing assistance to clients as long as they're not using that to book the financial statement information. And then, related to the certifications, we will continue to be able to do those as long as management has a competent actuary and the ability to take responsibility for recording the reserves in the financial statements.

**MR. DAVID BALDWIN:** (Disability Management Services) I was wondering, on more mundane issues, about how to calculate benefit reserves under GAAP. Is there any change coming along as to the methods used for health insurance? Is it still primarily going to be governed by FAS 60 rules?

**MR. BROWN:** At least to the extent that I'm aware, FAS 60 would continue to be the overriding guidance, as supplemented by the guidance in SSAP 55 on health reserves.