

**1995 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS**

**SESSION 4**

**Health Organization Risk-Based Capital**

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## HEALTH ORGANIZATION RISK-BASED CAPITAL

**MR. PETER L. PERKINS:** This is an open forum session, so we have prepared some opening remarks on the history of health organization risk-based capital and a review of the formula. How many people are intimately familiar with the Health Organization Risk-Based Capital (HORBC) formula? Because I see no hands, we'll give you the brief overview of the formula modifications. Commissioner Wilcox will tell you where things stand today and then we'll open up the floor to questions.

Before I start, let me introduce the panel. All these folks worked a great deal on the development of the modifications to the life and health RBC formula. Several of the people in the audience worked very hard as well. First we have Donna Novak. She's an actuary with the Blue Cross/Blue Shield Association. Next is Mike Thompson. He's vice president of financial services with Prudential Insurance Company. Next is Bill Thompson, who's no relation to Mike. Bill is a consultant with Milliman and Robertson in its Bloomfield, Connecticut office. Then we have Bob Wilcox. He's the insurance commissioner of the State of Utah. And I'm Peter Perkins, chief actuary with Trigon Blue Cross Blue Shield.

What I thought I would do is just give you the time line of events that led up to the formula. In November 1994, the NAIC discussed the need for a risk-based capital formula that was sensitive to the wide variety of health coverages that are currently and at the time were anticipated to be offered in the marketplace. That meeting took place on November 4, and on November 8, Commissioner Wilcox sent a letter to the State Health Committee of the American Academy of Actuaries (AAA) to request assistance on several items. The first item was to outline the various risk factors that were involved in health coverages. The second was to come up with a glossary of terms that might give clarity to terms and would help the debate move along. The last item was to develop a risk-based capital formula for health coverages.

The response to the first request was a monograph that was published in February 1994. It's Monograph Number Four entitled the *Actuarial Solvency Issues of Health Plans under U.S. Health Care Reform*. It was written with reference to the Clinton Healthcare Reform Plan that was being debated at the time. I'm sure there are still some general solvency observations that continue to be appropriate.

Between February 1994 and June 1994, the AAA set up a Risk-Based Capital Task Force to develop the formula. The task force was made up of about 40 or more representatives of the health coverage industry and the actuarial profession. After significant modeling and debate, we ultimately arrived at a formula. In June 1994, a first draft was released and then in December 1994, a final report was issued.

After the December 1994 report, the NAIC developed and sent out a survey to various types of carriers to get their reaction to the level of information that was required. The NAIC sought input both in terms of the difficulty or ease of getting the required information, as well as the level of reliability that it could expect from the information.

To start our review of the formula, Mike Thompson will take us through the first section .

**MR. MICHAEL J. THOMPSON:** When the committee met to discuss the formula, a decision was made not to define the actual RBC level of the formula, but to try to define the relative levels of risk. That's why the formula is written in terms of relative values (RVs).

One of the initial intentions of the formula, as Peter indicated, was to create a level playing field among the various managed care entities, HMOs, insurance companies, etc. HMOs are currently not subject to risk-based capital standards per se. They are subject to minimum solvency requirements, which, in many ways, serve a similar type purpose. With this in mind, the committee actually looked at the various health coverage risks regardless of legal entity structure. It looked more at what's the underlying risk to the entity no matter what it's called, and reads as follows:

## Medical Coverage

### Risk Factor

This section is intended to encompass all medical coverages not otherwise addressed in this formula. This includes medical coverage with deductibles up to \$2,500. Coverages with higher deductibles are covered under stop-loss, if such deductibles form a substantial portion of the block of business. For individual coverage, "substantial" means that the ratio of premium coverage with deductibles over \$2,500 to premium for all individual medical coverage exceed 15%. For other than individual, any premium is considered substantial.

C-2 risk factor:  $C \times I + (1.00 \text{ minus Total Managed Care Credit Factor, if any} \times RV) \times (\text{Incurred Claims or Cost of Medical Care Incurred})$ , but not less than  $\$500,000 \times I$ .

Where  $C$  is the smaller of (\$1.5 million) or (2 times the maximum retained risk after reinsurance on any single life.)

The formula starts with a basic RV factor for medical coverage. It defines a fixed value, (the smaller of \$1.5 million or two times the maximum retained risk) and a factor that is multiplied by incurred claims. These factors reflect the pricing risk. This is clearly the overriding risk for most health organizations. I'll talk later about how this might get adjusted with reinsurance, but basically for traditional indemnity health insurance, the capital requirement is a fixed value, plus a percentage of claims.

The formula is then reduced by a managed care credit, recognizing that some types of managed care reduce the risk for the health organization and other types of managed care do not. If the managed care program is just a discount, it is viewed to not have any effect on the risk, and therefore, no credit is given. Discounts may affect the cost level, but not the risk associated with projecting the cost of health care. The formula provides for credits against the risk-based capital if there's a fixed fee schedule, if there are withholds and bonuses where there's some sort of risk sharing with the providers, or where there's capitation, or there's some other form of prepayment. Those credits again are based on the payments that are made on those various bases (Table 1).

TABLE 1

Credit Level	Category of Managed Care	\$\$ Paid	Factor Credit	Product
	(a)	(e)	(f)	(g)
1	Payments made at levels set by contractual agreements, as fixed fees per service, per inpatient day, or per episode of care, if not included in other categories.		15%	
2	Where withholds or bonuses have been paid, the lesser of 25% or 5.56 RV times the prior year's total paid withholds and bonuses divided by the value in 2(e).		0-t 25% <sup>1</sup>	
3	Capitation payments made to entities directly providing medical care, for care directly provided. Excludes capitations where retroactive adjustments in excess of 5% can be made to such capitations as a result of specific performance targets other than total corporate financial results of the health plan. Excludes capitations paid to an organization where any payments are made by that organization to another corporate entity for provision of care, unless such payments can be explicitly identified, in which case they should be used to reduce the credit otherwise allowed in this item. If such payments are demonstrably less than 5% of the total capitation payments, the full credit can be taken.		40%	
4	Noncontingent salaries or aggregate cost <sup>2</sup> payments, when paid directly to persons licensed to provide medical care. <sup>3</sup> Also, the portion of payments made to entities which is passed onto medical care personnel directly providing care, where all payments are noncontingent salaries.		50%	
5	None of the above. (Remaining claims not included in one of the categories above.)		0%	

<sup>1</sup> A factor determined by the formula described in column (a).

<sup>2</sup> The "Aggregate Cost" method of reimbursement means where a health plan has a reimbursement plan with a corporate entity that directly provides care, where (1) the health plan is contractually required to pay the total operating costs of the corporate entity, less any income to the entity from other users of services, and (2) there are mutual unlimited guarantees of solvency between the entity and the health plan, which put their respective capital and surplus at risk in guaranteeing each other. The aggregate costs to be put in this chart equal the payments of the last year, less the largest deviation of actual cost from budgeted in the last five years.

<sup>3</sup> This item will include salaries paid to doctors and nurses whose sole corporate function is utilization review.

The first level of credits is for payments based on fee schedules. The second credit level is for withholds and bonuses. With these arrangements in periods of poor utilization, the providers would share in some of that poor experience. The third type of credit is a credit based for capitation payments. The fourth credit is used for staff model HMO or group models where there is essentially a fixed budget, and a carrier has the ability to adjust that budget if it didn't produce the membership that was expected during the projected period.

Next, there are separate factors for "stop-loss" type coverage. "Stop loss" has been defined as medical coverage with a deductible of more than \$2,500. There are factors for specific stop loss (Table 2), as well as for aggregate stop-loss (Table 3). The aggregate stop-loss RBC is varied, based on whether or not the attachment point is very low, in which case it is looked at more like a fully insured case. If it is a very small case, it is similarly looked at as if the risk is comparable to a fully insured type case. At the higher attachment points and for larger sized groups, the factors are multiples of the factors applied for specific stop-loss. There's also a factor applied to fees for administrative services contracts or administrative services only (ASO) contracts.

Where coverage is reinsured, there is the ability to adjust the minimum capital requirements downward. The "fixed amount" can be reduced two times the maximum amount at risk on any single individual. So if you have some sort of specific claim reinsurance, that fixed amount can be reduced down to a certain level based on two times the maximum amount you can actually have on any single individual.

**TABLE 2**  
**Specific Stop-Loss Factors**

<b>Attachment Point</b>	<b>Factor for Coverage with Hospital Benefits</b>	<b>Factor for Coverage without Hospital Benefits</b>
Less than \$100,000	1.67 RV	1.11 RV
Over \$100,000	2.78 RV	1.85 RV

**TABLE 3**  
**Aggregate Stop-Loss Factors**

Attachment Point	Factor for Groups with the Following Number of Employees:		
	<50	50 to 1,000	>1,000
Up to 1.1	0.85 RV <sup>4</sup>	0.85 RV <sup>4</sup>	0.85 RV <sup>4</sup>
1.1 to 1.2	0.85 RV	1.15 x direct specific stop-loss factors	1.05 x direct specific stop-loss factors
>1.2	0.85 RV	1.10 x direct specific stop-loss factors	1.00 x direct specific stop-loss factors

<sup>4</sup>These factors are applied to equivalent premiums.

And, again, just briefly hitting the highlights, there is an adjustment for assessments. It recognizes that assessments are made on a health organization through health alliances or otherwise. The quantification of this risk is essentially based on history. Another adjustment is when there is not a statement of actuarial opinion that the reserves are reasonable. If an actuary hasn't certified that reserves are adequate, a factor is included to reflect additional risk to the company. With that, I'll turn it over to Bill to continue explaining the formula.

**MR. PERKINS:** Before Bill starts, I'd like to mention something that we, on the task force, discussed at length. There was a great deal of debate as to whether there should be credits for holding reserves that were in excess of minimum requirements; the idea being that that's another cushion against adverse fluctuation. And I believe that after all the debate, we couldn't come to terms with a way to objectively and easily measure what that redundancy was. That's why you see nothing that relates to something relative to a minimum, but just states that the reserves and assets have suffered the level of scrutiny implicit in an actuarial opinion, then there should be some credit allowed for that. With that, I'll turn it over to Bill.

**MR. WILLIAM J. THOMPSON:** This is a great exercise in remembering what we were spending so much time doing over the last year-and-a-half, and we haven't done much of anything with it for



the last few months. Mainly, what I want to do is point out the whole array of coverages that are recognized in the formula. Keep in mind that in this section, the emphasis is on the C-2 risk, which is where we put most of our attention.

The formula describes other health coverages generically with the intent to fold in as many health coverages as we could contemplate in the process. In most cases, the formula was tied to claims. In some cases, it's tied to premiums or lives, depending on the nature of the risk. The definition reads as follows:

Other health insurance coverages are subject to the following risk-based capital levels. Factors, unless otherwise noted, are to be multiplied by the incurred claims for that coverage. Where factors are scaled by number of lives covered, premiums or claims should be allocated as an average amount per life.

The basic formula for dental insurance is tied to the same relative value Mike talked about earlier, and is as follows:

$\$125,000 \times I + 0.78 \text{ RV} \times (\text{incurred claims or cost of dental care incurred}).$

The managed care credit calculation under I.A.2 should be applied to the RV factor above, but not to the flat amount. With the managed care credits indicated, we reflect a managed dental plan. Also, Medicare supplement has been incorporated in the formula, and is: 0.855 RV for coverage of the first 5,000 lives, and 0.684 RV for coverage of lives in excess of 5,000. For at-risk contracts, the following appropriate medical coverages factors should be used.

Disability is the only coverage that I can recall where we are not using the relative value. The formula has absolute numbers. After quite a bit of deliberation, we felt that there are some differences in the nature of the risk that may not roll directly off the same type of relative values that you would find applying to most of the other types of coverages. Hence, these are absolute values.

The following applies to disability income and long-term care with elimination periods less than two years.

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1. Coverage with a maximum benefit period in excess of two years is 25% of the earned premium on the first 25,000 lives, plus 10% of earned premium on the excess, and is subject to the minimum in "4."
2. Coverage with a maximum benefit period of two years or less is 75% of "1.", and is subject to the minimum in "4."
3. When organizations have coverages of the type described in both "1." and "2." above, formula "1." may optionally be used for both coverages, treating the coverage in "2." as though it were coverage in "1."
4. Minimum level: The application of formulas "1." through "3." is subject to a minimum RBC factor equal to three times the maximum benefit amount exposed per life, being the largest monthly income or benefit amount retained per life insured, net of reinsurance, multiplied by the longest benefit period in force, not to exceed 100 months. This minimum level should be applied separately for long-term care and disability income coverages.

Items 1-4 show values that tie principally to premiums. Item 4 has a second component that applies to the claim reserves. We're reflecting risk associated with active lives and future claims. The claim reserve component in a later section deals more with the termination rate runoff of the existing claims that have already incurred.

The following formula for accidental death coverages is back to the relative value of the RV with a minimum on it.

$$C + (0.56 \text{ RV} \times \text{earned premium on the first \$6 million of premium}) + (0.11 \text{ RV} \times \text{earned premium in excess of \$6 million}).$$

Where  $C$  is the smaller of \$300,000 or three times the maximum retained risk after reinsurance on any single life. This excludes Federal Employees Group Life Insurance (FEGLI) and Service Employees Group Life Insurance (SEGLI) coverages.

For accident-only insurance, credit disability, cancer coverages, and hospital indemnity types of care, the values vary based on the size of the block of business.

1. For accident-only coverage, other than accidental death, 0.5 RV is multiplied by the earned premium.

2. In credit disability income, 1.26 RV is multiplied by the earned premium. For single premium credit disability, where unearned premium reserves exceed 50% of earned premium, a credit of 0.05 RV of such excess is divided by total earned premium and can be applied to reduce the factor, otherwise applicable, to a limit where the net factor is not less than 0.8 RV.
3. For cancer and other specified disease coverages, there's 1.65 RV on the first 5,000 lives, 0.78 RV on the excess.
4. In hospital and intensive care indemnity, we see 1.20 RV on the first 5,000 lives, and 0.78 RV on the excess.

This reflects that there's more statistical fluctuation in smaller-sized blocks. The formula reflects a reduction in the risk as you get to a bigger size, which is why you find some of the steps down in factors that exist here. Finally, there is the catch-all category called "Other Health Coverages." For coverages where claims are subject to inflationary trends, 1.5 is the RV; for coverages where claims are not subject to inflationary trends, 1.25 is the RV.

Now all of this sets the stage for the C-2 risk factors. We felt that regulatory constraints and other issues may get in the way of management being able to adopt rate changes that it needs. These factors affect the ability to react via pricing, and hence, increase the amount of risk-based capital that could be required. Therefore, we included a section dealing with the rate filings and approval processes that companies may need to go through. Basically, these processes add to delays between the time you identify your problem and the time you can take corrective actions due to regulatory issues there.

Lengths-of-premium guarantees also have an influence on risk. The initial formula is tied mainly to policies where you would have annual rate guarantees, typically, a 12-month rating period. Guarantees that go much longer than that add to the risk by impeding your ability to take corrective pricing actions. This is why you find the adjustments increasing with the length of rate guarantees shown below:

Policy Anniversaries:	Multiply by 1.00
Guarantees of 7-15 months:	Multiply by 1.00
Guarantees of 16-27 months:	Multiply by 1.25

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Guarantees of 28-36 months:	Multiply by 1.67
Guarantees over 36 months:	1.67 plus 0.42 per full or partial multiple of 12 months

Performance guarantees are becoming more and more common in large group situations where the insurer is being asked to take risk by employers for performance. The performance in question may be administrative performance and other times it may be claim management performance. Often carriers are putting certain amounts of fees or their income at risk. A portion of that amount also has a risk-based capital component associated with it, because it does provide an additional measure of risk that the carrier is getting into.

Next, I will ask Donna to help explain reinsurance credits.

**MS. DONNA C. NOVAK:** The concept of reinsurance is fairly straightforward. The formula assumes that you've actually reduced your risk when you've entered into a reinsurance agreement and transferred some risk to a reinsurer. However, we consider the qualifications of that reinsurer, recognizing the fact that you have not, in fact, transferred risk unless the entity is qualified to accept that risk.

The application of size scales is related to the flat-dollar minimum throughout the formula, which recognized that smaller companies with lower premium and claims still have a minimum risk and this is the method of applying a series of those minimums throughout the formula.

Let's move on to the credit for rate stabilization reserve. Again, recognizing the fact that if you have a rate stabilization reserve, or if you pay a dividend, you actually have protected yourself from some of the risk fluctuations that the formula is designed to measure. This is particularly true in the Federal Employees Health Benefits Program (FEBHP) where there's quite a large reserve that's held by the federal government to be used for down cycles. This part of the formula recognizes that and gives a credit to the risk-based capital for those situations.

The reinsurance assumed risk applies to a reinsurer that is assuming risk based on a reinsurance agreement. The RBC for the business that's being ceded is used as the measure of the risk that's being assumed. So we go back to the ceding company and look at its calculation of the risk that the HORBC formula shows has been transferred, and then is used for the assuming company.

Most of our efforts were aimed at the C-2 risk, but we did look at C-4 risk-type situations for health entities. The adjustment for increasing risk recognizes the fact that companies that are growing quite rapidly often are the ones that do have solvency problems. The formula increases risk-based capital for those situations. The formula states:

The C-4 risk-based capital for this element is 50% of the growth in C-2 risk-based capital from the prior year in excess of 20%. This calculation should be made separately with respect to each category of premium for which a unique set of factors and categories applies in this formula.

When health organizations merge or otherwise acquire both the assets and liabilities of another health organization, the growth in C-2 RBC should be based on the growth in RBC of the combined organization restated for the prior period. The (restated) RBC for the prior period should be calculated as if the new organization had been combined in the earlier period.

In states with guarantee funds, there is a risk of assessment from those guarantee funds. The formula states:

To the extent there are potential assessments by a guarantee fund, the corresponding risk-based capital is a function of the capital levels of other health plans in the service or license area. The risk-based capital from this source is the product of (1) the total capital shortfall in the state (i.e., the dollar amount by which insurers aren't meeting 200% of the authorized control level), divided by the total health premium in the state, multiplied by (2) the company's health premium. In calculating the shortfall, only the proportion which would be assessable to health insurers should be counted.

To the extent the assessments are offset by premium taxes in the state, this risk factor should be offset.

We also addressed guarantees from affiliated companies and investments in subsidiary health carriers, and how to handle those situations in the risk-based capital formula. Briefly, the formula for guarantees from affiliated companies says:

Where the contracts providing such guarantees made by other regulated insurance carriers or health plans, where the company has an unencumbered call on the assets of such other entities in

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the case of imminent insolvency, reporting for risk-based capital purposes can be made on a consolidated basis, including all such carriers, at the insurer's option.

In other cases, recognition of this formula of such guarantees shall be made on a case-by-case basis, and only with the approval of the commissioner in the state of domicile.

For investments in subsidiary health carriers, the formula reads:

The RBC for subsidiary health carriers should be accumulated into the parental entity through separately accumulating the C-1, C-2, C-3, and C-4 risks prior to the application of the covariance formula. Appropriate adjustments should be made to reflect percentage ownership and to eliminate any threshold amounts in the component charges which would otherwise be double-counted. After combining the risks of the parental entity and subsidiary entities, the covariance formula should then be applied.

In those cases where accounting practices would require the reporting of premium equivalents for the same business in both a subsidiary and parent company, adjustments should be made to ensure that the corresponding RBC amounts should be held only in the company which is directly providing the insurance guarantee or services.

**MR. PERKINS:** That's a good overview of the formula. Now Commissioner Wilcox will tell us where the formula and the modifications stand right now.

**MR. ROBERT E. WILCOX:** I appreciate the opportunity to be with you and to talk about some of these issues. I will try to put some of our efforts in perspective. Our original intent was to create an even playing field between the different kinds of entities accepting health care risks. And so we're really faced with a problem that did not exist with the development of either the life RBC or the property and casualty RBC formula in that we have a variety of different kinds of entities that we're trying to pull together for solvency purposes. These entities have some very difficult problems associated with that.

First of all, the entities filed different reporting forms and they used different methodologies and theories in preparing the numbers to go into those reporting forms. And yet the task is to bring all of these together into a common application of risk-based capital. This has been recognized by these different kinds of entities and recognized in that there is a general acknowledgment that we need to move to common reporting and common standards for accounting. So there are other issues related

to HORBC, that are very closely tied, as a matter of fact, and that have been going on and are going on.

First of all, we recognized that the reporting forms, at least in terms of the numbers that could be drawn on for risk-based capital, needed to be brought to a common format. The NAIC has organized a working group for the specific purpose of dealing with the reporting process. In addition to that, there is the codification of statutory accounting. With regard to health plans, this takes on, in many ways, more importance than it does for the other kinds of insurance because of that lack of common structure that exists. Some kinds of health plans prepare their financial statements on a generally accepted accounting principles basis, and some on a statutory accounting basis, and some on modifications of one or the other, so we need to deal with those issues as well.

A particularly important part of statutory accounting with regard to some of the organizations, particularly HMOs, is the treatment of assets that are involved in the delivery of health care. The provisions that exist in the C-1 formulas regarding assets do not adequately treat the question of an HMO that owns a hospital. And before you can really get to that you have to deal with the accounting treatment of the hospital: What is the admitted value of the hospital? And, how do you treat the risk associated with owning a hospital? This is extremely important to delivery of health care which is what we're really about. This is the instance where you can take an illiquid asset and use it to pay claims, in effect, because the claims are the delivery of care. But, on the other hand, if you need to convert that asset to cash to pay traditional indemnity claims, the hospital is probably the worst asset you could own. So those are some of the related issues that we're dealing with.

And then along with that, the NAIC is facing some budget problems that make it difficult to accomplish everything that we'd like to do. But all of this does have to come together before we have a treatment of risk-based capital that's going to make sense and accomplish our initial purpose of an even playing field with regard to solvency requirements and the capital and surplus requirements that underlie those.

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Now when we gave our initial charge to the Academy to develop this formula, we asked them to not consider practicality aspects. That is, we asked them to develop a theoretically correct formula and that the NAIC would undertake the task of reducing that to a practical level and, as you can see, it did that rather well. I don't think there's any question the Academy task force ignored practicality. But that task still lies ahead of us and we have been working on that at the same time as we've been dealing with other issues such as reporting. But we have recognized, and this was done officially at our meeting in Philadelphia, that anyone who can come up with a formula this complex ought to be really good at reducing it down. And so we have drafted a letter to the State Health Committee, addressing an additional charge having to do with the simplification of the formula.

Let me talk about simplification a little bit. Underlying what you do in simplification is the purpose for which you have a risk based capital concept to begin with. The fundamental problem that we looked to as solvency regulators is to identify solvency issues early enough in the process so that there's still the opportunity to apply corrective measures short of receivership. Sometimes those corrective actions are still not adequate and we further rely on the risk-based capital formula as a basis for going before a judge and asking for the authority to take over the company.

But once you have a risk-based capital formula, there are a variety of other things that it tends to be used for and some of these are issues that have been talked about long and in detail. As this has developed within the NAIC, there has been a lot of discussion about the confidentiality of the formula results. On the other hand, the Securities and Exchange Commission says if you know it, you've got to disclose it. So there are a number of issues that are aggravated, if you will, as you increase precision. And so you have companies worrying about whether or not their RBC ratio is a 153% or 149%. A difference, given the overall level of accuracy of the formula, that is inconsequential. I mean those kinds of numbers are really the same from the regulator's point of view, but if these numbers are used for other purposes, then those small differences become important. But our real purpose is to identify the company with problems so that corrective action can be taken before there's a loss to policyholders. That's our ultimate goal.



Solvency regulation does not guarantee that there will never be an insolvency. That's not its purpose. The right to succeed includes the right to fail, but we are very concerned about being able to take adequate corrective measures before policyholders are damaged. So that brings us to the task of getting this particular formula down to something that we can really use and that fits the overall purpose of risk-based capital.

And maybe to give you one more element of perspective on this, a decade ago we adopted a risk based capital formula in the State of Utah. That formula includes all carriers, life, health, and property and casualty. Everything is on one page of the code. And it took some fairly long discussions to put that together, but probably not more than 5% of the discussions that have gone into the formula were on health risk-based capital. And with regard to health insurance, it's a very simple issue. I was on the committee that developed that original formula, and I lobbied for 15% of earned premium. I compromised at 10% of earned premium. That's the risk-based capital formula for health coverages. And now I believe it turns out to be about 17 or 18 pages of formula just on health. So we do have to get it down to something in between those two extremes.

Now as we're looking at simplifying there are certain standards. We want, first of all, all the accuracy we can get. We need a data source to support whatever is in the formula and provide a certain level of accuracy. The data source has to be available; it has to be reliable, and it has to be consistent and auditable. That tends to drive you into the annual statement. Those are the numbers that we know that we can rely on. That doesn't mean that we can't consider other sources that will meet those criteria, but if it doesn't do those things, it really doesn't provide an acceptable basis. Because for the formula to work it has to be fair. The auditable part of it is extremely important because the companies that are going to have problems with risk-based capital are in the position in their existence where they're scrambling. They're trying to find ways to survive when things are going very poorly. So we need to make sure that we can apply this standard in an effective way and that we can audit those results and make sure that they're reliable and that we can rely on the outside auditors of the company, that they have a definitive enough standard that we can rely on the things that they do as well. So those are the kinds of things that we have to look to on a data source.

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Much of what's in the formula will meet those objectives, but much of it will not and so we have to find ways to either substitute different numbers from the published financial reports or change the published financial reports to include the numbers that we need. And even then the numbers that we add must be auditable numbers.

Our objective is to have the minimal effective regulation; I know that sometimes it doesn't seem like it. In that regard, there has to be a look at the cost benefit. We need to make sure the burden that we place on the company for a little bit of additional accuracy in the formula is truly justified. And I think we'll find oftentimes that it won't be. That if we go back to the original purpose of risk-based capital of identifying a troubled company early enough to do something about it, that additional accuracy doesn't really enhance that mission. So we have to have a practical formula that meets that cost benefit analysis and doesn't cost more to prepare the number than the additional accuracy the number provides. I can easily see in some of these that by the time you determine whether or not you have the risk-based capital, you won't have the risk based capital because you will have spent the money measuring it.

In giving up some accuracy, we need to test the formula pretty carefully to minimize the possibility of outliers. We don't want companies to show up as having risk-based capital at a much higher level than they really have, and we don't want to take corrective action because of the inaccuracy of the formula. So all of that has to come together in a reduction of the size of this formula to meet all of those criteria. We have had some discussion with some of the members of the State Health Committee to determine how we're going to do that. Donna is one of those members that we've discussed it with, so it's probably time for her to talk about how the State Health Committee intends to undertake this next phase of the task.

**MS. NOVAK:** I think all of us on the State Health Committee who helped create this formula believe that now. The next step is the simplification, and Peter was certainly one of those who was the most vocal in suggesting simplification. He will be heading up this project going forward.

The first thing that we're going to do is develop a model of the formula and test the sensitivity of the formula to different simplifications. Some of the formula elements just beg to be simplified. But we don't have any sense, as Commissioner Wilcox said, of what the effects would be on the formula's ability to predict insolvencies. So the first step will be to put a model together to test sensitivity. At the same time, we need to look at the annual statement blanks that will be used to provide data and expand them to include the necessary data.

Michael M. Barth from the NAIC has provided us with a whole series of statutory statements that are used by different types of health carriers. We're going to have to go through that whole series of blanks and find out what information is already there and what will have to be augmented in order to support the formula on an ongoing basis.

Personally, I am very excited about this project. I think it can become a winning situation for the profession and for the NAIC. The NAIC can draw on our expertise (at one point we had in excess of 65 individuals involved in the original project), and the actuarial professionals get an opportunity to actually participate in the process rather than be affected by the process after it's already complete.

We're looking forward to moving that into a practical application of HORBC that can be implemented by the NAIC.

**MR. JOHN DAWSON:** I have got a question, an observation, and a suggestion. My question concerns when risk-based capital first came out and how it applied to insurance companies. Now you're talking about applying it to more than that. Just who is it going to apply to? Is it going to apply to HMOs, PHOs (Physician Hospital Organizations), IPAs (Individual Practice Associations), employers who are self-funding? How do we limit it? It's a practical question I know, but what thoughts have you given to that?

**MR. WILCOX:** I'll be interested in the last part of your statement as well, the suggestion. It's our intent to apply this to all of the entities that undertake health risk. For clarification purposes, this particular formula is really in the form of an amendment to the life risk-based capital formula, but it

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is the intent that it will then be comprehensive enough to apply to the other kinds of health risk takers. Now you mentioned the self-funded employers and, of course, they are outside states' jurisdiction by federal act; however, it may not always be so. But in most states, the other kinds of entities that you talk about are under the purview of the Insurance Department, and it would be the intent that they would all be brought under this formula.

**MR. DAWSON:** Okay, my observation regards the formula, it says "Risk-based capital is based on incurred claims," which means it's based in part on how much margin you put into your reserve. And that concerns me a little bit, because that's going to encourage people to hold really low reserves in order to keep their risk-based capital down if their organizations are under financial stress.

Then my suggestion is when you start talking about whether a carrier's risk-based capital is 153% or 149%, instead of arriving at a number, maybe we ought to arrive at which class you end up in. Do you pass, are you on a watch list, are you on a list where we've got to take action, or are you failing? And we're actuaries. We're pretty creative. We should be able to come up with some way where we divide everything and take the integral value and that's what we get. We get four numbers and you get one of them.

**MR. WILCOX:** Bill Weller of the HIAA has made the suggestion that a pass/fail approach be coupled with the detailed formula. If a company has a passing score, no more detail is needed. If the carrier fails to reach a threshold level, then it must go through and do the more detailed calculations. So you have a simpler formula that just results in a pass/fail and then a detailed formula to identify the reasons behind it. I understand why you would make that suggestion, and I think it's a valid one.

On your observation about incurred claims, it's the change in incurred claims that drives claims cost. The fear that we always have is that the company in trouble is going to drive down reserves at the very time when reserves may need to be strengthened. That's one of the reasons that there is regulation and one of the reasons that there's standards of practices for the actuaries who develop reserves.

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**MR. M. THOMPSON:** I'll also comment on the choice of incurred claims versus premium for medical. The decision really stemmed from discussion of the managed care credit. The feeling was that it wasn't adequate to look at product types on a global basis to assess the risk. Whether an HMO product or a point-of-service product, you have to assess how the providers are actually being reimbursed. This forces analysis of claim data. Therefore, the managed care credits were designed to run off of claim-type data. To be consistent, the decision was to make the overall medical factor run off of incurred claims rather than a percentage of premium. That was debated and could have went the other way and may yet, but that was the rationale.

**MS. NOVAK:** I might also add that the Blue Cross/Blue Shield Association and Blue Cross/Blue Shield plans had its own formula called Capital Benchmark which gives managed care credits based on premium. There are many problems in categorizing premiums just for the reasons mentioned. Therefore, I'm personally looking forward to going to incurred claims in HORBC, because it is easier to classify how claims were paid on a managed care basis.

**MR. JERRY W. FICKES:** My first question is for the New Mexico Health Insurance Alliance where I also sit as the chair. Without thinking too well when we set this up, we structured, under our HMOs, a stop-loss at 100% of premium. This is not too difficult to handle on Individual Practice Associations (IPAs), but when we get to the group practice, we're trying to scratch our head as to how much reinsurance credit these group practices would really get on a 100% premium stop-loss in the aggregate. I'm just wondering, because the same thing falls under a risk-based capital as far as giving a C-4 credit, how would we really determine this? Is there a measurement in here where we can convert that group practice into dollars of claims? I think probably Commissioner Wilcox should get this first one.

**MR. WILCOX:** Why me? I'm not sure. If I thought about it, I could come up with the answer for you, but I don't have the answer immediately.

**MR. FICKES:** Could I ask you, Commissioner, to think about it and drop me a note sometime?

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**MR. WILCOX:** Yes.

**MR. FICKES:** I would appreciate it very much. The second question also deals with the C-4 risk or it might even fall under a C-1 which you're not addressing. But I notice that you are addressing guarantees. Basically, the reinsurance guarantee probably comes in under the HMO as opposed to having a guarantee association. I was wondering about the guarantees that go the other way.

I think Donna can probably discuss the one that's in the Blue Cross Association. The federal plan, I believe, actually has assets transferred to the association where they are held in trust, which means they're really being held for a specific plan. So what is this going to do to the either C-1 or C-4 risk for those particular assets that are being allocated?

In addition, many of these organizations such as Blue Crosses or HMOs have started setting up downstream holding companies under which they have other corporations. Sometimes they use the insurer, either the Blue Cross or the HMO, or it could be the insurance company, to guarantee a noninsurance operation that is downstream of the holding company. Now this is a guarantee of that operation. It goes around the holding company, because very often the holding company itself is not solvent. How do we pick that up in the C-4 risk?

**MS. NOVAK:** I think you are referring to the Federal Employees Health Benefits Program (FEBHP), which is the rate stabilization reserve. It comes into the formula under rate stabilization reserve. There's specific language that addresses funds that are held by government agencies, which is the case with FEBHP.

**MR. FICKES:** Well, I can expand on that question then. If we are going to actually segregate rate stabilization reserves, what sort of credit do we have to give in the C-4? That means that that capital, which may be allocated or may not be allocated, may not be available for anything else.

**MS. NOVAK:** I don't know that we did anything in C-4 with this, but if it's allocated to a particular group . . .

**MR. FICKES:** It's gone.

**MS. NOVAK:** If it's allocated to a particular group, you can only take the credit to the amount of the risk-based capital calculated for that group. So you can't end up with negative risk-based capital, which is spelled out in our formula. The funds can only be used for one purpose. So you can't have a rate stabilization reserve for one group actually subsidizing another one. HORBC can't have that situation.

**MR. FICKES:** And how about the downstream guarantees?

**MR. M. THOMPSON:** Well, the intent was that the upstream company should be looked at as a guarantor of those risks. Consequently, the various components of that risk should be looked at on a consolidated basis. I don't think it specifically addressed how you look at the downstream company other than to say if the parent is the one that's actually assuming the overall risk, then you consolidate up and look at risk-based capital at the parent level.

**MR. FICKES:** I realize that if it's an insurance entity, but I'm wondering about noninsurance entities that are guaranteed.

**MS. NOVAK:** It depends upon how your guarantee is written. Can you cite a specific situation?

**MR. FICKES:** Well, some that I have seen say that they are absolute guarantees of performance and of equity of the downstream company.

**MR. PERKINS:** Yet it's not an insurance company?

**MR. FICKES:** No, it's not an insurance company.

**MR. WILCOX:** Sounds like an insurance policy.

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**MR. FICKES:** It's basically third party administrators.

**MR. M. THOMPSON:** I'm not sure you get any credit. That's reinsurance by nonregulated companies.

**MR. PERKINS:** I think that gets to Bob's point. We're looking for risk-assuming carriers. Some of them aren't regulated today, but the idea is they should be subject to HORBC in some way.

**MR. WILCOX:** That's right. If you have entities that are undertaking risk, they need to be subject to these rules. If you're talking about guaranteeing performance of a noninsurer, that sounds like a surety business to me. If that's the kind of contract that a company is going to issue, it sounds like it needs to have a certificate of authority to write that line of business. Am I making sense, Jerry?

**MR. FICKES:** I think you're making sense, Bob, but now you can move that over to some of these big stop losses that have no underlying insurance. I mean is that surety or is that health insurance?

**MR. WILCOX:** Well, we have brought the stop-loss contracts where the risk is a health risk, under the definition of HORBC. So I'm not as troubled by that as a general guarantee of some kind of performance by a nonhealth carrier.

**MR. FICKES:** Which would be a performance to guarantee a trust, premiums, things of this sort. So really it's an amount that you probably don't know.

**MR. WILCOX:** I think that almost has to be treated ad hoc so that you have a clear understanding of the obligations that are being undertaken by the insurance company. And it sounds as if, at least in some instances, the insurance company may be undertaking to promise performances that are outside its scope of licensed authority. It sounds like many of these are not being treated as if they were insurance contracts even though it's a promise of an insurance company to either indemnify or guarantee some particular function. That's troublesome within the scope of overall insurance regulation.



**MR. FICKES:** Well, we've seen this in more than one area now, but thank you.

**MS. CYNTHIA S. MILLER:** I have a comment about the last issue that was raised. I know that the Blue Cross/Blue Shield capital benchmark formula has a specific line that says guarantees to affiliates. It doesn't say what kind of guarantee or what kind of affiliate you're talking about. I think the factor is 50% if I remember correctly. It is sort of a broad category, subject to a lot of interpretation, but I think that it is an attempt to address guarantees.

I also want to know if there was any thought given to the incurred claim question, that you're really penalizing companies that hold higher reserves in the risk-based capital formula which is really opposite of what we want to do. Was any thought given to looking at historical development? I know the property and casualty (P&C) formula on all their lines has part of the formula that looks at a company's historical development from Schedule P. If it has been adequate, you get a credit; or if it has been adverse, then you get hit again. Was there any thought given to that?

**MR. M. THOMPSON:** There was discussion about companies that hold more than adequate reserves: Should they somehow get an extra credit for holding more than adequate reserves? The basic feeling of the group was that it's a very difficult thing to police or assess. Also, it's the responsibility of actuaries to set the reserves to be adequate. They always have the ability to set them at a less redundant level. They always have the responsibility to set them on an adequate basis.

**MS. NOVAK:** Right. There are a number of complications in doing that. How do you pick the minimum reserve? How do you pick the amount that you're going to get the credit for? This, obviously, isn't going in the direction of simplification. There are all the practical problems of setting those amounts, tracking them, reporting them, and auditing them. It became something that was theoretically interesting to discuss, but not practical. The HORBC task force was a little practical.

**MR. WILCOX:** If I could just add one comment to that. When you're talking about loss reserves, it's clearly a transient sort of an advantage that you can gain since the change in the reserves is what

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goes into the incurred claims. If you take advantage of that by having your incurred claims liability reduced at one point in time, it will come back again.

I like your idea of the loss development analysis similar to the schedule P reserve analysis that is done on the P&C side. Perhaps it could be recognized that if reserves are significantly understated as shown by the loss development, that there would be an additional risk-based charge associated with that. That would be potentially a significant deterrent to understanding loss reserves, so I think there's something there that might be worth exploring.

**MR. DAWSON:** Just a thought on that last question. Your answer says it's the actuaries responsibility to set reserves at an appropriate level, but the formula recognizes that some of these companies aren't going to have an actuary setting those reserves, and we're adding about a 20% surcharge. I like the idea of placing a lot of reliance on actuaries because that is our job, but I'm concerned when we're dealing with organizations that don't use actuaries. And if a company has financial difficulties, maybe the first thing they ought to do is fire their actuaries so that they can take advantage of some of the things we're talking about.

**MR. LONNIE M. GRAUL:** It doesn't look like the health risk-based requirements are quite as bad as the life in terms of punishing smaller blocks of business. My company in particular happens to have smaller blocks of health, and life, and annuity business. The irony here is that part of the reason we do that is to reduce our risk as a company to exposure in some of these areas. Risk-based capital turns around and punishes us for increasing our risk somehow by being in several different blocks of business. We think we know how to manage them, so I guess our feelings are hurt. So one idea perhaps might be to combine coverages. For instance, in major medical and Medicare supplement business, I don't see a heck of a lot of difference between them. I don't know why they're treated as separate entities under risk-based capital. You might keep that in mind in trying to simplify their regulation.

Also, there is a very disturbing trend which is that it seems to me that insurance regulation, and I'm not talking about the regulators or the people in insurance departments per se, but certainly the trend

is to make being in the insurance business a lot more risky. Specific examples of that are loss-ratio guarantees, specifically, in Medicare supplement business, community rating guarantee issue, and guarantee renewability for life. These are all trends that are making the insurance business a lot riskier, at least it appears so to me.

**MR. WILLIAM A. KLING:** I have a question having to do with this RV value that's in the formulas. I think the AAA, in its testing, determined that something like 9% was equivalent to a 5% probability of ruin. The question is how that will be determined and whether there is a perception on the regulatory side that the current level of RBC should somehow mandate what the RV level is.

I also have a comment. Small companies sometimes have either small blocks of business in absolute dollar values, or even larger companies that have very small blocks of business that are fairly immaterial to testing solvency for that entity. Have you thought about a way to provide a very simple formula such as  $x\%$  of earned premiums or some such thing that would be very easy for them to comply with, and they wouldn't need to go through all the testing or all of the calculation mechanics that are implied by the formula.

**MR. PERKINS:** Does somebody want to respond to where the RV factor might be set?

**MR. WILCOX:** First of all, with regard to that last question, the idea that you have is along the line of what William C. Weller of the Health Insurance Association of America (HIAA) would suggest.

In terms of setting the RV factor and establishing consistency with the existing formula, I don't think that we want to get into a debate of whether risk-based capital for health plans should be more or less stringent than risk-based capital for other kinds of insurers. That is probably a debate that no one would win. And so I think that there will be consideration given to where the current formula is and the results that it would produce.

That isn't to suggest at the end of the day our formula will not produce different results particularly for certain companies, but, hopefully, we'll be able to explain why there should be a difference when

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that takes place. So I think that the expectation would be that we produce numbers that are similar to, in terms of overall magnitude, the current formula, but with the additional precision and the ability to apply RBC to other than traditional indemnity carriers. As you look at the formula now, 9% is probably not a bad number to look at. But one of the things I became convinced of, as I sat through the many meetings that went on in developing HORBC, and as I looked at the statistical analysis results that produce each of the formulas, is I don't think that the current state of the art with regard to statistical analysis can lead us to the definitive answer that we might wish to have. We talked about this a great deal, but if we talked about confidence levels with regard to failure of an insurance company and at what point would you have sufficient warning to always be able to react to the circumstances, I just don't think that the statistical experts are able to give us quite the definitive answers that we might wish we had. So a lot of it is going to be a "what feels good" kind of an answer at the end of the day. Not that that makes us more comfortable with the scientific accuracy of what we're doing, but the relative relationships here I think will help a great deal. Then if you plug in a particular value of RV, then those areas that you do have a comfort level with, you'll know that that is transferable to the other areas of which you have less familiarity.

**MR. MICHAEL L. EMERSON:** I have two questions. First, would anybody on the panel care to speculate as to the timing of this project from simplification all the way through approval at any level?

**MR. PERKINS:** I don't know that we've been given a deadline yet. Bob, have we been given a deadline yet?

**MR. WILCOX:** I wish I could give you a deadline that we're going to meet. When we started on this project, we had in front of us a mandate from the White House that was going to give us six months start to finish to get the whole job done. That, obviously, was a most daunting task to do that. However, there are lots of reasons why this needs to be moved along as rapidly as we can. To get everything done is difficult when we're talking about changes in annual statement blanks where we haven't yet defined the changes. They have to get into the process of changing the blanks. You all, I know, are regularly irritated by the frequency of changes in the blanks and the lack of time you

have to prepare for them, so that's one of the constraints on what we do. In terms of the codification of statutory accounting, the first edition of the work product of the working group that is undertaking the simplification task is a year away and so all of these things are going to have to fit in place. It's not going to be in effect January 1, 1996. It's not going to be in place January 1, 1997, unless we get another federal mandate that says we have to. Beyond that I think we just need to move as quickly as we can.

**MR. EMERSON:** The second question calls for a clarification of that managed care credit portion of the formula. Would the 15% factor that applies to payments under contractual arrangements call for splitting PPO plan claims into in-network and out-of-network claims before any applicable factor were applied?

**MR. M. THOMPSON:** The 15% factor would be applied where you have contractual agreements for scheduled payments. Typically, you wouldn't have contractual agreements for out-of-network claims in a PPO and so those would probably not get a managed care credit, but would get an in-network credit only to the degree that you have fee schedules and not discounts.

**MR. PERKINS:** Any other questions? Are you sure? All right. Any parting thoughts from our panelists?

**MR. M. THOMPSON:** It might be worth making one other clarification about the credit for capitations. This is more complex than one might otherwise think. The credit for capitations is only given when the capitation is made for providers who are actually giving or providing the care. If you capitate a provider organization, that's taking risk for care it's not providing, then you don't get a credit for that because, in essence, it's acting as an unregulated reinsurer. In practice, this is going to be very hard to apply, and I think that's one of the challenges that the NAIC and the Academy have to try to sort out. But it's a very real concern. It's very easy for a carrier to build a second organization that is capitated. This second organization is taking all the risk that the first organization could have been taking, and there's no regulation of that second entity.

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**MR. PERKINS:** That's a good clarification. Bob, any last thoughts?

**MR. WILCOX:** I think just one thing to finish up on. I've been most gratified by the way in which the profession has stepped up to the plate to assist in this process and develop a work product that can be used even though we have an additional phase to go.

But I see really that there are two levels of professional involvement in the development process. The first was the group, the very large group of people who devoted a substantial amount of time to developing the formula that you have in front of you, and a similar group, probably a smaller group, that will develop the simplifications. But I think there's a second level of professional involvement and that is for you, and your peers who are not at the meeting here, taking the additional time and effort to go through the formula and identifying problems that you see that have not been identified up to this point. Get that information in either to the State Health Committee, to Donna, or to Darrell D. Knapp, or Peter, or directly to the NAIC. But give us that second level of peer review, because we sincerely want to have the best work product that we can have when we're finished. Thank you.