

**1990 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS**

**HEALTH LIABILITIES AND RESERVES**

**MR. PAUL R. FLEISCHACKER:** I was initially going to talk about the actuarial standards of practice and reserving considerations on certain special issues and products, namely, extension of benefits, long-term care, disability income (DI), HMOs, and AIDS. Most of the prior health sessions at this symposium have covered those topics very adequately. As a result, I have felt like a sinking ship!

However, fortunately for me, maybe unfortunately for you, I came up with another topic to discuss -- the NAIC Model Regulations on Minimum Reserve Standards for Individual and Group Health Insurance contracts that were published in 1989.

The Model Regulations have five sections and three appendices:

<b>Section 1:</b>	<b>Introduction</b>
<b>Section 2:</b>	<b>Claim Reserves</b>
<b>Section 3:</b>	<b>Premium Reserves</b>
<b>Section 4:</b>	<b>Contract Reserves</b>
<b>Section 5:</b>	<b>Reinsurance</b>
<b>Appendix A:</b>	<b>Specific Standards for Morbidity, Interest and Mortality</b>
<b>Appendix B:</b>	<b>Glossary of Technical Terms Used</b>

## **1990 SYMPOSIUM FOR THE VALUATION ACTUARY**

### **Appendix C: Reserves for Waiver of Premium**

My presentation will focus on the five Sections and Appendix A.

#### **SECTION 1: INTRODUCTION**

In Section 1, Introduction, the scope, categories of reserves to which the standards apply, and the appendixes are discussed.

The scope of the regulations applies to all individual and group health insurance contracts except credit insurance. Minimum reserves are defined as being reserves that are adequate but not less than the minimum reserves defined in these regulations. This means that, if an insurer determines that adequate reserves are greater than the minimum reserves defined in these regulations, then the higher reserves shall be held and are considered the minimum for that insurer. However, the opposite is not true, i.e., reserves cannot be less than the minimum standard.

The scope section also discusses the ultimate test of reserve adequacy: a prospective gross premium valuation. Bill Bluhm will be discussing this in more detail in his presentation.

The minimum standards apply to three categories of health insurance reserves: claim reserves, premium reserves, and contract reserves.

The adequacy of an insurer's reserves is to be determined on the basis of all three categories combined, but the standards emphasize the importance of determining appropriate reserves for each category.

Appendixes A and B are an integral part of the regulations. Appendix C is supplementary and, as such, is not part of the standards. It is intended to explain and illustrate some of the issues dealing with waiver of premium reserves. As mentioned, I will be discussing only Appendix A.

## **SECTION 2: CLAIM RESERVES**

In general, claim reserves are required on all health insurance policies for incurred but unpaid claims. This includes reported and unreported claims for both accrued and unaccrued benefits.

Appropriate claim expense reserves are also required to be estimated for claim settlement expenses expected to be incurred on incurred but unpaid claims. The standards are silent

## 1990 SYMPOSIUM FOR THE VALUATION ACTUARY

as to the definition of claim settlement expenses, but they should include both allocated and unallocated expenses.

The standard also indicates that such reserves for prior valuation years are to be tested for adequacy and reasonableness.

The minimum standards for claim reserves are defined separately for DI and all other benefits. For DI, the minimum standards for interest, mortality and morbidity are described in Appendix A and will be discussed later. The one exception to these standards is that for claims with a duration from disablement of less than two years. In those situations, an insurer may use its own experience, if credible, or other assumptions designed to place a sound value on the liabilities. Duration of disablement is defined as duration measured from the beginning of the elimination period.

For all other benefits, the maximum interest rate standard for claim reserves is specified in Appendix A. For other assumptions, primarily morbidity, the claim reserves should be based on the insurer's experience, if credible, or other assumptions designed to place a sound value on the liabilities.

The valuation actuary may use any generally accepted or reasonable actuarial method or combination of methods in estimating the claim reserves. The methods can be aggregate methods, or the various reserve items can be valued separately. Also, approximations can be used, such as groupings and averages.

**SECTION 3: PREMIUM RESERVE**

Unearned premium reserves (UEPR) are required for the period of coverage for which premiums have been paid beyond the valuation date -- except advance premiums.

Due and unpaid premiums, if held as an asset, are also subject to UEPR determination. In addition, the insurer must also set up an offsetting liability on due and unpaid premiums for unpaid commissions, premium taxes and cost of collection.

Advance premiums are premiums for a period of coverage beyond the next premium due date. These can be set up as a separate liability or included with the UEPR.

The minimum standard for UEPR is the pro-rata unearned model premium. For policies requiring contract reserves, the model premium is defined as the valuation model net premium calculated using the same basis as that used for the contract reserves. For other policies, it is defined as the gross model premium.

## **1990 SYMPOSIUM FOR THE VALUATION ACTUARY**

There are two limitations that apply to the UEPR. First, the sum of the UEPR and the contract reserve cannot be less than the gross UEPR. Second, the UEPR cannot be less than the expected claims for the period beyond the valuation date represented by such UEPR to the extent not provided for elsewhere.

The valuation actuary may calculate UEPR exactly or use approximation methods, such as, groupings, averages and aggregate estimations.

### **SECTION 4: CONTRACT RESERVES**

Bill Bluhm is going to talk about the general requirements of the standards as they apply to contract reserves.

In general, the minimum standards for morbidity, interest, and terminations (mortality) are described in Appendix A. Regarding morbidity, the standards require that the valuation net premium structure must be consistent with the gross premium structure at issue of the contract as this relates to advancing age, contract duration and the period for which the gross premiums were calculated.

Regarding the termination rates, under contracts in which the gross premiums are not guaranteed and if the effects of insurer underwriting are specifically used by policy duration

## EXHIBIT 9

in the valuation morbidity standard, the insurers may use total termination rates at ages and durations where they exceed the specified mortality table. The total termination rates are limited to the lesser of 80% of the total termination rates used in the calculation of the gross premiums or 8%.

The standards specify that the minimum reserve standard is the two-year full preliminary term method, which may be applied only on the date of issue of the contract. Any adjustments to the reserves after issue due to revisions in the assumptions must be applied immediately as of the effective date of change. Also, negative reserves on one benefit can be offset by positives on another, but the total reserve on the same contract cannot be less than zero.

As an alternative, the valuation actuary may use any set of reasonable assumptions in calculating contract reserves, as long as the contract reserves are not less than the minimums specified in these regulations. The valuation actuary may also use alternative methods, such as net level reserves, one-year full preliminary term, gross premium valuations and approximations, such as age and/or duration groupings, subject to the same conditions as for alternative assumptions.

## **1990 SYMPOSIUM FOR THE VALUATION ACTUARY**

Finally, annually, the insurer shall prospectively test the ongoing adequacy and reasonableness of the contract reserves and make adjustments, if necessary.

### **SECTION 5: REINSURANCE**

In this section, the regulations state that the specified minimum standards apply to both reinsurance assumed and reinsurance ceded.

### **APPENDIX A: SPECIFIC STANDARDS FOR MORBIDITY, INTEREST AND MORTALITY**

The minimum morbidity standards for individual and group insurance contracts are summarized below by type of coverage:

#### **Individual Contracts**

- Disability Income -- both contract and claim reserves
  - Currently issued contracts: either the 1985 Commissioners Individual Disability Tables A (85CIDA) or the 1985 Commissioners Individual Disability Tables B (CIDB).
  - Prior issues: the 1964 Commissioners Disability Table (64CDT); there is also provision to use the 85CIDA or 85CIDB in some intervening years.



- **Hospital, Surgical and Maternity benefits**
  - **Contract reserves:** the 1974 Medical Expense Tables for 1982 and later issues and the 1956 Intercompany Hospital-Surgical Tables for prior issues.
  - **Claim reserves:** no standards are specified. This, in essence, means that the assumptions must be developed by a qualified actuary and are acceptable to the insurance commissioner.
  
- **Cancer**
  - **Contract reserves:** the 1985 NAIC Cancer Claim Cost Tables for 1986 and later issues.
  - **Claim reserves:** no standards are specified (same meaning as above).
  
- **Accidental Death Benefits**
  - **Contract reserves:** the 1959 Accidental Death Benefits Tables for contracts issued in 1965 and later.
  - **Claim reserves:** actual amount incurred.
  
- **Other Individual Contract Benefits**
  - No standards are specified (same meaning as above).

## 1990 SYMPOSIUM FOR THE VALUATION ACTUARY

### Group Contracts (Contract and Claim Reserves)

- Disability Income
  - Currently issued contracts: the 1987 Commissioners Group Disability Income Table (87CGDT).
  - Contracts issued prior: basis used by the insurer except the insurer may use the 87CGDT for claim reserves.
  
- Other group contract benefits
  - No standards are specified (same meaning as above).

Regarding interest rates, the standards specify that the maximum interest rate that can be used in calculating contract reserves is the maximum interest rate permitted by law in the valuation of whole life insurance as of the date of issue of the health insurance contract. The same standards apply to claim reserves except using the claim incurral date rather than the issue date of the contract.

For mortality, the standards state that the mortality table to be used is the same as that permitted by law in the valuation of whole life insurance (but without selection factors) based on the date of issue of the health insurance contract.