

Note: This version of ASOP No. 5 is no longer in effect.
It was superseded in 1991 by ASOP No. 5, Doc. No. 028,
which was superseded in 2000 by ASOP No. 5, Doc. No. 076.



ACTUARIAL STANDARDS BOARD

ACTUARIAL STANDARD
OF PRACTICE
NO. 5

RECOMMENDATIONS AND INTERPRETATIONS
CONCERNING
INCURRED HEALTH CLAIM LIABILITIES

Adopted by the
Interim Actuarial Standards Board (IASB)
March 1988

Developed by the
Health Committee of the IASB

Reprinted 1990

(Doc. No. 007)

TABLE OF CONTENTS

Transmittal Memorandum	iii
INTRODUCTORY STATEMENT	1
RECOMMENDATION NO. 1: Components of Incurred Health Claim Liabilities	2
RECOMMENDATION NO. 2: Recognition of Plan Provisions and Practices	3
Interpretation No. 2-A: Plan Benefits	3
Interpretation No. 2-B: Incurral Date	3
RECOMMENDATION NO. 3: Data Requirements and Assumptions	4
Interpretation No. 3-A: Tabular Methods	4
Interpretation No. 3-B: Development Methods	5
Interpretation No. 3-C: Plans with Insufficient Data	5
RECOMMENDATION NO. 4: Recognition of Trend	6
Interpretation No. 4-A: Tabular Methods	6
Interpretation No. 4-B: Development Methods	6
Interpretation No. 4-C: Plan Benefits	7
RECOMMENDATION NO. 5: Recognition of Exposure	7
Interpretation No. 5-A: Development Methods	7
Interpretation No. 5-B: Regulatory Requirements	7
RECOMMENDATION NO. 6: Recognition of the Time Value of Money	8
Interpretation No. 6-A: Purpose of Estimate	8
RECOMMENDATION NO. 7: Recognition of Claim Settlement Expenses	8
RECOMMENDATION NO. 8: Follow-up Studies	9
RECOMMENDATION NO. 9: Reasonableness of Results	9

April 1988

TO: Members of the American Academy of Actuaries and Other Persons with An Interest in Health Related Actuarial Topics

FROM: Health Committee of the Interim Actuarial Standards Board (IASB)

SUBJ: Recommendations and Interpretations Concerning Incurred Health Claim Liabilities

Background

This booklet contains an actuarial standard of practice concerning incurred health claim liabilities. This Standard has been prepared by the Health Committee of the Interim Actuarial Standards Board (IASB).

The Standard was submitted to the membership in Exposure Draft form in August 1987 and comments were received into November 1987. The Health Committee has considered these comments in preparing a revised Standard that was submitted to the IASB. A detailed report of the comments received and the committee's disposition of them follows this background information.

The Standard contained in this booklet was submitted to the IASB in January 1988 and approved by the IASB then. It was further approved by the Board of Directors of the American Academy of Actuaries and is now in effect for members of the Academy.

The Health Committee of the IASB believes that, particularly in the health area, the professional practice of actuaries varies widely. In some health areas of practice, including that of estimating amounts of liabilities for incurred health claims, there may be significant differences of opinion regarding commonly accepted, proper actuarial practice. Nevertheless, the committee, along with the IASB, firmly believes that standards of practice are needed in this area. The standard of practice promulgated herein sets forth areas of analysis and inquiry that actuaries must consider when their practice involves incurred health claim liabilities. The Standard is not meant to be a prescription of specific methods or procedures.

The committee wishes to point out that the introductory Statement Respecting the Development and Utilization of Recommendations and Interpretations Concerning Incurred Health Claim Liabilities is an integral part of the Standard.

Responses to Comments on Exposure Draft

The Health Committee of the IASB is appreciative of the large number of respondents to the exposure draft. A total of thirty-four individuals responded. The majority expressed support for the exposure draft while several others offered points for consideration without commenting on the overall value of the proposed Standard. Four individuals considered the proposed Standard as

inappropriate or inadequate. All of the comments were carefully considered by the Health Committee and a number of changes were made to the exposure draft as a result of this valuable input. In the introduction to the Standard, the committee has tried to clarify the relationship between this Standard and other applicable reserve requirements. We broadened the definitions of the Tabular and Development methods to recognize that each has many variations, too numerous to try to enumerate. The committee also stressed the estimate nature of any determination of liabilities for incurred but unpaid health claims and the appropriateness of conservative assumptions or explicit margins depending on the purpose of the estimate.

In Recommendation 2, concerning plan provisions, the committee modified somewhat the actuary's responsibility to be familiar with plan documents and in Interpretation 2A explicitly recognized the likelihood that plan benefits may change in the event of plan termination. Interpretation 28 was modified to clarify that reserves for health claims not yet incurred are beyond the intended scope of this Standard.

Recommendation 3, concerning data requirements and assumptions, was changed to recognize that plan data may not be credible or may be distorted by large claims. The actuary in all cases must be satisfied with reasonableness of the data and assumptions.

Recommendation 6, concerning the time value of money, was modified to clarify the importance of recognizing time value of money when material.

Recommendation 7, concerning claim settlement expenses, was changed to recognize that the liability for future claim settlement expenses may be a separate item and not included in the claim liability, and that the actuary should be aware of the manner in which the expense liability is included in plan liabilities.

Recommendation 9, concerning the reasonableness of results, was changed to stress the estimate nature of the determination of the liability for incurred but unpaid health claims, and to point out the value of varying the methods or assumptions involved to establish a range of estimates.

In addition, a number of other changes were made throughout the Standard to conform with the changes described above.

The committee feels that none of these changes is substantive and has concluded that another exposure draft is not warranted. The Standard is, therefore, being recommended to the IASE and the Academy Board as a final Standard.

We wish to thank all of the individuals who gave us the benefit of their comments on the exposure draft. We believe this input has improved the final standards.

Health Committee of the IASB

Ronald M. Wolf, Chairperson

Robert A. Alexander	Raymond M. McCaskey
Steven A. Eisenberg	Stephen A. Meskin
Herbert A. Fritch	Dennis M. Monaghan
Larry M. Gorski	Irwin J. Stricker
David L. Hunt	David B. Trindle
Matt B. Jones, Jr.	Ronald M. Wolf

Interim Actuarial Standards Board

Ronald L. Bornhuetter, Chairperson

E. Paul Barnhart	Walter N. Miller
Edwin F. Boynton	Thomas E. Murrtn
James C. Hickman	George B. Swick
Barbara J. Lautzenheiser	Jack M. Turnquist

ACTUARIAL STANDARD OF PRACTICE NO.5

RECOMMENDATIONS AND INTERPRETATIONS

CONCERNING

INCURRED HEALTH CLAIM LIABILITIES

INTRODUCTORY STATEMENT

The determination of liabilities for incurred but unpaid health claims is an integral, fundamental part of the practice of most health actuaries. It is necessary for the proper completion of financial statements of all kinds, for pricing, and for planning and projections.

This area of practice may be performed by actuaries working in varied fields and positions, such as insured health plans, non-insured plans, health service plans, HMOs and PPOs, and government-sponsored plans.

Techniques used in the determination of incurred health claim liabilities vary widely within the profession. Therefore, this Standard of Practice regarding incurred health claim liabilities, in particular, consists of a list of items that the practicing actuary must consider when performing professional work in this area.

This standard of practice is for “Incurred health Claim Liabilities.” The Committee has chosen “liabilities” rather than “reserves” to provide consistency of language and to recognize that the Standard applies to both insured and non-insured benefits. No attempt is made to distinguish “reserves” versus “liabilities” in a statutory annual statement sense. The word “health” is used to denote such benefits as medical, dental, vision care, disability income, accidental death and dismemberment, and similar benefits.

The Standard of Practice is generic, in that it is intended to apply to health actuarial practice broadly. The Standard applies to both insured and non-insured benefits. In applying this Standard, the actuary should also be mindful of any other applicable requirements, such as GAAP or statutory valuation requirements.

The Standard is not a technical document that mandates any particular calculational methodology. This Standard does contemplate both “tabular” and “development” methodologies as being generally accepted by health actuaries. These terms are defined and discussed briefly as follows:

1. Tabular methods - denotes the application of a reserve factor developed from prior experience to an inventory of claims. For example, claim liabilities for long term disability benefits are commonly determined by use of a tabular method.
2. Development methods - denotes methods under which historical claim data, such as the number and amount of claims for the subject line of business are recorded by period incurred and period paid, and this development pattern is used to estimate the future development of existing claims as of the valuation date.

Numerous variations of these methods may be appropriate.

While these methods are the most commonly accepted, other methods may also be appropriate. For example, during the early stages of a line of business, an approach of multiplying earned premiums by an expected loss ratio and then subtracting paid claims to date may be the only approach practically available.

Recognizing the fact that determination of liabilities for incurred but unpaid health claims is at best an estimate of the true liabilities that will emerge, varying degrees of conservatism or margin will be appropriate depending on the purpose of the estimate.

Actuaries should be able to support the methods and assumptions that have been employed and should be able to state that in the course of their work they have considered the items that are discussed in this Standard. Not all of these items may be valid considerations in each circumstance. An actuary who deems any of these items as being inapplicable should be prepared to give supporting reasons and should also be guided by the Guides and Interpretative Opinions as to Professional Conduct of the American Academy of Actuaries.

RECOMMENDATION NO. 1 - COMPONENTS OF INCURRED HEALTH CLAIM LIABILITIES

This Recommendation relates to the components of liabilities for insured but unpaid health claims, including liabilities for both reported and unreported claims.

When determining liabilities for incurred but unpaid health claims, provision for both reported and unreported claims is necessary. Separate determinations of liability for reported and unreported claims may be appropriate, or the total liability may be determined without reference to the separate components.

Liabilities determined using development methods generally include provision for both reported and unreported claims.

Tabular methods are typically used to determine liabilities for reported claims only. In such situations, a separate determination of liability for unreported claims is necessary.

RECOMMENDATION NO. 2 - RECOGNITION OF PLAN PROVISIONS AND PRACTICES

This Recommendation relates to the need to recognize all pertinent plan provisions, including interpretations, administrative practices, and regulatory requirements in the determination of liabilities for incurred but unpaid health claims.

1. The plan may be an insurance policy, a self-insured plan, a reinsurance arrangement, a provider service agreement, or other form of contract. The actuary should be familiar with pertinent portions of all applicable plan documents or contracts.
2. The plan documents define what benefits are provided, to whom, and when the coverage starts and ends. These plan features may not be clearly delineated in the plan documents but may be the result of established administrative practices and plan interpretations. The actuary should be aware of all pertinent plan provisions.
3. The actuary should recognize regulatory requirements which may not be included in the plan documents.

INTERPRETATION NO. 2-A: PLAN BENEFITS

This Interpretation provides examples of the significance of the benefits provided under the plan in the determination of liabilities for incurred but unpaid health claims.

1. When tabular methods are used, for example, on long term disability plans, the contractual provisions describing the amount and duration of benefit payments, any offsets or integration with social insurance and other programs, and the definition of disability will be important in determining liabilities.
2. When development methods are used, for example on medical plans, it is important to recognize any significant changes in the benefits provided under the plan between the experience period on which the completion factors are based and the time at which the valuation is being performed.
3. It is important to recognize that plan benefits may change in the event of plan termination.

INTERPRETATION NO. 2-B: INCURRAL DATE

This Interpretation relates to the definition of the incurral date of claims and use of the incurral date in the determination of liabilities for incurred but unpaid health claims.

1. The actuary should look to the plan, including plan provisions, interpretations, administrative practices, and applicable regulatory requirements, to define at what point the claim becomes a liability of the plan. This is the incurral date for the claim.

2. If liabilities for claims not yet incurred are also being determined for the plan, the definition of incurrence date should be consistent between such liabilities and the liabilities for incurred but unpaid health claims.

RECOMMENDATION NO. 3 - DATA REQUIREMENTS AND ASSUMPTIONS

This Recommendation relates to data requirements and assumptions used in the determination of liabilities for incurred but unpaid health claims.

1. The claim liability is the actuarial present value, as of the valuation date, of future claim payments under the benefit plan for claims which have been incurred on or before the valuation date.
2. Projections of future claim payments will require data or assumptions as to claim history (such as number and amount of claims), morbidity, mortality, interest, inflation, or other factors which may be relatively constant among plans. Data or assumptions are also required concerning exposure, claim filing and processing, and other factors which may vary greatly between plans and over time.
3. The actuary may consider different assumptions, depending on the purpose for which the valuation is being performed. For example, assumptions may differ when the valuation is performed for statutory rather than GAAP purposes.
4. The data and assumptions employed should be reviewed by the actuary for reasonableness and should reflect the experience of the specific benefit plan, where appropriate.
5. An important requirement of claim processing and accounting systems is the capture of accurate data to permit the determination of the claim incurrence date and the date of payment. The actuary should make every effort to secure such data. The actuary should recognize material differences between incurrence dates determined from these systems and the appropriate incurred dates defined by the plan.
6. In selecting assumptions for current liability determinations, the actuary should review any changes in benefit levels, exposure, claim filing, claim processing, and accounting systems to evaluate the continued applicability of prior claim lag experience.
7. The actuary should consider the most recent available data appropriate for the plan, including experience which has developed since the valuation date.
8. The actuary should be mindful of potential distortions due to large claims.

INTERPRETATION NO. 3-A: TABULAR METHODS

This Interpretation relates to data and assumptions required under tabular methods.

1. When applying tabular methods, the actuary should select the table that is most appropriate in the circumstances. Such selection should give consideration to the benefits being valued, the risk characteristics of the lives involved, and the characteristics of any table considered, including but not limited to its data base, exposure period, and statutory table margins, if any. The actuary should be aware of assumptions used in developing tabular factors and should modify tabular factors where appropriate.
2. When utilizing a particular table the actuary should be aware of all significant variables and parameters that are necessary for the proper use of the table. The actuary should make every effort to see that data is available that is consistent with the required tabular parameters.

INTERPRETATION NO. 3-B: DEVELOPMENT METHODS

This Interpretation relates to data and assumptions required under development methods.

1. A claim development chart shows, for prior experience under the benefit, how payments for claims incurred each period emerged over the periods following incurral. From this data, claim projection factors are determined to estimate remaining claim payments.
2. Claim development patterns may vary considerably among plans and types of benefits. Claim lags in periods of high claim processing backlog will be greater than in periods of low backlog. Claim lags will vary from one administrator to another, and claim lags may change when benefits are changed or exposure changes. There may also be seasonal variations in claim lag.
3. It is important, therefore, that the actuary be familiar with the processes for data collection and be mindful of changes that could significantly alter lag patterns.

INTERPRETATION NO. 3-C: PLANS WITH INSUFFICIENT DATA

This Interpretation relates to the determination of liabilities for incurred but unpaid health claims on plans where there is insufficient claim experience.

1. It may be appropriate to use claim lag experience from similar benefit programs of the same insurer or administrator with modifications to reflect expected differences.
2. Where there is no comparable plan experience, the actuary may elect to use the anticipated claim experience used in the pricing assumptions or appropriate modification thereof.

RECOMMENDATION NO. 4 - RECOGNITION OF TREND

This Recommendation relates to the recognition of determination of liabilities for incurred but unpaid health claims.

1. With respect to health claims, trend is the change over time in claims cost per unit of exposure for the plan, due to factors such as inflation, changes in utilization and technology, changes in economic conditions and the effects of cost-shifting and plan deductibles. These factors should be recognized in the determination of liabilities for incurred but unpaid health claims to the extent that each is applicable and material for the specific plan of benefits being considered.
2. To the extent that different types of benefits and plans are subject to different rates of trend, the estimate of liabilities may differ. It should be recognized that trend rates observed historically may or may not be a good indicator of trend rates to be used in determining liabilities for subsequent periods.

INTERPRETATION NO. 4-A: TABULAR METHODS

This Interpretation relates to the effect of trend in the determination of liabilities for incurred but unpaid health claims using tabular methods.

1. Liabilities for reported claims on benefits which are expected to be paid out over a long period of time, such as long term disability benefits and benefits for long term care, are often determined using tabular methods. Tabular methods should consider any change in the level of benefits that may occur during the lifetime of the claim due to the effect of trend.

INTERPRETATION NO. 4-B: DEVELOPMENT METHODS

This Interpretation relates to the effect of trend in the determination of liabilities for incurred but unpaid health claim liabilities using development methods.

1. Use of development methods typically requires the calculation of completion factors to be applied to observed claims paid through a specific date. Completion factors for the most recent periods may be unreliable. The actuary should evaluate incurred claims for these periods using other methods such as an observed relationship of claims to premiums or exposure from prior periods. Such estimates of incurred claims should appropriately recognize any effect of trend on the plan of benefits for which the liabilities are being determined.
2. When using development methods, the actuary should consider the effect of trend both in the observation period and in the current period for which the claim liabilities are being determined.

INTERPRETATION NO. 4-C: PLAN BENEFITS

This Interpretation relates to the effect of a health plan's benefits structure on trend rates.

1. A health plan's benefit structure can have a significant effect on the choice of appropriate trend rates, particularly with respect to deductible size and internal benefit limits.
2. Deductibles have a leveraging effect on trend rates. For example, a stop-loss policy with a large deductible may require a higher trend rate than a small deductible plan.
3. Plans providing scheduled benefits which are less than prevailing charges, such as some hospital indemnity plans and dental plans, are less affected by inflation but may be affected by other components of trend, such as changes in utilization.

RECOMMENDATION NO. 5 - RECOGNITION OF EXPOSURE

This Recommendation relates to the recognition of exposure in the determination of liabilities for incurred but unpaid health claims.

1. Exposure relates to the number or characteristics of units eligible for coverage. Exposure usually is a measure of the number of lives entitled to benefits but may be other measure if appropriate. Under medical plans, exposure may relate to the numbers or demographic characteristics of covered individuals or family units. Under plans of disability income benefits, exposure may relate to the amount of covered salary or the number of units of monthly income benefits. Exposure may change over time.
2. The actuary's determination of liabilities for incurred but unpaid health claims should take into account any material change in exposure.

INTERPRETATION NO. 5-A: DEVELOPMENT METHODS

1. When using development methods, it is frequently necessary to estimate incurred claims for the most recent periods on some basis other than pure application of completion factors to observed claims. In making such estimates, the actuary should recognize any material change in exposure.

INTERPRETATION NO. 5-B: REGULATORY REQUIREMENTS

1. Exposure can be influenced by regulatory requirements. If laws or regulations require that benefits be offered currently to different classes of individuals than in prior periods, the

actuary should consider to what extent such change in exposure should affect the claim liability estimate.

2. The 1986 enactment of PL 99-272, the Consolidated Omnibus Budget Reconciliation Act (COBRA), is an example of a situation where coverage of terminating employees and certain dependents may be continued for a longer duration.

RECOMMENDATION NO. 6 - RECOGNITION OF THE TIME VALUE OF MONEY

This Recommendation relates to the recognition of the time value of money in the determination of liabilities for incurred but unpaid health claims.

1. The actuary should consider the time value of money when determining liabilities for incurred but unpaid health claims. An interest discount is the most direct way of recognizing the time value of money - as in using tabular methods to determine liabilities for unpaid long term disability claims.
2. The time value of money should be recognized whenever doing so will have a material effect in the determination of liabilities for incurred but unpaid health claims. While it has not been common practice to employ interest discounts explicitly in determining liabilities for medical, dental, or short-term disability claims, this should not preclude the recognition of the time value of money on such short-term benefits.

INTERPRETATION NO. 6-A: PURPOSE OF ESTIMATE

1. The level of any interest discounts may depend on the purpose for which the claim liabilities are being calculated. For state or Federal statutory statements, any interest discounts should be consistent with statutory requirements. For GAAP accounting, any interest discounts should be consistent with GAAP standards.

RECOMMENDATION NO. 7 - RECOGNITION OF CLAIM SETTLEMENT EXPENSES

This Recommendation relates to the recognition of claim settlement expenses in the determination of liabilities for the plan.

1. If the discharge of liability for incurred but unpaid health claims will necessitate future claim settlement expenses, the present value of those expenses should also be considered a liability of the plan.
2. The actuary should be satisfied with the manner in which the claim settlement expense liability is included in plan liabilities.

RECOMMENDATION NO. 8 - FOLLOW-UP STUDIES

This Recommendation relates to the use of follow-up studies in the determination of current liabilities for incurred but unpaid health claims.

1. A follow-up study is a test of reasonableness of a prior claim liability estimate. For claims incurred prior to the original valuation date, it consists of a comparison of subsequent claim payments plus residual claim liability yet unpaid to the original estimated claim liability.
2. The larger the percentage of the prior liability which has been paid, the more reliance should be placed by the actuary on the results of follow-up studies.
3. The actuary should, to the extent possible:
 - a. acquire the data necessary to perform such follow-up studies;
 - b. perform follow-up studies; and
 - c. utilize the results of such studies in making current claim liability estimates.
4. The actuary should take into account changing circumstances in analyzing such studies.

RECOMMENDATION NO. 9 - REASONABLENESS OF RESULTS

This Recommendation relates to the requirement that estimated liabilities for incurred but unpaid health claims should be reasonable.

1. The actuary's determination of the liability for incurred but unpaid health claims is but an estimate of the true liability that will emerge.
2. The actuary should consider varying the methods or assumptions used in order to develop a range of estimates.
3. The actuary should be satisfied that the estimated liabilities for incurred but unpaid health claims are reasonable.