

HEALTH PRACTICE COUNCIL PRACTICE NOTE

October 2005

SMALL GROUP MEDICAL INSURANCE
RESERVES AND LIABILITIES

Prepared by the
Health Practice Financial Reporting Committee
of the American Academy of Actuaries



AMERICAN ACADEMY *of* ACTUARIES



AMERICAN ACADEMY *of* ACTUARIES

HEALTH PRACTICE NOTE 2005-3

OCTOBER 2005

Small Group Medical Insurance – Reserves and Liabilities

This practice note was prepared by a work group organized by the Health Practice Financial Reporting Committee of the American Academy of Actuaries. The work group was charged with updating a previous version of this practice note that described some of the current practices used by health actuaries in the United States for determining actuarial reserves and liabilities for small group health business.

Practice notes generally represent a description of practices believed by the work group to be commonly employed by health actuaries in the United States in 2005. The purpose of the practice notes is to assist actuaries who are faced with the requirement of preparing a statutory statement of opinion by providing examples of some of the common approaches to this work. However, no representation of completeness is made; other approaches may also be in common use. It should also be recognized that the information contained in the practice notes provides guidance, but is not a definitive statement as to what constitutes generally accepted practice in this area. Moreover, these practice notes are based upon the NAIC Accounting Practices and Procedures Manual, which includes the Health Reserve Guidance Manual. To the extent that the laws of a particular state differ from the NAIC model, practices described in these practice notes may not be appropriate for actuarial practice in that state. Events occurring subsequent to the publication of this Practice Note may make the practices described herein irrelevant or inappropriate. The Actuarial Standards Board has not promulgated this practice note, nor is it binding on any actuary.

The members of the work group responsible for this practice note are Donna Novak, chairperson; Karen Bender; James T. O'Connor; Bernie Rabinowitz; and David Shea. They have updated the original practice note issued in 1995. Much of that work has been preserved. The original work group was comprised of James T. O'Connor, chairperson; Karen Bender; Marla A. Cellucci; and Louis A. Vedros.

Comments are welcome as to the appropriateness of the practice note, frequency of updates, substantive disagreements, etc. Comments should be sent to the Academy's State Health Policy Analyst at the directory address.

Small Group Medical Insurance – Reserves and Liabilities

1. Q. What does this practice note address?

A. This practice note addresses questions and issues regarding the valuation actuary's responsibilities under the NAIC Accounting Practices and Procedures Manual, the NAIC model Actuarial Opinion and Memorandum Regulation, the NAIC Health Insurance Reserves Model Regulation, the NAIC Health Reserves Guidance Manual, and the Actuarial Standards Board's actuarial standards of practice (ASOPs) related specifically to determining reserve levels and asset adequacy for small group medical insurance coverage.

While many valuation issues are common to life and health insurance in general, the degree of emphasis varies by type of business and each product type presents its own unique problems, responses, methods, and bases for setting assumptions. Some requirements related to the statutory statement of actuarial opinion for life and health insurance companies reporting on the statutory “blue” blank differ from those for health plans reporting on the “orange” blank. This practice note is one of several health insurance product practice notes that have been compiled to provide information to valuation actuaries.

The actuary may choose to refer to Health Practice Note, *General Considerations*, to review valuation issues that are common to many health insurance product lines that may not be addressed in this note. Actuaries may also choose to visit the American Academy of Actuaries' website “Health” tab to see information on all the health practice notes.

2. Q. For purposes of this practice note, what is small group medical business?

A. Small group medical business includes fully-insured comprehensive medical plans, often sold with various ancillary benefits such as term life, short-term disability, prescription drug card programs, dental, and vision care to small groups. In general, this practice note addresses medical coverage with short duration runoff. Ancillary benefits are considered within this practice note only to the extent that they may affect the choice of assumptions and the evaluation of the medical coverage.

3. Q. For purposes of this practice note, what is a small group?

A. This practice note addresses issues related to small groups as defined by HIPAA and by many states in their health care reform laws. In general, small groups are employers with up to 50 employees. Several states define a small group to include no more than 25 or 35 lives, and some states have increased the number to 100, with certain reform features. Most states indicate that the regulations apply to groups with at least two employees, but a number of states apply some or all of the limitations and small group requirements to employers with one employee. It should be noted that HIPAA requirements are generally limited to underwriting aspects of small

Small Group Medical Insurance – Reserves and Liabilities

employer coverage, while states' laws and regulations address rating as well as underwriting. As such, a group could be considered a small group under HIPAA, but not for rating purposes under state law. Most of the issues addressed will be equally applicable to all groups that are fully insured, non-retrospective, experience-rated benefit plans. However, certain issues will be specific by state to the group size limits defined by state law. The actuary would normally, therefore, be prudent to refer to state law requirements for any applicable limitations on what constitutes a small group.

4. Q. How are reserves and liabilities defined when used in this practice note?

A. Traditional meanings of the terms are intended, particularly for those reserves, liabilities, and related actuarial items for which the valuation actuary must provide a statutory statement of opinion regarding their adequacy. These items are identified in the instructions for actuarial opinion of the NAIC Accounting Practices and Procedures Manual, and all exhibits that support those items. Only statutory reserves are addressed in this practice note. The actuary may wish to refer to Health Practice Note, *General Considerations*, for more detail on these meanings.

While traditional meanings are intended, health care reform actions have made it preferable in many instances for the valuation actuary to consider changes in risk that are reserved for because of the changing regulatory environment in which small group carriers are conducting business. These changes, such as community rating, other premium restrictions, minimum loss ratio requirements, guaranteed issue requirements, etc., may call for additional reserves or for different or additional methodologies for determining reserve adequacy.

This practice note supplements the Health Practice Note, *General Considerations*, in addressing deficiency reserves and issues related to the determination of when such reserves are needed and what reserve amount would normally be held. Also, the actuary should be familiar with ASOP No. 42, *Determining Health and Disability Liabilities Other Than Liabilities for Incurred Claims*.

5. Q. What minimum claim liability contingency margin is usually held for small group medical business?

A. An actuary practicing in accordance with ASOP No. 5, *Incurred Health Claim Liabilities*, and ASOP No. 22, *Statutory Statements of Opinion Based on Asset Adequacy Analysis by Appointed Actuaries for Life or Health Insurers*, may find it prudent to establish a contingency margin, either through the use of conservative assumptions or through an explicit provision for a contingency margin. The introduction of NAIC codification generated much discussion about the practice of including contingency margins in the claim liability estimates established by the carrier. Statutory accounting practices and principles (SSAP) No. 55 calls for the establishment

Small Group Medical Insurance – Reserves and Liabilities

of best estimate liabilities. The question has been asked if the “best estimate” can include a margin of adverse deviation. “Best estimate” has generally been interpreted by health actuaries to include margins in compliance with ASOP No. 5 and ASOP No. 22. Additionally, the Emerging Accounting Issues Working Group concluded that, “the concept of conservatism is inherent to the estimation of reserves and as such should not be specifically prohibited in the consideration of management's best estimate.” It is noted that the NAIC risk-based capital (RBC) formula was developed based upon the current health insurance industry practice of holding contingency margins on the claim liability. As such, the widespread practice of holding the contingency margins has continued. However, there is now more insistence by regulators that the margins that are held be determined in a consistent manner from year to year rather than in an arbitrary fashion.

Items that the actuary may wish to consider in setting the claim liability contingency margin include, but are not limited to, the following: review of historical fluctuations; recent changes in claim trends or adjudication practices or other claim lag factors; introduction of new benefit designs and products; size of block, lapses, and growth; duration of the block; and government regulation (actual and anticipated). A contingency margin may be needed to cover variations in the claim runoff experience that may result from any of these factors. Since the reserve is often a point estimate derived using deterministic methods, a confidence interval is usually not assigned to the estimate. Accordingly, the actuary may wish to perform sensitivity testing using alternate scenarios and/or methodologies. The use of stochastic methods to estimate the claim liability can generally produce a confidence interval. This approach still usually involves an analysis of what upside confidence interval above the 50th percentile is reasonable to assign to the claim liability contingency margin.

The more conservative the set of assumptions used in developing the liability reserve is, the smaller the explicit contingency margin typically would be in order to achieve liability reserve adequacy. The amount of the contingency margin usually varies as the above-mentioned, or other identifiable factors, vary.

6. Q. What does the valuation actuary typically consider regarding business not yet issued as of the valuation date?

A. Historically, small group medical business subject to individual member underwriting has relied on new business and its low loss ratios to generate much of the line's profits, even with select and ultimate rating structures. However, for valuation purposes it is generally advisable to establish reserves and liabilities as if the in-force business were self-supporting and a going concern. Accordingly, rate increase assumptions typically reflect what the carrier is likely to do on an open-block basis, not on a closed-block basis. However, the Health Reserves Guidance Manual issued by the NAIC allows for reasonable assumptions to be used for new enrollment for which premium rate guarantees have been made prior to the valuation period and for changes in

Small Group Medical Insurance – Reserves and Liabilities

enrollment within groups already in force as of the valuation date.

In terms of setting assumptions for gross premium valuation or cash flow projections, the valuation actuary normally uses reasonable expense and investment income allocations between new business and renewals. The wear-off of the impact of underwriting selection and the preexisting condition limitations within the first year of issue are also usually considered in setting assumptions. This has become a less significant factor due to HIPAA. In addition, the actuary is usually prudent to be familiar with state small-group-reform laws, where applicable, and their impact on assumptions.

The actuary generally considers the impact that rewrite (exchange) programs and new plan introductions have on claims and lapse and how such activities are reflected in the experience data that are used to set assumptions.

The valuation actuary also generally considers the adequacy of the new business rates. To the extent that inadequate rates are in place and will not be changed on a timely basis, it may be appropriate to establish premium deficiency reserves. This can be especially important in a guaranteed-issue environment and where, as in most states, the highest rate that can be charged is limited based upon the lowest rate that can be charged (often the new business rate). Furthermore, future rate increases on business in force are limited in most states to the change in the new business rates from one year to the next.

7. Q. What obligation risks are usually considered for small group medical business? How are assumptions typically set for each risk if a gross premium valuation, deficiency reserve calculation, or cash flow testing is to be performed?

A. The following is a list of risk components that actuaries typically use in developing assumptions underlying claim liability developmental methods and for experience projections:

- premium rate structure (including modified community rating implications, where applicable)
- premium rate adequacy
- adequacy of claim reserves
- claim trends
- underwriting selection wear-off
- antiselective shock lapse
- antiselective plan options
- guaranteed issue and renewability implications
- HIPAA
- rate increase limitations
- commissions and expense recognition

Small Group Medical Insurance – Reserves and Liabilities

- rate increase/trend timing mismatches
- managed care provisions and obligations (e.g., incentive pools)
- conversion business
- termination liabilities
- reinsurance commitments
- impact of ancillary products.

Historical and emerging experience generally serves as the key source for setting the assumptions for these risks. The valuation actuary, however, usually will wish to be advised of any known circumstances, such as rate increases, termination action, new products, the competitive market, regulatory changes, provider agreements, and economic or social developments that may require a modification of past experience trends for projecting future experience. Published data can also serve as useful sources for the formulation of assumptions where credible company data are not available.

The valuation actuary is usually prudent to be comfortable with the assumptions being used. Sensitivity and scenario testing are suggested to provide a comfort level and to help determine how much variation the model can tolerate before generating a need to increase reserves.

While termination liabilities, the extra costs due to conversions, and reinsurance costs generally are considered, the adequacy of reserves determination usually also recognizes contributions from small group ancillary business such as group life, AD&D, short-term disability income, and dental, as well as administrative and policy fees.

8. Q. What factors typically are considered in setting assumptions for a gross premium valuation, deficiency reserve calculation, or for cash flow testing?

A. Regarding the performance of gross premium valuation or cash flow testing, some considerations in setting assumptions for premiums, claims, and expenses are as follows:

Premiums—It generally is appropriate to assume rate increases consistent with the company's timing and magnitude of rate increases. Any assumed increases usually are consistent with the rate structure of the business and reflect what is attainable from a regulatory and marketing standpoint. The assumptions also usually recognize any material anti-selective impact of lapses due to rate increases and the impact of benefit changes in lieu of rate increases. For multiple scenario tests, rate increases generally are consistent with assumptions for trend-in-claim costs, and lapses reflect differences due to variance in the size of the rate increases.

Claims—Along with premium assumptions, claims level usually is a key obligation risk. The company's most recent experience is normally used in setting initial loss ratio and claim cost assumptions. In setting assumptions for future claims, some actuaries consider the impact of

Small Group Medical Insurance – Reserves and Liabilities

cyclical trends in loss ratios, while others do not. For a block of business supported by new issues, the loss ratio for the block may be stable. However, if new issues are not considered, claim costs for a closed block usually will tend to increase with aging of the business because of antiselective lapse. Therefore, it is generally appropriate to reflect the wear-off of selection in projections. HIPAA has required that small group policies be guarantee renewable, unless the company exits the small group market in a specified jurisdiction (e.g., in a state). Unless the company has formally made a decision to exit the market and has notified the state(s), the actuary should assume that the company is going to continue to do business in the small group market.

Claim Trends—The actuary is generally prudent to set realistic assumptions for future claim trends, based upon an evaluation of the carrier's experience and future expectations. A conservatively high claim trend, matched by a correspondingly high premium rate increase, is not necessarily a conservative assumption, but could be quite the opposite. If a projection period longer than several years is being used, small group valuation actuaries will often grade the claims-trend assumption to a level reasonably related to the assumed investment yield rate or discount rate. The actuary normally considers durational wear-off and anti-selection.

Commissions and Expenses—Many actuaries make provision in projections for commissions and expenses. Initial expenses usually are based on the most recent experience and attainable company plans for the future. Future unit expenses are usually consistent with assumptions made for inflation in claim expenses, with consideration for differences in general expense inflation and medical inflation. If other lines of business can cover overhead, expenses normally include only direct costs allocable to the small group line.

Under ASOP No. 7, *Performing Cash Flow Testing for Insurers*, actuaries may consider sensitivity testing. Variations in key assumptions are generally tested. Such tests may include elevated levels of trends in claim expense, and sharp deterioration of claim experience due to antiselective lapse. Generally, if initial assets are of suitable investment quality, sensitivity testing for assets will not be needed.

9. Q. What risks are inherent in various rating structures (e.g., pure community rating, individual attained-age rates)? How are reserve requirements likely to differ?

A. Many valuation actuaries consider the various small group medical rating structures and the sensitivity of the assumptions that underlie the rates for a given structure, particularly with respect to the mix of demographic characteristics. Actual variation from pricing expectations does not usually necessitate additional reserve requirements, if there is sufficient margin in the premiums to support the variations. However, the valuation actuary may be prudent to take such variations into account, particularly in areas where community rates are used.

Small Group Medical Insurance – Reserves and Liabilities

Rate guarantees, contractual or state-mandated, generally are considered by the valuation actuary in establishing reserves.

Age-band-rated products may be reviewed for increased lapse risk when an insured moves from one band to the next. This could be significant if sales distributions by age vary from one year to the next. There is likely to be less impact from such movement in states that regulate the use of age bands.

While HIPAA requires all small group policies to be guaranteed issue, provides for severe restrictions on pre-existing condition limitations, and requires policies to be guaranteed renewable, it may still be appropriate to pre-fund selection wear-off through an active life durational reserve if significantly wide rating bands for morbidity and individual attained age rating structures are present. For a discussion of this issue, see Health Practice Note 2005-2, *Individual Major Medical Business*.

Awareness of the underwriting, rates, and rating structures of the carrier's competition is usually beneficial for understanding exposure to antiselection. For example, a community-rated plan will likely have difficulty attracting young, healthy lives if it is competing against an underwritten, attained-age product.

10. Q. Are additional reserves usually established to reflect potential small employer group program assessments?

A. Provisions may be made for the possibility of program assessments if such assessments are likely to be made. These provisions are reported as claim reserves by some carriers and as an accrued expense by others. The nature of the assessment is often the determinate as to how it is reported. The actuary is usually prudent to determine whether the assumptions used in generating this accrual or reserve are reasonable and to take into account material changing circumstances in the legislative environment.

In most instances, individual company decisions will directly affect the establishment of this accrual. If a company participates in voluntary reinsurance pools, there may be more reason to consider establishing an assessment reserve since such a company would usually be subject to the first level of assessments. In states where participation is mandatory, the actuary usually analyzes whether the potential for an assessment of significant magnitude is likely. In states where premium will be redistributed based upon either the loss ratio or the demographics of the carrier (demographics include all risk characteristics), the actuary typically will attempt to quantify the potential impact on the total block of business.

Emphasis generally is placed upon adapting to the changing environment. Such considerations as

Small Group Medical Insurance – Reserves and Liabilities

the introduction of risk-adjustment factors and their role in the redistribution of premium dollars may become especially relevant.

11. Q. Are durational reserves typically established for medically underwritten or small group medical policies containing a preexisting condition limitation or exclusion?

A. The actuary may wish to refer to Health Practice Note 2005-2, *Individual Major Medical Business*. A flatter durational curve generally is expected under HIPAA and state health care reform for small group business, since restrictions on preexisting condition provisions, coupled with the guaranteed issue requirements, will tend to reduce severely the durational selection experienced prior to HIPAA and state reforms.

The frequency of premium changes as well as the durational effect of medically underwritten business may merit consideration. The NAIC Health Insurance Reserve Model Regulation (codified as Appendix A-010, *Minimum Reserve Standards for Individual and Group Health Insurance Contracts* in the SSAPs) states that contract reserves are required for group contracts for which the “value of future benefits at any time exceeds the value of any appropriate future valuation net premiums at that time” due to the gross premium pricing structure at issue. This may technically require establishment of a durational reserve to the extent expected experience meets this criteria. However, due to consideration of the typically short length of this selection period, block rating approaches sometimes being used for small group business, the mix of business by duration, and recognition of the ability of the carrier to change premium rates if needed, such durational reserves are often not established. Gross premium valuation is a method to determine whether to establish durational reserves.

12. Q. What are Section 7 and Section 8 opinions, and what special considerations are usually addressed regarding them?

A. The actuary may wish to refer to Health Practice Note, *General Considerations*, regarding Section 7 opinions. These are being phased out as the new NAIC model valuation law is being adopted by states as part of the NAIC requirements for uniform codification of actuarial opinion requirements. Most companies are now subject to having their valuation actuaries issue what was known as a Section 8 opinion, which requires statements regarding the adequacy of reserves and actuarial liabilities in light of the adequacy of the assets supporting them.

An opinion based upon asset adequacy is currently only required for life and health insurance companies reporting on the statutory life and accident and health reporting blank (the “blue” blank). Health plans and health insurance companies reporting on the statutory health business reporting blank (the “orange” blank) are not required to perform asset adequacy analyses, but a

Small Group Medical Insurance – Reserves and Liabilities

statement regarding adequacy of the reserves and actuarial liabilities is required.

13. Q. What is cash flow testing?

A. The actuary may wish to refer to Health Practice Note, *General Considerations*.

14. Q. Is cash flow testing necessary for small group medical business?

A. ASOP No. 7, *Analysis of Life, Health, and Property/Casualty Insurer Cash Flows*, lists situations in Section 3.2.2 where cash flow testing is not required. Small group medical business is usually viewed as a product with short-tailed liabilities, and, as such, usually has minimal C-3 risk. The most important risk for small group medical business would usually be the C-2 or obligation risk due to the substantial risk of variations in claim experience. Often, this risk can be analyzed using methods other than cash flow testing.

Performance of cash flow testing may give valuable information to both the valuation actuary and management about this business, especially with the advent of small group reform, with features such as guaranteed renewability, limited rate increases, and specified benefit plans.

15. Q. What methods are used to demonstrate asset adequacy for small group medical business?

A. There are a number of methods that are being used to demonstrate asset adequacy for small group medical business. ASOP No. 22, section 5.3, discusses these methods. Some companies have used cash flow testing, while others have used a gross premium valuation approach coupled with a review of the assets (but not a projection of asset cash flows).

Other companies have relied on more traditional methods of claim liability developmental and loss ratio approaches. However, these latter methods may not provide sufficient demonstration of asset adequacy if they are used alone. Other analytical tests regarding active life risks and premium adequacy tests may be useful along with these traditional methods. Additionally, the appointed actuary may wish to examine the assets allocated to the small group medical line in terms of quality, duration, and yield to ensure that they are appropriate for the business.

Small Group Medical Insurance – Reserves and Liabilities

16. Q. How does an actuary demonstrate that a block of business is relatively insensitive to influences such as changes in economic conditions or interest-rate scenarios?

A. ASOP No. 7, section 3.2.2 b, states that cash flow testing may not be necessary: “[i]f, in the actuary’s judgment, a block of business taken together with its policy term and the associated investment strategy, is relatively insensitive to influences such as changes in economic conditions or interest-rate scenarios, the actuary may determine that cash flow testing is not necessary to support the opinion, report, or recommendation, and other methods may be sufficient.”

If this section refers to sensitivity to changes in investment income (and not other forms of general inflation)-, an actuary demonstrates that the block of business is relatively insensitive to influences, such as the effect of changes in economic conditions on investment income, by showing that the premium structure is sufficient, without consideration of investment income, to fund the incurred claims.

Some ways of demonstrating this may be as follows:

- A comparison of net premium to incurred claims for the past several years
- A comparison of investment income to total premium for the past several years: the smaller the percentage investment income is to total premium, the more insensitive the pricing is to changes in economic conditions.
- A demonstration that changes in the interest rate assumption in the gross premium valuation does not impact the conclusions.

While small group medical business is generally considered to be insensitive to changes in economic conditions affecting investment income, it may be sensitive to certain changes in economic conditions that affect other aspects of small group profitability such as changes that affect claim cost levels or general administrative expenses. The actuary may wish to consider testing such scenarios of moderately adverse assumptions through the use of cash flow testing or through gross premium reserve modeling.

17. Q. If cash flow testing is not done for small group medical business, but is performed for other blocks of business, what is usually done regarding the adequacy of assets allocated to the small group medical line?

A. If cash flow testing is performed for other lines of business and not for small group medical business, the residual assets allocated to small group medical business are usually reviewed for

Small Group Medical Insurance – Reserves and Liabilities

duration, quality, liquidity, yield, and appropriateness to the small group lines.

In reviewing the duration of assets, the actuary may wish to consider cash flow from premium. Cash flow from premium and investment income for open blocks is usually sufficient to meet cash flow needs for benefits and expenses, allowing assets to have a longer duration than the claim reserve.

Investment income is generally not as important for small group medical business as it may be for other lines of business. Cash flows from premiums generally far exceed cash flows from assets for stable blocks of business. If the actuary is satisfied that assets are of investment-grade quality and sufficient liquidity, the actuary may choose to forego cash flow testing, particularly when duration of assets is reasonably related to duration of liabilities under an ongoing business scenario (excluding new business).

For closed mature blocks of business for which paid claims are expected to exceed incurred claims and start to draw down the established claim liabilities, additional attention to asset-liability durational matching may be prudent, particularly where collected premiums for the period cannot cover all the claims to be paid and where there may not be other blocks of business that may be relied upon to help minimize the potential impact of any mismatches.

18. Q. What methods are used to test for adequacy of reserves with regard to obligation risk?

A. Obligation risk is any tangible or intangible commitment by, requirement of, or liability of an insurer that can reduce receipts or generate disbursements. In classical surplus risk terminology, obligation risk is labeled C-2 risk. For small group medical business, obligation risk typically includes the claim liability and its associated expenses, along with the commitments a carrier has made to its insureds and its sales force, its provider commitments, and the requirements of the state to issue and renew business and limit the premiums it can charge. Obligation risk usually is the major risk faced by small group medical carriers, while asset and investment risk are generally not as significant.

While cash flow testing is an excellent method for testing the adequacy of reserves, it is not the only method, nor is it always needed, particularly for medical-expense-reimbursement policies. Statistical techniques applied to historical data to quantify the risk may be appropriate and sufficient. This is often particularly true for the evaluation of claim liabilities. The actuary should be aware of the standards presented in ASOP No. 5 concerning incurred health claim liabilities. The use of developmental methods is common for evaluation of claim liabilities of small group medical business.

However, claim liabilities for already incurred claims are not the only obligation risks that may

Small Group Medical Insurance – Reserves and Liabilities

be considered by the valuation actuary. Premium adequacy is usually a key obligation risk for small group carriers. Where in the past the carrier could simply increase premium rates or terminate business whenever it found its rates to be inadequate, in today's competitive and regulatory climate such remedial actions can be far more difficult to implement and in some cases impossible without severe business repercussions. Risks introduced by community rating, guaranteed issue, guaranteed renewability, and HIPAA, as well as potential small group state program assessments and reform laws and return of premium requirements will usually be considered by the actuary. The evaluation of premium adequacy and the potential need to establish certain additional active life reserves may be performed through projection techniques, such as cash flow testing or a gross premium valuation. As part of the analysis, sensitivity and scenario testing may be performed based on various sets of plausible moderately adverse assumptions.

Another gross premium valuation method some actuaries have used is a break-even demonstration. For this approach, a set or sets of projection assumptions are found for which the reserves established are just adequate (break-even) to support the business. The actuary then demonstrates from historical evidence and reason that the resulting assumptions are conservative enough to indicate adequacy in most plausible situations.

Other methods may also be appropriate, provided they address the various risks of the business. Some actuaries might rely upon their work used to determine premium rate increases to demonstrate the adequacy of the future premium flows; others have used corporate planning projections of the business for this purpose. The actuary usually is prudent to clearly document and justify reliance on such related analysis in the actuarial memorandum.

19. Q. When is a gross premium valuation performed to demonstrate reserve adequacy?

A. A gross premium valuation usually is performed when there is reason to believe that the current premium structure may be inadequate to support the future liabilities of the market segment, and that the current premium structure cannot or will not be changed in sufficient time or magnitude to support the future liabilities. Some considerations affecting the decision to perform a gross premium valuation are as follows:

- Ability to implement changes in the current premium structure
- Timeliness of implementation of changes to current premium structure
- Statutory limitations to premium levels or loss ratios, such as conversion contracts where some states require loss ratios greater than 100% of gross premium

Small Group Medical Insurance – Reserves and Liabilities

- Ability and resolution to withdraw from a particular market
- Rate guarantee period, either contractually or by regulation.

Actuaries typically scrutinize closely subsidization of one type of business by another, especially in light of the possibility of one line terminating and the company being prevented from terminating the other line. The actuary may refer to the NAIC's Health Reserves Guidance Manual for guidance regarding contract groupings.

A complete and detailed gross premium valuation may not be conducted annually. The actuary may review the periodic rate analysis that the pricing actuary is routinely generating. The scope, frequency, and detail of this analysis may be of sufficient quality to confirm adequate rate levels. Other sources to consider would be the models employed in the financial forecasts of the company. The actuary typically reviews the appropriateness of the assumptions employed and the sensitivity of results to these assumptions. Such a review normally considers actual experience as well as the current and expected rating environment. The actuary also typically reviews consistency of pricing assumptions employed in the various models and the appropriateness of using different assumptions for pricing, valuation, and forecasting.

20. Q. Are claim cycles and underwriting cycles reflected in the projection assumptions?

A. Claim cycle considerations usually are more appropriate for surplus adequacy analysis, although it would not necessarily be inappropriate to make such assumptions for reserve adequacy purposes. Generally, analysis of claim cycles and underwriting cycles are not required as part of the valuation of small group medical business.

21. Q. How long are the projection periods for small group medical business when actuaries are performing either cash flow testing or gross premium valuations?

A. The period chosen depends upon what is appropriate for the business being evaluated. The contract period (typically an annual period) is usually acceptable for small group medical when performing a gross premium valuation. SSAP No. 54, Individual and Group Accident and Health Contracts, and the NAIC's Health Insurance Reserves Model, appear to contradict each other with regard to the calculation time period. The Health Reserve Guidance Manual offers further guidance in this area, in addition to stating that this contradiction should be resolved through the application of actuarial judgment. The NAIC has indicated that the gross premium valuation and the premium deficiency reserve are two independent requirements. Further they state that "the gross premium valuation is the ultimate test for reserve adequacy that reflects a

Small Group Medical Insurance – Reserves and Liabilities

long-term horizon and is performed in the aggregate, and the premium deficiency reserve is the test for revenue sufficiency that reflects a short-term horizon and is performed on material blocks of business.”

22. Q. When are premium deficiency reserves required for small group medical business?

- A.** Premium deficiency reserves may be required for a small group medical block of business if expected premium income and current reserves plus investment income are not sufficient to cover claims and expenses to be paid for the remainder of a contract period. As mentioned above, the contract period for small group business is generally a one-year term. The actuary usually considers the company’s ability to increase premium rates or reduce expected claims or expenses in subsequent contract (rating) periods to restore the business to profitability when determining whether to extend the PDR calculation beyond the current contract period.

See the NAIC [Health Reserves Guidance Manual](#) and the Health Practice Note, *General Considerations*, for additional discussion on considerations for determining the need for and amount of PDR.



AMERICAN ACADEMY *of* ACTUARIES

1100 Seventeenth Street NW
Seventh Floor
Washington, DC 20036
Telephone 202 223 8196
Facsimile 202 872 1948
www.actuary.org