***Reserving Risk: Actual losses or other contractual payments reflected in reported reserves or other liabilities will be greater than estimated.***

The Reserving Risk Assessment is focused primarily on two key aspects of reserving: 1) reserve valuation and 2) reserve adequacy. Analysis of reserves relies heavily on the review of the Statement of Actuarial Opinion (SAO) and other related filings. In analyzing reserving risk, analysts may analyze specific types of reserves established by health entities, reserving methodologies and various aspects of health insurance that affect reserving. For example, an analyst’s risk-focused assessment of reserving risk may consider the following areas (but not limited to):

* Reserve valuation in accordance with the appropriate valuation requirements
* Reasonableness of valuation bases utilized, testing, assumptions, and methodologies to determine reserves
* Adequacy of assets to support policyholder benefits
* Appropriate reporting of reserves
* Lines of business written by the insurer
* Types of reserves for health lines of business
* Reserve development
* Reinsurance
* Loss adjustment expenses (LAE)
* Claims adjudication

**GENERAL GUIDANCE**

To assess reserving risk, consider the procedures, including specific data elements, metrics, and benchmarks in this chapter. The following is not an all-inclusive list of possible procedures, data, or metrics. Therefore, risks identified for which there is no procedure available should be analyzed by the state insurance department based on the nature and scope of the risk.

The placement of procedures, metrics, and data within reserving risk is based on “best fit.” Analysts should use their professional judgement in categorizing risks when documenting financial determinations of the analysis.

In conducting your analysis, utilize available tools in iSite+ such as financial profile reports, dashboards, investment snapshots, jumpstart reports, and other industry aggregated analysis. Consider also external tools such as rating agency reports, industry reports, and publicly available insurer information.

Analysts are not expected to document every procedure, data, or benchmark result. Rather, analysts and supervisors should use their expertise, knowledge of the insurer and professional judgement to tailor the analysis to address the specific risks of the insurer and document the applicable details within the analysis. Results of reserving risk analysis should be documented in Section III: Risk Assessment of the insurer. Documentation of the risk assessment analysis should be sufficiently robust to explain the risk and reflect the strengths and weaknesses of the insurer.

Results of risk analysis should be documented in Section III: Risk Assessment of the insurer. Documentation of the risk assessment analysis should be sufficiently robust to explain the risks and reflect the strengths and weaknesses of the insurer.

Analysts should complete their reserving risk assessment in conjunction with:

* A review of the Supervisory Plan and Insurer Profile Summary and the prior period analysis.
* Communication and/or coordination with other internal departments. The health entity’s corporate governance which includes the assessment of the risk environment facing the health entity in order to identify current or prospective solvency risks, oversight provided by the board of directors and the effectiveness of management, including the code of conduct established by the board.

**Statement of Actuarial Opinion Assessment Worksheet**

The Statement of Actuarial Opinion Worksheet is intended to provide procedures for reviewing the Actuarial Opinion and other actuarial filings for compliance and assessment of risks. In many states, actuarial staff review the Actuarial Opinion and related filings. Whether the analyst or the actuary performs the SAO review, the Worksheet provides for the results of the SAO review to be documented and communicated to the analyst.

***Refer to the Overview section at the end of this chapter for more guidance on the SAO.***

The SAO must be issued by the Appointed Actuary who is a qualified health actuary appointed by the board of directors. For purposes of the health SAO, the Health Annual Statement Instructions define a qualified health actuary as a member in good standing of the Academy or a person recognized by the Academy as qualified for such health actuarial valuation.

***Procedure #1a.*** Determine that the Table of Key Indicators has been completed. Note that within each section of the Table, only one box should be checked. Identify those sections of the SAO for which it may be appropriate to perform additional analysis, specifically when “Prescribed Wording with Additional Wording” or “Revised Wording” has been checked.

***Procedures #1b–#1e.*** Determine that the SAO was prepared by a qualified actuary and that the reserve amounts agree with the Annual Financial Statement.

***Procedure #1f.*** Determine if the health entity’s actuary, the health entity’s accounting firm, or an officer of the health entity has verified the accuracy and completeness of source data.

***Procedures #2a and #2b.***Determine if the health entity’s actuary has covered the required reserves.

***Procedure #3a.***Determine that the health entity’s actuary’s SAO on reserves is in accordance with the criteria found in the *Health Annual Financial Statement Instructions* Section 7and in particular that the SAO states that the reserves meet the requirements of the state of domicile. The *Annual Financial Statement Instructions* list certain items to include in the SAO paragraph, A through H. Certain other items have been included as separate lines in the past. For 2009, these items should be included within item H. Determine the actuary’s conclusion concerning reserve adequacy in total. It is important for the actuary to document the reasons for his or her conclusion, which should be available upon request by analysts.

***Procedures #3b and #3c.*** Determine that the health entity’s actuarial methods, considerations and analyses used in forming the actuary’s opinion conform to the relevant Standards of Practice as promulgated by the Actuarial Standards Board.

***Procedures #4 and #5.***Perform only in the situation where an asset adequacy test has been performed by the actuary. Review the actuary’s asset adequacy testing and actuarial memorandum that supports the SAO. The *Annual Financial Statement Instructions* and *Health Insurance Reserves Model Regulation* (#10) do not specifically require asset adequacy testing for health entities but may be required by actuarial standards of practices in some specific situations. A small number of health entities hold life insurance licenses and may, therefore, be subject to the asset adequacy and memorandum regulations. Analysts should become familiar with his or her state requirements and special situations that may exist.

For the small number of health entities that are subject to actuarial memorandum requirements, the actuarial memorandum is a comprehensive document that provides an understanding of the health entity’s reserves, the assets available to support the reserves, and the projected impact on the health entity’s financial condition of varying economic and interest rate projection scenarios. It is not automatically filed with the Annual Financial Statement but is provided to the regulator only upon request. The decision as to whether to request the actuarial memorandum is an important one. The actuarial memorandum should be requested for health entities with known financial problems, significant changes in product mix or investment strategy, or significant growth in a particular product line. The Regulatory Asset Adequacy Issues Summary (RAAIS), which is filed with the Annual Financial Statement, assists the regulatory actuary in determining whether to request the actuarial memorandum. The RAAIS would include the following eight data requests, many of which may not apply to health asset adequacy analysis. (Refer to the NAIC *Actuarial Opinion and Memorandum Regulation* (#822), Section 7.):

1. For interest sensitive products, the amount of any negative ending surplus values on a market value basis under each of the Required Interest Scenarios.
2. The extent to which the Appointed Actuary uses assumptions in the asset adequacy analysis which are materially different than the assumptions used in the previous asset adequacy analysis.
3. The amount of reserves and the identity of the product lines which have been subject to asset adequacy analysis in the prior SAO but were not subject to such analysis for the current SAO.
4. The number of additional interest rate scenarios that were tested identifying separately the number of deterministic scenarios and stochastic scenarios. Also, identify the number of such scenarios which produced ending negative surplus values on market value basis.
5. If sensitivity testing was performed, identify the assumptions tested and describe the variation in ending surplus values on a market value basis from the base case values.
6. Comments should be provided on any interim results that may be of significant concern to the Appointed Actuary.
7. The methods used by the actuary to recognize the impact of reinsurance on the company’s cash flows, including both assets and liabilities, under each of the scenarios tested.
8. Whether the actuary has verified that all options embedded in fixed income securities and equity-like features in any investments have been appropriately considered in the asset adequacy analysis.

**ANNUAL RESERVING RISK ASSESSMENT**

***Refer to the Overview section at the end of this chapter for more guidance on health reserves.***

**Adverse Findings from Statement of Actuarial Opinion Assessment**

Risks may include:

* **Minimum Statutory Standards Not Met**
  + Analyst identifies that certain minimum statutory reserving standards have not been met as required by state law/regulation.
* **Management Changes - Change in Opining Actuary** 
  + If there is a change in actuary, consider if the management change results in any changes in reserving assumptions, methodologies, etc.

Review and incorporate any concerns or issues noted in the review of the Actuarial Opinion into the review of the valuation of the health entity’s health reserves. The valuation of these reserves should be in accordance with Appendix A-010 of the AP&P Manual.Issues noted in the review of the Actuarial Opinion may be relevant to aspects of reserve risk identified in other procedures, and risks should be assessed concurrently with those procedures.

Issues or concerns identified through a review of the actuarial opinion assessment may indicate prospective risks. Examples include concerns regarding the qualifications of the appointed actuary, limitations in the scope of the opinion, an inability to reconcile to the Annual Statement, problems with the nature of the opinion, etc.

Procedure

* Review the results of the Statement of Actuarial Opinion Worksheet. Were any concerns noted regarding the valuation of the insurer’s reserves in accordance with minimum statutory valuation standards?

Additional Review Considerations

* If questions or concerns are noted, contact the qualified actuary who signed the insurer’s actuarial opinion to discuss the nature and scope of the health reserve valuation procedures performed.
* If questions or concerns are noted, request a copy of the qualified actuary’s actuarial memorandum and review the actuary’s comments regarding the analysis performed and conclusions reached regarding health reserves.
* Request information from the insurer on who ultimately determines the level of reserves to be booked by the insurer and the board of director’s role in overseeing the reserving process.
* If filed on an insurance entity basis or if your state is the lead state, review the insurer’s Corporate Governance Annual Disclosure (CGAD) filing to understand and assess the board of director~~’~~s’ role in overseeing the reserving process. If your state is not the lead state, rely on the information provided in the Group Profile Summary (GPS) or provided by the lead state, where the CGAD is filed on a group basis.

**Adequacy of Health Reserves (High Reserve Leverages / Large Reserve Adjustments)**

Determine whether an understatement of health reserves would be significant to the health entity.

High reserve leverage is represented by a high ratio of net claim unpaid and net aggregate health reserves to capital and surplus. If claims unpaid, claims reserve, policy reserve and premium deficiency reserve computations are not performed correctly or the selected estimates are unreasonable, capital and surplus could be negatively affected.

In evaluating these leverage ratios, also consider the nature of the health entity’s business. For example, a health entity that has written primarily health business for many years and has proven that it can manage the business profitably is probably less risky than a health entity that has just begun writing health business, even if both entities have the same leverage ratio results.

Reserve adjustments made or anticipated to correct assumptions or other estimates result in a reduction to surplus.

Procedures/Data

* Ratio of gross claims unpaid and gross aggregate health reserves to capital and surplus.
* Ratio of net claim unpaid and net aggregate health reserves to capital and surplus.
* Determine if a reduction in capital and surplus of 10% of the net claim reserve on risk-based capital (RBC) would result in a potential solvency problem if reserves were understated by 10%.

A 200% RBC ratio is the Company Action Level of concern according to the NAIC *Risk-Based Capital (RBC) for Health Organizations Model Act* (#315). A ratio below 200% indicates a health entity must file an RBC plan with the domiciliary state.

Additional Review Considerations

* If questions or concerns are noted, obtain information from the insurer regarding health claims paid after year-end, which were incurred prior to year-end, and test the reasonableness of the year-end claim liabilities established, by the insurer.

Part 2B – Analysis of Claims Unpaid - Prior Year-Net of Reinsurance of the Underwriting and Investment Exhibit provides information that allows analysts to determine if the health entity has had adverse reserve development in the past year. Using this exhibit, a ratio of the paid claims plus reserves for prior periods to the reserves established in the prior year can be calculated. A positive result (ratio > 1) for this ratio represents additional or “adverse” development on the reserves originally established by the health entity (the estimated amount of the original reserves has proven to be understated based on subsequent activity). The amount of reserve deficiency is compared to the reserve to determine if the deficiency was > 10%.

Part 2C – Development of Paid and Incurred Health Claims of the Underwriting and Investment Exhibit shows a history of reserve development. If the health entity’s ratio results consistently show additional development, this could be an indication that the health entity is understating its health reserves. Analysts should review this exhibit to determine if there have been any adverse trends or fluctuations and if reserves have been adequate to pay actual claims.

**Inappropriate or Inaccurate Valuation of Health Reserves**

**Adverse Reserve Development, or Negative Reserve Development Trend**

* Review reserve development as an indicator in determining whether health policies appear to have been adequately reserved. Reserve development can be used as a measure to assess the insurer’s ability to accurately estimate reserves. Analysts also should consider the reserve development trend.

Procedures/Data

* Compare the one-year reserve development to capital and surplus and review and explain any adverse loss development results. [Annual Financial Statement, Underwriting and Investment Exhibit – Part 2B]
  + Determine if the insurer reported a reserve deficiency that was material to capital and surplus.
  + Determine if there has been an increase or decrease in the claim reserve and claim liability as a percentage of incurred claims since prior year-end.
* Review the Annual Financial Statement, Underwriting and Investment Exhibit – Part 2C. Determine if there has been an adverse trend or unusual fluctuation over the last five years.
* Review the Annual Financial Statement, Underwriting and Investment Exhibit – Part 2B and Part 2C. Determine if the reserve has been adequate to pay actual claims.
* Review the Annual Financial Statement, Underwriting and Investment Exhibit to determine which lines of business may have been under reserved at the prior year-end.
* If significant concerns regarding reserve development are identified, request the assistance of a department or consulting actuary in reviewing and assessing the adequacy of the reserves carried by the insurer.

**Reserve Adequacy – Loss Ratio Assessment**

Assess loss ratio and underwriting gain/loss indicators to determine if health policies appear to be adequately reserved. Significant increases in the loss ratio might be indicative of additional health reserves being established due to prior understatements while significant decreases might be indicative of current health reserve understatements.

Typically, significant increases in membership will result in lower loss ratios since first year claims experience is typically lower in the first year. Dropping membership accompanied with increasing loss ratios may indicate that healthier individuals and groups are leaving. This is often the first sign of a potential adverse selection rate spiral where rates force healthier individuals to leave resulting in inadequate rates. Reviewing the per-member per-month medical expense in the prior year or quarter may be further indication of problems, especially if membership is dropping.

By compare the health entities medical claims expense per member per month (PMPM) and claims unpaid ratio to similarly situated industry peers, if significant variances from industry peers are noted, the analyst may need to gain a better understanding of the health entity’s claim experience.

A deficiency reserve is required when future premiums are not sufficient to pay future claims and expenses. If a line of business is showing an underwriting loss there may be a need for a deficiency reserve. It is possible that premium increases have been implemented to correct the deficiency, but the situation should be considered.

A significant decrease in health reserves to incurred claims may indicate that reserves have been weakened. Note, there are other possible explanations for this type of change such as a shift in provider contracting or product design, however analysts should investigate if material changes occur.

Analysts should review the percentage of claims paid on a capitated basis. If this percentage is decreasing, indicating a shift from capitated to fee-for-service, there should be an increase in health reserves in proportion to incurred claims. A shift in the other directions should have the opposite effect.

Procedures/Data

* Loss ratio for each product line.
* Change in the loss ratio from the prior year.

Additional Review Procedures

* Compare the direction of any changes in the loss ratio to the direction of changes in membership.
* Review the ratio of claims unpaid plus aggregate health reserve to incurred claims by line of business for past years to determine unusual fluctuations or trends between years.
* Compare the annual per member per month medical claims expense increased from last year-end compared to similarly situated health entities.
* Compare the ratio of claims unpaid plus aggregate health reserve to incurred claims to similar companies in the industry to determine any significant deviations from the industry average.
* Review the percentage of claims paid on a capitated basis.

**Understatement of Reserves due to Delayed Claims Adjudication/Payment**

The ratio of claims in process of adjudication to the average incurred non-capitated claims per day measures the average number of days of reported unpaid claims in inventory by reducing annual incurred claims to a daily average. An unusual result may indicate problems with claims administration or cash flow.

To determine the size of the backlog you must first determine the average daily-incurred claim expense less capitation. Once you have determined this amount, then determine the amount of claims in the process of adjudication, excluding capitation, divided by the average daily-incurred claim expense, to determine the average number of days of claims backlog.

Results for a recently licensed or rapidly growing health entity may have a high ratio because the growth of the numerator will be faster than the growth of the denominator. Reporting inventory valuation problems may also skew results for this ratio. Also, any IBNR changes will affect any results of this ratio.

Please note that a similar ratio might be calculated based on average daily paid claims instead of average daily incurred medical expense less capitation.

Procedure(s)/Data

* Determine if the amount of claims in process of adjudication to the average incurred non-capitated claims per day is greater than 30.

**High Unpaid Claims Adjustment Expsenses**

Assess unpaid claims adjustment expenses.

Procedures/Data

* Ratio of unpaid claims adjustment expenses to claims unpaid.
* Ratio of unpaid claims adjustment expenses to incurred claims adjustment expenses.

**Reasonableness of Actuarial Methodologies and Assumptions**

Reasonableness may be identified through follow-up to the examination, review of actuarial filings that summarize changes in assumptions/methodologies, discussions with the company, etc. Assess the lines of business written by the health entity, business plans, policy benefits offered, and RBC information in order to gain an understanding of the impact differences in the types of plans may have on reserving risk.

Procedures

* Determine which health lines of business are being written by the insurer.
* Review the insurer’s risk-based capital filing to better understand the types of risk and risk management techniques being used, such as the types of managed care arrangements being used.
* Request a copy of the insurer’s business plan and review the insurer’s plans to assess and mitigate reserve risks.
* Review the Annual Financial Statement, Notes to Financial Statements, MD&A or other correspondence with the insurer to determine if the insurer initiated any internal changes that may impact the reserve estimates.
* Review the insurer’s health insurance plan descriptions and/or policy forms to better understand the types of plans offered and the specific features and benefits.
* Contact the policy forms section of the insurance department and inquire as to whether the insurer has filed any new and unusual health policy forms during the past year.

Additional Review Procedures

* Request and review assumptions for reserve, utilization and benefit costs projected in the development of the contracts.
* Request information regarding any significant changes in reserve methodologies and assumptions, underwriting practices, case reserving, or claims handling practices with the potential to affect reserve setting.

**Adequacy of Long-Term Care (LTC) Insurance Reserves (Risk of Understatement of Reserves)**

Review the LTC Experience Reporting Form of the Annual Financial Statement and the Actuarial Guidelines 51 reporting filed to the department if the insurer writes LTCI to gain an understanding of the reserve adequacy of the LTC line of business. If concerns exist, consider requesting additional information as necessary to assess actual vs. projected results, legacy vs. newer blocks of business separately, any recent rate increases and capital support. If the insurer has recently filed for rate increases on LTCI blocks, consider intra-departmental discussion with the rate increase analysis and outcome with the rate review staff (if a different person than the analyst/actuary performing the valuation reserve analysis).

Procedures

* Review the information reported in the LTC Experience Reporting Form of the Annual Statement, the *Actuarial Guideline LI -The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves (AG51)* reporting, actuarial memorandumor any other related actuarial information filed to the department*,* and identify any concerns with reserve adequacy of the LTC insurance business. Request a department actuary to assist in the review, if available.
  + Gain an understanding of the asset adequacy and cash-flow testing for LTCI on a stand-alone basis.
  + Consider any negative development in total LTCI reserve, asset adequacy reserves (if available), active life reserves, disabled lives reserves and premium deficiency reserves over the last five years.
  + Evaluate the appropriateness of investment return assumptions factoring in the status of the current economic and low interest rate environment.
* If concerns exist:
  + Evaluate actual results vs. original or revised assumptions and financial projections to identify trends and concerns.
  + Consider evaluating legacy blocks of business separately from newer blocks of business.
  + Rate Increases: Obtain and review the following information related to the status of rate increases and reduced benefit options. Consider that some information may be available from rate review staff for recent rate increase filings:
    - Track the progress of rate increases across states where a material amount of business is written.
    - Review projections illustrating the impact of proposed rate increases or reduced benefit options on the company’s future profitability.
    - Determine the extent that future rate increases are included in the amount ($) of reserve offsets, asset adequacy/cash-flow testing and the reasonableness of the assumptions.
    - Consider the impact of historical approvals on the company’s ability to obtain the rate increases presented in the projections. If concerns are identified in this area, obtain and review information on the company’s plans to address these issues.
    - Compare the average percent of rate increases requested to the average approved.
    - Identify the amount of written premium change due to approved rate increases.
  + Regarding the adequacy of internal capital to support the LTCI business, compare the current total LTC reserves (active life and other), net of reinsurance, to the amount of internal capital the company has set aside for LTCI (e.g., internal capital per ORSA if applicable, or rating agency if higher than internal). If necessary, request information to gain an understanding of the degree of conservatism in such capital assumptions.

**Impact of Changes in Valuation Bases of Reserves**

Review the Annual Financial Statement to determine whether there has been a change in the valuation basis of the health policies during the year. Consider a review of changes that result in a decrease in health reserves in an amount greater than 5% of capital and surplus.

Procedures

* Review the insurer’s description of the valuation standards used in calculating the additional contract reserves (which is required to be attached to and filed with the Annual Financial Statement) and consider whether the reserve bases, interest rates, and/or methods appear reasonable.

**Additional Analysis and Follow-Up Procedures**

**Examination Findings:** Consider a review of the recent examination report, summary review memorandum (SRM) and communication with the examination staff to identify if any reserving risk issues were discovered during the examination. If outstanding issues are identified, perform follow-up procedures as necessary to address concerns.

**Own Risk and Solvency Assessment (ORSA)**: Obtain and review the latest ORSA Summary Report for the insurer or insurance group (if available) to assist in identifying, assessing and addressing reserving risks faced by the insurer.

* Determine if the ORSA Summary Report analysis conducted by the lead state indicated any reserving risks that require further monitoring or follow-up.
* Determine if the ORSA Summary Report analysis conducted by the lead state indicated any mitigating strategies for existing or prospective reserving risks.

**Holding Company Analysis*:*** Obtain and review the holding company analysis work completed by the lead state to assist in identifying, assessing and addressing reserving risks that could impact the insurer.

* Determine if the Holding Company analysis conducted by the lead state indicated any reserving risks impacting the insurer that require further monitoring or follow-up.
* Determine if the Holding Company analysis conducted by the lead state indicated any mitigating strategies for existing or prospective reserving risks impacting the insurer.

**Quarterly reserving risk assessment**

The quarterly reserving risk procedures are intended to identify if an understatement in reserves would have a potential impact on the health entity’s solvency and if significant changes in health reserves or health benefits have occurred since the prior year Annual Financial Statement.

Determine whether health policies appear to have been adequately reserved. A change in reserves of greater than 10% may indicate reserves should be looked at more closely. Actual claim payments and the current reserve for prior periods are reviewed in relationship to the prior year-end reserves to determine if the year-end reserve was adequate in light of subsequent experience.

Enrollment, premium, and utilization are reviewed to determine if there have been large changes in these key elements. Increasing utilization may lead to increasing loss ratios if premiums are not increased adequately. Large increasing enrollment may require increasing reserves and large decreases in enrollment may result in increasing loss ratios due to the loss of healthier individuals. This particularly happens when there are large rate increases and healthier individuals, families, and groups shop for better rates elsewhere. If healthier individuals are leaving, there may be a need for deficiency reserves on medical policies. Other types of coverage experience a release of contract reserves when enrollment drops resulting in increasing surplus.

Consider reviewing the Underwriting and Investment Exhibit to determine which lines of business are being written by the health entity and which health lines of business may have been under reserved at the prior year-end. Also consider reviewing: 1) the health entity’s health insurance plan descriptions and/or policy forms to better understand the types of plans offered and the specific policy features and benefits; 2) the health entity’s RBC filing to better understand the types of managed care arrangements being used; and 3) contacting the policy forms section of the insurance department and inquiring as to whether the health entity has filed any new and unusual health policy forms during the past year. In addition, review the health entity’s description of the valuation standards used in calculating the additional contract reserves and consider whether the reserve bases, interest rates, and methods used appear reasonable. (The health entity’s description of the valuation standards used is required to be attached to the filed Annual Financial Statement.) Contact the qualified actuary who signed the health entity’s actuarial opinion to discuss the nature and scope of the valuation procedures performed and/or request a copy of the qualified actuary’s actuarial memorandum to review for comments regarding the analysis of reserves performed and the conclusions reached.

**Understatement of Health Reserves**

Determine whether an understatement of health reserves would be significant.

Procedures/Data

* Ratio of net claims unpaid and net aggregate health reserves to capital and surplus.
* Determine if the current estimate of the insurer’s claims unpaid and aggregate claim reserves would drop the insurer’s prior year risk-based capital ratio below 200%.

**Changes in Health Reserves and Reserve Adequacy**

Determine whether health policies appear to have been adequately reserved.

Procedures/Data

* Change in claims unpaid, the aggregate policy reserves, or aggregate claim reserves from the prior year-end.
* Change in the claim reserve and claim liability as a percent of incurred claims since prior year-end. [Quarterly Financial Statement, Underwriting and Investment Exhibit]
* Change in member months for any line of business from the prior year, same period. [Quarterly Financial Statement, Exhibit of Premiums, Enrollment, and Utilization]
* Point change in the medical loss ratio for any product line from the same period in the prior year.
* Compare the direction of any changes in loss ratio to the direction of changes in membership. Determine if there is an indication that increased loss ratios may be resulting from falling membership.
* Compare to peer health entity results.
  + Increase in the annual per member per month hospital and medical claims expense since last year-end and/or since last quarter, more than similarly situated health entities.

For additional guidance on individual procedure steps, please see the corresponding annual procedures discussed above.

**Actuarial Opinion Assessment overview**

The Table of Key Indicators included in the SAO notes where prescribed language has not been used, as well as if the Statement is other than unqualified. Generally, analysts can focus on the following four steps to compose much of the initial Actuarial Opinion Assessment Procedures.

1. Review Table of Key Indicators for use of other than prescribed language.
2. Review Table of Key Indicators for use of an unqualified opinion.
3. Determine if the Company has provided a notification letter to the domiciliary state describing the appointment of the actuary.
4. Determine if a certification letter is attached if the actuary has relied upon someone for data.

As noted in the discussion of the Actuarial Opinion Assessment Procedures below, in most instances proper review and analysis of the SAO beyond the Actuarial Opinion Assessment Procedures will use in-depth knowledge of actuarial science where most SAOs will be reviewed in detail by actuarial staff members. However, it is up to each state to determine how best to address this review with available resources.

The following provides an in-depth description of elements of the SAO.

The Health Annual Statement instructions contain 10 sections that provide instructions for the SAO, including instructions relevant to the Actuarial Memorandum that supports the SAO. These 10 sections are summarized below.

**Section 1** requires a Qualified Health Actuary (actuary) to render the SAO. For this SAO, an actuary means a member of the American Academy of Actuaries (Academy), or a person recognized by the Academy as qualified for such actuarial valuation. The actuary must be appointed (Appointed Actuary) by the board of directors (or a committee of the board) to render the SAO. Section 1 includes specific responsibilities of the insurer regarding the appointment of the Appointed Actuary and addresses documentation, and replacement requirements. Requirements include notification of any replacement of the Appointed Actuary to the commissioner with disclosure of any disagreements with the prior actuary relevant to the SAO. Requirements are also provided regarding a responsive letter from the prior actuary addressing agreement or disagreement to reasons for replacement provided by the company. When reviewing compliance with Section 1, note that the publication of the changes to the Health Actuarial Opinion Annual Statement Instructions in September 2009 may impact the timeliness of notification and compliance. Section 1 also provides for reporting and documentation requirements between the Appointed Actuary and the board of directors or the Audit Committee. Section 1A provides definitions, Section 1B discusses exemption options and Section 1C provides requirements for the Actuarial Memorandum which supports the SAO.

An insurer who intends to file for one of the exemptions under this Section must submit a letter of intent to its domiciliary commissioner no later than Dec. 1 of the calendar year for which the exemption is to be claimed. The commissioner may deny the exemption prior to Dec. 31 of the same year if he or she deems the exemption inappropriate. A copy of the approved exemption must be provided in lieu of the SAO with the Annual Statement in all jurisdictions in which the company is authorized.

To qualify for an exemption, an insurer must meet one of the four following criteria:

1. An insurer that reports less than $1,000,000 total gross written premiums during a calendar year, and less than $1,000,000 total gross loss and loss adjustment expense reserves at year-end, in lieu of filing the SAO required for the calendar year, may instead file an affidavit under oath of an officer of the insurer that specifies the amounts of gross written premiums and gross loss and loss adjustment reserves.
2. Unless ordered by the domiciliary commissioner, an insurer that is under supervision or conservatorship is exempt from the filing requirements.
3. An insurer otherwise subject to the requirement and not eligible for any of the exemptions previously described, may apply to its domiciliary commissioner for an exemption based on the nature of business written.
4. An insurer otherwise subject to this requirement and not eligible for any of the previously discussed exemptions may apply to the commissioner for a financial hardship exemption. A financial hardship exists if the projected reasonable cost of the SAO would exceed the lesser of:

a) 1% of the insurer’s capital and surplus as stated in the insurer’s latest quarterly statement for the calendar year for the calendar year for that the exemption is sought; or

b) 3% of the insurer’s gross premium written during the calendar year for which the exemption is sought as projected from the insurer’s latest quarterly statements filed with its domiciliary commissioner.

**Section 2** requires that the SAO contain four clearly designated sections: Identification, Scope, Reliance, and Opinion. A fifth section, Relevant Comments, may be provided at the option of the actuary. A Table of Key Indicators must be provided which indicate whether these five sections use prescribed wording only, prescribed wording with additional wording, or revised wording. The Table of Key Indicators also provides whether the SAO is unqualified, qualified, adverse, or inconclusive.

**Section 3** provides a Table of Key Indicators, which indicates whether the sections of Identification, Scope, Reliance, or Opinion use prescribed wording only, prescribed wording with additional wording, or revised wording. The Relevant Comments section provides boxes to be checked that indicate if there is revised wording or if any of the actuary’s work, as detailed in the Actuarial Memorandum deviates from Actuarial Standards of Practice. The Table of Key Indicators also provides whether the SAO is unqualified, qualified, adverse, or inconclusive.

**Section 4** (Identification section) is self-explanatory.

**Section 5** (Scope section) is also self-explanatory where all actuarial items listed in the instructions should be provided even if amounts are zero.

**Section 6** (Reliance section) requires the actuary to identify any person upon whom the actuary relied for data used in the reserve analysis. A statement from the person relied on is also required by this section. The actuary may choose to accept responsibility for the data without reliance on another. The actuary would state this by using prescribed language in this section.

**Section 7** (Opinion section) provides the prescribed statements the actuary is to make that opine on the items identified in Section 5. This is a key section to review for deviations from prescribed language that form the basis for whether the SAO is unqualified, qualified, adverse, or inconclusive as indicated in Section 3.

**Section 8** (Relevant Comments section) is optional. The actuary may use this section to state a qualification of his or her opinion or provide greater explanation of that qualification. The actuary may also address topics of regulatory importance or explain some aspect of the annual statement. Examples may include explanations of any material changes in assumptions or methods that were made during the year.

**Section 9** of the SAO instructions provides additional guidance to the actuary regarding adverse, qualified, or inconclusive opinions. The determination of adverse, qualified, or inconclusive must be explicitly stated in the Table of Key Indicators provided in the Opinion. It is expected that adequate explanation of this determination be provided in the Opinion.

**Section 10** of the Opinion provides for signatures which is self-explanatory.

**Considerations**

Requirements for the SAO provide for conformance with specific Standards of Practice adopted by the Actuarial Standards Board (ASB) of the Academy, including standards relating to follow-up studies and standards of what should be included in a SAO. For managed-care health plans, ASB standards for SAPs (ASOP 5, “Incurred Health and Disability Claims” or ASOP 42,” Determining Health and Disability Liabilities Other than Liabilities for Incurred Claims”) require consideration by the actuary of any capitated risk contracts that exist. Such consideration should also include or indicate whether the actuary has evaluated the financial position of the provider entities.

There is a significant difference between the SAO requirements as found in the Life, Accident & Health or Property & Casualty Annual Financial Statements and the Health Annual Financial Statement. Effective for 2003 Statutory Statements, companies with over 95% of specific types of health insurance would file the Health Annual Financial Statement regardless of their state license. Such companies must comply with not only the SAO requirements of the Health Annual Financial Statement but also with the SAO requirements based on their state license. For example, life insurance companies who file the Health Annual Financial Statement are still subject to any asset adequacy SAO requirements as required by the SAO and Memorandum Regulation pursuant to the Standard Valuation Law.

The NAIC *Health Insurance Reserves Model Regulation* (#10) if implemented by a state with respect to health entities defines the minimum reserve requirements. The NAIC *Accounting Practices and Procedures Manual* (AP&P Manual) Appendix A-010 defines minimum health reserve requirements when there are no other state specific requirements[[1]](#footnote-2). Although Appendix A-010 describes the separate minimum standard for each type of reserve separately, *Statement of Statutory Accounting Principles (SSAP) 54R—Individual and Group Accident and Health Contracts* requires a health entity’s health insurance reserves to also be tested in total using the gross premium valuation method. The SAO for the Health Annual Financial Statement is required to address certain other liabilities as well as these specific reserves. The *Annual Financial Statement Instructions* specifically include:

1. Claims unpaid (Page 3, Line 1).
2. Accrued medical incentive pool and bonus payments (Page 3, Line 2).
3. Unpaid claims adjustment expenses (Page 3, Line 3).
4. Aggregate health policy reserves (Page 3, Line 4) including unearned premium reserves, premium deficiency reserves, and additional policy reserves from the Underwriting and Investment Exhibit – Part 2D.
5. Aggregate life policy reserves (Page 3, Line 5).
6. Property/casualty unearned premium reserves (Page 3, Line 6).
7. Aggregate health claim reserves (Page 3, Line 7).
8. Any other loss reserves, actuarial liabilities, or related items presented as liabilities in the annual statement.
9. Specified actuarial items presented as assets in the annual statement.

Although the instructions specifically identify the above actuarial items for review, certain other actuarial items also require review as provided in the general item H above. Some actuarial items are often incorporated into the required items while others have not been incorporated in the required list.

Actuarial reserves and liabilities that are incorporated into the required items above are as follows (note items 1a & 1b are specifically referenced in item D in the list above):

1. Aggregate Health Policy Reserves (Page 3, Line 4) includes:
   1. Unearned Premium Reserve (Underwriting and Investment Exhibit – Part 2D, Line 1).
   2. Additional Policy Reserves (Underwriting and Investment Exhibit – Part 2D, Line 2).
   3. Reserve For Future Contingent Benefits (Underwriting and Investment Exhibit – Part 2D, Line 3).
   4. Reserve For Rate Credits or Experience Rating Refunds (Underwriting and Investment Exhibit – Part 2D, Line 4).
   5. Aggregate Write-ins for Other Policy Reserves (Underwriting and Investment Exhibit – Part 2D, Line 5).
2. Aggregate Health Claim Reserves (Page 3, Line 7) includes:
   1. Present Values of Amounts Not Yet Due on Claims (Underwriting and Investment Exhibit – Part 2D, Line 9).
   2. Reserve For Future Contingent Benefits (Underwriting and Investment Exhibit, Part 2D, Line 10).
   3. Aggregate Write-ins for Other Claim Reserves; Actuarial Reserves Should Be Included in the SAO (Underwriting and Investment Exhibit – Part 2D, Line 11).

Note that additional policy reserves include premium deficiency reserves. Premium deficiency reserves are identified in Underwriting and Investment Exhibit – Part 2D, Footnote a.

Scope section, discussed above for Section 5 of the Annual Statement SAO Instructions, should specifically identify those items and amounts to which the actuary is expressing an opinion, including but not limited to the above specifically identified lines from the Annual Financial Statement. Where the actuary determines that no liability exists, the value $0.00 should be entered. Lines should not be deleted.

If there has been a material change in the actuarial assumptions from those previously employed, that change should be described in the Annual Financial Statement and in the Relevant Comments section of the SAO. (See Section 8 of the Annual Statement SAO Instructions and summarized above.)

If the actuary has not examined the underlying records, but has relied upon product definitions, computer listings and summaries of enrollment and claims payments prepared by the health entity, a prescribed statement to this effect is required by the Reliance section of the SAO. A signed statement by the person relied on is also required by this Reliance section for items provided, confirming the accuracy, completeness, and/or reasonableness of the items. Instructions for the Reliance section of the SAO are provided in Section 6 of the Annual Statement SAO Instructions.

Most health coverages do not require extensive cash flow testing, due to the short duration of the claim liabilities. The ASB has issued Actuarial Standards of Practice to guide actuaries in determining when an asset adequacy analysis should be performed and methods of asset adequacy analysis to consider. One of these is a prospective gross premium valuation. There is also guidance in the *AP&P Manual*,Appendix A-822 Asset Adequacy Analysis Requirements. If required by either regulation or professional standards, the actuary should have included an opinion of the asset adequacy.[[2]](#footnote-3) Unlike life insurance opinions, there is currently no specific guidance for health asset adequacy opinions.

As provided in the instructions and mentioned above, the SAO can take four forms:

* Unqualified SAO
* Qualified SAO
* Adverse SAO
* Inconclusive SAO

In cases where the SAO is other than unqualified, analysts should determine what the weakness is that prevents an unqualified SAO. A qualified SAO would state that the reserves may be adequate, but there are somewhat likely circumstances under which they would not be adequate. An adverse SAO is one in which the amounts reviewed do not satisfy opining statement “D” in the SAO section of the SAO. This opining statement “D” reads as, “Make a good and sufficient provision for all unpaid claims and other actuarial liabilities of the organization under the terms of its contracts and agreements.” An adverse SAO implies that amounts reviewed are not adequate under state regulations and/or actuarial standards. If the actuary’s SAO is adverse or qualified, the actuary should specifically state the reason(s) for such an SAO in the Opinion section and/or Relevant Comments section of the SAO. If the actuary is unable to form an opinion, the actuary should issue an inconclusive SAO and specifically state the reason(s) for this.

**Reserving Risk Assessment overview**

Health reserves are intended to: 1) cover claims payments for claims that have been incurred prior to the valuation date and have not yet been paid; or 2) to retain a portion of current revenues to cover future incurred claims that the company anticipates it will be obligated to pay. The NAIC *Annual Financial Statement Instructions* and theAP&P Manualcontain specific guidance for distinguishing between certain types of claim liabilities*.* Specifically, SSAP No. 54R and *SSAP No. 55—Unpaid Claims, Losses and Loss Adjustment Expenses* differentiate between claims that have accrued costs (claim liabilities) and claims that may have been incurred but for which costs will be accrued in the future (claim reserves). For this handbook the term reserve will be used in its broader sense to include items denoted as reserves as well as other items called liabilities.

When there are reserves and liabilities for claim amounts to be paid in the future there will also be expenses associated with paying these claims. The liability for the administrative expense associated with paying these claims is entered in “Unpaid Claims Adjustment Expenses.”

The incurred date of a claim is the first date on which the company has an obligation to pay for a contracted benefit. The incurred date of a claim depends on the type of product and the contract language. Some examples of incurred date determination would include:

* Hospital claims are incurred on the date of admission.
* Some claims related to one diagnosis may be grouped and considered incurred on first date of service.
* Maternity claims are incurred on the date of the first service related to the maternity.
* Other medical, dental and vision services are incurred on the date of service.
* Disability income claims are incurred on the date of disability.
* Long term care claims are incurred on the date of eligibility for benefits or date of first service, depending on the reserving method.
* Stop loss claims are incurred based on the contract specifications.

Other reserves are associated with provider contracts and experience rating contracts with employer groups. Provider contracts often result in funds being held for future payment based on claims experience for the members assigned to a provider group. Similarly, some contracts with employer groups result in future premium due or premium refunds owed based on actual claims experience.

Health reserves and methods used for their estimation are discussed in detail in the NAIC *Health Reserve Guidance Manual*. Analysts should be familiar with the information addressed in that manual and should use it as a reference when looking for guidance about a particular item under review. Before contacting a company or a company’s actuary, analysts should review the NAIC *Health Reserves Guidance Manual* to become more familiar with the terms and techniques for reserve estimation.

Due to the variety of types of health policies issued and the complexity of determining the aggregate reserves and liabilities for health policies, most health entities rely on actuaries or individuals with actuarial training to assist in estimating these liabilities. Although some health entities do not use actuaries to actually set the health reserves, health entities are required to annually obtain an opinion regarding the reasonableness of the established health reserves by a qualified actuary. Therefore, qualified actuaries are involved in setting and/or reviewing the health reserve liabilities established for virtually all health entities.

There are eight categories of health reserves and liabilities:

* 1. **Unearned premium reserves**

The unearned premium reserve is the amount of paid premium covering future periods. For example, an annual premium paid on January first is 75% unearned at the end of the first quarter. Health products often have monthly premiums that do not require unearned premium reserves if coverage is from the first of the month to the end of each month (typically the case for employer-based coverage).

If a premium is paid before it is due it is considered an advanced premium. For example, if January’s monthly premium is paid on December 15 of the prior year it is advanced premium. Advanced premiums are entered in premiums received in advance on the Annual and Quarterly Financial Statements. See SSAP No. 54R for further guidance on this distinction.

* 1. **Claim reserves**

Claim reserves are intended to cover claims that have been incurred but have not been paid. They can be further divided into three categories based on where the claim is in the process of being reported, approved and paid. The allocation among these categories is usually based on past statistics and they are usually not estimated separately. In general, incurred claims are estimated using one of the techniques described in the NAIC *Health Reserves Guidance Manual* and paid claims are deducted from the incurred claims to get a claim reserve. Other methods may be used for non-medical lines of business.

Claim reserves can fluctuate as a percentage of incurred claims. A possible reason for this fluctuation is a large increase or decrease in the health entity’s claims inventory. This often happens when a new claims system is installed. Other reasons for fluctuations in claims inventory can include a larger than normal turn over in claims processors, changes in the percentage of claims submitted electronically, changes in provider agreements such as moving to or from capitation arrangements and adding large amounts of new business. One concern may be that a change in the ratio of claim reserve to incurred claims could indicate that reserves are being lowered to improve profits or raised to justify rate increases.

* 1. Claims reported and in process of adjudication:

Claims reported and in process of adjudication may be waiting for additional information or may be ready for payment. States have different laws and regulations concerning the maximum number of days between the time that a claim is received and paid or otherwise adjudicated. An average backlog can be very roughly estimated by comparing the Reported in Process of Adjustment in the Underwriting and Investment Exhibit – Part 2A to the average daily-incurred claims amount (incurred claims divided by 365).

* + 1. Due and unpaid claims:

These are claims that have been received, approved and adjudicated, but have not yet been paid. They generally represent a very small part of the claim reserve compared to the incurred-but-not-reported liability. Typically claims are considered paid when the check is issued.

* + 1. Claims in course of settlement:

These are claims that have been received by the company but have not been paid. They are often claims that are waiting for some additional information before they can be adjudicated and approved for payment.

* 1. Incurred but not reported (IBNR) claims:

Although claim reserves are often called IBNR, technically the only part of the reserve that is IBNR is the part that represents claims that have NOT been reported to the company. This is almost always the largest part of the claim reserve.

Historically, physician claims take longer to be reported than hospital claims, but electronic filing of claim information is shortening the lag between the date of service and the date that a claim is submitted to the health entity.

The amount of claim reserve per member or per incurred claim dollar differs significantly between types of companies. If a company pays most of its claims on a capitated basis, its claim reserve will result only from services that are not covered by the capitation. Claims not covered by the capitation generally include claims for out-of-area emergencies and claims for referrals to non-capitated specialists. Also, because some companies pay a budgeted amount to the largest hospitals providing services to their insured’s with a periodic reconciliation for actual claims, there are additional reporting rules for these payments. *SSAP No. 84—Health Care and Government Insured Plan Receivables* defines these payments as advances or loans to providers and distinguishes between advances to hospitals and advances to non-hospital providers. Regarding advances to hospitals, as long as a reconciliation is performed within the strict parameters set forth in SSAP No. 84, these advances are admitted assets up to the estimated amount of incurred claims still unpaid to the hospital (includes IBNR). For non-hospital providers, and when the advances to a hospital do not meet the specific reconciliation requirements of SSAP No. 84, the admitted asset is limited to the amount of claims due and unpaid or in course of settlement (does not include IBNR) to that particular provider. The claim reserve is not to be reduced in either situation. Accounting guidance found in *SSAP No. 25—Affiliates and Other Related Parties* should be followed for loans and advances to related party providers.

When companies contract with providers on a capitated basis, they may consider it appropriate to include an amount in the IBNR reserve for the contingency that the provider group becomes insolvent and is not able to perform under its contract. For example, if a capitation has been paid to a provider group for medical services and the provider group becomes insolvent and does not have the funds to pay member doctors, then the company may have to pay doctors directly for services rendered to members.

Claim reserves are estimated with some level of conservatism based on the health entity’s and the actuary’s determination of the amount of margin needed for potential adverse experience. Factors affecting the need for conservatism in reserve estimates include: 1) statistical fluctuation in incurred claims; 2) data problems due to system changes or inadequate data reporting; 3) new or growing product lines; and 4) changes in plan design or provider arrangements that may affect claims payment patterns. Conservatism can be achieved by using a tabular method based on a conservative table, by using conservative assumptions and/or by adding explicit margins to reserve estimates. The conservatism of past claim reserve estimates can be observed by comparing Claims Incurred in Prior Years with the Estimated Claim Reserve and Claim Liability December 31 of the Prior Year in the Annual Financial Statement from the Underwriting and Investment Exhibit Part 2B.

* 1. Disabled life reserves:

Disabled life reserves are reserves for individuals who are currently eligible for claim payment on coverage such as disability income and long-term care (LTC). These claims will continue to be paid even if the contract ends until the individual is no longer eligible for claim payments due to an improvement in health status. More guidance can be found in SSAP No. 54Runder claim reserves.

* 1. **Reserves for future contingent benefits**

In some situations and for some types of products, benefits resulting from an incurred claim can extend beyond the valuation date and may extend even beyond the end of the contract period. For a hospitalization that extends past the end of the contract period, either the contract itself or state law may require payment of charges up to a specific time past the end of the contract period. Maternity claims may also result in a reserve for future contingent benefits, if the delivery is covered even if the contract is terminated. The federal Health Insurance Portability and Accountability Act (HIPAA) places restrictions on pre-existing condition exclusions resulting in new policies being responsible for continuing hospitalizations and maternity benefits, thus reducing the need for future contingent benefit reserves, but under state laws the prior carrier may still remain liable for the claim. A contingency benefit reserve may still be needed since there may be no replacement policy or the replacement policy may not cover all of the benefits of the old policy. Company experience and tabular methods are used to calculate these types of reserves.

Future benefits for disability income and LTC claims are included in disabled life reserves rather than as reserves for future contingent benefits.

* 1. **Claims or LAE liability**

When incurred claims have not been paid as of the valuation date and a reserve is set up for their future payment, there will generally be an expense to process and pay the claims. This expense, although paid in the future, is associated with claims incurred prior to the valuation date. To achieve consistent financial reporting a liability is set up for the future claims payment expense.

Also, when provider contract provisions require a payment at the end of the contract period for financial and/or operational performance, there will be a cost of determining and paying the contingent payment. A liability should be included for the expense of processing the provider liability.

* 1. **Contract reserves**

Contract reserves are in addition to claim and premium reserves. A contract reserve is a reserve set up when a portion of the premium collected in the early years is meant to help pay for higher claim costs arising in later years. The reserve is calculated using actuarial assumptions and techniques, and in general, equates to the amount that the present value of future benefits exceeds the present value of a consistent portion of future premiums (the portion of the “gross premium” used for contract reserves is called the “net premium”).

Contract reserves are needed when premiums are collected in the early years of a policy and are intended to offset increasing claims in later years. This is usually seen when premiums are level over the life of a policy, but can occur when premiums are structured to increase, but still are not proportional to expected claims. Issue age rated policies often fall into this category where premiums can increase, but the ratio of expected claims to premiums are lower in early durations, by design, in order to avoid rate increases at later durations (or at least reduce their size).

The types of products that generally require contract reserves include: 1) individual disability income (if premiums are not based on attained age); 2) LTC; and 3) issue age rated medical policies (including those for specified diseases). Issue age rated medical policies are rare except for issue age Medicare Supplement and some issue age hospital indemnity policies. Many other types of health policies (accident coverage or AD&D coverage) may not need contract reserves because the likelihood of claims is the same for each age. Those contracts (most employer-based coverage) that are re-rated each year to cover the expected claims for the year do not need contract reserves.

Contract reserves may be needed for policies with multi-year rate guarantees. Many medical policies with multi-year rate guarantees have built in rate increases to cover anticipated increases in claims cost, but if premiums are level, contract reserves will be needed.

Appendix A-010, *Minimum Reserve Standards for Individual and Group Health Insurance Contracts*, (Appendix A-010) of the AP&P Manual prescribes the minimum standards used in determining the health policy reserves and specify some of the assumptions to use such as morbidity tables, maximum interest rate and valuation method. Health entities may establish health policy reserves that equal or exceed these minimum standards. Analysts should review that all changes to contract reserve assumptions for in force policies have been approved in accordance with State regulations.

* 1. **Premium stabilization reserves**

These are reserves set aside to reduce the potential for large rate increases and smooth out the underwriting cycle. They are often associated with retrospectively rated contracts that require additional premium if claims are more than a specific percentage over expected or a premium refund if claims are less than a specific percentage of expected claims. The use of premium stabilization reserves due to retrospectively rated contracts is described in *SSAP No. 66—Retrospectively Rated Contracts*.

There are other experience rating arrangements besides retrospectively rated contracts that build up premium stabilization reserves. These reserves are used in years of higher-than-expected claims cost and result in a smoothing effect on premiums since premiums will not have to be increased to compensate for one year of poor experience.

Most premium stabilization reserves are determined by contract, but a company may use a similar concept on a block of business. Care should be taken to ensure that positive reserves from one contract are not used to offset material claims on other contracts that should be recognized. The reserve would be used to smooth out the need for large rate increases by building up a reserve in years when claims are less than expected and then drawing it down in years of larger than expected claims.

* 1. **Provider liabilities**

There are many types of provider contracting arrangements in the marketplace today. Many of these arrangements base some portion of the amount paid to the provider on financial and/or operational goals that are measured periodically. Under these types of arrangements, payment for reaching goals is not dependent on any specific service, but rather is based on overall performance. As of the valuation date, a payment for performance under a provider contract may have been earned, but not paid. This payment must be set up as a liability to the company.

If a contract period has ended and there has not been a final settlement, any potential settlement with respect to provider liability should be included. If the valuation date occurs during a contract period, then an appropriate liability should be determined that represents the time period from the beginning of the contract period through the valuation date. When provider risks are minimized using stop-loss arrangements that take large claims out of the calculation, the effect of the stop-loss coverage should be estimated and included in the claim reserve calculation. In some situations, the provider contracts may allow for an additional provider payment to the company. These payments, which may be determined in a similar manner should be separated (not netted against the company’s liability) and may be admitted if recorded in accordance with SSAP 84.

Some conservatism for adverse fluctuations should be included when estimating provider liabilities. The level of conservatism depends on the variability of the liability, time period being estimated, and the quality of the data being used. Please note, conservatism that increases the claim reserve estimate and anticipates higher incurred claims can lower the estimate for provider payments under a risk-sharing contract. The health entity’s actuary should consider the total liability when doing his or her estimate.

* 1. **Premium deficiency reserves**

When future premiums and current reserves are not sufficient to pay future claims and expenses, a premium deficiency reserve is required. HIPAA requires that all individual and small group medical products be issued on a basis that allows termination only of an entire line of business. These requirements may increase the number of instances where premium deficiency reserves will need to be reported for blocks of business. Analysts should be aware that some states have stricter termination rules than those imposed by HIPAA.

If contracts not protected by HIPAA or state termination restrictions are not profitable, they can be canceled. The contracts with many large groups allow them to be canceled. Also, certain lines of business can be canceled in total. In spite of contractual provisions, companies may decide not to cancel and therefore a deficiency reserve may be required. A company may not want to cancel a large group or a line of business in a state either because of the effect on its reputation or because the membership represented gives it bargaining power with providers.

A reserve may even be required for an Administrative Service Only (ASO) or Administrative Services Contract (ASC) agreement if administrative fees are not sufficient to cover administrative expenses. An insufficient administrative fee may be acceptable to the health entity when the importance of writing a large group due to prestige or bargaining power is provided to the health entity. Analysts should refer to *SSAP No. 5R—Liabilities, Contingencies and Impairments of Assets* for a discussion of the reporting of loss contingencies.

In instances where future premiums can be increased to cover projected claim levels for a block of business, these increases may cause better risks to drop coverage. This will result in even higher claims costs and potentially continuing deficient premiums. It is difficult to predict the effect of this type of selection, but the health entity’s actuary should attempt to include the effect of selection in his or her determination of the need for a deficiency reserve.

There is some state variation concerning limits on the assumptions that can be used in calculating premium deficiency reserves. Since these variations are not currently documented, analysts should contact the department actuary for input on any guidance that has been given to health entities in the state.

Areas of confusion and inconsistency include:

* How to define a block of business for calculation of deficiency reserves.
* The time period to use for calculation of deficiency reserves.
* Assumptions to use concerning enrollment changes, premium increases, and marginal versus allocated expenses.
* The level of claim reserves and claim reserve conservatism to be available at the end of the time period and thus included in the deficiency reserve.

For a thorough discussion of deficiency reserves and an up-to-date position on issues surrounding deficiency reserves analysts should refer to SSAP No. 54R and the *Health Reserves Guidance Manual*.

**Long-Term Care Insurance (LTCI) Reserves Overview**

“Long-term care insurance” means any insurance policy or rider advertised, marketed, offered or designed to provide coverage for not less than twelve (12) consecutive months for each covered person on an expense incurred, indemnity, prepaid or other basis; for one or more necessary or medically necessary diagnostic, preventive, therapeutic, rehabilitative, maintenance or personal care services, provided in a setting other than an acute care unit of a hospital[[3]](#footnote-4)3. Historically, insurers that wrote LTCI encountered difficulties accurately projecting claims costs, lapse rates, investment returns and other factors associated with LTCI, and subsequently many writers have experienced unprofitability in older (legacy) blocks of LTCI business. This has led many companies to request significant rate increases, modify product benefits, or exit the product line altogether. Therefore, many insurers continue to experience significant solvency challenges related to this line of business, and state insurance regulators should continue to carefully evaluate and monitor the solvency position of all insurers with a material amount of LTCI business.

These same risks also affect reinsurers, because the reinsurance contract may not arbitrarily allow for ceded premium increases. Additionally, in order to effectuate a true transfer of risk, the reinsurer may not have the ability to require the direct writer to request rate increases[[4]](#footnote-5). As some insurers look for avenues to minimize or eliminate its risk from the LTCI block, they may look to new reinsurance opportunities or non-traditional buyers.

In addition, periods of economic downturn and low interest rates increase the risk that LTCI writers will be challenged to generate sufficient returns to support this line. In addition, declines in projected investment returns could have a significant impact on LTCI reserve assumptions.

[**Actuarial Guideline 51**](https://www.naic.org/cipr_topics/topic_actuarial_guideline_li_ag51.htm)**—The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves (AG 51)**

Effective for reserves reported with the Dec. 31, 2017, financial statement, [Actuarial Guideline 51](https://content.naic.org/cipr-topics/actuarial-guideline-li-ag-51) — The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves (AG 51) now applies. The *Health Insurance Reserves Model Regulation* (#10) and the *Valuation Manual* VM-25, Health Insurance Reserves Minimum Reserve Requirements, contain requirements for the calculation of LTCI reserves. AG 51 requires companies with more than 10,000 LTCI enrollees to submit standalone LTCI asset adequacy analyses to the state. AG 51 is intended to provide uniform guidance and clarification of requirements for the appropriate support of certain assumptions for the asset adequacy testing applied to a company’s LTCI block of contracts. AG 51 requires reporting to the department within the appointed actuary’s actuarial memorandum required by VM-30, Actuarial Opinion and Memorandum Requirements, or in a special actuarial memorandum containing LTCI-specific information on the results of the analysis, assumptions on mortality, voluntary lapse, morbidity, investment returns and rate increase assumptions.

**Factors Impacting LTCI Reserves and Rates**

This following guidance provides additional information that may assist state insurance department staff in understanding the differences in premium rate review and approval, and valuation review of reserve adequacy assumptions in order to maintain or improve state insurance departments’ current intra-departmental coordination/communication practices between the states’ rate reviewers, valuation actuaries and analysts/examiners.

**Reserve Increase Factors**

1. **Background**

Ever since asset adequacy testing became a requirement for life insurers in the 1980s, actuaries have been required to analyze reserve adequacy assumptions on an annual basis and make the assumptions more conservative when experience or expectations become more adverse. If the result of the more conservative assumptions was inadequate reserves, companies have been required to establish higher reserves to ensure future claims could be paid in the more adverse environment.

In some cases, the chain of events is straightforward. For instance, for life insurance, if more people die at earlier ages than expected and the experience is highly credible, then the actuary increases mortality rates in the upcoming year-end filing, leading to higher reserves being established.

In other cases, the chain of events is less straightforward. For instance, it is expected that cash surrenders on deferred annuity products will increase if interest rates rise. However, most deferred annuities have been sold during a period of decreasing interest rates. Actuarial and regulatory practice require reserves to be adequate in moderately adverse conditions, even if those conditions have not been recently experienced. There is typically judgment by the company actuary and another layer of judgment by regulators in play in this type of complex situation. The *Standard Valuation Law #820* (SVL), the Valuation Manual, and the *Actuarial Standards Board’s* (ASB’s) *Actuarial Standards of Practice* (ASOPs) describe how these complex situations should be handled.

1. **Long-Term Care Insurance**

For LTCI blocks of business that experience higher morbidity than expected, this experience will likely lead to changes in expectations on future morbidity for both the observed block and other blocks.

With LTCI, some factors are likely to play out in a straightforward manner. A combination of higher life expectancy and lower lapses will lead to more people than expected reaching prime LTCI claims ages of 80 and above, which leads to companies holding higher reserves than originally anticipated. Similarly, all companies have experienced the decreasing interest rate environment, which has led to lower-than-expected investment returns and the need to hold higher reserves, because investment income is relied upon to help pay claims.

Mortality, lapse, and interest rate factors become observable and can develop credibility during the premium-paying years prior to policy years when significant claims tend to occur.

1. **Morbidity Assumptions:**

Morbidity, however, has tended to fall into the category of a complex factor. The three main aspects of LTCI morbidity are: (1) incidence, the percentage of people at a given age who start a claim; (2) average length of claim; and (3) utilization, which is less than 100% if, e.g., the daily nursing home cost is lower than the maximum daily benefit in the insurance policy.

There has not been uniform experience development in morbidity, except that length of claim has tended to increase, likely because cognitive (e.g., dementia and Alzheimer’s disease) claims tend to be longer than average and incidence has been higher than expected, likely due to more people reaching the age when cognitive claims tend to occur.

Because of divergent experience among companies and because morbidity becomes observable and credible during the later claim-paying years, establishing and regulating LTCI morbidity assumptions has not been straightforward. However, as with other factors and other products, the handling of these situations is addressed in *Model #820, Valuation Manual, and ASOPs*. Examples of these standards include:

* Model #820 12A(3)(a): “Assumptions shall, to the extent that company data is not available, relevant, or statistically credible, be established using other relevant, statistically credible experience.”
* Model #820 Section 12A (4): “Provide margins for uncertainty … such that the greater uncertainty the larger the margin and resulting reserve.”
* AG 51 (providing guidance on VM-30) Section 4.B.: “The analysis shall comply with applicable Actuarial Standards of Practice, including standards regarding identification of key risks. Material assumptions associated with the LTCI business shall be determined testing moderately adverse deviations in actuarial assumptions.”
* *Acounting Practices and Procedures Manual (AP&P Manual)*, Appendix A-010 paragraph 48.e (referenced in VM-30): “The total contract reserve established shall incorporate provisions for moderately adverse deviations.”
* AP&P Manual, Appendix A-010 paragraph 51 (referenced in VM-30): “Annually, an appropriate review shall be made of the insurer’s prospective contract liabilities… and make appropriate increments… if such tests indicate that the basis of such reserves is no longer adequate.”

The result is that whether credible experience exists or not, the company actuary needs to set assumptions underlying reserves, and the factors underlying the assumptions are often complex and frequently changing. Company and regulatory actuaries are experienced in working in this complex, changing environment with many life insurer products, such as variable annuities, indexed products, and LTCI having product features and factors underlying reserves that are complex and changing.

1. **Rate Increases:**

A unique aspect of LTCI products is being a long-term product with rate increases that require review by states. Besides states with the largest insurance departments, the actuaries reviewing LTCI reserves are often the same staff reviewing LTCI rate increases. For larger states, there is typically coordination or training to ensure the reserve and rate teams are on the same page regarding developments in for example, life expectancy and morbidity. State insurance regulator experience in reviews of LTCI reserves and rate increase filings show that reserve increases and requests for rate increases are due to similar factors including higher life expectancy, lower lapses, lower investment returns, and worsened morbidity.

There has been additional regulatory attention on ensuring the companies asking for rate increases based on adversity of certain factors are holding reserves based on at least the same level of adversity in those factors. The questions used in many states’ rate increase reviews require the company to explain the consistency between the rate increase filing assumptions and reserve adequacy assumptions.

To date, the most common complex, non-straightforward case is the applicability of a company’s adverse morbidity experience of an older LTCI block to morbidity assumptions on a newer block. This complex dynamic comes into play when establishing reserve and rate increase assumptions.

The reserve assumption changes can occur with initiation by the company, through formal or informal agreement between regulators or companies, or by relying on Model #820 Section 11.6., which allows a commissioner to require a company to change reserve assumptions and adjust reserves.

*Example:*

A typical example of a chain of events would first involve a block issued in 1995 to 1998 to policyholders with issue ages ranging from 52 to 62. By 2019, enough policyholders have reached prime LTC claim ages of 80+. This experience is what drives reserve assumption changes. As policyholders enter ages in the upper 80s and 90s, additional experience will be attained that will predict future LTCI costs and result in further changes in reserve assumptions. The development of older-age morbidity experience is expected to generate volatility in LTCI reserves. For some companies, the older-age morbidity experience will likely be unfavorable, with increased reserves needed. For most other companies, the older-age morbidity experience will likely be as expected, leading to no significant, unforeseen reserve increases.

Companies will be expected to apply lessons learned from older blocks of business to their newer blocks. Those lessons will likely differ by situation. For example, to the extent underwriting is different, the newer and older blocks may experience different morbidity trends.

1. **Rate Increase Factors**

Factors impacting LTC reserves, including higher life expectancy, lower lapses, lower investment returns, and changes in morbidity, also potentially impact LTC rate increases.

If a company’s reserve adequacy testing is dependent upon assumption of future LTC rate increases, the state insurance department staff performing reserve valuation should evaluate that assumption for reasonableness. The company’s rate increase assumptions and documentation should be consistent with the requirements specified in AG 51 related to rate increase plans. The state insurance department staff performing reserve valuation may wish to coordinate and communicate with the state’s rate review staff to help evaluate the appropriateness and reasonableness of the company’s future rate increase assumption.

1. **Intra-Department Communication and Coordination of Actuarial Review Work**

While every state insurance department may be structured differently, many state insurance departments have the same staff members perform work on both LTCI reserve valuation analysis and rate increase reviews, while other have separate staff perform these functions. In the latter instance, department staff should be aware of or coordinate the intra-department review work related to each function.

The following are suggested steps a state may consider to ensure that actuarial assumptions associated with the rate increase request are consistent with the assumptions embedded in the asset adequacy testing.

* Inquire of the company’s actuary or senior management regarding:
  + The relationship of the actuarial assumptions embedded in the rate filing versus those made for annual statement reporting.
  + Explanation if there is inconsistency between assumptions reported.
  + How AG 51 affects the company’s rates and reserves.
  + Affirmation that the assumptions underlying the projections are consistent with the assumptions used in asset adequacy analysis.
  + A copy of the company’s rate increase plan when rate increase filings disclose that future rate increase filings, beyond what is currently being requested, are planned.
* Consider reviews of different filings for consistency. For example:
  + Compare reserving assumptions to rate increase assumptions,
    - e.g., review the RAAIS and the Actuarial Opinion and Memorandum (AOM) to ensure that assumptions used for pricing and reserving are similar in nature.
* Identify assumptions underlying the asset adequacy testing memorandum that appear.

1. The NAIC *Accounting Practices and Procedures Manual Appendix A-010* incorporate minimum reserve requirements from the *Health Insurance Reserves Model Regulation.* [↑](#footnote-ref-2)
2. 2 *Accounting Practices and Procedures Manual, Appendix A-822* provides guidance for Asset Adequacy Analysis Requirements. The only companies filing the Health Annual Financial Statement that are subject to the requirements of Appendix A-822 are those licensed as life insurance companies. [↑](#footnote-ref-3)
3. 3 Definition per NAIC *Long-term Care Insurance Model Act* (#640) Section 4.A. [↑](#footnote-ref-4)
4. Refer to the NAIC *Life and Health Reinsurance Agreements Model Regulation* (#791) with respect to qualifying for risk transfer and reinsurance accounting within life and health reinsurance agreements. [↑](#footnote-ref-5)