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MONOGRAPH

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Mr. Walling's consulting experience includes:

- Serving as appointed actuary to insurance companies, risk retention groups, captive insurance companies and self-insured entities.
- Providing consulting services to over 20 state insurance regulators focused on captives and commercial insurance.
- Advising commercial self-insurance programs regarding funding, reserves, and related matters.
- Consulting with numerous government insurance programs, particularly patient compensation funds and birth injury funds.
- Developing commercial insurance products, often using predictive analytics.
- Authoring expert report and providing expert testimony.

Rob is a frequent speaker at actuarial and insurance industry meetings on topics including professionalism issues, collateral, commercial lines predictive analytics, captives and alternative markets, medical professional liability reforms and government insurance programs.

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External Peer Review

An Effective Approach to Company Governance of Insurance Risk

Robert J. Walling, III, FCAS, MAAA

Increasingly, external peer review is being used as an effective means of increasing stakeholders' confidence in the work of appointed actuaries. By employing a qualified, independent actuary to assess the reasonableness and appropriateness of an actuarial analysis and report, insurance companies, self-insured management teams, boards of directors, auditors, insurance regulators, lawyers and others are relying on external peer review to provide a thorough assessment of an actuary's work without a complete second actuarial analysis.

In a general sense, a peer review is intended to "ensure the correctness of the results and the proper applicability of the work product to the issue being addressed."[1] However, a number of issues can materially complicate the effectiveness and outcomes of an external peer review. A systematic approach, the use of proven best practices and compliance with professional standards can significantly increase the likelihood of success.

As part of its ongoing mission to provide clients and the insurance industry with "Commitment Beyond Numbers", Pinnacle has developed a rigorous approach applying a standard set of external peer review criteria in the review of another actuary's work product to effectively evaluate reasonableness, appropriateness, and compliance with professional standards. This structured, cost-effective process examines specific criteria to ensure that the actuarial report produces reasonable results, is properly documented for the intended audience and complies with all applicable professional standards.

KEY POINTS

External Peer Review is:

- an independent approach to evaluating the work product of another actuary
- less time consuming and expensive than a complete second actuarial analysis
- a more professionally sound evaluation of the actuarial work product than a review by an individual not qualified to perform actuarial work
- a review of the reasonableness and appropriateness of the data, methods, assumptions and findings of an actuarial analysis as well as how those results are communicated
- best performed using a rigorous framework that includes a review of the form and content of the analysis, as well as compliance with actuarial professional standards.

SUB-OPTIMAL OUTCOMES FROM TRADITIONAL APPROACHES

A number of scenarios exist wherein interested parties other than the principal, that is the actuary's customer or employer, may be interested in having an "independent set of eyes" review an actuarial work product for reasonableness and appropriateness.

1 American Academy of Actuaries Committee on Professional Responsibility, "Peer Review – Concepts on Improving Professionalism", April 1997

Examples of non-principals with interests in reviewing an actuarial report include:

- an auditor responsible for issuing the audit opinion of an insurance company or captive
- insurance regulators responsible for oversight of an insurance or self-insurance program
- a reinsurer reviewing the actuarial work of a current or potential cedant
- parties involved in collateral negotiations
- lawyers taking part in a directors and officers lawsuit after an insolvency
- members of a board of directors taking a proactive role in ensuring the proper governance of a company with insurance risk

Historically, external reviews of an actuary's work product have tended to one of two suboptimal extremes: a limited review by a non-actuary or a complete, independent, ground-up actuarial analysis.

In a limited review, a non-actuary, such as an auditor, regulator, or member of a finance department reviews an actuarial analysis and report for "obvious" errors. Such a limited review contains obvious drawbacks, most notably the independence of the reviewer from the audit opinion and the qualifications of the reviewer to review actuarial work products. In fact, it is hard to imagine either the American Institute of Certified Public Accountants (AICPA) or the Casualty Actuarial Society (CAS) would find a CPA qualified to perform more than a cursory review of an actuary's work product. Quite simply, non-actuaries don't have the training or education to know what to look for when it comes to the intricacies of an actuarial analysis and report.

On the other hand, a complete, second actuarial analysis can also present problems. For example, a second analysis will often significantly increase costs, even to the point of more than doubling total actuarial fees. In addition, a review for straight-forward insurance programs may add little value, or certainly not enough, to justify the incremental costs. Finally, a second independent actuary is often challenged by such issues as time and cost constraints, making it difficult to learn the unique characteristics of an insurance program and perform as thorough an analysis as the first actuary. At times, this can even impact the accuracy of the analysis.

THE VALUE OF THE RIGHT APPROACH

In keeping with the goal of ensuring reasonable and appropriate results and documentation, external peer reviews are generally performed by another qualified actuary, either within the same firm as the author of the actuarial report or from another firm. In addition, a peer review can either be related to the issuance of the report to its original user or on behalf of a third party user of the actuarial report.

The general approach to external peer review is borne out of and guided by both the CAS Code of Professional Conduct (the Code of Conduct) and the Actuarial Standards of Practice (ASOPs) which are promulgated by the Actuarial Standards Board (ASB) of the American Academy of Actuaries (AAA). Precept 4 of the CAS Code of Conduct states:

"[a]n Actuary who issues an Actuarial Communication shall take appropriate steps to ensure that the Actuarial Communication is clear and appropriate to the circumstances and its intended audience and satisfies applicable standards of practice."

Prior to being updated and reorganized in 2010, Actuarial Standard of Practice #41 (ASOP 41), entitled "Actuarial Communications", in section 3.3.3 provided an even more direct description, stating:

"(A)n actuarial report should identify the data, assumptions, and methods used by the actuary with sufficient clarity that another actuary qualified in the same practice area could make an objective appraisal of the reasonableness of the actuary's work as presented in the actuary's report."

The scope of an external peer review is very similar to the objective appraisal described in the above statement. To this end, Pinnacle's approach to external peer review applies a series of evaluation criteria that allows an objective appraisal of the actuarial report and the data, methods and assumptions underpinning the analysis.

CRITICAL ELEMENTS OF A SUCCESSFUL PEER REVIEW

For its part, ASOP 41, section 3.1.1 states that "(t)he actuary should take appropriate steps to ensure that the form and content (emphasis added) of each actuarial communication are appropriate to the particular circumstance, taking into account the intended users."

For an actuarial work product to meet this standard, it should satisfy three key criteria:

- The form of the report
- The content of the report
- Compliance with all applicable professional standards

A document extremely helpful in developing peer review criteria is a discussion paper prepared by the Committee on Professional Responsibility of the AAA entitled, "Peer Review – Concepts on Improving Professionalism." Many of the questions posed in Pinnacle external peer review criteria are taken directly or indirectly from this document.

Form

The evaluation of the form of an actuarial analysis and report is focused on the clarity and readability of the report by both "its intended audience" and "another actuary qualified in the same practice area." It is important to recognize that these may be very different standards. Some of the questions in the form portion of the review are relatively straight forward:

- Is the principal requesting the performance of the actuarial analysis clearly identified?
- Is the actuary or actuaries responsible for the actuarial report clearly identified?
- Is the scope of the work clearly defined?
- Does the report meet its intended scope?
- Is the report complete?

Further, the form evaluation also deals quite a bit with the flow of the report. For example, the clarity of an actuarial report can be materially improved if the tables and exhibits are well organized and footnoted. The flow of data from one exhibit to another and ultimately into the report is also essential. In our experience, we have seen actuarial reports that fail even these simple criteria.

Another key form element deals with documentation. While it is often impractical to provide exhibits supporting every assumption in an actuarial analysis, the basis of all assumptions should be documented, and support for the assumptions should be available in the supporting client or project file. It is also important that the findings and conclusions of the report can be clearly drawn from and supported by the analysis.

Finally, it is very important to the form of an actuarial communication to avoid any statement that could lead to an unintended or inappropriate conclusion by the principal or another party permitted to use the report. This is especially important when an actuarial report, such as a legislative costing study, is intended to be distributed to a broad audience, many of whom have little or no experience with actuarial jargon. One trend intended to address this issue is the increased use of glossaries of terms to assist the non-actuarial reader.

Content

The content element of a peer review is focused more on the analysis itself. This is the element that looks at how the data, methods, and assumptions are documented, and examines the reasonableness and appropriateness of this information for use in an analysis consistent with the project scope. Overall, there is also a greater level of professional judgment associated with this section of the review. Two qualified actuaries may have perfectly sound reasons to rely on different datasets (e.g. countrywide vs. by state or loss and defense costs combined or separately), different methods (e.g. loss development techniques) or different assumptions (e.g. trends or loss development factors). Further, these two different approaches may well both result in a reasonable range of actuarial estimates.

Examples of the type of questions within the content section of the review are shown in the following table:

Typical Content Peer Review Questions

- Are the data sources and benchmarks identified?
- Are the data sources appropriate for use in this analysis?
- Are all assumptions specified? Are they reasonable?
- Are the methods used reasonable and appropriate?
- Are any modifications of data or methods identified and explained?
- Are the calculations correct?
- Are the results, findings, and recommendations reasonable and adequately supported by the analysis?
- Are any reliances and limitations appropriate and clearly delineated?
- Are the potential variability and risk factors of results adequately discussed?

Professional Standards

The final element of the external peer review is compliance with professional standards. While this may sound simple enough, the need to focus on this element is crucial. For example, the reviewer needs to ask, "Does the analysis and report meet applicable standards of practice, statements of principles, and other standards (e.g. NAIC statutory accounting standards)?"

Many times, just asking this question may be enough. However, there are a number of issues that can materially complicate this part of the review. For example, accounting standards and requirements regarding the statement of actuarial opinion are constantly changing. Instances exist where longstanding actuarial analyses and statements of actuarial opinion may not immediately respond to these changes. Similarly, ASOPs are frequently updated and require updated wording in many parts of actuarial reports.

Another major source of problems with professionalism is unique or rare situations. Insurance programs can have significant operational changes (e.g. changes in third party administrators or case reserving practices) or other changes (e.g. a recent judicial ruling) that need to be incorporated into the actuarial analysis. Sometimes actuaries do not properly reflect or document how they considered these factors. Also, some practitioners may not be very familiar with certain actuarial applications, such as unearned premium reserves for death, disability and retirement (DD&R) coverage, premium deficiency reserves (PDR) or treatment of long duration contracts. Problems often arise when actuaries who have not dealt with these types of situations face them for the first time, particularly when there is no other actuary within the company or consultancy to help deal with an unusual situation. With the use of external peer review, however, an actuary can receive help regarding the treatment of these issues.

BENEFITS OF EXTERNAL PEER REVIEW

The benefits of external peer review are many. First, the performance of the external peer review involves "another actuary qualified in the same practice area" as the report's author, ensuring the reviewer is familiar with the essential methods and assumptions as well as all applicable professional standards. The external peer reviewer is also independent, meaning he or she can review the actuarial report from the perspective of the interested party, rather than that of the initial principal. This can be essential, especially for lawyers, reinsurers, and insurance regulators who often have very different perspectives from the insurers, captives, and self-insureds they work with. Finally, the external peer review focuses on material risks and avoids the unnecessary time and expense.

As a result, parties requesting external peer review can experience:

- Increased confidence in the original actuarial report
- Identification of potential weaknesses in the original actuarial report and the impact of alternate assumptions
- Improved understanding of the underlying risk
- Demonstration of pro-active oversight, which is often a concern for auditors, regulator, and boards of directors
- Greater value than either a non-actuarial review or a complete second actuarial analyses

EFFECTIVE APPROACHES TO DIFFERENCES AND DISAGREEMENTS

External peer review is not intended to be a superficial process that adds little or no value. In situations in which the reviewing actuary disagrees with the opining actuary, it is common for the reviewing actuary to perform a limited analysis of the impact of the differing assumptions. Sometimes, this sensitivity analysis or scenario testing does not produce material differences and such differences can simply be documented. Other times, however, the differences are material.

In the cases when material differences between the two actuaries exist, it is incumbent on the actuaries to try to resolve these differences in an amicable manner. In fact, Annotation 10-1 to Precept 10 of the Code of Conduct states, "[d]ifferences of opinion among actuaries may arise, particularly in choices of assumptions and methods. Discussions of such differences between an Actuary and another actuary, or in observations made by an Actuary to a Principal on the work of another actuary, should be conducted objectively and with courtesy and respect." Such an approach to resolving differences leads to more informed and satisfied customers for all of the actuaries involved.

UNDERSTANDING LIMITATIONS

It is important to also understand what external peer review is not. First and foremost, it is not simply one actuary "rubber stamping" another actuary's work. Instead, the use of a qualified actuary who is truly independent of the opining actuary, not just a company employee or another consulting actuary at the same firm, helps ensure that the review has intrinsic value. Further, it is also more than just someone proofreading the actuarial report. The actuarial report should have been exposed to technical and peer review before it was ever distributed, ensuring the quality of the work product itself. Rather, external peer review is intended to protect the interests of the interested party requesting the external review.

An external peer review is also not an adequate substitute for a complete independent analysis. An actuary serving as an external peer reviewer will often make disclosures such as:

- The review was limited to work performed by others as documented in the actuarial report.
- We did not audit or verify the data underlying the calculations included in the report.
- An exhaustive technical review of the report exhibits was not performed; however, many of the calculations in the exhibits were checked for accuracy and no errors were found.
- We did not conduct any independent actuarial analysis or calculations, but conducted a review of the reasonableness of the data, methods, assumptions, and findings presented in the report.
- We focused on the major actuarial issues to determine the reasonableness of the program and the pro forma financials presented within the application.
- We did not prepare the analysis and, if asked to do so, we would not necessarily use the same data or methods, make the same assumptions, or produce the same results.

Understanding what an external peer review is and is not can help users of these reviews avoid unintended misuse and expectations that are not viable.

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CONCLUSIONS

Cost efficiency and appropriate controls over internal processes are practical realities of today's insurance market. As a result, there is a growing demand for external peer review of a wide variety of actuarial work products. Pinnacle's rigorous approach to this review by one of our a qualified, independent actuaries is consistently adding significant value and controlling incremental costs to our customers. This approach is providing our customers an effective means of increasing their confidence in the work of other appointed actuaries and providing alternative perspectives in areas that present material risk.

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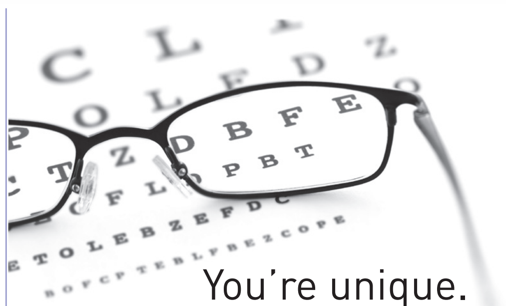

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