SMALLER INSURANCE COMPANY SECTION

"A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES"

Small Talk

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Changes in the Valuation Interest Rate

by Terry M. Long and Donna K. Ferguson

Bob Dylan's quote "the times they are a changing" has more relevance today than ever before in the insurance industry. Among the multitude of issues your company must deal with every day, add more if you market individual life, disability income or long-term care insurance. Two important changes are about to affect the reserves and nonforfeiture values your company holds for newly issued life insurance policies:

- the reduction in the life valuation interest rates; and
- the adoption of the 2001 CSO Table.

What does this mean for your company?

First and foremost, these changes will significantly add to your to-do list in the near future. At a minimum, reductions in the life valuation interest rates will require changes in reserves for policies issued in 2006. The change in mortality basis will affect all life insurance policies issued after 2008, but for practical reasons, might require more urgent action. This article should serve as a heads up on these issues so your company can create an action plan now.

Life Valuation Interest Rates

For 2006 new business, the long life valuation interest rate will decline from the historical 4.50 percent to 4.00 percent. Unlike the 2001 CSO Mortality Table that needed to be approved by individual states and permitted a transition period, this change will automatically take effect Jan. 1, 2006 as required by the Standard Valuation Law.

The decrease in the maximum life valuation interest rates means reserves required to be held for a product based on a 4.50 percent interest rate must be recalculated for policies issued in 2006. Note that the change in the maximum valuation interest rate also caused a change in the maximum nonforfeiture interest rate. The reduced maximum nonforfeiture interest rate of 5.00 percent (125 percent of the maximum statutory valuation rate rounded to the nearest 0.25 percent) will be mandatory in 2007. That is, there is a one-year grace period for nonforfeiture interest rate changes—the new interest rate is optional for 2006 but mandatory for 2007. Thus, nonforfeiture values must also be recomputed by the end of 2006. These rate decreases could impact the profitability of your product.

However, simply adjusting reserve factors and nonforfeiture values may not be adequate. The following issues may have a material impact on the profitability of products based on a 4.50 percent valuation interest rate:

- **Basic Reserves:** Increased basic reserves due to lower valuation interest rates could result in increased surplus strain and lower rates of return for products.
- **Deficiency Reserves:** Many life products have guaranteed gross premiums set equal to, or slightly greater than, the 4.50 percent valuation net premiums. Since valuation net premiums for these products will now increase, such gross premiums will now be less than the valuation net premiums. This could result in

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Actuaries
The Best-Kept Secret in Business™

Editorial

by James R. Thompson

This issue of our newsletter contains several topics of relevance. There is a lot going on in our industry, and much of it affects all companies. We are working to emphasize the specific effect on smaller companies, however.

The lowering of the interest rates is of immediate importance (going into effect next year). This issue is discussed in the article, "Changes in the Valuation Interest Rate" by Terry Long and Donna Ferguson. While we all know about the pending 2001 CSO, Roger Annin is exploring it in depth by highlighting what he Society of Actuaries is discussing with respect to Principles Based Reserving. Read his article, "Does It Seem to You That Valuation Mortality Tables Don't Last as Long Anymore?" Dan Winslow takes a closer look at Actuarial Guideline 38. As you may know, even as this is being discussed by the Life and Health Actuarial Task Force, the NAIC is directing that an asset-adequacy based approach be provided. This also is a move towards principles based reserving.

The Generally Recognized Expense Table (GRET) has not been revised since the 2003 table. A revision effort was postponed in 2005. This affects illustrated products and provides an alternative expense methodology which many smaller companies use. I discussed this topic, which is of particular relevance to the smaller companies, in my article, "GRET 2006: What it is and How it is Going."

Also, health insurers use public databases. These are of particular relevance to smaller companies as well, which are less likely to have their own credible data, especially if they are starting up a new line. This information is detailed in a reprint piece from the August 2005 issue of *Health Section News*, entitled "Accessing and Using Public Data: A Primer for the Health Actuary" by Denise Love.

Credit insurance is a product, which many small companies are into these days. Chris Hause provides an update on developments in that market in his piece, "What's New in Credit Insurance?" Phil Velazquez provides some insights on reinsurance, which is used heavily by smaller companies. Read "Don't Forget Your Reinsurer Revisited—15 Years Later." Finally, Norm Hill provides us with some insights on the effects of SOX on small companies in his article "Sarbanes Oxley—The BANE of Small Insurers?"

I hope you all spend as much time reading this as we did preparing it. There's a lot to cover! ●

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unexpected increases in deficiency reserves if the gross premiums are not increased. The deficiency reserves, which can be sizeable, tie up surplus and decrease profitability.

As an example of the relative magnitude of the increases, we did testing for one client, which indicated that basic reserves would increase approximately 6.5 percent. Deficiency reserves, however, will increase more than 800 percent if the gross premiums are not increased!

2001 CSO Table

The 2001 CSO Table has now been adopted for use in almost all states. While a number of companies have already developed and introduced products based on the new mortality table, other companies were waiting to introduce 2001 CSO products. The reduction in the maximum valuation interest rate is causing a number of these companies to reconsider their decision. Rather than changing their products once for the valuation and nonforfeiture interest rate changes, and then again two or three years later to recognize 2001 CSO mortality, many companies are coupling the reduction in interest rates with the introduction of the 2001 CSO mortality table. If these issues are addressed simultaneously, a company will experience savings in filing, administrative, software and pricing. As an additional bonus, since the 2001 CSO Table reflects improved mortality, products priced on the new table will generally be more competitive. However, depending on product design there might still be reasons to delay the implementation of the 2001 CSO Table.

Company Options

There are several ways a company can deal with these issues, including:

- Simply holding higher reserves in 2006, and postponing premium and nonforfeiture changes until 2007; delay 2001 CSO adoption until 2007 or later.
- Filing the same product design with the necessary reserve and gross premium changes, but not changing the nonforfeiture values (and possibly gross premiums again) until 2007; delaying 2001 CSO adoption until 2007 or later.
- Filing the same product design with the necessary reserve, nonforfeiture value and gross premium changes in 2006; delay 2001 CSO adoption until 2007 or later.
- Restructuring and introducing a new product incorporating the valuation interest rate, nonforfeiture interest rate, 2001 CSO mortality and gross premium changes as soon as possible.

As an additional bonus, since the 2001 CSO Table improved mortality, products priced on the new table will generally be more competitive.

The first option, holding higher reserves in 2006 and postponing other changes until 2007 or later, has the benefit of being technically easy and not very time consuming. However, as a result, companies choosing this option could be holding much higher reserves than necessary.

If a company is comfortable with its current product portfolio, it can take the approach of using the same basic policy design with an increase in premiums and reserves, with the option to either maintain current nonforfeiture values and dividends or compute updated nonforfeiture values and dividends. This will still require a considerable effort to generate new reserve, nonforfeiture and dividend values. However, keeping the same product portfolio means the distributors do not have to make adjustments. Additionally, if these products performed well in the past they should continue to perform well in the desired target markets.

Some companies may decide that now is the time to redesign their portfolio of products. To restructure an entire product portfolio requires an enormous amount of time and energy, not only for actuaries but also from a host of company-wide resources such as marketing, underwriting, systems and so on.

Planning for These Changes

These changes represent some major hurdles that lie just ahead. Companies should address these issues today, as time is of the essence—2006 is quickly approaching. Changes to administrative, valuation and illustration systems will require efforts by marketing, actuarial and IT departments. Legal and compliance divisions will also be busy filing new and updated products.

Companies need to consider the various options available. Although many companies have already begun to incorporate the lower valuation interest rates and the 2001 CSO Table, that choice may not be the best choice for every company. Each company must analyze its portfolio and individual circumstances to determine the best action plan. Whether in-house or outside resources are utilized, making these decisions and implementing the changes will require much expertise and time. However, with proper planning a company can successfully handle these issues. ●

On the cover

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What's New in Credit Insurance?

by Chris Hause

The Emergence of Debt Protection

Of course, the biggest news of all in the credit insurance business is the continued emergence of debt cancellation and suspension ("debt protection") business as a competing product.

For those of you who aren't entirely "in the know," debt protection was legitimized by the Gramm-Leach-Bliley Act (GLBA) as a permitted activity for national banks. By adding an addendum to their loan agreement, a bank may agree to cancel or defer all or a part of the debt upon occurrence of certain events. Due to parity laws and actions by their respective regulatory bodies, most state chartered banks and credit unions may also offer this benefit without involvement of an insurer.

The primary source of debt protection remains in the credit card business. This is true with retail cards as well as bank cards. The benefits start with the "traditional" credit insurance coverages of life, disability and unemployment. However, today the typical credit card debt protection program will have limited monthly benefits for marriage, divorce, national disaster, call to active military service, nursing home and hospital confinement.

The regulation of debt protection contains a great deal in the way of disclosure to the consumer, but very little in limiting the types of benefits offered, and the fees charged for these benefits.

Many of the credit card issuers retain 100 percent of the risk contained in their debt protection programs. However, as other types of loans become covered, such as installment, home equity and mortgage, banks will be increasingly looking to contractual liability policies to "reinsure" or share the risk.

Probably the biggest impediment to the unrestrained growth of non-insurance debt protection is the requirement that the lender offer a "bona fide monthly alternative" to single premium debt protection. This requirement took many lenders by surprise. Many lenders providing smaller and shorter-term loans can simply not provide coverage due to the economics of very small loans. Additionally, the majority of bank loan origination and administration software was not ready for monthly credit insurance premiums.

Home Ownership and Equity Protection Act

This requirement was a reaction by the regulators to the other major movement affecting credit insurance production. This movement started primarily on a local and state level and goes by the name of "predatory lending." This rather dramatic moniker has come to mean the underhanded practice of loading up a sub-prime loan with nonrefundable fees and eroding the equity in a real estate secured loan.

This movement became nationalized with the Home Ownership and Equity Protection Act (HOEPA), which shed national attention on the issue. HOEPA increased regulation and cast a negative shadow on any loan secured by real estate where the up-front financed fees and charges exceeded a certain level. This included financed (single premium) credit life and disability insurance in spite of the termination value of the coverage.

Those lenders that continued to provide credit insurance coverage on real estate secured loans did so primarily on a monthly premium basis, either with a level payment or one based on the outstanding balance. But more often, these loans now are going entirely uncovered. Part of the problem here is the same issue that is stalling efforts to write debt protection on installment loans: quoting and administration of the monthly premium insurance. However, with real estate secured loans, the economics are more justifiable than in the small loan market.

Between GLBA and HOEPA, these two events caused an overall decrease in the credit life and

disability written premium of some 30-40 percent industry wide.

The good news is that for now, written premium levels seem to have stabilized, albeit at a much lower level. It was reported recently that the credit life face amount issued actually went up in 2004.

Statutory Reserving Standards

On the valuation side, there have been two major events in the setting of reserves for credit life and disability insurance.

Credit Life Mortality Basis

On the life side, the NAIC has adopted, and some states have followed suit with, a model regulation dealing with credit life insurance. This was the culmination of many meetings and negotiations between various regulatory actuaries and industry representatives.

The model prescribes the use of the 2001 CSO Male Composite Ultimate Table, with dynamic valuation interest rates and the Commissioner's Reserve Valuation method. As demonstrated in the report by the SOA's Credit Insurance Experience Committee, the 2001 CSO table sets liabilities at a significantly lower level than the prevailing standards of 1958 and 1980 CET tables.

Credit Disability – Morbidity-Based Reserves Take Hold

For credit disability, after an extensive study of credit disability claim cost experience, the industry had proposed use of the 1985 CIDA Table as a morbidity basis for single premium credit disability insurance. This is the first table specifically recommended for credit disability. The standard that is now a part of the Model A&H Valuation Regulation contains a 12 percent margin over the base table, and uses the 14-day table for all waiting periods 14 days and longer. The interest rate to be used is the dynamic "whole life" rate.

A follow-up study to the 1997 disability study was recently completed by the Credit Insurance Experience Committee. The report is now available on the SOA Web site. The study shows trends in the business since the earlier study and confirms the conservatism in using the 1985 CIDA Table, as modified, for valuation of single premium credit disability.

The model allows for a revaluation of in-force reserves, since this is the first table of its kind, but some states may not allow a revalution.

It has been estimated that, on an industry-wide basis, adoption of the new basis will allow a release of redundant reserves equal to approximately 25 percent of current reserves. The model allows for a revaluation of in-force reserves, since this is the first table of its kind, but some states may not allow a revaluation.

While there are still some issues to be settled, the disability standard has been adopted in several states. This (because of the "state of filing" language in the actuarial opinion) makes the calculation of single premium reserves on the morbidity basis a necessity for most writers, even though actual reserves held may be based on the unearned premiums.

The Horizon

Credit insurance continues to be an evolving coverage in many ways. The future may produce an entirely different benefit package and delivery system from the current environment, but I feel sure that loan protection will continue to be an important product for providers and consumers alike. ●

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Sarbanes Oxley – The BANE of Small Insurers?

by Norm Hill

Background

In 2002, the Sarbanes Oxley legislation (SOX) was passed by Congress to deal with bankruptcies and revelations of gigantic frauds perpetrated by Enron, WorldCom and others. The Act requires that, under criminal penalties, both public company management and their auditors must attest to the adequacy of the company's internal controls. Also, it established a new federal organization, the Public Company Accounting Oversight Board (PCAOB), with broad powers to regulate audit functions of accounting firms that audit public companies.

Sarbanes Oxley wording was not exact as to what was meant by "internal controls," much less by how internal controls could be judged to be adequate. The criminal indictment and resulting demise of Arthur Andersen was due to alleged participation in the above Enron fraud. Many people, including this author, believe that the remaining big four audit firms, all other public firms and all public company auditors, were terrified of similar fates if they or their clients ran afoul of the requirements for internal control attestation.

Audit fees have skyrocketed from initial engagements designed to test and strengthen internal controls. Other firms have developed lucrative specialties as SOX consultants. Their stated expertise would test these controls before the auditor looked at them, and supposedly make it easier and less expensive to obtain the required attestation.

Application to Insurers

One of the trickiest areas in which to define and test controls is that of intangible assets and liabilities. The situation is worsened if these accounting items are established or finally established outside of the company's mainframe computer system. This includes output from PCs or from spreadsheets. Unfortunately, calculations like these are almost universally applied for insurer policy reserves, claim liabilities and deferred acquisition costs. Therefore, when internal controls are critically examined, these items receive unusual amounts of attention and unprecedented scrutiny. This means that, among various insurer departments, the actuarial department will bear a heavy brunt of SOX procedural review.

The phrase "internal controls" has long been subject to different interpretations. Originally, internal controls meant systems that would preclude company fraud, unless committed by at least two employees. Now, it seems to mean that insurers' records of reserve factors, of mainframe reserve factor applications or even of offline spreadsheet formulas and results (i.e., as used by actuarial departments) must be rigidly protected and controlled. Anyone attempting to change these key records must be a member of management and document in writing his changes and reasons for changes.

Application to Small Insurers

Investor interests that were ruined in the Enron and WorldCom scandals typically are not present with small-capitalized stocks. Large companies are different from smaller ones in more than just size. Large organizations often have complex business models that lead to complex accounting practices. Smaller companies generally have less complicated financial statements requiring less rigid internal controls.

The key problem confronting smaller companies is Section 404 of the Act. It requires designing, documentation and auditing of financial controls. Section 404 has also led to demands on companies to erect rigid separation between certain types of internal duties. Historically, small insurers have given multiple duties to each employee. Now, SOX has forced companies to increase their personnel count by preventing individuals from acting in multiple capacities.

The problems just mentioned are even more acute for small insurers in defining controls for financial items computed by spreadsheets. They are more likely than large insurers to rely on spreadsheets or even manual calculations.

SOX forces both small and large insurers into the same regulatory mold when it comes to internal controls and external auditing. Its regulatory measures are not tailored to a company's size, nor were they designed to require as little additional cost as possible. Unfortunately, this uniform regulatory doctrine also applies to insurers in the formative stages of growth.

Development-stage companies with little or no revenue cannot afford burdensome compliance costs. According to a study by Financial Executive International, SOX implementation cost averages around $800,000 for companies with annual revenues under $100 million. This compares with $1.25 million for companies with sales of $100-500 million. For companies with annual revenues of about $50 million, compliance costs would thus consume nearly 1.5 percent of revenues, severely squeezing or eliminating operating margins. Funds available for reinvestment would also be depleted. In other words, small companies that create jobs and drive economic growth bear the relative brunt of SOX cost.

Statutory Implications

It has been said that whenever scandals give way to some kind of new federal legislation, the NAIC wants to show diligence and "get on the bandwagon" for appropriate expansion to the statutory arena. They have held several hearings and meetings on how to apply SOX requirements to statutory accounting statements of insurers and their audit reports.

Understandably, the most contentious area is the so called "404" requirement, calling for auditor attestation of internal controls. One major problem of applicability is that the signoff for federal (GAAP) purposes is on consolidated financials presented in Form 10Ks. Many insurance organizations are comprised of several insurers and, even more, of non-insurer affiliated companies (agencies, TPAs, etc.). A literal SOX application to statutory accounting would require audit attestation for each of these entities.

In reference to this activity of the NAIC/AICPA Working Group, one large insurer noted its concern that any decision to modify the Model Audit Rule should be accompanied by changes in the examinations process. In the discussion of Internal/External Auditors Work, a sentence should be added, recommending that if a company has an independent opinion about internal controls, e.g., as required for public companies, that it would serve as sufficient evidence for regulators, minimizing or eliminating balance sheet verification.

SOX forces both small and large insurers into the same regulatory mold when it comes to internal controls and external auditing.

At the time of this article, the final outcome of this statutory question is uncertain.

Any Relief in Sight?

Recently, in a July 2005 article in *Financial Times*, Congressman Oxley has stated that Congress "overdid it," i.e., overreacted to the Enron debacles. He hoped that the internal controls requirement would be interpreted "sensibly." Of course, neither the Congressman nor anyone else has defined what "sensibly" means.

In London last month, Oxley was quoted as telling the International Corporate Governance Network that the 2002 SOX Act, passed to reform public company corporate accounting and governance practices, was "excessive" due to the "hothouse atmosphere" that prevailed when the law was enacted. He described SOX as a "mismatch of public policy and desired objectives." The article also reported that the Congressman reaffirmed that the Act's purpose was to enhance "the strength of the U.S. capital markets," but said that he would do things differently if he could re-write the law knowing what he knows now.

At a recent meeting of the National Association of Mutual Insurers (NAMIC),Oxley was also quoted as saying that the original bill was intended to restore confidence in capital markets, while solvency regulation exists to protect insurance policyholders. One other speaker reiterated findings from a NAMIC study that showed that for every dollar of maximum possible benefit from SOX, it would cost insurance companies $8 to comply with the Act's Section 404.

Similar public statements have come from the SEC Chairman and others. The SEC has taken steps to address

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Some who have struggled through the first round of SOX compliance say that companies can "live with it."

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these issues by creating an advisory committee to examine the impact of SOX and other laws on smaller companies.

Some who have struggled through the first round of SOX compliance say that companies can "live with it." The main, overall requirement is compliance with checklists that govern management review and signoff on all phases of financial statements.

This attitude, on the surface, seems sound. However, it may conflict somewhat with several public statements of federal regulators that SOX compliance should not "deteriorate" into mechanical signoffs on checklists.

At the same time, the chief accountant of the Securities and Exchange Commission, Donald T. Nicolaisen, issued a staff report that set forth the S.E.C's views on the law. His report encouraged auditors to use their judgment to reduce checks they perform. In some cases where companies applied the new law, "The assessment became a mechanistic check-the-box exercise," Nicolaisen said. "This was not the goal of the Section 404 rules, and a better way to view the exercise emphasizes the particular risks of individual companies."

"The desired approach," the report added, "should devote resources to the areas of greatest risk, and avoid giving all significant accounts and related controls equal attention without regard to risk."

One professor recently wrote a letter to the *Wall Street Journal*, defending SOX. He said that most frauds in financial statement filings have been committed by small companies. However, he seemed to overlook the fact that, by far, the greatest monetary harm to investors has arisen from large company financial frauds.

Some commentators have stated that companies can only look to the SEC for SOX relief, not Congress. Others have stated the opposite, that it is fruitless to lobby any organization but Congress for relief.

Conclusion

ERISA in 1974 was once referred to as the "greatest piece of legislative overkill" in U.S. history. Now, possibly, the same criticism could be leveled at the SOX legislation. Hopefully, just like ERISA, initial SOX costs may reduce drastically in a few years, once initial satisfactory controls are in place. However, the outcome for small insurers is still in doubt. ●

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Actuarial Guideline 38 – Finally Arriving

by Daniel E. Winslow

First, I'd like to offer a comment about timing in a rapidly changing world. This article is written on Sept. 1, 2005 in the aftermath of Hurricane Katrina. The devastation to New Orleans caused the cancellation of the NAIC Fall meeting in New Orleans. AG 38 had been expected to be voted upon by the Plenary and Executive Committees. Perhaps it will be the subject of a regulatory conference call or it may be delayed while the consequences of Hurricane Katrina take first priority.

An Oct. 7 update is that the NAIC Executive and Plenary meeting will be Oct. 14 and Actuarial Guideline 38 is on the agenda. The May 9 draft of AG 38 is available for download at the NAIC Web site until it is officially adopted. Visit *http://www.naic.org/documents/committees_models0505_AG_38-6.pdf* for this information.

This draft was adopted by the Life and Health Actuarial Task Force (LHATF) at its meeting on June 10, 2005 and adopted by the Life Insurance and Annuities (A) Committee on July 13, 2005.

Actuarial Guideline 38 has been one of the most discussed reserving changes in the past year. First proposed in late summer of 2004, several industry groups and LHATF have worked to reach consensus on this issue. The current draft is a compromise, sometimes referred to as the "CEO compromise" since the CEOs of several leading life insurers negotiated the language. It has proved to be a catalyst for change and provoked much discussion about the weaknesses of the current life insurance reserving system. Perhaps the most important idea is that it is meant to be a temporary solution while principles-based reserving methods are drafted. Valuation mortality tables are also being examined with the SOA leading an industry-wide experience study. The 2001 CSO valuation mortality table is still fairly new but already is considered too conservative by many.

Given the July 1, 2005 implementation date and the "sunset date" of April 1, 2007, as well as the length of the product development, state filing and marketing implementation process, insurers will mostly be using the current products in their portfolio with this revised AG 38. If an insurer has not already undertaken an analysis of this draft of AG 38, this analysis should be swiftly done.

The reserving increases for certain categories of product are likely to be significant. Some products may need to be pulled off the market because the statutory reserving strain may be too large for an insurer to bear. Smaller to medium sized insurers may have more trouble accessing the capital markets for capital to fund this strain.

In the new Section 8B, significant is the "DRAFTING NOTE: The 7 percent premium load allowance approximates an average premium load level as evidenced by policies currently sold in the market. Rather than have the funding ratio vary according to the actual policy loads (which can fluctuate greatly by company and product), all companies will use an identical premium load allowance at a level approximately equal to the current industry average."

This is intended to bring whole life insurance type reserves to products with extended guarantees and close a perceived loophole in the prior AG 38 Section 8.

The following language serves as a point of interest. "However, the specified reserving approaches should be modified as needed to comply with the intent of this guideline that similar reserves be established for policy designs that contain similar guarantees." That sentence does not have the clarity of the previous formula-based reserving methods that have been fairly well settled in application and practice.

Well, life in life insurance product development and life insurance statutory reserving is likely to stay interesting for the next few years! Best wishes to all those company actuaries working to sell competitive products that serve policyholders and insurers well. ●

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Accessing and Using Public Data: A Primer for the Health Actuary

by Denise Love

Editor's Note: The following article last ran in the August 2005 issue of Health Section News. *It is reprinted with permission by the Society of Actuaries.*

"The twenty-first century will be about velocity: the speed of business and the speed of change. … An infrastructure designed around information flow will be the "killer application" for the twenty-first century." — Bill Gates, Business @ the Speed of Thought

Transformation of the health care industry is occurring and is long overdue. Despite escalating health care costs, health care quality and access has not improved, and may be worsening. Pay for performance, patient safety awareness, consumer-driven health care and advancements in medical informatics and information technology are converging to impose change on a health care system with a history that is resistant to change.

If the 1990s health care can be characterized as the years of managed care and quality improvement, then the first part of the 21st century will be known as the years of medical informatics and information technology. The good news for data lovers (actuaries, statisticians) is that health data no longer is an afterthought but it is an essential component of health care delivery, payment and decisions. But the next challenge will be information management. Most of us suffer, not from a lack of information, but from information overload. Search engines are more efficient than ever and within seconds deliver thousands of links to Web sites and documents. For example, a Google search of "public health data" delivers in seconds over 193,000 links to agencies, reports and data sources.

The health actuary can benefit from the diverse array of public data sets generated by federal and state agencies. Knowing what types of data are available and where to look reduces time and effort in accessing the right data for the right task. Knowing where and how to narrow your data search for the right data source can reduce the search time and effort.

About This Article

This article was written by the National Association of Health Data Organizations (NAHDO) for the Society of Actuaries. The paper is a primer for actuaries with limited experience in accessing and using public data sets. First, a very basic inventory of the major federal and state data sets is provided. Next, a few examples of online and analytic tools and innovative Web portals are described. These tools and portals (which organize and point to content created by others) offer a wide range of content appealing to the novice as well as the most sophisticated researcher. Private or proprietary data sets are not included in this article, as many are not available for general public use.

About The National Association of Health Data Organizations (NAHDO)

The National Association of Health Data Organizations (NAHDO) is a national nonprofit membership and educational association, established in 1986. NAHDO provides technical assistance to and advocacy for public and private health data organizations that collect and disseminate hospital discharge and other health care data. NAHDO regularly convenes leaders in health care information to share best practices and transfer methods and technologies across states and provides formal testimony and consultation to federal and state policy makers around health care data issues. NAHDO is actively involved in national standards development and federal grants and projects to improve the quality, quantity, and use of health care data for health care cost, quality, and access purposes. NAHDO's senior staff has over 20 years experience in the technical and political aspects of implementing statewide reporting initiatives, including the dissemination of

market and policy indicators related to health care cost, quality and access. NAHDO is a subcontractor to Medstat in the Agency for Healthcare Research and Quality's (AHRQ) Healthcare Cost and Utilization Project (HCUP) and through a NAHDO-CDC Cooperative Agreement provides technical assistance and statistical guidance to states disseminating public health data on the Internet. Visit *www.nahdo.org*.

About Public Data: 101

Publicly available data are generally available (for low or reasonable cost) to appropriate users. Because they are collected to meet the needs of the program or the user, they may not be designed to perfectly meet the needs of other end users. Most public data sets are accompanied by detailed code books and documentation, so it is essential to read data source notes and other documentation before embarking on a study using a public data base.

Tips on Accessing Public Data

The myriad of online query tools listed later in this article are reducing the barriers to access to federal and state data sets. However, structured queries and aggregate reports are not likely to meet the needs of the serious researcher or actuary who will want to access the micro data files directly from the agency. The privacy regulations promulgated under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) has resulted in additional considerations when requesting a data set. Public health agencies continue to experience inconsistent and sometimes conflicting interpretations and applications of the HIPAA privacy regulations when dealing with the collection, maintenance, use and disclosure of health information. If the data is for a research project, HIPAA requires approval by an Institutional Review Board (IRB). Without IRB approval, HIPAA provides for a "Limited Data Set" without direct identifiers such as name, address, or fields which individually identify a patient. A Limited Data Set must also be accompanied by a Data Use Agreement. For detailed information about the HIPAA Privacy Rule, see the following links:

http://www.mc.vanderbilt.edu/root/vumc.php?site=hipaaprivacy&doc=1548 and

http://www.hhs.gov/ocr/generalinfo.html

... structured queries and aggregate reports are not likely to meet the needs of the serious researcher or actuary who will want to access the micro data filed directly for the agency.

Tips for Requesting Public Data

- Structure your data request to avoid delays or getting turned down.
    - Define your study period. How many years of data do you need versus what is available? For multi-year studies, be aware of changes in hospital ownership over the time period. Codes and definitions may also change between years. Data elements may be added or deleted across years, so data documentation is critical. Be aware of calendar year or fiscal year time frames.
    - Consider the universe. Do you need all hospitals in an area? All geographic areas? Are data available for the scope of your study (e.g., specialty hospitals may be excluded from some statewide hospital discharge data sets)?
    - Are there legal or other limitations/restrictions to data release and disclosure? Some states restrict the public disclosure of hospital identity, as does the HCUP National Inpatient Sample. Some agencies limit public disclosure to aggregated results and restrict secondary release of the data.
    - Most hospital discharge data sets release charges, not cost or payment.

Where to Find Public Health Data

Federal Government Data Resources

The Department of Health and Human Services (DHHS) maintains a broad array of data collection systems designed to monitor disease outbreaks, disease treatment outcomes, injuries, food safety and other public health problems. Individual federal agencies are also providing Web tools to increase access to their own statistics and data sources.

- Centers for Disease Control and Prevention (CDC) — *www.cdc.gov*

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The Census Bureau, part of the U.S. Department of Commerce, is one of the primary sources of insurance data.

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- o Numerous national-level surveillance data reported by states, ranging from cancer to pregnancy risk assessment data, are maintained by the CDC.

- National Center for Health Statistics (NCHS) of the CDC (*www.cdc.gov/nchs*)
  - o NCHS maintains a host of household and provider-level surveys
  - o National Health Interview Survey (NHIS)
  - o National Health and Nutrition Examination Survey (NHANES)
  - o State and Local Area Integrated Telephone Survey (SLAITS)
  - o Survey of Income and Program Participation (SIPP)
  - o National Employer Surveys
  - o National Immunization Survey (NIS)
  - o National Maternal and Infant Health Survey (NMIHS)

NCHS and other DHHS agencies also conduct provider-level surveys that collect data from hospitals, physicians and clinics. Some of these surveys collect information directly from the individuals who use these services, but all of them also collect data from facility records.

  - National Ambulatory Medical Care Survey (NAMCS)
  - National Hospital Discharge Survey (NHDS)
  - National Home and Hospice Care Survey

- Agency for Healthcare Research and Quality (AHRQ) — *www.ahrq.gov*
  - o National Medical Expenditure Panel Survey (MEPS)—An annual household survey conducted since 1996 using the NHIS sample frame.
  - o Consumer Assessment of Health Plans Survey (CAHPS)
  - o Healthcare Cost and Utilization Project (HCUP)

- Substance Abuse and Mental Health Services Administration (SAMHSA) — *http://as.samhsa.gov*
  - o Drug Abuse Warning Network (DAWN) from hospital emergency department records

- Centers for Medicare and Medicaid Services (CMS) formerly HCFA — *www.cms.hhs.gov/researchers*
  - o Medicare program data are widely used to study health and health care outcomes of populations eligible for Medicare coverage. The Medicare Enrollment Database (EDB) contains information on all Medicare beneficiaries. It is an important database because it can link to other Medicare files. Medicare Current Beneficiary Survey Series (CMS) and the Medicare Provider and Review (MEDPAR) files.

- Health Resources and Services Administration (HRSA) — *www.hrsa.gov/data.htm*
  - o HRSA provides a wide range of data and statistics on maternal-child health, workforce, primary care, rural health and health insurance coverage.

Other federal data:
The Census Bureau, part of the U.S. Department of Commerce, is one of the primary sources of insurance data; it conducts two main surveys responsible for deriving health insurance data; the Current Population Survey and Survey of Income and Program Participation.

Human Services data include the Temporary Assistance for Needy Families (TANF): states provide data on a quarterly basis to the federal government including data on employment, earnings and income from other sources.

Federal Portals

- Quick Access to Federal Government Data (*http://www.fedstats.gov/*)
  This site is a gateway to statistics from over 100 U.S. Federal agencies and provides direct access to federal agencies, online data resources, mapping statistics and almost any federal statistical resource.

- HHS Data Council Gateway to Data and Statistics (*www.hhs-stat.net/*)

This Web-based tool brings together key health and human services data and statistics. It is designed to complement other government resources such as FirstGov and FedStats. The Gateway covers federal, state and local government sponsored information.

State Health Data

States are responsible for maintaining numerous health-related data collection systems including vital statistics (birth and death records); hospital discharge abstracts which provide detailed information on hospital patients and the diagnoses and treatments they receive; registries such as the cancer registry system; and programs such as Medicaid and State Children's Health Insurance Program (SCHIP). Much of the data states collect are shared with DHHS for department use in monitoring the health of the nation and administering and evaluating federal programs.

Because states' regulatory powers and service provision activities are broad, the federal government relies on states to collect health data used to study health and health services at the state and federal levels.

Much of the data resources are located with state health departments. The most efficient way to access one or more health department homepages is through the CDC Web site at *www.cdc.gov/mmwr/international/relres.html* which lists each state health department

Important federal-state cooperative data initiatives reflect the critical data partnerships between the federal and state governments, where the state implements data collection and management, using federal guidelines and standards, and then reports local data to the federal agency. Examples of these cooperatives and partnerships include the following:

- **Vital Statistics Cooperative Program:** The National Vital Statistics System is the oldest and most successful example of inter-governmental data sharing in public health and the shared relationships, standards and procedures form the mechanism by which NCHS collects and disseminates the nation's official vital statistics. These data are provided through contracts between NCHS and vital registration systems operated in the various jurisdictions legally responsible for the registration of vital events—births, deaths, marriages, divorces and fetal deaths. Visit *http://www.cdc.gov/nchs/nvss.htm*

- **Statewide Hospital Discharge Data Programs:** Over 45 states maintain statewide, discharge data systems that include all payers on all patients admitted to acute care hospitals, including the uninsured. These systems are maintained by state agencies or private data organizations, such as a hospital association. All of these data programs collect inpatient data in a Uniform Billing 92-based discharge data abstract which may be modified by states to meet local needs. Data access policies vary by state, depending on the legal and organizational policies governing data collection and release. Many of these states also participate in the HCUP project, which provides state-level data files in HCUP format; however, the HCUP common-denominator data set does not meet the needs of some research studies. Generally, the state agency provides research-level or more detailed data guided by data use agreements and policies. Many states are disseminating hospital statistics in query format on the Internet. Contact NAHDO at *nahdoinfo@nahdo.org* for contact information.

- **Healthcare Cost and Utilization Project (HCUP):** The Healthcare Cost and Utilization Project (HCUP, pronounced "H-Cup") is a family of health care data bases and related software tools and products developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality (AHRQ). HCUP databases bring together the data collection efforts of State data organizations, hospital associations, private data

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Researchers outside of the federal government can purchase these files for approved research activities through a data use agreement with CMS.

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organizations, and the federal government to create a national information resource of patient-level health care data. HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. These databases enable research on a broad range of health policy issues, including cost and quality of health services, medical practice patterns, access to health care programs, and outcomes of treatments at the national, state and local market levels. More information, databases and tools are available at *http://www.hcup-us.ahrq.gov/overview.jsp*

- **Behavioral Risk Factor Surveillance System (BRFSS):** a state-level survey developed by DHHS in collaboration with the states to monitor state-level prevalence of behavioral risks among adults. The survey contains a core survey that is common across all states so that comparisons can be made, but flexibility to permit states to add their own questions.

- **Youth Behavioral Risk Factor Survey (YBRFS):** a state-level survey modeled after the BRFSS and targeting adolescents.

- **Surveillance, Epidemiology, and End Results (SEER) program for cancer:** The National Cancer Institute administers the Surveillance, Epidemiology, and End Results (SEER) program to provide data on cancer incidence and survival. Data are collected from cancer registries in 14 geographical areas covering approximately 26 percent of the U.S population

- **Medicaid and State Child Health Insurance Programs (SCHIP):** States report encounter data to the CMS Medicaid Statistical Information System (MSIS). MSIS data are used to create an analytic data file, which prior to 1999 was called "SMRF" but now is named "Medicaid Analytic extract" (MAX). MAX files include claims and encounter records in a revised format. MAX files include encounter data from MCOs, but CMS staff does not consider these data to be useful for research purposes, as discussed below. For each state for each year, there are five MAX files, an eligibility file plus four utilization files (the same types that states use when submitting their data to CMS). Researchers outside of the federal government can purchase these files for approved research activities through a data use agreement with CMS.

- **State Health Interview Surveys:** The national surveys do not support state or local estimates, so many states conduct their own state-specific surveys and about 25 states have received federal funding from HRSA to conduct state planning grants to study potential ways to expand health insurance. The goal of the program is to support states as they analyze their uninsured populations and health care marketplaces in order to develop solutions to ensure health coverage for all state residents. More information can be found at *http://www.hrsa.gov/osp/stateplanning/granteelist.htm*.

The California Health Interview Survey can be found at *www.chis.ucla.edu/*.

Public domain analytic tools

National measures of quality increasingly used for proprietary, purchasing, public reporting and quality improvement initiatives are the AHRQ Quality Indicators. AHRQ's Quality Indicators are standardized indicators of quality generated from widely available hospital discharge data sets.

The quality indicators were empirically evaluated and refined by Stanford University's Evidence-based Practice Center. Under contract with AHRQ, Stanford assesses the face validity, precision, bias, construct validity and application factors for each quality indicator. This study resulted in the development of three software modules. The software can be downloaded without charge at *www.qualityindicators.ahrq.gov/* in SAS or SPSS format (and soon an online calculation tool will be available).

The advantages of the indicators are their public access, complete documentation, standardized definitions and a reference database consisting of 35 state inpatient data sets. The indicators can be used with any hospital administrative data set, including MedPar, state discharge data, payer data and a hospital's internal data. Known limitations of

administrative data apply to these indicators as they do to any study involving billing or claims data. Each of the following software modules generates numerators, denominators, observed rates, risk-adjusted rates and smoothed rates for individual indicators.

- **Prevention Quality Indicators (PQIs)** are a set of 16 measures that can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care-sensitive conditions." These are conditions for which good outpatient care can potentially prevent the need for hospitalization or, which early intervention can prevent complications or more severe disease.

- **Inpatient Quality Indicators (IQIs)** are a set of 31 measures that provide a perspective on hospital quality of care using hospital administrative data. These indicators reflect quality of care inside hospitals and include inpatient mortality for certain procedures and medical conditions; utilization of procedures for which there are questions of overuse, underuse, and misuse and volume of procedures for which there is some evidence that a higher volume of procedures is associated with lower mortality.

- **Patient Safety Indicators (PSIs)** are a set of 29 indicators to help health system leaders identify potential adverse events occurring during hospitalization. Twenty-three of the PSIs are provider-level measures and six are area-level measures. The PSIs are a set of indicators providing information on potential in hospital complications and adverse events following surgeries, procedures and childbirth. The indicators can be used to help hospital identify potential adverse events that might warrant further study.

Web Query Systems to Disseminate Public Data

State and federal agencies are developing interactive Web query systems to disseminate health statistics on the Web. These sites provide a quick and easy way for researchers to assess the significance of a problem and explore the data prior to purchasing the entire data set for detailed studies. It provides consumers and advocacy groups with aggregate information about a particular condition or procedure. And they can be used to gather national or regional benchmarks for use with local or proprietary data sets. A more complete listing of national, state and local Web query systems can be found at NAHDO's Web site, the Health Information Dissemination Systems Clearinghouse (HIDSC) at *http://www.nahdo.org/hidsc2/hidsc.aspx?id=Users%20web%20applications*.

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U.S. Tax Reserves for Life Insurers Book Signing at Annual Meeting

Never before has there been such a comprehensive, updated document on life and health insurance tax reserves …until now! *U.S. Tax Reserves for Life Insurers* is authored by SOA President-Elect Edward L. Robbins and Richard N. Bush, both experts in their fields. This new, innovative textbook provides authoritative guidance and mathematical approaches to calculating both statutory and tax reserves for all major product lines written by life insurance companies.

The text provides an introduction to statutory and tax reserve planning and includes a detailed discussion of the pertinent parts of the authoritative guidance, including extensive references to specific cases and rulings.

An added bonus! Also included, at no extra charge, is an interactive, Web-based feature that provides book buyers with access to the original Excel files used for most of the tables within the text … an excellent way for readers to comprehend the more complex mathematical calculations and concepts discussed in the book.

Authors will be on site at the Annual Meeting in NYC. Don't miss this opportunity!

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Table 1–Web Query Tools, Selected Examples

Entity	Name	Description/Criteria	URL
Utah Department of Health	Indicator-Based Information System for Public Health (IBIS-PH)	This system contains standard reports, publications and multiple query modules, which access data on population estimates, births, mortality, hospital use, emergency department use, health surveys, cancer registry and injuries. Emergency department module. Metrics: counts, crude rates, age-adjusted rates, total charges, average charge and median charges. Filters and dimensions: year, diagnosis, procedure, gender, primary payer (including Medicaid, SCHIP), discharge status and geographic area.	*http://ibis.health.utah.gov/view?xslt=home.xslt&xml=home/home.xml*
Wisconsin	Wisconsin Inquiry Tool for Healthcare Information (WITHIN), Ambulatory surgeries query module	WITHIN, which is based on Utah's IBIS-PH system, allows queries of hospitalizations and ambulatory surgeries (from both hospital-based and freestanding facilities). Ambulatory surgeries query module. Metrics: counts, total charges, average charge and median charges. Filters: type of surgery (170+ options) gender, age group, county of residence, year and primary payer (including medical assistance). Dimensions: year, gender, age group, county of residence and primary payer. Years available: 2001 and 2002.	*http://dhfs.wisconsin.gov/within/qspages/qcamb01.htm*
South Carolina	Analysis of Emergency Room Discharges by Selected Characteristics	Metrics: total and average charges. Filters: diagnosis category, specific diagnosis, age group, race, gender, primary payer (including Medicaid), county of residence, health service area and health district. Dimensions: county of residence, health service area, DHEC health district and primary payer. Years available: 2002 and 2003.	*http://www.ors2.state.sc.us/er.asp*

Entity	Name	Description/Criteria	URL
West Virginia	Health IQ 2003	Metrics: number of hospital discharges, charges, inpatient days, average charge and length of stay. Filters and dimensions: gender, age group, county of residence, payer, type of service, discharge status, DRG, APS, MDC, principal and secondary diagnosis and principal and secondary procedure. Years available: 2000-2002.	*http://www.hcawv.org/DataAndPublic/IQ/UB03.asp*
AHRQ	Healthcare Cost and Utilization Project (HCUP-NET)	HCUP-net generates statistics using data from HCUP's Nationwide Inpatient Sample (NIS), Kids' Inpatient Database (KID) and State Inpatient Databases (SID). Metrics: number of discharges, mean and median length of stay, mean and median charges, percent died in the hospital, discharge status, percent admitted from emergency department, percent admitted from another hospital and percent admitted from long term care facility. Soon will include the AHRQ Quality Indicators statistics.	*http://hcup.ahrq.gov/HCUPnet.asp*
AHRQ	Medical Expenditure Panel Survey (MEPS)	MEPS has two components: household and insurance. Household component: Metrics, filters and dimensions: hospital emergency room visits, prescribed medicines, perceived physical and mental health status and insurance status. Years available: 1996-2002.	*http://www.meps.ahrq.gov/mepsnet/mepsnetintro.htm*
NAHDO	Emergency Department Internet Query System (EDIQS)	This query system provides national emergency department statistics and benchmarks derived from the NCHS National Hospital Ambulatory Medical Care Survey (NHAMCS). Users can query general and injury-related ED utilization statistics by patient and hospital characteristics.	Available at the NAHDO site: *http://155.98.221.34/ediq/index1.htm*

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Table 2–Examples of Model Local Web Resources

Local Portal	Characteristics	URL
Massachusetts Health Data Consortium	Catalogue links to health data sites by: • Costs/expenditures • Disease/conditions • Drugs • Facilities • Geographic • Insurance • Medical Care/Treatment • Health Care Workforce	*http://www.mahealthdata.org/*
Health Foundation of Greater Cincinnati	Maintains a Health Data Resource directory for the Tri-State area of Indiana, Kentucky and Ohio. Created the Online Analysis and Statistical Information System (OASIS) in partnership with the University of Cincinnati. OASIS permits user-defined analysis of data sets in its data warehouse for guided analysis or execution of sophisticated statistical functions. Mapping software permits the generation of maps. SAS logs are generated and downloadable, as are data sets. Detailed documentation of codes and data fields are available for data sets in the warehouse.	*http://www.healthfoundation.org/data* OASIS: *http://www.oasis.uc.edu/OASIS_CODE/Templates/Login.cfm*
Family Health Outcomes Project, University of California San Francisco	This site includes excellent information about data, and online access to public health data through FHOP-maintained interactive sites. • EpiBC 2005: birth certificate data • Analysis and presentation system • Hospital discharge data analysis and presentation system • EpiMap2 california county map boundary files Downloadable EpiInfor (ver 3.2.2) with full users manual.	*http://www.ucsf.edu/fhop/htm/pub_health_data/index.htm*

Local Portal	Characteristics	URL
Washington State Department of Health	Health Data Section: links you to pages within and outside the Department of Health Web site that contain links to data tables or data for online query and publications. VistaPHw is used across the Washington State public health system as a standardized tool for community health assessment. Statistical guidelines for commonly encountered issues in public health practice. Assume a basic knowledge of epidemiology and biostatistics. • Confidence intervals for public health assessment • Population denominators • Racial and ethnic groups in data analyses • Rates for public health assessment • Rural-urban classification systems for public health assessment • Small numbers • Address matching and geocoding data • Human subjects review Many health publications.	*http://www.doh.wa.gov/Data/data.htm*
University of Michigan's Statistical Resource on the Web for Health	Regularly updated, provides data and statistical resources for topics ranging from A to V (Abortion to Vital Statistics). Statistical Universe indexes and abstracts federal government statistics since 1974; business, association, and state government data since 1980, and international agencies since 1983. About 15 percent of the abstracts link to full text.	*http://www.lib.umich.edu/govdocs/sthealth.html*
National Association of Health Data Organizations (NAHDO)	The NAHDO-CDC Cooperative Agreement supports a Web site, Health Information Dissemination Systems Clearinghouse (HIDSC) with links to interactive public health Web sites, plus: • Statistical guidelines • Soon HIPAA white papers series • Technical papers series	*http://www.nahdo.org/hidsc2/hidschome.aspx*

The actuarial community is an important constituency or user group for federal and state data sets. Since these data systems rely on public funding, actuaries can help. Often legislators will want to know who uses the data and its benefits. If you use a public data set for a study or in your daily work, provide feedback to the agency about the data, what might be improved, and results or findings from your study. This information is helpful to agency staff, especially as they prepare for their budget or sunset reviews. ●

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GRET 2006: What It Is and How It's Going

by James R. Thompson

Introduction

The GRET is the Generally Recognized Expense Table, and was included in the Life Insurance Illustrations Model Regulation. Although the regulation itself was passed by the NAIC at its Dec. 1995 meeting, the GRET table was produced in 1996 in time for the effective date of the regulation, Jan. 1, 1997. This newsletter had a material impact on the inclusion of the table in that model regulation. This table provides a standard, which a company can use instead of its own expense study. The use of the GRET is obviously helpful to smaller companies and startup companies, since they may use this if they do not have the resources to do their own study. Also, they may be experiencing high expenses due to years of low production, which result in high per-policy acquisition costs.

From a historical perspective, our Nov. 1996 issue (page 1) notes, "We consider the introduction of the Generally Recognized Expense Table (GRET) in the final draft to be one of our accomplishments,"(along with others who worked hard for it).

Background Information on the GRET

This table is formally updated from time to time based on new data with an analysis of the need for an update performed, usually on an annual basis. The GRET analysis and update recommendations are carried out by the SOA's Committee on Life Insurance Company Expenses (CLICE). It has four categories of companies: branch office, direct marketing, home service and other.

Companies were originally sorted to one category based on information from Conning and Co. and Best's Reports. The expenses are classed as acquisition per policy, per unit and percent of premium and maintenance per policy. In order to have a starting basis for the development of the table, seed expense factors from a study which used to be done by LOMA (e-map study) were taken and then normalized to fit the level of expenses generated by the reporting companies. Because of the huge amount of data (over 1,000 companies report expenses to the NAIC) and difficulties in company categorization prior to this year's analysis, only the largest 200 companies were chosen because they would give the most complete data available (about 95 percent of expenses reported to the NAIC). In addition, they excluded some with too much reinsurance or with expenses, which deviated too much from the average (that is, the outliers). Other companies were then included so that 200 in all were used. The 2003 GRET was based on 2001 data.

Proposed GRET for 2006

An attempt was made to produce an updated GRET for 2005, but they decided to delay this for a year because initial analysis showed an inconsistent trend for some of the distribution channels. This was due in part to reassigning the distribution channel for several insurance companies based on more recent information than that used in previous versions of the table. Because of this observation, the NAIC asked CLICE to re-examine the categorization of companies as well as the GRET methodology in anticipation of producing a 2006 table.

As part of its re-examination of the GRET procedures, CLICE conducted a survey of the reporting companies to have them self-assign their own category. They thought the individual companies would use their own judgment to determine their category. About a third responded, and this information was used to update distribution channel assignments for those companies. Those who didn't respond retained their prior ones.

Because of the survey information, data for a larger number of companies (415, with the usual exclusions as before) were incorporated than for the prior tables, which only had data from the largest 200. CLICE believes that using the larger number of companies will result in an even more representative data set. For reasonability, they compared the table from this data with that for the largest 200 companies.

One problem in the past is credibility of variations in factors caused by using only one year's worth of data. The direct marketing category in particular exhibited large fluctuations. If they used multi-year averages, the data had greater

risk of being out-of-date. So they studied use of one-, two- and three-year averages. Remember that the data are not from the year referred to in the GRET (2003 GRET has 2001 data). The committee produced charts showing one-, two- and three-year averages as well as annual results for calendar years 2000-2004 and for the 200 company and larger company bases. They showed these different tables in their reports so that the public could see the differences which would result.

Another difference in methodology between this study and the prior tables was the use of overall company averages instead of the use of a median company. The 2003 GRET had used the medians. The rationale for the use of the median was that it would minimize variation in the resulting calculations.

Results

Based on this analysis, CLICE is recommending the use of two-year averages for the most recent data (2003 and 2004) for the expanded set of companies. The results follow and are compared with the current factors, the 2003 GRET.

Recommended:	**Acquisition Per Policy**	**Expense Per Unit**	**% Premium**	**Maintenance Expense per Policy**
Branch Office	$76	$1.35	84 %	$38
Direct Marketing	111	2.00	61	56
Home Service	72	1.30	40	36
Other	78	1.40	43	39
2003 GRET (Current)				
Branch Office	$66	$1.15	73 %	$33
Direct Marketing	80	1.40	44	40
Home Service	61	1.10	34	31
Other	85	1.50	47	43

The committee also noted some recommended improvements for the future. First, they want a higher response rate from the company survey to distribution channels. Also, they still need to evaluate how to handle pour-ins for UL and VUL. The unit expense seeds derived from a LOMA study are from the mid-1990s. LOMA has discontinued this study and cannot provide more recent factors. CLICE is looking at alternatives for updating these factors.

If you wish to review these results, visit the NAIC Web site at *http://www.naic.org/committees_lhatf.htm.*

Status

I have been following the conference calls of the Life and Health Actuarial Task Force (LHATF) of the NAIC in 2004 and this year. They have been interesting. The last one took place on Aug. 1. CLICE representatives Sam Gutterman and Steve Siegel reported to them on the findings above. They batted it about a bit. Of particular note is the huge increase in the direct marketing category. No written comments were received prior to the call. No other suggestions were made by other regulators or any non-regulators on that call. Mike Batte of New Mexico said he would bring this up at the Fall National Meeting of the NAIC in New Orleans for final action.

As we no know, this meeting will not occur because of the hurricane. As discussed elsewhere, it is likely that the NAIC will push things right along anyway by conference calls. For GRET, this in fact occurred on Sept. 14, by conference call, and then on Sept. 22, the "A" committee of the NAIC also adopted it. It will go to the Plenary meeting in December in Chicago, and then if passed, be effective for any illustrations in 2006.

Prediction

I know that many smaller companies are into direct marketing, and I was puzzled at the lack of interest in the huge increases in this category. If you think about it, however, do many direct marketing companies sell illustrated life products? My experience is that they often sell simplified issue or non-medical final expense products. Thus they are not really interested in this. Or, if they use illustrations, might they be using their own expense?

The other expenses decreased. Many smaller companies use independent agents to sell their products. They would fall in this category.

Ample opportunity has been given for people to speak up. This issue of *Small Talk* will reach you after the fall meeting and before the final action at the December meeting. If you have any suggestions, you have a last chance; otherwise, expect to be using this in 2006. ●

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Don't Forget Your Reinsurer Revisited – 15 Years Later

by Philip A. Velazquez

I was recently reorganizing my files and came across an article of mine that appeared in the April 1990 issue of *Product Development News*. The title of the article was "Don't Forget Your Reinsurer." It discussed the role that a reinsurer could play during a company's product development process and encouraged companies to consider the reinsurer as a source of advice during the early stages of product development. The article was written before first dollar quota share became the method of choice for allocating reinsurance as opposed to excess retention. It was written during the early years of living benefit riders, joint last survivor policies and the introduction of preferred risk underwriting classifications. Yes, those were prehistoric times. In my article, I even mentioned hospitality suites as a marketing tool of life reinsurance companies!

The article was written to address a concern that I had that reinsurance considerations were being relegated to the back of the product development cycle. I was concerned that reinsurance input on benefit design, underwriting and pricing was not getting into the process. In my article I included a list of items that most reinsurers would like to see when a Request for Proposal (RFP) was sent. The items were:

- Policy and rider forms
- Gross premium rates, current and guaranteed mortality charges
- Actuarial memoranda
- Underwriting guidelines
- Contemplated retention schedules
- Volume estimates
- Historical experience regarding age distributions, mortality and lapse experience

I'm happy to say that the situation has changed since I wrote my article 15 years ago. There is much more interaction and discussion going on between the direct company actuaries and the reinsurance actuaries during the early stages of the product development process. However, there are still some areas that need improvement, primarily caused by recent developments. I'll just touch on a few.

Regulation XXX

Since 2000, many term writers have increased the use of reinsurance as a source of statutory capital. The growth in reinsurance volume assumed (by reinsurers) and ceded (by direct companies) requires additional lead time to develop a reinsurance proposal. More precise new business volume estimates for term insurance are needed to check for both initial capacity and also for ultimate capacity. This also requires precision in estimating volume by plan, underwriting class and issue age. With respect to deficiency reserves, there needs to be ongoing discussions regarding the development and reporting of X- factors, and the actual cost of the extra reserves and how the reinsurer will reflect those costs in its reinsurance rates.

Universal Life Option C Return of Premium Benefit

This benefit is proving to be troublesome to reinsurers, especially when the benefit allows for interest accumulation. The problems include the potential for "pop-up" liabilities for the reinsurer (i.e., no liability until the very late durations and possibly no coverage from retrocessionaires), the risk of exceeding available capacity especially at the older issue ages, and distortion of pricing models. A reinsurer may want to limit its liability at a much lower level than anticipated by the direct company.

No-Lapse Universal Life Policies

The characteristics of this business (e.g., better persistency, older issue ages, level net amount at risk pattern as opposed to one that decreases) are sufficiently different from other UL products that a different set of reinsurance mortality risk charges may be needed. A company should not take for granted that it can cover this type of product under an existing

reinsurance agreement that may cover a basket of other universal life plans.

Older Issue Ages

When I wrote my article 15 years ago, the subject of mortality for individuals whose issue ages are 80 and over was of little concern to most life reinsurers. There was little business being automatically ceded at those ages, and we generally relied on the decreasing pattern of mortality risk liability when we established simplified formulas for setting the reinsurance mortality risk charges at those ages.

In recent years many reinsurers have discovered that they have more age 80-and-over business than they are comfortable with and are increasingly giving more scrutiny toward their pricing at the senior issue ages. I encourage direct companies to contact their reinsurers to discuss the reinsurance pricing for mortality risk at the senior ages. They may find sticker shock similar to that experienced during a gasoline fill-up right after Hurricane Katrina.

Extended Maturity Benefits under Universal Life Contracts

It has been my experience that most direct writers expect that reinsurers will participate in the "free" death benefit coverage that is often provided after policy maturity, typically age 100 for 1980 CSO products. The problem is that the coverage is not cost-free and the reinsurers must adjust the pre-maturity reinsurance mortality risk rates to build up a fund to cover the cost. Before entering into a reinsurance contract, both parties need to discuss the incidence and level of these charges, and also the reporting of reserves.

Table Shaving Programs

The late 1990s and the early part of this century saw increased growth of these programs, primarily with support from the life reinsurance community. The life reinsurers are beginning to withdraw their support. They have become frightened by the increasing popularity of these programs within the life settlement market. A company should have discussions with its reinsurers before assuming that an existing program can be extended to a new product series. Perhaps a modification of the program can be worked out that will satisfy any concerns about the impact from life settlements on these programs. Personally I hope these programs go the way of leisure suits and polyester plaid bellbottoms, hopefully never to come back—but that is just my opinion. Maybe we should also extend that wish to floppy jeans that hang way below the waist.

A company should not take for granted that it can cover this type of product under an existing reinsurance agreement that may cover a basket other universal life plans.

Life Insurance Life Annuity Contracts (LILACs)

The life reinsurance industry has not been supportive of these programs, which involve the simultaneous purchase of a life insurance policy and a single premium immediate life annuity. Some direct companies initially thought that they could reinsure this business under existing automatic reinsurance agreements. The life reinsurers generally took the position that these programs were not contemplated at original pricing of the reinsurance deals. They expressed concern about the target market (older ages), the mortality anti-selection (arbitrage) and the use of table shaving programs.

The above are just a few examples of the complexities that have developed in the life insurance marketplace in the past 15 years. Ongoing dialogue between direct writers and reinsurers will enable both parties to work together more efficiently. Waiting to hold these types of discussions at treaty negotiation time will cause delays in completing the reinsurance deal and treaty documents. An added benefit for smaller companies is the ability to draw on a valuable resource, gratis.

I wonder what the next 15 years will bring. Let's talk about it soon. ●

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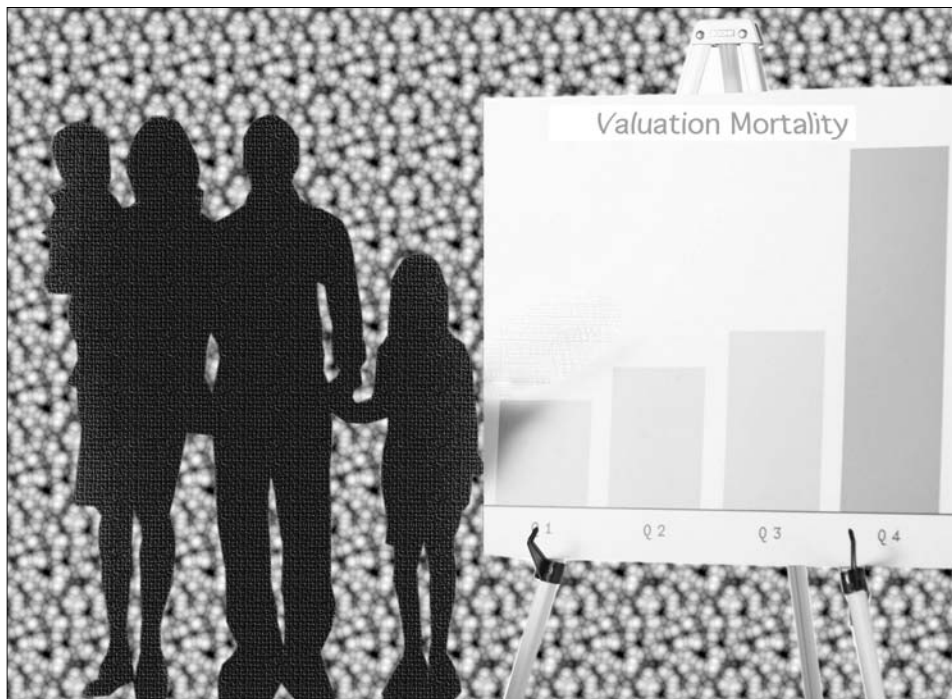
Does It Seem to You that Valuation Mortality Tables Don't Last as Long Anymore?

by Roger K. Annin



Most of us are currently implementing the new 2001 CSO Valuation Mortality Table for new product development. Numerous articles have been written about the table, transition strategies, tax issues and the like. One might think that with this new table, valuation issues would move to the back burner for a time. But this is not the case.

You may be aware of the principle-based versus formulaic reserve debate, the need for preferred risk mortality tables and the need for valuation tables for specialized products like PreNeed insurance. The purpose of this article is to provide a perspective on these issues, particularly as they relate to smaller-sized companies in the industry.

At the outset, I want to state that several of the following comments reflect my interpretation of current events and discussions in the valuation area. My hope is that by providing these insights, you will be encouraged to think about how various proposals and changes might affect your company.

To begin, two Project Oversight Groups (POG) have been appointed by the SOA to address issues related to preferred risk and specialized risk valuation tables. The first group is evaluating data and the need for a new PreNeed mortality table. This is a practical issue related to reserve adequacy in applying the 2001 CSO to PreNeed risks. At this point, we are in the data gathering phase of the work.

The second POG was more recently formed and is dealing with preferred risk issues. The need for preferred risk tables was expressed by a group of companies operating primarily in the UL and term markets. I was added to the POG to help represent the views of smaller companies toward a series of new valuation tables. I was surprised to find that data collection, analysis and development of these tables were slated for completion by April 2007. The NAIC has attached a sense of urgency to this project and the project schedule reflects a commitment by the SOA and others to respond to this need.

At a special meeting of the Life A Committee in Minneapolis on August 22 and 23, we found this timetable needs to be accelerated. My understanding is that the NAIC wants to push toward Principle-Based reserves for 2007, and therefore, needs the preferred valuation tables in 2006. These tables, with the 2001 CSO, provide a foundation for moving to the principle-based reserve approach. Of course, the NAIC is looking to the actuarial community to provide the basis for these new tables.

Options for the new tables range from completely new tables with preferred risk and residual mortality to subdivisions of the 2001 CSO, similar to the breakdowns of the 1980 CSO used for Nonsmoker/Smoker risks. Of course, rules will be needed to guide use of the tables. The 2001 CSO will continue as an optional table, but note that valuation actuaries will be able to select from a range of tables matched to expected mortality risks.

Throughout our committee conversations is the underlying current that these tables will provide a basis for valuation of business for those companies that use a standardized table and formulas for reserve determination. Principle-based reserves will provide an alternative basis for reserve determination based on company experience. There are many issues to be worked through, but what has caught my attention is the speed at which this process is moving forward.

Certainly, politics and special interests play a role in changes of this magnitude. We are all aware of proposals for federal regulation of insurance, such as the SMART Act and the optional federal charter. The NAIC has been battling these issues and establishing its case

that it is capable of regulating the industry in a progressive fashion. It now appears that at least some battle lines are being drawn around valuation issues.

There is no question that formulaic reserves are designed to produce conservative reserve totals for the industry as a whole. Statutory accounting has always had the safety of the industry at heart. However, the claim of many companies is that reserves are redundant and excessive, resulting in a higher consumer cost and a detrimental positioning of U.S. companies in an increasingly global market. As a result, we see pressure from larger companies for principle-based reserves and for federal regulation alternatives if states cannot respond quickly to these needs.

We have the computer power and tools to statistically evaluate reserve liabilities and establish confidence levels for appropriate reserve totals based on company dynamics. We can also recognize that options must be available for companies wishing to base reserves on standardized tables and methods that match mortality data to underwriting criteria—hence, the immediate need for preferred risk and specialized risk tables. All this makes sense in a progressive industry.

However, there is another aspect of these changes that creates concern for many companies. Small and even medium-sized companies are sometimes overwhelmed with the pace of changes and need time to absorb and implement new tables. And in this case, these changes may affect the very livelihood of some companies.

Consider the marketing balance between a large and small company for a moment. Let's say the large company bases reserves on its own data (principle based) whereas the small company uses standard tables and methods. Assuming the large company is able to hold lower reserves (otherwise they would choose standard tables), they will have an immediate advantage in a pricing element that heretofore was not in contention (effectively, valuation mortality served as a buffer between individual company experience and industry experience). This advantage may result in the larger company having reduced surplus strain, reduced overall reserve requirements and greater financial flexibility than the smaller company. This has the potential of upsetting an already fragile product market.

Small and even medium-sized companies are sometimes overwhelmed with the pace of changes and need time to absorb and implement new tables.

Now, suppose the smaller company is able to evaluate its data and hold reserves based on its own experience. Further, assume the smaller company realizes the same mortality levels through their underwriting and market as the larger carrier. Even then, statistical analysis might suggest that the smaller company hold greater reserves due to volatility associated with the smaller volume of business. Once again, the smaller company may face a pricing disadvantage that currently does not exist.

There are other issues related to these changes that may result in varying perspectives based on your position in the market. As such, it is important to think through the balance that exists between companies of various sizes in the market and to reach conclusions that recognize that balance.

I believe it would be a mistake to underestimate the important role smaller companies play in the insurance market. Yet, the speed at which some valuation issues are advancing may not provide adequate time for smaller company executives and actuaries to fully appreciate the impact valuation changes make in the competitive market. I encourage all smaller companies to actively follow these matters and to voice their opinions so that issues important to this segment of our market are fully represented. ●

Roger K. Annin, FSA, MAAA, is senior vice president and principal with Lewis & Ellis, Inc., Actuaries and Consultants in Overland Park, Kan. He currently serves on the SOA Project Oversight Groups for development of new PreNeed and Preferred Risk mortality tables. He can be reached at RAnnin@lewisellis.com.

NAIC Fall Meeting Cancelled; National Meeting Scheduled for Dec. 3-6

The officers and members of the National Association of Insurance Commissioners have decided to cancel the Fall National Meeting, which was scheduled for September 10-13 in New Orleans. Approximately 1,500 insurance regulators, industry representatives and interested parties had registered to attend the conference.

The NAIC has also made a pledge of $25,000 to the American Red Cross Special Hurricane Fund to assist with recovery efforts from Hurricane Katrina.

"The first priority for all insurance commissioners is responding to disasters," said NAIC President Diane Koken. "Our hearts go out to our colleagues who are trying to recover from the devastation of Hurricane Katrina. The NAIC and our members pledge our unified support in helping insurance consumers restore their lives after this unparalleled catastrophe."

"After surveying our members, we agreed to cancel the meeting and continue committee work through conference calls," said Catherine J. Weatherford, NAIC executive vice president and CEO. "If necessary, we will consider holding a smaller meeting in October. Because regulators are used to conducting telephone conference calls, we do not expect any interruption of NAIC business. Insurance regulators are experts at emergency response and our officers and committee chairs are continuing to collaborate on key initiatives."

Information about committee work will be updated regularly on the NAIC Web site at *www.naic.org*.

The NAIC Winter National Meeting is scheduled for Dec. 3-6 in Chicago. ●

Letter To The Editor

Dear Jim,

As the American Academy of Actuaries Universal Life Working Group (ULWG) moves closer towards defining an approach for using principles-based reserve methods, smaller insurance companies should offer their input to the process. Over the upcoming months, the principles-based approach will be working towards a more definite structure and will continue to be discussed with regulators about how it might be implemented to become part of statutory valuation law.

Potential topics that might be of interest to smaller companies include how prudent best estimate assumptions are set and if any simplified calculation methods may be available for product lines that pose minimal risk to solvency of the company. In addition, the scope of the ULWG has expanded to include products such as whole life, which might be more commonly sold in smaller company settings. I would encourage actuaries who work for smaller insurance companies or consult for such companies to keep abreast of the topics and offer their input to the ULWG.

Sincerely,

R. Dale Hall, FSA, MAAA
Chief Actuary, Life/Health Operations
Country Insurance & Financial Services

Articles needed for *Small Talk*
Your help and participation is needed and welcomed. All articles will include a byline to give you full credit for your effort. *Small Talk* is pleased to publish articles in a second language if a translation is provided by the author. For those of you interested in working on *Small Talk*, several associate editors are also needed to handle various specialty areas such as meetings, seminars, symposia and continuing education meetings.

If you would like to submit an article or be an associate editor, please call James R. Thompson at 815.459.2083

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In order to efficiently handle articles, please use the following format when submitting articles:

Please e-mail your articles as attachments in either MS Word (.doc) or Simple Text (.txt) files. We are able to convert most PC-compatible software packages. Headlines are typed upper and lower case. Please use a 10- point Times New Roman font for the body text. Carriage returns are put in only at the end of paragraphs. The right-hand margin is not justified.

If you must submit articles in another manner, please call Joe Adduci, 847.706.3548, at the Society of Actuaries for assistance.

Please send a hard copy of the article to:

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