

## SOCIETY OF ACTUARIES

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### Recommendations of the Society of Actuaries Mortality Study Working Group

by Al Klein

In 2003, the Society of Actuaries formed a panel of experts, the Mortality Study Working Group (MSWG), whose purpose was to re-evaluate the scope and content of the Society's mortality experience studies and to develop fresh strategic perspectives for the long term. The purpose of this article is to summarize the results and recommendations of the MSWG and to request your support in implementing the recommendations.

The MSWG recently had its first meeting. We typically had one to two conference calls per month. The final report (50 pages) was released in January 2004. The MSWG had broad representation— companies, consultants, regulators, reinsurers, SOA committee chairs and SOA staff were all represented. The underwriting and medical professions were also represented.

The MSWG concluded that mortality studies bring fundamental value to the life insurance industry and these studies cannot currently be obtained elsewhere. However, they also concluded that much change needs to take place. The collection process, form of output and speed of implementation, were singled out as areas needing improvement. Another area where additional improvement is necessary is in the number of contributors to the study. Currently, the annual Standard Ordinary Mortality Study receives contributions from 23 companies.

The MSWG had three specific recommendations. They suggested trying to implement these recommendations as soon as possible. The recommendations are to:

1. Design and develop a new preferred mortality study.



- 2. Further develop a new mortality study (called the FIRST Study) which will collect underwriting and other data to allow for more in-depth analysis of mortality.
- 3. Provide data and results on a more timely basis and in more useful forms.

Let's look at each of these recommendations in more detail.

#### 1. Preferred Mortality Study

The MSWG concluded that the industry desperately needs a preferred mortality study for both pricing and valuation purposes. The recommendation is to complete this study by the end of 2005.

In order to do this and to maintain the momentum that the Individual Life Experience Studies Committee is making (more on this later), a new task force was formed. This new task force, which is called the Preferred Mortality Study Task Force (PMSTF), had its first meeting August 11–12, 2004 in Chicago. The PMSTF has eight actuaries and four underwriters, representing a nice cross-section of direct companies, reinsurers and consultants.

In order to complete the work by the end of 2005, currently available data will be used. The PMSTF worked together to define a standard three rate class structure using seven criteria, including build, blood pressure, cholesterol ratio, driving record, current personal characteristics (i.e., not substandard), drug and alcohol use and family history. The next step is to collect the preferred criteria from each of the current contributors and then map all of the current data into the appropriate newly defined rate class. This will enable the PMSTF to perform a preferred mortality study on each of the rate classes that have been pre-defined. If this study is successful, as we anticipate that it will be, another interim study or two may be performed before the FIRST Mortality Study is ready.

#### 2. FIRST Mortality Study

The FIRST (Factors In Risk Selection Techniques) Mortality Study is a mortality study that will enable a more in-depth analysis of multiple variables than has ever been done. The idea behind the FIRST Study is to collect laboratory and other underwriting data and then do a mortality study on each element and correlated combinations of elements to gain a better understanding of the predictors of increased mortality risk.

The MSWG concluded that the FIRST Study approach was the best approach for future mortality studies.

Currently, four of the 23 contributors to the Standard Ordinary Mortality Study submit their contributions in the FIRST Study format. Since many companies are not familiar with the FIRST Study format and because the amount of data requested can be intimidating, there is a large education process in front of us.

A new task force, called the Task Force on Enhancements to Life Experience Studies (TFE-LES), will be formed to fine-tune the FIRST Study and to educate and recruit companies to contribute in this new format. Recruiting for members of TFELES is underway. This task force will have actuaries and underwriters and at least one medical director, IT person and statistician. We anticipate 12-15 members on TFELES.

It will take many years to collect enough data to perform a FIRST mortality study. The major laboratories have retained each company's data back to 1995, and this information is easily obtained from your lab. There is information about this on the FIRST Study Web page on the SOA Web site. Since it will take a long time before there is sufficient data to perform a mortality study, we may provide certain useful distributions of exposures on an interim basis, until enough deaths have occurred to do a credible mortality analysis.

#### 3. Data

The MSWG concluded that more companies are needed to contribute more data more quickly. The Individual Life Experience Studies Committee is trying to catch up and move to annual mortality studies again. The plan is to catch up completely by the 2005 SOA Annual Meeting.

The other suggestion of the MSWG was to create a new paradigm for mortality study output. The idea is to make the data available so that users can analyze it more deeply on their own. Exactly how the data is provided will need further examination, however, the confidentiality of the insured and the insurer will not be compromised. TFELES will also work on this issue.

#### Implementation

Implementation of these recommendations will be difficult, however, work has already begun on each of the recommendations, as described above. The SOA seems serious about moving to some new paradigms that will benefit the industry. Quick implementation and turnaround will benefit both pricing and valuation actuaries.

The SOA sent a blast e-mail to its membership asking for comments on the MSWG's recommendations and to find out whether members are willing to pay more to help support the additional effort and cost involved with the recommendations. Preliminary results were mixed in terms of willingness to pay more; however, they were almost universally in favor of the recommendations. There were a few suggestions, such as concentrating on getting more contributors and making sure that the SOA doesn't spread itself too thin trying to accomplish all that it has set out to do.

#### How You Can Help

There are a number of ways that you can help:

- Most importantly, have your company begin to contribute data, if it is not already doing so. Despite the limited resources at most companies, the technology available today should help in this regard. For those on older, more cumbersome systems for maintaining experience data, Medical Information Bureau (MIB) can help. MIB is the company that collects and compiles the data for the SOA, and is very willing to work with you to enable you to contribute data. The more smaller companies that we can get to contribute, the easier it will be to segregate smaller company results from the aggregate results and provide more meaningful results for the smaller companies.
- Volunteer on a task force. Recruiting for TFELES is underway and the first meeting will probably take place in early December (2004).
- Help pass along our message and recruit others. Tell your life insurance company friends and neighbors and ask them to get involved!

If you are already contributing, thank you!

If you have any questions or would like to participate, you can contact me at *al.klein@towersperrin.com* or Narayan Shankar at the SOA at *NShankar@soa.org*.

You can find a copy of the full MSWG report on the SOA Web site at *http://www.soa.org/ccm/content/areas-ofpractice/life-insurance/experience-studies/mortality-studieswork-group/.* ●



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