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EDITORIAL CORRECTION
In the article by Allen Schmitz titled, “The Pluses And Minuses Of The Long-Term Care Insurance Market” in the June/July 2011 issue of The Actuary, attribution for the “Average Daily Rates by Type of Care, Trend Data (2004 – 2010)” chart is missing. The source of the information is: Long-Term Care Cost Study, Prudential Research Report 2010. The Actuary regrets the omission and any confusion caused by it.

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DEAR EDITOR,

In “Predictive Modeling with Consumer Data” (October/November 2011 issue), Ksenia Draaghtel shows that consumer data can be used as a proxy for the health status information that insurers will be prohibited from using beginning in 2014 according to provisions in the Affordable Care Act (ACA). However, it is unclear whether the use of consumer data as a health insurance marketing tool will or should be allowed once the major provisions of the ACA are drafted into federal rules.

Although it is desirable for people with certain conditions to be covered by plans that do a particularly good job of managing care for those conditions, a negative consequence could arise if insurers use consumer data to avoid marketing to other individuals. Indeed, should the latter activity come into practice, it would undermine one of the intents of Congress and the president in enacting the ACA—for insurers to compete based on care management and efficiency rather than selection.

The Department of Health and Human Services (HHS) currently is drafting the rules that will govern marketing under the ACA. In a comment letter responding to draft regulations, the American Academy of Actuaries’ Exchanges Work Group informed HHS of the potential use of consumer data in marketing efforts (http://www.actuary.org/pdf/health/Academy_comments_on_NPRM_on_exchanges_100611_final.pdf). It is ultimately the decision of federal regulators whether to limit or prohibit consumer data from being used in this way.

Regardless of the outcome of the HHS rules on this matter, other factors should be considered by actuaries working for or advising health plans regarding the potential use of these data. It is possible, perhaps even likely, that the public would view the use of consumer data as a way of circumventing one of the more popular aspects of the ACA—the prohibition on using health status information for plan issuing or rating purposes. If so, the long-term reputational risk to anyone using consumer data in this way could outweigh any potential short-term financial benefit from out-predicting the risk adjustment system. As a profession, we need to ensure that we do not undermine the intent of health care reform or we risk damaging our reputation with policymakers and with the public.

Cori E. Uccello and Tom F. Wildsmith
Cori E. Uccello, FSA, MAAA, MPP, is senior health fellow of the American Academy of Actuaries. Tom F. Wildsmith, FSA, MAAA, is vice president for Health Issues for the American Academy of Actuaries.
DEAR EDITOR,

In the article, “Predictive Modeling with Consumer Data” (October/November 2011 issue), Ksenia Draaghtel describes using consumer data and predictive models to identify and market to profitable insureds in the post-health care reform health insurance market as a “win-win” for insurers and for consumers. Assuming Draaghtel and other consultants are correct with respect to the predictive abilities of consumer data, consumer data is a win for insurers and some consumers. It is not, however, a win for all consumers. Furthermore, condoning such use of consumer data poses a public relations risk for actuarial organizations.

Draaghtel proposes using consumer data and predictive models to differentially attract and retain insureds in the post-health care reform market. What she describes is known as indirect selection. Direct selection, better known as underwriting, will no longer be allowed under health care reform. While there is no passage of health care reform that specifically forbids indirect selection, indirect selection, by discriminating between customers based on their current and potential future health status, is clearly contrary to the intent of health care reform. Sections 1302, 1331, 1557, 2704, 2705, and 2706 of the Patient Protection and Affordable Care Act variously prohibit “discrimination” with respect to “pre-existing conditions,” “health status,” “health status related factors,” “expected length of life,” disability, age, race, gender, national origin, religion, and other factors. Section 2706 says that wellness efforts should not be a “subterfuge for discrimination.” Section 1311 mandates that qualified health plans “include within health insurance plan networks those essential community providers, where available, that serve predominately low-income, medically-underserved individuals.”

PPACA’s references to race, low-income and medically underserved individuals is worthy of consideration. Draaghtel proposes using predictive modeling to identify and seek subpopulations of people, as defined by their individual and neighborhood characteristics, who are most profitable given their risk adjusted premiums. Seeking the profitable also implies the reverse: avoiding the unprofitable insureds. There is good evidence from the public health literature to believe that risk adjustment is not adequate for minority, low-income and medically underserved populations. Therefore minorities, low-income and medically underserved populations are unlikely to be desired insureds within marketing plans organized around predictive models.

A central goal of health care reform is that insurers should profit based on quality, efficacy and cost-efficiency of health care, not on risk selection. That’s why underwriting is no longer permitted and why risk adjustment (PPACA Section 1343) will move money between insurers depending on the risk profile of their insureds. Draaghtel proposes identifying subpopulations that cost less (and more) than their risk adjusted premiums and designing insurer strategies accordingly. Such strategies: 1) are contrary to legislative intent; 2) divert resources toward data analysis activities and consultant fees that do not improve health care quality, efficacy or cost-efficiency; and 3) inevitably label some individuals and subpopulations as less desirable insureds. Undesirable insureds at a minimum will not be sought after; they may even experience clearly negative consequences. For example, there may be limited providers near their homes as there will be no incentive for insurers to build a robust provider network in neighborhoods with an undesirable profile.

I fear that someday we may wake up to a headline in a national publication that states, “Actuaries Undermined Health Care Reform.” I don’t want to see that day. I instead hope to see actuarial energies dedicated to health care quality, efficacy and cost-efficiency. And should non-actuaries try to sell insurers on the merits of indirect selection, I hope that we will see a headline that reads, “Actuaries Defend Health Care Reform from Those Intent on Undermining It.”

Tia Goss Sawhney
Tia Goss Sawhney, FSA, MAAA, is director of Data, Analytics and Research for the Illinois Department of Healthcare and Family Services. Her doctoral dissertation is “Controlling Indirect Selection under Healthcare Reform” (October 2011).
A CONVERSATION ON REASONABILITY

BY CORIN CHAPMAN

WITHIN THE INSURANCE INDUSTRY, there are many standard risks to analyze, value and appropriately price for such as weather-related disasters, major epidemics, catastrophic earthquakes, substantial economic variations and regulatory changes. Wait, should regulatory changes really be grouped in with these critical occurrences? More than ever, implemented rules and regulations are having significant effects on the bottom line of insurance companies, particularly within the health insurance industry where new legislation seems to be created and debated almost daily. With the addition of many of these laws, a battle seems to be brewing pitting health insurance companies against regulators and vice versa. Given the understanding that actuaries from both sides have about the ultimate underlying effects of many of these regulations, it only makes sense that the burden must fall on our profession to step outside the political arena and have a conversation on reasonability. Only by working together can the relationship between those that issue insurance and those that regulate it be strengthened, therefore guaranteeing that a viable and fair market exists into the future for many of the health products marketed today, such as comprehensive medical, Medicare Supplement, and long-term care (LTC) insurance.

Each year, as medical premiums rise, sometimes by double-digit percent increases, consumers’ trust towards insurance companies continues to decline. Critics cite specific examples of unscrupulous practices by a minority of insurance companies such as misleading sales practices, unfair rescissions or denial of coverage. These examples have occasionally been emphasized by the media and translated to all health insurance companies, often leading to increased pressure by the public to regulate health insurance companies. An obvious example of increased regulation is within the Affordable Care Act (ACA) in the form of a medical loss ratio requirement requiring all large group comprehensive health insurers to maintain a loss ratio of 85 percent and all small group and individual comprehensive health insurers to maintain a loss ratio of 80 percent. By limiting the allowable loss ratio, the government is attempting to essentially limit the profit a company can make, theoretically deterring any unfair practices.

Comprehensive medical insurers are not the only companies being targeted by recent regulation. Supplemental health insurance products, primarily excluded from ACA, have also been under increased scrutiny in recent years. In July, Representative Pete Stark from California and Senator John Kerry from Massachusetts introduced a bill to apply the ACA minimum loss ratio rules to Medicare Supplement. These rules would be in addition to the substantial guidance provided by the Medicare Supplement NAIC Model Regulation, current prior approval standards for rate increases in most states, and the fact that the Medicare Supplement market already has substantial price competition.

Additionally, through the current rate approval process, many insurance companies are being asked to set rate increases at levels that are below requested in order to maintain affordability of the product to the consumer. Reduced premium increases have the potential to put the product at a price level where it is no longer economical for insurers to remain in the Medicare Supplement market. For certain insurers, the introduction of the 80-to 85-percent minimum loss ratio would be
the final deterrent from continuing to sell Medicare Supplement policies.

An additional product line where similar issues exist is within LTC insurance. LTC insurers have been a continuous focus of the media, the public, and regulators due to their product’s inherent characteristics. LTC insurance premiums are paid over an extended time period, often greater than 20 years, in order to fund care that usually occurs towards the end of life. Therefore, any adverse action by the insurer, such as denial of benefits or an increase in premiums, has an increased likelihood of being experienced by an elderly individual with a fixed income. Premium increases may make the policies unaffordable for policyholders, causing them to lapse just when LTC services are becoming necessary.

In order to avoid consumers receiving unexpected rate increases, in 2000 the NAIC adopted the Long Term Care Insurance Model Regulation, which requires company actuaries to certify that rates are sufficient to pay future claims under moderately adverse experience. Additionally, the regulation requires that if companies do increase their rates, they need to meet an 85 percent minimum loss ratio on the increase from the original rate. Earlier this year, California presented and later tabled AB 999, which attempted to add an additional level of scrutiny by restricting rate increases to once every five years for pre-stabilization policies (sold prior to adoption of the NAIC LTC model regulations) and once every 10 years for post-stabilization policies.

From a consumer’s point of view, increasing premiums on individuals, particularly the elderly who have already paid a substantial amount of premiums to an insurer, seems particularly onerous. Furthermore, for many regulators, the large rate increases being requested, some reaching 40 percent, seem to indicate irresponsibility on the part of the insurer. From the regulators’ perspective, regulations are needed to ensure policies are priced correctly and to limit the insurers’ ability to punish policyholders for their own pricing mistakes. Additionally from the regulators’ perspective, it is necessary to have a given level of regulation to avoid insurers intentionally underpricing their products to build market share only to raise rates after policyholders have had the product for a substantial time period and no longer feel they can qualify for a new policy due to insurability standards. Therefore, many regulators feel limiting rate increases on LTC insurance policies is a clear and necessary step.

However, from an actuarial perspective, one cannot deny the need for rate increases for many insurers in order to maintain a sustainable product. The LTC insurance market remains relatively new and given the long tail on the claims curve, some insurers are only now starting to compile credible claims experience in which to compare previous estimates. Additionally, many of the assumptions that went into initial pricing, particularly those involving persistency, continue to evolve and differ substantially from expected. Initially, LTC insurance products were priced assuming a lapse rate similar to life insurance or Medicare Supplement products. However, lapse rates have decreased over time as the product and consumer behavior have evolved, leading to a substantial premium shortfall for many insurers. A perfect storm of lower than expected investments returns, changing mortality estimates and, in some cases, higher administrative expenses all have led to losses on insurers’ blocks of business. Were these assumptions incorrect? Yes. Were

Even at an increased premium, financial advisors agree that LTC insurance remains a valuable product. …

They actuarially irresponsible? Probably not. When communicating needed rate increases, insurers point to the fairly immature market for LTC insurance and the fact that they need to continuously refine their assumptions to build and maintain a properly priced product.

As with many of the health products available today, many regulators are trying to protect their constituency, but is it destroying the possibility of having a viable market? Even at an increased premium, financial advisors agree that LTC insurance remains a valuable product for those who own it. With the baby boomer generation turning 65 and nearly two-thirds of people over age 65 estimated to need some sort of long-term care either at a facility or at home, it comes as no surprise that the lapse rate of LTC insurance is lower than anticipated. Even after rate increases, most providers fail to experience significant shock lapse. Further emphasizing the need for a viable LTC insurance market, increasing the number of individuals owning private LTC
insurance will help reduce the mounting pressure on the Medicaid system caused by the usage of the home- and community-based care and institutional care benefit.

Despite the growing demand for LTC services, the number of insurers selling LTC insurance is decreasing. With the rising cost of LTC and the reluctance of regulators to approve needed rate increases, many insurers have chosen to discontinue sales and sometimes sell off their blocks of business. When determining applicable regulation, there must be more consideration of the effect the elimination of competition may have on the availability of the product. Regulators must consider if the coverage long-term care insurance provides is worth allowing insurers to institute unpopular and possibly financially harmful rate increases on in-force policies.

These issues are not unique to LTC insurance or even health insurance products. In general, insurers are often thought of as entities with unlimited capital, but as additional rules are implemented to govern profitability, the viability of many of these companies may become less stable. The balance between regulators protecting their constituency and allowing insurers to maintain a stable book of business is a struggle felt across the insurance industry with actuaries taking a front-and-center role on both sides. Actuaries have a unique opportunity to encourage more constructive conversations between all parties by educating both the regulators and insurers on all the potential ramifications of possible actions that either side may take. Additionally, as actuaries, we must continue to strive to create justifiable regulations and policies that work together to create a sustainable market.

Corin Chapman, FSA, MAAA, is an actuarial analyst for State Farm Life Insurance Co. She can be contacted at corin.chapman.rog2@statefarm.com.
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Letter From The President

SOA PRESIDENT BRADLEY M. SMITH’S SPEECH AT ANNUAL MEETING

BY BRADLEY M. SMITH

The following is an excerpt of SOA President Bradley M. Smith’s address to members at the 2011 SOA Annual Meeting & Exhibit, held in October. The entire speech can be found at www.soa.org/smith-2011-speech.

TODAY I WANT TO TALK ABOUT the actuarial profession, the opportunities we have, the challenges we face and the structure we operate under.

Have you ever been accused of being “too actuarial”? I certainly have. I used to wear it as a badge of honor. Until someone pointed out to me that they were not criticizing the complicated, technical nature of the work that actuaries do, but rather, my inability to communicate the issues in a non-technical fashion to non-actuaries.

If you cannot articulate the problem you are trying to solve and the solution you are proposing, you will fail as a professional—or at least fall short of your potential.

I have been a consultant for more than 25 years. Have I had clients ignore my advice? Absolutely.

We need to recognize that, as actuaries, we are not always right, that there are elements to any solution that we may not appreciate, that we are not always the “smartest person in the room.” Having said that, we must also recognize that if this happens too often, clients will eventually stop asking our opinions—we will become irrelevant.

This is important now because depending upon your point of view, we are either “blessed” or “burdened” with enormous societal problems that have substantial actuarial components: the funding and potential reform of Social Security, Medicare and Medicaid, health care reform, and the underfunding of public pension plans.

UNDERFUNDING OF PUBLIC PENSION PLANS

Many of our largest public pension plans are severely underfunded, which is a substantial financial burden on future generations. We
know the causes of the problem, but we have failed to communicate them effectively to the general public.

1. Sponsors have failed to fund their plans at the level recommended by their actuaries.

2. The investment returns of the past decade have been calamitous.

3. Politicians appealed to public employees by promising increases in their benefits, knowing that such increases would be substantially funded in the future, after they had left office.

4. Plan administrators of final average pay defined benefit pension plans allowed the “spiking” of benefit levels by permitting employees near retirement to work additional overtime in the years immediately prior to retirement.

5. Early retirements of older, higher-paid employees who were replaced by younger, lesser-paid employees was seen as a way to reduce current payroll, without recognizing the impact that these early retirements would have on the funded status of the pension plan.

6. Post-retirement health costs were either not funded at all or were funded at a level well below their expected cost.

Earlier in the year I was interviewed by a reporter from the New York Times concerning the funding of public pension plans. While I am not a pension actuary by training, my commercial responsibilities require me to be aware of the issues. At the end of the interview she told me that she had been working on this story for a number of months and that I was only one of two actuaries willing to discuss the causes of the problem. No one else would discuss it on the record!

If you cannot articulate the problem … you will fail as a professional—or at least fall short of your potential.

She said, “You must recognize that once the level of underfunding is understood by the public, people will be pointing fingers at the actuarial profession.”

I certainly do and so do you.

All the more reason for the actuarial profession to be a part of the solution, rather than be viewed as part of the problem.

HEALTH CARE REFORM
The Patient Protection and Affordable Care Act (PPACA) is a very complicated piece of legislation. One of its elements that will affect actuaries and our work are the four primary subsidies the law creates among different constituencies.

The four subsidies created by the legislation are:

1. Affluent to poor,
2. Healthy to unhealthy (via the elimination of underwriting),
3. Young male to young female (via the elimination of gender-based pricing), and
4. Young to old (via the 3-to-1 limitation on pricing).

While any one of us may disagree with the social benefits of such subsidies, it is pretty clear what the underlying thinking was on the first three. However, I did not understand why the fourth subsidy was enacted. After all, many of the uninsured are young adults who feel invulnerable and do not see the need to purchase health insurance.

The new law requires them to purchase insurance or pay a penalty. If we were going to subsidize any age group, shouldn’t we be subsidizing them? Instead, not only are we not subsidizing them, we are forcing them to pay artificially high premiums that subsidize an older, generally more affluent cohort.

This didn’t make sense to me.

I discussed this with someone who works on Capitol Hill. I told him I understood the criteria for the first three, but was struggling to understand the reason for the young to old age subsidy. Were Congress and the President trying to emulate the group insurance market? Were they making a statement about the appropriateness of age-based pricing?

He just looked at me and smiled. He said, “Brad, you are such an actuary. You try to impute logic where there is none. There is one

Bradley M. Smith
reason and one reason alone for the 3-to-1 limit that subsidizes the old at the expense of the young.” I said, “OK, what is the reason?” He said, “It is the price that AARP (American Association of Retired Persons) extracted for their support of the bill.” Totally non-actuarial and totally political. Old people vote, young people don’t.

If you are under age 35 this should make you really angry. I’m 56 and it makes me angry. One final point on this topic: there are ramifications to moving from our current environment to one that is subsidized in a different way, and as professionals we should not be shy about pointing out these ramifications.

**MEDICARE**

Health care costs are growing at an unsustainable level. Waste, fraud and overutilization have resulted in health care costs in excess of 16- to 17-percent of GDP.

The current health care delivery system incents health care professionals to provide more, not necessarily more effective, medicine.

The financial crisis taught us that we have finite resources. Choices have to be made. The issue is not whether the individual is free to pursue whatever protocol of treatment he or she wishes. The issue is what level of coverage is provided by the publicly provided plan, and what additional coverage is the individual responsible for purchasing.

Actuaries have the skills necessary to participate in research that will help society make some of these tough choices.

**SOCIAL SECURITY**

Social Security was designed as a pay-as-you-go system. The 1983 reform resulted in increased taxes and decreased benefits to assure the 75-year “solvency” of Social Security. The resultant tax revenue in excess of benefit payments “accumulated” in the Social Security Trust Fund. The federal government “borrowed” this excess revenue to pay current expenses. It also contributed to a reduction in the government’s current deficit and external debt.

Nonetheless, the federal government owes this money to the Social Security Trust Fund which now sits at approximately $2.6 trillion.

Reform is necessary, not to help address the deficit issue, but rather to distribute the pain of some combination of increased taxes and reduced benefits more equitably to all taxpaying generations.

Absent such reform, the generations paying taxes through the mid 2030s and receiving reduced benefits from the dissipation of the trust fund will bear the economic brunt caused by this demographic shift.

The actuarial profession needs to support their efforts to better educate the tax-paying public and lawmakers so that we can create a system that is fair to all.

**CONCLUSION**

These societal issues represent a significant and growing opportunity for the actuarial profession.

So what am I asking you to do?

I am asking every actuary to speak out about these issues: at cocktail parties, at neighborhood barbeques, at family gatherings, and at your place of work. I’m asking you to give presentations to your local community clubs, to write your congressman and to write letters to the editor of your local newspaper. To tap the power of social media to deliver this message.

One of the impediments to the actuarial profession becoming more substantial contributors to solving these issues is the structure of our professional organizations in the United States.

We must restructure our organizations in a way that concentrates and focuses our resources on ensuring the profession, our professional associations and our credentials remain strong and grow stronger in the future.

Many of the profession’s leaders and its employers, in private conversations and public statements, have expressed the view that a more efficient and rational structure for the U.S. profession makes sense. Several of them have tried in various ways over the years to achieve change.

Our current structure is not positioned to compete in the global marketplace. It is expensive, inefficient and less effective than it could be. Almost everyone that works and has worked within the system recognizes this. It seems clear that 10 years from now, this structure will no longer be in place.
It has been my experience in the commercial world that if you know you are destined to go a certain direction eventually, you are better off getting there sooner rather than later.

We have a great responsibility. In order to meet that responsibility we need to simplify our profession’s organizational structure. There is absolutely no need for three separate professional organizations—the SOA, the CAS and the AAA—to exist. We need to consolidate into one efficient, effective organization.

There are historical differences among our organizations, and there were good reasons why all were created. However, I believe—and I think the vast majority of you agree with me—that the time has passed when we should let our history dictate the future structure of our profession.

The challenges we face, as a profession and as a nation, are simply too great for us not to respond with a new approach.

Despite the obvious difficulty, I intend to address this issue. I am prepared to focus energy and time during my term as president seeking this change, even as we continue serving members and candidates in our current structure.

Let’s assure the relevancy of the actuarial profession into the foreseeable future. Let’s commit to do more to contribute to the solutions of society’s problems.

Inertia is our biggest obstacle. Those who do not want this change will certainly be the most vocal. Let your voices be heard! I welcome your suggestions.

Let’s not leave this earth knowing we could have done better.

Bradley M. Smith, FSA, MAAPA, is president of the Society of Actuaries. He can be contacted at bsmith@soa.org.

Developments Following SOA President Bradley M. Smith’s Call For Unity

THE SOA BOARD OF DIRECTORS has authorized the formation of a Task Force to explore whether other U.S.-based actuarial organizations are willing to discuss a possible consolidation of the actuarial professional organizations in the United States, consider various options for such a consolidation, and make a recommendation to the Board for possible action.

The Board also strongly reaffirmed its commitment to continue its ongoing and expanding initiatives to serve the needs of all SOA members and the constituents they serve in the United States, Canada and globally.

The SOA will keep members apprised of developments as they occur. In addition, the SOA will create forums in which members can share their thoughts about the idea.

Comments may be sent to membercomms@soa.org. In addition, blog posts on this topic are posted at the SOA Blog, and members may also use the SOA’s LinkedIn site to discuss the idea.

The CAS Board of Directors met on Nov. 6, 2011 and issued the following statement:

“The CAS is the only non-nation specific actuarial organization exclusively focused on property-casualty risks, and our members find this of value. Our members have made it clear, and the CAS Board agrees, that they do not see benefits in consolidation with other actuarial organizations. The CAS has been, and continues to be, strongly in favor of cooperative efforts with other organizations, including efforts to address the concerns raised in the SOA President’s speech.”
THE ACTUARIAL PROFESSION in India has witnessed a sea change in the decade after insurance liberalization. It has gone from being described as a “moribund profession” to being a “dynamic and lucrative” one. **BY SANCHIT MAINI**

The membership statistics below (see growth chart) show the increase in interest level of those wishing to pursue the actuarial exams.

The growth in student numbers has not yet led to a similar growth in fellows and associates and this has led to a paucity of qualified actuaries available to support the growth in the financial services industry, in particular the insurance industry. Most of the actuaries still work in the traditional fields of life insurance, pensions and employee benefits, and general insurance to a smaller extent.

In 2006, the profession witnessed a transformation when The Actuaries Act made the Actuarial Society of India a chartered institute. The key objective of the act is “to provide for regulating and developing the profession of actuary and for matters connected therewith or incidental thereto.” An actuary, as defined by the act, is someone who is a fellow of the Institute of Actuaries of India. In order to regulate the profession, the Act provides for a council to manage the affairs of the Institute with a membership of between nine and 12 members. The Act requires external nominees: one to represent the Ministry of Finance; one to represent the Insurance Regulatory and Development Authority (IRDA); and up to two persons nominated by the Central Government with backgrounds in life insurance, general insurance, finance, economics, law or accountancy. The Act also provides for a disciplinary committee.

The most significant element of The Actuaries Act is not to allow any company (defined as “any corporate body and includes a firm or other association of individuals”), whether incorporated in India or overseas, to engage in actuarial practice. That means that only partnership structures are allowed to carry out actuarial practice. A fellow member of the Institute must manage each office of an actuarial firm.

### Growth Chart

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**SOURCE: INSTITUTE OF ACTUARIES OF INDIA**
The Institute of Actuaries of India has been conducting its own actuarial examinations since 1988 and has been a full member of the International Actuarial Association since 1996.

The opening up of the industry has led to many challenges for actuaries working in life insurance, in particular due to the lack of past company experience in areas like persistency, costs and mortality. An era of high lapse rates—first year lapse rates of 30- to 35-percent are common in the industry—coupled with poor surrender values at early durations have led to a large number of customers receiving poor value for money on early surrenders. This problem is accentuated by high levels of agent and sales manager attrition. For example, sales manager attrition in the first year of joining may be higher than 100 percent for many private sector players.

One of the benefits of working in India is the diverse range of foreign insurance partners covering the United Kingdom and other parts of Europe, the United States, Canada, and Japan. These international partners have each brought different practices to the Indian life insurance market including product development.

As the Indian market matures there will be several interesting areas of work and challenges for actuaries including valuation work related to IPOs and M&A, advances in embedded value techniques, the development of Solvency II and its impact on the Indian solvency regime and risk management.

Foreign direct investment (FDI) in insurance companies is currently restricted to 26 percent, although there has been a long-standing debate to increase this to 49 percent. The matter, along with other legislative matters to amend the regulations introduced in 1999/2000, will be covered in an Insurance Amendment Bill, although there is significant opposition towards any increase in FDI amongst several political parties. Another significant change under consideration is to allow reinsurance companies to set up branch licenses in India. All foreign reinsurers currently reinsure business with overseas legal entities and their Indian operations provide sales, marketing and service support. None of the foreign reinsurers have as yet incorporated a company in India.

The IRDA, along with the Securities and Exchange Board of India (SEBI, the capital market regulator) have introduced draft regulations to allow life insurers who have completed 10 years to raise capital through initial public offerings. IPOs would lead to interesting work for actuaries, besides strengthening corporate governance in insurers as a result.

The Indian life insurance market has seen tremendous change in the last decade due to a multitude of factors ranging from the opening up of the market to private participation and subsequent regulatory reforms; robust economic and equity market growth; increase in household savings rate; and cultural changes amongst others. This decade of change has had a significant impact on the actuarial profession as well. This article focuses on the changes in the life insurance industry and its impact on the actuarial profession in India.

**MARKET STRUCTURE**

The life insurance market consists of 23 private players and the state-owned Life Insurance Corporation of India (LIC). It contributes just more than 4.4 percent of India’s GDP with a per capita premium income of US$56. Later in this article we will cover some of the recent regulatory changes that have affected growth and resulted in penetration dropping in 2010 compared to 2009. (See chart on page 19.)

The growth in life insurance density may well be a reflection of the high inflationary environment whereas penetration has slowed down considerably since 2006.

**PRODUCTS**

Before 2000, the LIC mainly sold savings-oriented traditional participating insurance in the form of endowments and anticipated endowments. A favorable tax regime, with life insurance premiums deductible from taxable income up to a limit, a low rate of tax applied to the LIC (12.5 percent compared to a company tax rate of 30 percent) and tax-exempt maturity benefits meant tax efficiency was a key driving force for life insurance sales. As a result, protection-oriented products without any savings elements were not really popular. The opening up of the market brought a host of new insurance products with unit-linked products becoming the main product category over the last decade.

A key regulatory change in 2002 regarding surplus transfer rules from the policyholder fund to shareholders fund made...
unit-linked products quite attractive for shareholders.

**REGULATIONS**
The IRDA was set up in 1999 and promulgated regulations in 2000 to open the insurance sector to private participation, including foreign ownership restricted to 26 percent. Since then the IRDA has been actively playing its dual role of supervision and development of the insurance industry in India.

Follows is a description of some of these regulations and their impact in shaping the life insurance industry.

**IRDA Regulations, 2000**
The key elements of the initial set of regulations focused on opening up the industry to private participation, including foreign ownership. The IRDA specified minimum capital requirement of INR100 Crore (cUS$22m); foreign ownership restricted to 26 percent through foreign direct investment; single license for operating in the entire country. The regulations introduced the appointed actuary role as a statutory position with significant responsibilities. The IRDA was particularly progressive in its regulations surrounding products with virtually no restriction on the types of products that companies could launch. All products required the appointed actuary to certify the premium rates, terms and conditions as being fair and adequate.

**Distribution of Surplus, 2002**
The LIC is governed by the LIC Act, 1956, when more than 250 insurance companies were folded into the state company. The LIC Act restricted surplus distribution to shareholders to 5.0 percent for all funds including participating and non-participating funds. The IRDA Regulations in 2000 allowed transfer to shareholders of up to 10 percent (thus creating the so-called 90:10 gate for distribution of surplus between policyholders and shareholders). This restricted the development of non-participating business, including unit-linked business. The Distribution of Surplus Regulations, 2002, allowed a 100 percent surplus transfer from non-participating funds to shareholders thereby creating a favorable regulatory regime for launching unit-linked business. Although the LIC had launched unit-linked business prior to the opening...
up of the sector to private players (and the Unit Trust of India had launched mutual funds with insurance wrappers even before that) this regulation made unit-linked products attractive from a shareholder value creation viewpoint and subsequently led to the launch of several products.

Unit-Linked Guidelines
The period between 2002 and 2006 saw the development and growth of unit-linked business and, coupled with the strong equity markets in India, became a dominating product form in India. The transparency of benefits and charges, together with the ability to participate in equity markets, proved to be a potent formula of success for unit-linked business in India.

Despite the introduction of the Unit-Linked Guidelines in 2006, one of the key objectives of which was to ensure fair treatment for customers, there were mounting concerns surrounding the appropriateness of unit-linked products being sold to the broad market. The Unit-Linked Charge Cap introduced in 2009 ensures that customers will receive a minimum maturity benefit by capping the amount of reduction in yield due to the levy of all charges at a hypothetical interest rate of 10 percent. The minimum maturity yield has been set at 7.0 percent for contracts up to a duration of 10 years and 7.75 percent for durations greater than 10 years. There is no cap for surrender values except for the requirement of surrender values to equal the account value from year six onwards. This focus of the guidelines on maturity values led to many unit-linked product designs that were arguably tontine, given the high lapse rates prevalent across the industry.

Early 2010 saw the mutual fund and life insurance industry turf war take an unprecedented turn with SEBI (the mutual fund regulator) issuing notice to 14 life insurers and asking them to register all unit-linked products with the SEBI in addition to the IRDA. It asked for new sales to be stopped at a short notice. This regulatory turf war went on for a few months and finally the matter was resolved through a Presidential Order giving the sole regulatory rights of unit-linked products to the IRDA.

Soon after this, the IRDA announced a revised set of unit-linked regulations that extended the net reduction in yield caps to all durations from six onwards and included surrender charge caps from years one to five.

These changes have led to a fundamental shift in the life insurance industry and companies have been forced to revise their business strategies. The initial changes evident since these regulations came into force include increased focus on bancassurance while companies consider changes to the agency channel, increased focus on traditional and single premium products, reductions in commissions and costs, and an enhanced focus on persistency. It remains to be seen whether the changes will lead to M&A; this being complicated with private players typically having two shareholders. Foreign insurers may also bide time until the FDI caps are increased to 49 percent.

The impact of these far-reaching regulatory changes will no doubt create a stronger, more resilient and customer-friendly insurance industry.

ENDNOTES
1 The first level of employees in the agency structure who directly recruit and develop agents. The Life Insurance Corporation of India and some private life insurers use the title of Agency Development Manager or Development Manager for this position, which describes the role more accurately.
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WITH REGULATORY CHANGES FOR U.S. INSURERS LOOMING ON THE HORIZON, THIS ARTICLE GIVES READERS AN IDEA OF WHAT TO EXPECT SO THEY CAN COME UP WITH A WINNING GAME PLAN. BY DAVE INGRAM

SEVERAL YEARS into the Risk Based Examination process, the National Association of Insurance Commissioners (NAIC) now is working to augment that process with a significant new risk related regulatory requirement for U.S. insurers. This new process, the so-called ORSA, or Own Risk and Solvency Assessment, moves insurance solvency regulation into new territory. Insurer and reinsurer management who will now be called to articulate their own judgment about the adequacy of their firm’s capital may see this is an abrupt shift from the longstanding practice of regulators specifying the exact requirements for assessing insurer solvency. The new judgment from management is expected to better reflect the risks, risk management capacity and capital as well as the future plans of each insurer. Many of the largest insurers may have developed the capabilities and have been applying those capabilities for at least half a decade now, but mid-sized insurers may need to get to work.

This change comes from an agreement of the international insurance regulatory community for a set of Insurance Core Principles (ICPs) in October, 2010. The new requirement for solvency is recorded in ICP 16, titled Enterprise Risk Management. ICP 16 calls for an ORSA which is already embedded in Pillar 2 of Solvency II. In the United States, ORSA is currently under discussion for adoption by the NAIC later in 2011 or early 2012. Implementation by the states would follow in 2013 and after. In Bermuda it will be called the Commercial Insurers Solvency Self Assessment. In Australia, it takes the same name as a similar process for banks, the Internal Capital Adequacy Assessment Process or ICAAP. Other regulators in other countries are expecting to join in. The Insurance Core Principles are a part of the enhanced regulatory thrust of the global Financial Stability Board under the authority of the G20 heads of state. The Financial Stability Board will be expecting a status report on implementation late in 2011.

WHY IS ORSA NEEDED?
In the past, solvency standards were always retrospective. They focused on past balance sheets to determine if an insurer had enough capital at the end of the last year for the risks that they held then. But what regulators really need to know is if an insurer has enough capital for the risks ahead.

Past solvency standards also focused on capital determination based on the regulator’s estimate of the firm’s risk. But the more important question is if there is enough capital for the risks as they really are.

As mentioned above, existing solvency standards make the regulator responsible for certifying solvency. The standards imply that if an insurer “passes,” then the insurer has enough capital. But large U.S. banks that had “passed” the Basel II solvency standards succumbed to the economic crisis. Regulators have therefore decided to make the management and board responsible for certifying solvency, in hopes that they will do a better job of reflecting the actual risk position and capital needs of the insurer.

REACTIONS TO THE NAIC’S ORSA PROPOSAL
The NAIC has exposed two different versions of an ORSA requirements for comments in late 2010 and in the spring of 2011. Reactions to the ORSA are mixed:

“We agree that introduction of an ORSA requirement into the U.S. solvency framework could provide regulators with meaningful insights into a company’s risk management practices.” — American Academy of Actuaries

“ACLI believes that consideration of the scope and effectiveness of an insurer’s risk management framework should be an integral part of the supervisor’s assessment of an insurer’s solvency. Our members believe that an insurer must have a sound process for assessing its capital adequacy in relation to its risk profile. That process must be integrated into its management processes and decision making culture, and the culture must in turn embrace an active internal risk assessment and risk management processes. Our members would therefore support a requirement that an insurer regularly assess its reasonably foreseeable material risks to ensure that its total financial resources are adequate to meet its insurance obligations at all times.” — American Council of Life Insurers
“The ORSA process should not mandate specific approaches but should focus on verifying that insurers are thinking about and managing their risk exposures.” — Aegon

“We urge the NAIC to be sensitive to the extraordinary effort that will likely be required of all carriers to complete a risk assessment appropriate to the company’s risk profile.” — America’s Health Insurance Plans

“We believe that the current U.S. solvency system is functioning well. … During the recent period of major financial failures, the lack of insurer insolvencies has been a source of pride for the NAIC. This outcome suggests that the current solvency regulatory system is ample, if not robust. While there may always be room for improvement, it would be a stretch to suggest that the current system is broken and should be revamped. This proposal seems to increase the overall regulatory requirements without deriving tangible benefits.” — Blue Cross Blue Shield Association

“The criteria included in the ORSA proposal (particularly Section 1) would best fit, after appropriate changes, as examination guidance of common criteria generally found in ERM programs. It would provide a basis for examiner evaluation without setting out de-facto requirements for ERM programs. Such requirements would seem to cross the line between regulator and management. As ERM practices further evolve, it would be easier to change examination guidance rather than a model law or regulation.” — Group of North American Insurance Enterprises

“Many of the responses sought here would exceed thirty pages. Some, including those not listed, would require more—plus supporting schedules. Is it within the capabilities of the states to annually review such a behemoth compliance filing? … How many different species of regulator-analysts would be required to competently review such annual filings?” — National Association of Mutual Insurance Companies

A new group, the North American Chief Risk Officers, provided extensive suggestions that proved to be in line with where the NAIC ended up with their October revisions. For the most part, they suggested that the ORSA should be the company process, without significant specifications from the regulators.

“The ORSA summary report should be organized into three major sections: Section 1—Description of the Insurer’s Risk Management Framework; Section 2—Insurer Assessment of Risk Exposures; and Section 3—Internal Capital and Prospective Solvency Assessment. An internationally active insurer that completes its ORSA for a group-wide supervisor in a foreign jurisdiction may be able to satisfy the NAIC’s filing requirement by providing that ORSA report. One of the NAIC’s goals is to avoid creating duplicate regulatory requirements for internationally active insurers.

“The summary should describe how the insurer identifies and categorizes relevant and material risks and manages these as it executes its business strategy. It should also describe risk monitoring processes and methods, provide risk appetite statements, and explain the relationship between risk tolerances and the amount and quality of internal capital. Finally, it should describe how the insurer incorporates new risk information to monitor and respond to changes in its risk profile due to economic and/or operational shifts and changes in strategy.
“Additionally, as part of the risk-focused examination, the examiner may review supporting materials to supplement his or her understanding of information contained in the ORSA summary report. These materials may include risk management policies or programs, such as the insurer’s underwriting, investment, claims, asset-liability management (ALM), reinsurance counterparty and operational risk policies.

“Emphasis on flexibility and principles-based ORSA requirements. The Council recognizes that the NAIC would like to provide state regulators with a framework for evaluating the efficacy of each insurer’s internal risk and capital management processes. In presenting this framework, it is important to differentiate between fundamental and supporting risk management practices. While having procedures in place for material and relevant risks is fundamental to a risk management framework, we suggest that the specific supporting details will depend on each company’s self-assessment of risks and strategy. For this reason, we reiterate that there is no one-size-fits-all approach to an ORSA and company risk policies, procedures and management actions should differ according to the business strategy and risks. As such, we suggest that the NAIC’s Guidance Manual provide clear language indicating that each insurer’s risk management, policies and procedures will vary based on the self-assessment of material and relevant risks.”

**NAIC GUIDANCE MANUAL**

The NAIC has created an implementation Guidance Manual and issued an updated version in late July to react to some of the comments received. The new draft manual suggests that insurance groups will be exempted from the ORSA requirements if their U.S. premium writings are less than $1 billion per year, and insurance companies with less than $500 million are also exempted. According to NAIC statistics, this will capture at least 80 percent of the premiums while relieving a large number of smaller insurers.

**IMPLEMENTATION REQUIREMENTS**

The new ORSA requires the management and board to decide on the adequacy of the firm’s ERM system and capital, based on their own assessment of the firm’s future plans, risks and risk capacity. The risk capacity is calculated from the funds available and the quality of risk management systems.

For a few insurers with large formal ERM programs already in place, the ORSA requirements will mean simply documentation of their ERM processes. However, the NAIC is expecting to require filing of only a three- to five-page confidential summary. U.S. companies that are a part of international groups filing an ORSA with the group will be able to file the same report in the United States. U.S.-based groups will be expected to create an ORSA report at the group level or can provide the reports at the company level depending upon how they organize their ERM process.

“Mandating legal entity-level presentation is also inconsistent with the premise that the ORSA should be an output of an insurer’s existing ERM environment and a regulatory resource to monitor that same environment. Most ERM programs look at risk holistically across an enterprise, recognizing where there may be concentration risks across legal entities, as well as diversification benefits. Viewing the risk at a legal entity-level is inconsistent with this approach.” — Chubb

But for some insurers, the new standards will require the establishment of more formal ERM processes and additional risk measurement capabilities. Boards and management will also need to be prepared for the initial ORSA summary report. They will need to stay updated on ORSA developments, as well as the firm’s risk management processes.

The ORSA will require a consistent and efficient measurement of solvency resources as well as a determination of capital quality. In addition, the ORSA will look for an effective ERM framework. The NAIC sees such a framework to include:

- Risk Culture and Governance;
- Risk Identification and Prioritization;
- Risk Appetite, Tolerances and Limits;
• Risk Management and Controls; and
• Risk Reporting and Communication.

They will look for documentation of this framework as the ERM policy statement of the insurer.

MINIMUM INTERNATIONAL STANDARDS FOR ERM ADEQUACY

ICP 16 that spells out the international standards is somewhat different from the NAIC approach. ICP 16 specifies nine major risk categories: Claims, Expense, Reserving, Investment Market, Counterparty Credit, Investment Credit, Operational, and Liquidity Group Risk. Insurers will need to be able to identify and track key indicators for each major risk.

For risk measurement, many requirements have been laid out. Insurers that have not yet developed significant risk measurement capabilities will find compliance with these requirements to be quite challenging. They will be expected to regularly assess the frequency and severity of identified risks using risk modeling techniques, stress testing and/or scenario analysis. These methodologies should be able to consider a range of levels of adversity as well as distributions of future cash flows. They should also be able to look beyond accounting and regulatory views. If they contain limitations, management and boards should be informed. Concepts such as parameter risk modeling, and qualitative assessments of reputation risk and other non-quantifiable risks need to be considered. New stress tests should be performed, in addition to documentation of risk measurement approaches and assumptions.

Apart from risk measurement, ORSA calls for a Risk Feedback Loop. This is a new risk concept, based on the idea that a new ORSA review process is required whenever there is a major change or potential change to the insurer’s risk profile. This change could result from environmental factors, management actions, uneven growth or a decline in the risks of the insurer. In such circumstances, ORSA requires that insurers trigger a new ORSA, as well as a reassessment of risk tolerance and risk treatments.

The development of a Risk Tolerance Statement is known to stymie most insurers. However, insurers will need to overcome their reluctance to complete this step. Quantitative and qualitative risk tolerances and limits must be set and reflected in business strategy choices as well as day-to-day operations. It requires calculating financially the strength, size and complexity of risks; resources needed to manage risks; and transferability of businesses.

Once risk tolerances and limits have been set, the required risk policy statements will largely be a documentation of these practices. The policies will summarize how relevant risks are identified, managed and monitored at the operational level. It will also report how risk information links to the company’s strategy development processes, in addition to explaining the relationship between risk tolerance and capital held. Specifically, ICP 16 calls for policies regarding the underwriting of risk, asset liability management and investment risks. It also requires a policy statement that documents the risk feedback loop.

QUANTITATIVE AND QUALITATIVE RISK ASSESSMENTS SHOULD BE PERFORMED. STOCHASTIC MODELING IS NOT SPECIFICALLY REQUIRED; IN FACT, THE ORSA PRACTICE SEEMS TO FAVOR STRESS TESTING.

SOLVENCY REQUIREMENTS

Most firms will focus on the ORSA resource assessment or measurement requirement. ICP 16 specifies that the ORSA needs to plan ahead for up to five years to represent the business plan of the insurer while the NAIC Guidance Manual allows for a two- to five-year look forward. All foreseeable and material risks should be included in the assessment. Quantitative and qualitative risk assessments should be performed. Stochastic modeling is not specifically required; in fact, the ORSA practice seems to favor stress testing.

The NAIC suggests that insurers need to calculate economic capital and to specify seven major decisions that they made in calculating economic capital:

1. Definition of solvency—Cash flow basis, balance sheet basis or other.
2. Time horizon of risk exposure—One year, lifetime or other.
3. Risks modeled.
4. Risk measurement process—Stress tests, stochastic modeling, factors.
5. Measurement metric—Value at risk, tail value at risk, probability to ruin, or other.
6. Company target level of capital.
7. How diversification is reflected.

In Europe, regulators expect that the parameters for the ORSA may be different from those of the internal model submission for Solvency II capital adequacy purposes. This is because the internal model submission is calibrated on the risk assumptions specified by the regulators, while the ORSA will be calibrated to reflect the risk assumptions of management.

While the NAIC allows for factor models to be used as the basis for the capital held, the ORSA will require that insurers prepare a view of the adequacy of capital in a stressed environment. Insurers will need to develop processes to perform a self-assessment in the stressed environment using either a stress testing methodology or a stochastic model. And since the ORSA requires a multi-year view of future capital needs, even firms that have developed internal models may want to enhance the scope of their models to provide multi-year projections. Otherwise, they will need to create alternative processes to look ahead over several years and get the board and management to sign off on the resulting conclusions.

HOW OFTEN MUST ORSA BE UPDATED?

The NAIC has specified that the ORSA must be prepared annually as the minimum schedule. In addition, ICP 16 specifies a number of situations that would trigger the need for a new ORSA. These include:

- Occurrence of a major change—actual or likely;
- Startup of new lines of business;
- Major changes in risk tolerance limits and/or reinsurance arrangements;
- Aggressive acquisition strategy to win market share;
- Acquisition of other insurers and/or portfolios;
- Aggressive strategy to improve risk profile;
- Major changes to premium levels;
- Disposal of existing portfolios;
- Major changes to capital distribution (e.g., dividend payment or share repurchase) or capital injection;
- Major changes in asset mix;
- Major changes in external risk factors; and
- Major changes in business conditions such as in the competitive, regulatory or legal environments.

It is unclear whether the NAIC will have any process for reviewing an ORSA report anything other than annually.

CONCLUSION

ORSA requirements may present a new challenge for some insurers. While the consequences of noncompliance have not yet been specified, they could range from additional scrutiny during the regulatory review process to public reports declaring the inadequacy of the firm’s risk management practices. The exact ORSA process that will be required of U.S. companies is still evolving. The NAIC is clearly working with the feedback that they are getting to adapt the ideas of the ICP 16 to fit with the existing regulatory and industry situation here in the United States while achieving the objectives of ICP 16.

The main ideas of the ORSA—that the insurer (not the regulator) should be responsible for determining the capital that the firm needs; and that the determination should reflect the risk management capabilities, the risks and the capital of the firm—are strongly in place.

Dave Ingram, FSA, CERA, MAAA, is executive vice president with Willis Re Inc. He can be contacted at dave.ingram@willis.com.
What do you do when you’re out of the office?

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- Play an instrument, or Create artwork?
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We look forward to hearing from you!
A LOOK AT THE COMPETENCY FRAMEWORK

BY JUDY POWILLS

REMINDE ME ... WHAT IS THE COMPETENCY FRAMEWORK?
By now you’ve probably heard about the Society of Actuaries’ Competency Framework—developed by members for members. It is designed to reflect the knowledge, skills and abilities that actuaries need to be valued and successful. Eight key areas, covering aspects of professionalism, technical expertise and business acumen, make up the framework. These eight competency areas are not mutually exclusive though—they are interrelated and the whole is greater than the sum of its parts. (See graph below)

The competency framework is foundational to the SOA professional development curriculum. The SOA is committed to providing its members with a full spectrum of professional development and lifelong learning opportunities. The Competency Framework provides a means of ensuring this happens. In fact, a diverse set of more than 400 SOA professional development offerings have been mapped to the Competency Framework. Live and recorded meeting sessions, seminars, webcasts, e-courses, articles and research are now aligned to the eight competency areas.

WHY IS THE COMPETENCY FRAMEWORK SELF-ASSESSMENT TOOL FOR ME?
What’s important to you? Where are you now? What competencies are most important to you in your present work? What about your future work? Where do you want to go? What strengths will you foster? Where is there room to grow? The self-assessment tool will help you answer these questions.

Knowing yourself and being self-aware is an important step toward achieving your desired results. The tool helps you discover your current level with regard to each competency and helps you identify where you believe your level should be for your current and future employment.

WHO HAS COMPLETED THE SELF-ASSESSMENT TOOL?
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WHAT ARE YOUR LEARNING NEEDS?
WHAT’S YOUR PLAN?

Judy Powills

What’s the catch?
The catch is time. You’ll need to schedule a small block of time to complete the Competency Framework Self-Assessment Tool. Although the time required to complete the assessment varies by individual, it might take you up to 45 minutes and you must complete it in one sitting. However, I’m sure you’ll agree that your professional development is worth 45 minutes of your time.

What will I get?
Upon completion, you’ll be able to view, save and print your personal results (see chart, right, bottom and charts on page 32)—including a graphical display of skill gaps as well as the supporting detail. Using the results is the key. Use the assessment report to devise a unique and personal professional development path based on a structure designed to help you develop a broad and valued skill set.

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edge and skills and how you can use them to close the gaps. Will you develop or strengthen specific skills within the context of a project on which you’re currently working? In addition to your continuous development on your job, seek out opportunities to grow through training and development options offered by your employer, the SOA, your local actuarial club, external vendors or other channels. Think broadly. Learning options for your personal plan go beyond the live event, virtual session or classroom. Take advantage of e-learning, webcasts, podcasts, vodcasts, meeting recordings, readings, job aids, job shadowing, mentoring, coaching, volunteering, social networks, forums, communities of practice, blogs and more.

After completing the self assessment you will need to take some time to design your personal plan. Invest in your plan, invest in yourself!

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We’ve made it easy to stay organized. Use the Personal Planning Workbook to develop and plan for meeting your goals. This Excel workbook has a template planning form, sample activities related to each competency and a list of meeting sessions by competency for the four major SOA meetings in 2010—Life and Annuity Symposium, Health Meeting, Valuation Actuary Symposium and Annual Meeting. The listing of sessions will be updated annually.

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• Professionalism in Practice: Precept 3
• Professionalism in Practice: Precept 10
• Professionalism in Practice: Precept 13

WEBCAST RECORDINGS (1.8 CREDITS EACH)
• Professionalism for Actuaries in Entrepreneurial and Non-Traditional Roles (May 6, 2010)
• Professionalism for Actuaries in Smaller Insurance Companies (March 8, 2011)
• Code of Conduct Implications for Nontraditional Actuaries (May 24, 2011)

VIRTUAL SESSIONS (1.5 CREDITS EACH)
• Professionalism in Everyday Life of an Actuary (Life & Annuity Symposium—May 17, 2010)

AUDIO RECORDINGS
• ASOPs for Health Actuaries (Health Meeting—June 15, 2011—1.8 credits)
• 19 PD—Acting in the Public Interest (Annual Meeting—Oct. 17, 2011—1.5 credits)
• 36 TS—Professionalism, Standards of Practice and Reinsurance (Annual Meeting—Oct. 17, 2011—1.5 credits)
• 78 PD—Standards of Practice in Product Development—Do These Apply to Me? (Annual Meeting—Oct. 18, 2011—1.5 credits)
• 139 PD—What Every Actuary Must Know About ASOP 41 (Annual Meeting—Oct. 19, 2011—1.5 credits)

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Judy Powills is senior director of Curriculum and Content Development for the SOA. She can be contacted at jpowills@soa.org.
The mission of the E&R Section is to (1) expand the knowledge base of the profession, (2) promote ties amongst practitioners and academicians, and (3) support actuarial education and research (surprise).

Our 572 members are primarily academics, researchers (including actuaries who do practical research for their insurance companies, consulting firms, etc.), and practitioners interested in research and education (e.g., exam volunteers). While some academics do theoretical research, many would love to do more practical research and do it with practitioners, but getting this connection has been difficult. In practical research, flexibility and the ability to drill down is key. For example, many academic researchers will treat age-sex as an independent variable, whereas a practitioner might apply age-sex factors or look at results by age-sex cell. This aligns more closely with pricing models and gives us the ability to determine outliers. These methods are not mutually exclusive. In fact, it works best when the practitioner shadows the academic or vice versa. Also, in practical research, the results need to align closely with the underlying data. Not only should the overall averages match the data but also the slopes. Many academic studies are often dismissed if the mean predicted by a regression model is way off base from the underlying data. This happens frequently when the regression model accounts for human behavior … always hard to model!

Another major difference between academic research and industry research is the role of publication. Publication and subsequent citation of results is the primary goal of academic research, while industry research is often intended to be proprietary to provide a competitive advantage. Academic researchers often have difficulty obtaining data with which to develop and test leading-edge techniques and theories, while industry researchers often have rich proprietary data sources but may not be familiar with some leading-edge techniques. The Society of Actuaries (SOA) can play a role by developing industry datasets with rich detail that still protect the confidentiality of the contributed data.

We are a diverse group, since we can work in any practice area (or all of them). That can make it a little more difficult for us to unite over specific issues as in the practice-area sections, but we have been very successful at coming together at our excellent Actuarial Research Conferences (ARCs) every summer, the premier event for E&R actuaries each year. We just had our last ARC at UCONN which broke all kinds of records (150 attendees, 75 presentations, and 17 sponsors, including 11 sections). Our members attend ARC more than other SOA meetings, because they are in the summer (when professors are less likely to be teaching) and they are tailored to our membership.

The next two ARCs are on Aug. 1–4, 2012 at the University of Manitoba (on their Actuarial Department’s 100th Anniversary) and Aug. 1–3, 2013 at Temple University (in Philadelphia). We hope that sections will continue to sponsor them and, in addition, encourage their members to attend and give presentations. That will help us with one of our top priorities: to integrate more with the other members and sections of the SOA. It might help the presenter too, if academics at the meeting find it interesting and do further research on it (and many academics will enjoy doing research on a topic that practitioners can use).

To further this goal, we also created two subcommittees to bring together academic and practitioner researchers to co-author papers, do joint research, and co-present at SOA sessions and SOA webcasts. If you are interested, please email Joan Barrett (Joan_C_Barrett@uhc.com) or Tom Edwalds (tedwalds@munichre.com).

Ron Gebhardtbsauer, FSA, EA, MAAA, MSPA, is past E&R Section chair and the head of the Actuarial Program at Penn State University. He can be contacted at rug16@psu.edu.

PENSION SECTION

Over the past several years, there has been a continuing trend away from defined-benefit plans as the primary retirement vehicle that companies offer to their employees. Based on statistics from the Pension Benefit Guaranty Corporation (PBGC) (see www.pbgc.gov/Documents/2011bluebook.pdf), hard-frozen defined-benefit plans—i.e., plans where benefit accruals have ceased completely—represented 26 percent of the defined-benefit plans covered by the PBGC at the beginning of 2009 and 13 percent of plan participants. Another 7 percent of participants were covered by plans where benefit accruals have ceased for some, but not all, participants. Finally, 11 percent of participants were covered by plans that may not be frozen, but are closed to new employees.

Observers have put forth many potential reasons for this trend, including increased cash
flow and expense volatility, an increased regulatory burden, and a lack of perceived value of defined-benefit plans among employees. Whatever the reasons for the trend, the decline in the prevalence of these plans remains a fact and represents a challenge for the actuaries who work with them. Closing or freezing a defined-benefit plan typically represents the first step toward an eventual plan termination, in which a company settles the benefits owed to plan participants by either paying lump sums or purchasing annuities with an insurance company. Once this has occurred, the company is no longer financially responsible for the pension benefits promised to its employees and the retirement actuary’s involvement typically ends.

The Pension Section believes that plan terminations are likely to be a growing area of practice for retirement actuaries in the future, and that there is a need for greater education on these issues. The termination process raises numerous issues that actuaries typically don’t deal with on a day-to-day basis. For example, many plan sponsors who freeze their plans may decide that they need to better manage their investment risk in the near term to avoid having market swings significantly increase the cost of termination or create a surplus that can’t be accessed without a significant tax liability. There are also very specific administrative issues and regulatory filing requirements that need to be understood and managed.

As a result, the section’s continuing education offerings at the 2011 SOA Annual Meeting in Chicago were significantly expanded to include a symposium on pension plan terminations. The symposium covered a wide variety of topics, from investment strategy and annuity pricing to administrative issues and filing requirements. Symposium participants have indicated that they found it to be interesting and informative, while helping them better prepare to serve their clients’ needs in the coming years.

The Pension Section aims to provide continuing education content that is timely, relevant and valuable to retirement actuaries. While the 2008 financial crisis taught us that retirement plan trends are difficult to predict with any certainty, we believe the plan termination symposium and similar efforts will provide this timely, relevant and valuable content to our members.

Eric Keener, FSA, EA, FCA, MAAA, is a principal with Aon Hewitt and is a member of the Pension Section Council, serving as the chair for the 2010/2011 council year. He can be contacted at eric.keener@aonhewitt.com.
WITH JUST SHY OF 2,000 ATTENDEES, the 2011 SOA Annual Meeting in Chicago was a huge success. First and foremost at the meeting was the changing of the leadership for the SOA. The SOA would like to thank outgoing President Donald J. Segal for all his dedication and hard work and welcome President Bradley M. Smith. We look forward to a productive year under Brad’s leadership.

There were some new features to this year’s Annual Meeting that added value for all the attendees. The meeting application for use on mobile devices is one such feature and it garnered rave reviews. With the app, attendees were able to access session, speaker and presentation information and much more. Another new feature was based on attendee feedback from previous Annual Meetings—the length of the sessions was increased to 75 minutes and the number of concurrent time slots was increased to 10. This offered attendees more continuing professional development credit than ever before.

The General Session keynote speaker Nick Bontis, director of the Institute of Intellectual Capital Research, Inc., gave an energetic and entertaining talk about ways to overcome information bombardment—a situation he believes to be a major cause of decreased productivity.

In his presidential address, Don focused on three things he learned during his presidency: focus on your professional development; take responsibility for your own career; and remember that the actuarial profession “is not just about the numbers.” It’s the context around the numbers that’s important.

Brad talked about the actuarial profession—the opportunities we have and the challenges we face. He stressed the importance of remaining relevant by committing to lifelong learning and developing skills outside of one’s area of expertise. Brad spoke passionately about the need for actuaries to become involved in discussions of major social issues and to develop the communication skills needed to communicate actuarial insights to a non-technical audience. Finally, Brad expressed his strong view that the three major U.S.-based actuarial organizations (the SOA, the American Academy of Actuaries and the Casualty Actuarial Society) should consolidate into one organization in order to better face the challenges to the profession and to provide the focus and resources needed to be effective in the future.

Four-star Gen. Stanley McChrystal gave the Presidential Luncheon keynote address. Gen. McChrystal offered leadership lessons learned on the battlefield, including how to build teams able to actively pursue results. He also answered challenging questions from the audience following his presentation.

The SOA has named 2011 the year of the volunteer and honored all the SOA’s volunteers at the Annual Meeting. The SOA would also like to thank all of the volunteers who have given their time and effort to make the SOA what it is today.

With the annual meeting behind us and 2011 quickly drawing to a close, it is time to concentrate on all the great opportunities 2012 will hold. But before we head into the new year, I’d like to wish you and yours a joyous holiday season and a healthy, prosperous and happy new year. May 2012 be a good year for all of us.

— SOA Executive Director Greg Heidrich
THE ACTUARIAL PROFESSION IN THE NEWS

The SOA is focused on raising awareness of actuaries in the media. Recent efforts have been successful. Here are just a few examples:

University of Waterloo Will Honor Adviser to Governor General at Fall Convocation
Harry Panjer is named distinguished professor emeritus. For more information, visit www.exchangemagazine.com, search term Harry Panjer, or use the QR code.

Commercial Payers to Open Claims Data to Researchers
Read about the Health Care Cost Institute initiative. For more information, visit www.healthdatamanagement.com, search term Commercial Payers To Open, or use the QR code.

401k Hardship Withdrawals Require Serious Thought
Cheryl Krueger discusses 401(k) hardship withdrawals with Reuters. For more information, visit www.chron.com, search term Cheryl Krueger, or use the QR code.

View all of these articles by going to www.soa.org/newsroom and clicking on the Profession In The News link.

Stern Advice: What All Those Retirement Studies Get Wrong
Reuters reports key findings from SOA research. For more information, visit www.reuters.com, search term Retirement Studies Get Wrong, or use the QR code.

Longevity Insurance Reduces the Fear of Outliving Investments
San Antonio News reports life expectancy statistics from the SOA. For more information, visit www.mysanantonio.com, search term Longevity Insurance, or use the QR code.

Is the World Becoming a Riskier or Safer Place?
NBC notes the SOA’s work on retirement’s impact on women. For more information, visit www.nbc12.com, search term Women Preparing For Retirement, or use the QR code.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES

REFOCUS CONFERENCE
March 4 – 7
Las Vegas, Nev.

INVESTMENT SYMPOSIUM
March 26 – 27
New York, N.Y.

ENTERPRISE RISK MANAGEMENT SYMPOSIUM
April 18 – 20
Washington, D.C.

THE LIFE INSURANCE CONFERENCE
April 23 – 25
Orlando, Fla.

THE RETIREMENT INDUSTRY CONFERENCE
April 25 – 27
Orlando, Fla.

LIFE & ANNUITY SYMPOSIUM
May 21 – 22
Los Angeles, Calif.

HEALTH MEETING
June 13 – 15
New Orleans, La.

47TH ACTUARIAL RESEARCH CONFERENCE (ARC)
Aug. 1 – 4
Winnipeg, Manitoba

VALUATION ACTUARY SYMPOSIUM
Sept. 10 – 11
Los Angeles, Calif.

CRITICAL ILLNESS INSURANCE FORUM
Sept. 10 – 12
Las Vegas, Nev.

View all Professional Development opportunities by visiting www.soa.org and clicking on Event Calendar.
The following is a list of recommended readings from the contributing editors that they feel will pique your interest and help keep you informed.

**From Sue Sames**

There is a dizzying array of theories about why people are the way they are. David Brooks, the *New York Times* columnist, has found an intriguing way to help readers make sense of many of them. In *The Social Animal: The Hidden Sources of Love, Character and Achievement*, he tells a story of two people, Harold and Erica—from their parents’ meeting through their own marriage and subsequent death. Along the way, he interjects theories that help illuminate their choices/behaviors. He covers topics such as learning, courtship and morals. Although the story isn’t meant to flow the way a novel would, it helps provide a comprehensive illustration of such a variety of topics that are usually so abstract that they are hard to grasp. For more information, visit [http://bit.ly/orMBfZ](http://bit.ly/orMBfZ) or use the QR code.

**Good Poems** is a collection that Garrison Keillor has selected to read on *The Writer's Almanac* on public radio. They help remind us that there is so much more to life than just the numbers. For more information, visit [http://bit.ly/vlCVsJ](http://bit.ly/vlCVsJ) or use the QR code.

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**Attestation is OPEN!**

**Attestation is now open.** You must attest compliance with the SOA CPD Requirement or be considered non-compliant. Three simple steps to attest:

1. **STEP 1**: Log on to the SOA membership directory and click the SOA CPD Requirements button on the main page.
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3. **STEP 3**: Identify which compliance path was used.

That’s it! Attest today at [soa.org/attestation](http://soa.org/attestation).
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Retirement/Pension Plan; Portfolio Management; Quantitative, Risk Management and ALM; Economics, Accounting & Regulatory Topics

PAST ATTENDEES SAID:

• “The educational contents were particularly relevant to the topics. In some sessions, the mix of presentations with varying degrees of complexity was a valuable element.”

• “I very much enjoyed the presentations—relevant and useful material.”

• “Really got a lot out of the sessions with three presenters. The keynote and luncheon speakers were excellent and spoke on very timely topics.”

The Society of Actuaries would like to acknowledge and thank the 2011 SOA Annual Meeting & Exhibit event partners and exhibitors for their support, leadership and commitment to the actuarial profession.

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