

SOCIETY OF ACTUARIES

# The Actuary

OCTOBER/NOVEMBER 2014 VOLUME 11 ISSUE 5

## THE ACA

What's the answer to the cost predictability question?

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# Oct/Nov '14



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What did I want to do in retirement? I had few hobbies, having immersed myself in work and family. I was offered a full-time faculty position. I was going to teach.

By Abe Gootzeit

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## Editorial

# YOU CAN LEAD A CHANGE!

BY WILBUR LO

### THE SOCIETY OF ACTUARIES (SOA)

education system has a strong focus on technical and problem-solving skills; however, does it define the scope of our profession? Different people will answer differently. For me, as an actuary with more than 20 years of experience, being technically strong is never on the top of my mind. To be successful, I believe one must develop a global vision and be prepared to lead a change. I am going to share my insight with regard to health care reform in Asia—the reform needed and how we can make good things happen.

### WHERE IS THE REFORM?

This is the first question in most people's minds. The spectacular growth of many economies in Asia has amazed the world. According to the World Bank, the region contributed 40 percent of global gross domestic product (GDP) growth in 2013. Along with the growth are changes in socioeconomic status, which indirectly impacted the population's risk factors for diseases and their expectations regarding health care services.

For me, changes mean opportunity; the ability to spot a trend and lead the changes is one of the most valuable qualities.

### WHY IS HEALTH CARE REFORM NEEDED?

Needs change with a country's development, and needs again drive reform; the following are reasons for health care reform.

#### 1. Changes in population structures.

The portion of the population over 65 years old is constantly increasing.

2. **Urbanization** increased from 26 percent in 1990, to 33 percent in 2009<sup>2</sup> in Southeast Asia, according to the World Health Organization (WHO). Urbanization reduces the option for physical activity and increases exposure to air pollutants, which negatively impact the population's health.
3. **Globalization** brought processed food and diets high in total energy,

For me, changes mean opportunity; the ability to spot a trend and lead the changes is one of the most valuable qualities.

Currently, the above-65 population in Hong Kong, Singapore, Taiwan and Korea represents 10 percent of total population, and it is expected to increase to 20 percent by 2025. In other developing economic zones, the above-65 population is expected to increase by 2 to 5 percent in the next 10 years.<sup>1</sup> As we all know, the prevalence of non-communicable diseases increases with age. The progressively aging population will result in a corresponding increase in health care expenditure.

fats, salt and sugars. Unhealthy diet, together with insufficient physical activity and harmful use of alcohol, are responsible for most non-communicable diseases in the region.

#### 4. Inflated health care expenditure.

With technological advancement and diffusion of advanced technology in routine care, health care expenditure is expected to rise in the coming decades. Health care financing is thus an important topic in all health care reforms.

CONTINUED ON PAGE 8



# AUTUMN ROLES!

## **NORTHEAST USA – HEALTH BUSINESS DEVELOPMENT ACTUARY**

Group health, reinsurance and stop loss business development actuary sought in Northeast USA for Position 59816. FSA with at least fifteen years of group health insurance, reinsurance and stop loss experience ideal.

## **MASSACHUSETTS – HEALTH FSA/ASA**

For Position 59595, a Massachusetts insurer is looking to hire a health actuary. ASA or FSA with data analysis, reporting and managed care experience sought. Requires at least six years of healthcare experience.

## **ARIZONA – DIRECTOR OF HEALTHCARE ACTUARIAL SERVICES**

For Position 57965, this Arizona insurer has an immediate need for a Director of Healthcare Actuarial Services. Requires at least 10 years of experience. Some Medicaid experience preferred. Fellow of the Society of Actuaries credentials ideal.

## **NORTHEAST USA – SENIOR HEALTH ACTUARIAL ANALYST**

For Position 59571, a Northeast USA insurer is searching for a senior health actuarial analyst. Requires at least three years of experience. Utilization and cost trend analysis, financial forecasting, statistical modeling, reimbursement studies and other assignments.

## **SOUTHEAST USA – SENIOR HEALTH ACTUARY**

For Position 59394, our Southeast USA client has an immediate need for a Senior Health Actuary. Requires FSA and 10+ years of experience. Management experience a must.

## **CHINA – HEALTH AND WELFARE ACTUARY**

For Position 58444, our Beijing client is searching for a health and welfare consulting actuary. FSA or ASA with at least three years of experience preferred.

## **SAUDI ARABIA – HEALTHCARE ACTUARY**

For Position 57856, this Saudi Arabian insurer has asked Ezra Penland to find a US health actuary at the FSA level.

## **IOWA – CAPITAL BUDGETING AND PLANNING ACTUARY**

Iowa insurer is looking to hire a capital budgeting and planning actuary for Position 60213. Life/Annuity FSA or ASA with financial analysis and management experience preferred.

## **MIDWEST USA – FINANCIAL REINSURANCE ACTUARY**

For Position 60312, our Midwest USA client is looking to hire a financial reinsurance actuary. Fellow of the Society of Actuaries credentials required. Requires a strong understanding of life insurance accounting.

## **SOUTHEAST USA – DIRECTOR AND LIFE MODELING ACTUARY**

For Position 60355, a highly-rated Southeast USA life insurer now needs a Director and Modeling Actuary. FSA with 10+ years of experience preferred.

## **MIDWEST USA – ANNUITY VALUATION DIRECTOR**

Annuity valuation director and actuary at the FSA level immediately sought by our RETAINED Midwest USA client for Position 59694. Indexed annuity valuation experience ideal. Manage staff. Position open due to anticipated growth.

## **NORTHEAST USA – LIFE ACTUARY WITH ALM EXPERIENCE**

Northeast USA insurer has an immediate need for an FSA/ASA life and annuity actuary with asset liability management experience for Position 60496. Must have at least three years of ALM experience. MG-ALFA, Prophet, AXIS or Moses software expertise ideal. Some experience with Economic Capital is a plus.

## **NEW YORK – NON-TRADITIONAL PENSION ACTUARY**

EA,ASA or EA,FSA pension actuary immediately sought by New York insurance company for non-traditional role for Position 59776. Must have at least seven years of defined benefits experience. Some pension risk transfer experience a plus, but not required.

## **MIDWEST USA – RETIREMENT CONSULTING ACTUARY**

Pension consulting actuary immediately sought by Midwest USA consulting actuaries for Position 59732. This EA,ASA or EA,FSA must have at least eight years of retirement consulting experience. Requires exceptional communications skills.

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**5. Shift of focus.** An increase in education level, a by-product of economic growth, has shifted the population and local government's focus from medication to disease prevention and primary care. This again reinforced the need for health care reform.

### HOW CAN WE LEARN FROM PAST REFORMS?

Singapore and Taiwan are two of the early movers in Asia. They adopted different health care programs. Though not perfect, the programs have satisfied the countries' needs in health care, and at the same time provided insights to other developing countries.

**Singapore** is a pioneer in health care reform. Instead of traditional form "risk pooling" insurance, Singapore introduced the nationwide Medical Saving Account (MSA) in 1984. MSA is made up of three pillars: MediSave, MediShield and Medifund.

MediSave is the core part of MSA, in which everyone gainfully employed puts aside a certain percentage of income for future medical expenses for themselves and their families. MediShield is a form of low-cost catastrophic insurance that protects the insured from excessive medical expense incurred by chronic disease or critical illnesses. Cost-sharing mechanisms such as copayments and high deductibles are incorporated to limit overutilization and maintain affordable premiums. Finally, Medifund is a means-tested safety net to protect the low-income groups.

The system of saving accounts encourages a high degree of cost consciousness; compared to countries with similar living standards and standards of health care systems, the share of health expenditure per GDP is only 4.6 percent, compared to 17.9 percent in the United States, 11.1 percent in Germany, and 9.3 percent in Great Britain. MSA is highly recognized; countries like

South Africa and the United States have incorporated medical savings accounts on commercial

insurance—that encourages a higher degree of cost awareness. Long-term care insurance, "ElderShield," was introduced in Singapore in 2002 to supplement MSA.

**Taiwan**, on the other hand, opted for social health insurance, known as National Health Insurance. It was introduced in 1995, covering a wide range of medical services including certain inpatient and outpatient services with a small deductible. The Establishment of Medical Care Network project sought to distribute medical resources more evenly and promote equality in medical treatment. Accompanying the social health insurance program is the vision of "A Healthy Taiwan," which promotes medical education, health care and disease



Wilbur Lo

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prevention, as well as food, drug and cosmetic management and insurance affairs. Taiwan's health system has an environment with minimal barriers to health care and is an ideal condition for testing the vertical equity hypothesis: "People with greater health needs should receive more health care than those with lesser needs."

Neither the medical savings account nor social insurance programs satisfy the needs of all citizens; this provides a unique opportunity to private health insurers. To profit from this gap, one has to keep an eye on the development, understand the risk behind, and more importantly, be ready to present and execute one's ideas.

### WHAT OPPORTUNITIES ARE OUT THERE?

The majority of Asian countries are developing their own health care systems; consequently, there is much room for private insurance to fit in, especially for large countries like China.

**China** has made great progress in health care reform in the last decades. The country has achieved nearly universal coverage under three insurance programs, known as "Urban Employee Basic Medical Insurance," "Urban Resident Basic Medical Insurance" and "New Rural Cooperative Medical System." The achievement is remarkable in the pathway of reform, yet uncompleted.

Currently, China is seeking ways to reduce the out-of-pocket payment for patients with chronic diseases or major critical illnesses; promote equality in health care services; and reduce the burden on class "A" hospitals. No single solution can meet the needs of 1.3 billion citizens; this environment provides unique opportunities for private health insurers.

The **Japanese** health care system is famous for its universal access, high efficiency and effectiveness. Several mechanisms are employed to limit spending on public health care, which include high copayments and control over types of medical treatment and prices of all procedures, drugs and devices.

Notwithstanding all the merits of the Japanese health care system, the system is now facing a number of challenges from the aging population, dissatisfaction with quality of health care, imbalances of service, inequality in premium payments, and the burden of copayment on the population. The country is now looking for changes with three main goals: "cost control," "quality improvement" and "equality."

**Hong Kong** has retained a public health service, operating alongside a largely fee-for-service private health care sector. However, shifts in population structure and technological advancement, together with the demand on health care services from mainland Chinese have drastically increased government expenditure on health care services. A series of health care consultations were launched since 1997 with the aim of easing government burden on health care service, and at the same time maintaining or improving the quality of health care services. However, no consensus or concrete reform plans have yet been introduced.

None of the problems mentioned can be solved easily. To be a successful player in these markets, one must take a proactive role in identifying the opportunity and incorporating the implications of economic, social, regulatory, geopolitical and business changes into designing and delivering actuarial solutions.

If you aim higher than an actuarial analyst, I would recommend the following: First, open your eyes and develop a global vision; second, apply your knowledge on the real situation; third, learn from past experience; and finally, be ready to initiate, innovate and influence others. **A**

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### END NOTES

- <sup>1</sup> AXCO Report, Report of Life Insurance from AXCO Insurance Service Ltd., Updated March 2014.
- <sup>2</sup> Action Plan for the Prevention and Control of Noncommunicable Diseases in South-East Asia, 2013–2020, WHO.

# Measure the Impact of Change

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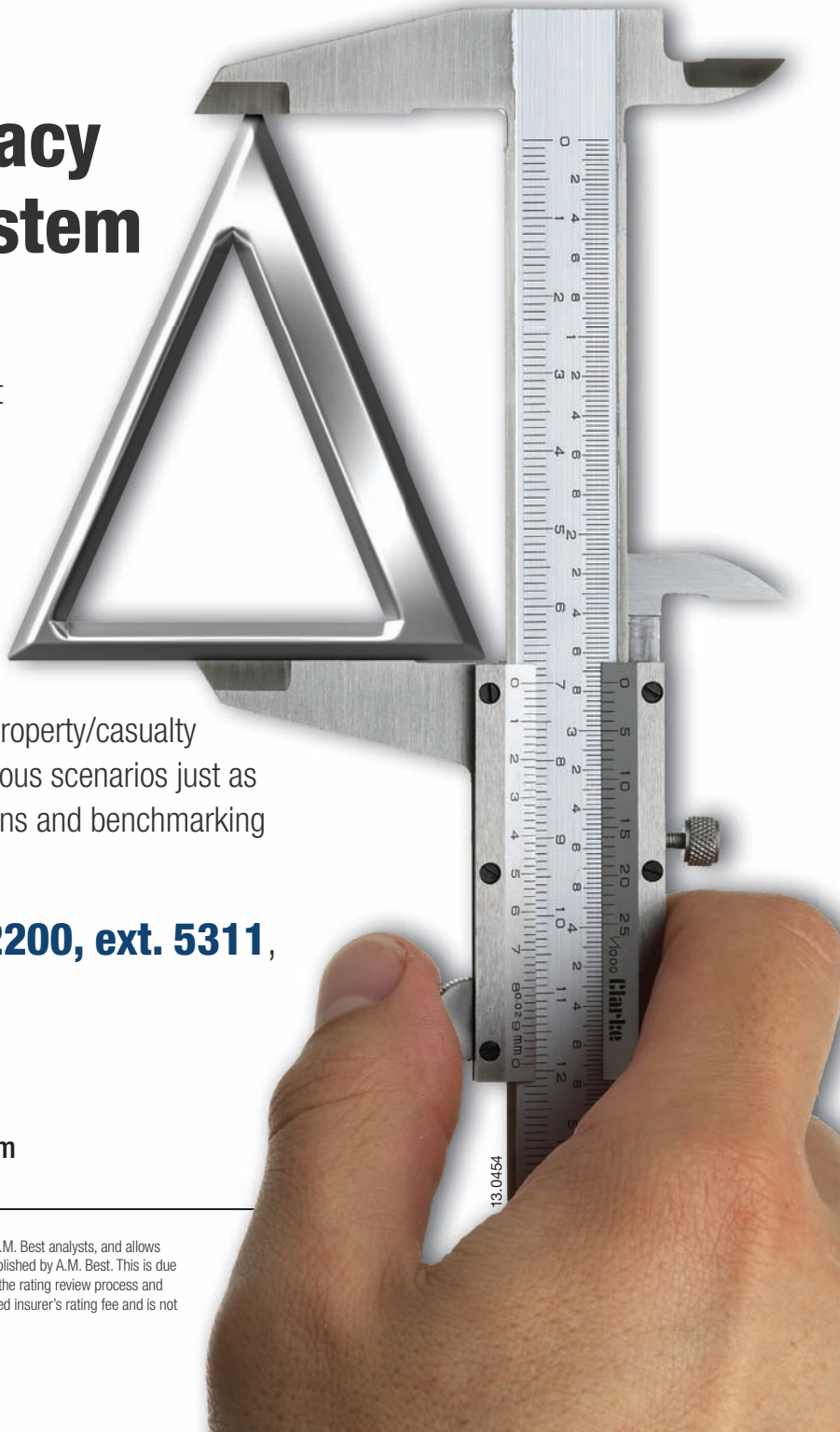
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## Letter From The President

# A STRONG GLOBAL PRESENCE

BY MARK J. FREEDMAN

**AS PRESIDENT** of the Society of Actuaries (SOA) my three top priorities over the past year were to explore and develop new opportunities for the SOA and the actuarial profession; to cultivate research supporting public policy; and to foster international development. In my final letter to you as SOA president, I will outline our work in international development and look ahead to potential future opportunities.

### WE ARE GLOBAL

International development is one such priority that I want us all to reflect upon, as it has been an important journey. About 14 percent of our members and one-third of our candidates are outside of North America and most of the non-North American members and candidates are from Asia.

This increase of our presence in the Asian markets has helped strengthen our global efforts as an organization and on behalf of the profession as well. It is important to understand factors impacting economic issues around the world to do our jobs better. The fact is that current economies, investments and knowledge are global; companies merge and acquire assets transcending boundaries; and many of the companies where we work are increasingly becoming even more global in nature.

In particular, China is an interesting story for the SOA. Since the SOA launched a project in Nankai University in 1988 to address the shortage of qualified actuaries in mainland China, the number of actuaries and SOA members in the Asia-Pacific region has increased significantly. In addition, China has the third-largest concentration of SOA members and candidates in the world, right after the United States and Canada.

### GROWING MIDDLE CLASS, GROWING INSURANCE NEEDS

The SOA recognizes the economic growth impacting the insurance industry and the resulting increase of demand for actuarial services. In an interview published by *Sima.com* in early August, I noted that as a result of the steady growth of the middle class in the region, we will see a steady growth in Asia's general insurance market over the next decade and an increased demand for general insurance actuaries. In the mid-1980s there were only a limited number of private cars in China. Today there are about 120 million cars. Ernst & Young, in a publication titled "2014 Asia-Pacific Insurance Outlook," predicts that by 2020, that number will grow to 200 million.

I also noted that there will be increased demand for health care insurance, as well as investment products and life insurance.

Significant growth is taking place in health care insurance with three core factors powering development: an aging society, reductions in areas of public resources and the rise in Chinese citizens' spending power.

In June this year, the SOA released a research project on the "Changing Middle Market for Life Insurance in China." The survey included 2,000 family households across 16 metro centers in China. Results indicated that 70 percent of those interviewed agreed that having life insurance to protect the family in case of death was more important now than it was in the past.

### REACHING OUT

The SOA is very interested in partnering with other actuarial organizations in productive, constructive and mutually helpful ways to address different issues. An example of this is our work in strengthening our involvement with the International Actuarial Association (IAA), because a strong and vital IAA is critically important to the actuarial professional. The relationships the IAA is building with supranational organizations like the International Association of Insurance Supervisors and the assistance they provide to small national actuarial associations are important to growing the profession globally.





**Mark J. Freedman**

To extend our global reach even further, I have traveled to many different areas of Asia to visit students, members and employers. These travels have helped us refine the services we provide to our members and candidates in Asia. Noteworthy examples include:

- We met with the leadership of the Actuarial Institute of Chinese Taipei to discuss the success of the e-Learning module on Taiwan insurance regulation and the SOA's involvement in the upcoming East Asian Actuarial Conference to be hosted in Taiwan.
- In July, the SOA co-sponsored the Joint Regional Seminar that took place over a two-week period in Hong Kong, Beijing, Taipei, Shanghai and Singapore. This seminar, with more than 750 attendees, and titled "The Future

of Insurance," covered some of the main issues affecting the insurance industry in the Asia-Pacific region.

At four of the five events during the Joint Regional Seminar, I was the keynote speaker and took the opportunity to highlight the importance of deploying products to meet the changing needs of consumers, staying ahead of regulatory developments and implementing data analytics for a competitive advantage.

- I met with the China Association of Actuaries leadership to discuss avenues for the SOA to collaborate with them to strengthen the profession in the area.
- We offered a general insurance seminar in Singapore, which we designed to explore leading practices and recent trends related to general insurance topics in the Asia-Pacific region.

Moving forward, we will continue to have a strong global presence. Most recently, we participated in both the IAA meeting in London and the annual meeting of the China Association of Actuaries in September. Looking ahead, we formed a task force to assess the possibilities of expansion into Latin America. I am confident the SOA is on the right path for continued growth in key markets throughout the world.

My year as president is drawing to a close. The global initiatives, and all of the other initiatives, are being carried out by dedicated members, candidates, volunteers and staff. Thanks to everyone for your support during this incredible journey. This has truly been a memorable experience. **A**

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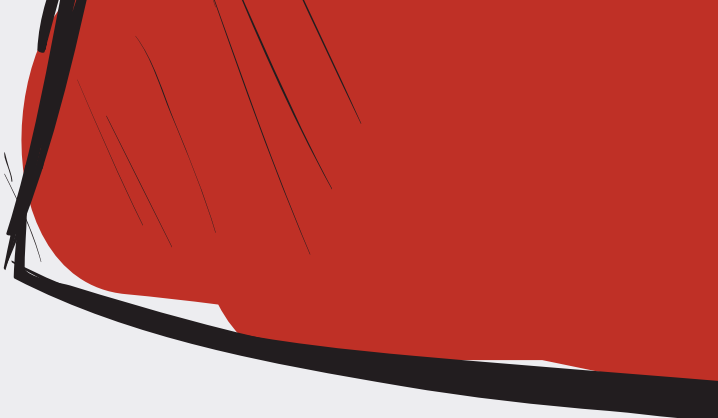
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# THE ACA COST PREDICTABILITY QUESTION

Will the exchange populations have sufficient cost predictability  
to allow insurance organizations to participate in  
the ACA Exchange Program?

By Kurt J. Wrobel



AFTER THE INITIAL  
THREE YEARS OF  
THE PROGRAM,  
ONLY THE SELF-  
FINANCING RISK  
ADJUSTMENT  
PROGRAM WILL  
CONTINUE TO BE  
IMPLEMENTED.

**W**ith the tremendous interest in the Affordable Care Act (ACA) exchanges, many policymakers and pundits are looking for signs of their success or failure with everything from emerging demographic and diagnosis information to the proposed rate increases from different health plans. Although this information is insufficient at this point to make a final determination, these metrics ultimately point to the fundamental policy question to determine the ACA exchange's success:

*Will the exchange populations have sufficient cost predictability to allow insurance organizations to participate in the program?*

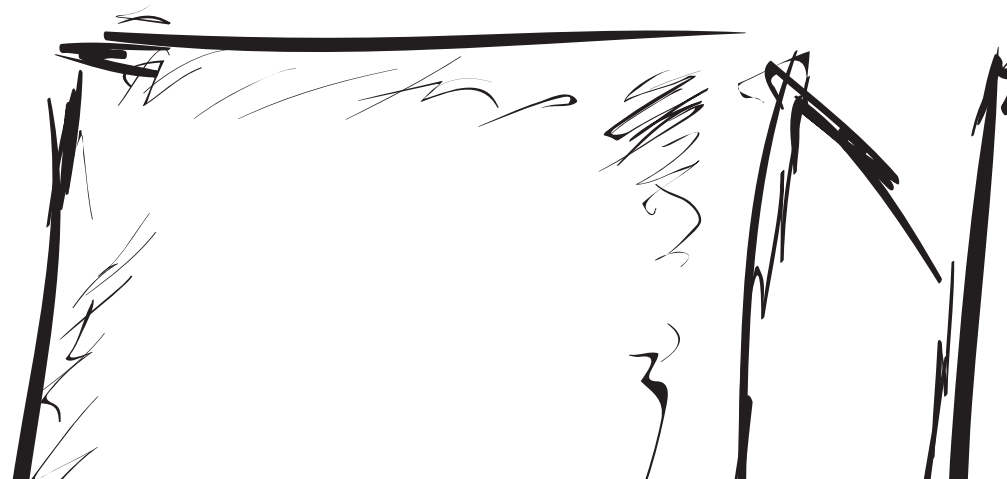
While over the next two years we will see emerging information in the form of premium increases, enrollment, and payment for the risk protections to help answer this question, the ultimate determinant will be seen when insurance companies file their rates in mid-2016 for the 2017 calendar year. As I will highlight, because these rates will not include several important risk protections currently imbedded in the ACA, these rates and the insurers' willingness to participate in the exchanges will become one of the most important evaluations of the success of the program and will answer the cost predictability question.

### THE FIRST THREE YEARS—THE COST DISCOVERY PHASE OF THE PROGRAM

Consistent with the stated policy in the ACA, the Centers for Medicare & Medicaid Services (CMS) have provided insurance organizations with substantial financial protections in return for taking risk on a new population without the underwriting controls that traditionally have been used in the industry. These provisions provide protection for health plans that attract high-cost claimants (reinsurance), sicker-than-average individuals (risk adjustment), and incorrectly estimating the cost of the exchange population (risk corridors). After the initial three years of the program, only the self-financing risk adjustment program will continue to be implemented. In this program, health plans reallocate money among themselves based on the relative risk attracted to each health plan.

The intent of this policy is to allow insurance companies the opportunity to better understand the underlying cost of this population and ensure rates can be developed without the reinsurance or risk corridor protections that will sunset after the 2016 calendar year.

As one would expect in this period of cost discovery, the initial filed rates for the 2014 calendar have varied substantially. Although several factors have played a part in this variation, the most important







variables have been the extent actuaries have assumed different morbidity assumptions for this population and the risk tolerance of the particular insurance company. Because so many variables can impact this ultimate result, the rates have predictably varied widely.

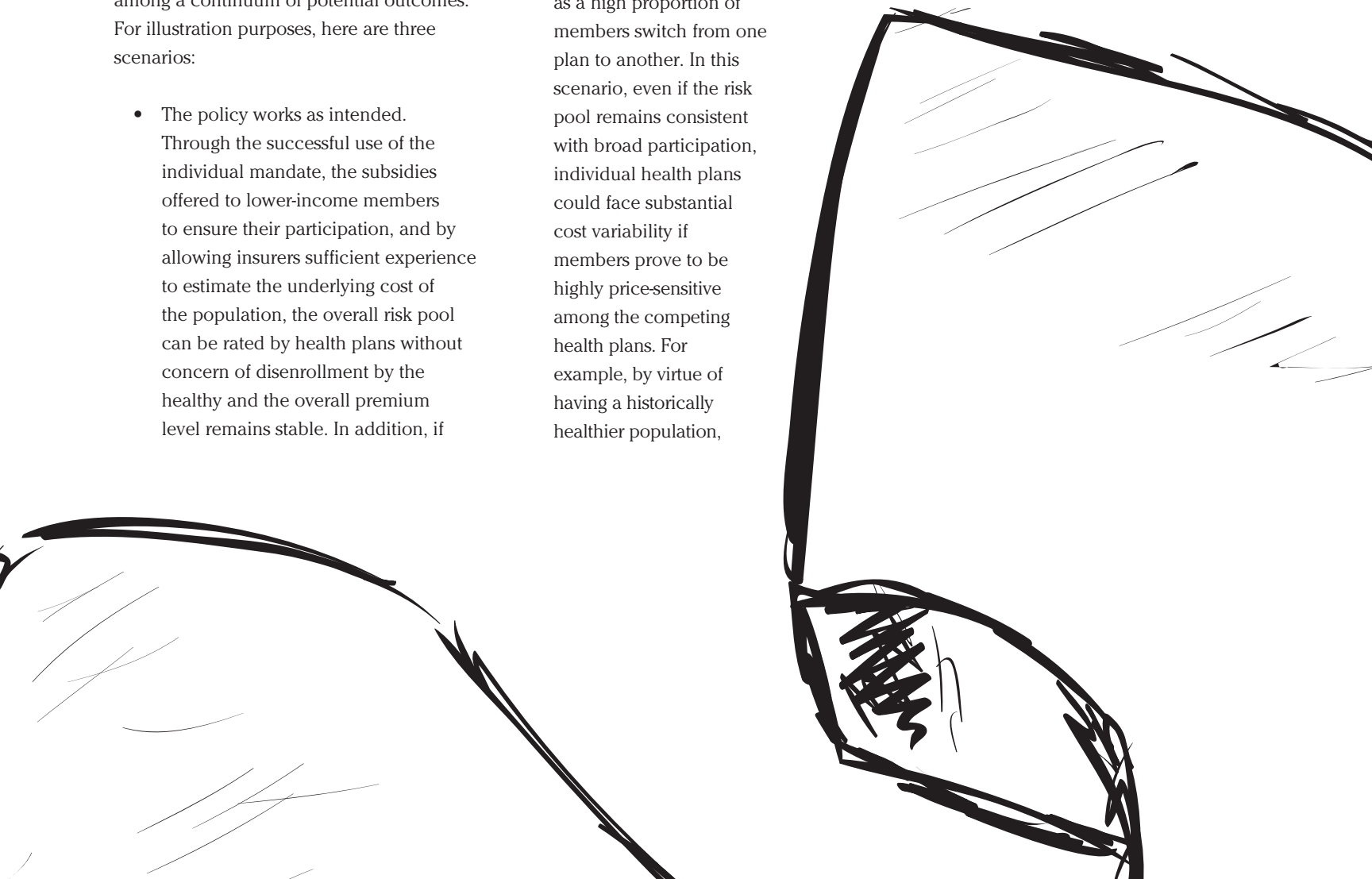
### **POTENTIAL OUTCOMES AFTER THE COST DISCOVERY PERIOD**

Following this initial period of substantial risk protections and cost discovery, the key question that will drive the 2017 rates will be cost predictability. At this point, assuming no further policy changes, the ACA will become largely an actuarial question of cost predictability driven by the experience over the preceding 2.5 years. The final answer to this question will be among a continuum of potential outcomes. For illustration purposes, here are three scenarios:

- The policy works as intended. Through the successful use of the individual mandate, the subsidies offered to lower-income members to ensure their participation, and by allowing insurers sufficient experience to estimate the underlying cost of the population, the overall risk pool can be rated by health plans without concern of disenrollment by the healthy and the overall premium level remains stable. In addition, if

any adverse selection does occur at the plan level, the risk adjustment mechanism provides a trusted reallocation of payments to ensure an equitable payment for insurers with healthier or sicker members.

- The broader risk pool is compromised as younger and healthier members disenroll in the face of rate increases. The resulting cumulative anti-selection produces a downward spiral. This could make adequate rate increases more difficult to predict. In this scenario, several insurers may choose to exit the market.
- Individual health plans face substantial cost variability as a high proportion of members switch from one plan to another. In this scenario, even if the risk pool remains consistent with broad participation, individual health plans could face substantial cost variability if members prove to be highly price-sensitive among the competing health plans. For example, by virtue of having a historically healthier population,





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a health plan could develop a very competitive rate across the spectrum of plans and receive a disproportionate percentage of sicker members.

Although not inherently problematic assuming adequate risk adjustment payments from other health plans, this population shift introduces additional uncertainty and would require an accurate risk adjustment mechanism to reallocate dollars among the health plans. In addition, this constant shifting among plans by members will limit a health plan's ability to impact the provision of care through medical management activities where more than a single year is necessary to improve outcomes and costs. Similar to the problems described earlier, the challenges with constant member turnover could limit insurer participation.

#### WHAT TO LOOK FOR IN THE DATA

At this point, we simply do not have enough information to make a judgment on the final success of the ACA exchanges. This, of course, will change over time as more information and data become available.

Several keys will be important to look for over time regarding the cost predictability question.


- **Disenrollment of the young and healthy.** Although the initial demographics have been collected, the most important cohort will be those individuals who are implicitly subsidizing the broader exchange pool—younger and healthy members. If these individuals leave the pool in response to rate increases, this could be the first sign of a downward spiral, and it will challenge the ability of insurers to adequately rate and predict the cost of the exchange population.
- **The overall health status of the exchange population.** To the extent that the premiums will ultimately reflect the cost of the exchange population after the risk protections are eliminated, a more costly exchange population will lead to higher premiums and a greater chance that healthier members will leave the pool in response to rate



increases. A wide variety of data sources will provide insight into this population, including the extent of the reinsurance and risk corridor payments.

- **Risk-adjusted payments among the insurers.** Because the risk adjustment program is designed to simply reallocate payments among the insurers, if we see large payments among health plans, they will face additional uncertainty in estimating their final revenue payments and matching these payments to newly emerging costs.
- **Substantial enrollment changes in response to rate changes.** If the exchange populations at the individual health plan level change substantially in both total enrollment and relative risk in response to rate changes, this will contribute to the challenge in estimating costs and limit medical management activities.
- **Rate increases among those insurers who have attracted the highest proportion of membership.** While many have focused on the rate increases among all insurers, a better measure for the potential morbidity of this population will be increases for those health plans that have attracted the bulk of the membership—particularly those health plans that have attracted the sickest members in the market. In many cases, the health plans requesting low or negative increases are attempting to simply become competitive after receiving little enrollment in the initial year.

For the remainder of this year, we will see the states and insurance companies release information regarding their rate increases for 2015, while the enrollment results will be released by the states and CMS early next year. The most compelling information regarding the cost of the risk protections will likely be released in the middle of 2015 by CMS.

In short, the next two years will provide a stream of emerging data to help insurance companies make more reasoned decisions about their exchange rates and participation in 2017 after two important risk protections—reinsurance and risk corridors—are removed from the program. Assuming no further policy changes, the 2017 rate filings will provide the most definitive proof of whether the cost predictability challenge has been achieved by the ACA. 

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FROM INDUSTRY TO ACADEMIA:

# TEACHING AS A SECOND CAREER

What did I want to do in retirement? I had few hobbies, having immersed myself in work and family. I was offered a full-time faculty position. I was going to teach. **By Abe Gootzeit**







**M**y first class began at 2:15 p.m. on Monday, Aug. 26, 2013. The course was Math 372—Statistics III, and it covered the concepts of inference and hypothesis testing. Mostly junior students had registered. All had studied the content for Society of Actuaries (SOA) examinations P (Probability) and FM (Financial Mathematics) in courses taught by accomplished actuarial science professors. Many had passed one or both of these exams. Newly retired from my 38-year career as an actuary, it was my turn to stand in front of the classroom and impart my hard-won knowledge and experience.

I had retired just a few months earlier from RGA, where I worked for six years. My actuarial career was long and fulfilling. It afforded me the opportunity to do whatever I wanted during retirement. But the fact

## Because I was not a traditional teacher, I challenged myself to think of ways I could engage students that would complement their already excellent educational experience.

remained that for the first time since my sophomore year in high school, I was without a summer job.

### FACING RETIREMENT

What *did* I want to do in retirement? I had few hobbies, having immersed myself in work and family. Over the years, my wife and children had heard me mutter that maybe I would try teaching when I retired. Back then, it all seemed so far away.

Maryville University is situated less than two miles from RGA. With its 100 credentialed



actuaries working in St. Louis, RGA is the largest local employer of actuaries. More significantly, among the approximately 50 Maryville alumni who work at RGA, some are passionate about their alma mater. Some were convinced I would be a good addition to the actuarial science faculty and could bring a complementary business perspective to the program. They facilitated introductions between the College of Arts and Sciences dean, the program

director, and me. While I had some initial trepidation, Maryville University recognized that my professional skills—above and beyond my actuarial knowledge—would serve me well as a credible faculty member.

I was offered a full-time faculty position. I no longer had to agonize about what to do after retirement. I was going to teach.

The last time I had been in a college classroom was December 1974, while in graduate school in Syracuse, New York. I left to join Unity Mutual Life's actuarial



program when I was two courses short of a master's degree in math, which I subsequently completed. I was completely unfamiliar with actuarial science when I joined Unity. My personal experience through the credentialing process was self-study. I didn't use study aids, attend actuarial science classes, or participate in study groups. It turned out that I was good at taking exams (a positive attribute for an aspiring actuary). I became an FSA in 1980.

Because I was not a traditional teacher, I challenged myself to think of ways I could engage students that would complement their already excellent educational experience. I pondered three sayings I remembered from years past—two from the hallways of my daughter's high school and one from RGA's CEO:

- *"Education is what remains after one has forgotten everything learned in school."*—Albert Einstein



- There isn't a single correct solution.
- You will work in teams.
- What you learn today will need to be supplemented with lifelong learning, as the world continues its rapid change.
- Most importantly—we must learn how to inform, communicate and influence skillfully.

- *"It's more important to question the answers, rather than answer the questions."*—Voltaire
- *"The best time to pass is on the curve, not the straightaway."*—A. Greig Woodring

- Actuaries are seen as falling short when it comes to managerial skills, interpersonal skills, adaptability and flexibility, and effective communications.

This information helped anchor my thoughts as I prepared for the classroom, and focused on the realities of the business world:

- Actuaries are businesspeople who address problems in risk.
- All relevant information may not be available.

I also recalled key findings from the SOA 2009 Employer Survey; excerpts below:

- Actuaries' strengths (in trustworthiness, quantitative skills, and attention to detail) very much align with traits respondents find important when looking to hire risk professionals.

After discussions with the program director and faculty, I was assigned three courses for the fall of 2013: Linear Algebra, Insurance and Risk, and Statistics III. During the summer, I prepared for teaching. I pored over the material, and held discussions with two faculty members (one full-time and one adjunct) who taught the courses most recently. I watched videos of the Linear Algebra course online, prepared by the author of the text. I wrote notes for most of the classes I would be teaching, prepared quizzes and exams, and thought about how I would manage the classroom. Where sensible, I intended to supplement normal





classroom lectures with group projects, outside readings and guest lecturers.

### TRANSITIONING TO TEACHING

On Aug. 23, as I walked through the



hallway to the classroom, I watched as 33 students streamed into the room for their Statistics III class. I was more nervous than at any time I could remember; more nervous than when I gave podium presentations in front of hundreds of people at SOA meetings, or presented to boards of directors, or testified in front of regulators.

I awkwardly made it through my introductory comments. The students took turns introducing themselves (for my sake—they obviously knew each other very well). I began teaching.

There is only one way to describe my performance in that first class: terrible. I couldn't keep the concepts straight; I was unable to control the classroom; I was tongue-tied and couldn't verbalize the words I wanted to use. My students were confused and frustrated.

Statistics III was my only class that Monday; the other two classes started the next day.

Immediately, I questioned my decision, my ability to teach, the school's decision to hire me, and (most of all) my sanity. Why did I think this would be a suitable "retirement" job? At the very least, I realized that I had a long, tough road ahead of me. The swagger and ego that developed over a long, successful business career were firmly in check, replaced by humility and listening. I stumbled through those first classes with varying degrees of ineffectiveness. Comments from students' third-week feedback forms (used for new teachers) ranged from concerns about the class being dull to students feeling lost and frustrated.

### IT STARTS TO GET BETTER

Then, something quite extraordinary started to happen. Students took the time to give me pointers, and they offered encouragement. Student feedback at the end of first semester and during second semester improved considerably. They mentioned my "passion" for the subject, my ability to incorporate "real-life applications and stories," and even



# LESSONS LEARNED: AN ACTUARY CHANGES CAREERS

A U.S. Bureau of Labor Statistics (BLS) report published in July 2012 revealed that younger baby boomers (people born in the years 1957 to 1964) held an average of 11.3 jobs from ages 18 to 46. The BLS has never attempted to estimate the number of times people change careers in the course of their working lives, since there is no consensus on what constitutes a career change. Nonetheless, a quick Internet search reveals many believe that, on average, people make between three and seven career changes during their working lives.

Actuaries are extremely well-suited to changing jobs and careers. We solve ill-defined business problems surrounding risk. In order to be successful, we must take a holistic approach, assessing and analyzing inputs and data from a wide array of sources. We must learn to work in teams, listening to and working with, our colleagues. The “best” solution generally doesn’t exist; we understand there are a range of results, and we attempt to quantify the probability of each occurrence. And, most importantly, we learn to communicate, inform and influence skillfully. These talents and skills make us particularly well-prepared to change jobs, and careers!

Even though I had worked as an actuary my entire career, becoming an assistant professor of actuarial science was a huge change for me. I learned some important lessons during my career:

- **Know yourself.** Change can sound seductive. Honestly assess your skills, potential contributions and needs before embarking on a change.
- **Do your homework.** There must be a skills match between you and the job, as well as alignment of success criteria between yourself and a potential employer.
- **Be prepared to listen.** Talk less and listen more ... actively listen! As much as possible, take advantage of the experience and expertise your new colleagues can share with you.

- **Be patient.** It takes time to become comfortable with any new situation. Know that there will be frustrations and pitfalls along the way and factor those into your progress assessment.
- **Know that success may look different.** Identify success characteristics of the new situation; these could be quite different from your past career experiences. Recognize and celebrate the successes you achieve.
- **Be confident.** Our actuarial careers taught us how to assess and analyze problems of all types; these skills are transferrable to other disciplines.
- **Have an exit strategy.** Even after sufficient time, preparation, learning and patience, it’s possible the new situation is not a good fit. Recognize when it is time to exit and find a way to leave gracefully.

I went through each of these steps. I had “always” thought I’d enjoy teaching and could contribute to a university actuarial science program. I spent months preparing for the change (although my preparation still left me woefully unprepared!). I left my ego at the door and worked hard to learn from my new colleagues, who were extremely gracious with their time and help.

As a Maryville faculty member, “success” means assisting students to develop their academic, business and interpersonal skills. These criteria are very different from when I was an actuary. It’s important to recognize—and celebrate—those new success stories.

During the first academic year, when I was asked, “How is it going?” I consistently deferred my answer. I want to get through two years before determining if this is a good match for me. I’m anxious to hear my answer!



## All About Education

### THE SOA IS CONTINUALLY EVOLVING

to meet the current and future needs of candidates, members, employers and the public. Learn what's new in the way of education at the SOA 2014 Annual Meeting & Exhibit.



Session 66 PD, "Update on Pre-Qualification and Continuing Education," will review recent changes and preview what is to come in 2015. Updates on all components of the associateship and fellowship pathways will be provided along with plans for 2015. Also included will be an update on professional development opportunities, including 2014 accomplishments and plans for 2015.

"E-Learning, Business Analytics and You," (Session 115 PD) showcases e-Learning as an effective way to learn new skills. This will be illustrated via the Applications of Statistical Techniques module followed by a presentation of the wide range of modules available for professional development.

For more information about these sessions and the annual meeting offerings in general, visit [SOAAnnualMeeting.org](http://SOAAnnualMeeting.org).

my sense of humor. Students seemed to appreciate the fact that I acknowledged my limitations and they began to root for my teaching success. I was "approachable" and "straightforward," and my mistakes made me "seem more human." They said with a little more confidence I could be a "strong asset." Maryville's actuarial science students are smart, hard-working, patient and polite. They couldn't have been more helpful.

I also received support from my new College of Arts and Sciences faculty

associates. The dean, assistant dean and two science faculty members "checked in" at least daily. They gave me their time, wisdom and encouragement, and invited me to watch their classrooms. This combination of student and faculty assistance was invaluable; I wouldn't have lasted a full academic year without it.

Candace Chambers, Ph.D., professor of chemistry, was dean of the college during my first year. In her annual review she wrote: "He clearly puts in significant

time and effort, and the feedback from his students indicates that while he started out a bit rough, he has won them over and is learning to use his strengths—which are considerable—to teach in his own style. It is clear that he cares not only about his teaching, but the curriculum for the entire major." And after observing my class, Gabriel Colbeck, Ph.D., assistant professor of biology, wrote: "I felt excited to have been in class with an expert who knew important details about something very relevant to all of us. This can be difficult even for veteran teachers."

While these are gratifying words, it took a lot to reach that point. In the beginning, everything was new, and a struggle. It took me long hours to prepare for class and grade quizzes and exams. I was able to incorporate guest lecturers, outside readings and group projects in two of my three classes. During





my second semester, I created a group project in Corporate Finance that involved projecting a simple income statement for the sales of a new insurance product—the instructions I wrote were four pages long. I slowly gained confidence.

For my Insurance and Risk class, I asked the students to select projects reflecting the risk concepts we were studying. Project topics included:

- The risk that the nuclear power plant owned by Wayne Enterprises in the Batman movie, “The Dark Knight Rises,” could be turned into a nuclear bomb
- The cultural, reputational and financial risks involved with investing in a Super Bowl ad
- Risks associated with the Target credit card breach
- Risks posed to Penn State from the Jerry Sandusky scandal.

I received emails from students when news stories reminded them of topics we discussed. For example, a student sent an email indicating that while browsing through the news online, the student found an article about the Toyota recall. Since the class discussed this issue several times in Insurance and Risk, the student thought it might be something worth discussing in class. Another email referenced our class discussion on the Target credit card breach, and one student forwarded a link to an article on recalls after we discussed the Johnson & Johnson



handling of the Tylenol tampering scandal in the 1980s.

More importantly, several students who were concerned about their future found their way to my office to talk about career planning, which is another way in which my industry experience is an asset that can be leveraged on behalf of the students. I received a year-end note from one student that read: “Thank you for everything you’ve done for me this year. You were a great professor. See you next fall!” Not quite like hitting the World Series winning home run ... but close. However, there is still work to do—students noted my need to improve time management in the classroom, and that I needed consistency in writing and grading exams and quizzes.

I made it through academic year one and was offered a contract to continue for another year. It was a combination of hard work, frustration, disappointment and fulfillment. I enjoy working with the incredible actuarial science students at Maryville. Additionally, Maryville University and the actuarial science program administrators have been supportive of some new ideas I’ve suggested. An example is a new elective course, Enterprise Risk Management (ERM). The course is being offered for the first time to seniors this fall





and covers ERM material contained in the Fundamentals of Actuarial Practice modules. Fewer than 25 students were eligible to register, and I'm pleased to report that 10 students are currently enrolled.

### HOW A BUSINESS CAREER HELPS IN THE CLASSROOM

Actuarial science students are primarily driven to pass the preliminary exams in the credentialing process. Exam problems are well-defined and have a single correct answer. My primary goal is to prepare students to become "good" actuaries. The business world is full of problems that aren't well-defined, with

incomplete and flawed data. In business, the correct response is never a, b, c or d—it normally begins "it depends." Solving problems involves a holistic approach that scours the landscape for all information. Problem solving is greatly enhanced by working in groups, carefully listening to and considering all perspectives. My long business career allows me to help students with their business problem solving—a complementary contribution I can make to the program.

### WHAT'S NEXT?

At some point, the "big" questions will be answered. Could I make a positive contribution to the Maryville actuarial

science program? And would I enjoy working with students? The answers seem to be trending toward "yes." I've become totally immersed in my new role.

Thank you, Maryville, for having faith in me. **A**

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LIVING  
to 100

SOCIETY OF ACTUARIES  
INTERNATIONAL SYMPOSIUM

## 2014 Living to 100 Symposium Monograph

Presentations from the 2014 Living to 100 Symposium are now in an online monograph at [livingto100.soa.org](http://livingto100.soa.org). The symposium brought together thought leaders to discuss the latest theories, research and implications on longevity and quality of life. Topics discussed included:

- The evolution of retirement;
- Work flexibility for a graying workforce;
- Business implications of living longer;
- Lifestyle and longevity; and
- Mortality trends and projection methods of older age.

The Living to 100 Symposium featured actuaries, demographers, physicians, academics, gerontologists, economists, financial planners, researchers and other professionals. This monograph will help to continue the conversation about how to address living longer, the impact to social support systems and the needs of advanced-age populations.

Visit [livingto100.soa.org](http://livingto100.soa.org) to learn more.



**Your**  
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**Our**  
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=

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Who will provide the healthcare that our ageing populations need, and the quality of life they expect? You know the issues better than the back of your own, elegantly ageing hand. And so do we. For example, right now in the US we're working with clients to combine their expert market knowledge with our risk assessment capabilities. The result? Affordable private insurance that will not only provide retirees with comprehensive medical cover for the rest of their lives – but peace of mind for everyone concerned. Especially him. **We're smarter together.**

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# CLOSING CRITICAL SKILLS GAPS AND ENSURING CONTINUED STRENGTH

BY JENNIE MCGINNIS AND SHERRI BLYTH

## THE SOCIETY OF ACTUARIES' (SOA'S) COMPETENCY

**FRAMEWORK**, introduced in 2009, was developed largely through analysis of surveys that questioned what skills were critical to being a successful actuary and how practicing actuaries measure up with respect to these skills. The framework is comprised of the following competencies:

- Communication
- Professional Values
- External Forces & Industry Knowledge
- Leadership
- Relationship Management & Interpersonal Collaboration
- Technical Skills & Analytical Problem Solving
- Strategic Insight & Integration
- Results-Oriented Solutions.

It was no surprise to find that as a community we perform well when it comes to Technical Skills & Analytical Problem Solving and Professional Values. It likely also wouldn't come as a surprise that

actuaries were found to have a gap when it comes to business skills.

This article focuses on competencies at both ends of the performance spectrum. While it's necessary to close the gaps identified, it is also critical that we don't lose ground when it comes to our strengths. Interestingly, while the Professional Values competency ranked as the most important to our success, Technical Skills & Analytical Problem Solving was ranked lowest. Relationship Management & Interpersonal Collaboration and Communication—key business skills—were ranked as the second and third most important.

## BUSINESS SKILLS

The SOA has historically offered business skills training through meeting sessions, seminars and webcasts. While these have focused on the skills needed in an actuarial setting, it's clear that some basics cross all industries.

Thus, the SOA's Professional Development Committee (PDC) sought to partner with professionals who train the broader

business community. Additionally, the PDC considered the increasing member feedback indicating an interest in online offerings (for access any time and (almost) anywhere). After vetting for content, design and quality, the PDC determined to partner with BizLibrary to provide SOA members discounted access to BizLibrary's portfolio of courses. Many of these courses are created by SkillSoft®, a leading provider of off-the-shelf online training.

BizLibrary is a repository of online courses that focus on four key SOA competencies:

- Leadership
- Relationship Management & Interpersonal Collaboration
- Strategic Insight & Integration
- Communication.

Since the launch of the BizLibrary partnership in October 2013, the most popular courses have been "Leadership Essentials: Motivating Employees," "Leading Teams: Dealing with Conflict" and "Interpersonal Communication: Listening Essentials."



The online courses are interactive and engaging. Concepts are presented and then followed by an interactive video in which the learner is given various situations and asked how he would react. The main character in the video provides detailed feedback and gives the user an opportunity to go back to the scenario and select a different option or to proceed.

Members and candidates can access BizLibrary from [soa.org/bizlibrary/](http://soa.org/bizlibrary/). These courses provide Continuing Professional Development credits. A purchase of one license entitles you to select five online courses from the library over a one-year period.

It is hoped that these courses benefit the actuarial community in several ways. Most importantly, it's a tangible step toward closing the identified skills gap. Secondly, it will allow live sessions to delve deeper into applications involving actuarially specific settings. While these courses leverage online training, there are certain levels of learning that are best suited to in-person sessions.

**PROFESSIONALISM**

In recent years the SOA has increased its interactive professionalism offerings. These have typically been held as a session at one of the larger meetings and consistently receive positive ratings and feedback. As a result, the PDC sought to bring this offering

to a broader base of the membership. As such, the SOA has added a new type of professionalism training to the current mix.

Known as the **2014 Professionalism Ready-to-Go**

**Workshop Kit**, this offering contains the materials needed for a company or an actuarial club

to deliver a three- to four-hour workshop on professionalism. Think of this product



Jennie McGinnis



Sherri Blyth

## Communication Skills Are Critical

**TECHNICAL PROFICIENCY** is a hallmark of the actuarial profession, but the ability to communicate methods and results can sometimes be a challenge for actuaries. Business skills such as effective communication, professionalism and persuasiveness have been recognized by SOA leaders as essential for success. Here are a few quotes from previous SOA presidents who have addressed this issue and underscored its importance.

**From Bradley M. Smith ...**

"What are the attributes of professionalism? Specialized knowledge/capability. Personal integrity. Commitment to completing the assignment. Courtesy."

"The marketplace wants someone with specialized knowledge and capability ... someone it can trust ... someone committed to completion of the assignment ... someone who communicates clearly and is pleasant to deal with. The marketplace wants professionals." — **Letter from the President, "Professionalism," *The Actuary*, August/September 2012.**

**From Tonya B. Manning ...**

"... [C]ommunication skills, problem solving, and persuasiveness—they all have to be part of the mix—these are all important tools that every business leader needs. We need to develop and hone these skills to change the misperceptions of actuaries. This takes work."

"Being an actuary is more than just doing the calculations or the modeling. Actuaries are called upon to recognize bigger-picture issues, and we must use our business and communication skills to address those issues." — **Letter from the President, "Taking the Actuarial Profession to the Next Level," *The Actuary*, December 2012/January 2013.**

"Effective communication is critical to our professional relevance, as we continue to service our current clients, and especially as we expand into new areas of practice, where we can aspire to impress these new audiences with the clear and concise ways in which we communicate to help them in their financial challenges." — **Letter from the President, "A Clear and Concise Direction for Our Profession," *The Actuary*, August/September 2013.**

as training in a box. The kit (box) contains source files for a participant guide, facilitator guide and slide deck;

## Check Out the BizLibrary

Here are a few of the online BizLibrary courses that members are using to polish leadership skills. See the full listing of courses at [soa.org/bizlibrary/](http://soa.org/bizlibrary/).

- Leadership Essentials: Motivating Employees
- Leadership Essentials: Building Your Influence as a Leader
- Leading Teams: Dealing with Conflict
- Management Essentials: Directing Others
- Getting Results without Direct Authority
- Leading Teams: Fostering Effective Communication and Collaboration
- Leading Teams: Building Trust and Commitment
- Interpersonal Communication: Listening Essentials

all you need to provide is a facilitator (a great opportunity for individuals who are looking to build their communication and interpersonal collaboration skills!) and logistics.

The workshop format is interactive, utilizing small group discussions based on real-life situations. Each situation is explored in a number of different ways with each discussion building on the preceding one.


The 2014 Professionalism Ready-to-Go Workshop Kit is based on the “road show” concept. This means the workshop can be easily delivered in different locations by different facilitators. Of note, the case studies are not country-specific, which lend them to broad use, as evidenced by one of the pilot offerings being successfully held in Jamaica.

The kit is a good solution for companies and actuarial clubs that don’t often have the opportunity to send their SOA members to large conferences such as the annual meeting. It is different from a webcast in that it promotes interactive discussion among participants. Many of the companies who purchase the 2014 Professionalism Ready-to-Go Workshop Kit use it in conjunction with another planned on-site meeting to help economize the costs of bringing participants together.

A company or club that purchases a 2014 Professionalism Ready-to-Go Workshop Kit license is entitled to deliver the workshop an unlimited number of times during one 24-hour period. If the organization is hosting an official event, in the same location, the workshop can be delivered

multiple times across three days (see License Agreement for full details). To find out more about this offering, visit [soa.org/Professional-Development/Event-Calendar/kits/prof-ready-to-go-kit.aspx](http://soa.org/Professional-Development/Event-Calendar/kits/prof-ready-to-go-kit.aspx).

### BUILDING AND MAINTAINING STRENGTH

Regardless of the skill, and whether you’re looking to build or maintain your ability to utilize it, the SOA seeks to ensure the diverse needs of its members and candidates are met. BizLibrary and the 2014 Professionalism Ready-to-Go Workshop Kit are just two of the newer offerings that aim to meet these needs. The PDC hopes that these are found to be meaningful additions and appreciates feedback on these and other offerings in the spirit of the SOA’s own continuous improvement. We look forward to working with you and for you in order to close gaps and maintain the strength of the actuarial profession. 

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**Jennie McGinnis, FSA, CERA, MAAA**, is vice president at Swiss Re and board partner to the SOAs Professional Development Committee. She can be reached at [Jennifer\\_McGinnis@swissre.com](mailto:Jennifer_McGinnis@swissre.com).

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Trevor Howes

## Section Highlights

# MODELING FOR FUN AND PROFIT

BY TREVOR HOWES

**DESIGNING, BUILDING AND RUNNING MODELS** have always been instrumental to actuarial work. Yet recently there has been rapidly growing interest in discussing the appropriate design of models, how to control and manage them, and how to make them more efficient and more useful—just check the programs at many recent actuarial conferences. But would you know where else to look for expertise and guidance for this fundamental actuarial skill?

Look no further—the Society of Actuaries (SOA) Modeling Section is here! It will provide many opportunities for learning and interaction on modeling topics. Haven't heard of it? That's because it is the SOA's newest section. At the June board of directors meeting, a petition to form a new section—dedicated to the whole topic of modeling—was approved as the 20th section in the SOA and the first new one in five years. Less than three weeks after opening the door for memberships, we reached the minimum threshold of 200 members, and we are still growing. Ours is a fast-forming section—one for the SOA history book.

Why do we think you will be interested? The primary reason is that models used in the life insurance industry have been


getting more and more sophisticated, detailed, complex and demanding to run and maintain. Models capable of stochastic or multiple-scenario analysis are a core requirement for supporting various existing and pending regulatory demands, such as Actuarial Guideline (AG) 43, C3 Phase II and III, and the principle-based approach (PBA) for life and annuity products. International Financial Reporting Standards (IFRS) and U.S. GAAP valuation standards are also trending toward more and more complex model-based approaches.

New approaches to modeling are requiring enhancements to existing software or totally new software for many companies. The projected computation load implies significantly increased processing capacity, or new, more efficient modeling techniques, or both. The increased risk posed by these advanced models, with constantly changing assumptions and inputs, demands improvements in our model governance policies and in the tools to comply with them.

This heightened focus on models and modeling crosses product lines, actuarial functions and national borders. It will be of interest both to new students looking to land their first job, who will almost certainly start building and running models as their

first assignment, and to senior actuaries who must give opinions based on the results of running those models.

We plan to address all of these interests through sponsoring seminars, webinars, panel discussions and workshops at professional meetings; by launching our section newsletter with interesting and informative articles; and by sponsoring research, maybe jointly with other interested sections, on current modeling issues. We also hope to get interested members to volunteer to help this new section start off on the right track and contribute to the growth of our modeling skills everywhere they are needed.

If this interests you, check out our section Web page on the SOA website and think about joining us. We would love to have you! And if you want to take it to the next level, contact me at [Trevor.Howes@ggy.com](mailto:Trevor.Howes@ggy.com) to volunteer for a more active role. 

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**Trevor Howes, FSA, FCIA, MAAA**, is vice president and actuary at GGY AXIS in Toronto. He can be reached at [Trevor.Howes@ggy.com](mailto:Trevor.Howes@ggy.com).

# SOA 2014

SOCIETY OF ACTUARIES  
Annual Meeting & Exhibit

Oct. 26-29, 2014  
Rosen Shingle Creek  
Orlando

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Change  
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Innovate  
Perform

Through the profession,  
collaboration, research, education and  
our members...

## TOGETHER WE PROGRESS

[SOAAnnualMeeting.org](http://SOAAnnualMeeting.org)

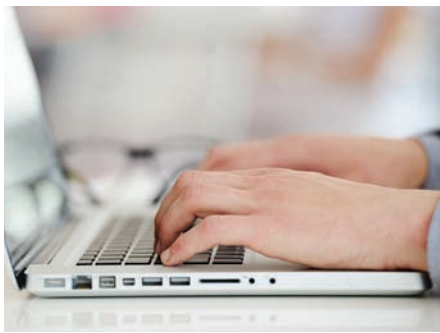
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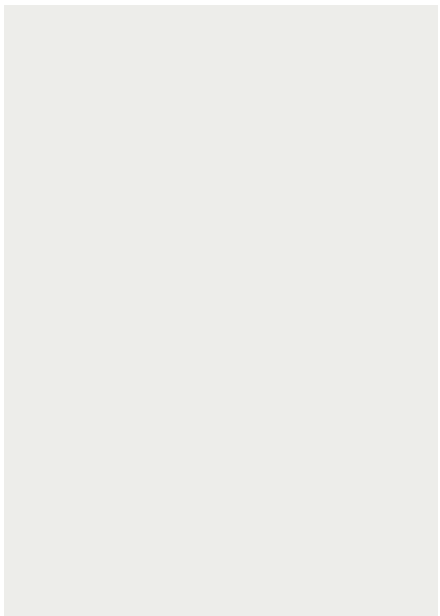
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# SOA AT WORK

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# MAKING PROGRESS TOGETHER

BY GREG HEIDRICH

I really like the theme of this year's annual meeting—*Together We Progress*. In three simple, yet powerful words, it describes what the SOA's mission is; how the Annual Meeting & Exhibit showcases the advances we've made in the profession, in business and in society as whole; and how our professional interest section members, volunteers and actuarial leaders collaborate to improve this event every year.

Nearly 2,000 actuarial professionals from approximately 20 countries will be

**For the first time, a group of pre-ASA candidates has been invited to this event. They will attend selected sessions and have the opportunity to network with SOA members.**

attending the annual meeting in Orlando. I hope you will be joining us. With nearly 200 insightful sessions, dozens of networking opportunities, and a vast array of knowledgeable and dedicated presenters, it is truly a meeting you won't want to miss!

President Mark Freedman will give his presidential address at the Opening General Session that will include a review of the SOA's accomplishments over this past year and a look at the future of our

organization. Mark will later pass the gavel of office to President-Elect Errol Cramer who will deliver his address to the group at the Presidential Luncheon.

It is our privilege to have Adam Steltzner as our keynote speaker at the General Session. As chief landing phase engineer and development manager of NASA's Mars Science Laboratory Curiosity Rover Project, his job was to ensure that the intricately designed rover vehicle, Curiosity, landed safely. I can't imagine a better speaker to have on hand to talk about progress as Steltzner, as his team

had to design, build and fly the systems that made Curiosity work.

We are also very fortunate to welcome former U.S. Secretary of State Madeleine K. Albright to the stage as keynote speaker at the Presidential Luncheon. Among all her exemplary attributes and accomplishments, the progress she made toward world peace is particularly noteworthy. In 2012, President Obama awarded the U.S. Medal of Freedom—the nation's highest civilian honor—to



Albright, citing the inspiration her life is to all and that her scholarship and insight continue to make the world a better, more peaceful place.

It's a meeting of celebrations as well. For the first time, a group of pre-ASA candidates has been invited to this event. They will attend selected sessions and have the opportunity to network with SOA members. Their experience will be similar to other SOA Candidate Connect events hosted throughout the year, such as the Health Meeting, the Val Act Symposium and the Life & Annuity Symposium. Be sure to visit their booth in the exhibit hall and learn about candidate engagement initiatives and volunteer opportunities. We are very happy to have the candidates on board with us this year.

The Actuarial Foundation is celebrating its 20<sup>th</sup> anniversary with a special

luncheon. Keynote speaker Liz Murray, author of the best-selling book, *From Homeless to Harvard*, will share her inspirational story of overcoming homelessness at the age of 15. This is sure to be a powerful presentation.

Have you checked the Annual Meeting Web page? If not, visit [SOAAnnualMeeting.org](http://SOAAnnualMeeting.org). You'll find sessions and workshops covering topics such as predictive modeling for actuaries, opportunities for actuaries in a nontraditional world, professionalism, developments in international solvency requirements, and ERM governance. You will also find

presenter information, special events, networking opportunities and registration information. Remember, online registration is available until Oct. 24, so there is still time to register for what is sure to be a great growth and networking opportunity.

I could fill pages with information on this outstanding event. Instead, I welcome those who will be attending and hope you learn, enjoy, network and make the most of your time at this annual meeting. For those of you who cannot attend this year, I trust you will take advantage of the virtual sessions and recordings that

will be available after the meeting, and will consider registering for the 2015 Annual Meeting & Exhibit.

This event takes countless hours, commitment and dedication from hundreds of people. Thanks very much to our members, candidates, leadership, volunteers, presenters, staff, sponsors, advertisers and exhibitors. Together, we really do progress. **A**

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**Greg Heidrich** is executive director of the Society of Actuaries. He can be reached at [gheidrich@soa.org](mailto:gheidrich@soa.org).



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# RAVE REVIEWS FOR FIRST CANADIAN HEALTH ACTUARY SEMINAR

BY ÉMILIE BOUCHARD

**O**n May 5, 2014, the Society of Actuaries (SOA) hosted the first Canadian health actuary seminar. The seminar was created for Canadian actuaries and featured eight Canadian experts speaking on the driving issues of the Canadian health care market. The featured speakers, from various backgrounds, brought a wealth of information and expertise to the discussions, making sure to engage the participants. For an enhanced experience, the speakers were very generous with the material they shared, diving deep enough in the subjects to provide participants with relevant learning that can be applied in their work.

It was a fun day, filled with sessions led by the featured speakers:

- **Stéphane Levert, FSA, FCIA**, vice president, Group & New Initiatives at SCOR Global Life Canada, presented the findings of his research, jointly sponsored by the SOA and the Canadian Institute of Actuaries, on the sustainability of the Canadian health care system.
- **Marcel Théroux**, member of the Bars of Ontario and Alberta and of the Barreau du Québec, and partner with Mercer, presented recent case law and legislation applicable to the health sector.
- **Erin Crump, FSA, FCIA**, director of Group Research and Development

at Munich Re, and **Maria Semak, FSA, ACIA**, actuary, Living Benefits for Munich Re, presented an overview of the Canadian group critical illness market.

- During lunchtime, **Dan Bailey, FSA, MAAA**, founder of Acumen Health, led a discussion on the health reform in the United States.
- **David Willows**, vice president of Strategic Market Solutions at Green Shield Canada, and **Atul Goela**, senior pharmacy services consultant at Green Shield Canada, presented studies on pharmacy trends and hypertension management.
- **François Joseph Poirier, FSA, FCIA**, partner and market business leader for Eastern Canada in the Employee Health & Benefits business for Mercer, presented a drug plan survey as well as strategies to control prescription drug costs in the private sector.
- **Karla Thorpe**, director with the Leadership and Human Resources Research Division of The Conference Board of Canada, presented research findings of a three-part study on absenteeism and the actions employers can take to tackle this issue.

Reviews of the seminar were really positive. Pierre Vincent, president and chief operating officer at The Excellence Life Insurance



Company, commented, “While I do not work on a daily basis on health care cost issues, the seminar provided me with a good overview of the ongoing shift in health care cost from the public sector to the private sector. The content also helped me realize some of the financial challenges that Canadians will be facing within a few years and gave me a few ideas about how insurers could help Canadians better prepare for the increased cost of health care.”

Participants who completed the survey following the seminar all agreed that the seminar provided leading-edge professional development. In fact, 95 percent of respondents would encourage their peers to participate in a similar event!

See you next year! **A**

**Émilie Bouchard, FSA, FCIA**, is staff fellow—Canadian Membership for the Society of Actuaries. She can be reached at [ebouchard@soa.org](mailto:ebouchard@soa.org).

# USING RESEARCH TO INFORM PUBLIC POLICY

BY R. DALE HALL

Actuarial research, through original reports, surveys and experience studies, is an important part of the Society of Actuaries' (SOA's) mission. These efforts would not be possible without the continued support and volunteerism of our members to complete necessary research for the benefit of our industry and society.

The SOA has a long history of working with policymakers, regulators and our actuarial partner organizations on research that informs public policy. For reference, our public policy statement is available under the research area at [SOA.org/files/SOA/SOA-public-policy-research.pdf](http://SOA.org/files/SOA/SOA-public-policy-research.pdf).

There are four core principles at the center of our research work to inform public policy:

- **Objectivity**—Our research informs and provides analysis that can be relied upon by others in public policy discussions.
- **Quality**—Our rigorous peer-review process ensures the quality and integrity of the work.
- **Relevance**—Our research advances actuarial knowledge and provides critical insights on key policy issues for decision-makers and stakeholders.
- **Quantification**—Our research projects use the diverse skill sets of actuaries with the best available data and methods.

As part of our continued work with the SOA 2013-2016 Strategic Plan, our organization has created a new staff position, director

of Regulatory Affairs. In this new role, Ann Weber, formerly of Property Casualty Insurers Association of America, is working with our membership to create greater visibility of the SOA with regulatory bodies in the United States and in other countries where our members practice. It is important for us to remain attuned to developments in the regulatory arena and to build upon the relationships and overall discussions with regulatory bodies, including the National Association of Insurance Commissioners and the International Association of Insurance Supervisors.

We have also created an SOA Regulatory Research Advisory Council, which will help with guidance and planning of future experience studies and practice research projects to connect with what regulators will need on the horizon.

Taking all of these developments into consideration, here are some of the current research projects related to public policy:

- Earlier this year the SOA released analysis on the provisions from the Moving Ahead for Progress in the 21st Century Act (MAP-21), and the research examined how private sector, single-employer, defined-benefit plans were affected by the 2012 provisions. The data analysis showed how the flexibility afforded by the provisions was utilized by both the sponsors of relatively well-funded plans and the sponsors of lesser-funded plans. More information can be found at [SOA.org/](http://SOA.org/)



[files/research/projects/research-MAP-21-fact-sheet.pdf](http://files/research/projects/research-MAP-21-fact-sheet.pdf).

- We are planning to release new research on the U.S. multiemployer system and a review of the U.S. single-employer, defined-benefit system under a variety of economic scenarios.
- We are also partnering with several North American actuarial organizations in creating an index on extreme climate events.

I encourage you to learn more about these research projects and future research developments covering retirement, pensions, health care and life insurance, among others. We look forward to developing actuarial research intended to aid and inform the work of policymakers and regulators. ▣

**R. Dale Hall, FSA, CERA, MAAA**, is managing director of Research at the Society of Actuaries. He can be reached at [dhall@soa.org](mailto:dhall@soa.org).

# RESULTS OF THE 2014 SOA MEMBER AND CANDIDATE SATISFACTION & ENGAGEMENT SURVEY

BY LLOYD SPENCER

The Society of Actuaries (SOA) conducted its seventh survey of member and candidate satisfaction and engagement in early 2014. More than 4,000 respondents working in six continents assessed their satisfaction with the SOA's performance in core areas of activity. They also provided guidance on how the SOA could better meet their needs.

## MEMBERSHIP SATISFACTION INCREASES

Overall, the current survey revealed that the level of member satisfaction with the SOA continues to increase. When asked if they were more or less satisfied with the SOA today than one year ago, on a scale of 0 being "not at all satisfied" to 10 "very satisfied," the level of member satisfaction

stepped up to 6.1 in the current survey versus 5.8 in the 2011 survey. This trend was observed across all geographic regions.

New to this year's survey was the option for responders to articulate why they were more or less satisfied with the SOA now versus one year ago. Nearly 2,300 comments were provided. The majority of these comments were complimentary of the SOA's activities in education, research, professional development and communication.

Member satisfaction with the SOA's efforts to maintain high standards for the education process (including examinations and e-Learning) continued to trend upward, reaching a new high (7.1). Similarly, trends were also demonstrated with respect to the

SOA's efforts to maintain and enhance the image of the profession (6.9). See **Chart 1, Education Standards**.

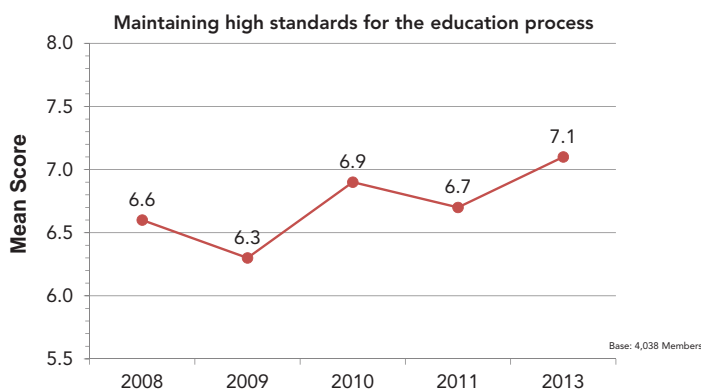
## VALUE OF MEMBERSHIP

When asked to identify the benefits of an SOA credential, members cited increased respect from employers (80 percent), increased knowledge and competency (76 percent), and increased career advancement opportunities (72 percent). Nearly 1 in 2 members working outside the United States cited the benefit of providing a pathway for international mobility. See **Chart 2, Benefits of an SOA Credential**.

Nearly two-thirds of member respondents belong to one or more SOA sections. When asked what they valued from their section

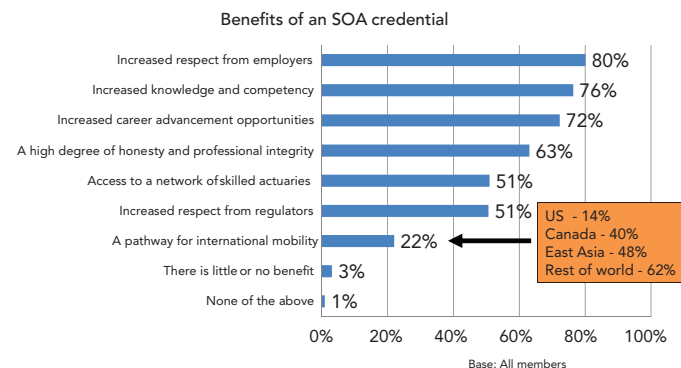
### Chart 1: Education Standards

Member assessment of the SOA's performance in *maintaining high standards for the education process* has reached a new high.



### Chart 2: Benefits of an SOA Credential

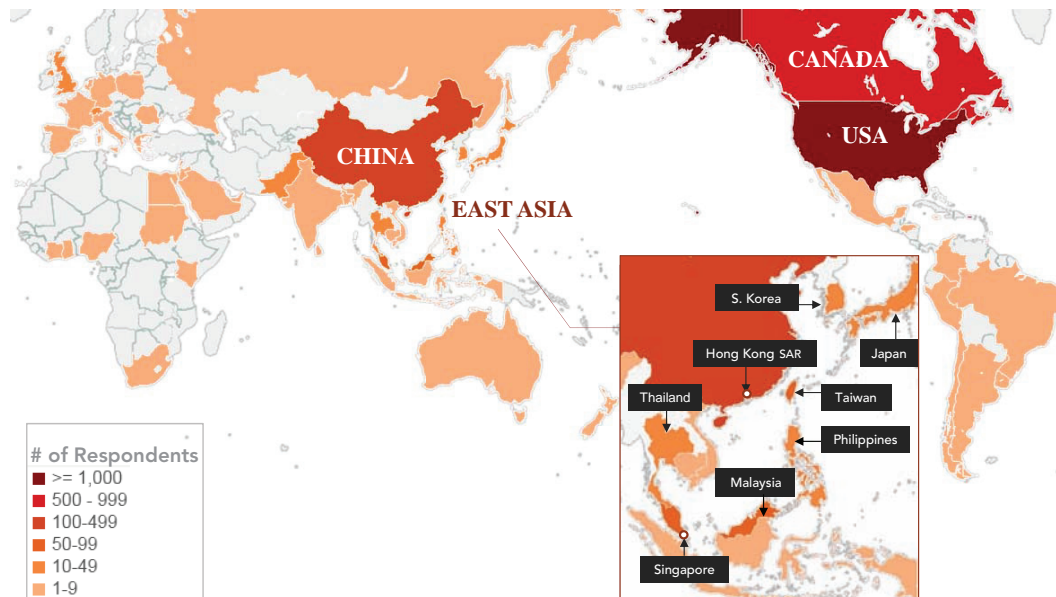
*Increased respect from employers* is cited as the top benefit of having an SOA credential. Members outside of the US are more likely to view credentials as *a pathway for international mobility*



## Survey Demographics

- Those holding the FSA designation represented the largest segment of member respondents (63 percent), with 8 percent of all member respondents holding the CERA designation in addition to an FSA or ASA designation.
- In terms of work experience, 42 percent of member respondents noted 10 years or less of work experience, while 26 percent noted 25 years or more of work experience.
- Nearly 9 in 10 (89 percent) of member respondents indicated that they work in the United States or Canada, as compared to just under 7 in 10 (69 percent) of the pre-ASA candidate respondents. Of the remaining 31 percent of pre-ASA candidate respondents, two-thirds (21 percent) indicated that they work in East Asia (defined as Cambodia, China, China-Hong Kong Special Administrative Region
- (SAR), China-Macau SAR, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam). **See chart below, Survey Demographics: Respondents by Country.**
- Nearly 4 in 10 (38 percent) member respondents work for employers with 10,000 or more employees, with an additional 32 percent reporting that they work for employers with between 1,000 and 9,999 employees. Only 10 percent of member respondents work for employers with fewer than 50 employees. Of all member respondents, 66 percent indicated they participate to some extent in their employer's hiring process.
- By practice area, one-third of member respondents indicated a life insurance practice area, followed by health insurance (25 percent), and retirement (18 percent).

### Survey Demographics: Respondents by Country





membership, respondents most frequently cited gaining access to information specific to their job (78 percent) and the work product of the section, which supports the overall actuarial profession (51 percent). Section members also mentioned the support and financing of research through section dues, the opportunity for greater participation in the SOA and to network with one's peers.

More than 750 respondents indicated that they participated in volunteer activities supporting the SOA during 2013. Of this group, 85 percent said they would volunteer again. When asked to rate their level of satisfaction with the SOA's support for one's professional needs, 73 percent of volunteers and 66 percent of section members provided a score of "7" or higher, compared with 59 percent of members who neither volunteer nor belong to a section. This reinforces the notion that engaged members perceive greater value and support from the SOA.

### NONTRADITIONAL ROLES AND INTERESTS

Roughly one-half of member respondents indicated a high level of interest in using their actuarial training to pursue actuarial careers in industries that have not traditionally employed actuaries (such as banking, energy or transportation), or in filling nontraditional roles (such as business analytics, marketing or predictive modeling). This level of interest is markedly higher for millennial (born after 1980) and Generation X (born 1965 to 1980) respondents as compared to the level of interest among boomer (born 1946–1964) respondents.

More than 1,200 member respondents reported hiring and/or working closely with para-actuaries. By practice area, 35 percent of health actuaries, 29 percent of

life actuaries and 18 percent of retirement actuaries reported working with and/or hiring para-actuaries.

### RESEARCH AND PROFESSIONAL DEVELOPMENT

When asked to consider all sources of technical research, nearly 70 percent of members believe that the SOA is more (26 percent) or equally (43 percent) valuable as other providers of technical research. In addition, more than 80 percent of members believe the SOA's research activities should inform public policy development and public understanding. Sixty-nine percent of members had a mid to high level of familiarity with experience studies. The level of familiarity falls for practice research (48 percent) and data driven in-house research (38 percent). **See Chart 3, Actuarial Research and Public Policy.**

Members indicated that they receive, on average, 50 percent of their actuarial professional development from the SOA, continuing an increasing trend observed since 2009. In terms of source, on average, webcasts and virtual sessions provide

43 percent of actuarial professional development, followed by in-person meetings/seminars/symposia (31 percent). Common non-SOA sources of actuarial professional development cited by member respondents include self-reading or study (79 percent), via their employer or through on-the-job training (66 percent), from another national or global actuarial organization (49 percent), at industry conferences (38 percent), or from a local or regional actuarial club (35 percent). Member respondents working outside the United States and Canada indicated that they receive a disproportionately higher percentage of their actuarial professional development from industry conferences or from a university than do members working in the United States and Canada. **A**

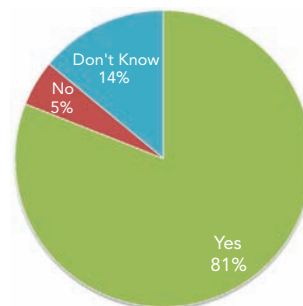
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## Chart 3: Actuarial Research and Public Policy



A robust 81% of members believe that SOA research activities should inform public policy development and the public's understanding

Should SOA research inform public policy?





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### ADVANCED TOPICS IN CORPORATE FINANCE AND ERM

Three applications of Extreme Value Theory (EVT) are covered to put the theory to work in a business context in this e-course. The candidate will learn about the factors that affect strategic thinking (external forces, environmental analysis), the organizational characteristics that influence strategic decision-making (strategy, structure, controls, leadership) and how senior management uses these to evaluate and benchmark progress toward strategic goals.

### APPLICATIONS OF STATISTICAL TECHNIQUES FOR PROFESSIONAL DEVELOPMENT

This e-course will introduce you to a set of advanced business analytic techniques. Advanced business analytics as a set of tools and techniques to assist in key business decisions are defined.

### FINANCIAL ECONOMICS: FINANCIAL MATHEMATICS

This e-course focuses on the financial mathematics branch of financial economics. You will learn about derivative securities and options, modeling returns, and option pricing and hedging.

### FINANCIAL MODELING

The Financial Modeling e-course seeks to expand the knowledge first learned in the MFE course in both theoretical and practical aspects.



### FUNDAMENTALS OF ACTUARIAL PRACTICE (FAP)

This e-course is set in the context of the control cycle. It encompasses real-world applications and uses examples to demonstrate actuarial principles and practices. You will also have opportunities to apply these principles and techniques in traditional and nontraditional actuarial practice areas. With the fundamentals in your toolkit, you will be better prepared to apply your learning to new areas of practice that may emerge during the course of your actuarial career.

### HEALTH FOUNDATIONS

The Health Foundations e-course discusses the health care system at a micro level. It begins with an exploration of health care terminology and coding. The module moves on to discuss sources of data with regard to medical treatments and claims experience. The next step is to learn about the administrative systems that bring the data sources together. The module ends with examples illustrating how these elements combine to help provide solutions to actuarial problems.

### INTEGRATED DECISION-MAKING PROCESS (IDMP)

The Integrated Decision-Making Process (IDMP) provides a foundation for making decisions related to complex business problems that require the involvement of many stakeholders and decision makers. IDMP presents a decision-making process that is specific enough to provide solid guidance when making decisions yet general enough to be applicable in a wide variety of situations. **A**



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**Columbia Mutual Insurance Company** increases Businessowners rates, effective 10/1/2014, in Nebraska. Rate effect: +4.7%

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## GOOD RESEARCH READS



### COMPLETED RESEARCH STUDIES

#### KEY FINDINGS AND ISSUES: UNDERSTANDING & MANAGING THE RISKS OF RETIREMENT

This report presents an overview of findings from the 2013 Risks and Process of Retirement Survey, which was conducted by Mathew Greenwald & Associates on behalf of the SOA's Committee on Post Retirement Needs and Risks. It includes commentary on the findings as well as related insights from an earlier series of eight focus groups, which probed participants on their decision process for retiring and their views on managing assets after retirement. To give further context to the findings, the report also provides perspectives written by project oversight group members. Upcoming highlight reports from the survey will explore personal risk management, the phases of retirement and retirement issues for women.

#### UNDERSTANDING THE VOLATILITY OF EXPERIENCE & PRICING ASSUMPTIONS IN LTC INSURANCE

Sponsored by the Long Term Care Insurance (LTCI) Section, this report provides a

framework to help actuaries better understand the volatility of LTCI and to compare the volatility and riskiness of different products and product portfolios. The authors, Actuarial Resources Corporation of Kansas, explore a number of questions in the paper including

how an actuary can differentiate between poor experience due to the inherent volatility in the underlying LTCI business and poor experience due to incorrect assumptions. To illustrate this, the authors describe how key product assumptions can be expressed as probability distributions and a company's block of business can be forecast using Monte Carlo simulation. A forthcoming report, to be authored by PwC, will provide further risk and market perspective on this topic.

#### UNDERSTANDING THE CHANGING MIDDLE MARKET FOR LIFE INSURANCE IN CHINA

This new report examines the Chinese middle market for life insurance. Supported by the Marketing and Distribution Section and International Section, plus the Research Expanding Boundaries Pool, this research provides insight into the financial situations and needs for life insurance among middle market families. Performed by WZ Research + Consulting and Mathew Greenwald & Associates, nearly 2,000 families from 19 cities across China with annual household incomes between RMD 60,000 and 360,000 (roughly \$10,000 and \$60,000 USD) were surveyed

about their attitudes and behaviors for life insurance.

Utilizing the results of the survey, the research team identified three compelling segments to help life insurers better understand how to reach these middle market consumers.

#### SUSTAINED LOW INTEREST RATE ENVIRONMENT: CAN IT CONTINUE? WHY IT MATTERS

This report, authored by Max Rudolph, describes the impact on insurers and products when interest rates remain low for an extended period of time. The report also describes strategies for addressing such scenarios and aims to help readers make conscious decisions about potential strategies and approaches based on an entity's risk profile, culture and appetite for risk.

#### COMMUNICATING THE FINANCIAL HEALTH OF PUBLIC PENSION PLANS

The focus of this report is to address the need for a concise but comprehensive and focused report on the financial health and prospects of state and municipal plans. The intention is to provide stakeholders with an overview to come to informed opinions about potential changes to the structure of these plans. Sandy Mackenzie, the author of the report, has also created prototype reports on two example state pension systems. The reports include a narrative portion, a dashboard providing quantitative indicators, and a summary of the structure of benefits and actuarial assumptions. The proposed reports can be updated on a regular basis and can be a part of a plan's actuarial control cycle.

To view a complete listing, visit [SOA.org/Research](http://SOA.org/Research) and click on Completed Research Studies. **A**



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Ezra Penland Actuarial Recruitment was established by Sally Ezra and Claude Penland, ACAS, MAAA, partners with over 35 years of combined industry experience. Our rapidly growing actuarial recruiting team works with all levels of actuaries and actuarial analysts, catastrophe risk modelers, predictive modelers, as well as up through executive roles.

Below is a small sampling of the actuarial roles we are working on.

### **ILLINOIS – LIFE ACTUARIAL CONSULTANT**

For Position 60346, an exciting client-facing and managerial role has opened up at Chicago life consulting organization. ASA or FSA with 7 to 20 years of life insurance-related experience ideal. Immediate need.

### **MIDWEST USA –**

#### **LIFE MODELING ACTUARY & DIRECTOR**

Life modeling actuary and Director immediately sought by a RETAINED Midwest USA insurer for Position 58885. FSA credentials and MG-ALFA experience are a must. SAS or R programming skills ideal.

### **USA – CHIEF RISK OFFICER**

Insurer seeks CRO for Position 58562. FSA with 15+ years of Life actuarial and risk management experience ideal.

### **GEORGIA – LIFE PRICING / ACTUARIAL MODELING**

Life pricing and actuarial modeling actuary at the ASA/near-FSA level sought in Atlanta area for Position 60356. Must have at least four years of life actuarial experience.

### **TEXAS –**

#### **ANNUITY PRICING AND PRODUCT DEVELOPMENT**

For Position 60470, Annuity Pricing, Product Development and Analytics Actuary sought by a Texas insurer. FSA or ASA with 10+ years of life and annuity actuarial experience sought.

### **WESTERN USA – ANNUITY VALUATION ACTUARY**

FSA Annuity Valuation Actuary needed by Western USA life insurer for Position 60498. Requires at least ten years of life and annuity actuarial experience.

### **MIDWEST USA –**

#### **ENTERPRISE RISK MANAGEMENT ACTUARY**

Enterprise risk management actuary at the FSA level immediately sought by a Midwest USA insurer for Position 60015. Advanced financial modeling and financial analysis experience required. Must have 7+ years of actuarial and financial experience.

### **NEW YORK – HEALTH LEADERSHIP ROLE**

New York insurer seeks a Health Actuary for a Leadership role for Position 60529. FSA with 10+ years of health actuarial experience ideal. Management experience required.

### **NORTHEAST USA –**

#### **SENIOR HEALTH ACTUARIAL ANALYST**

Insurer is looking for a senior health actuarial analyst for Position 60215. Requires at least four years of healthcare actuarial experience. Position open due to anticipated growth. Exam support.

### **MIDWEST USA – HEALTH CONSULTING ACTUARY**

Health actuary at the FSA level immediately sought by our Midwest USA client for Position 58886. Requires Medicare Advantage experience. Mentor staff. Position open due to anticipated growth

### **NEW JERSEY –**

#### **HEALTH FSA/ASA WITH 10+ YEARS OF EXPERIENCE**

For Position 60019, a health actuary is immediately sought by our New Jersey client. 10+ years of health actuarial experience preferred. Modeling, research, pricing and manage staff. FSA or ASA.

### **SOUTHWEST USA – HEALTH ASSOCIATE**

For Position 59685, this cutting-edge Southwest USA insurer seeks a Health Associate of the Society of Actuaries. Requires at least four years of experience. Must have pricing, modeling and reserve analysis experience.

### **MIDWEST USA – PENSION MANAGING ACTUARY**

For Position 60442, a Midwest USA consulting group seeks a Pension Managing Actuary. EA/ASA or EA/FSA with 10+ years of retirement consulting experience preferred. Manage staff and develop business.

### **FLORIDA – SENIOR PENSION ACTUARY**

For Position 59445, a Florida consulting group is now seeking a senior pension actuary. Requires EA credential and 5+ years of defined benefits consulting experience. ProVal skills a plus.

**THESE JOBS AND MANY MORE CAN BE FOUND AT [EzraPenland.com](http://EzraPenland.com)**



# PROFESSIONAL DEVELOPMENT: Your Opportunity to Grow

When is the last time you attended a meeting or seminar, or tuned into a webcast? As an SOA member, there are a number of events you can attend, in person or from your computer. Here are just a few of the upcoming meetings and webcasts coming your way that can help you:

- Stay up to date with current trends in your area of practice,
- Continue to make meaningful contributions to your company, your team and the profession, and
- Develop or fine tune new knowledge and skill areas.

## **MEETINGS AND SEMINARS** **ADVANCED BUSINESS ANALYTICS**

Nov. 4–6

Chicago

This interactive hands-on seminar will impart practical working knowledge of statistical and machine learning techniques that are broadly relevant in actuarial work.

## **BRIDGING THE GAP SERIES: SIMULATION—THE BLACK HOLES ENCOUNTERED WHEN PUTTING THEORY INTO PRACTICE**

Nov. 16

Chicago

Attend this seminar and delve into the details of shortcuts used to simplify problems in practice, while exploring ways to use simulations in conjunction with hybrid models.

## **READY TO REGISTER?**

Visit [SOA.org/calendar](http://SOA.org/calendar) for the full complement of meetings, seminars, virtual sessions, webcasts and more. We look forward to hearing from you!

## **EQUITY-BASED INSURANCE GUARANTEES CONFERENCE**

Nov. 17–18

Chicago

The only global event of its kind, this innovative conference features experts speaking on relevant issues ranging from valuation to reserving to product development to sound risk management practice to current market environment.

## **VIRTUAL SESSIONS/WEBCASTS** **LIFE INSURANCE M&A WEBCAST**

Nov. 11

A panel of experts will provide an overview of the North American life and annuity mergers and acquisitions (M&A) market. The panelists will discuss the M&A process from a non-actuarial and an actuarial viewpoint, professional considerations and valuation topics relevant to life actuaries.



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## FEATURED CAREER OPPORTUNITIES

### HEALTH

#### **Director—Medicare Programs (ASA/FSA) (H-2080)**

Leading Health Management organization seeks an Actuary (10+ yrs) as Director, Underwriting & Actuarial Services. Develop Best Practice actuarial models and promote implementation throughout Government Program products. Conduct studies, develop and recommend actions to leadership team. Develop actuarial models for pricing products.

**\$140,000–\$175,000+ Eastern Region**

### INVESTMENTS

#### **Chief Risk Officer—Life (FSA) (FC-03320/IV-4213)**

CRO, US Life business for premier financial services provider. Drive enterprise-wide risk strategy. Work closely with senior management and ensure risk infrastructure. Set direction for risk appetite and manage risk across multiple product lines. Strong Life and Risk background.

**Competitive \$\$\$ Southeast Region**

### FINANCIAL CORPORATE

#### **Senior Reinsurance Actuary—Appointed Actuary (FSA) (FC-03319)**

Giant financial institution seeks an FSA with Reinsurance experience and strong financial/valuation background. Make strategic recommendations based on Company's financials. Provide actuarial guidance on new reinsurance transactions. STAT and GAAP experience needed.

**\$130,000–\$180,000+ Midatlantic Region**

### LIFE & ANNUITIES

#### **Vice President—Actuarial Strategy & Innovation (FSA) (LA-01801)**

Premier Life Insurance Company seeks an FSA to work with Life products and support innovation and strategic initiatives. Apply actuarial, product and general insurance expertise to strategic issues. Assess risks and opportunities inherent in strategic initiatives. Highly visible role.

**\$150,000–\$200,000+ Southeast Region**

### LIFE & ANNUITIES

#### **Actuarial Associate—Pricing (NearASA-ASA) (LA-01800)**

Fast growing insurers need ASA's with Life and/or Annuity pricing and product development experience. Help design new products and prepare financial studies. Analyze matching of assets and liabilities; develop optimal investment strategy. Perform Research and Analyses.

**\$75,000–\$100,000+ Multiple Regions**

### CONSULTING

#### **Consultant (ASA/FSA/ACAS/FCAS) (S-6179)**

Premier global consultancies seek candidates at all levels with Life, Health and P&C expertise. Prior consulting not required at Junior/Mid levels.

**\$80,000–\$200,000+ Multiple Regions**

# MASTER & DELPHI

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PolySystems offers fully integrated valuation (Master) and projection (Delphi) modules that utilize the same underlying calculations and user-interface. Our approach is well positioned for principle-based reserves and eliminates many of the common modeling problems such as memory constraints, compression issues, and setting up and reconciling separate models for projections and valuations.

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