

# 2017 CCA Annual Meeting Session Summaries

This document contains the proceedings from the 2017 CCA Annual Meeting held October 22-25, 2017 in Orlando, Florida.

## THANK YOU TO OUR SESSION ASSISTANTS

A special thank you to our Session Assistants who provided summaries:

Kelly Karger  
Gail Steward  
Tamara Wilt  
Ward A. Brigham  
Jennifer Milstein  
Jody Carreiro  
Jesse Nichols  
Michael L. Pisula  
Joseph Strazemski

Yi-Ling Lin  
Thuong Broaden  
R. Andrew Blough  
David Kent  
James D. Burke  
Andrew Marcus  
Keith L. Nichols  
Albert Phelps  
Julie M. Reyes

Arthur Tepfer  
Steven Pribis  
Nick C. Thornley  
Dan Hoffman  
Piotr Krekora  
John B. McQuade  
Yueh Phing (Jessica) Chung  
Kelley M. Elliott

## WOULD YOU LIKE TO BE A SESSION ASSISTANT AT THE 2018 ANNUAL MEETING?

Serving as a Session Assistant is an excellent way to network into other continuing education opportunities, gain exposure within the profession, and potentially participate in speaking opportunities. Actuaries new to the profession, or to CCA, are especially encouraged to consider serving in this capacity to build contacts and experience in coordinating an educational session.

Duties include writing a brief description of specific sessions, collecting continuing education forms, and other duties as requested by the moderator.

Sign up now to volunteer for next year's Annual Meeting by visiting [www.ccactuaries.org](http://www.ccactuaries.org).

# 2017 CCA Annual Meeting Session Summaries

## Session 003

### PROFESSIONALISM IN THEORY AND PRACTICE

Speakers:

- Paul Kollmer-Dorsey, JD – American Academy of Actuaries
- Christopher F. Noble, FSA, EA – Willis Towers Watson
- Richard A Block, MAAA, ASA, EA, FSPA – Block Consulting Actuaries Inc.
- Carol R Sears, FCA, MAAA, EA, FSA, CPC – Actuarial Consulting Group Inc.
- Ethan E Kra, FCA, MAAA, FSA, EA, CERA, MSPA, CLU – Ethan E. Kra Actuarial Services LLC
- Molly E Loftus, FSA, MAA – Mercer
- Moderator: Patricia A. Rotello, FCA, FSA, EA – Willis Towers Watson
- Session Assistant: Kelly Karger, FCA, FSA, EA – Willis Towers Watson

#### Background

As a professional association whose mission is to serve the public and the United States actuarial profession, the American Academy of Actuaries provides for high professional standards of actuarial conduct, qualification and practice.

The first of two key themes: It's up to you! Actuaries constitute a self-regulated profession. This requires each of us to comply with and actively participate in self-regulation of the profession. It all starts with the Code of Professional Conduct, which you can get in a handy pocket-sized version! Personal integrity is at the heart of our Code of Professional Conduct (CoPC).

The second key theme: It's not about just checking the box for continuing education. In order for a self-regulated profession to maintain a high standard, we all must actively participate in regulation, holding ourselves and others responsible for maintaining that standard. We have a heavy responsibility to protect the public and that involves our U.S. Qualification Standards, Code of Professional Conduct, Actuarial Standards Board, and Actuarial Board for Counseling and Discipline (ABCD).

#### The Code of Professional Conduct

The CoPC was individually adopted by the five U.S.-based actuarial organizations: The Academy, ASPPA, CAS, CCA, and SOA. Actuaries who commit material

violations of the CoPC are subject to counseling and discipline from the ABCD. Most complaints to, and 80% of requests for guidance handled by, the ABCD in 2016 involved alleged material violations of Precepts 1 (Professional Integrity), 2 (Qualifications), and/or 3 (Standards of Practice).

Precept 13 is critical to the concept of self-regulation. Actuaries are in the best position to observe other actuarial work. We have the knowledge to audit and identify poor actuarial work. If a self-regulating profession does not prevent unethical behavior and practice by relying on members to monitor compliance, it is highly likely that some other body will emerge who can and will do so. First things first, if you have knowledge of an apparent, unresolved, and material violation of the CoPC, consider discussing the situation with the other actuary and attempt to resolve the apparent violation. If that discussion is unsuccessful, we have a duty under the CoPC to disclose the apparent violation to the appropriate counseling and discipline body, except where the disclosure would be contrary to the law or would divulge confidential information.

Another opportunity for us to get involved in self-regulation is through review and commentary on the ASOP Exposure Drafts. The Actuarial Standards Board's process for setting Actuarial Standards includes the element of soliciting members and the

# 2017 CCA Annual Meeting Session Summaries

public for comments. Remember that ASOPs do not replace our professional judgement, they are married to the CoPC. For a refresher on this connection, ASOP 1 is foundational and provides a roadmap for interpreting the ASOPs, establishes common terminology, and provides the analytical framework that pairs professional judgement with principles-based standards. The ASB even has a mobile-friendly website, so you can add a quick link to your iPhone or Android device and keep the ASOPS at your fingertips!

## **How does this play out in real life?**

The session transitioned from foundational to practical with group discussions of some real-life scenarios.

- “Peer Review” discussed the role of peer review in our work. Peer review is not a well-defined concept and is not required under the Code of Professional Conduct. However, it can be one of a number of useful techniques to manage your own compliance with the CoPC.
- “Annie Actuary and the Case of the Budgeting Error” addressed a fact of life: we are human and errors will happen. What’s important is how we handle ourselves and address errors when they do occur.
- “Do I Report to the ABCD?” covered two cases where an actuary has access to work performed by another under a confidential setting of potential acquisitions. These highlighted the fact that our duty to report may require working with our clients’ legal counsel to determine what and when violations can be reported.
- “Are You Fully Qualified?” explored a situation where an actuary may have to acknowledge that a client’s situation is outside of their expertise and refer a client to individuals more qualified for a particular issue.
- “Assumption setting: GiantCo Acquisition” and “Assumptions Selection Pressure” addressed the questions of setting appropriate assumptions and how manipulation of assumptions could be used to mislead. In a

surprising twist, a conflict of interest factor is introduced to determine how our reactions might change.

## **There are no perfect answers**

Lively discussion of these scenarios and commentary from the audience in each of these situations provided wide-ranging viewpoints. In many cases, there will be no 100% clear answer and no definitive statement that will tell us exactly to do. Professional judgement, discussions with peers, and even guidance from the ABCD can help us navigate murky waters!

# 2017 CCA Annual Meeting Session Summaries

## Session 101

### Q&N/A's: Things We Don't Know

#### Speakers:

- Susan L. Breen-Held – Principal Financial Group
- Scott A. Hittner – October Three LLC
- Ellen L. Kleinstuber – Bolton Partners
- Carolyn E. Zimmerman – Internal Revenue Service
- Session Assistant: Gail Steward – Findley Davies|BPS&M

#### Background

This session aimed to provide some guidance, or direction, on a few topics that don't already have specific guidance. A few of the topics became known days before the meeting, so there are actual answers included below!

#### Section 417 Minimum Present Value for a Qualified Pre-Retirement Survivor Annuity (QPSA) Benefit

Under Section 417(c), the QPSA is calculated at the later of the participant's earliest retirement date and the participant's date of death. The two options discussed were to 1) calculate the present value of the survivor's annuity deferred to the participant's Normal Retirement Date (NRD) or 2) calculate the present value of the survivor's annuity deferred to the participant's earliest retirement date. A majority of the audience thought option 2 to be the preferred method, and the speakers agreed.

The support provided was partly based on two Gray Book Q&As, recognizing that these are not binding guidance. Q&A 2003-26 asked about the lump sum for a plan that offers a QPSA in excess of the statutory minimum. The answer indicated that the optional lump sum could not be less than the present value of the plan provided benefit. Q&A 1997-34 asked how to calculate the amount payable if the survivor chose to defer payment until the participant's NRD. The answer indicated that the QPSA amount must be actuarially increased from the earliest retirement age to the starting date, reflecting the full value of any early retirement subsidy at the earliest retirement age.

A few examples were presented showing that quite often the survivor will receive a larger amount if the QPSA is actuarially increased from the earliest retirement age versus recalculating at the starting

age using the plan's early retirement reduction factors. Are the differences close enough in these situations to be considered reasonable?

One attendee asked about the actuarial equivalence (AE) factors to be used for the increase. It was pointed out that the plan should have a definition of AE for all purposes. The regulations require the factors to be reasonable, so if your early retirement reduction is 1/15<sup>th</sup>, 1/30<sup>th</sup> you may be comfortable increasing the QPSA with those factors. Having AE clearly defined in the document for this purpose is required.

One attendee asked why the IRS took the position that the QPSA needs to be increased from the earliest retirement date. The collective opinion was, in the Code, the participant benefits are defined in terms of the accrued benefit, but that the QPSA is defined in terms of the benefit payable at the participant's earliest retirement age, so that becomes the basis for any adjustments.

#### Interest Rate to be used to Increase Lump Sum Payments for Corrective Distributions Under Employee Plans Compliance Resolution System (EPCRS)

The speakers posed a question about a corrective lump sum distribution being paid three years after the original annuity starting date. The audience was polled, with the choices being: a) the first segment rate used for the original calculation, b) split the lump sum into three portions, and accumulate each portion at its respective segment rate, and c) use the single effective interest rate (EIR) that would produce the original lump sum.

A large majority of the audience chose "c" as the answer and the speakers agreed that this may be the most practical answer because it doesn't matter

# 2017 CCA Annual Meeting Session Summaries

how long the retroactive period is when you use the EIR. While options “a” and “b” may also be acceptable approaches, the underlying methodology is more difficult to apply if the period between the original annuity starting date and the correction date is more than five years. It was discussed if the plan could specify a rate, or a policy for choosing a rate, that is not tied to the 417(e) segment rates and is used for corrective payments. The speakers thought you could and the only potential 411(d)(6) issues would be if you have any current corrective payments that have been calculated differently. The speakers agreed that best practice is to follow a well-documented methodology. There was also some discussion of whether you need survivorship adjustment also if the plan’s actuarial equivalence basis is used for corrections. There was no clear consensus on this issue, but EPCRS would review any proposed corrections submitted to them. There was also discussion about the ability to pay as a correction a lump sum that would have been a Small Benefit Cash Out (SBCO) if paid timely, but that with the additional interest exceeds the SBCO limit. In general, the feeling was it is ok as a correction, but not as a “new” distribution.

## **Protected Period for a Plan’s Section 417(e) Basis**

There can only be one basis for the 417(e) applicable mortality and interest rates at one time in a pension plan. What happens if the plan sponsor offers a lump sum window (LSW) to participants not otherwise eligible for a lump sum, and they want to use a different lookback month for this LSW? If the plan sponsor does not want the new lookback month to be permanent, then the speakers agreed that the safest approach was to protect the new lookback month for the one-year period after that ends on the 1-year anniversary of the end of the LSW. For example, the LSW period is 10/1/17 – 11/30/17, then until 11/30/18 the 417(e) basis is the better of the original lookback month rates and the rates used for the LWS.

## **Material Changes for a Range Adjusted Funding Target Attainment Percentage (AFTAP) Certification in the Case of Bankruptcy**

For bankruptcy situations, accelerated payments are not permitted unless the AFTAP is certified as 100% or greater. What happens if an 80% or higher

range certification is signed on 9/30, and then on 12/3 the final AFTAP is signed certifying 101%?

The speakers discussed that getting complete data is not on the list of reasons to justify that the change is not material. The range certification was not wrong, since the final certification was 80% or higher, but plan operations changed as a result of the final change (because lump sums are now payable), so the change is material. There is conflicting language in Regulation 1.436-1(h)(4) between items iii(A) and iv(A). Regulation 1.436-1(h)(4)(iv)(A) indicates to continue to use the presumed percentage, while Regulation 1.436-1(h)(4)(iii)(A) indicates to use the later AFTAP retroactively to the date of the AFTAP that was materially changed. The general understanding is that a range certification is to be treated as an actual certification. It is possible that since there are conflicting rules you may have the option to choose which of the two rules best fits your circumstances. The IRS is working on new regulations, and should address the conflict. It was suggested that if you think your client might be considering bankruptcy, a range certification is not the way to proceed if you are not certain whether the actual AFTAP is over or under 100%.

## **Procedure if an AFTAP is Signed and Later an Error is Discovered Resulting in a Lower AFTAP**

The answer depended on whether the presumed AFTAP would have been in a different range, and the timing of the first (incorrect) AFTAP.

If the 2015 AFTAP was certified timely at 85%, and the 2016 original AFTAP was signed by 3/31/16 at 81% then later changed to 79% you would have a material change and potentially EPCRS corrections because the presumed AFTAP at 4/1/2016 would have been less than 80%.

If the 2015 AFTAP was certified timely at 90%, and the 2016 original AFTAP was signed 6/1/16 at 81% then later changed on 9/15/2016 to 79% you may not have a material change because the presumed AFTAP of 80% could apply through 9/15/16.

It was discussed that there is most likely some leeway on participant notices that might have been missed in the first situation.

# 2017 CCA Annual Meeting Session Summaries

## **No Specific AFTAP Signed After a Range Certification**

Suppose a plan has an AFTAP of 85% for 2015, a Range Certified AFTAP of at least 80% funded signed on 3/24/16 and no further AFTAP until 84.79% is certified on 3/1/17 (so NO final 2016 AFTAP certification). What restrictions apply during 2016?

The range certification doesn't expire until 12/31/2016. The regulations specify that if a range certification is not replaced by a specific AFTAP certification by the last day of the plan year (12/31/2016 in the example), the AFTAP is retroactively deemed to be under 60% as of 10/1/2016. That leaves open the question of whether this "deemed" rate is a material change. At least one speaker thought that the regulations would have referred to additional implications if that were the case.

## **Section 436 Contributions to Allow Accruals to Resume**

Section 1.436-1(h)(4)(iii)(C) includes a list of deemed immaterial changes that includes additional contributions for the preceding plan year and Section 436 contributions to allow plan amendments or UCEBs, but does not include contributions to allow accruals to resume.

Under Section 1.436-1(f)(2)(v), contributions made to allow accruals to resume would be material because plan operation is affected – you ignore the preceding certified AFTAP and revert to the presumptive rules.

The discussion was that this might not matter, and that the IRS has been made aware of this conflict and has it on their radar.

## **Cash Balance Plans Testing Issues**

Section 1.411(b)-1(b)(2)(ii)(G) provides that a plan with a variable Interest Crediting Rate (ICR) is not treated as failing the 133 1/3 rule in the current year merely because the ICR for the prior plan year was negative. Discussion about what ICR to use for future plan years when performing accrual rule testing was that it is possible there is too much focus on current year rates. When the IRS looks at Determination Letter filings they are focused on worst-case scenarios that might need "greater of" rates, not the actual rate in a given year. The rate in

a given year might be more important if a correction is needed. The speakers noted that the IRS 2017 – 2018 and 2016 – 2017 Priority Guidance Plans included treatment of future interest credits under hybrid DB plan for purposes of satisfying various qualification requirements.

There was further discussion on whether a 0% rate floor for projection is reasonable for general testing. Several of the speakers agreed that it was probably appropriate, or it would also be appropriate to use an average of up to 5 years as permitted for the safe harbor Cash Balance test under Section 1.401(a)(4)-8(c)(3)(v)(B). Using a 5-year average rate would provide less wild swings in testing results from year-to-year, which seems appropriate, given that, in most cases, the cash balance benefit at normal retirement age will not be greatly impacted by one year's interest. The IRS may provide additional guidance in the future based on the project on the treatment of future interest credits under hybrid DB plans mentioned above.

## **Cash Balance Plans Multiple Interest Crediting Floors**

There was discussion about whether a proposed design that had increasing pay credits based on points earned combined with decreasing minimum interest crediting rates for the same points would meet the hybrid requirements. The speakers agreed that it probably is a viable design — one that could satisfy both the accrual rule and age discrimination tests — but they noted possible communication and administration challenges for such a plan.

## **15 Limit Increases After a Lump Sum Distribution**

The discussion started with a plan that does not suspend benefits after NRA in which a participant past NRA takes a lump sum distribution that was limited by the 415 high three-year average pay limit. Since the plan does not suspend benefits, any benefit accrual past NRA must go into payment to avoid a forfeiture. Section 1.415(b)-1(b)(1)(iii)(A) requires a plan to actuarially adjust benefits that commence at annuity starting dates past NRA, but no specific methodologies are prescribed. Two options were presented: 1) any increase in the high three-year average pay would be paid in full, or 2) the accrual is offset by the actuarial equivalent of the lump sum paid.

# 2017 CCA Annual Meeting Session Summaries

Discussion turned to benefits limited by the dollar limit under 415, and what happens if the dollar limit increases due to a COLA. Generally, only benefits that have not commenced get the indexed limit, so only additional service would result in a subsequent payment. That payment would be limited to the increase in the 415 dollar limit. If a plan calculates benefits after NRA as the greater of the actuarially increased benefit and the benefit with continued accrual, once the actuarially increased benefit wins the participant is not likely to ever get an additional benefit.

## **Missing Participants Past NRA Presumed Dead**

There was discussion about whether you could have a valuation assumption that some percentage of missing participants had died without a beneficiary. A question was raised about what happens if a terminated vested participant dies after NRA, but before commencing benefits – is there still an amount that is required to be paid on behalf of that participant even if there is no beneficiary? Some plans indicate that vested terminated participants commence at NRA, but can elect to defer commencement. Language is not always clear on the benefit payable at a later date. Practice is often to give an actuarial increase, rather than back payments with interest. Does the participant forfeit benefits if they die single? Does it matter whether they actually elected to delay commencement or were deemed to have elected the delay? A participant who dies after reaching age 70 ½ without commencing is a different issue. A question was posed (but not answered) about an insurance

company's options when they take on the liabilities from a plan termination. It was noted that PBGC premiums are still due on missing participants, other than as discussed in PBGC Blue Book Q&A 2002 – 9. Time was limited, so these questions were not fully discussed.

## **Expected Disability Benefits in Frozen Plans**

This was the final discussion topic. What happens at the time of plan accrual freeze in a plan that provides for continued service and compensation increases for a disabled participant? If a person is already disabled can their benefits still grow or can they be frozen? Disability benefits are only considered protected once a person becomes disabled. If a plan sponsor wants to allow the disability benefit to continue to grow they might run into issues under 401(a)(26) because the disabled person is benefitting. Also, if the disability benefit continues to grow it could lose its status as a qualified disability benefit because it would be larger than the normal retirement benefit the individual would earn if he/she continued to work (i.e., because if the individual were still working, the benefit would be frozen). Probably good to make sure the document language is clear upon plan freeze.

## **Undiscussed Items in the Slide Deck**

The slide deck contained supplemental information that was not discussed, including content on aspects of variable annuity plans, multiple employer plan withdrawal liability, and ASC 960 treatment of trust expenses.

# 2017 CCA Annual Meeting Session Summaries

## Session 102

### Impact of Low Current Rates on Investment Return Assumptions

Speakers:

- Jerry Mingione - Willis Towers Watson
- R. Evan Inglis - Nuveen Asset Management
- Session Assistant: Tamara Wilt – Actuarial Guidepoint, LLC

#### Background

The goal of this session was to identify why interest rates are as low as they have been, whether they may continue at low levels going forward, and what the implications may be for future returns.

#### Summary

Jerry Mingione started with this question: can historical data be relied upon as a guide to future investment returns? In his view, it cannot - at least not without considerable adjustment to recognize changes in economic and capital market conditions.

A search of 5,000 years of economic history shows that interest rates have never before been as low as in recent years, nor have they ever been as high as they were in the early 1980's. The transition in rate levels, from historic peak to historic trough, has dominated the capital market environment, pushing up recent periods' bond and stock returns in a way that, realistically speaking, can never be reproduced.

In the past, governments used fiscal policy to stabilize the level of macroeconomic activity: for example, building public works such as libraries and train stations during the Great Depression. However, the current situation with public finance, including large structural deficits, has forced governments to shift from fiscal to monetary policy approaches.

Nine years of expansionary monetary policy has grown the money supply and financial capital enormously, so that we are now left dealing with "A World Awash in Capital" (the title of an article by Bain & Company, November 2012). But rather than being spent, a large portion of this newly created capital has ended up being stockpiled in investment markets, aggressively competing for reliable sources of return --driving prices up and yields down.

Other powerful factors have acted to keep interest rates low, including globalization which created a competitive marketplace with ready access to cheap labor, thus keeping wages and prices low. Recent technological advances and an increased focus on services have allowed the economy to grow in ways that do not require substantial capital.

There have also been behavioral shifts. The 2008-2009 capital market implosion resulted in an ongoing phenomenon that can be labeled "dread risk." This means that people put a higher value on security, driving their interest towards increased saving and safe, liquid assets. A version of this same behavior is seen in companies as well. As companies grow, we are seeing that instead of distributing the accumulated wealth back into the market, through expansion, many companies are instead creating stockpiles of cash.

Shifts in demographics are also having powerful effects. The workforce is aging, which implies that the workers-to-dependents ratio will be decreasing across the globe. This creates a worrisome drag on economic productivity. The corresponding impact on savings levels is somewhat quixotic – while older workers earn and save at high levels, once they reach the retirement zone they begin to draw down that accumulated capital (negative savings).

While interest rates may increase to some extent in the future, this combination of environmental factors may be expected to keep rates below historic mean levels. Mr. Mingione noted that the impact of interest rate changes on future bond returns is rather limited, in that the projected return on longer-maturity bonds will roughly equate to the initial yield level regardless of what happens to future rates.

Evan Inglis focused on the outlook for equity returns. He pointed to near-historic high levels of



# 2017 CCA Annual Meeting Session Summaries

prices to earnings in global equity markets, and to an emerging consensus of market experts that future equity returns will be negatively impacted by the resulting low yields, slow growth, and the possibility of a “reversion to mean” in

price/earnings ratios. On the other hand, if interest rates continue to be low going forward, it is possible that current high equity pricing may remain the norm, which could imply a milder suppression of future equity returns compared to past levels.

# 2017 CCA Annual Meeting Session Summaries

## Session 104

### MEDICARE ADVANTAGE AND PART D WORKSHOP

Speakers:

- David M. Tuomala – Optum
- JoAnn Bogolin – Bolton Health Actuarial, Inc.
- Joshua M. Wynveen – Optum
- Session Assistant: Ward A. Brigham – UnitedHealthcare

This session was presented in a workshop format and featured a facilitated discussion of current topics in Medicare Advantage and Part D (MAPD) from the benefits consultant and health plan perspectives. This session was intended for those with considerable experience in this area. By a show of hands, the audience of 21 had a varied background.

Given the large number potential topics for this discussion, the speakers focused on a few particular topics of choice and, also, those raised by the audience.

The initial discussion centered on employer group Medicare Advantage (MA) plans. The speakers discussed how the employer group MA plans can be offered with richer benefits, expanded formularies, and broader networks than the MA or MAPD plans available on the individual marketplace. In discussing the outlook of Medicare Advantage plans, the speakers indicated a bullish outlook given the membership totals in MA plans are reaching close to one-third of all Medicare eligible members, suggesting it would be difficult, politically, to see a downturn.

The next discussion turned to comparing “RDS versus EGWP” (i.e. Retiree Drug Subsidy/RDS vs Employer Group Waiver Plan/EGWP) and the impact of the direct subsidy payments by CMS being driven by the bids of large Pharmacy Benefit Managers. Due to the competitive landscape, the bids are not seemingly increasing at the same rate as utilization, providing pressure to certain groups to consider moving back to an RDS reimbursement. This is somewhat offset by the increasing

reinsurance payments as a result of higher utilization of specialty drugs.

With regard to individual Medicare Advantage plans, there seems to be continued availability of zero-dollar premium plans, suggesting a minimal change to the MA marketplace. Enrollment continues to grow in MA plans, as there are many new entrant carriers to the marketplace targeting specific retirees and geographies rather than having a statewide presence. There is strong interest in Special Needs Plans (SNPs) as well.

An example of the calculation of the 2018 Risk Scores was reviewed and focus was given to the blending of the Encounter Data approach, where CMS calculates the Risk Scores using data provided by carriers, and the RAPS approach where the carriers calculate the Risk Scores themselves. In 2018 the weighting was 15% for Encounter Data and 85% for RAPS. The plan is to eventually move towards 100% Encounter Data approach. The phase-in is to allow carriers an opportunity to understand how the data needs to be delivered to CMS.

Looking ahead to what may be coming next regarding MAPD, speakers and the audience discussed potential changes to the Part D benefit structure and/or total beneficiary cost testing for Part D plans. It seems likely CMS will reintroduce the insurer fee in 2018. Thus, maximizing CMS revenue by encouraging annual wellness visits to properly code RAF scores will be instrumental in continued success for MA plans (e.g., once a diabetic, likely the diabetic risk will continue in future years).

# 2017 CCA Annual Meeting Session Summaries

## SESSION 105

### SPECIALTY DRUGS CONQUER THE WORLD (IF WE LET THEM)

Speakers:

- Derek Guyton – Mercer
- Ben Slen – Express Scripts
- Michael J. Staab – Innovative Rx Strategies, LLC
- Session Assistant: Jennifer Milstein – Lockton Companies

#### Background

Healthcare costs are exploding, and specialty drugs are a main contributor to this. In fact, specialty drugs are expected to comprise more than 50% of total drug spend by 2019 while only representing between 1%-2% of an employer's prescription drug claims. Companies are looking for solutions to manage this trend while improving care and outcomes. One complicating factor is that there is no single definition of specialty drugs. However, CMS has defined them as drugs that treat complex conditions, have special handling requirements, special side effect profiles, includes biologics, and exceed a cost of \$600 per month. There are approximately 7,000 drugs in development, with 80% of those classified as specialty, thus crystalizing the need for trend management strategies.

Currently, two-thirds of specialty spend is in the categories of Rheumatoid Arthritis, Cancer, Hepatitis C and Multiple Sclerosis. In most cases, these drugs are not curative, but their use does result in significant lifestyle improvement. Much of today's drug development is happening for very rare conditions ("orphan conditions"), leading to drugs with extremely high price tags. The specialty pipeline is composed of 32% orphan conditions, 22% Cancer, and 19% biosimilars (which are generic-like versions of specialty drugs) with the remainder focused on various other conditions.

#### Solutions for Managing Cost and Care

An Express Scripts study shows that companies moving from an unmanaged to a tightly managed program of specialty drug utilization show up to a 32% reduction in specialty drug trend, while improving care. Moving to a more managed state can include any combination of solutions presented.

One of the most commonly employed solutions is the category of specialty plan designs. These can

include a separate specialty copay tier that better reflects the costs of these drugs by having the member share more in the cost of the drug based upon their copay and a specialty formula to drive market share.

All plans should consider including some level of utilization management of their specialty drugs. This includes prior authorization, step therapy, refill-too-soon edits and split fill programs. Establishing clinically sound, evidence-based criteria for all "naïve" specialty drug prescriptions will help ensure that the right patients are using the right drugs. A plan can also consider excluding new-to-market specialty drugs from coverage for a certain period. Utilization of pharmacogenomics and biomarkers/molecular testing is also gaining traction. Lastly, managing off-label uses of drugs may help manage costs.

Plans may also focus on channel management in determining whether specialty drugs are best filled, from a cost and care perspective, through the medical benefit or the pharmacy benefit. Also, it is important for a payor to know where a specialty drug is being filled: through retail, mail or specialty pharmacy. The recommendation is that a payor use exclusive specialty to manage a member's drug therapy from the onset. These protocols also focus on site-of-care, and ensuring that the patient receives their drugs at the appropriate location (e.g., infused at home, physician office, hospital, etc.). Significant cost and care differences exist, specific to the drug considered. Plans may even include incentives to ensure that members are utilizing the most advantageous site-of-care.

Clinical management of the patient may also be employed. Minimum requirements should be established and a comprehensive initial clinical assessment should be done on any new specialty

# 2017 CCA Annual Meeting Session Summaries

patient. This strategy should also include live contact with the patient prior to each refill to assess side effects and clinical efficacy. An annual comprehensive profile review of all medications should be done to assess outcomes, evaluate patient compliance and adherence, eliminate duplication, assess dosages to decrease costs without clinical sacrifice.

One final strategy that is gaining traction is copay assistance programs. These programs, although previously used widely by patients, have often not been integrated into employer plans. This strategy focuses on taking advantage of pharma programs such as copay assistance and manufacturer coupons to lower plan drug costs. With this strategy, if a

member uses a manufacturer coupon to pay for the cost of a drug, the plan only allows a portion of the coupon to apply to the member's copay while the remaining value of the coupon is used by the plan to lower specialty drug cost. Alternatively, the employer can establish variable copays for certain specialty drugs based upon the value of a particular manufacturer's coupon for a specialty drug.

Employing any combination of these strategies should help curb specialty drug trend in health plans. However, with the growth trajectory of specialty drug costs and pipeline, it is likely that there will be a continued focus on developing additional solutions for managing this trend.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 107

### ROLE/RESPONSIBILITY OF THE PUBLIC SECTOR ACTUARY – CAN YOU HEAR ME NOW?

#### Speakers:

- Koren L. Holden – Colorado PERA
- Brian B. Murphy – Gabriel Roeder Smith & Company
- David N. Levine, Esq. – Groom Law Group
- Moderator: Lance J. Weiss – Gabriel Roeder Smith & Company
- Session Assistant: Jody B. Carreiro – Osborn, Carreiro & Associates

#### Overview

The presenters shared their insight and opinions about the moral, ethical and legal responsibilities that the actuary has in several scenarios presented by the moderator. The audience also participated by sharing opinions and questions for the presenters. The moderator opened the session by reminding attendees of the definition of “moral,” “ethical,” and “legal” to stage the discussion.

#### A Back Loaded Funding Policy

The first scenario discussed concerned an actuary hired by a Retirement Plan Board to provide ongoing actuarial valuation and consulting services. The illustrated plan has an established funding policy that only attains 90% funding in more than forty years. What are the actuary’s responsibilities?

The existence of an established board policy does not mean that the actuary should not inform the Board that there are more reasonable funding policies that are accepted practice. The actuary should show the Board the effect of a different funding policy, for example, a policy aimed at 100% funded in twenty years.

The actuary should educate and illustrate how the current policy differs from generally accepted policies. The presenters felt that the actuary should ensure that the policy makers understand the risks and anticipated effects of their current policy.

All of these should be done in the framework of reminding everyone of the roles and responsibilities of all parties: legal counsel, internal actuary, consulting actuary, board members, and lawmakers. The actuary needs to understand who has the authority to set these kinds of policies.

It is suggested that the recent Governmental Accounting Standards Board (GASB) rules could be

of assistance. An actuary may discuss the pitfalls of a certain funding policy, but until they illustrate the problem by showing a crossover point in the GASB disclosures, the policy’s shortfalls may not be understood.

The question was raised concerning how public the actuary’s advice to the Board should be in such a situation. The presenters felt that the discussion should be made public and be part of the record at the earliest possible juncture. Open records laws in many states will likely require this open disclosure.

#### Actuary Inherits Unreasonable Assumptions

The second scenario discussed concerned an actuary who has a plan for which the economic assumptions have been set by the Retirement Plan Board. The Board believes the assumptions are reasonable since they were adopted a short time ago based on an experience study conducted by the prior actuary. The actuary does not believe these assumptions are reasonable. What responsibility does the actuary have to recommend, or even push, for more “realistic” assumptions?

The presenters began the discussion by referencing Actuarial Standard of Practice (ASOP) 27 concerning economic assumptions. The actuary needs the assumptions to be reasonable and discuss the basis of the assumption or any disagreement with the assumption each year. So, depending on the funding policy, the assumptions given in the scenario could actually “defund” the plan. The actuary needs to clearly communicate this to the Board. It is suggested that this report might even need to be qualified. (See Precepts 4 and 8)

The actuary is not typically a fiduciary, but they have a duty to educate the plan fiduciaries concerning the situation. It is also noted that the

# 2017 CCA Annual Meeting Session Summaries

actuary should carefully review the employment contracts as some governments try to slip in language that would make the actuary a fiduciary.

The presenters discuss how to deal with the Board when they bring in the investment advisor who says that the plan earned more than the assumption the past 30 years. It is agreed that this makes the discussion more difficult. This would be a case where looking at the structure of the liabilities would be helpful.

The actuary should also note the idea in Precept 10 of acting “in the principal’s interest.” There is nothing in that precept that says that the actuary cannot disagree with the principal and continue to serve the best interest of the principal. The Comprehensive Annual Financial Report (CAFR) is supposed to detail the support for the decisions that the sponsor has made on assumptions.

Should the actuary calculate and disclose alternative results using reasonable assumptions in this type of situation? Alternative results would help the user understand the difference in the results using a different assumption. ASOP 4 and 27 do not require the disclosure of alternative results, but they would be useful.

How does this discussion apply to a non-economic assumption, for example the retirement assumption? If a retirement assumption seems questionable, the first thing to do is to review the most recent experience study. One presenter has seen this situation and strongly suggested a new experience study be performed.

Another question arises when the economic assumptions are set too low. This can create a difficult discussion, but the presenters believed that the assumptions should not drive the investment policy. First, risk and risk tolerance should be determined by a Board, then investment policy, and finally economic assumptions. But, in practice, it doesn’t always work that way. The actuary should also consider the reasonableness of assumptions during the proposal and interview process.

## **Plan that Adopts Benefit Increase and Contribution Deferral Simultaneously**

The next scenario involved a Plan which is 25% funded and adopts an amendment that both defers

contribution and provides an increase in the COLA. Labor and management are both happy with this decision. What responsibility does the actuary have to advocate against these changes?

This is a political problem since this type of situation typically comes from the employer and not the Board. Unless the actuary is asked beforehand, they should not be required to advocate against the changes. But when the valuation report is complete, the actuary then has the platform and responsibility to discuss plan viability with the changes. If the actuary is asked to analyze and discuss beforehand, then they clearly can, and should, advocate against the change.

One commentator pointed out that the state in which they operate in requires certain things, like funding method and number of years to amortize the unfunded liabilities. He doesn’t feel that his valuation is complete unless he provides a report with alternative results using a more reasonable funding method and policy. It is again noted that ASOP 4 does not require the actuary to show alternative results, but it is probably good practice in similar cases.

The discussion continued around the parties to whom the actuary should disclose information and advocate their professional opinion. The actuary needs to identify the issues at hand, but she can still get in trouble if she seems to have a personal quest to make everything right. The actuary could take care to limit her comments to note that there are risks involved and new risks are being incurred by an action. Precept 9 states that the actuary should not disclose confidential information. Therefore, when making any public statement that was not requested, the actuary should not disclose confidential information. Once a report or document is made public, it is no longer confidential.

The actuary should understand the legal landscape. There are cases where actuaries have been sued and it was found that their role was to provide numbers, but not advice. There are also cases where actuaries have been sued for not advocating strongly enough.

Finally, it is noted that advocating strongly includes communicating clearly. One presenter noted

# 2017 CCA Annual Meeting Session Summaries

hearing an actuarial presentation and understanding that the plan in question is in trouble. Then, when she talks with the Board members, they did not get the same message. Actuarial indicators don't always come across the

way actuaries think they do to those outside our profession. If a situation might ultimately wind up in litigation, then the actuary should ensure that their message was delivered and understood by the parties involved.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 201

### RETIREMENT IMPLICATIONS OF LIVING LONGER

Speakers:

- Michael Finke – American College of Financial Services
- Andrew Peterson – Society of Actuaries
- Moderator: Una Raghavan – Willis Towers Watson
- Session Assistant: Jesse Nichols – Willis Towers Watson

What are the retirement implications of living longer? Speakers at this session discussed issues and decisions that retirees are facing, such as accumulating assets before retirement, decumulation of assets after retirement, and timing of Social Security benefits.

The session focused on three key risks: Longevity Risk, Investment Risk and Spending Risk

#### Longevity Risk

Longevity risk is a growing concern in retirement planning. Millennials are expected to live five years longer in retirement than Baby Boomers (assuming retirement at age 65). The oft-cited “4% rule” regarding optimal retirement asset spending is based on a 30-year time horizon. Financial planners often view this as conservative, but there is now a 43% probability that at least one member of a healthy couple will live to age 95.

There is a strong correlation between longevity and higher income households, which provides an argument for the Social Security’s benefit structure – those with lower income pay less into the system, but receive fewer payments on average. This also provides a good argument for including annuitization options within defined contribution (DC) arrangements, as it is much more financially efficient to pool all lives within the DC plan for annuity pricing.

Joint lifetimes are also increasing, as male life expectancies are catching up to female life expectancies, and relative ages of married couples

are trending together (i.e. partners more commonly are the same age).

#### Investment Risk

The costs of asset returns during the period 1995-2015 are approximately double the costs from 1975-1995. Baby Boomers are looking to purchase retirement assets while at the same time global asset purchasers (i.e. China) are ramping up activity, driving up asset prices and driving down interest rates.

The inflation-adjusted cost of buying \$1 of real retirement income has doubled since 1982, primarily due to mortality improvements and lower bond yields.

Historically when stocks have been priced as they are now, the average cyclically-adjusted price/earnings return has been 0.5% above inflation. Retirement calculators today often use historical returns to predict future returns when determining “required savings rates.” This may be inappropriate given expectations of a low-return environment, and using today’s asset returns result in wildly different savings requirements.

So, what can be done to help address investment risk?

*Employ the ‘power of defaults’:* Approximately 10% of employees opt out of savings plans that utilize auto-enrollment and auto-escalation features. However, these features can be dangerous if the initial or ultimate savings rates are too low. For example, auto-enrollment at a 3% savings rate with



# 2017 CCA Annual Meeting Session Summaries

no escalation generally will result in a lower average savings rate than a fully voluntary system.

*Delay Social Security:* To the extent this option is financially feasible, utilize it. This is the most cost-efficient COLA product available. While some are concerned that the post-SSNRA increases will be cut to address the Social Security deficit, it is unlikely that the solution would include immediate cuts to those receiving or on the verge of receiving benefits.

*Implement efficient annuity products:* Creating a personal bond ladder to generate retirement income is much pricier than utilizing a Qualified Longevity Annuity Contract (QLAC) as \$315,000 worth of bond ladder is approximately equal to \$125,000 of QLAC in terms of annuity purchasing power. Creating a “long life club” can result in significant savings in the cost of purchasing

retirement assets. In addition, the cost difference between a bond ladder and a purchased annuity rises in a lower interest rate environment because the annuity income includes mortality credits due to risk pooling, in addition to the principal and interest credits included with the bond ladder payments.

## **Spending Risk**

Health expenses are extremely idiosyncratic. Analyses of annual real changes in retiree expenditures show a steady decline from retirement age to mid-70s, with expenditures increasing throughout the 80s and later.

Financial literacy declines approximately 1% per year of age in retirement. This decline ties closely to cognitive decline. Compounding this issue, confidence in financial literacy remains very high throughout retirement, even slightly increasing with age.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 202

### DIALOGUE WITH THE PBGC

#### Speakers:

- Robert W. Bruechert – Willis Towers Watson
- Amy C. Viener – Pension Benefit Guaranty Corp.
- Karen Morris – Pension Benefit Guaranty Corp.
- Session Assistant: Michael L. Pisula – The Phoenix Benefits Group Inc.

Appropriate with the tempestuous weather of central Florida, the attendees of this session were exposed to a torrent of new and important issues from representatives of the PBGC, actuary Amy Viener and attorney Karen Morris. Amy and Karen brought the audience up-to-date with recent developments as well as ongoing issues such as changes to the missing participant program, reportable events and the PBGC's early warning program.

Amy opened up the session with a review of new programs and pointed to the new and improved PBGC webpage for information on these programs (e.g. "Pilot Mediation Program") and coverage (e.g. an overview of the coverage rules for small professional service plans which have plagued practitioners). Amy noted that the PBGC and IRS have had to deal with plenty of disaster relief. She cautioned that even though filing deadlines were extended, late filings would still be subject to interest penalties that cannot be waived. Finally, with the publication of the change in the consumer price index for September 2017, Amy was able to present the updated PBGC premiums rates for plan years beginning in 2018 for both single employer and multiemployer pension plans.

Next up in the presentation was a review of the PBGC's "Missing Participants Program." Amy reviewed how the current missing participant program works for terminating single employer

defined benefit plans and how that program will be expanded to include terminating multiemployer plans as well as plans not covered by the PBGC (e.g. defined contribution plans and small professional service plans). Amy covered minor changes to the current defined benefit program (e.g. how to determine the amount transferred to the PBGC and a change in the administrative fee). She indicated that the PBGC has created a user-friendly spreadsheet for these calculations. An important issue that Amy reviewed was the types of "missing" participants (e.g. truly missing individuals whose address is unknown as well as non-responsive participants that have a known address but refuse to respond to paperwork sent to them from the plan administrator). Amy was careful to note that the plan must perform a diligent search for the truly missing participants but not the non-responsive missing participants. Finally, she reviewed the program expansion to defined contribution plans and the procedural issues encountered with this expansion.

A review of the Reportable Event filings was then presented. It was indicated that, in general, the number of reportable event filings has declined, a bit (4%). It was pointed out that there was an increase in filings for a reduction in the number of active participants, loan default and the failure to make required contributions over \$1 million. Amy felt that the recent technical guidance on active participant reduction (Technical Update 17-11)

<sup>1</sup> <https://www.pbgc.gov/prac/other-guidance/tu/technical-update-17-1-active-participant-reduction-reportable-events>

# 2017 CCA Annual Meeting Session Summaries

should cause those types of filings to decline. She indicated that there are few filings for a number of events (e.g. inability to pay benefits when due, distribution to a substantial owner, liquidation and application for a minimum funding waiver). It appears that the PBGC is concerned that practitioners may not understand the definitions of these events and the applicable waivers. It also appears that the PBGC may be concerned with a liquidation event that is reported too late, especially for very small companies.

The options for mandatory e-filing were reviewed and, most importantly, it was pointed out that use of the e-filing portal will ensure that the correct version of the reportable event filing form is used. Furthermore, mandatory e-filing enables the PBGC to route that information more efficiently to members of its staff. Common filing issues include: incomplete filings, use of the incorrect form, missing data, or attachments that lack explanations or report the incorrect financial information (e.g. financial information of the plan and not of the plan sponsor's controlled group). Finally, it was noted that the PBGC webpage will be enhanced "soon" to include "quick reference sheets" and that practitioners should encourage their clients to notify them of corporate, as well as plan, events that may trigger a reportable event filing.

Karen, as Chief of Negotiations and Restructuring, next reviewed the two objectives of the PBGC's risk mitigation efforts. One is to encourage plans to remain ongoing for the benefit of plan participants. The second is to fight for recoveries when plans terminate to reduce losses borne by plan participants. An excellent slide was presented showing an overview of the risk mitigation program. One of the tools of this program, the "early warning program," has been in effect since the early 1990's and has been an extremely successful tool. Karen describe the types of events and transactions that

may cause concern to the PBGC (e.g. change in the controlled group responsible for supporting a plan, transfer of a significant amount of unfunded pension liabilities, leveraged buyout, payment of a large dividend to shareholders, or a downward trend in cash flows). Karen indicated that the PBGC is a neutral party in the settlement process, the goal of which is to ensure funding of the pension benefits. Karen indicated that the PBGC's focus is on plans with \$50 million or more of underfunding or plans with 5,000 or more participants. She also noted that the PBGC's webpage on risk mitigation should be extremely helpful<sup>2</sup>. Finally, Karen indicated that only a small portion of plans identified (e.g. 2%) end up with some sort of settlement with the PBGC.

The conclusion of the presentation was devoted to a broad range of topics (e.g. regulatory agenda, standard termination audits, 4010 filing tips, and common premium filing errors). Amy indicated that the fall agenda should be available on the PBGC webpage "soon," and that the spring agenda will include rules for missing participants, multiemployer plan mergers and valuation assumptions and methods.

The review of standard termination audits was quite instructive. The PBGC is required to audit a "statistically significant number of plans." The object of the audit is to ensure compliance with the plan documents as well as ERISA/IRS/PBGC rules and regulations. It was noted that plans with more than 300 participants must be audited while random samples of smaller plans are taken. Plan terminations that "indicate problems" as well as those that distribute assets before or without filing a standard termination notice will also be audited. Timing of the audit selection process was described as well as some of the common errors found (e.g. incorrect vesting, not fully vesting participants, not protecting benefits under prior plan terms, and not

---

<sup>2</sup> <https://www.pbgc.gov/prac/risk-mitigation>

# 2017 CCA Annual Meeting Session Summaries

paying top-heavy minimums). PBGC also continues to find lump sum calculation errors (e.g. use of incorrect interest/mortality rates). A list of other common errors found was presented (e.g. failure to obtain participant elections and spousal consents, deduction of processing fees from participant benefits, failure to include all benefit options in annuity contracts).

One of the important 4010 filing tips was to ensure that when the filing coordinator resigns/retires that he/she reassigns the filing before that happens.

The PBGC provided a list of common premium filing errors which included: incorrect use of the lookback

rule, failure to provide a bank code if the account has a debit lock, sending PBGC premium payment to the wrong address, spinoffs and mergers, small plan issues, and risk transfers.

The final material presented was a summary of statistics obtained from single employer premium filings through November 30, 2016 (e.g. numbers of plans and participants covered, numbers of plans with hard as well as no benefit accrual freeze). Surprisingly these statistics indicate that most workers in these plans are still accruing benefits.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 203

### MARKET-BASED CASH BALANCE & VARIABLE ANNUITY PLANS – DESIGN AND OPERATION

#### Speakers:

- Lloyd A. Katz, FCA, FSA, EA, MAAA – The Benefit Practice
- Lawrence J. Sher, FCA, FSA, EA, MAAA – October Three
- William Strange, FCA, ASA, EA, MAAA – Fidelity Investments
- Carolyn E. Zimmerman, FCA, FSA, EA, MAAA – Internal Revenue Service
- Session Assistant: Joseph P. Strazemski, FCA, FSA, EA, MAAA – Conduent
- Session Summary Provided by: Joseph P. Strazemski, FCA, FSA, EA, MAAA – Conduent

This session covered market-based cash balance and variable annuity defined benefit (DB) plans.

Many plan sponsors are changing the way their DB plans work to decrease the cost and/or risk of the retirement program. Common methods are freezes with or without defined contribution (DC) enhancement and liability driven investing (LDI). With freezes, volatility is still a concern.

There are DB plan designs that take an investment driven liability (IDL) approach that, if properly designed, smooth out employer costs and give employees an opportunity to share in investment upside in a DB plan.

Starting in the middle 1980's and through most of the 1990's, many companies converted their traditional DB plans into cash balance plans where the interest credit rates were based on an index, e.g., 30-year Treasury bond rate. In the late 1990's and early 2000's, there was a significant amount of litigation that resulted from the conversion methods, the way the conversions were communicated to employees, and in some cases, the very cash balance design itself. Even the plans that met limited legislative guidance were at risk of being wrapped up in litigation. This threat was enough to all but put a halt to adoption of cash balance plans except for professional service firms.

Legislation starting with PPA 2006 and subsequent regulations confirmed the legitimacy of hybrid plans

and, while questions still remain, the guidance is sufficient, and, if followed, reduces the likelihood of litigation. Clarity was also provided for market-based cash balance plans (MBCB plans). However, while activity with professional service firms continues, there has been no return to the type of corporate activity that existed before the late 1990's.

MBCB plans are popular with professional service firms for several reasons, including the typical advantages of cash balance plans (e.g., easier to understand, more portable than traditional DB plans), greater tax deferrals and retirement savings compared to 401(k) plans, and the ability to direct benefits to owners and partners when tested with non-elective (profit sharing) defined contribution benefits provided to staff.

While most of the interest has been from professional service firms, there are aspects of MBCB plans that make them attractive to corporations. These include portability similar to DC plans (highly valued by participants), stable costs and contributions and an optional interest cap that provides the possibility of funding pay credits with less cost than DC (highly valued by corporate finance), and the ability to mitigate risk more easily than with traditional DB plans or fixed credit cash balance plans. There are other advantages as well, such as employees benefiting from professionally managed investments, longevity protection, and

# 2017 CCA Annual Meeting Session Summaries

lower risk than with a full replacement by a DC plan. For plans that are converting from a traditional DB plan to a MBCB approach, the A+B approach must be used.

MBCB plans do, however, have aspects which corporations might view as significant obstacles such as PBGC premiums, “herd” mentality to abandon DB plans caused in part by the great recession, and interest rate volatility which has left a negative view of traditional DB plans in corporations’ eyes. Also, from a corporation’s perspective, the 415(c) limitation for defined contribution plans (i.e., the 415(c)(1)(A) limit of \$54,000 for 2017) is high relative to average compensation and corporations may see the DC plan as offering individuals sufficient opportunity to build the same level of benefit as a DB plan while having the advantage of avoiding DB plan requirements (e.g., preservation of capital, annuity offerings, actuarial valuation, PBGC premiums, etc.). Additionally, there are some unclear legal issues such as:

- Accrual rule testing; while there is an IRS project that looks at the appropriateness of using last year’s interest rates for projecting accounts, the release date and conclusions are unknown.
- Acceptable frequency of changes to benefit levels; operationally benefits have to be definitely determinable which might not be consistent if benefit levels change frequently, for example due to an extra pay or interest credit.
- Application of the rule that the normal retirement benefit cannot be less than the early retirement benefit.
- Top 25 highest paid employees lump sum restrictions; these rules were not written with market-based plans in mind.

The focus of the session then turned to variable annuity plans (VAP), the “other” market-based plan.

A VAP pays a monthly benefit like a regular DB plan, but the benefit is commonly denominated in “units” or “shares” and is adjusted for investment performance. In a VAP, there is a target investment rate, or “hurdle rate” and the benefit is adjusted periodically, usually annually, with an increase/decrease if return is greater/less than the hurdle rate.

VAPs were given the “green light” in 1953 in Revenue Ruling 53-185 and achieved some popularity and use through 1974 but then had a period of disuse and rarity through 2006. With PPA 2006, there has been a revival of interest. However, interest has been muted for a number of reasons, which include:

- VAPs are not common or well-known.
- There are questions on the valuation method and issues with expense calculations.
- There is no prototype or volume submitter document so plan sponsors must use individually designed plans.
- Some questions exist around the application of operational rules such as nondiscrimination, “meaningful benefit,” benefit accrual, lump sum calculation and PBGC variable premiums.

During the session, some of the VAP valuation math was discussed, drawing on reference to TSA 1963, Franklin Smith & Chandler McKelvey. Internal Revenue Code rules (415, 417(e), 430, etc.), accounting standards for DB plans and PBGC regulations introduce several complicating factors that have to be dealt with, and for which definitive answers are not necessarily available.

The VAP is the only market-based plan that avoids statutory hybrid requirements (as long as hurdle rate requirement met). For example, when converting from traditional DB plans, while the total benefit cannot fall below the level of the benefit at the time of conversion, the “A+B” approach is not required.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 204

### MACRA AND THE MEDICARE SIDE OF ACA

Speakers:

- Stu Alden – Aon Risk Solutions
- Phil Ellis – Acumen LLC
- Session Assistant: Yi-Ling Lin – The Terry Group

#### Reimbursement under Medicare – A Brief History

Medicare started in 1966 with two general components: hospital (Part A) and physician/outpatient (Part B) benefits. Part A is funded by the HI payroll tax and the trust fund is currently projected to run out of money by the year 2029 or 2030. Originally Medicare was thought to only need to cover hospital benefits since people were afraid of the financial risk of long hospital stays. Physician and outpatient services at the time were affordable. By the time the law was passed, Part B benefits were added.

Since the 1980s, Part A providers have been paid under a system using Diagnostic Related Groups (DRGs). DRGs bundle the services needed for a hospital visit under one payment that reflects the cost of a base case, geographic factors and other adjustments.

Part B payments, on the other hand, have gone through a variety of transformations over the years. In the earlier years of the program, Part B payments were based on physician charges capped at the 75<sup>th</sup> percentile of Usual, Customary and Reasonable Charges (UCR). From 1975-1991, a mechanism called the Medical Economic Index (MEI) was used in an attempt to limit the spending growth of Part B benefits due to price increases. However, modest price increases were more than offset by surging demand for services and Part B spending increased 15% annually. In 1992, the government adopted a system consisting of the Resource-Based Relative Value Scale (RBRVS) and the Volume Performance Standard (VPS). High annual spending increases continued despite the new system and in 2000 the Sustainable Growth Rate (SGR) mechanism was

adopted, intending to adjust prices to limit the growth in Part B spending to the growth in GDP.

The first couple of years of the SGR produced reasonable increases and a 5% decrease in physician payment fee schedules in 2002. Since 2003 however, the SGR formula annually produced a significant decrease in fees that was overridden by Congress. The “Doc Fix” as it was known allowed for modest increases in fees each year instead. Due to the cumulative nature of the SGR formula, by 2013, the calculated adjustment reached a 30% decrease in physician fees.

The latest changes to the Medicare payments were made with ACA in 2010 and the MACRA (Medicare Access and CHIP Reauthorization Act) in 2015.

#### Implications for Physician and Hospital Payments

MACRA’s key provisions replace the SGR formula with the Quality Payment Program (QPP). Under this new program, physicians can choose to be paid under one of two alternatives: Advanced Alternative Payment Models (APMs) or the Merit-based Incentive Payment System (MIPS).

MIPS consolidates components from three existing programs: the Physician Quality Reporting System (PQRS), the Value-based Payment Modifier and the Electronic Health Record (EHR) Incentive Program. MIPS will adjust physician fees based on performance in four areas: quality, clinical improvement activities, EHR use and patient cost/resource use. The composite performance measure of these four areas changes over time and includes an increasing weight to the cost/resource use component by 2021. In 2019, payment adjustments range from plus 4% for at least partial

# 2017 CCA Annual Meeting Session Summaries

(90 days) 2017 data submissions to minus 4% for no 2017 data submissions. The payment adjustment ranges increase over time with 2020 at  $\pm 5\%$ , 2021 at  $\pm 7\%$  and 2022 and later at  $\pm 9\%$ .

APMs are like Accountable Care Organizations (ACOs) with providers accepting both upside and downside risk. In 2019, physicians seeing at least 25% of Medicare payments or 20% of patients through APMs will receive a 5% bonus payment. The requirement increases over time to 75% by 2022. In general, APMs have a target cost per enrollee so reducing the number or mix of services delivered will increase effective fees per service.

Physician payment updates under MACRA are stringent to limit the growth in spending. 2017-2019 has an annual limit of 0.5% increase for all physicians. 2020-2025 payments are generally frozen but do allow for special bonuses based on performance. 2026 and later have limits of 0.75% for physicians under APMs and 0.25% for physicians under MIPS. Under these constraints, if private health insurance reimbursement rates were to increase by 2.0% each year, the Medicare reimbursement rates would drop from 80% of private insurance rates now to less than 30% of private insurance by 2090. This projection of physician fees would be better than implementing

SGR and having a sudden drop in fees in the short-term but it is unsustainable long-term. Realistically, there are a couple of things that could happen in the future: APMs could encourage doctors to improve efficiency and earn more per service or we could go back to legislative updates and “doc fixes.”

The payment system for Part A also changed with the passage of ACA. Annual updates to hospital payments were previously made by changing a “market basket” index that incorporated price increases but effectively assumed no productivity growth. ACA now reduces that “market basket” index by an economy-wide rate of productivity growth. Hospitals essentially took a payment reduction in exchange for the promise of more patients through the increase of insureds in the system. CMS actuaries estimate that productivity growth is approximately 0.4% annually, however the future price decreases will be closer to 0.8% annually.

The situation seems rather bleak for providers. Perhaps hospitals will need to shift their focus from improved quality to reduced cost. Maybe physicians can navigate APMs and reduce the quantity and mix of services enough to offset the low allowed growth in payment rates. Only time will tell.



# 2017 CCA Annual Meeting Session Summaries

## SESSION 205

### OUT OF NETWORK SHARED SAVINGS SOLUTIONS

Speakers:

- John Schubert – Deloitte Consulting LLP
- Jane Jensen – Willis Towers Watson
- Jennifer Gillespie – Consortium Health Plans
- Session Assistant: Thuong Broaden – Deloitte Consulting LLP
- Session Summary Provide by: Thuong Broaden – Deloitte Consulting LLP

#### Out of Network Payment Provisions

Out of Network (“OON”) payment provisions have been around for some time now. Historically, providers expected to be paid amounts close to total billed charges, which were based on a percentage of Usual, Customary, and Reasonable (“UCR”) charges. UCR charges were developed by the Health Insurance Association of America (“HIAA”) and varied by geographic area. Furthermore, patient balance billing was rare and evolving PPO networks were broad in scope. There was a period of transition when discounts on total billed charges started to grow and become significant, networks continued to evolve to adapt to these changes in payment rates, and sources of UCR data were eliminated. Today, there are a variety of methods designed to help reduce billed charges for providers. This session focuses on charges for ‘shared savings,’ a variable fee tied to savings rather than a fixed amount in the Administrative Services Only (“ASO”) fee.

#### Shared Savings

Shared savings may also be referred to as small print fees, variable fees, or total administrative costs. They are fees associated with negotiated reductions from billed charges. As an example, suppose the billed charge is \$700,000 and the carrier negotiates the allowed reimbursement to be \$400,000 and the member is protected from balance billing. The difference in billed and allowed of \$300,000 is the savings and the shared savings fee is determined based on the \$300,000. Shared savings are in addition to utilization based fees for

special programs or services that don’t necessarily promise or promote savings.

There are a variety of administrative services that may be included in a shared savings fee: supplemental network savings (rental networks), hospital bill review (for non-contracted claims), professional fee negotiation, subrogation, hospital/professional bill audit, diagnosis related group (“DRG”) audit and recovery, inpatient admission retrospective review, medical implant device audits, coordination of benefits (“COB”) vendor recoveries, etc.

#### Current Approaches and Potential Implications

There are many considerations to keep in mind for shared savings payments and fees. Access fees for leased or participating networks may be included in monthly ASO fees. Savings may be developed based on the reduction from billed charges, or it may be based on savings from the reasonable and customary (“R&C”) level. External vendors may be involved, and sometimes the cost of these vendors is additional. Involuntary use of non-contracted providers may be treated differently than those affiliated with an OON benefit. Emerging options include a fee amount that applies to all savings, even those for contracted in-network providers. And finally, there is still potential for balance billing.

Different carriers have different approaches to charging shared savings. Actual costs vary greatly from employer to employer and year to year. As such, it may be difficult to estimate shared savings effectively.

# 2017 CCA Annual Meeting Session Summaries

So how can you make shared savings fees less challenging for your clients? Consider requiring quarterly reporting of all charges beyond the ones

billed monthly and requesting caps on the amounts retained on any given claim.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 207

### UAAL: HOW DID WE GET HERE?

Speakers:

- Paul Angelo – Segal
- William R. Hallmark – Cheiron
- David J. Kershner – Conduent HR Services
- Adam J. Reese – PRM Consulting Group
- Session Assistant: Andrew Blough – Indiana Public Retirement System

#### Background

Since 2001, the historical funded ratios of public pensions in the United States have fallen from just over 100% to under 75%. Liability growth has outpaced asset growth over this time period by a ratio of more than 2:1. Although there were two significant asset declines in that time period, the underlying factors leading to the decline in funded status are more varied. As assets experienced volatility, some plans allocated a higher proportion of assets to lower-risk assets, leading to slower asset growth. Funding policies with back-loaded designs lead to contributions not covering the growth in the unfunded actuarial accrued liability (UAAL). Discount rate assumptions have been steadily falling along with longer life expectancies being recognized through new mortality tables. Benefit improvements without funding and insufficient contributions have also contributed to the falling funded statuses, or equivalently, the growth in UAALs.

#### Funding Policies

The first section of the session was a primer on funding policies, amortization methods, and the UAAL presented by Paul Angelo. A more complete description of funding policies can be found in the CCA Pension Plan Community's White Paper titled *Actuarial Funding Policies and Practices for Public Pension Plans*.

Unfunded liabilities can be generated from experience, plan changes, and assumption or method changes. There are multiple amortization methods to deal with paying off these unfunded

liabilities after they arise. The session covered examples of fixed-period (closed) and rolling (open) amortizations; level dollar and level percentage of pay amortizations; and single-layer amortization and multiple-layer amortization. Negative amortization occurs when the payment on the UAAL is less than the interest on it, caused by using a level percentage of pay amortization method with relatively long amortization periods. This causes the UAAL to grow as a dollar amount in the early years, although it decreases as a percentage of payroll. Payments are back-loaded towards later years in the amortization period when the payroll is greater.

Open amortization implies the UAAL will never be completely paid off. The base is re-amortized over the same period each year, leading to progressively smaller payments (assuming no negative amortization). Open amortization can result in slow progress towards the elimination of the UAAL.

Single-layer amortization means the UAAL is amortized over a single time period regardless of the source. Multiple-layer amortization gives the sponsor the opportunity to amortize different sources of liability over different time periods.

The White Paper on funding policies has recommendations on model amortization policies. The model policies include a multiple-layer amortization approach with fixed amortization periods using the level percent of pay approach. A summary of the model amortization periods for each source of UAAL are described below:

# 2017 CCA Annual Meeting Session Summaries

Source of UAAL	Model Amort. Period
Experience	15 to 20 years
Assumption Changes	15 to 25 years
Active Plan Changes	Demographic, ≤15 years
Inactive Plan Changes	Demographic, ≤10 years
Early Retirement Incentives	≤ 5 years
Surplus	30

With layered amortizations, sponsors can experience “tail volatility” as various layers are paid off at different points in the future. For example, if a large loss base is paid off, the following year the sponsor will see a decline in the UAAL payment, and vice versa for a gain base. The result can be a pattern of rising and falling net UAAL payments for sponsors over time. Tail volatility can be managed by combining offsetting amortization layers.

### Case Study

Adam Reese presented a case study on the Commonwealth of Kentucky. Over the 11 years from 6/30/2005 to 6/30/2016, the funded percentage of Kentucky’s six largest retirement plans fell from 79% to 47%.

The Kentucky Employees Retirement System Non-Hazardous Plan in particular declined from 74% funded to 16% funded over that time horizon. The main drivers in this decrease were contributions less than the actuarially required contributions, assumption changes (including discount rate and mortality tables), granting cost of living increases without funding, and the funding method allowing for negative amortization. These factors were responsible for a combined 80% of the UAAL increase, with the remainder being associated with plan experience and investment / market performance.

A second plan examined also comes from Kentucky, but is under the jurisdiction of the County Employees Retirement System rather than the

Commonwealth’s retirement system. The County Employees Retirement System Non-Hazardous Plan of Kentucky also experienced a significant decline in funded status over the same period – from 94% to 59%. Unlike the Kentucky Employees Non-Hazardous Plan above, the participating employers in the County Employees Retirement System Non-Hazardous contributed more than the actuarially required contributions in total, and only missed their required contributions in one year in the case study period. However, its funded status decline shares similar reasons with the Kentucky Employees Non-Hazardous Plan, including a funding policy allowing negative amortization, unfunded cost of living increases, and actuarial assumption changes. Investment returns played a more significant role in the UAAL growth for the County Employees Retirement System Non-Hazardous Plan.

The table below provides a summary attribution of the principal causes of the growth in the Kentucky Employees Retirement System Non-Hazardous Plan (KERS-NH) and County Employees Retirement System Non-Hazardous Plan (CERS-NH) UAALs from 6/30/2005 to 6/30/2016 by source:

	KERS-NH	CERS-NH
Funding less than ARC	28%	-5%
Negative Amortization	13%	30%
Investment / Market performance	14%	27%
Granting COLAs without funding	14%	16%
Assumption changes	25%	23%
Plan experience	6%	9%
Total	100%	100%

### Stakeholder Communications

Bill Hallmark presented information on stakeholder communications and ideas surrounding disclosures of plan status, history, and risk. Example metrics

# 2017 CCA Annual Meeting Session Summaries

provided were charts of the historical funded status (including showing in-payment and not-in-payment liabilities separately), year-over-year UAAL reconciliation, a history of UAAL changes by source (including more detailed charts on investment performance and expected UAAL change, if necessary), cost and contribution comparisons, a projected schedule of UAAL payments and balances.

Plan risk can be communicated with maturity measures and projections. Examples of maturity measures include historical membership counts and volatility ratios (AAL / Payroll and MVA / Payroll).

Payroll is serving as a proxy for the overall sponsor size. As these volatility ratios increase, it shows how asset movements represent larger proportions of the underlying sponsor's payroll. For example, if  $MVA / Payroll = 5$  and the sponsor experiences a 10% decline in the market value of assets, that represents a dollar value equal to 50% of the sponsor's payroll that will need to be funded. Projections can be either stochastic or deterministic, depending on the decision makers' needs. Because plans are unique, certain systems or features may require additional unique disclosures.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 208

### VIEW FROM INSIDE THE BELTWAY

Speakers:

- Moderator: Tamara Shelton – Willis Towers Watson
- Jan Jacobson – American Benefits Council
- Kathryn Wilber - American Benefits Council
- Session Assistant: David Kent – Retirement Horizons Inc.

#### Background and General Information

In this session our speakers from the American Benefits Council (ABC) discussed tax reform, employee benefit legislation and proposals, and the implications to benefit plan sponsors and the broader employee benefits community. The American Benefits Council is based in Washington D.C. and works closely with Congress, the White House, and various agencies.

#### Tax Reform

The Republican's say their primary goal for tax reform is to lower the current tax rates, which they hope will stimulate the economy. They are seeking to retain current tax benefits that encourage retirement security, simplify the retirement tax benefits, and maintain or raise retirement plan resources and participation.

One recent development is the idea of the "Rothification" of 401(k) plans, where some portion of the deferral would be post-tax, but would not be taxed upon withdrawal. This would be a large source of tax revenue in the short term, but could lead to lost revenue in the long term. However, the President did indicate via Twitter (on the morning of this presentation) that there would be no changes to 401(k)s.

Other possible changes to the tax reform could include changes to the limit of the value of the tax deferral for high earners, a freeze to the cost of living adjustments to maximum limits, changes to nonqualified deferred compensation, and limits on executive pay deductibility. Changes to the PBGC single employer premiums, as well as

multiemployer pension plan reform could also be under consideration. Depending on how the bill is passed (bipartisan versus reconciliation), reform on non-revenue items could be delayed.

It was pointed out that a reduction in taxes, or in the beneficial tax treatment that retirement plans can claim, could reduce the attractiveness of retirement plans. This could cause a run up (in the short term) of plans making contributions before the changes take effect. There is the hope that any changes to the tax laws would be phased in to avoid this run.

#### Retirement Policy

There are a number of new retirement policy issues being looked at in DC, including covering part-time workers if they meet the 500 hour requirement for two years, a "sidecar savings account" (similar to Health Savings Account, but used for other emergencies), auto-portability (i.e. automatic rollover into an IRA and new employer plan) and a retirement savings "Lost and Found" for retirement benefits. This lost and found would be similar to current SSA-8955, but would include more information. In addition, the PBGC is contemplating adding a missing participant program for terminated defined contribution plans.

Another topic that legislators are considering is permitting matching contributions based on student loan payments. This would allow former students to pay off their loans while also accruing retirement savings. There are possible non-discrimination

# 2017 CCA Annual Meeting Session Summaries

testing implications that would need to be addressed.

New mortality tables have been adopted by the IRS for funding and lump sum purposes for 2018. There is the possibility to delay adoption of the tables until 2019 for funding purposes if the impact to the business is greater than de minimis (there are indications that the IRS would be lenient in the definition of “de minimis”). There is no delay in the adoption of the tables for lump sum purposes. Unless there is further clarification, the new lump sum tables would need to be valued in the funding valuation for the lump sum form of payment. This would cause issues with the annuity substitution rule and would dampen the impact of delay for plans that pay lump sums.

The Department of Labor (DOL) is currently conducting Missing Participant audits, and has been very aggressive with their requests. They have indicated that failing to find the participants is a fiduciary breach, forfeiting the benefits to lost participants and using the assets for plan expenses is a prohibited transaction, and that searches using different methods need to be conducted each year. The audits are taking a considerable amount of time, and can expand in scope once started. During the audit, the DOL is contacting participants directly and are sending out letters to participants indicating that their former employer is “under investigation for breach of fiduciary duty”. The ABC has pointed out that the audits are not consistent, are causing confusion among participants, and that the rules they are asking plans to follow are not published. The ABC has asked for a meeting with the DOL to address these issues.

Other retirement issues to be considered include the delay in the definition of fiduciary (as well as current litigation regarding it), states moving forward on state auto IRAs despite removal of safe harbor protection, and activity around paid leave.

## Health Care Policy

The Affordable Care Act has had several near death experiences in recent history. The process of passing new health care legislation could either be done with a bipartisan bill, or through budget reconciliation. Budget reconciliation only needs the votes of the party in the majority (currently the Republican Party). So far neither process has been successful. They are currently marching down the path of reconciliation again; however, there does seem to be some growing support for a bipartisan bill.

Health care could be impacted by tax reform. In 2015 the Cadillac tax, device tax and health insurer tax (HIT) were all delayed. Future legislation could delay these taxes again, or possibly repeal them. The ABC has been working to repeal or delay them, but plans should be aware that without new legislation, the taxes would be in effect in the near future.

Another direction that legislators could go would be to repeal the Cadillac tax, but replace it with cap on the employee exclusion. Therefore, instead of the plan being taxed, the employees would be taxed. This is unpopular with employees, and has failed in the past. However, the Republicans like this option because they think it will help curtail health care cost inflation.

There is a bipartisan health care bill that is being drafted. It will be small in order to pass the Senate. It includes funding for the near future for the Cost Sharing Reduction payments that were recently eliminated by Executive Order. In addition, it would simplify and streamline the 1332 State Innovation Waiver application process, allow the purchase of “catastrophic only” health plan in order to bring healthy risks into the market, and may address some of the health care taxes mentioned above. The President has gone back and forth on his support for such a bill in its current state, so there may be more changes coming for it in order for it to pass.

# 2017 CCA Annual Meeting Session Summaries

Another route to change healthcare policy that has been used recently is for the President to issue Executive Orders. The orders do not happen instantaneously and there are no rules or guidance, they simply direct the agency to consider regulations or guidance based on the order. This measure could be used again in the future to address other healthcare policy changes that the President would like to see.

The first order recently issued made it easier for employers to join or form Association Health Plans. The Republicans like this idea, but the worry is that this would cherry pick the healthier risk from the overall pool. The second order covered short-term limited duration insurance. The order directed the agencies to look at the rules and propose guidance

that would allow for longer short-term duration insurance. The ACA cut the duration to just three months. The third covered Health Reimbursement Arrangements (HRAs). The ABC has been very focused on this. Once the ACA passed, the prospect of a defined contribution strategy approach to healthcare became more viable. The ABC would like to see rule changes to allow employers to use an HRA to buy an individual policy for employees. Current IRS guidance does not allow this.

Other recent regulatory changes include changes to the contraceptive policy to allow all employers to exclude coverage based on religious or moral objections, HIPAA administration simplification, and final forms and instructions for 1095-C and 1094-C.



# 2017 CCA Annual Meeting Session Summaries

## SESSION 301

### IFRS EMPLOYEE BENEFITS – ACCOUNTING AND AUDITING

Speakers:

- Stephen S. Breeding – Ernst & Young LLP
- Miguel Santos – Aon Hewitt
- Joseph P. Strazemski – Conduent Human Resource Services
- Daragh Watson – KPMG LLP
- Session Assistant: James D. Burke – CBIZ Retirement Plan Services

The speakers in this session provided an overview of IAS 19R, which is the international accounting standard for employee benefits. The topics included historical background, the principles of IAS 19R, similarities and differences with US accounting standards, and review of results by the auditor.

#### Background

The panel defined the following acronyms used during the session:

IAS – International Accounting Standards

IFRS – International Financial Reporting Standards

DBO – defined benefit obligation

The International Accounting Standards Board develops and issues global accounting standards, promotes their usage, and works on converging its standards with local standards. IAS standards were published from 1973 through 2001. Since 2001, IFRS standards have been published. Where elements contradict, IFRS supersedes the older IAS. IAS and IFRS standards are required in much of the world. The United States, China and India are notable exceptions where IAS and IFRS standards have not been adopted.

IAS 19R covers post-employment benefits, such as DB and DC retirement benefits and post-employment medical and life insurance benefits. It also covers short-term benefits (settled within 12 months of year-end), other long-term benefits (sabbatical, long-term disability) and termination benefits. For these types of benefits, IAS 19R instructs plan sponsors in recognizing the value of

benefits earned on the company balance sheet and the value of benefits earned in the defined benefit cost.

#### Liability Principles of IAS 19R

Generally speaking, IAS 19R is similar to US generally accepted accounting principles (GAAP). The panel highlights key similarities and differences.

Assumptions should be unbiased; they should not be imprudent or excessively conservative. They should be internally consistent. For example, the underlying economic assumptions such as inflation should be the same. Each assumption should be the entity's best estimate.

As with US GAAP, the discount rate is generally based on market yields for high-quality corporate bonds. Government bonds are used if the locality does not have a deep corporate bond market. However, unlike in the US, this is not a "settlement rate," so the settlement concept should not be considered in setting this assumption. Therefore, bond matching models are harder to justify under IAS 19R than under US GAAP.

Unlike US GAAP, IAS 19R does not specifically have an expected return on assets in the defined benefit cost. The "net interest cost" is the discount rate applied to the difference between liabilities and assets. Therefore, no assumption exists for investment return on assets; it is no longer a concept in IAS 19R.

In US GAAP, the spot rate method has become increasingly common in recent years. This method

# 2017 CCA Annual Meeting Session Summaries

can also be applied under IAS 19R, but because assets are netted from the liabilities and there is no assumption for investment return, the spot rate method has a muted impact for funded plans.

Typically, the average discount rate (the interest on the DBO divided by the DBO) is applied to assets.

Other economic assumptions should reflect the plan sponsor's view of the economy, not the actuary's.

The attribution of liabilities is similar to US GAAP.

The DBO corresponds to the projected benefit obligation in US pension plans and accumulated postretirement benefit obligation in US postretirement plans other than pensions.

Attribution is based on the plan formula using the projected unit credit cost method. If benefits are back-loaded based on service, project-and-prorate is required. For hybrid plans like cash balance plans, the principles are also the same as with US GAAP.

## **Other Principles of IAS 19R**

The components of defined benefit cost under IAS 19R are reflected in either the entity's profit & loss (P&L) or in other comprehensive income (OCI). P&L components are current service cost, net interest cost, administration costs, past service cost (including curtailments), settlement gain/loss and termination benefits. Elements attributed to OCI include all other gains and losses and the change in asset ceiling. In short, "measure in P&L; re-measure in OCI." Unlike in US GAAP, everything is recognized immediately, whether through P&L or OCI; there is no amortizing of gains, losses or past service costs.

Past service costs consist of plan amendments and curtailments, which are accounted for separately under US GAAP. Settlements refer only to non-routine settlements, which is also different from US GAAP. If a plan regularly pays lump sums, those are not considered settlements. A lump sum window could be considered either a plan amendment or a settlement, so the actuary should talk to the auditor in advance to determine proper treatment.

Significant events, such as plan amendments or settlements, call for a re-measurement when they occur. The effect on the DBO is recognized immediately. However, unlike with US GAAP, the assumptions should be those in effect at the original measurement date, because there is a broad IFRS concept that interim events should not affect the assumptions. Of course, there is a proposal to use updated assumptions at the date of re-measurement. This is expected to be finalized in December 2017, to be effective January 1, 2019.

The "asset ceiling" is a concept that does not exist in US GAAP. The idea is that surplus assets cannot be reflected in full in the balance sheet if the employer will not be entitled to a full refund of benefits. Typically, this would be the excess of assets over the sum of DBO and present value of future required contributions. For US plans, it may make sense to consider future administrative costs and anticipated excise taxes due to the reversion of surplus.

Disclosures are similar to US GAAP. Additional disclosures include descriptions of the DB plan's characteristics and risks, significant actuarial assumptions, and DBO sensitivities to assumption changes.

## **Auditing Employee Benefits**

There is immense pressure on audit firms in areas of estimates and judgments. Regulators of audit firms are concerned about the process of making estimates, the risks involved and the process for catching errors before results are finalized. For retirement plans, there are risks associated with the assets and liabilities, as well as operational, fiduciary and governance risks.

The concept of materiality in financial statements is also important. However, that is not up to the actuaries. The auditor will determine the appropriate metrics and thresholds on a case-by-case basis. The company being audited may also

# 2017 CCA Annual Meeting Session Summaries

have its own view of materiality; some companies are more sensitive to potential errors than others.

With these thoughts in mind, an auditor will look carefully at the census data and the assumptions. Census data is reviewed for completeness and accuracy. Data is obtained from both the company and the actuary, and the two sources are reconciled. Therefore, an actuary should explain to the company or the auditor any changes made or assumptions used as data was prepared for the actuarial valuation.

To review the economic and demographic assumptions, auditors will look for sources of

management bias. Regulators want to see more professional skepticism in this area. Auditors will look for support for the selection of the assumption and for confirming evidence.

Finally, an auditor will question the company's controls around the actuary's work. Even if work is done by a specialist, an auditor really expects the answers to come from the company, so the auditor will look at the company's process to ensure that the specialist (the actuary in this case) is correctly doing the work.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 302

### DC PLANS: DESIGN AND TESTING

#### Speakers:

- Anthony Michael Davis – Fidelity Investments
- Michael A. Chisnell, Jr. – Sequoia Financial Group, LLC
- Jaime. M. Bruton – Bruton Financial Advisors
- Shams Talib – Fidelity Investments
- Session Assistant: Andrew Marcus – Fidelity Investments

#### Background

Defined contribution plans (DC plans) are top of mind in today's economic environment as the focus of employer-provided retirement benefits continues to shift away from defined benefit plans (DB plans) to DC plans. In this session, the presenters discussed their ideas for best practices in DC program designs and plan sponsor oversight to help organizations achieve their desired retirement program objectives.

#### Plan Design and Testing

Anthony Davis opened by reviewing the fundamentals of DC plan design and testing. Plan sponsors tend to focus on a few key objectives when designing their plans. Creating programs that improve retirement readiness is gaining emphasis. Employers want to make sure that their participants have enough savings to retire. This not only helps participants, but helps employers manage their workforce demographics. Of course, plan sponsors strive to make the dollars provided to employees purposeful and efficient. Other traditional design outcomes include employee understanding and appreciation coupled with talent attraction and retention.

One trend in recent years has been the shift to considering the overall benefit philosophy more holistically to ensure the programs align well with organizational goals and objectives. We are many years removed from changes involving enhanced DC benefits as a replacement for the many DB plans that froze to new accruals. We are moving toward

more plan sponsors establishing an overall retirement program philosophy.

Next Anthony reviewed the key DC plan design elements. Employee contributions can take the form of pre-tax, Roth, or after-tax. Each form has different tax treatment on contribution, earnings, and distribution. Plan sponsors are learning that participants are getting more comfortable with, and gaining a better understanding of, Roth contributions. Similarly, after-tax contributions have a greater role when coupled with Roth conversion, allowing participants to save after-tax dollars beyond the IRS 402(g) limit and then convert those to Roth dollars so that the earnings grow tax-free.

Employer matching contributions reward employee participation in the plan. Whereas DB replacement benefits were designed to give something for nothing, now the goals have shifted to retirement dollar efficiency, shared savings responsibility, and retirement readiness. For example, if a company matches 100% on the employee's first 6% of contributions, then a participant maximizing the match will have 12% going into his or her retirement account (i.e. 6% deferral plus 6% match). Matching contributions reward participation and encourage savings.

Non-elective employer contributions are not dependent on employee participation. These tend to be components of many large corporate plans but are not as prevalent in the smaller market. Non-elective contributions can be discretionary and may be tiered based on age, service, or points.

# 2017 CCA Annual Meeting Session Summaries

Sponsors can use eligibility and vesting to help minimize the spend going to those participants who no longer work for the plan sponsor. Eligibility can include a one year wait for participation while the minimum vesting requirements include 3-year cliff or 6-year graded periods. Additionally, some plan sponsors require participants to be employed on the last day of the plan year in order to receive a company contribution.

One of the biggest trends in the market is to nudge participants into better savings habits. Many DC plans use automatic enrollment to bring new hires into the plan by automatically turning on employee deferrals at a specified rate. This helps participants save for retirement because there is typically only a 10%-20% opt out rate. Participants tend to stick with the default behavior. Increasingly, auto-enrollment is being coupled with annual automatic increases in deferral rates. Plan sponsors need to consider the appropriate auto-enrollment deferral rate since it implicitly signals to employees the “correct” deferral rate. Auto-enrolling at the full company match is a good strategy, otherwise without auto-increases, participants may get “stuck” at their initial deferral rate.

Next, the session turned to nondiscrimination testing including determining the testing population and highly compensated employees (HCEs), as well as the specific tests that DC plans are required to satisfy. The testing population includes employees in the entire controlled group but may exclude collectively bargained and other excludable employees. Companies should be careful during a merger or acquisition to ensure they have considered the proper controlled group and that they leverage the nondiscrimination transition rule when applicable. Once the testing group is known, HCEs are determined by a compensation threshold or the Top 20% Paid Group election as specified in the plan document, and also include 5% owners.

DC plans must satisfy a number of nondiscrimination tests. The actual deferral

percentage (ADP) and the actual contribution percentage (ACP) tests test DC plans for discrimination with respect to employee contributions and company matching benefits, respectively. It was noted that after-tax contributions are included in the ACP test rather than the ADP test. There are safe harbor designs that may help avoid ADP and ACP testing, but have some requirements that must be included in the plan. Other tests include the 410(b) coverage test that measures who is covered under the plan to ensure appropriate coverage of non-highly compensated employees, and the 401(a)(4) benefits test that is meant to ensure the non-elective benefits provided under the plan do not discriminate in favor of HCEs.

## **Plan Oversight**

The session then transitioned to Michael Chisnell who outlined his perspectives on the DC plan environment in the smaller market and discussed how he consults with clients on their plan oversight responsibilities.

From a plan design and testing perspective, Michael generally does a Plan “Health” Summary Assessment with clients. Michael agrees that plan sponsors are moving away from DB plans toward retirement readiness in the form of DC plans. However, he notes that delayed entry periods may cause participants to lose out on retirement benefits, especially in the cases where there is a 12-18 month wait to enter the plan (e.g. one-year eligibility with semi-annual plan entry dates). In working with clients, it is typical for it to take two years from Board discussions to design/feature implementation. Auto-enrollment at a rate higher than the match level is recommended to provide an implicit starting point for participants who make active elections, plus it helps nondiscrimination testing.

Plan sponsor oversight is key to helping companies manage their retirement plans. Many plan sponsors tend not to know all that is going on in the

# 2017 CCA Annual Meeting Session Summaries

retirement industry since they do not live and breathe retirement plans. They rely on trusted advisors to keep them updated on retirement regulation, litigation, legislation, and competition. Plan sponsor education includes reviewing the fiduciary structure, discussing who should be considered the prudent expert in charge of the plan, and focusing on total plan governance.

A useful framework for reviewing all the service providers using C.R.A.F.T.: Custodian, Recordkeeper, Advisor, Funds, Third Party Administrator. This helps clients understand who their service providers are, what they do, and who should be helping solve their problems.

Next, Michael discussed the different types of investment advisors. The Naked Plan has no advisor but gets investment support from the recordkeeper. The Agent or Broker is an advisor that is paid on commissions from the investment funds. A Non-ERISA advisor is paid directly by the plan or company. An ERISA §3(21)(A)(ii) Advisor and an ERISA §3(38) Investment Manager are subject to the fiduciary standards of ERISA. If a plan sponsor is unaware of the arrangement they have with their current advisor, they should seek out the disclosure agreements that will outline the details.

Options for mitigating fiduciary risk include retaining risk in-house, reducing risk by implementing liability insurance and working with outside experts, transferring risk to a third party who can provide protection, or avoiding risky activities altogether.

The ultimate goals and objectives plan sponsors want is fiduciary simplicity and participant solutions. They achieve this by working with experienced professionals including advisors, actuaries, and third party administrators.

## **Defaulting to Success**

In the final segment of the session, Jaime Bruton reviewed his perspective on the best actions to

achieve desired outcomes in DC plans. He described the 90-10-90 rule for Plan–Providers–Participants. He credited Shlomo Benartzi, a UCLA professor and Allianz behavioral economist, with the concept. This rule calls for 90% Participation (achieved through auto-enrolment), 10% Average Savings Rate (achieved through auto-increase), and 90% Proper Asset Allocation (achieved by moving participants to the Qualified Default Investment Alternative (QDIA) and or Target Date Funds).

When consulting with individual participants, Jaime uses a Savings x Time x Risk exhibit that outlines retirement savings projections in a very easy-to-understand format. It helps participants answer the question, “How much will I have in retirement?” and offers a dynamic look at what a change in behavior, investment returns, and other parameters would mean for their projected retirement benefits.

The session wrapped up by discussing lifetime income solutions, one of the next ideas on the horizon for DC plans. DC plans are quickly becoming the largest asset for many workers. The future of Social Security seems uncertain to many (solutions seem to be to either raise taxes, decrease benefits, or a combination of the two). Participants retiring with DB benefits are in decline and personal savings remains very low for many workers. There have been recent regulations to increase fiduciary oversight, ensure advisors act in the best interest of participants (avoiding conflict of interest on decisions), and help prevent retirement income leakage.

All of these are pointing toward ideas for creating streams of retirement income payments for participants from DC plans in order to make DC plan retirement payments look and feel more like those from a DB plan. Participants would benefit from lifetime income, institutional pricing on annuity purchases, and fiduciary oversight, but plan sponsor would bear more responsibility.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 307

### LEGISLATIVE UPDATE AND FUTURE CHALLENGES “UNDER NEW MANAGEMENT”

Speakers:

- David Levine - Groom Law Group
- Jeannine Markoe Raymond - National Association of State Retirement Administrators
- Moderator: Koren Holden – Colorado Public Employees Retirement Association
- Session Assistant: Keith Nichols – Hallet

David and Jeannine led a fast-paced session discussing a myriad of possible upcoming changes with an emphasis on public plans concerns, ultimately concluding “odds are nothing will change, but they could”. Many IRS and DOL executive and legislative leadership positions remain unfilled, but the key players and staffers on Ways and Means remain firmly in place. This would imply that although the political power may have shifted, the people actually drafting the potential legislation remain unchanged. Although tax reform was thought to be unlikely, it now seems that something could happen before the end of the year and pensions will almost certainly be impacted. The most significant concept that is under discussion is “Rothfication,” which would be to cap the amount pre-tax employee contributions and instead require most or all contributions to be made after tax. Because the timeline for fiscal impact is limited to 10 years, this shift is treated as a strong revenue generator, as the future tax-free withdrawals are outside the budget window.

There also seems to be interest in reducing the number of types of plans or removing the “anomalies” between 401(k), 403(b) & 457 plans, such as some of the special treatment the different plans enjoy. Also, there is growing concern over the impact of PLR 2015322036 which ruled that participant elections between different benefit tiers with different employee contribution levels was an impermissible cash or deferred arrangement. There are many types of participant elections that have been in place that could be affected, but no regulatory solution has been reached to both

provide needed flexibility while also addressing concerns.

Many of the old tax proposals could resurface with aspects of PEPTA, SAFE and RESA appearing in legislative proposals in recent years. Both panelists felt that government bonds would continue to be treated as tax free since they are needed by many municipalities to fund important projects. Other potential legislative changes on the horizon include mandatory Social Security coverage for all governmental employees, but it would not move separate from larger reforms to the program.

General opposition remains to any Federal intervention in the State and Local Plans, however the Federal government is growing increasingly concerned about funding levels and credit worthiness of many governmental plan sponsors.

On the regulatory front, SEC continues to push for more uniform measurements of plan liabilities, and other federal agencies are looking at pensions as part of their monitoring state and local government and economies.

Also, we should expect the Normal Retirement Age Regulations to be finalized “soon”. Other expected regulations on the “soon” horizon include a proposed regulation defining what types of plans are “governmental” and what kinds are not. This is especially concerning for those sponsors who might not be directly sponsored by a state or local government, but have been operating under the assumption that they are governmental. The largest interest to date in this area has related to charter schools.

# 2017 CCA Annual Meeting Session Summaries

State sponsored plans for employees who are not covered by a workplace retirement plan were believed to be approved when Regulations were released near the end of the Obama presidency. However, Congressional Review Act (CRA) Resolutions repealed the regulations shortly into the Trump presidency. Since these regulations were reversed due to CRA action, they cannot be re-proposed. Many states are now trying to determine what to do with the programs they created under the original regulations. Several states have said they will move forward with their programs (California Connecticut, Illinois) in spite of the pulled regulations, which will likely lead to litigation, unless Tax Reform modifies the playing field.

Many state systems continue to modify their pension plans as they work to solve their funding problems. The trends are definitely towards greater fiscal responsibility with decreasing benefit levels

and COLAs and an increased shifting of risk to employees. Also, defined contribution and hybrid plans continue to become more popular for some participants. MO recently offered a lump sum window to terminated vested participants offering them 60% of the present value based on 7.5% interest and unisex mortality. Other states have implemented trigger points that change plan provisions or close the plans to new entrants if funding level fall below certain levels.

Finally, the trend towards lower long-term rates of return assumptions and more conservative mortality continues in the public sector. The median investment return assumption has declined from 8.0% in 2001 to 7.5% in 2017. Where 8.0% was by far the most common long-term rate of return assumption in 2001, now various long-term interest rate assumptions from 7.00% - 7.50% have become the most popular range.



## SESSION 308

### MANAGING PROFESSIONAL LIABILITY RISK

#### Speakers:

- David Godofsky – Alton & Bird, LLP
- Paul Zeisler – Paul Zeisler Consulting
- Session Assistant: Al Phelps - Gallagher

#### Background

This session examined common types of professional liability risk for actuaries, with a focus on good practice management, practice standards, quality control approaches and effective internal and external communication practices that help reduce risk. The main areas of practice that create risk fall into five categories: benefit calculations and estimates, cost of benefit changes, contribution calculations, corporate transactions and plan design.

#### Summary

Benefit calculations and estimates are commonly provided when payments commence, and in benefit statements or 204(h) notices, where a participant may take action or make a decision based on incorrect information. This becomes especially problematic when the same error is made year after year, and the participant may claim that this impacted his/her ability to make an informed decision. You can control risk on the front-end by ensuring that you work only with signed, complete and current plan documents and amendments, and confirming that your interpretations of the plan are consistent with the client's understanding. When an error is discovered, the actuary should first confirm that there is an error and that no offsetting errors were part of the calculation. If an overpayment occurs, the client will often be reluctant to ask for money back from the employee, so the actuary should ask for subrogation rights prior to agreeing to reimburse the plan for any overpayments. You should never admit liability prior to discussion with your liability insurance carrier, as this might void your coverage.

Valuation "errors" often arise in three areas. The first is in the definition of materiality. Items that seem immaterial (and thus, not "errors" to the actuary) may be seen very differently by the client. Clients, and juries, are likely to see a number like \$10 million and think of it as extremely significant, even in a multi-billion dollar plan. Likewise, "rules of thumb", "estimation techniques", "shortcuts", and "data corrections" may all be seen as errors by a client and by a jury. Interest rate assumptions are often targeted as "errors." The most effective prevention is clear communications, with a possible consideration to define such items in the client engagement letter. The presenters suggested including an explicit provision in an engagement letter specifying that any valuation modifications amounting to less than 1% or 2% of the actuarial accrued liability are, by definition, not "errors." Such a provision would not only reduce the risk of meritless lawsuits, but would also help the client in understanding the level of accuracy of the work product, and therefore would constitute good service to the client.

The cost of proposed benefit changes is another area of risk due to complexities of calculating cost and the precise data needed to ensure correct calculations. Often, a proposed benefit change requires data that was not previously needed to compute benefits. Accordingly, the actuary may not have previously reviewed such data for reasonableness or may simply not have that data, because it was not previously material. The actuary should be very careful before assuming such data to be accurate and complete. In addition, benefit changes should always include a review of the

# 2017 CCA Annual Meeting Session Summaries

possible impact on assumptions, such as early retirement. Even mortality may be affected by a benefit change, to the extent that it changes the relative weighting of different groups of employees with different mortality patterns. The dynamic and uncertain nature of the actuarial assumptions should be carefully considered as well as communicated to the client. The presenters also suggested being very careful in communications with the client to use the correct terminology with respect to assumptions, projections and predictions, which are all quite different. The client may view all three as predictions.

Funding calculations relating to immaterial items have also resulted in significant judgements against actuaries. For example, in *Millman v. Maryland State Retirement System*, required contributions of \$72 million (over 22 years) in a \$45 billion fund were ruled an error and resulted in liability.

Actuaries should always evaluate potential conflicts of interest in corporate transactions, especially if advising both sides.

Plan design, especially related to accrual rules, non-discrimination testing and age discrimination compliance, could result in legal risks where future rulings or guidance renders plan design non-compliant.

While these risks are inherent in much actuarial work, the actuary has several important ways to limit professional liability. Both internal and external communications are extremely important. Emails, including internal emails, are discoverable and will be used in depositions. Client communications are not privileged and confidential, except in limited situations where you are working at the direction of, and for, the client's attorney.

In internal emails, avoid written criticism of another's work and carefully consider that your error may actually be another actuary's estimation technique. Incendiary language should be avoided, as well as premature legal conclusions and

concerns. The actuary should take care not to communicate errors broadly prior to peer review, and make sure that all errors are addressed at the same time. When communicating externally, keep in mind that caveats which have been previously communicated may not be fully understood (or even received) by the intended audience, and work product may be forwarded to others who do not understand such previously communicated caveats. So, it is important to include necessary caveats with each communication, even if it may seem to the client like you are repeating prior communications. The concept of a range of results should be included, even when presenting a specific number. Giving a client a present value number like \$12,345,678,901 may lead a client to believe your results are actually accurate to the dollar, when perhaps the actual level of accuracy is plus or minus \$500 million.

The client should always be seen as potentially much broader than the individuals with whom you are directly communicating. Always assume your communications will be forwarded to others within the organization who do not understand your work as well as your direct contacts do.

After discovering an "error," you should always notify your liability carrier and not admit fault (which would potentially void your liability coverage). The actuary should never discuss fault or admit error with the client until first discussing with the insurance carrier. This limitation can be communicated to the client, and clients tend to understand it is in their interest for your coverage not to be voided.

Keep in mind that not following an ASOP does not automatically mean the actuary has committed malpractice. The legal standards for malpractice are different from the ASOPs. You can follow the ASOPs and still have malpractice. Similarly, if you have not followed an ASOP, it does not necessarily follow that your work falls beneath the standard required by law. In addition, liability for malpractice generally

# 2017 CCA Annual Meeting Session Summaries

requires that the harm to the client be related to, and proximately caused by, the error, and not due to the client's error. So, for example, if the client has negligently given you inaccurate data, your failure to follow the data quality ASOP may, for legal liability purposes, not be the cause of the harm.

The actuary has several ways to help prevent errors in the first place. Comprehensive checklists provide a good framework, but are never a substitute for training, experience and competence.

Communications with the client should clearly define responsibilities, especially for data. The right types of peer review are important, but don't take the place of comprehensive checking. Peer review should be carefully designed, as too many layers of peer review can be just as bad as too few layers of

review. When there are too many people who "check" the work, the result is often that each person's review is brief and superficial, and no one takes responsibility for the outcome.

The actuary should proceed cautiously when confronted with common warning signs for greater risk of error. Clients who need results right away or whose data is messy or late can compromise the quality of your work. Likewise limiting peer review to stay on budget needs careful consideration. Extra time and consideration should be built into higher risk work such as corporate transactions, plan changes or union negotiations, notwithstanding the fact that the client may express a need for such work to be done faster than typical valuation work. The actuary should think carefully before taking on work with a litigious client.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 401

### LATE BREAKING DEVELOPMENTS

Speakers:

- Bruce A. Cadenhead – Mercer
- Tonya B. Manning – Conduent HR Services
- Michael F. Pollack – Willis Towers Watson
- Carolyn E. Zimmerman – Internal Revenue Service
- Moderator: Fred C. Lindgren – Fidelity Investments
- Session Assistant: Julie M. Reyes – Fidelity Investments

After a somewhat slow start to the year, the agenda filled up quickly over the weeks leading up to this session. This session provided an overview of new and late-breaking developments in the pension arena.

#### IRS Update

Carolyn Zimmerman gave an overview of recent updates from the IRS. In the recent weeks and months, the IRS has been working on finalizing the 417(e) regulations, reviewing comments from proposed closed DB plan regulations, making updates to the 430 and 436 regulations and reviewing hybrid plan regulations. A new development from the IRS is the issuance of “issue snapshots” which are informal guidance to the agents and may be helpful to practitioners.

Ms. Zimmerman highlighted some items that have come up in recent casework. She pointed out that mailing addresses for certain filings have been updated in Ruling 2017-4.. In addition, she reminded practitioners that for short plan years, normal cost should consider the benefits accrued during the shortened period, rather than a simple proration of normal cost. Also, amortization extensions should only be applied for the bases that are eligible for extension (which only includes charge bases, not credit bases, bases established for changes in funding methods, shortfall losses, or other bases not specifically mentioned in the relevant sections of the Code).

#### Mortality Tables

Tonya Manning discussed the recent regulations that were released in October and finalized the mortality tables and projection scales to be used for 2018 valuation purposes. The rates were as proposed and will likely be updated annually. What

remains unchanged is the option to use a static or fully generational version of the mortality table. However, the development of the static version of the table is more complex than the previous 7-year/15-year projection.

Ms. Manning discussed the transition rule which allows for a one-year delay to implement the new tables for funding purposes if it is “administratively impracticable or would result in an adverse business impact that is greater than de minimis.” This description leaves several questions unanswered (definition of “administratively impracticable” for funding purposes, threshold for “de minimis”, etc.). Ms. Zimmerman commented that the determination of an “adverse business impact” should lie with the plan sponsor, not the actuary. Her opinion is that it is unlikely that “more actuarial fees” or “less credit balance” would suffice as an adverse business impact. For the annuity substitution rule, actuaries are still required to use mortality assumptions from 417(e) which have no similar transition period so must be applied immediately.

Next, Ms. Manning covered the substitute mortality table guidance. This requires the use of the standard tables as the base tables and more deaths are needed for the substitute table to be fully credible. Partial adjustments are allowed if the actual number of deaths is at least 100. In addition, a substitute mortality table, if used, must be used for all plans in the controlled group that are subject to Section 430. Ms. Manning pointed out that if a plan sponsor is interested in using a substitute mortality table for 2018, they should apply for it as soon as possible. If the sponsor’s current substitute mortality table expires at the end of 2017, they

# 2017 CCA Annual Meeting Session Summaries

should clearly mark their application to request expedited treatment, and the IRS will attempt to handle it quickly.

## **Hurricane Relief**

Ms. Manning described the relief that was provided as being similar to what we might expect, related to plan loans, relaxed hardship rules, and tax relief from Congress related to early withdrawal penalties. In addition, the relief provides for extension through January 31, 2018 of the deadlines for 5500 filings, plan contributions, and AFTAP certifications among other items, for those in affected areas. The PBGC allows for extended deadlines for premium filings and post-event notification, but did not extend deadlines for 4010 filings or pre-event notifications. Ms. Manning reminds us that plan sponsors should be cautious about any outstanding elections that may be tied to “due date” of contributions, since those due dates may have changed with this relief.

## **Risk ASOP**

The risk ASOP is still in process and is expected to be released soon. The exposure draft included a requirement that actuaries should conduct assessments of risks (not necessarily numerical assessments) when completing a covered assignment. The possible methods to evaluate risk could include scenario testing, stress testing, and sensitivity testing, among other methods. The actuary will need to disclose the results of this risk assessment with additional commentary.

## **ASOP No. 23 – Data Quality**

The updates to ASOP No. 23 are effective for data that was provided or developed on or after April 30, 2017, rather than being tied to the measurement date of the calculations. The new ASOP includes a clarification that we should be applying the ASOP to data even if we’re preparing the data for another actuary to use. Data elements now include both the raw data and the elements that are derived from that raw data. In addition, this ASOP includes commentary that in cases of data deficiencies or problems, we are allowed to adjust the end results of our calculations to reflect the data shortcomings. In addition, actuaries should be disclosing any unresolved data concerns, limitations to the data, and whether the actuary conducted a review of the data.

## **417 Final and Proposed Regulations**

Bruce Cadenhead described the final regulations that were recently released, which describe the bifurcation of a benefit and allows the 417(e) requirements to apply only to the accelerated portion of the benefit. This bifurcation can be explicit or implicit. Mr. Cadenhead described a situation where a defined portion of the benefit is allowed as a lump sum and how that subsidized lump sum may not be used to offset the other portion of the benefit. Ms. Zimmerman commented that although a recent webinar stated that the approach in the final regulations is mandatory for plans that bifurcate benefits, the IRS is currently looking at whether the old rules are still valid. The webinar is still helpful for unofficial guidance on other aspects of the final regulations. Further, official guidance is not expected prior to year-end.

The proposed regulations clarify some items, such as including pre-retirement mortality in the calculation of the minimum present value, treating Social Security Level Income Option (SSLIO) payments as entirely subject to 417(e) and allowing cashouts of late retirement benefits to exclude suspended payments. Mr. Cadenhead pointed out that these clarifications result in some items that are still unclear. For example, could the SSLIO be treated as a temporary annuity plus a life annuity? Should the preretirement mortality discounting also apply to late retirement increases? We continue await guidance on those items.

## **Funding Methods**

Mr. Cadenhead discussed Revenue Procedures 2017-56 and 2017-57 which were recently released. These allow for automatic approvals of certain funding method changes for plans to which Section 430 applies and is applicable for 2018 but can be applied retroactively. Ms. Zimmerman pointed out that plan sponsors who have an outstanding application for a 2017 method change that would be automatically approved under this guidance should send a note to the IRS to retrieve the application.

Some of the method changes that may be subject to automatic approvals are asset valuation method changes, changes to the valuation date for small plans, or treatment of benefits covered by insurance policies. In addition, there are revised

# 2017 CCA Annual Meeting Session Summaries

rules for takeover plans and new valuation software, addressing and updating the thresholds that are required to “match” the prior actuary’s or prior software calculations. Mr. Cadenhead also described how the new guidance addresses changes in data elements, which are approved if there is less than a 1% difference in funding target and normal cost. He walks through several examples of what constitutes a change in data element vs. a change in assumption. In addition, the new guidance allows for some additional changes in funding method that are made in conjunction with a fully funded terminating plan.

Mr. Cadenhead described the provisions related to plan mergers. For de minimis mergers where the PVAB of the little plan is less than 3% of the bigger plan, the smaller plan’s methods are simply ignored by the ongoing plan. For those mergers that are not de minimis, the combined plan may generally use the methods of one of the two plans that is being merged. If the merger occurs mid-year, both plans must have used a beginning of year valuation date and the amortization installments are prorated for the remaining post-merger period. For merging plans, automatic approvals will not apply if the AFTAPs are in different ranges, even if benefit restrictions don’t matter. Ms. Zimmerman pointed out that Private Letter Rulings are still to be followed if you have a plan with a Private Letter Ruling.

## **FASB – Pension Cost**

Michael Pollack described recent updates to the presentation of net periodic pension cost, which will better align FASB standards with IFRS principles. The service cost is the only component of the net periodic pension cost that can be included in operating income and the remaining components

should be included in non-operating income. Mr. Pollack pointed out that a question remaining after the FASB update is the treatment of trust-paid administrative expenses, which have traditionally been handled either through a load to service cost or a reduction to the return on asset assumption. Now that service cost is handled differently than the other expense components, this distinction would make a difference, but the FASB did not provide guidance on this question.

## **Implicit Interest Rates**

Mr. Pollack explained the recent guidance on PEP plans, issued via Notice 2016-67. For those PEP plans that become a cash balance at separation, the rules about cash balance plans (interest crediting rates) apply and 411(d)(6) protection is afforded to these plans when they update those rates. For PEP plans where there is no increase for interest after separation, where the balance at separation is divided by an annuity factor (the annuity factor’s rate is the “implicit” interest rate”), the recent guidance states that these implied interest rates are not currently subject to the market rate rules in the hybrid plan regulations. But not all plan sponsors thought this would be the case and some may have already adjusted these plans to reflect a market rate of interest. So, now there is an outstanding question of whether 411(d)(6) protection is offered in these situations. The IRS has requested comments on the guidance for plans with implicit rates.

## **PBGC Update**

The session concluded with a brief discussion of the two legislative proposals that affect PBGC premiums, which may or may not go anywhere, according to the presenters.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 407

### SETTING THE INVESTMENT RETURN ASSUMPTION FOR PUBLIC PLANS

#### Speakers:

- David L. Driscoll, Conduent
- Lindsey Loftin Settle, Horizon Actuarial Services
- R. Evan Inglis, Nuveen Asset Management
- James J. Rizzo, Gabriel, Roeder, Smith & Company
- Session Moderator: Michael J. de Leon, Deloitte Consulting, LLP
- Session Recorder: Arthur H. Tepfer, TCG Public Consulting, Ltd.

ASOP 27 is the actuarial standard for setting the Investment Return Assumption for all plans. What procedures and sources are available to the actuary in selecting appropriate assumptions?

#### Background

This session addressed the methodologies available to the actuary in the assumption setting process. What considerations should be given to actually setting a reasonable assumption? How can one use stochastic modeling in the selection process? How does the actuary deal with investment advisors and what insights can be drawn from these investment advisors? What is the current perspective on developing the capital market assumptions? What considerations are there in short-term vs. long-term given the current low-rate environment? What can we learn from the National Hurricane Center about setting pension return assumptions?

- David Driscoll, Conduent – considerations actuaries use in setting the assumption, stochastic modeling in setting expected returns, working with investment advisors, etc.
- Lindsey Loftin Settle, Horizon Actuarial Services – insights from Horizon’s annual survey of investment advisors
- R. Evan Inglis, Nuveen Asset Management – perspective on developing the capital market assumptions, short-term vs. long-term considerations, the current low-rate environment, impact of underlying inflation, etc.

- James J. Rizzo, Gabriel, Roeder, Smith & Company – relating National Hurricane Center forecasting to investment return assumptions

#### Summary

Mr. Driscoll began the session with a summary of the process described by ASOP 27 *Selection of Economic Assumptions for Measuring Pension Obligations* for selecting the investment return assumption. The general process involves identifying the components, evaluating relevant data, and evaluating specific factors for the measurement. A review of appropriate investment data should be made. This includes current yields to maturity on fixed income investments, forecasts of inflation, and historical investment data and plan performance. The actuary should consider whether a provision for adverse deviation or plan provisions that are difficult to measure may be needed, and bear in mind the need to balance between refinement of the economic assumption and materiality. He points out that after completing the steps for each economic assumption, the final set of assumptions must also be reviewed and appropriate adjustments made, if necessary.

The reasonableness of the assumption must be determined by its appropriateness and its reflection of the actuary’s professional judgment; must take into account historical and current economic data that is relevant as of the measurement date; must

# 2017 CCA Annual Meeting Session Summaries

be unbiased; and must reflect the actuary's estimate of future experience.

In addition to many standard approaches Mr. Driscoll discussed the ability to use stochastic modeling to estimate future returns. A discussion of the GEMS model, which simulates 1,000 paths and results, is presented. The GEMS model captures an important aspect of reality as means, volatilities, and correlations are determined dynamically and can change over time.

Mr. Driscoll presented specific guidance for selecting the investment return assumption considering the factors of general investment policy, reinvestment, and manager performance. He further points out that an examination of arithmetic vs. geometric forecasts (where differences can be substantial); and incorporation of a margin for adverse deviation, which must be disclosed in accordance with ASOP 27. Other key points of ASOP 27 are explored including that the assumption may be developed as the sum of individually estimated separate components. Mr. Driscoll concluded with the observation that, in many cases, public sector clients rely largely on investment advisors and in such cases the actuary should ensure that assumptions chosen or recommended on the basis of input from such advisors are consistent with the actuary's own view of what is reasonable and with other economic assumptions.

Ms. Settle continued the session with a review of public fund return expectations from a study completed by the National Association of State Retirement Administrators based upon data from public funds from 2001- 2014. It is noted that although the median rate had decreased over the past decade from 8.0% to 7.5%, a significant number of plans are still using rates of 8.0% or higher.

A discussion of the 2017 Horizon Survey of Capital Market Assumptions was then presented.

The survey included 26 advisors to multiemployer pension plans, 6 published white papers and 3 advisors outside of the multiemployer community. All 35 respondents provided short-term (10 years or less) assumptions and 12 respondents also provided long-term (20 years or more) assumptions. The full survey is available at

<http://www.horizonactuarial.com/blog/2012-survey-of-capital-market-assumptions>.

Ms. Settle noted that, in this study, changes in expected returns were mostly driven by changing return expectations and changes in the survey participants. It was not established that the trends were sustained on a year by year basis and that, therefore, it may not be appropriate for actuaries to change return assumptions each year to reflect current market trends. It was pointed out that the limitations of these kinds of studies are many; as reasonable people may differ.

Ms. Settle also noted that the survey assumptions are generally indexed, adjusted downward for investment fees and, sometimes adjusted upward for alpha. Furthermore, standardized asset classes were used to categorize each advisor's assumptions and, therefore, may be incomparable. Since a normal distribution of returns was established, certain limitations in comparability may be also be presented and, finally, a simplified formula for conversion between arithmetic and geometric returns was used.

Even with these caveats, the study provides insight into what is happening right now. Ms. Settle noted that care should be taken in using the results of the study; and, the actuary should consider the purpose of the measurement valuation (solvency or snapshot); time horizons, and changing expectations.

Ms. Settle also noted that the survey results could be used to plan for adverse deviations and applied to Multi-employer ERISA funding standards, to



# 2017 CCA Annual Meeting Session Summaries

support move conservative assumptions, or to provide a general funding policy with a “cushion.”

The session continued with a presentation by Mr. Inglis who pointed out that the traditional approaches to determining expected discount rates may no longer be appropriate as methods for forecasting future equity returns have evolved significantly during the last 20 years. There are three reasons for this.

1. Methods of forecasting returns have changed
2. Current market conditions are fairly extreme
3. Pension plan cash flows are due in the relatively near future

Mr. Inglis noted that traditional methods for forecasting equity returns included the “building block” approach and historical means. Now there is a greater awareness that current P/E ratios are strong indicators of future returns; because, increases in P/E ratios create lower dividend yields and less room for future P/E ratio increases. The forecast paradigm has changed.

Mr. Inglis also points out that the time periods matter as pension payments are made over defined periods of time.

Because lower interest rates have pushed up P/E ratios to very high levels, Mr. Inglis indicates that we are likely to see lower equity returns in the future than we have experienced in the past. Typical point forecasts of U.S. equity returns for the next 10 years are in the 4.0% to 7.0% range.

Mr. Inglis suggested that the actuary is now in a position to estimate future returns using current market information including payout yield, growth, changes in P/E rates and sentiment, and inflation. With the above information the actuary is able to align the discount rate assumption with the investment consultant’s inflation creating a more appropriate assumption.

Mr. Rizzo concluded the session with a most fascinating presentation on lessons to be learned

from the National Hurricane Center about setting pension return assumptions.

He asserted: “Let’s not be on the wrong side of history. The cost of being wrong can be devastating.”

Mr. Rizzo asserted that it is all about **process**. We must move our clients toward a process for determining and adopting the investment return assumption driven by discipline, investment finance, and analytical thinking. He suggests that “we should try to move our clients away from a process based on politics, budgets and wishful thinking, toward a robust process driven more by actuarial and finance principles and analytics for an unbiased forecast of the future.”

Mr. Rizzo suggested we not be on the wrong side of history on this topic of lowering our return assumptions. He stated that the cost of being wrong can be devastating to all interested parties. Some plans have a very disciplined and analytical process for setting the return assumption, but most do not.

The National Hurricane Center has now discarded the “Historical-based Model” for forecasting (based upon past historical relationships) and adopted state of the art “Dynamical Models,” including model families developed by experts, multiple source models, and multi-complex models. “Consensus Models” are developed which combine the various forecast models into ensembles and have a lower tracking error than any individual model. The NHC builds a number of consensus models and applies staff expertise to develop an Official Forecast for public consumption.

Mr. Rizzo opines that, similar to the NHC, our client’s “process” for setting pension return assumptions should resist projecting past inflation and returns into the future, seek experts in forecasting (for inflation and investment returns), turn to more than just one expert source, adopt a consensus of expert expectations for assumptions, rely more on mid-term horizons than long-term horizons, and avoid agency risks.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 501

### AN IN-DEPTH LOOK AT ANNUITY PURCHASES

#### Speakers:

- Michael S. Clark—P-Solve
- Alexandra Hyten – Prudential
- Russell S. Proctor – Pacific Life
- Session Assistant: Steven R. Pribis – Dietrich & Associates

#### History and Popularity

Until 2012, the volume of group annuity purchases in connection with qualified pension plans averaged about \$2 billion per year. The jumbo purchases of GM and Verizon, collectively \$33.6 billion, started a trend that hasn't stopped since. Volume has increased steadily since then, attaining about \$14 billion in 2015 and projected to reach as high as \$20 billion in 2017.

Popularity has increased for several reasons. First, the general perception on the part of plan sponsors was that it was an "all or nothing" proposition. Now they are more informed, realizing that they can parse a select group of their participants, rather than having to wait until they had sufficient funds for plan termination. Many plan sponsors have also realized that a substantial group of their retirees have small annual benefits. Additionally, the increase in PBGC premiums and other expenses has increased the cost of maintaining a defined benefit plan and represents a significant administrative cost most specifically for the small benefit retirees. Additional reasons for the interest in annuities has been the release of mortality tables giving rise to increased balance sheet liabilities that are more in line with annuity purchase prices, more volatility in the asset/liability balance and a desire to get the balance sheet liability under control.

#### Rules, Guidelines and Other Considerations

There are numerous rules that dictate how a plan sponsor can proceed with the purchase of an annuity to settle plan obligations. The process of selecting an insurer to provide the annuities is a fiduciary decision. In 1995, the Department of Labor

(DOL) issued an Interpretive Bulletin, 95-1, which serves even today as the standard by which plan sponsors and their advisors make their decision. Three primary mandates associated with this ruling are that there must be a thorough and objective (provider) search, that several factors relating to an annuity provider's claims paying and creditworthiness must be evaluated, and that reliance on ratings as provided by insurance ratings services alone is NOT sufficient to satisfy Interpretive Bulletin requirements.

DOL 95-1 also refers to the process plan sponsors follow for selecting the safest available annuity. Considerations include the investment portfolio quality, the size of the insurer, its capital and surplus, lines of business of the insurer, and the annuity contract itself which may lead to more than one "safest" available annuity. Other considerations include service levels, plan participant support and name recognition.

New fiduciary regulations have also had an impact on the process for selecting an annuity provider (the preamble to the regulations cite bulk pension plan annuity purchases as a reason new regulations were needed). The regulations address the notion of investment advice; acquiring, holding and/or disposing of investment property, which is clearly a fiduciary responsibility.

#### Transaction Considerations

Factors that would influence price include: the nature of the workforce, size of the benefits, age and sex of the annuitants, and geography. Another important aspect of annuity pricing is the

# 2017 CCA Annual Meeting Session Summaries

cleanliness of the census data and the accuracy of the summary of plan provisions. Both can help the plan sponsor get the best pricing possible.

A comparison of the level of protection from the PBGC and state guarantee association is also important to understand, both for the plan sponsor and the participants. Of primary importance is the knowledge of the likelihood of an insurer defaulting and how each individual could be affected. Insurers are not permitted to be underfunded, which gives a great deal of security to the plan sponsor.

Additional requirements for reserve and surplus should also give the plan sponsor more assurance as the responsibility shifts to the insurance company.

Insurers can maintain either a general account or separate account in connection with the annuity transaction. The separate account is insulated from the general creditor claims in the event of insurance company insolvency, which generally means a greater cost that is anywhere from 50-100 basis points. These accounts are dedicated to the plan sponsor and could be either a single or commingled separate account. Often there are more regulatory filings needed for separate accounts, making them more costly and thus prone to the bigger transactions that are generally over \$100 million.

Annuity purchases are generally with one insurance company. However, there may be reasons that the plan sponsor may want to split the transaction with two or more insurance companies. One reason for this is that insurance companies can be attracted to different types of populations and a split can drive down the overall price of the transaction (perhaps with some larger benefits or with different groups of participants), splitting it either vertically or horizontally. Split transactions are usually more complex from an administrative perspective, but could provide additional state guarantee coverage.

Most annuity transactions are paid in cash. However, there are circumstances under which it is possible for the plan sponsor to pay all or a portion of the transaction in kind in order to reduce the cost of securities transactions. If the plan sponsor is considering such a transaction, they should make the insurance company(ies) aware of this as early as

possible to ensure that the insurance company is willing to take on the specific types of investments. For example, insurance companies prefer bigger and fewer blocks of bonds than smaller ones. Also, more time is generally needed to evaluate the portfolio, so the importance of lead time is paramount. Cost savings are real with the right matching of investments and cashflow. Cost savings could range from 0.5% to 2% as compared to a cash deal. Historically these Assets in Kind (AIK) deals needed to be greater than \$100 million. Many insurers are now willing to look at AIKs of lesser amounts.

Historically annuity purchases have been seasonal. The past several years have seen over 40% of the transactions occurring in the last quarter of the year. Because of this trend, staffing on the part of the insurance companies can often create capacity issues. These staffing capacity issues may make it difficult for plan sponsors to get annuities purchased by year-end. Plan sponsors and their advisors are encouraged to get the data and annuity requests in sooner rather than later, especially in the case of plan terminations.

Timing from the perspective of the actual transaction is especially critical as the insurance company quote is good for only one day. The plan sponsor must be ready to sign the transaction agreement that day. Most deals are now done with a "one and done" process, so no negotiating is likely to take place on "Bid Day." The actual annuity contract will take more time, as data cleanups, etc. will need to take place which often results in some cash true ups or true downs.

## **Consulting Considerations**

As a result of the timing and intricacies associated with the purchase of annuities, various consulting opportunities arise. Actuaries should communicate clearly with plan sponsors that there can be a gap between accounting liabilities and the cost of annuities. For all retiree groups this gap may be only 5% or less. However, this gap is greater, often 20% or more, when there is a longer duration on the liabilities, especially for those participants not in pay status. Reasons for this include uncertain cash flow and optional forms of benefit elections as well as reinvestment risk. Expectation should be made clear to the plan sponsor to avoid surprises.

# 2017 CCA Annual Meeting Session Summaries

Annuity purchases have typically represented a complete settlement of the plan liability. However, more recently, insurance companies have been willing to consider buy-in contracts. In a buy-in contract, the insurer guarantees the payment and covers the investment and longevity risk, but that liability (and the assets of the annuity contract) remains on the books of the plan sponsor. A buy-in does not trigger a settlement. Therefore the plan sponsor retains responsibility to pay PBGC premiums. It also could be viewed as a more secure (liability driven investment) LDI strategy. While it “guarantees” the option to convert to a buy-out contract at any time in the future, many plan sponsors view it as a short-term solution due to the continued PBGC premiums and other expenses prior to conversion.

“Deal killers” represent issues that make it extremely difficult to negotiate an annuity contract. They include cash balance plans, unlimited lump sum options, employee contributions, deferred liability too great a percentage of the total plan

obligations, as well as COLA provisions, size (too big or too small) and timing. The best advice is to communicate clearly and as early as possible to the plan sponsor to develop a realistic set of expectations, and to work with the insurers with advanced notice to increase the likelihood that they will bid on a specific case.

The other considerations for plan sponsors to consider include timeline to plan termination, settlement accounting, and future asset allocation decisions. Plan sponsors that are nearing plan termination may want to think twice before purchasing annuities for some or all of their retirees in order to maintain a mix of immediate and deferred annuities upon termination. Sponsors will also want to be aware of the potential for settlement accounting costs when doing an annuity purchase (either a buy-out or full plan termination). After a retiree carve-out it will be important for plan sponsors to reassess their asset allocation especially if they are using an LDI glidepath.

# 2017 CCA Annual Meeting Session Summaries

## Session 502

### EFFECTIVELY WORKING WITH CLIENTS' EXTERNAL ACTUARIES

#### Speakers:

- Dan Langlois – KPMG LLP
- Casey Shork – Deloitte Consulting LLP
- Steve Eisenstein – KPMG LLP
- Session Assistant: Nick Thornley - Ernst & Young LLP

#### Auditing Pension Estimates

The session began with a focus on an auditor's view of the interactions in the financial reporting ecosystem. The Public Company Accounting Oversight Board (PCAOB) sets auditing standards, regulates of public accounting firms, and enforces through an inspection of audit firm work papers based on a sample of SEC filings. Each year the PCAOB makes recommendations for improving insufficient compliance with auditing standards and documentation requirements.

Public accounting firms have national offices that monitor standard setting activities of major organizations such as the PCAOB, Securities and Exchange Commission (SEC) and Emerging Issues Task Force (EITF). These national offices interact with representatives of the PCAOB and SEC and offer opinions and training to clients and internal teams.

A recurring deficiency identified by the PCAOB is testing of internal controls and areas of judgment, which includes pension accounting. For auditors and clients, testing of controls is difficult. Auditors determine risk points in the selection of key assumptions, including those assumptions that do not change. The focus and intensity on this aspect of the audit has likely not hit its peak. The PCAOB has issued two proposed rules (PCAOB Release 2017-002 and 2017-003) focused on the use of specialists and auditing estimates. If enacted, these rules would increase attention on evaluating the work of the actuary (potentially indicating rework of

the actuarial valuation) and on management controls. The proposed rules affect multiple disciplines, not just actuaries, and would likely require increased use of actuarial specialists within auditing firms. This may put a burden on smaller auditing firms that do not employ internal specialists.

The panelists closed this portion of the session noting that financial statement materiality is determined by audit standards (not specialists) and can be much lower for employee benefit plan audits as compared to corporate financial statement audits.

#### Financial Accounting Standards Board (FASB) Update

Accounting Standards Update (ASU) 2017-07 provides clarifications on how net benefit cost is to be accounted for on income statements. Service cost is included with other employee compensation costs, whereas the other components of net benefit cost are presented separately outside of operating income. As a result, only service cost is eligible for capitalization in assets. Capitalization in assets refers to delayed recognition of certain costs related to amortization of fixed assets or sale of inventory. Although ASU 2017-07 does not directly affect how actuaries calculate net benefit cost, it results in renewed attention by auditors on certain aspects of net benefit cost. The classification of administrative expenses is not addressed directly by US GAAP, and there is diversity of practice. The panelists note that upon adoption of the ASU,

# 2017 CCA Annual Meeting Session Summaries

companies may want to be consistent with prior treatment of administrative expenses. Particular attention should be paid to frozen plans, as such expenses are not a part of the definition of service cost. An additional consideration, as per Goldman Sachs, is that the removal expected return on plan assets from operating expenses may lead companies to shift to more conservative investment strategies.

A further implication of the ASU for parent/subsidiary pension plan arrangements is how a subsidiary should reflect its share of net benefit cost if the subsidiary issues its own financial statements. There are different approaches currently being used including a reasonable allocation methodology or following multiple employer pension plan accounting rules. An opinion as to what approach to take was not provided. However, it may be wise to have support and rationale for the approach taken.

Other FASB updates include ASU 2017-06, which clarifies presentation requirements for a plan's interest in a master trust; an active project aimed at improving the effectiveness of pension disclosures in the notes to financial statements; research projects related to smoothing in earnings and measurement of the benefit obligations.

## **Assumptions**

The panel provided insights into key assumptions for pension and other post-employment benefit (OPEB) plans.

Multiple discount rate approaches now exist, including the standard and granular yield curve approaches, hypothetical bond portfolios, and indices. ASU 2015-04 helps in the selection of discount rates where the measurement date does not coincide with month-end by allowing a shortcut to utilize the nearest month-end (not quarter-end) as the measurement. However, care still needs to be given to the materiality of this shortcut. The use of one discount rate for multiple plans is only

appropriate for plans with similar attributes, and may cause risk in carve-out/transaction activity.

The long-term rate of return on plan assets (LTRR) assumption may include an allowance for alpha (i.e. active management). Support for alpha is key. Even without alpha, it is important that any support provided (e.g. model output) should connect to the selected assumption. Best estimate (not conservative or aggressive) is the right approach.

Both annuitant and lump sum mortality require sufficient proof that any adjustments to standard tables and projection scales is management's best estimate. This concept applies to assumed termination and retirement rates, as well as OPEB-specific assumptions (such as participation rate), as clear, supportable methodology in the selection of the assumption is emphasized.

The handling of subsequent events, particularly as relates to the release of new mortality information, is guided by an American Institute of Certified Public Accountants (AICPA) technical Q&A issued in February 2015, as well as Accounting Standards Codification (ASC) 855-10-55-1. Subsequent events relate to information available after the balance sheet date, but prior to the issuance of the financial statement. Such information should be taken into account, but does not necessarily require a change to existing results. The panelists noted that a good story/rationale is key. A specific example is the release of new mortality projection scales by the Society of Actuaries subsequent to ASC 960 valuations, but prior to issuance of the plan financial statement.

## **Audit Support/Communications**

The session closed with an emphasis on communications to auditors. The panelists noted that often requests to clients and their third-party specialists (i.e. actuaries) may be sent by auditors rather than the auditor's specialists, which may remove additional technical information that provides context to the requests. Auditors and their

# 2017 CCA Annual Meeting Session Summaries

specialists have only the documentation provided to them, and are reliant on the client and their specialists' institutional knowledge of the client. The panelists emphasized that requests made are not meant to put anyone on the defensive.

Actuarial Standard of Practice (ASOP) No. 21 drives interactions with auditors, and ASOP No. 41 governs actuarial communications. Auditor specialists do read actuarial certifications in detail to look for limitations, disclaimers, responsibility for the assumptions, and confirmation of qualifications. Actuarial certifications can become outdated or stale, and a comparison against the current ASOP No. 41 may highlight areas of improvement.

A key aspect of the certification crucial to auditors and their specialists is the identification of who has taken responsibility for the assumptions utilized in the measurements. Many actuaries are uncomfortable with taking responsibility for the

LTRR assumption, as clients and other specialists (such as investment advisors) have significant input or outright prescribe the assumption to the actuary. However, if the actuarial certification has no commentary, auditor specialists will assume the signing actuary has taken responsibility for the assumption as described in ASOP No. 41. If an assumption conflicts with what the signing actuary believes is reasonable, this must be disclosed. As an example, consider an actuary's use of 25th – 75th percentiles as basis for reasonability of an LTRR assumption. If the LTRR assumption selected was based on the 81st percentile, the actuary may want to include a disclaimer in their certification for the LTRR assumption in accordance with ASOP NO. 41. The panelists further noted the challenges for multi-service firms (i.e. investment and actuarial groups), in which coordination is assumed by the audit specialists.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 505

### BRINGING NEW PRESCRIPTION DRUGS TO MARKET

Speakers:

- Drew Kirchner, FCA, FSA, MAAA – Senior Director of Pharmacy Advisory Practice, Optum
- David Armstrong, Ph.D. – Director of National & Specialty Products, Boehringer Ingelheim
- Session Assistant: Don Hoffman, FCA, FSA, MAAA – Optum

#### Background

The introduction of new drugs represents a huge investment to pharmaceutical manufacturers, and the marketing and pricing of these drugs are a critical issue for them. Speakers discussed models, approaches, and considerations used in evaluating the effectiveness of one drug vs. other options from several stakeholder perspectives.

#### Summary

In bringing new drugs to market, there are many different players involved across a drug manufacturer and health plan and achieving cross functional buy in is critical to success. It is important to know the audience you are speaking to as how the message is presented might need to change. For example, if you were talking to a Chief Financial Officer (CFO), you might want to be more financially focused and, if you were talking to a Chief Medical Officer (CMO), you might want to be more clinically focused. With the launch of a new drug both the CFO and CMO will need to be involved with the process and will expect some modeling to be completed to make decisions. Generally, the CFO is more likely to evaluate the new drug using an actuarial model where the CMO may be more likely evaluate a health economic model. While these models differ on a variety of approaches and applications there are common foundations between them.

When modeling the impact of a new drug it is important to look at the total cost for treating the condition. When looking at total cost for a medical event there are often events prior to the claim with the diagnosis that you are looking for when the member is getting tested for possible reasons for their condition as well follow up treatments after

the event. The grouping of these claims is called episode treatment groupings. Each member can have multiple episodes or clusters of episodes to treat certain conditions. When evaluating the total cost of treating these episodes it is important to look at pharmacy, facility, and physician costs because a change in one of the components may change the cost of the others. Along with evaluating the different component of the episode cost, evaluating the disease co-morbidities can influence the total cost effectiveness of treating certain conditions.

Eventually when actuaries are evaluating new treatments for conditions, a return on investment (ROI) model is developed to assess the cost effectiveness of a new treatment. The key assumptions in an ROI model for a new drug to market are cost trend, interest rate, initial investment, medical offset, risk adjustment, and churn rate. After evaluating the impact of each of the key assumptions, an aggregate savings estimate for the book of business is developed to use in the decision making process for the new pharmaceutical product.

With Health Economics and Outcomes Research (HEOR), performed by the pharmaceutical manufacturers, the research is similar to actuarial models in that it tries to evaluate the economic impact of the new treatment. However HEOR measures the impact of new drugs in scientific studies. The studies that HEOR use are often clinical trials or real world studies where there are control groups in which certain patients are treated with the new drug and others are treated with a placebo or under the current standard of care. These tests are often patient-focused as to how well the patient



# 2017 CCA Annual Meeting Session Summaries

is treated and the effect the treatment has on the healthcare system and even society in general.

One product of HEOR research is a Budget Impact Model (BIM). The budget impact model is similar to the ROI model that actuaries use. The BIM model is produced by the drug manufacturers when releasing a new drug to show its costs and the effect on medical costs. Good BIM models not only show the savings for members that are treated but also take into the account the side effects that the treatment may have. These BIM models are often shared with health plans but since they are generally shared with the chief medical officer, actuaries often do not see the results.

When comparing Actuarial models and HEOR models, there are many similarities in the foundations, but divergent approaches and

applications. Both are trying to quantitatively measure the economics and the health impact a certain treatment has on a population. Some of the divergent approaches come from the different perspectives of each audience. For example, actuaries generally try to use large, credible datasets to reduce variation and can estimate confounding factors. HEOR models often try to minimize confounding factors and develop studies on specific populations. Additionally actuarial models are often trying to identify correlation of events while HEOR models are trying to establish causation. Understanding both modeling techniques can be helpful in communicating with different parts of organizations and in negotiations with pharmaceutical manufacturers on how the health plans position their drugs.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 507

### RISK IS THE WORD –EVALUATING AND COMMUNICATING RISK FOR PUBLIC PENSION PLANS

#### Speakers:

- Paul Angelo, FCA, FSA, EA, MAAA – Segal Consulting
- Donald J. Boyd. PhD – Rockefeller Institute of Government
- Frank Todisco, FCA, FSA, EA, MAAA – Actuarial Standards Board
- William R. Hallmark, FCA, ASA, EA, MAAA – Cheiron, Inc
- Session Assistant: Piotr Krekora, FCA, ASA, EA, MAAA – Gabriel Roeder Smith & Company

#### Introduction

After introductions, the session started with a brief discussion of differences found in Actuarial Standard of Practice (ASOP) 51 with respect to some of the risk assessment methods often thought as synonymous:

- *Scenario test* estimates impact of one possible event, several simultaneous events, or several sequential events
- *Sensitivity test* assesses impact of change in actuarial assumption or method
- *Stress test* measures impact of adverse changes in one or a few factors (assumptions or events)
- *Stochastic modeling* generates probability distributions of potential outcomes by allowing for random variation in one or more inputs over time, such as investment returns

#### The Rockefeller Institute's Pension Simulation Project

The first segment of the session summarized the Pension Simulation Project, undertaken by the Rockefeller Institute, reporting on risks taken by state and local government pension plans and their potential impacts on state and local governments. The project examines risks related to public sector pensions and borne by various stakeholders, using stochastic methods.

The combined liabilities of public sector pension plans, as measured by the Federal Reserve Board using their own set of assumptions, including a discount rate of approximately 5%, come to approximately four trillion dollars resulting in unfunded accrued liability of almost two trillion dollars. Computations of the liabilities using risk

free rates of return result in even higher unfunded liabilities. It was observed that despite the decreases in the risk-free rates, most public sector plans maintained the assumption relative to the long term rates of return, or decreased it only slightly. These declines in risk-free rates have made the investing environment more difficult for pension plans. Over the last 25 years, yields on 10-year treasuries came down from 8% to just over 2%. Discount rates used by corporate plans followed the decline in substantial part but rates of return assumed by public sector retirement systems didn't come down as much. This was accompanied by a decline in allocation to equity by corporate plans while the share of investments in risky assets by public sector plans held steady or even increased. This resulted in increased exposure of plan sponsors to investment risks. The exposure to risk is illustrated by comparing volatility of earnings on assets to state and local government tax revenue. The volatility is represented by one standard deviation of the distribution of expected rates of return and is estimated to have increased from 4.3% in 1995 to 12% in 2016. The ratio of volatility of invested assets to tax revenue more than tripled between 1995 and 2016, increasing from 7.6% to 27%. The increases in relative exposure to investment risk resulted from growth of pension assets outpacing growth in tax revenue, compounded by growing equity allocation.

Volatility risk was further illustrated by comparing contribution patterns for a sample plan under

# 2017 CCA Annual Meeting Session Summaries

different scenarios resulting in the same 7.5% 30-year geometric average of rates of return but dramatically different patterns of returns over the 30 years. Contributions were developed using 7.5% discount rate with 5-year asset smoothing and 30-year open level-percent-of-pay amortization of gains and losses. A deterministic scenario earning exactly 7.5% every year was compared to two scenarios selected from a stochastically generated sample, each of which achieved a 7.5% compound return at the end of 30 years.

While contribution rates for the deterministic scenario decline slowly over time, contribution rates under stochastic scenario varied greatly with 60% declines for a scenario with high concentration of good returns at the beginning of the 30-year period and 50% increases for a scenario with a string of losses at the beginning of the simulation period. Similar patterns were observed for the funded ratio. So even for situations where assumptions are met on average over a long period of time, there are risks of wide swings in contribution requirements and funded ratios. It's important to consider how stakeholders are likely to react to such volatility. Politicians have been known to increase benefits or re-direct resources at times of favorable experience, or attempting changes to benefits at the bad times.

Another important aspect of risk taking relates to the fact that plans take the risks but they don't bear the risks. The risk is borne by other parties:

- In the short and medium term, sponsors and their stakeholders – taxpayers, beneficiaries of government services and investments, government workers who may feel wage squeezes, politicians, and government CFOs - bear political pain of raising contributions
- Over the very long run, our children and grandchildren, and possibly retirees, depending on legal protections, bear these risks.

This could lead to erosion of public support for pensions

With heightened risks and the well-being of pension plans depending in part on behavior of various stakeholder groups, providing the right risk assessments is crucial. Presenting probabilities of bad outcomes has been working well for many such audiences. This concept was illustrated with graphs of growing probabilities of contribution rates increasing by 10% of payroll in a 5-year period and funded ratio falling below 40% for three hypothetical distributions of expected rates of return: two of them featuring 7.5% expected long term rate of return but one having a 12% standard deviation and the other with 17.5% standard deviation; and a third one having a 6% expected rate of return with a 12% standard deviation. Increasing volatility or decreasing mean expected returns both have an effect of increasing the probability of bad outcomes, but higher volatility was more likely to lead to faster increases in contribution rates.

Another way of presenting information on risk is in a narrative form. A quote from the 2015 Annual Review of Funding Levels and Risks Report for the California Public Employees Retirement System (CalPERS) was presented as a great example of communicating risk for decision makers: *“unless changes are made, it is likely that there will be a point over the next 30 years where the funded status of many plans will fall below 60%.... There is about a 15% chance that we will see funded statuses below 40%.”* This communication style resonates well with legislators and budget officers.

The segment was concluded with an observation that public pension investment risk has grown significantly over the last 20 years and that risk is taken by plans, but borne by employers and taxpayers. Generally, risk is poorly understood. Simple but easily understood illustrations are better in communicating risk than measures that are sophisticated but difficult to understand.

# 2017 CCA Annual Meeting Session Summaries

## **Risk ASOP –Late Breaking News**

The second segment of the session was centered around the Actuarial Standard of Practice (ASOP) on risk. It started with a partial chronology leading to issuance of ASOP No. 51, *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Plan Contributions*. The standard will apply to “any actuarial work product with a measurement date on or after November 1, 2018.”

This part of the session started with an overview of chronological development of ASOP No. 51 and guidance put forth prior to drafting the risk ASOP. The 2010 revisions to ASOP No. 41 added Sections 3.4.1: “The actuary should consider what cautions regarding possible uncertainty or risk in any results should be included in the actuarial report.” and 4.1.3.d: Disclose “any cautions about risk and uncertainty.” Prior to 2010 revisions, this standard did not provide any guidance on communicating risk or uncertainty other than disclosing “any limitations or constraints on the use or applicability of the actuarial findings.” Similarly, ASOP No. 4 did not offer any risk related guidance prior to 2007. 2007 revisions required use of professional judgment in considering significant sources of potential volatility if scope of assignment includes analysis of potential range of future measurements. A requirement was also added to include a statement cautioning intended users that future measurements may differ significantly from the current measurement. Furthermore, these revisions introduced a requirement to disclose results of analysis of range of such future measurements and factors considered, if scope of assignment included such analysis. In other cases, a statement was required indicating that, due to the limited scope of the actuary’s assignment, the actuary did not perform an analysis of the potential range of such future measurements. The 2013 revisions to ASOP No. 4 added a requirement to qualitatively assess the implications the plan sponsor’s funding policy or contribution allocation procedure (one example of

such an implication could be a risk of inadequate funding of the plan).

Before presentation of factors considered in drafting ASOP No. 51, the audience was reminded about principles governing development of standards. As such, ASOPs set standards for “appropriate practice.” They are principles-based and not narrowly prescriptive. They generally allow for use of professional judgment in selecting methods and assumptions and conducting an analysis, and identify factors that the actuary typically should consider. Pension ASOPs have generally been applicable to all plan sectors, private and public, and have been applicable to all plan sizes. ASOP 51 follows those principles and applies equally to all plans, although early drafts made some attempts to include provisions applicable only to large plans.

Presentation of issues addressed by the Actuarial Standards Board (ASB) Pension Committee in drafting ASOP 51 started with the consideration of whether this Standard should be limited to assessment and disclosure of risk, or should it also include actuarial advice on managing or reducing risk? Drafting committee opted to limit to assessment and disclosure of risk even though an early internal draft included section on managing risk. It was also decided that the actuary should focus on risk to the plan as a proxy to plan sponsors, participants, or other stakeholders. ASOP 51 requires a mandatory assessment of risk identified by the actuary even if such assessment is not requested by the sponsor. The committee opted against issuing a broad comprehensive standard. The approach employed aims at introducing the community to risk assessment and disclosure. This standard does not apply to Other Postemployment Benefits (OPEB), although actuaries are free to apply concepts found in ASOP 51 to OPEB valuations. ASOP 51 applies to all types and sizes of defined benefit pension plans: private single-employer, multiemployer, state, local, and federal.

# 2017 CCA Annual Meeting Session Summaries

The idea of creating separate standards for public plans was rejected. ASOP 51 applies to funding and pricing valuations. Accounting valuations were not included in the final version of the standard.

For the purpose of this standard, risk is defined as the potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from assumed, and also includes contribution risk.

Under the new standard, the actuary should identify risk that may be significant. An early draft focused on experience risk, with contribution risk added later, defined as the potential of actual future contributions deviating from expected. The following sources of contribution risk should be considered: actual contributions are not made in accordance with the plan's funding policy, withdrawal liability assessments or other anticipated payments to the plan are not made, and material changes in the anticipated number of covered employees, covered payroll, or other relevant contribution base. Importantly, ASOP 51 does not require the actuary to evaluate the ability or willingness of the plan sponsor or other contributing entity to make contributions to the plan when due. Although certain guidance was originally limited to large plans, many commenters pointed out the size of that cut-off was arbitrary. Ultimately, the distinction was eliminated and the final ASOP applies equally to all.

Although risk assessment is required for all plan types and sizes it does not need to be based on numerical calculations. In response to a question from the audience, it was later clarified that the cost of numerical risk assessments was one consideration taking into account to adopting this approach. However, if in the actuary's professional judgment a more detailed assessment would be significantly beneficial for the intended user to understand the risks identified by the actuary, the actuary should recommend to the intended user that such an assessment be performed.

In addition, ASOP 51 requires calculation and disclosure of plan maturity measures that, in the actuary's professional judgment, are significant to understanding the risks associated with the plan, and identification and disclosure of relevant historical values of the plan's actuarial measurements such as funded status, gains and losses, actuarially determined contribution, maturity measures and others. The actuary is also required to provide commentary to help intended users understand the significance of the historical information.

ASOP 51 leaves selection of methods and assumption for assessing the risk to the actuary's professional judgement. As examples of potential methods, the standard identifies stress tests, scenario tests, sensitivity tests, and stochastic modeling, as well as a comparison of an actuarial present value "using a discount rate derived from minimal-risk investments" to a corresponding present value from the valuation.

This segment concluded with a discussion of required disclosures. Actuaries will need to disclose the risks identified along with the results of the risk assessment including plan-specific commentary on the potential effects of the identified risks as well as the specific circumstances applicable to the plan that were taken into account. Whenever applicable, a description of assumptions and methods should be included and a recommendation to the intended user that a more detailed assessment be performed. In addition, the actuary should disclose any limitations or constraints on the comprehensiveness of the risk assessment.

## **A framework for managing risk in public pension systems**

The last prepared segment of the session focused on managing risks associated with public sector pensions. Management of the risk requires more attention now than in the past because of changes affecting pension plans such as declining interest rates and maturing plans. Declining interest rates

# 2017 CCA Annual Meeting Session Summaries

resulted in declines in expected rates of return. Many pension plans responded by taking on more investment risk as an alternative to lowering the investment return expectations. Plans have also matured, meaning that assets and liabilities have been growing faster than resources of plan sponsors. Combination of these changes makes it very difficult to deal with outcomes of unfavorable developments like large investment losses, or decline in sponsor resources or both at the same time. This pattern has been observed many times in the recent years. After a bad event there is a lot of pressure to do “something,” often resulting in crowding of services, or reduction in pay, introduction of new tiers of benefits, or even bankruptcies in extreme situations. Patterns like these affect all types of plan sponsors with the smaller, less diverse ones being affected the most. Declining interest rates forced plan sponsors to make a choice between increases in investment risk and reductions in expected returns (resulting in increased contributions). Initially, plans took on more risk to avoid contribution hikes, but recently mixed approaches are becoming more common. Increased investment risk was illustrated with a comparison of historical interest rates and expected rates of returns. As interest rates dropped faster than expected returns, implied investment risk has grown. This is consistent with an observation made in a Wall Street journal article stating that, based on data from Callan Associates, the amount of risk necessary to achieve a 7.5% return has nearly tripled between 1995 and 2016. At the same time pension plans have matured. The simplest measure of maturity is a ratio of the number of retirees to the number of active members. For many, but not all, plans this ratio rose dramatically over the last 20 years. A declining number of active employees is often an indication of shrinking resources of the plan sponsor. Other measures include ratio of present value of benefits attributed to benefits in pay status over present value of benefits for active members and the net non-investment cash-flow.

Net negative cash flows for mature plans can have significant implications in asset management.

Maturity can also be illustrated by ratios of plan assets and accrued liability to covered payroll. For CALPERS these ratios increased from approximately 3 (both metrics) in 1990 to more than 6 for assets or 9 for accrued liability in 2015. That means that amount equivalent to 10% loss in assets went up from 30% of payroll in 1990 to 60% in 2015.

Handling of these patterns can be very challenging for most plans. Some transition to more expensive assumptions is not easy, particularly for mature plans. Actuaries need to measure risk and set tolerance levels, and coordinate contributions and investments with investment advisors. It may be easier to manage the risk with frequent, small adjustments in response to changing economic conditions than with larger, more dramatic revisions in assumptions.

Investment risk can be assessed by comparing funding results to risk free measurements. This can be thought of as a reference point, or a settlement value. The difference between the settlement values and funding values can be considered a price to be paid to eliminate the investment risk.

Traditionally attention was paid primarily to actuarially determined contributions, funded status and standard deviation of investment returns. These measures can be misleading as long amortization periods dampen volatility and make it easier to contribute actuarially determined contribution, but that doesn't mean they are less risky. Furthermore, funded percentage provides no indication of whether or not the unfunded amount is affordable. Standard deviation is an important component of the analysis, but its usefulness is limited unless it is adjusted for the amount of assets at risk compared to the resources of the sponsor. A better measure of the cost of the program may be a sum of the normal cost and interest cost, calculated as an interest on the unfunded liability. An interest

# 2017 CCA Annual Meeting Session Summaries

risk can be measured as an increase in the interest cost resulting from an asset loss equivalent to two standard deviations. These concepts were illustrated by comparison of three sample plans with different funded levels. Ironically, the least funded plan had the lowest risk assessment.

Potential Strategies to Consider include:

- “Risk-Free” approach –Not likely to be a viable alternative, but concept of matching some portion of the liability may be very useful
- CalPERS approach –Use opportunity of a good investment year to reduce investment risk without increasing employer contributions
- Maximum asset volatility ratio – Match benefit cash flows with any assets in excess of the maximum
- Pre and postretirement investment strategies and discount rates –Target higher accumulation of assets by retirement so assets supporting retiree liability can be invested more conservatively
- Percentage of retiree liability in core bonds - Target core bond asset allocation to be a percentage of the retiree liability (e.g., 40%)

A full stochastic analysis may be cost prohibitive in many cases and actuaries should develop simple

measures approximating results of the stochastic analysis, like a probability of interest cost + risk cost going above some threshold. We may consider focusing on simple measures that can be tracked from one year to the next.

This segment concluded with a brief discussion of contribution risk. Historically, a failure to make sufficient contributions has been the most common predictor of funding difficulties. Actuarially determined contributions have been considered as a benchmark. However, this measure is insufficient because not all such contributions are equal. This approach creates incentive to set the contribution at the lowest acceptable level so the benchmark is easier to attain.

A good alternative for setting contribution benchmark can be set at the normal cost plus interest on the unfunded accrued liability. Simply because funding policies have not been made equal and they don't lend themselves to the benchmarking.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 603

### COST REIMBURSEMENT FOR GOVERNMENT CONTRACTORS – A DEEPER DIVE

Speakers:

- Craig P. Rosenthal – Mercer
- George A. Matray – Defense Contract Management Agency
- Deborah A. Tully – Pine Cliff Consulting
- Session Assistant: John McQuade – Pine Cliff Consulting

*Note: Session 603 at the 2017 CCA Annual Meeting represented the second of a two-part series on Government contractor issues for actuaries. The 2017 session focused only on the “CAS 413 events” discussed below. Session 602 of the 2016 CCA Annual Meeting, which represented the first part of the series, addressed ongoing annual CAS pension costs. The panelists suggest that interested actuaries retain the presentations from both sessions for their records.*

While the usual caveats also apply to this session, the Panelists wished to stress that Mr. Matray’s comments in particular should not be construed as representing the views of his employer, the US Government.

#### Key Definitions

Over the years, there have been three different versions of Cost Accounting Standard (“CAS”) 413. The original version of CAS 413 (referred to as “Old CAS” or “original CAS”) was promulgated in 1978 and, for a calendar-year contractor, took effect in 1979. A revised version was released in 1995 and took effect in 1996; this version is referred to as “Revised CAS” or “Basic CAS.” A third version called “Harmonized CAS” was published in 2011. While harmonized CAS made substantial changes to the annual cost calculations required by CAS 412 and CAS 413 (and as discussed in the 2016 session), it had no impact on the CAS 413 events that were the focus of the 2017 session.

The financial impact of CAS 413 events are typically measured at the “segment” level rather than the “pension plan” level. As defined in CAS 413, the

term “segment” refers to a business unit of a contractor; as such, it is organizational in nature and is not a pension term.

“CAS 413 events” include (1) segment closings, (2) curtailments of benefits and (3) pension plan terminations, in each case as those events are defined in CAS 413. “Segment closings” arise when a segment is (1) sold or otherwise transferred to another party, (2) is shut down or (3) ceases to perform CAS-covered contracts. A “curtailment of benefits” occurs when a pension plan is amended to completely eliminate the accrual of future benefits (note: a CAS curtailment is not defined the same way as a GAAP curtailment). A “pension plan termination” has the same meaning under CAS 413 as under ERISA.

#### Financial Impact of a CAS 413 Event: Assets and Liabilities

The first step in quantifying the financial adjustment associated with a CAS 413 event is to compare the segment’s assets and liabilities. The asset value used in connection with a CAS 413 event is based upon market value, not actuarial (i.e., smoothed) value.

If assets have previously been tracked for the affected segment (i.e., if ongoing pension costs are computed on a “segmented” basis), the asset value equals the CAS market value of assets. If assets have not previously been so allocated (i.e., if CAS 412 pension costs are computed on a “composite” basis), an initial asset allocation is required. If the data is available to recreate historic cash flows of the segment, that information must be used to



# 2017 CCA Annual Meeting Session Summaries

calculate the segment's asset value; in the more common situation where this historical information is not available, an allocation of market value is made in proportion to ongoing actuarial liabilities (an example of this calculation is included on page 15 of the presentation).

When a plan termination occurs, the liabilities are defined by the annuity purchase price and the amounts of any lump sums paid. In contrast to other CAS 413 events – which typically occur on a single date – a plan termination is a process that extends over many months. While ongoing CAS pension expense typically stops accruing at the ERISA termination date, the ultimate settlement of the liabilities may not occur for another 12-18 months (or more). Because the underlying process is drawn-out and complicated, quantifying the CAS 413 implications of a plan termination is likewise complex. These complexities are illustrated at pages 38 through 41 of the 2017 presentation, though this example only represents one possible approach.

In the event of a segment closing or a curtailment of benefits, however, because the pension plan remains in effect, the liabilities used to compute the CAS 413 adjustment are actuarially calculated based upon the “accrued benefit cost method,” which is often referred to as the unit credit cost method. In making this calculation, it is imperative to apply the appropriate actuarial assumptions. The Government generally views the actuarial assumptions used in the CAS 412 valuation immediately preceding the CAS 413 event as being reasonable for this purpose. Notwithstanding, anticipated changes in participant behavior caused by the event (e.g., accelerated early retirement elections following job eliminations resulting from a plant closure) can be considered. Moreover, the CAS Board has stated that assumptions modified in connection with a CAS 413 event that are based upon a persuasive actuarial experience study are permissible.

CAS 413 requires that plan improvements adopted within 60 months of a CAS 413 event must be recognized in the liability determination on a phased-in basis (this does not apply to collectively-bargained improvements or those required by law). A particular issue to be careful of is when a lump sum option is added in connection with a pension plan termination. In this case, the contractor should be prepared to demonstrate to the Government that the lump sum amounts do not exceed the price that would have instead been paid to the insurance carrier to purchase annuities. Due to the lack of transparency of annuity pricing at the individual participant level, careful planning and proactive discussions with Governmental representatives may be appropriate to prevent disputes.

In connection with some segment closings, only a portion of the assets and liabilities may be transferred to a successor contractor (usually those associated with current active employees who will continue working for the successor). In such cases, the Basic or Revised CAS provides that the segment closing calculation is based only upon the assets and liabilities retained by the original contractor. Actuaries should note, however, that a more complex calculation may be required based on legal precedents if the closed segment operated under both the original and revised versions of CAS 413.

The preceding “gross” adjustment is based upon the total assets and liabilities of the segment. As explained below, typically only a portion of this amount is considered to be attributable to Government contracts and only a percentage of the gross amount will be included in the cost adjustment between the parties.

## **Financial Impact of a CAS 413 Event: Government Share**

When a CAS 413 event occurs, the amount to be paid from the Government to the contractor (in the event of a deficit) or from the contractor to the Government (in the event of a surplus) simply

# 2017 CCA Annual Meeting Session Summaries

equals the product of the deficit/surplus and the Government share. Once the amount of payment is agreed-upon, the parties can negotiate the mode of settlement (e.g., a one-time payment, installments over a period of years, adjustment of future costs, etc.) in a mutually-agreeable manner.

Revised CAS 413 includes a formula that defines the Government share calculation. However, this formula was effectively modified by a Federal Court in *Teledyne, Inc. v. United States* (“Teledyne”).

Under Teledyne, the Government share is calculated as a fraction, as follows:

- The numerator of the fraction equals the sum of (1) pension costs subject to the original CAS 413 (i.e., most pension costs for 1979 through 1995) that were allocated to flexibly priced Government contracts plus (2) pension costs subject to revised CAS 413 and harmonized CAS 413 (i.e., most pension costs in 1996 and later) that were allocated to both flexibly priced and fixed price contracts subject to CAS 413. The exclusion of pension costs before original CAS 413 took effect in 1979 means that there is no adjustment to be made with respect to pension costs that were allocated to Government contracts before 1979 that were never subject to CAS 413.
- The denominator of the fraction equals the sum of (1) all employer pension costs ever determined for the segment since its inception (which might be decades before the original version of CAS 413 became effective) plus (2) all employee contributions made from the inception of the segment until at least the effective date of revised CAS 413 in 1996 (while Teledyne clarified the treatment of employee contributions under original CAS 413, the proper treatment of employee contributions under revised CAS 413 has never been litigated and is presently a “gray area.”).

Pages 31-32 of the handouts to the session include an example of the Government share calculation.

While the preceding Government share calculation is conceptually straightforward, few contractors

have easy access to the full array of historical data contemplated by Teledyne. In guidance released in 2004, the Government recognized that reasonable estimates would be necessary in most situations, and that the fraction may be calculated based on a mutually agreed period of time if that is not expected to distort the results. The courts have reached similar conclusions.

## **CAS Pension Costs After a CAS 413 Event**

CAS pension costs need not be computed for a segment in periods subsequent to a segment closing for the simple reason that the segment no longer exists. Similarly, CAS pension costs need not be computed for a segment in periods following a pension plan termination for the equally simple reason that the pension plan no longer exists. In periods following a curtailment of benefits, however, both the segment and the pension plan continue to exist.

It is the Government’s view that contractors must continue to calculate CAS pension costs in the years following a curtailment of benefits. The first step in this process is that all amortization bases present at the time of the curtailment are typically eliminated as part of the CAS 413 settling-up process. Second, in the case of a CAS 413 deficit, an amount equal to the gross amount of the one-time CAS adjustment (i.e., not just the Government’s share) is added to the segment’s assets in a manner similar to the treatment of an unallowable cost; where a CAS 413 surplus is present, an additional prepayment credit equal to the total amount of the one-time CAS adjustment is created. Third, at the beginning of the following year, a new “fresh start” base is established equal to the unfunded actuarial liability; the fresh start base is then amortized over a period agreed to by the parties (the amortization period is typically 10 years but could be as long as 30 years).

## **Advance Agreements**

The Government and contractors frequently execute “advance agreements,” which merely set forth agreed-upon procedures to deal with complex

# 2017 CCA Annual Meeting Session Summaries

and/controversial cost matters. The treatment of CAS 413 events – both the one-time calculation and the details of cost computations in subsequent years – are always complex and often controversial; as such, negotiating an advance agreement to avoid future disputes is highly desirable.

The primary parties to advance agreement negotiations are typically the Government's contracting officer and the contractor's

Government contracts expert, in both cases with assistance from their actuaries (in addition, auditors are usually part of the Government's team). The advance agreement should set forth the agreed-to financial terms (e.g., methodology, assumptions, period over which the Government Share will be calculated, data sources, etc.) in sufficient detail so that all accounting for the CAS 413 event is mechanical in nature (i.e., there should be no unresolved critical aspects of the calculation).

# 2017 CCA Annual Meeting Session Summaries

## Session 606

### Looks can be Deceiving – DB Plans in Disguise

Speakers:

- Rohit A. Chhiba – Willis Towers Watson
- Vaibhavi V. Patel – Aon Hewitt
- Mike Spetko – Deloitte Consulting LLP
- Session Moderator: James L. Jones – Deloitte Consulting LLP
- Session Assistant: Jessica Chung – Deloitte Consulting LLP

#### Background

Many non-U.S. retirement plans have significant defined benefit (“DB”) components that global actuaries should recognize as impacting a company’s balance sheet. This session actively takes a group approach in identifying DB plan characteristics to illustrate how global actuaries apply their skills.

#### Asia Pacific (APAC)

In the APAC region, there is a high prevalence of countries that have mandatory retirement and termination plans that also tend to substitute as employer sponsored pension plans. Plans that can be deceiving are those with severance plan features that are paid out at termination as well as retirement. This session will cover examples of such plans in South Korea and India.

##### **(1) South Korea**

In South Korea, the Mandatory Severance Pay System (“SPS”) is based on the Labor Standards Act of 1997. The SPS provides a minimum benefit of one month’s pay per year of service, payable as a lump sum at termination or retirement. This was historically treated and accounted for as a DB plan.

The Employee Retirement Benefit Security Act (“ERBSA”) was introduced in 2004 and required all employers to set up a DB or DC plan to replace SPS. The replacement of unfunded SPS plans with funded DB and/or DC plans must take place between 2016 and 2022, depending on the size of the company (2016 for companies with more than

300 employees to 2022 for companies with fewer than 10 employees).

Corporate tax has been one of the key drivers encouraging companies to adopt the DB or DC plans. Corporate tax incentives for employer contributions into the SPS is gradually decreasing to 0% from 2016. Conversely, corporate tax incentives are provided for employer contributions into DB and/or DC plans under ERBSA.

For employers in South Korea, the recommended action is to review the current severance pay plan and implications of upcoming regulations. MNCs are continuing to generally adopt DC plans, however, the pace of transition is slowing and likely to remain at current levels.

##### **(2) India**

Mandatory/statutory plans in India include the Social Security system – Employee Provident Fund (“EPF”) and Employee Pension Scheme (“EPS”) and the Mandatory Leaving Service Benefit (“Gratuity”). Under the Social Security system, employees, employers, and the government all contribute into the EPF and EPS. The EPF benefit is payable as a lump sum, while the EPS benefit can be paid as a lump sum or certain combinations with annuity payments. The Gratuity plan is based on the Payment of Gratuity Act, 1972, and is accounted for as a DB plan. The plan provides a benefit of 15 days of pay per year of service.

Voluntary employer-sponsored pension plans include the National Pension Scheme (“NPS”), Enhanced Gratuity Plans, and Superannuation

# 2017 CCA Annual Meeting Session Summaries

Plans. The Superannuation Plans are accounted for as DB plans. The current trend for MNCs is to replace Superannuation plans with Corporate NPS vehicles which are more cost effective and provide greater investment flexibility and portability. However, most companies still only provide the mandatory plans.

Note that the average age of employees in India is generally lower compared to more mature markets in North America and Europe, and therefore, focus on retirement is still considerably low. In addition, pay increases in India are typically provided twice a year, and are higher than typical. Actuaries should take these into consideration when valuing DB plans.

## **Latin America**

In the Latin America region, occupational pension funds have existed since at least the 1920s in Brazil, Mexico, and other countries. In the late 70s, employer-based pension plans were formalized in Brazil. Privatization of social security in various countries today started in Chile in 1981. The process involved substitution, to different degrees, of pay-as-you-go public pension systems by fully funded, DC systems, with individual pension accounts.

A majority of countries in Latin America have statutory termination indemnity or severance benefits payable in the event of “unjust dismissal.” These plans are typically accounted for as defined benefit plans due to the “defined” termination indemnity payment upon retirement of employees. We will discuss statutory termination indemnity plans in Honduras and Dominican Republic, and provide an example of how the treatment of both plans could differ under the same benefits.

In this scenario, the client has employees in Honduras and Dominican Republic. Employees in both countries are given six weeks off for Christmas each year (which is typical for the region). These employees also receive Christmas bonuses equal to two weeks of pay. Both jurisdictions include

provisions for termination/retirement indemnity benefits. However, the termination indemnity benefits in both countries could potentially be accounted for differently. This is because, in Honduras, a break-in-service is defined as any period of unemployment greater than 30 days. In Dominican Republic, a break-in-service is defined as any period of unemployment greater than 90 days. The six-week vacation that was provided could be considered as a break-in-service in Honduras, and therefore, the Christmas bonuses paid would satisfy the statutory termination indemnity payment requirement, and as such, would be accounted for as short-term employee compensation. The termination indemnity in Dominican Republic would need to be accounted for as a defined benefit plan.

## **Europe**

There has been a historically high prevalence of traditional defined benefit plans in the Europe region (i.e. UK, Netherlands, Switzerland, Belgium etc.). Plans that can be deceiving are those with “DC” plan features, but include some form of minimum guaranteed returns. This session will cover examples of such plans in Switzerland and Belgium.

### **(1) Switzerland**

In Switzerland, the BVG / LPP provide for a minimum benefit defined in terms of a cash balance plan. The retirement and leaving benefit is based on an accumulated retirement savings account, with guaranteed minimum investment return set by government and reviewed annually (the minimum return in 2016 was 1.25%).

Most companies provide benefits higher than the minimum in some respects (higher retirement credits, higher pensionable salary, or higher investment return). Under the BVG/LPP, the comparison to the minimum benefit is done at leaving, death, disability, or retirement; each element of the benefit does not have to be higher than those of the defined minimum. Most

# 2017 CCA Annual Meeting Session Summaries

companies provide lower conversion rates at retirement.

The BVG/LPP benefit is portable; and leavers before retirement are required to take their accrued retirement savings to the next employer's plan. This can lead to volatile benefit payments in and out of plans in any given year.

The BVG/LPP is treated as a DB plan as it reflects inherent guarantees, annuity options, and DB risk benefits.

## **(2) Belgium**

In Belgium, almost all multinational and large local companies provide supplemental retirement plans for all employees. These plans are mainly DC / cash balance plans with some legacy DB plans remaining. Under these plans, employee and employer contributions are subject to guaranteed minimum returns. Where the actual rates of return fall below

the statutory minimums, employers are required to compensate for any difference.

Given that a legal minimum exists, Belgian DC plans do not qualify as DC plans under International Accounting Standards ("IAS") 19R. It is unclear under IAS 19R how these plans should be valued, however the key considerations when determining the accounting treatment should include the type of plan, plan design, asset method, and risk benefits.

## **Conclusion**

Defined benefit plan characteristics appear in many non-US retirement plans and recognition of these liabilities on a company's balance sheet would differ depending on the applicable accounting standards. In today's global economy, actuaries are increasingly required to apply their skills to identify these defined benefit plan characteristics in retirement plans across the world.

# 2017 CCA Annual Meeting Session Summaries

## SESSION 708

### MAXIMIZE YOUR PRESENCE AT CLIENT MEETINGS

Speakers:

- Phillip A. Merdinger – Mercer
- Doug MacKay – Exec Comm LLC
- Session Assistant: Kelley Elliott – UPS

Showing up fully “present” at client meetings is not easy. Doug MacKay, of Exec Comm, provided helpful tips about how to make the most of client meetings and client interactions. He then helped the group put these tips into action through 4 group exercises.

The idea is that the focus should be on others (i.e. the clients) and not on ourselves as consultants. We all have the technical skills to be good consultants, but we might need to focus on the softer skills to become great consultants. Some of those softer skills were covered in the session and summarized here.

#### Eye Focus

When you’re delivering information in a live meeting, remember to only speak when you’re looking at someone’s eyes. Hold that eye focus for five to seven seconds, or the length of a complete thought. Then pause and silently move your eyes to another person’s eyes. Avoid looking to the side or up to grab information. In one-on-one meetings, break the eye focus by looking down at your notes instead of skyward.

This helps maintain a comfortable pace. You’re staying with each person long enough to connect, but not so long that it’s menacing. This technique also builds those helpful pauses into your delivery. To practice this on calls, consider placing objects or post-its around your desk. Each one will represent a person on the call. You can deliver five to seven seconds worth of information to each object or note and pause between them. This will help eliminate filler words such as, “uh,” “um,” and “you know.”

#### Posture and Gesturing

We talked about good posture and using natural gestures. When speaking in a meeting:

- Sit tall in your chair, on the front two-thirds, so your back is away from the chair’s back.
- Place both feet flat on the floor.
- Smile when it’s appropriate, especially in an introductory meeting.
- Keep your hands open and apart. Imagine the listeners always want to see the palm of your hands.
- Take up all the space around you when gesturing—to the front and to the sides

#### Speaking from Notes

Try using notes in meetings and calls to organize your thoughts beforehand. Lead with the main point and then add supporting information and details as needed. Write short phrases in the middle of the page. Look down silently, grab one phrase, look up and deliver that point. Then repeat the process. Try not to talk into your notes. Speak only when you’re looking at someone or at an object on your desk.

#### Listening Skills

Before meetings, plan some open-ended questions to ask. You’ll certainly use closed-ended questions during a meeting, but those require less practice. Questions that begin with “what,” “why,” or “how” guarantee you’ll receive more than an “yes” or “no” response. These words help you gather useful information during a meeting.

You can also use the TEDS acronym—tell, explain, describe and share. Be mindful of asking one question at a time. Also, don’t offer options in a

# 2017 CCA Annual Meeting Session Summaries

question. An example of that is, “Why are we unable to move forward? Is it due to timing or

budget?” Lastly, pause and wait for the answer. Resist the temptation to fill that silence with words.