TASK FORCE ON CONTRIBUTION STRUCTURE
MEETING MINUTES

Tuesday, February 17, 2015
IRMA Office
9:30 a.m.

PRESENT:
David Clark, Glencoe
Mike Braiman, Wilmette
Jessica Frances, Riverside
Drew Irvin, Lake Bluff
Robert Kiely, Lake Forest

Dane Bragg, Buffalo Grove
Julia Cedillo, LaGrange Park
David Danielson, West Dundee
Marlo Kemp, Hazel Crest
Kathleen Rush, Woodridge

ABSENT: Barry Krumstok, Rolling Meadows   Steve Tilton, Tinley Park

ALSO PRESENT:
Margo Ely
Susan Garvey
Mary Henzler
Doug Nishimura, Milliman
Tim Vosicky, Milliman

Rita Boserup
Dan LeTourneau
Peter Wright, Wright Benefit Strategies
Richard Frese, Milliman

Following a brief introduction of those present at the meeting, Ely presented a recap from the first meeting of the task force in which the group:

- Reviewed IRMA formula and history of studies and process improvements implemented.
- Discussed concerns regarding revenue as determining factor in contribution formula and importance of actuarial analysis to measure veracity of concerns.
- Discussed the possible reasons that larger members don't take higher deductibles.
- Discussed the conflict between pooling philosophy and individually rated options.
- Discussed the higher predictability and control over workers' compensation compared with other lines of coverage.

Ely stated that during the meeting today the findings from the first meeting would be presented. Ely noted that today's PowerPoint included the IRMA Mission and Basic Tenants and stated that she would be willing to discuss these if anyone from the group wanted her to do so. Ely stated that the main part of today's meeting would be the Actuarial Analysis by Milliman. Ely commented that she felt it was important as we continue discussion, to be aware of where our costs are, and our costs are clearly in workers' compensation. Workers' compensation is our most costly line of coverage on a consistent basis, and we think it is more predictable and more controllable.

Ely turned the presentation over to Doug Nishimura, IRMA's actuary. Nishimura stated that the focus of the Milliman analysis is analytical, and they will try and make it very understandable. Nishimura noted that with him today were Richard Frese and Tim Vosicky, who did most of the analysis.

Nishimura stated that they looked at three things: 1) Are large members subsidizing small members? 2) What exposure is most correlated with losses by line? 3) Would offering different deductibles by coverage be beneficial?

Are large members subsidizing the small members? Nishimura referred to slide 4, stating that this represents a scatter plot. They tried to show an example of a really positive correlation. They ran some regressions and some correlation analysis. Nishimura explained that what correlation does is really try to compare the relationship between variables. On the "x" access, it shows the contributions over the last five years. On the vertical access it is the paid losses by calendar year over the last five calendar years. We want to compare what the actual losses were with the contributions made. We would expect there to be a relationship here or positive correlation because as the contributions go up the losses should go up. And we see that there is definitely a relationship here. Nishimura stated that they did three basic statistics. The first one is called the Pearson's Correlation, which is the regular correlation that you usually use. So a high correlation would be a one, a low correlation would be a 0 and a negative correlation would be a minus-one. What we strive for is around 80%. Anything close to 80% here in real life is really a good, good correlation. Nishimura stated that Pearson's Correlation showed about an 80% correlation; the other two are called Kendall's Tau and Spearman's Rho. These are common other correlation coefficients that try and rank the variables rather than use just the absolute number. Nishimura stated, again, that they would expect to see a positive correlation between losses and contribution and there is one – about 80%. This just shows that the contributions made are related to losses.

Nishimura reviewed slide 5, which gave an example of loss ratio. Instead of looking at just the pure losses, they looked at the losses per revenue per unit of exposure. The loss ratio here represents the total paid losses divided by the contributions. So we want to see if the loss ratio but not the losses themselves are correlated by revenue. The "x" access is the revenue and the vertical access is the loss ratio per member. Nishimura noted that this is just an example, so if in fact large members were subsidizing small members, we would see this negative correlation. Nishimura noted that this slide was created to show this negative correlation; it is just an example. We see bubbles in kind of a line going down.

Slide 6 uses the actual data. This represents the relationship between loss ratio and revenue. So, are the large members subsidizing the small members? A positive correlation of 1 means there is a perfect correlation. A negative correlation of -1 means there is a negative correlation. A correlation of 0 means there is no correlation. In this case, the Pearson Correlation was .5. That is as close as you can get to 0. So what this says is that this is purely noise. There is no correlation between size and loss ratio. We would conclude here that large members are not subsidizing small members. There is no indication, based on the data, that anyone is doing any better or worse by size.

Nishimura pointed out other observations taken from this slide. Looking at the bubbles on the graph, the bubbles in the front represent the various small members by size. As you get further and further out to the bigger members, the bubbles get more compact. So the variability of the small members is much greater than the large members, which gives a strong indication that the revenue is a good credibility information source. The average loss ratio is about 70%. A loss ratio of less than 100% means that a member is paying less than what they put in. A loss ratio greater than 100% means that a member is paying more than what they put in. The average loss ratio for the group here is 70% and they are clustered all around 70% in fairly equal proportions. Nishimura commented that this was a very powerful slide.

Wright agreed, in that this is big piece of what today's discussion will focus around and what everyone needs to think about. Wright gave the example that we want about $.70 of each dollar going to losses. The amount above that is fixed costs, i.e., expenses related to running the building. Out of that 30% is the magic members' surplus, excess surplus, etc. Because Nishimura is using the paid losses versus contribution here and we see that as revenue goes up

or for that matter in aggregate, all of these bubbles are somewhat equal distance from the overall pool ratio line, the process in total is working.

Wright commented that there are two conflicting concepts to consider. One being, is the size of the member a predictor of ultimate loss and, if so, ultimate risk. Second, how do we adjust the contribution to make sure it accommodates the losses, while not exposing the member?

Kemp questioned whether considering most of the losses are due to workers' compensation, are we suggesting that the larger members may have more workers' compensation claims than smaller members. Does that larger size tend to correlate with more employees and, therefore, you get more workers' compensation cases? But when you consider their larger size, that ratio tends to normalize the number of workers versus the number of cases and that's why we stick to .7 as opposed to the other end where it vary widely because the size of the employee workforce would be very small. Nishimura stated that this was a very good question and it would be addressed in a future slide.

Nishimura reiterated that it was hugely significant that there was no relationship between size and losses. The contribution that is being paid on the average is very good for all members. Nishimura commented that you really don't see this kind of zero correlation. This is what we call noise. It's randomly picked out – they are all around the 70th percentile line – it's probably equal with the number of bubbles above and below the line if you added them up. So, it's pretty significant what is going on. As the revenue got larger and larger, the loss ratio per member got closer and closer to the line.

Wright added that this is an affirmation that for the large part the system, the processes and procedures that you are using work for the pool as a whole.

Wright also commented that this group does not have a lot of turnover. Let's take an insurance company that comes into Chicago to write workers' compensation coverage. They are going to come in very aggressive and write a ton of business. After three years their loss ratio is going to sky rocket unless they actually raise their rates, which would potentially cause them to lose customers and not write new business. In that case, you wouldn't see this perfect correlation. We are different than that. Members' longevity in the pool is helping to do this. At least the systems in place are heading in the right direction.

Nishimura reported that to be sure, they ran a lot of different analysis based on different relationships. They looked at the linear relationship, the exponential relationship, the logarithmic relationship and the power relationship. These are all non-linear correlations. They concluded that there is no non-linear relationship between the losses.

The conclusions/observations found included:

- There is no relationship between loss ratio and revenue.
- Large and small members have about the same loss ratio.
- Small members have more variable loss ratio than large members.
- Revenue is a credible measure of exposure.
- 2/3 of members' loss ratios are between 40% and 100%.
- The average loss ratio = 70%
  - Contribution includes admin fees, excess premium; therefore, loss ratio is less than 100%
- Any surplus is retained by IRMA

Nishimura stated that they then looked at the question – What exposure is most correlated with losses by line? Nishimura reviewed slide #10 – Correlation Matrix. In looking at Revenue, Payroll, Autos, Property, and Employees and then looking at the different losses – AL losses, APD losses, FPC losses, GL losses, WC losses and Non-WC losses, they found that 1) all independent variables are highly correlated and 2) revenue is the overall beset variable for rating.

Their conclusions included:

- Exposures currently used by line are reasonable.
- Revenue is reasonable exposure base to develop rates.
- Revenue is most consistent verifiable exposure.
- Other variables may improve rating marginally.
- A question to raise – should we separate variables for rating?

Nishimura addressed the question, would offering different deductibles by coverage be beneficial, stating this goes back to the earlier question by Kemp. Is there a relationship between size and distribution of losses by coverage? For example, are the larger members getting more workers' compensation losses? Nishimura stated that they analyzed this and concluded the following:

- WC and GL are about 90% of losses.
- There is no correlation between losses by coverage and size.
- All members have about the same loss distribution.
- Selection of different deductibles can increase adverse selection.
- Administrative implementation outweighs benefits.

Clark stated that when he looks at the data and looks at the small groups statistically, if you took that small group together and put them in a single group, would they behave more like the larger revenue members or is there something unique about that small member group that makes them perform the way they do. Nishimura answered, no, everything they have seen shows that the small groups and the large groups in total are performing about the same. We would expect the disparity of the small groups to be what they are. If you are a small member you have to understand that you are going to get a much more variable loss than the large member. Instead of the 80/20 rule you can go 95 years with great experience and then 5 years with really bad experience. So maybe as a small member you are going to really get hit every 20 years and you will be hit very big, so that is why you are in the pool. Clark asked whether it would make sense to let small members self-pool. Nishimura answered, no. The whole thing of a pool is whether the exposure is homogeneous. We don't see the argument here for the small members to form their own pool. We see that the small and large members are acting in the same fashion and their losses are homogeneous, so there would be no argument to form a separate pool.

Rush asked whether they would say that the large members in the sense of their losses buffer the pool as a whole. Nishimura stated, absolutely. Because the large members are more predictable, the risk load involved in the losses help to minimize that effect. In the long run everyone is going to pay about the same. However, the large members bring more credibility to the pool. It brings a more stable cost to the fixed cost – the administrative expenses. So you always have to look at that if you have anyone leaving. What the large members do is bring more stability to the pool which reduces the risk load that you have to charge the members. The administrative expenses that the large members contribute help to maintain the cost of the pool for everyone.

Kiely commented that if Nishimura were his financial advisor, he would be telling him to diversify his portfolio. Based on what he is hearing, Kiely stated that there is really no deviation of risk between large and small members, but there might be other advantages of large members. The question to Ely and her staff at IRMA is, if we want to grow, are there sized communities we should be looking at long term to help diversify our portfolio?

Nishimura stated that Kiel's question was a great question. Nishimura stated that in the past IRMA has been content with a stable membership. They have not pushed for growth. Because some of the members have left, they are looking at adding some more members to grow a little bit. That growth creates greater stability and helps reduce the fixed costs. So, growth in general is good as long as you get a good, homogeneous member. Nishimura also commented that if you added another big member, your excess premiums may not change much at all.

Kiely stated that he was just looking at, strategically down the road, if some members come and some go, he just wants to make sure that we are growing in the right areas and the right sized groups. That we are being much more diligent in what communities we go after. Part of the reason we are here is that we were going after Oak Park and came up with this $250,000 deductible and that didn't pass out. Kiely questioned whether this even made sense for us to go after Oak Park or not. Ely noted that when staff looked at Oak Park's losses, they looked riskier than what we were comfortable with.

Clark also brought up another question to ask when bringing on a new member. How much of a percentage of our portfolio do we want one asset to be? Ely noted that we don't want to increase our vulnerability for a large member exodus by being overly reliant on larger members.

Bragg stated that we are pretty balanced out with large, medium and small members and the question is how do we maintain that balance? LeTourneau noted that in the past five to seven years there have been a few members that have left the organization. Those members had a higher loss ratio; so, overall, financially IRMA is in a much better place now without those members.

Wright commented that in some of the work he has done with other pools, when they go out with a specific goal to grow like crazy, that's when you run into problems. It's an actuarial perspective, it's an underwriting perspective, but more importantly it's the philosophy perspective. Wright stated that he took a look at IRMA's Membership Growth Policy Statement and was very pleased to see it. However it is interesting that the context in the beginning of the statement says that the organization will realize that the benefits of growth will come through selective membership growth, and then it says that we don't want an arbitrary cap on projected size. Wright commented that this is like a negative growth statement; however, that is not a bad thing.

Wright provided the group his perspectives after meeting with the actuaries and IRMA staff. These included:

- Higher deductibles encourage more accountability.
- Reducing annual contribution is perceived as a cost reduction strategy, but assumed risk can be significant.
- Actuarial and Insurance modeling reflect inherent uncertainty in loss prediction (in the absence of risk transfer).
- Risk transfer is achieved through pooling, which includes shared costs.
- A stable and/or growing risk pool provides for higher credibility and reduced cost of risk (administration, insurance costs, etc.)

Bragg stated that he thinks we are all on the same page in terms of the membership growth and we all recognize that we have to have a good balanced strategy. But when we talk about the deductible issue, Bragg stated that he didn't know how you get a deductible strategy that moves members to a larger deductible with the workers' compensation situation and the premium pricing the way it is structured right now. Bragg stated that when they go through the exercise, they look at it and think this is not even worth contemplating a higher deductible mainly because of the workers' compensation exposure out of the gate. Ely stated that she thought that was interesting because to her it's the general liability and the risk that is so much more volatile than the workers' compensation side. Ely stated that for purposes of controlling your losses, she thinks you have a lot more control over your workers' compensation losses. The other thing is that workers' compensation is so much quicker to be developed than general liability. In workers' compensation there is a statutory fix on it and we can predict what your loss is going to be fairly quick after the injury. Bragg noted that he didn't see the value in going to a higher deductible based on their experience. Bragg stated that every year they sit down and look at it and ponder what do to and can't get past where they are at – you would be taking on a lot of risk to go to a higher deductible.

Clark explained that his municipality is at $100,000 deductible now and as a municipality they probably have one of the smallest general fund balances out there. Clark explained that they found some tools that they use. The excess surplus provides us with an opportunity. They have close to $400,000 in their excess surplus, so if they have an adverse claim they can reimburse themselves out of their excess surplus. Clark explained that they didn't just jump right to $100,000. They gradually moved, staying at $25,000 for a couple of years, and then going to $50,000 for a couple years. Ely also commented that as they progressed, their culture changed in the village in respects to director and supervisor level of awareness of cost. Clark agreed and stated that IRMA provides them with information as to what department claims are occurring and each department is paying their own deductible losses. Clark also mentioned that they have incentives that support the safety culture.

Ely reviewed the action items from the information provided during today's meeting.

Action Item: Additional Analysis of revenue base as determining factor for contribution formula.

Ely asked the committee if they felt that any more analysis should be done regarding the actuarial analysis supporting conclusion that revenue base is a reasonable and predictable factor for contribution formula. Ely stated that staff recommendation is to do no further analysis. The conclusion is that revenue is a reasonable factor for determining the contribution formula. The committee concurred with staff's recommendation.

Action Item: Additional analysis of equity/subsidization question as it relates to revenue.

Ely asked the committee whether they though any more analysis should be done in regards to having a subsidization issue in the pool. The task force agreed that no more analysis needed to be done.

Action Item: $250,000 Permanent Deductible

A motion was made by Rush and seconded by Kiely to eliminate the $250,000 permanent deductible. A voice vote was called and the motion carried.

Action Item: Develop a plan for members to increase deductible levels (Glencoe model)

Ely asked the committee whether they would like staff and the group to get together and put together a pilot program for identifying certain members over the next several years who might benefit from a higher deductible and help them to achieve that. The task force agreed with staff's recommendation. Rush asked staff to identify what kind of work load it creates the employees who are processing those claims. Ely stated that we would still process the claims. She thought the burden on village staff would be the increased safety culture and possible training.

Kiely stated that he thought this was a good idea. Another piece he was interested in is the fact that one of the reasons they have not left is that they like putting their money into IRMA because you make a lot more money than they do. He certainly would be happy to build a reserve like Glencoe, but he would like IRMA to build that reserve and get your interest rates rather than what they could do on their own. Ely agreed and stated that she thought this would be part of the plan – to leave your money with IRMA and it would grow. It would almost be a self-insured reserve.

Action Item: Explore opportunities to introduce more accountability for workers' compensation.

Ely noted that staff's recommendation is to separately report workers' compensation experience in a claim to contribution formula and explore incentives for members with positive experience and to consider whether to tie eligibility to interest income credit to a certain score over a certain period of time.

After a brief discussion it was determined that staff should take a closer look at this and bring it back to the next task force meeting.

Kiely commented that all of our data is based on what has happened in the past and maybe we could have the actuaries look at what could possibly happen in the future that could dramatically change this. At some point, Kiely stated that he would like to see how the insurance market could change in that everything we are talking about here wouldn't make a difference.

Nishimura stated that one thing you could do is to implement a very small change in the surplus return that would be enough incentive to say I didn't get my share, and not enough hurt that would really hurt someone bad. Nishimura said that he did think there should be some kind of loss component in the experience modifier. It doesn't have to be huge, but just enough incentive to drive behavior.

Ely stated that if anyone had any comments on the Goals listed on the last slide, they should email her or call her. The meeting was adjourned.