Summary of Independent Actuarial Studies

The Ohio Bureau of Workers' Compensation has requested studies from independent actuarial consultants on the group rating program. These studies have shown an inequity between the group rated employers and those employers not in group. A summary of these studies follows:

1990

Mercer Meidinger Hansen Actuarial Consultants

Report signed by:

Robert Finger, FCAS, MAAA, CPCU, Principal

This report prepared by Mercer before the start of the group rating program presented issues with how the group rating program was set up and the concerns that manipulation of experience would take place when groups select only employers without claims or larger employers with minimal claims. By doing this the group's premium would be less than it should be and it would increase the off-balance and the base rates causing non-group rated employers to pay higher premiums.

1991

William M. Mercer, Actuarial Consultants

Report signed by:

James Inkrott, FCAS, MAAA, CPCU, CLU, Principal

Chad C. Wischmeyer, FCAS, MAAA

The initial evaluation of the group rating program again pointed out that "the current method of group rating significantly reduces the actuarial equity in workers' compensation rates for employers in the State of Ohio." This report stressed that the base rate would be artificially higher which would cause the non-group rated employers to pay a higher amount of premium. The report also stated that some employers are receiving more credit on their premium then they deserve.

1993

William M. Mercer, Actuarial Consultants

Report signed by:

James Inkrott, FCAS, MAAA, CPCU, CLU, Principal

The evaluation of group rating concluded that, "the available data indicate that the credits being given under group experience rating should be reduced significantly and premiums for group-rated employers should be increased, while base rates and premiums for non-group rated employers should be reduced in order to restore equity in the experience rating process." This study stated that the non-group employers are subsidizing the group-rated employers.

1994

William M. Mercer, Actuarial Consultants

Report signed by:

James Inkrott, FCAS, MAAA, CPCU, CLU, Principal

Jeffery J. Scott, ACAS, MAAA

This study estimated that non-group employers have subsidized the group employers by $128 million and that similar subsidies would continue for subsequent rating periods. The study suggested that the credibility factor be changed to lessen the group discounts.

1995

William M. Mercer, Actuarial Consultants

Report signed by:

James Inkrott, FCAS, MAAA, CPCU, CLU, Principal

Jeffery J. Scott, FCAS, MAAA

"The main conclusion from this analysis is that the use of either the updated Ohio plan (with major revisions to the credibility table) or the NCCI plan would increase the actuarial equity of the experience rating program as compared to the current Ohio plan." The study also confirmed the 1994 study that the loss ratios for group rated employers were relatively higher than those for non-group rated employers.

2001

William M. Mercer, Actuarial Consultants

Report signed by:

James Inkrott, FCAS, MAAA, CPCU, CLU, Principal

Jeffery J. Scott, FCAS, MAAA

Hou-wen Jeng, FCAS, Are

Eileen P. Roach

This study updated previous studies to include more recent policy year information. This study also tested previous analyses by using a different approach using SAS programming. The results of the analysis remained the same as previous analyses.

2004

Mercer Oliver Wyman, Actuarial Consultants

Report signed by:

Jeffery J. Scott, FCAS, MAAA

Eileen P. Roach

"The preliminary conclusions to be drawn from the exhibits is that the emerging "loss ratios" (i.e. losses divided by premiums) for group rated employers are noticeably higher than for non-group rated employers…. The implication is that group rated employers have been paying relatively lower premiums (compared to non group employers) than is indicated by their emerging loss experience. In other words, even though group rating may have resulted in overall reduction in losses for the fund, group rated employers have enjoyed higher credits than can be supported by their actual losses."

2006

Pinnacle Actuarial Resources, Inc.

Report signed by:

Chris Carlson, FCAS

The BWC hired Pinnacle to review the group rating program. As a result of this study Pinnacle determined that " the current experience rating plan credits overreact to the group-rated experience resulting in an actual loss ratio after the Group Rating experience adjustments that is significantly higher than the private employer overall average loss ratio. When compared with the Base and non-group Experience Rated policies, the average Group Rating credit should be in the neighborhood of 45 percent. In the current plan, the average Group Rating credit for Private Employers is in excess of 75 percent."

The Pinnacle study also addressed the base rate impact of group rating by stating that private employer base rates are estimated to be overstated by roughly 20 % due to group rating. Based upon their review Pinnacle suggested 3 changes to the group rating program:

1) Continue to reduce the credibility table with an indicated maximum of 60% in a shorter time frame.
2) Create an alternative credibility table with an expansion of the expected loss ranges beyond $1 million in expected losses.
3) Replace the current experience rating calculation structure with a structure similar to that used in most other states as developed by NCCI.

2007

AON Actuarial Consulting

Report signed by:

Joseph P. Kilroy, FCAS, MAAA, Director and Actuary

Mark Brissman, FCAS, MAAA, MSIA, CPCU, Director and Actuary

Peter L. Lindquist, FCAS, MAAA, Assistant Director and Actuary

Ni Qin-Feng, FCAS, MAAA, Assistant Director and Actuary

Brenda Reddick, ACAS, MAAA, Senior Consultant and Actuary

Bill Keros, ACAS, MAAA, Senior Consultant and Actuary

Amy L. Sestito, FCAS, MAAA, Senior Consultant and Actuary

Zoe Rico, ACAS, MAAA, Consultant and Actuary

Jay Matthew South, FCAS, MAAA, Assistant Director and Actuary

This report was commissioned by the Workers' Compensation Oversight Commission.

The report concluded that "The current Group Rating Plan in Ohio has resulted in a much larger off-balance adjustment than industry standards in the calculation of rates for individual classifications. As a result, non-group rated employers are paying exorbitantly high base rates, and subsidizing the group rated employers in the process.

As detailed in task B, (of proposal and RFP), group rating has had a significant adverse effect on pricing equity – prices for various groups are no reflective of underlying costs and therefore there exists substantial cross-subsidization."

2009

Deloitte Actuarial Consulting

Report signed by:

Jan Lommele, FCAS, MAAA, FCA, Principal and Lead Actuary

Bob Miccolis, FCAS, MAAA, Senior Advisory Actuary and Alternate Lead Actuary Dave Heppen, FCAS, MAAA, Senior Manager

Bill Van Dyke, ACAS, MAAA, Senior Manager

Dave Heppan, FCAS, MAAA, Senior Manager

This report was commissioned by House Bill 100 wherein the Legislature required a comprehensive review of the Bureau of Workers' Compensation. An RFP was issued and awarded to Deloitte Consulting, LLP.

Summary of conclusions as quoted from the Deloitte report March 12, 2009.

- The group experience rating process is inconsistent with the basic tenets of an experience rating plan, as it creates greater dispersion and instability.
- Given that the individual experience rating formula, when applied to groups, produces results that are inconsistent with the basic tenets of experience rating, a different approach to group rating is indicated.
- We are unaware of any other state that has a program which functions similarly to group rating as it exists in Ohio.
- The turnover of groups is very high.
- This lack of stability is indicative that groups are functioning poorly.
- Studies of BWC's group rating program have consistently demonstrated that applying the individual experience rating formula to group experience has resulted in significant under-prediction of losses for groups.

- A split experience rating plan, with lower credibility assigned to group experience compared to the current plan, will mitigate some of the inequity currently produced by group rating.
- However, a split plan shares the same basic flaw as the current plan in that it applies a formula designed for an individual employer to a group of employers.
- The opportunity to manipulate the composition of a group in order to maximize discount will still be present under a split rating plan structure and inequity will persist.
- Differences in the loss experience of individual employers are largely driven by the differences in the behavior of the management and employees of each employer, in terms of employee selection and training, safety programs, operating procedures, accident prevention, risk controls, etc. Such behaviors directly affect the frequency and severity of work injuries. Experience rating is a good predictor of future losses for an employer, because prior loss experience reflects an employer's oversight of such behaviors.
- A group of employers will not have the same management influencing such behavior, and therefore an individual experience rating formula applied to a group is not generally predictive of future losses for that group, regardless of similarities in type of business and prior loss experience of the group members.
- Studies of the BWC's group rating program have consistently demonstrated that applying the individual experience rating formula to group experience has resulted in significant under-prediction of losses for groups.
- The poor performance of the individual experience rating formula when applied to groups is evidenced of the flaws in the current approach to group rating, and indicates a need for a different approach to group rating, if some type of group rating is to be retained.