

*Analytics in Ratemaking
CAS RPM 2010*

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Goals of the Presentation

- Overview of the current P&C industry, with an emphasis on workers compensation and the risks faced.
- The importance of analytics to help navigate through this market
 - The Competitive Advantage
 - Loss Ratio and Risk Selection
 - Mitigation of Pricing Risk
- Type of analytics being used by Accident Fund Holding, Inc.

Overview of the WC market

- Economic conditions
 - WP down from unemployment and lack of business
 - No benefit to WC in 2010
- Companies financial strength improved in 2009
 - Rebound of investments
 - No major catastrophes
- Market conditions remain soft, and not expected to change in 2010
 - Industry has not reached its "pain" point to turn the cycle
 - Rates are flat, companies releasing reserves from prior years
- **Expect that 2010 will be another tough year for the WC industry**
 - *So, how does one gain an edge in this environment?*

Risks facing the WC industry

- The Ongoing Risks:
 - Reserving, Pricing, Catastrophic Event...etc.
- Inflation – Could it accelerate?
- Political – Could the CA's governor race rollback reforms?
- Economic
 - Are the current employment shifts by industry permanent?
 - What is the impact on claims?
- Investment
 - Lower yields which in turn will put pressure on the CR
 - Unstable investment market
- Perfect Storm – Combination of the above.

- *A lot of risks to consider.....analytics can help*

Reasons for Analytics

- The Competitive Advantage

- Mitigation of Pricing Risk

The Competitive Advantage

- The ultimate advantage is reducing the loss ratio and achieving better risk selection (vs. the competition).
- Competition is already using analytics in its pricing and expansion strategies
 - Predictive modeling is starting to take hold on the commercial side
 - Advances in software are allowing users to more effectively analyze larger quantities of data.
- So....if your company is not using analytics wisely then your competition will be using this against you, putting you at a disadvantage.

Mitigation of Pricing Risk

- Pricing risk (simple definition): Risk of capital being drained due to under pricing.
- Traditional ratemaking:
 - Review a line, by state, once (maybe twice) a year.
 - Review standard exhibits (rate indication, experience by class,....etc).
 - The time lag between reviews and limited diagnostics could allow for pricing risk to seep in.

Mitigation of Pricing Risk

- Analytics can help fill in this void, by allowing companies to monitor their book of business on a continuous basis.
 - Break from traditional ratemaking
- Move to a more continuous process.
 - In today's environment companies must constantly stay on top of the many fluid risks facing its business.
 - Doing so will allow companies to manage their volatility surrounding their pricing risk.

Benefit and Challenges with Analytics

- From an ERM perspective, the more savvy a company is in analyzing/predicting its business the more value it will create.
- Key challenge is to actually use the information in a constructive way.
 - Need to know what data/metrics are important
 - Be wary of information overload
 - Need alignment with Underwriting
 - If they don't, or can't, use it then the metrics will be meaningless
 - Need to present the analytics in a meaningful way
 - Understand the audience
 - Sometimes graphs work better than tables.

Types of analytics being used by AFHI

- Predictive Modeling
- Diagnostics

Predictive Modeling - Highlights

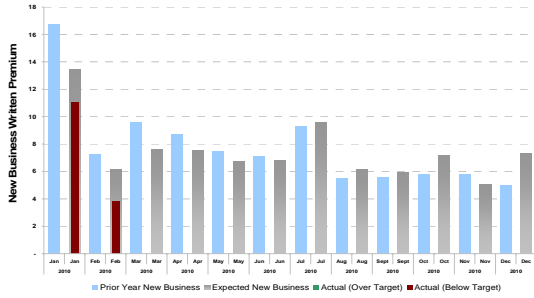
- There is no one magical variable
 - Many variables are predictive
 - Key is putting them together into an efficient model
 - Do not underestimate the importance of a good modeler.
- Many good sources of data out there
 - NCCI, BLS, OSHA, other socioeconomic sites....etc
 - Help supplement internal data gaps
 - Do not overlook the data structure
- Implementing the model into the underwriting process
 - Education of agents and underwriters
 - Very effective as a risk selection tool

Examples of Diagnostics

- The following slides are examples of diagnostics that AFHI is currently using.

ACCIDENT FUND HOLDINGS, INC.

State X - CY New Business Written Premium



Slide 19

ACCIDENT FUND HOLDINGS, INC.

Questions?

Slide 20
