Comment #17 – 10/31/16 – 12:35 p.m.

Thank you for the opportunity to provide comments on the proposed actuarial standard of practice (ASOP), *Modeling*. These comments reflect my opinions, and are not necessarily those of my employer.

The previous exposure draft had numerous comments regarding the extremely broad scope of this proposed ASOP. I believe that continues to be a concern and the end result is language that does not fit well with all actuarial practice. For example, a model that rank orders customers from least to most likely to have a claim is much different than a stochastic model that predicts the probabilities of financial ruin. Another example is how to apply the degree of conservatism described in section 3.6.4 to a predictive model that rank orders customers.

Section 2.7 I suggest deleting the word "simplified". The word "simplified" is not needed and it could be misinterpreted. Someone could argue that a very complex model is not a "simplified" representation. While models are always an approximation of real world events, the models may be extremely complex representations.

Section 2.7 I like the statement that a model "transforms inputs into estimates". This makes it clear that reports or spreadsheets that organize, filter, sort, or performs statistical functions on historical data are not models.

Section 2.11 the use of the word "parameters" as being an input into models is not typical usage for P&C pricing models. The parameter estimates are typically considered the outputs of regression modeling.

Section 2.12 - I like the concept of limiting the proposed ASOP's applicability and agree with the use of professional judgment in determining which models are simple models. However, the definition of a simple model is not sufficiently clear to me to apply the line to be crossed for a model to no longer be simple. Perhaps some examples might help.

Section 3.2 and 3.3 - The dividing line between Section 3.2 and 3.3 is vague. I have concern that this could be interpreted as a higher bar of responsibility than is intended. In litigation this could provide opposing attorneys a tough line of questioning.

Section 3.6.1a- The following seems burdensome "the extent to which a model fails to fulfill its intended purpose, due to limited information, time constraints, or other practical considerations" How can the actuary measure the "extent" of something he/she did not do? Perhaps the actuary could have built a better model if they had more information or time, but how can they know the "extent"? I also suggest a different would than "fails".

Section 3.8 The following language seems redundant. ... should follow the guidance of ASOP No. 41, including section 3.2 in ASOP No. 41.

Thank you for your many hours of service in responding to prior comments, preparing this exposure draft and the hours you will spend reviewing the comments.

-Greg Hayward