



Excess Product Suite Laser Tool

Milliman's Laser Tool is an innovative way to help an underwriter quantify the financial risks associated with high-cost individuals. It is a simple tool that requires no clinical expertise, with the potential to improve efficiency in the laser-setting process as well as the incorporation of lasers into a broader underwriting strategy. This functionality is designed to manage risk while remaining competitive in the retention of existing clients and new business acquisition.

Estimate distributions, not average costs

For fully insured coverage, knowing the expected, or average, cost of an individual is generally sufficient to properly underwrite a case. In stop loss, however, the entire distribution of potential outcomes is important. For example, if an individual's expected cost is \$100,000, and the group deductible is \$125,000, that individual represents a much greater underwriting risk than a "normal" individual with expected costs of \$5,000. This raises several critical questions:

- How much greater?
- What needs to be done to adjust the risk so that it is consistent with an average person?
- If the risk isn't adjusted, what is the expected cost to the stop loss policy?

By projecting a claims distribution instead of an expected cost, the Laser Tool can provide guidance in answering these questions.

Use diagnostic detail

Simple data summaries can tell us the distribution of costs for individuals diagnosed with congestive heart failure (CHF). However, that summary dataset is likely to include CHF patients with and without comorbidities. If the summarized data is further broken out to reflect multiple comorbidity combinations, credibility of the data can quickly disappear. The methodology behind the Laser Tool allows for incremental changes in the expected cost distribution for multiple comorbidities.

Take advantage of clinicians' knowledge

We recognize the value that a clinical estimate can bring over and above that of a statistical model. Therefore, the Laser Tool allows the user to input expected costs based on a clinical (or other) review, and adjusts its projected distribution to be consistent with these expectations. In cases where a clinician has not performed a review, the Laser Tool can generate a projected distribution without any clinical input.

No single strategy fits all

The Laser Tool provides multiple outputs that will allow an underwriting organization to build a custom strategy around lasers. The Laser Tool outputs information that can support varying strategies, including:

- Pooling concepts
- Premium loads
- Target probability of large claim (or policy losses)

If you are interested in licensing any of these products, please contact your Milliman consultant. If you do not have a relationship with a Milliman consultant, contact Rob Bachler at rob.bachler@milliman.com or David Olsho at david.olsho@milliman.com.