

Claim Reserve Estimation Workbook (CREW)



Claim Reserve Estimation Workbook™ (CREW™), Milliman's powerful tool for estimating incurred but not reported (IBNR) medical claim liabilities, helps our clients develop accurate reserve estimates and monitor their businesses at a high level. CREW performs a series of actuarial-based claim-reserve calculations using historical, client-specific claims and exposure data.

A BETTER MONITORING TOOL WITH MORE ACCURATE ESTIMATES

CREW stands out from the pack with its efficient, flexible Microsoft Excel®-based template that uses a single, simple-to-use workbook. There are no hidden worksheets and the flow of the calculations can be easily understood by actuaries and nonactuaries alike. CREW's primary asset is its ability to accommodate unusual claim payment patterns, as well as changing enrollment, benefits, unit costs, and other key factors. The result? A more accurate estimate.

In addition to estimating reserves, CREW's reporting features make it an exceptional management tool. For example, CREW will:

- summarize claims by incurred month, quarter, and calendar year
- calculate loss ratios by incurred month, quarter, and calendar year
- analyze incurred claim trend and seasonal patterns
- calculate restated reserve levels using claim run-out data
- sensitivity-test best estimates against alternative assumptions
- graph results to better display estimates

CREW makes the data load process easy by color coding all input areas and protecting other areas so that formulas can't be overwritten. The program incorporates dialogue boxes in the input areas to help the user quickly set up trend assumption, experience credibility, and other key variables. Finally, we provide a simple print feature and update mechanism that saves the user time and effort.

FLEXIBLE APPROACH SUPPORTS UNIQUE CLIENT NEEDS

CREW is founded on two approaches. First, it mathematically models monthly claims lag patterns and uses these patterns to develop monthly incurred claim estimates. Then, it develops incurred claim estimates by projecting historical costs on a unit cost basis. The final incurred claim estimates are based on a blending of these two methods. The IBNR reserve estimate is simply the incurred claim estimates less claims reported (paid) to date.

CREW's flexibility allows the user to review, select, and modify claim patterns, projection bases (e.g., per member month or per hospital inpatient admissions or days), and projected trend rates. CREW can develop IBNR estimates for as many as six service categories in one workbook (e.g., hospital inpatient, other hospital, physician, pharmacy). Each category is supported by its own worksheet, which contains several exhibits. Each exhibit represents a step in the IBNR estimation process or a monitoring report summary, such as rolling trends or completion pattern analysis.

CREW is designed so that the user can easily test and document the sensitivity of different sets of assumptions on the resulting IBNR estimate—a critical feature because the results are sensitive to the assumptions used.

CLIENT FOCUS OFFERS TIMELY SUPPORT

Milliman consultants provide training and ongoing support for CREW users. In our thorough, half-day training session, we give CREW users a comprehensive understanding of how to use this tool, often using actual client data as part of the process. While some of our clients prefer that we perform their IBNR analyses from start to finish, others use CREW on their own and turn to Milliman as a second-opinion resource when complex situations arise.

When a client is trained on the CREW system, Milliman consultants can respond to reserving questions quickly via CREW e-mail, and we offer timely results with little or no data issues. Reserve estimates are often made under tight deadlines, so our ability to respond rapidly is reassuring to our clients.

SUMMARY

Developing reasonable IBNR estimates and monitoring financial results are important functions for risk-taking organizations. Reserve estimates always require sound judgment and CREW provides a consistent structure for developing IBNR estimates.



CLIENT POINT OF VIEW

A young, consumer-driven insurance company received training from Milliman to use our CREW system a few years ago. They now develop IBNR estimates on their own and are very comfortable using CREW. The client writes, “Using Milliman’s CREW model, we were able to easily manage our difficult claim development issues brought on by rapidly growing membership, changes in claim systems, and several benefit design adjustments. CREW is perfect for our continuously changing environment.”

A small local HMO also uses CREW and Milliman certifies its reserves annually. The plan administrator writes, “We started out having access to an actuary through our claims administrator, who prepared monthly reserves for us. When we switched administrators, those services were no longer available. We needed to continue to prepare monthly reserve estimates but could not afford to employ a full-time actuary.

“We talked to Milliman staff and they made us aware of their CREW model. For minimal start-up costs, which included training on the CREW model, we were able to use Milliman’s expertise without the price of monthly consulting costs. It is extremely user-friendly and macro-driven so after inputting the monthly lags for paid claims and some minor review of factors, the reserves are calculated. The reserve results are consistently in line with expectations and supply a level of reliance that provides a comfort level to our owners.”

Milliman, whose corporate offices are in Seattle, serves the full spectrum of business, financial, government, and union organizations. Founded in 1947 as Milliman & Robertson, the company has 48 offices in principal cities in the United States and worldwide. Milliman employs more than 2,100 people, including a professional staff of more than 1,000 qualified consultants and actuaries. The firm has consulting practices in employee benefits, healthcare, life insurance/financial services, and property and casualty insurance. Milliman’s employee benefits practice is a member of Abelica Global, an international organization of independent consulting firms serving clients around the globe. For further information visit www.milliman.com.

For additional information regarding leasing the CREW model, please contact Doug Proebsting or your Milliman consultant.

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