Top 10 Things to Consider when Running Loss Triangles

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Introduction

It's considered good practice to get an annual checkup from your doctor. It's a way to spot any negative trends in your health and make steps towards correcting the problem. And once you're done, you feel good knowing you got all of your vitals checked and made a plan for improving your health,if necessary, in the coming year. Running loss triangles is like a health check for your organization's losses, where you can spot trends in your claim costs. But it's easy to put off the reporting because loss triangles have a reputation for being complicated or frustrating. So,while loss triangles may appear to be complicated, with the right plan and the right tools, they don't have to be. Today's risk management information system (RMIS) technology solutions automate in seconds what used to take hours or days.

What are loss triangles?

Loss triangles are powerful actuarial reports that can give you insight on your ultimate claim costs over time.They are necessary to provide estimates of ultimate loss to reflect on your organization's financial statements. Loss triangle reporting is tricky because it may take several years for all claims in a given policy period to be reported and closed. New information pertaining to existing claims can impact the total losses long after the end of a policy period. Sometimes new claims are reported after the close of the policy period. So, a snapshot, or summarized evaluation of the losses, is generally made at least once a year. The development in the losses is the quantitative change in this evaluation from year to year. A loss development triangle is a unique way of arranging the annual loss evaluations for several past policy periods. By arranging the loss evaluations for past years in a table, you can analyze the change in losses from one evaluation period to the next.

Don't Lose Your Mind Over Loss Triangles

When it is time to run loss triangles, it is imperative to have a plan and to think through the process. Today's analytical tools are extremely robust. These tools have the flexibility to generate triangles with options to select incident start and end dates, valuation dates, coverages, claim status, triangle intervals (monthly, quarterly, semi-annual, or annual), the dollar threshold at which to cap losses, selection to generate the triangles on an Occurrence or a Claim basis, plus many other options. With all of this flexibility comes great responsibility.

Here are some additional things to consider when running loss triangle reports:

LOSS TRIANGLE GENERATION CONSISTENCY

H1) Has any data changed since the last time the loss triangles were generated? Consideration of data changes is extremelycrucial, especially with respect to changes in fields that are used to filter triangles. For example, you may want to filter WC claims by State of Jurisdiction to create state specific triangles for additional actuarial analysis. Actuaries may need to isolate the development of California claims and therefore will request a California Only triangle. If the State of Jurisdiction on a claim was originally California, but then later changed to another state, then the claim would be on the previous year's triangle, yet later fall off of the triangle for the triangles generated after the date the data changed. This can cause discrepancies between annual triangle comparisons.

This problem can be solved by retaining field history for these key claim fields. Field History Tracking allows you to determine when crucial claim characteristics have changed. By utilizing history tracking, the date, time and nature of the field change is captured. This allows for variances in the triangles to be identified and documented for your actuary.

2) Are you being consistent in the way you are running your triangles?
Frequency Triangles generate a table of loss experience showing claim/occurrence frequencies for a certain period at various, regular valuation dates. The incident frequencies can be generated on an Occurrence or Claim basis. Inconsistency in approach will cause counts to erroneously fluctuate. Additionally, claims without any money paid on them (zero dollar claims) can be included or excluded from the frequency counts. Consistency when selecting these triangle options is paramount.

Financial Triangles generate a table of loss experience showing total losses for a certain period at various, regular valuation dates. These financials can reflect:

Total Net Incurred / Total Net Paid
Total Gross Incurred / Total Gross Paid
Total Indemnity Incurred / Total Indemnity Paid
Total Medical Incurred / Total Medical Paid
Total Expense Incurred / Total Expense Paid
Total Net Incurred Minus Expense / Total Net Paid Minus Expense
Total Gross Incurred Minus Expense / Total Gross Paid Minus Expense
Or any other custom Financial Calculation

Consistency in the selection of financial development generated is also required. If you excluded expenses from your triangle last year, then they should also be excluded in this year's analysis. A supplemental triangle could also be provided to your actuaries that is for expense only financials. This supplemental triangle can then be utilized to add/or subtract from other triangles depending upon whether those previous triangles contained expenses or not.

3) Have you changed TPAs or Carriers? Are their takeover claims being counted twice?
You will want to review your claims data in cases of takeovers to ensure that your claim frequency triangles are not artificially being inflated. Typically, in the case of changes in carriers, the data consolidation efforts of your RMIS technology provider should denote these duplicates with a Takeover Flag. This allows for one claim that was historically handled by one carrier, that later is handled by a different carrier, to not be counted twice in a frequency triangle.

DATA QUALITY

4) Do you have any data issues?
Claims not mapped to a location, missing coverage codes, claims with date of loss after the date the claim was reported, can all cause discrepancies within your triangle. The data coming out of your triangle reporting is only as good as the information you feed into the system. Commitment to data quality is important for producing solid actuarial analyses. While null values in any field is never desired, when it occurs in certain key fields it can become extremely problematic. For example, if you are generating triangles segmented by the organization's location hierarchy, you should review your data to determine if any claims are either not mapped to a location or are mapped to an Unknown Location. Claims not mapped to a location could be inadvertently dropped from your Company/

Subsidiary/Division specific triangles and cause under reporting.

POLICY DATA

5) Have your Policy Periods changed?

Triangles can be processed by Actuarial Year, Policy Year, Calendar Year, Fiscal Year or any other Custom Year. The key to this is the dedicated maintenance of the Policy Year table to ensure that any changes in time periods are properly updated so that triangle elapsed periods can be determined accurately.

6) Has any of your Policy Limits changed?

Triangles can be capped by either a flat amount or a custom amount based upon Coverage, Date of Loss, Report Date or any other combination of Policy/Claim characteristics. During the generation of annual loss triangles, the Policy Limit table should also be reviewed. This is to ensure that Policy Periods added since the generation of the last annual triangles are properly updated to accurately reflect the Policy Limit for the corresponding period/coverage combination.

7) Are you capping financial triangles by Claim or Occurrence?

If capping at the occurrence level, then consideration must be given to multi-line occurrences. If the triangles are filtered by coverage, but the claims within the occurrence spans multiple coverages then how should that capping be applied? Some may take the Occurrence characteristics from a "Lead" or representative claim. Others may group the claims within an occurrence with the same coverage. Either approach, as long as it is utilized consistently and properly documented and communicated to your actuary during the analysis, should be acceptable.

LOCATION HIERARCHY

8) Has the corporation acquired or sold off any companies/divisions?

If so, claims associated with those locations may need to be segmented and specifically reviewed with your actuaries. Triangles allow for segmentation by any level of the location hierarchy. This allows for an unlimited number of triangles to be generated limited to specified companies, divisions, subsidiaries, business units or any other level of the location hierarchy.

OTHER

9) Large Loss Listings

A large loss listing should also always accompany your loss triangles. If your triangles are capped or if there are other retention considerations, create a claim listing for all claims over that threshold. This listing should contain claim by claim details to include incident date, report date, coverage, location, status, and all financial information broken out by incurred, paid and outstanding. Your actuary needs this and by providing it in conjunction with your loss triangles, can save time on their analysis.

10) Documentation

The last recommendation to ensure a successful actuarial analysis for the current period (and for subsequent analyses in future years) is to document, document, document. This will make it clear for your actuary to understand precisely what data is contained in each loss triangle. It will also make your life easier the next time you generate triangles so that you can ensure consistency between each actuarial analysis.

Conclusion

So just like your annual health checkup is important for your well being, loss triangles are just as important to the health of your organization. Riskonnect not only provides enterprise-class risk management technology, but also has the expertise and consultative approach needed by each client to ensure their data quality and analytics are best-in-class. The Riskonnect Analytics team works hand in hand with each client to deliver loss triangles to your actuaries so that more accurate forecasting of your organization's losses can be achieved. Loss triangle reporting is a challenge, but by focusing on loss triangle generation consistency, data quality, policy data maintenance, and documentation, it can be a breeze. Riskonnect stands by its analytics services provided to you. But don't take our word for it. Read what one Riskonnect client experienced.

What a Riskonnect client says about Loss Triangle reporting with Riskonnect - a large packaged foods organization

"I would like to thank each of you for your efforts in getting our triangle reporting process to the position we are in today. When we ran the triangle process in September, the triangles balanced almost to the penny. I believe the total time spent on the entire process was around 2-3 days (including the generation of over 100 triangles and our internal verification and validation process) which exceeded my realistic expectations.

The work this team put into these triangles has paid off and we are now running them more efficiently than ever. Based on this experience, I now have even higher expectations for what we can do within the system in the future and look forward to those implementations.

Thank you for all that you do in supporting our Enterprise Risk Management efforts!"

Director Finance, Insurance & Loss Control, a large packaged foods organization

About the Author

Kristi has over 20 years of experience working in the risk management and insurance industry. She joined Riskonnect from Crawford & Company's Risk Sciences Group, where she was a Business Process Consultant. Her expertise in business intelligence, quantitative applications, decision support systems, forecasting, trend analysis and dashboarding, combined with her analytical approach to problem solving, has translated into the successful implementation of customized reporting packages for numerous Fortune 500 clients.

Prior to joining RSG, Kristi worked at Blue Cross Blue Shield of North Carolina as a Senior Operations Reporting Analyst and at PennCorp Financial Group as Director of Underwriting and Market Development. She received her Bachelor of Business Administration in Risk Management and Insurance with a concentration in Actuarial Science from the University of Georgia's Terry College of Business. She has also received her MBA with a concentration in Operations Research from the University of North Florida.

About Riskonnect Analytics

The Riskonnect Analytics team is characterized by a deep understanding of the loss management analytics utilized by brokers and underwriters, and by a commitment to connecting clients with the optimal technology solutions for their needs. Riskonnect provides organizations with a centralized database and analytics system in a single secure, online work platform. Riskonnect empowers end users with self-service analytics, as well as the option to utilize Riskonnect's Analytics team for any level of consultative requirements. Clients are afforded game-changing capabilities for reports and dashboards, including the ability to set up KRIs and KPIs necessary to monitor and analyze their business, all within the Riskonnect platform.

Through a combination of data, analytics, and technology, the Riskonnect Analytics team gathers your requirements and creates functional and technical reports to your specifications. These reports provide greater certainty and understanding of an organization's risk data and help risk management professionals take an anticipatory approach to risk by empowering them to make strategic business decisions that align with their corporate objectives.

About Riskonnect, Inc.

Riskonnect, Inc. is the provider of a premier, enterprise-class technology platform for the risk management industry. As an independent innovator in risk management software, Riskonnect develops and markets a growing suite of software solutions on a world-class cloud computing model, helping clients elevate their risk management programs, safety solutions and programs for management of risks across the enterprise. Through its strategic, operational and insurable risk software applications, Riskonnect provides the risk management industry with the specific, configurable solutions needed to reduce losses, control risk and affect shareholder value. For more information about Riskonnect, contact us at www.riskonnect.com, email us at info@riskonnect.com or call **770-790-4700.**