Taking the EDGE off:
Minimize stress while maximizing ACA risk adjustment through EDGE server best practices

Alan Vandagriff
Jason Petroske, FSA, MAAA

The financial consequences of an inaccurate risk score for a Patient Protection and Affordable Care Act (ACA) population can be severe.

A few inaccuracies can turn an otherwise profitable book of business into a losing proposition. Some of our own audits of External Data Gathering Environment (EDGE) data have revealed that risk scores are all too commonly understated by 10 percentage points or more. Considering each 0.01 change in risk score for a modestly sized health plan can affect revenue by as much as **$2 to $3 per member per month (PMPM)**, such large understatements in risk score can easily be a $2 million to $3 million hit to the bottom line of an issuer with just 10,000 lives. Some ACA carriers, in an unfortunate surprise, discovered the effect of artificially low risk scores on 2014 transfer payments a little too late. Lesson learned, right? Maybe not. A recent report released by the Centers for Medicare and Medicaid Services (CMS)[1] highlights the struggles health plans still face with accurate risk score data submission in the second year of the risk adjustment program.

Development of an issuer's risk transfer starts with data stored in an EDGE server. Conceptually, the process for maintaining the data is straightforward—each health plan purchases a server (cloud-based or physical) and uploads a very specific set of information. Software designed by CMS and downloaded by the carrier takes care of the rest. Some issuers confront the data management challenge head on and establish EDGE procedures internally. Others contract with vendors to ease staffing burdens and (presumably) increase the accuracy of the submissions.

Regrettably, neither avenue has consistently led to positive experiences and outcomes. Plans managing their own EDGE servers must wade through mountains of rules, technical specifications, and CMS webinars and slide decks—all while presuming they are correctly interpreting and completing

the requirements. Insurers partnering with a vendor report perceived imbalances in responsibility from understanding the EDGE Server Business Rules (ESBR) to troubleshooting errors. In either case, health plans feel the submission process lacks the degree of transparency needed for such a critical component of their financial strategies, leading to recurring issues, wasted time, unresolved errors, lower risk scores, and ultimately millions of dollars in lost revenue.

In this paper, we outline action steps health plans should consider as part of their annual EDGE server submission cycle. Whether leveraging outside expertise or designing a solution in-house, our experience suggests straightforward steps can go a long way toward maximizing risk adjustment results.

Effectively managing the process

Complete and accurate data is a critical element in capturing—and, more importantly, in receiving compensation for—a health plan's true level of risk. While navigating the first two years of EDGE submissions, we have mapped out a comprehensive action plan focused on three main areas that any issuer can integrate into its data management framework:

Establish a robust review and reconciliation process: Create a continuous process for reviewing and reconciling EDGE submissions to internal data sources. Identify key metrics for data completeness and use the test environment to ensure each EDGE submission passes these standards before finalizing in production.

Prioritize error corrections: Not all errors are created equal, so have a strategic plan for correcting errors and improving data quality. Understand the economics of risk adjustment to help effectively deploy and allocate resources.

Track data quality and establish benchmarks: Track and benchmark data quality and submission results over time. Look for patterns in errors or outliers from prior submissions as these can be signals of systemic weaknesses in the overall data management process.

In the sections below, we explain these three components in greater detail and outline approaches to consider for each.

---

1   Centers for Medicare and Medicaid Services (March 18, 2016). March 31, 2016, Interim Summary Report on Risk Adjustment for the 2015 Benefit Year. Retrieved July 22, 2016, from https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs/Downloads/InterimRAReport_BY2015_5CR_031816.pdf.

ESTABLISH A ROBUST REVIEW AND RECONCILIATION PROCESS

One of the more frustrating EDGE-related issues is realizing, oftentimes too late in the process, that the data accepted and posted to the server do not square with expectations. This can include premium, claims, enrollment, and even the data underlying the risk scores or the scores themselves. Fortunately, the problem can be easily rectified with thorough reconciliations and generous use of the EDGE test environment.

Tie back to internal reporting

At a high level, simple validation techniques can often be most useful for identifying obvious, experience-related data issues that are surprisingly sometimes worth millions of dollars. Reconciliations of each EDGE submission back to key performance indicators, internal data warehouse reporting, and financial statements can pinpoint places where information is not populating accurately *and* completely.

For example, existing data warehouse reports already evaluating submitted records, claim dollars, and enrollment metrics can be directly compared with and tied to EDGE-outputted amounts, quickly highlighting gaps in the submission logic. Similar tracks can be developed for other key financial metrics regularly measured as part of normal business operations. These checks should be performed early in the reconciliation process to circumvent auditing of the more detailed process flow components as long as possible. We identified one situation where a plan's EDGE data collection procedures summarized data differently from those employed for monthly financial reports, leading to incomplete claim records posting to the EDGE server. Had this error been identified, the plan's overall risk score would have increased by over 10%.

Risk score validation is paramount

Risk scores are more difficult to reconcile than experience metrics because the point of comparison is not as apparent. Company resources supporting the EDGE server tend to base their correction efforts on the stock CMS error reports. However, risk scores can still be understated even if more conventional reconciliations pass rigor and all EDGE error report issues are addressed, leading to material revenue loss if not corrected.

The core of the problem is related to how detailed claim data translates to the Health and Human Services Hierarchical Condition Categories (HHS-HCCs). Perhaps the most egregious example was mentioned at the March 31 CMS Risk Adjustment Methodology meeting whereby several plans in 2014 mistakenly uploaded only a handful of diagnosis codes—effectively sending less information to the HCC scoring algorithm and severely dampening those plans' reported (not experienced) risk level. This failure to reflect all diagnosis codes within EDGE is a critical mistake. Milliman research has illustrated that submitting, for instance, 15 diagnosis codes rather than only one would result in an average increase in the overall risk score of approximately 30%. A change of this magnitude could easily lead to a multi-million dollar shift in revenue for a health plan.

The key to successful risk score reconciliation is establishing a valid expectation. By using the CMS "Do It Yourself" software and implementing the necessary filters, health plans can calculate independent risk scores from source claims and enrollment data. From these expected risk scores, issuers can identify member level discrepancies when compared with the EDGE server outputs. Investigating inconsistencies and addressing the root causes can lead to substantial increases in revenue. We have seen firsthand how beneficial this approach can be. In one case, an issuer corrected the risk scores for only 100 members but increased its risk adjustment revenue by roughly $2 million.

Most risk score investigations will eventually culminate with an analysis of the score's buildup. As such, we advise issuers to initially establish a process to regularly monitor the key components directly influencing risk score development, including:

- *Diagnosis codes:* Issuers should populate as many diagnosis code fields as possible and confirm all codes have been specified correctly and fully migrated into EDGE. Trends in diagnosis code completeness should be tracked over time to ensure accuracy among providers and to identify potential gaps in claim submissions.

- *HCC prevalence rates:* Depending on issuer size, large shifts may signal an incomplete identification of all relevant HCCs.

- *Medical record code sets:* All medical record-related data fields (i.e., diagnosis codes, Current Procedural Terminology (CPT) codes, bill types, etc.) must reflect standard values rather than company-generated codes. Failure to convert issuer-specific codes or processes to the prescribed code sets can lead to a claim's inadvertent removal. Issuers should measure the proportion of claims populated with invalid data and establish procedures to improve these metrics over time.

The EDGE test environment is there. Use it

Regardless of the metric evaluated, the EDGE test environment offers a ready-made setting for reconciliation exercises. By conducting all allowable testing and sample reporting here, health plans can not only improve submission accuracy before migrating information to the production environment but can also avoid the additional hassles arising from the void and replace guidelines if corrections are needed later. Voiding or replacing claims, and then resubmitting, quickly adds complexity to an already demanding process. While these procedures are, at times, unavoidable, taking full advantage of the test environment to reconcile and review each submission prior to a production upload can significantly minimize rework later.

Vendor oversight can have a huge payoff

For issuers working through a third-party vendor to facilitate the EDGE server process, understanding each party's responsibilities and protocols is necessary for quality submissions and will help increase the long-term value of the relationship. Some health plans expect a vendor to thoroughly understand the entire value chain and provide adequate consulting throughout the entirety of the submission process, even taking the lead in finding and addressing errors. Other issuers develop more sophisticated internal capabilities and simply want assistance with the mechanics of the submission itself. If the health plan and vendor are not on the same page, opportunities to address errors and improve risk adjustment results inevitably slip through the cracks.

Health plans also need to have a complete understanding of their vendor's submission process. Late in the 2014 cycle, an issuer discovered its vendor applied an independent set of business rules that trimmed the number of claim records prior to the EDGE upload. This preprocessing inevitably prevented a portion of claims eligible for risk adjustment from receiving appropriate credit, which reduced the company's composite risk score by approximately 25%. While vendors can be powerful partners, health plans should also view the relationship as another source of possible data loss and must audit the claims going to and from the vendor just as meticulously (if not more meticulously) as if they had performed the EDGE submissions themselves.

PRIORITIZE ERROR CORRECTIONS

Even after employing a rigorous review and reconciliation process, errors and rejected records will inevitably still occur. However, prioritizing and targeting error correction efforts will save time and take the strain off resources. Unless all errors can reasonably be addressed, the focus should be directed toward those with the highest dollar value impact.

Prioritizing error resolution efforts for risk adjustment[2] requires a strong grasp of how claims translate into transfer dollars. The basics of the approach might resemble the following:

First, understand each member's assigned risk score and HCCs based on accepted claims. From a risk adjustment perspective, there is no value in correcting claims that either translate to an existing HCC (i.e., an HCC already credited on the EDGE server, an HCC that is in the same group, or an HCC in a less severe part of a hierarchy) or lack eligible diagnoses.

Second, assuming a rejected claim does contain a diagnosis for a previously unidentified HCC, recognize its relative return. This encompasses not only the value of the condition but also the member's metallic tier. All else equal, a member with any condition enrolled in a richer plan will generally provide a greater return than a member with the same condition in a leaner plan.

Third, consider other interactions:

- A member's risk pool: Risk scores are highly leveraged in the catastrophic pool because of the overall lower HCC prevalence found in the catastrophic risk pool as compared to the individual and small group risk pools.
- Geography: Members in higher cost areas contribute more to the final transfer.
- Enrollment duration: Active or termed members with a longer enrollment period in the calendar year contribute more to the final transfer.
- CSR Status: Members enrolled in Cost Share Reduction (CSR) plan variants—specifically the 87% and 94% silver plans, limited cost sharing (LCS) plans, and zero cost sharing (ZCS) plans—will provide a higher risk score, all things equal, than members in other plans.

Regardless of how a plan tackles error correction, a concerted effort should be made to clean up the data warehousing and data manipulation prior to information reaching the EDGE server. Doing so will provide the greatest long-term benefit and time savings as opposed to perpetually solving issues on the back end.

TRACK DATA QUALITY AND ESTABLISH BENCHMARKS

Issuers should establish two long-term goals in EDGE data management: (1) develop a mechanism to track information as it travels from database to the EDGE server and (2) benchmark key metrics and quality indicators over time. By reviewing errors longitudinally within a year and across multiple years, patterns may emerge that highlight flaws in the underlying data extraction, manipulation, or submission steps.

We have already touched briefly on identifying and tracking errors once data reaches EDGE, but these methodologies can extend beyond what exits the EDGE server. As mentioned previously, many vendors and health plans employ internal scrubbing routines between the initial extraction of the data systems and final loading to the EDGE server. Tracking errors within these intermediary steps will prevent rework as the data moves from source to final destination.

Benchmarking can occur between submissions within a year or between similarly timed submissions year-over-year. They come in two varieties: benchmarks for data metrics and benchmarks for submission quality.

- Several metric-based benchmarks for comparison already discussed include risk scores, CPT code and bill type acceptance rates, the number of diagnosis fields, etc. But plans may take the analysis as far as HCCs per member, disease prevalence rates, and allowable rating factors. Such experience-based metrics may be developed specifically for EDGE data management or for outside financial analyses.

---

2   While we focus specifically on risk adjustment, health plans do have opportunities to affect Transitional Reinsurance Program recoveries for the 2016 plan year in the individual market. When considering error corrections related to this program, issuers should focus on individual market members who are near or over the annual attachment point. In 2016, this value is currently $90,000 of annual paid claims per member.

Either way, they can serve to expose pieces of the chain that may be deviating beyond some tolerance compared with past submission experience. If a carrier is not comfortable with its current internal data management, we usually recommend comparing internal outcomes to external benchmarks until a stable baseline can be established.

- Equally important, standards for submission quality hold vendors or internal teams accountable for meeting pre-established criteria and for recognizing areas of deficiency in data management.

Do not stop at the raw data. Incorporate analytics where possible

While our advice thus far has been focused directly on data management and EDGE error resolution, the path to a streamlined and accurate annual submission does not stop at the raw data. Rather, we have seen the value of establishing risk analytics and integrating these tools in strategic planning.

EDGE input files and output reports contain a rich source of data and can facilitate other critical initiatives. For instance:

- EDGE data can be summarized over time to uncover risk score patterns among various regions, metallic tiers, demographics, and network cuts.

- By estimating the final transfer payment from the EDGE risk scores, issuers can view net medical loss ratios (MLRs) at any relevant level of detail, which can be especially valuable when setting premium rates and making product development and pricing decisions.

- Health plans without access to a statistical algorithm can find real opportunities for medical coding improvement suspecting by assessing historical chronic HCCs by member and comparing those conditions to the current EDGE outputs. Keep in mind some coding improvement efforts may require significant lead time and depend highly on the accuracy of the data. The data management capabilities outlined in this paper will help produce greater efficiencies and better results.

Aside from risk analytics, the data housed within EDGE can feed reporting tools, which can then be tied or crosswalked to internal financial reporting. Such a process can not only provide a good gut check of the data funneling into the EDGE server but can also provide valuable time savings in the case of CMS audits or regulator objections. As part of 2014 MLR and risk corridor calculations, health plans were asked to justify or reconcile those submissions against EDGE data. Building tools in advance can highlight any differences between EDGE results and internal financials up front and can prevent a last-minute scramble if an audit does occur.

Concluding thoughts

The permanence of the risk adjustment program in the commercial insurance market almost guarantees that the EDGE server is here to stay for quite some time. Historically, issuers have not been penalized for shortcutting data management or for lacking robust warehousing and reconciliation processes. However, there are now real and material incentives for all health plans to improve the accuracy and timeliness of submissions to the EDGE server environment. The importance of establishing and adhering to the practices and analyses outlined in this paper cannot be underscored enough. Otherwise, the passive and unprepared health plan will continue leaving money on the table and funding its competition.

Limitations

The suggestions outlined in this paper should be viewed as a guide to assist health plans in improving data quality and management as it relates to the EDGE server for ACA risk adjustment and transitional reinsurance submissions. While applicable across a wide range of health plans, the information should not be considered all-encompassing or one-size-fits-all. Many issuers will find all or a combination of tactics relevant and suitable for their unique circumstances.

Further, the examples provided for risk score or revenue improvements are specific to the clients we provide services for and may not translate similarly to all carriers experiencing the same issues. The magnitude of the impacts will relate directly to the pervasiveness of the data and procedural errors as well as the size of the company. Health plans with more robust capabilities or a larger membership base should expect more muted gains.

The authors would like to thank Scott Weltz, Chip Fetherston, and Victoria Boyarsky for their peer review.

CONTACT

Alan Vandagriff
alan.vandagriff@milliman.com

Jason Petroske
jason.petroske@milliman.com

FOR MORE ON MILLIMAN'S HEALTHCARE REFORM PERSPECTIVE:
Visit our reform library at **www.milliman.com/hcr**
Visit our blog at **www.healthcaretownhall.com**
Or follow us on Twitter at **www.twitter.com/millimanhealth**