Payment integrity: Predict fraud and detect loss to improve your medical loss ratio

Business Impact

"Patient safety is a key factor for us in the fraud, waste and abuse area. We're always searching the data for things that could potentially harm patients."

- **Anne Mack,** Senior Director of Network Compliance at Prime Therapeutics, which saved its clients $355 million in 18 months with AI-powered SAS® Detection and Investigation for Health Care.

Challenges

- **Pay-and-chase models for overpayments** are increasingly less sustainable.
- **Integrating business processes** to share siloed data.
- **Creating outcome-based analytics** that shows quality of care, episodes of care or provider effectiveness.
- **Creating a centralized approach** that prioritizes work and avoids duplication of efforts.
- **Delineating value** generated by various cost management initiatives.

The Issue

Cost containment pressures are mounting for payers as health care markets continue to evolve, and disruption alters the landscape. Commercial and government health care systems are experiencing deeper integration. Medicaid and Medicare are offering more opportunities for managed care and risk-based capitation payments by commercial payers. These options include numerous complex value-based payment models.

Integration between health care payers, direct care provider networks, pharmacies and pharmacy benefit managers only add to the financial complexity, making cost containment even harder to achieve. Multiple internal and third-party automated systems are producing more data than ever, but integrating data silos to provide meaningful analytical insights for users across the organization has never been more difficult.

Cost containment now encompasses all organizational risks: payment integrity from operations; fraud and abuse from the special investigation unit (and provider enrollment/credentialing); and actuarial from rate setting, policy and contracting. Meanwhile, business information users demand faster data analytics and better insights. The analytical needs of a variety of organizational users also continue to change in response to digital transformation, rapid expansion of lower-cost cloud services, and advancing electronic health record (EHR) and Internet of Things (IoT) technologies.

Our Approach

With an advanced analytics platform, you can quickly detect patterns and anomalies and improve payment decisions. SAS is the only vendor to combine three disciplines – behavioral analytics, claim analytics and clinical targeting – into a comprehensive payment integrity solution available through multiple deployment options (including cloud for a fast implementation) so you can:

- **Identify gaps in payment integrity.** Holistically examine the payment process, including data about relevant internal processes captured during service operations. Use many of the same analytics techniques for fraud (anomaly detection, trend analysis, regression and predictive techniques, and link analysis) to uncover hidden insights.
- **Uncover all types of known fraud schemes.** SAS® employs hybrid analytics for a more comprehensive detection mechanism to uncover fraud. Using several methods concurrently – such as active pattern, link and fraud scheme analysis – helps you find the most complex and best-hidden schemes. Machine learning delivers additional insight from data to constantly improve where and how improper payments are detected.
- **Reduce losses while increasing recoveries.** Near-real-time daily batch scoring catches fraud quickly. Find loss padding in similar claims. Identify repeat offenders and uncover insider or collusive fraud by integrating staff data and audit records and applying risk- and value-based scoring models to prioritize output for investigators.
- **Visually discover data. You can use executive dashboards to create enterprisewide results.** Tap into the data from payment integrity, operations, compliance, subrogation, investigations and finance for a far-reaching impact beyond just fraud, waste and abuse.

The SAS® Difference

With our unified technology platform, SAS can help solve your most complex problems across medical cost management; risk adjustment; fraud, waste, abuse and error; outcome-based analytics; and value-based payments. SAS advanced analytics helps you identify, investigate and make higher-value referrals to regulators and law enforcement. We provide:

- **Coverage of multiple disciplines.** SAS is the only vendor to offer multiple disciplines that cover relevant functions for multiple areas in your payer organization, including coding/policy, clinical targeting and behavioral analytics.
- **A single enterprise technology platform.** Our end-to-end process includes data preparation, model life cycles, what-if scenario tuning, forecasting and reporting over multiple data sources, such as health plan and third-party data.
- **Consolidation of more contextual information.** To surround the services and claims transaction data, SAS consolidates your view of information – from provider contracts and company policies to comparative behavior and performance data – as well as external data that helps assess risk and differentiate behavior.
- **Analytics results.** Comprehensive data integration and analysis that allows not only reporting, but also true analysis that offers insight to payers on their members and providers to improve care, policy and member health.
- **Continuous monitoring.** Execute fraud models and rules continuously instead of running queries on an ad hoc basis for detection.
- **Visual investigation for the intelligent analyst.** SAS marries advanced analytics with dynamic and interactive visual workspaces so intelligence analysts can quickly gain a complete view of people, relationships, networks, patterns, events, trends and anomalies across all available data. Analysts can easily grasp reasons for events or alerts and act on deep analytical insights thanks to these intuitive visuals and search.

Case Study: A Commercial Health Plan

Situation

As a US top-five health plan, this company covered 6 million people and processed 70 million claims per year. It hosted 15 terabytes of raw data and claims using seven different data sources, cleansing it to help with false positives. To meet government contract mandates, the company wanted to be able to detect fraud and waste as early as possible in the claim payment life cycle. However, the existing rules-based approach wasn't producing the anticipated leads.

Solution

The company uses SAS to analyze finalized claims data from all lines of business. Seven disparate data sets were normalized to provide an end-to-end look at provider activity. This data integration with data management built a foundation for business analytics and reporting.

Results

With a new single source of truth for consistent and effective decision making, the organization gained a return on investment within eight months, with more than $5 million in savings on overpayment, waste and abuse.

What if You Could ...

- Prototype new scenarios and bring the data closer to the analyst to help provide insights into suspicious behaviors and abnormal trends?
- Easily integrate critical information with workflow and knowledge management to share important insights across departments and the enterprise?
- Identify drivers to better understand and ensure if utilization is appropriate?
- Anticipate and manage medical care expenses and provide a benefit to move to less expensive care services?

With SAS, you can.

SAS Facts

- 100% of the Fortune Global 500 Health and Life Science companies are SAS customers.
- SAS is used by all US state governments and currently supports more than 700 government departments, ministries, offices and agencies around the world to solve their most complex problems with reliability and accuracy.
- SAS provides advanced analytics support for both public and private health care initiatives across the globe.
- As a premier member of NHCAA and NAMPI, SAS sends subject-matter experts to present the newest in fraud, waste and abuse models and algorithms at conferences across the US.

Learn more about SAS solutions at sas.com