



The SAS® Fraud Framework for Health Care

Prevent, detect and manage fraud, waste and abuse across the organization

Overview

Providing unnecessary services. Billing for services not rendered. Unbundling or upgrading services. Establishing fictitious providers and billing agents. Making false referrals. Getting illegal kickbacks. Misrepresenting services. The list goes on and on.

The National Health Care Anti-Fraud Association estimates that outright fraud costs the health care industry an estimated \$70 billion to \$230 billion each year. In the EU the figures are similar – 5.6 percent of national health care budgets, or \$30 billion to \$100 billion each year. Only 10 percent of such fraud is ever detected, and only 10 cents of each fraudulent dollar billed is ever recovered. That adds up to tremendous losses for health payers – losses that are often passed on to consumers in the form of higher premiums. And, of course, money lost to fraud and abuse is money that can't be spent on improving the quality of care for those incurring valid expenses.

Unfortunately, the methodologies typically used by health payers to detect fraud, waste and abuse have not kept pace with technological advances – a fact that has not gone unnoticed by opportunistic criminals. And prompt pay laws, as well as marketplace expectations, have payers striving to pay provider claims quickly. As a result, fraud isn't discovered until after claims are paid – and recovery of funds is unlikely. The SAS Fraud Framework for Health Care can help.



Challenges

- **Siloed business units.** Different departments often use disparate legacy solutions that don't talk to each other, making it almost impossible to share information and spot suspicious activity across the organization.
- **Staff limitations.** There aren't enough analysts to investigate *all* suspicious activity, and scoring based on rules alone generates too many false positives, which consume valuable analyst time.
- **Poor data quality.** Disparate systems and the inability to integrate third-party data or text data mean that information is often incomplete and unreliable.
- **Changing tactics.** Fraudsters actively test rules and thresholds, and constantly change elements of their identities, making it hard to match a claim with a known fraudster.
- **Limited scope.** Current data models rarely produce a view beyond a single patient identity, and the lack of an enterprise approach to fraud, waste and abuse makes it hard to spot high-risk relationships and get a full picture of a patient, claims and all related entities.



■ The SAS® Approach

The SAS Fraud Framework for Health Care is an end-to-end framework for detecting, preventing and managing health care claims fraud. The framework includes components for fraud detection, alert management and case management. In addition, you get:

- A category-specific workflow.
- Rule and analytic model management.
- Content management.
- Advanced analytics.
- Link analysis via SAS Social Network Analysis.
- Integration with a case management system.

■ The SAS® Difference

SAS provides enhanced fraud detection and improved operational efficiency while decreasing the total cost of ownership. Only SAS enables you to:

- Develop and deploy models quickly.
- Take full advantage of advanced analytic capabilities, including data mining and link analysis.
- Update business rules as needed.
- Handle large data volumes easily.
- Integrate with existing systems.
- Choose from a variety of deployment options, including complete hosting by SAS, deployment at your site or a combination of the two.

How SAS® Can Help

Is claims fraud just an unfortunate cost of doing business? It doesn't have to be. The SAS Fraud Framework for Health Care takes a unique, hybrid approach to detecting and preventing both opportunistic and professional fraud at each stage of the claims process.

The solution's fraud analytics engine uses multiple techniques (automated business rules, outlier analysis, predictive modeling, text mining, database searches, exception reporting, network link analysis, etc.) to uncover the likelihood of fraud. Prioritized alerts are then routed to investigation units, where investigators can use case management tools to efficiently triage and investigate.

Once a claim is scored and prioritized, an investigator may perform a more in-depth review of the claim's characteristics to determine if the claim or any associated historic data are fraudulent.

Benefits

Detect More Fraudulent Activity

SAS helps you detect more fraudulent activity than ever before by letting you:

- Insert analytical models into the process, in addition to rules engines.
- Process *all* data (not just a sample) through rules and analytical models.
- Use customized models to detect previously unknown schemes.
- Spot linked entities and crime rings, which can help stem larger losses.

Reduce False Positives and Increase Investigator Efficiency

With SAS, you can actually reduce the number of false positives, which helps improve investigator efficiency by:

- Applying risk-based scoring to model output before it goes to investigators.
- Enabling investigators to work more cases than ever before.

Lower Fraud Losses While Increasing Recoveries

SAS helps you lower your losses *and* increase recoveries by enabling you to:

- Prevent fraud *before* claims are paid using online real-time scoring.
- Detect loss padding in similar claims using anomaly and loss comparisons.
- Identify repeat offenders and score incoming data more accurately by searching databases of known fraudsters and recording outcomes, claims settlement amounts, referrals and suspects for future reference.
- Uncover insider fraud by integrating staff data and audit records showing who handled claims.
- Focus investigations on higher-value networks and alerts by using risk- and value-based scoring models.
- Gain real-time access to information by inserting analytical models into your process workflow.

Gain a Consolidated View of Fraud Risk

SAS gives you a consolidated view of fraud risk, enabling you to:

- Continually improve models and adapt the system to address changes in fraud trends.
- Better understand new threats and prevent big losses early using social network diagrams and sophisticated data mining capabilities.

Capabilities

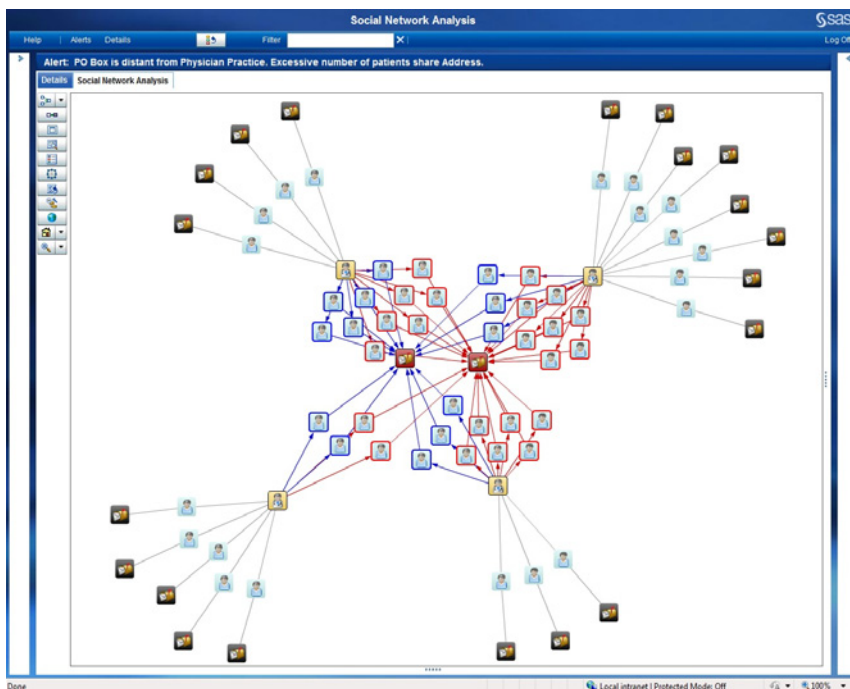
As an end-to-end solution for preventing, detecting and managing health care claims fraud, the SAS Fraud Framework for Health Care includes the following:

Fraud Data Management

- Consolidate historical data from internal and external sources – claims systems, watch lists, third parties, unstructured text, etc.
- Eliminate or reduce redundant or inconsistent data with the solution's built-in data quality tools.
- Seamlessly integrate the solution with your third-party fraud applications.

Rule and Analytic Model Management

- Create and logically manage business rules, analytic models, alerts and known fraudster lists.
- Customize analytic models to identify fraud, waste and abuse not found by existing business rules.
- Easily manage the deployment, aggregation, scheduling, suppression and routing of similar rules across multiple factors, such as parties, data sources and business lines.
- Run groups of rules and models alone, in parallel or at different times (intraday, daily, weekly, monthly, etc.).



Visualization of a common – and typically undetected – fraud scheme.

Detection and Alert Generation

- Calculate the propensity for fraud at first submission, then rescore claims at each processing stage as new claims data is captured.
- Review claims early in the adjudication process so you can stop suspicious activity at the prepayment stage.
- Incorporate fraud detection methods into the process at the most appropriate points – e.g., cases where anomaly detection scenarios may require data that is not available until later in the adjudication process.

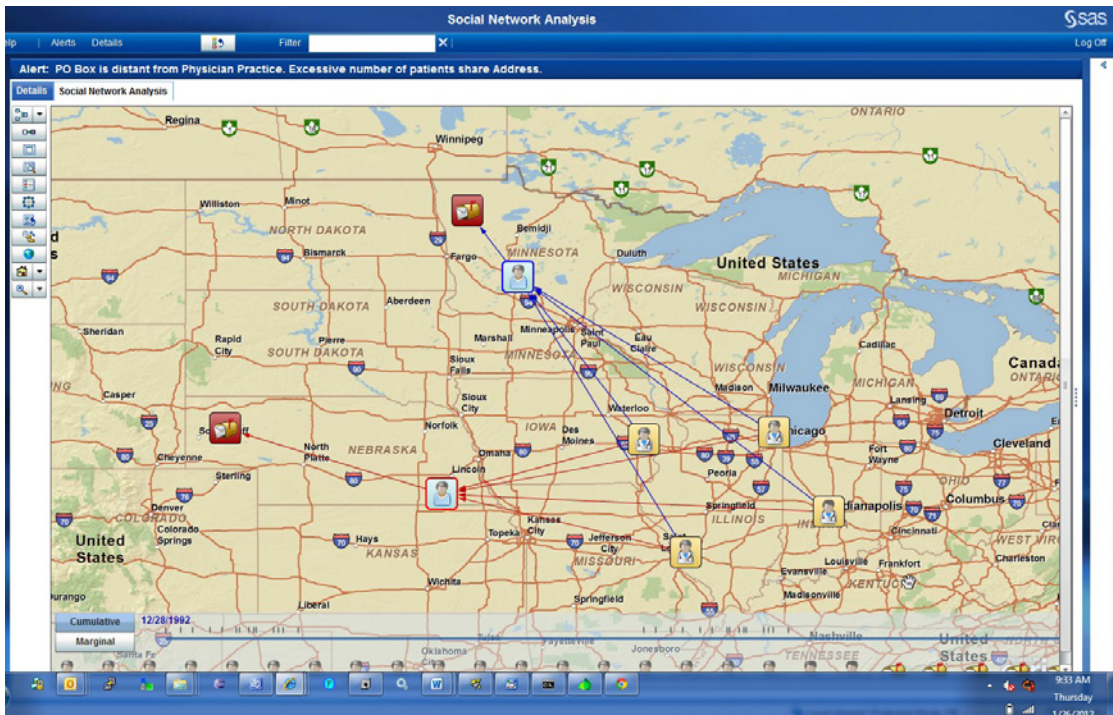
Alert Management

- Combine alerts from multiple monitoring systems, associate them with common individuals and gain a more complete perspective on the risk of particular individuals or groups.
- Prioritize the investigative order of alerts by scoring alerts in real time, based on the specific characteristics.

- Route alerts to appropriate team members based on user-set rules and requirements.
- View all evidence for each case via a dashboard that is customizable to your investigative unit's processes.

Social Network Analysis

- Go beyond transaction and account views to analyze related activities and relationships at a network dimension.
- Identify linkages among seemingly unrelated claims using a unique network visualization interface.
- Produce complete dossiers of networks surrounding a case and gain fast access to full details on all related parties and networks.
- Produce independent and combined fraud scores, so you can assess overall risk on a customer, claim or network basis.



Mapping capabilities expose multiparty fraud schemes by showing geographic relationships among linked entities.

- Increase investigator effectiveness by enabling investigators to merge and delete network entities and add annotations (text and images) to specific entities in a network.
- View how activity in a network develops over a time horizon, using time slider functionality.

Optional Integrated Case Management Solution

- Systematically facilitate investigations using a configurable workflow.
- Store all information pertinent to a case, including detailed investigation information – e.g., interview notes and evidence for criminal or civil prosecution, restitution and collections.
- Assess overall fraud exposure, including losses due to fraud as well as fraud detected or prevented.

Analytic Model-Ready

- Provides prepackaged heuristic rules, anomaly detection and predictive models.
- Includes a health care-specific fraud, waste and abuse data model.
- Lets you harness the power of advanced analytics out of the box.

Hosting and Analytical Services

- Can be installed and administered at the SAS hosting site, which enables faster implementation (and faster ROI) while eliminating the need for payer staff to oversee the system.
- Can be hosted on your site, in which case SAS Professional Services staff will assist with the implementation and provide knowledge transfer.

About SAS

SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions, SAS helps customers at more than 55,000 sites improve performance and deliver value by making better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®. www.sas.com

Scan this QR code* or visit sas.com/hcfraud

to watch a video on preventing health insurance fraud *before* claims are paid.

*Requires reader to be installed on your mobile device

