



# The SAS® Fraud Framework for Health Insurance

Prevent, detect and manage fraud across your organization



## Overview

Billing for services not rendered. Providing unnecessary services. 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 healthcare industry an estimated \$60 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 insurers – losses that are often passed on to consumers in the form of higher premiums. Or in the case of self-funded plans, those losses result in dollars that were intended for plan benefits never actually being available.

Unfortunately, the methodologies typically employed by health insurers' special investigative units (SIUs) to detect fraud have not kept pace with advances in technology – a fact that has not gone unnoticed by opportunistic criminals. The SAS Fraud Framework for Health Insurance 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 and investigators to detect and investigate all suspicious activity.
- **Poor data quality.** Disparate systems and the inability to integrate data from third parties mean that data is often incomplete and unreliable.
- **Changing tactics.** Fraudsters actively test rules and thresholds to find ways to operate around or under them, and they 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, making it difficult to spot high-risk relationships and to get a full picture of a patient, claims and related entities.
- **Too many false positives.** Scoring at a claim or patient level alone generates many false positives, which can take up valuable investigator time.



# Detect, prevent and manage healthcare claims fraud.

## ■ The SAS® Fraud Framework for Health Insurance

The SAS Fraud Framework for Health Insurance is an end-to-end framework for detecting, preventing and managing healthcare claims fraud.

The framework includes components for detection, alert management and case management, along with a category-specific workflow, content management and advanced analytics.

These components are fully integrated with SAS Social Network Analysis, a solution that offers both top-down and bottom-up functionality for making hidden and risky networks visible to investigators.

The SAS approach provides enhanced fraud detection and improved operational efficiency while decreasing fraud spending from a total cost of ownership perspective.

## How SAS can help

Many health insurers accept claims fraud as an unfortunate cost of doing business – after all, it isn't cost-effective to pursue fraudulent claims after settlement. But it doesn't have to be that way.

The SAS Fraud Framework for Health Insurance is designed to help health insurers detect and prevent both opportunistic and professional fraud within the healthcare claims process.

Opportunistic fraud refers to low-level, high-frequency fraud where normally honest people pad legitimate claims. Opportunistic fraud tends to rise with a downturn in the economy.

Professional fraud is often perpetrated by organized groups or service vendors (e.g., medical providers). These criminals know how fraud detection systems work, and they routinely test thresholds to stay just under the radar. These crime rings often place or groom insiders to help them defraud the health insurer.

The SAS Fraud Framework for Health Insurance calculates the propensity for fraud at each stage of the claims process with a fraud analytical engine that uses multiple techniques, including:

- Automated business rules.
- Predictive modeling.
- Text mining.
- Database searches.
- Exception reporting.
- Network link analysis.

Alerts for potentially fraudulent claims are routed to special investigation units where investigators are provided with case management tools that help them rapidly investigate.

Once a healthcare claim is scored and prioritized based on severity, an investigator may perform a more in-depth review of the claim characteristics to determine if the claim or any associated historic claims are fraudulent.

## Capabilities

### Detection and Alert Generation

These components enable the systematic detection of suspicious activity using a fraud scoring engine that employs a combination of analytic techniques to determine the likelihood of healthcare claims fraud.

The detection and alert components:

- **Score healthcare claims in real time** with an online scoring engine that lets you detect fraudulent claims using a combination of business rules, anomaly detection and advanced analytical techniques.
- **Calculate the propensity for claims fraud** at first notice of loss and rescore claims at each stage of the settlement process as new claims data is captured.
- **Can take you beyond healthcare claims fraud detection** by deploying at policy inception to prevent fraudsters from taking out health insurance policies in the first place.

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## Alert Management

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The alert management component assembles alerts from multiple monitoring systems, associates them with common individuals and provides investigators with a more complete perspective on the risk of a particular individual. Additional functionality includes:

- **Risk score calculation.** Each alert is assigned a risk score based on the specific characteristics of the activity, with transparent reason codes.
- **Alert prioritization.** Prioritizes and routes potentially fraudulent claims to appropriate team members, resulting in greater efficiency, increased detection rates and reduced losses.
- **Work assignment.** Health insurers can appoint automated alert assignments to various investigators or analysts based on rules and requirements set by the user.

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## Social Network Analysis

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SAS Social Network Analysis helps health insurers detect and prevent organized healthcare claims fraud by going beyond transaction and account views to analyze all related activities and relationships at a network dimension. In addition, the solution:

- **Improves investigator efficiency.** The solution lets you produce complete dossiers of networks surrounding a case using an intuitive interface that provides fast access to full patient details and all related parties and networks.

- **Uncovers previously unknown relationships.** Using a unique network visualization interface, the solution gives investigators the ability to identify linkages among seemingly unrelated healthcare claims.
- **Produces independent and combined healthcare claims fraud scores.** The solution enables you to assess overall risk on a customer, claim or network basis.

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## Case Management

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Once an alert has been triaged and requires further investigation, the case management functionality provides a systematic means for facilitating the investigation and capturing and displaying all information pertinent to that case.

In addition, you can:

- **Store fraudulent activity information,** including interview notes and evidence needed for criminal or civil prosecution, restitution and collections.
- **Assess your overall fraud exposure,** including losses due to fraud as well as fraud detected or prevented.
- **Use a configurable workflow** for the management and resolution of cases.

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## Benefits

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### Decrease fraud losses

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The SAS Fraud Framework for Health Insurance enables you to decrease your fraud losses by:

- **Preventing fraud before claims are paid** using online real-time scoring.
- **Detecting loss padding in similar healthcare claims** with anomaly and loss comparisons.
- **Detecting repeat offenders** and more accurately scoring incoming claims by searching databases of known fraudsters and by capturing all fraud outcomes, referrals and suspects within the system for reuse.
- **Detecting insider or collusive fraud** by integrating staff data and audit records that show who handled which claims.

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### Lower loss adjustment expenses

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The SAS Fraud Framework for Health Insurance enables you to lower your loss-adjustment expenses by:

- **Greatly reducing false positives.**
- **Improving investigation efficiency** with advanced case management tools.
- **Increasing ROI per investigator** by prioritizing higher-value networks and conducting more efficient and accurate investigations.
- **Capturing all claims settlement amounts** within the system for reuse with similar claims in the future.

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## A consolidated view of fraud risk

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The SAS Fraud Framework for Health Insurance gives you a consolidated view of fraud risk, enabling you to:

- **Improve models on an ongoing basis** and adapt the system continuously to address changes in health insurance fraud trends.
- Better understand new claim threats and prevent substantial losses early using social network diagrams and sophisticated data mining capabilities.

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## Improved competitive position

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The SAS Fraud Framework for Health Insurance can also help you improve your competitive position:

- Fewer false positives means higher customer satisfaction.
- Fraudsters are driven to target other health insurance companies.
- Enhanced fraud management satisfies regulatory pressures.

## 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 delivered within an integrated framework, SAS helps customers at more than 45,000 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®.

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