



Healthcare & Life Sciences

**Top 5 US health payer identifies \$45M in overpaid claims**

## The Big Picture

The US healthcare system loses more than \$200 billion every year in fraud, waste, and abuse-nearly 10 percent of annual healthcare spending. The Government Accountability Office (GAO) has deemed Medicaid to be highly vulnerable to fraud, waste, and abuse. A leading multi-billion-dollar healthcare payer, with a growing government business supporting Medicare and Medicaid, wanted to identify claims overpayments and opportunities to better contain costs.

## Transformative Solution

Claims may be overpaid due to fraud, waste, or abuse by providers, pharmacies, members, or payers' internal claims adjusters. With variations in member demographics, health conditions, condition severities, and treatment patterns, it is imperative to compare claims with other similar claims when looking for irregularities or aberrancies.

An unsupervised learning framework was developed to identify overpayments. For example, one cause of overpayment was the company paying for a service that a patient wasn't supposed to be covered for. Here, 'bogus billing' was a driver of cost and was identified as a key focus area.

The framework has a four-step approach:

- Define causes of fraud, waste and abuse, and identify the focus areas with high impact.
- Develop hypotheses to define key internal and external data elements that should be analyzed – we identified 50+ hypotheses.
- Use multi-level unsupervised decision tree and clustering techniques and business rules to create homogenous segments across member, provider and procedure details.
- Evaluate millions of claims to identify patterns or thresholds of aberrant dosage and pricing, while controlling for clinically homogenous segments.

The aberrancy identification framework flagged claims likely to be overpaid and helped in achieving unbiased leads for foragers and cost containment units (CCUs). An independent clinical validation showed, identification of fraud, waste or abuse with 60% accuracy compared to 10%-20% accuracy with existing process. The entire framework was automated for scalability and efficiency.

The framework drove efficiency improvements beyond flagging overpaid claims, including sharing reasons with foragers and prioritizing recoveries based on the expected cost of overpayment & likelihood of recovery. The highest priority was given to low complexity and less sensitive claims.

The process revealed that more than 75% of the identified claims overpayments were due to higher dosage or units billed than actually serviced or units billed that were not covered. Nearly 25% of the identified overpaid claims were systemic inconsistencies.

## The Change

As a result of the engagement, the payer was able to identify more than \$45 million in recoverable overpaid claims, in the first year, by

- Developing business rules, leading to systemic changes to hold possible overpayments.

- Identifying 20 times more claims with dosage and pricing aberrancies.
- Optimizing the recovery process through the recommended prioritization framework.

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