



BIG DATA TO THE RESCUE: WALKING THE FINE LINE BETWEEN CLAIMS AND FRAUD

Healthcare insurers walk a fine line every time they try to estimate the validity and accuracy of claims - risking disgruntled fair health plan members in case of undervalued assessment, or losses due to overpayment or payments for fraudulent claims. The latter two cause the US healthcare industry to lose hundreds of billions of dollars every year. While it is a standard insurance practice to provision for overpayment risks that hover around 10%, healthcare insurers need to maintain the balance between increasing member expectations, stricter compliance requirements, and escalating overpayment scenarios. Speed being of the essence, leveraging technology is imperative.

A photograph of an older man with a grey beard and a woman with blonde hair looking at a laptop screen. The man is pointing at the screen with his right hand. The woman is looking down at the screen. The background is a plain wall with a window on the left.

US\$1 BILLION IN OVERPAYMENTS

As per a study by Greyhound Research, a leading global analyst firm, big data analytics is one of the critical technology priorities for healthcare payer and insurance companies, with 74% respondents in the study rating fraud detection as an essential requirement in their increasingly competitive business. Still, only 32% confirmed that they either already have a consistent and reliable system in place or are in the process of accomplishing it.

While insurance companies recognize the need for a better fraud detection mechanism, they also realize how difficult it is to accomplish. Big data, however, changes the equation.

One of the largest US healthcare insurers, an Infosys client, faced a daunting challenge when they realized they ended up paying US\$1 billion in claims overpayments annually, due to lack of timely claims-related data or claims data being in complex and varied formats, and then spent even more in recovering that amount. They decided to leverage advanced analytics techniques to remedy the situation. Specifically, they wanted to optimize their claims processing and payment systems by identifying potential overpayments, thereby predicting the claim liabilities accurately and identifying potential fraudulent claims and providers as early as possible in the cycle.

The client wanted the solution up and running in five months.

Infosys®

50,000 CLAIMS IN 15 MINUTES

The insurer partnered with Infosys to implement a big data-based advanced analytics system. The Infosys team built a pipeline to ingest the stream of pre-payment claims data into a Hadoop platform in real time. Infosys engineered the data sources into a format that could help create mathematical and statistical matrices to detect potential overpayments.

Each claim passing through the framework- the system processed 50,000 claims every 15 minutes - would be assigned a score, with those exceeding a certain score being tagged as potential overpayments. Infosys also built a dashboard over this analytics framework, so that executives could see, in real-time, the claims being processed and how many were tagged for intervention and why.

The client got an effective fraud and overpayments detection product with the advanced data and analytics capability we provided, within the given time frame. With the new system, they were able to identify US\$ 11 million in claims overpayments and prevent losses, leading to net savings of US\$ 5 million in the first year itself.

BIG DATA TO THE RESCUE: WALKING THE FINE LINE BETWEEN CLAIMS AND FRAUD: THE FIVE TAKEAWAYS

- 1 Assess** points and patterns of impact in the claims process. Identify specific focus areas to be addressed.
- 2 Leverage** advanced big data technologies to perform large-scale predictive analytics. Identify patterns and define hypothesis to establish decision paths.
- 3 Re-engineer** the data sources to enable creation of models for scoring claims in real time.
- 4 Create** dashboards and guidance reports for executives to measure effectiveness, enable responsiveness, and quick decisions.
- 5 Deliver** better member experience through speedy resolution of claims while safeguarding against fraudulent claims.



BIG LEARNING:

Identifying fraudulent scenarios in real time at scale is not possible without a well-devised and carefully executed big data analytics strategy. Unforeseen situations and the complexity of underlying data formats make it a significant challenge, and speed is critical; hence, it is crucial to involve experts with big data experience and capabilities.

WE DID THIS FOR THEM. WE CAN DO IT FOR YOU.

Learn more about leveraging big data analytics for your enterprise by reaching out to us at askus@infosys.com