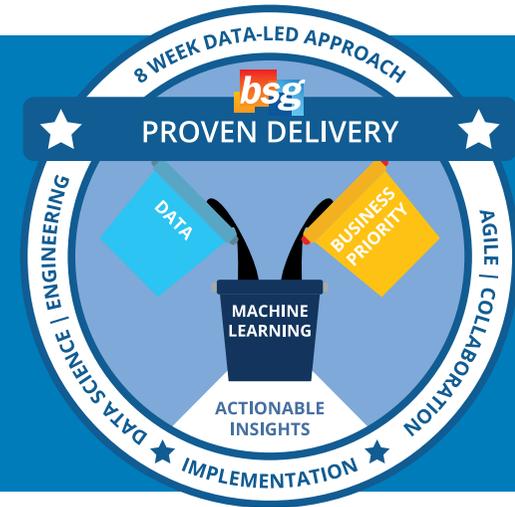


## Healthcare

## Taking a **data-led** approach to **predict high-risk cases** and **prioritise action** within the claims' management process

BSG helped a leading healthcare provider to be in a position to **save millions of Rands** each month by making **data-led decisions**, enabling better prioritisation of action and reduction of claims-related issues



### Overview of the client's needs

- Understand how to leverage data more effectively in the organisation
- Become more proactive in identifying claims-related issues and prioritising action
- Create visibility of high-risk cases within the claims value chain across the client's South African operations
- Take insight to action by implementing a data-led approach to solving the claims-related issues



### Objectives of the engagement

- Ensure implementable and measurable KPIs for the project
- Use data and advanced analytics to provide insight into the primary causes of claims-related issues
- Understand the impact on patient experience during the claims process
- Prove the value of a data-led approach to the client's executive team



### Benefits of the change

- BSG recommended and helped implement a pilot initiative to prevent claim rejections, which were costing the client over R40 million each month
- The pilot initiative was driven by a machine learning model that accurately predicted inefficiencies in existing processes and provided insight into practical changes to drive business benefits
- BSG followed a practical approach to operationalise the predictive model focusing on people, process and technology change considerations

BSG's **data-led approach** combined multi-skilled teams, working with our client, to **rapidly deliver implementable business change** to drive cost savings and improve revenue collection efforts

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## Engagement Overview

The client is a leading healthcare provider, operating a number of major healthcare facilities within South Africa. When a patient is treated and makes use of these facilities, a claims management process is initiated between the healthcare provider and the various fund administrators to recover the costs involved.

The client processes medical claims with the major fund administrators through a B2B straight-through process intended to minimise manual intervention and reduce errors. A large percentage of claims processed by the fund administrator are however still rejected or short-paid, typically as a result of the ever-changing environment. Rejected claims are then manually investigated by the client's internal team. The manual resolution process can be up to three times longer than a claim processed without issue. In some cases, these claims are written-off as a bad debt.

BSG proposed a collaborative approach, using a team with both generalist and specialist skillsets to help the client better use their data. This enabled the client to reduce the number of claim rejections and improve the ability to recover claim payments from the fund administrators.

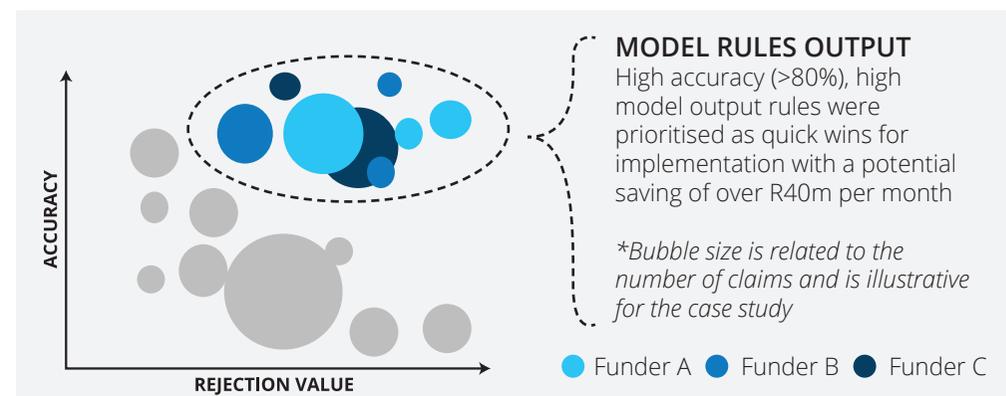
## Solution

The data-led solution was driven by two major deliverables:

- Predicting and highlighting high-risk claims and related issues before billing; and
- Prioritising high-risk claims and taking appropriate action before a case is submitted to the fund administrator.

An agile approach was adopted in order to complete rapid data-discovery and show benefit early on in the process. During the data-discovery phase, it emerged that the client was unaware of the wealth of rich data they were collecting on a monthly basis. Data wrangling and feature engineering skillsets were used to enrich the data across multiple dimensions, revealing the true extent of data relationships, value and inputs into the machine learning process.

Multiple machine learning models were then developed by BSG, which could accurately predict which high risk claims needed to be prioritised and resolved before submitting to the fund administrator.



A practical pilot implementation was then designed to:

- Agree on measurable pilot KPIs and reporting needs
- Operationalise the machine learning model in a practical manner
- Manage change in terms of people and operational process
- Provide the pilot team with deep insights for individual high-risk cases flagged in the form of a near-real-time dashboard

## BSG making a difference

BSG succeeded in delivering actionable results in 8 weeks with a team of 4 people. The predictive model was able to predict high-risk cases, with more than 80% accuracy, resulting in estimated benefit realisation of approximately R40 million a month.

## Contact

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