

# Medicare Supplement Analysis

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***The Insight Enterprise system can help manage this demanding business through timely and accurate information.***

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Medicare Supplement has many unique and complicated aspects. It is a highly regulated type of insurance with very strict reporting and pricing regulations. It is also demanding on data processing with a very high volume of transactions, often with very low claim amounts. Data and information management is key to being able to appropriately manage the business.

## Background

This mid-sized insurer is comprised of several smaller insurance companies that had been acquired over the past ten years. Many of the acquired companies were still operating as separate entities and the corporation had not previously been able to effectively analyze and report on data from an enterprise view across all companies. The nature of the business means they need to combine data from different systems – such as investigating premiums and claims by contract details, all within the same report.

The organization offered both life and health insurance products, although the majority of their business was through the senior health market – primarily Medicare Supplement.

The company initially considered a data warehouse solution after the president of the company asked about better access to information. Once the company looked at the Insight Enterprise they soon realized that it was capable of much more than executive reporting, including claims and actuarial analysis and rate management.

## Scope

Implementation covered the whole company, including applications around claims analysis, incurred claims analysis and earnings-by-source. Consistent with the profile of the business the initial focus was on Medicare Supplement.

## Situation Assessment

The company had multiple systems, and since the business had grown so quickly many of these systems had not been completely integrated. In particular reinsurance administration used several systems and ad-hoc processes, and they also used multiple claim administration systems. The valuation was primarily carried out on PolySystems, although only the basic module was used and this varied by line of business.

## Solution Overview

### Company Profile

- Mid-size life and health insurer
- Primary business in the senior health market
- Operating in the US and Canada
- Over \$600 million of premium income
- Over 7.5 million claim transactions annually

### Situation

The corporation was comprised of several smaller companies that had been acquired over the years. One of the corporation's major shareholders wanted the organization to update their analysis and reporting systems, to improve information for management and shareholders.

### Business Solution

Insight Decision Solutions was asked to implement the Insight Enterprise system. The company chose to limit the first phase of the project to one of the two administration systems and the internally developed claim system.

### Benefits

Accurate and consistent management reports were available within one week on data being loaded. In addition, in-depth claims and cashflow analysis could now be conducted.

The user-friendly interface made report building easy and the advanced date functionality allowed them to update automatically, as new data was loaded.

## Solution

Insight proposed a reinsurance database that could be maintained by the business area and loaded as a separate source into the Insight warehouse. In a joint effort by Insight and the client, the database was developed and is now fully maintained by the client.

The first step was to define products based on Insight's product hierarchy. Over time and across companies, products were defined in a variety of ways. Insight's product hierarchy involves using a common set of attributes to describe each product and is one of the core components in the Insight warehouse and analytical applications.

Next transformation packages were created to load data from source systems into the Insight warehouse. This allows data to be cleansed based on consistent business rules and audit reports created identify anomalies and/or transformations needed.

Using extracts of terminated records, together with the current active records, Insight Decision Solutions used their backwardization routines to create three years of historical data snapshots, in the format that it would have been extracted, had the data warehouse been available at that time. This provided historical data for studies and analysis without having to wait for experience to build up.

## Outcome

Implementing the Insight Enterprise system resulted in management reporting to be available within one week of a monthly load, as opposed to the two months required previously. The automated audit checks and data cleansing ensured results were consistent and accurate from month-to-month and across reports.

Insight's temporal model ensures accurate analysis across time periods. And the advanced data functionality allows reports to update automatically each time new data is loaded.

Improved accuracy of claims analysis and greater flexibility with analysis allowed the corporation to gain more in-depth information about claim incidence and claim amounts. For example, claims could now be analyzed by cause and type for the first time, allowing expected ratios to be tested.

Improvement of the rate filing process including faster reporting and more efficient rate application processes resulted in faster rate increases. To put this in perspective it is estimated that the Insight system is instrumental in accelerating rate filing by a month; on a billion dollars of premium income this is worth approximately \$6m income per year.

Another quantifiable impact from rate increases on small block of business that wouldn't have been practical with more manual processes. This may be worth \$20 to \$25m to a company with a billion dollars of premium income.

All in all the implementation offered a number of benefits in a variety of areas. Some are easily quantifiable; others are less quantifiable and come from the benefit of having better information.

## Solution Overview

### Data Sources Incorporated

- CAPSIL admin system
- Internally developed claim system
- PolySystems valuation system
- Reinsurance rules database

### About Insight Decision Solutions

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Insight Decision Solutions is unique in offering a combination of analytical products and service aimed specifically at the insurance industry. The Insight Warehouse gives clients the ability to analyze and simply understand their business in depth based on the particular dynamics of the insurance industry.

Insight Decision Solutions was founded to provide insurance companies with a better understanding of their business. This is achieved by building systems, which enhance the understanding of the business.