

## Corticon Success Story

# Precedent

### ABOUT PRECEDENT

**Precedent Insurance is a subsidiary of American Community Mutual Insurance Company (Livonia, MI), which provides group and individual health and life insurance plans throughout the Midwest. US Precedent was created to provide an alternative to traditional health insurance plans – a new channel to bring an innovative suite of healthcare insurance products directly to consumers through web-based solutions. Their goal is to deliver an easy, online system for consumers between the ages of 19-35. As healthcare insurance is traditionally delivered through agents, Precedent is breaking new ground with its unique real-time, online underwriting and application process, which is sure to change the face of the healthcare insurance industry.**

### THE CHALLENGE

To accomplish their vision, Precedent set out to build an online application, rating & underwriting solution. In this process, the customer would complete a short questionnaire, followed by an applicant rating exercise. The system would then configure insurance offerings and associated premium – providing it to the customer for immediate purchase. The entire transaction would be completed online – streamlining a traditionally burdensome process and delivering a positive user experience.

“A key challenge was to remove most of the manual steps in the traditional insurance processes,” said Don Ames, CTO of Precedent. “Unburden the consumers from unnecessary healthcare requirements, and make the application process as easy and streamlined as possible. We knew that if we built intrinsic value into the system, it would translate to real value to our organization. By using technology instead of manual processes, we could improve both the user experience and the bottom line.”

Driving the solution is a large and complex collection of rules which govern the analysis of the applicant’s data and the subsequent rating, product configuration and pricing decisions. For this, Precedent turned to Business Rules Management technology – which helps companies automate the decisions within business processes and manage the logic (rules) behind them.

### KEY REQUIREMENTS

Precedent knew that their solution had to be at once highly intelligent as well as easy and intuitive. And with only four people to support and maintain the new application, it also had to be self-sustaining and require minimal IT intervention. The business rules technology would provide the intelligence and drive the user experience, and for this the team had the following requirements:

- A business-friendly interface – for underwriters to manage the logic
- Seamless SOA integration – with their rating/quoting application
- Ability to handle complex, sophisticated logic – without forcing the underwriters to turn to IT to translate it into code
- Easy administration – the solution had to have a small footprint, work in a Linux environment, and be easy to deploy and maintain

## SELECTION

Given their specific needs to create and deliver an innovative, user-friendly online healthcare insurance application, Precedent investigated ten business rules products. After an initial evaluation, the team narrowed it down to three vendors, including Corticon. They had each company create, test and deploy the underwriting rules that would exist in their production systems. They ultimately selected Corticon's Business Rules Management System, including: 1) Business Rules Modeling Studio to create, validate and test the rules, 2) Business Rules Server to execute decision services in a SOA environment, and 3) Corticon Collaborator for rule lifecycle management.

"After the final review, it was clear to us that Corticon was the best choice for our solution," said Ames. "Corticon had the same characteristics of bigger, more expensive rules solutions – with a better price to value ratio. In addition, we were very impressed with the richness of functionality and integration with external data sources."

Precedent identifies their key selection criteria as follows:

Corticon's UI is the most user-friendly on the market. Corticon allowed the business experts to define, validate and test business rules without programming. As such, Precedent could avoid the IT layer normally required to interpret business intent to code in a regular rules development environment. This is of tremendous value to Precedent – allowing them to save costs associated with IT support.

Corticon can handle the most complex decisions with ease and sophistication. All of the risk evaluation, dependency checks, and package and pricing selection selections exist within Corticon's engine. Precedent is able to not only automate complex business decisions, but also to execute the decisions consistently and reliably. This is unique in the healthcare marketplace – where most decisions are still made manually.

Corticon easily integrates with external data sources. Corticon was able to interact seamlessly with the application's web interface, driving the user experience through a dynamic dialog – determining both additional questions that may need to be asked as well as which web page to render. This would help guide the user quickly and efficiently through a healthcare application, and help Precedent capture more customers immediately, at the point of interest.

## THE IMPLEMENTATION

Precedent launches their new offering in Summer 2007, and has used Corticon extensively throughout the solution. The Chief Strategy Officer defines and manages all of the underwriting rules, and a business analyst takes responsibility for rule modeling, testing and deployment.

"We are particularly impressed with Corticon's analysis features, which give us a high degree of confidence that we are building complete and unambiguous business assets", said Ames. "We can identify and close gaps and conflicts in our rules with a touch of a button. This has helped us improve the quality of our decisions."

Some the key components of the implementation include:

Questionnaire Management. The heart of the user experience in the initial offering, this is the dynamic dialog between the applicant and the system. As the applicant inputs information, the system will call out to Corticon to determine additional questions to ask, and which pages to render. This will guide the user through a healthcare application, without having to deal with questions that do not pertain to them (such as removal of pregnancy questions for males). This will help Precedent capture more customers immediately, offer custom packages to customers in its target market, and offer suggestions for those who are not.

Risk Evaluation. This is the foundation of the application, where potential customers are evaluated on their risks and matched with packages/policies. There are four outcomes to this evaluation: a) match is found, offer is made, b) match is found, offer is made with exclusions, c) match not found, no offer is made, and d) exception – manual intervention is needed. Precedent sees this as another advantage to its offering, but also as a way to drastically reduce costs when compared to the typical manual underwriting process. These decisions will be made automatically, consistently, reliably, and will be instantly available to the applicant. By automating these decisions, they expect to reduce the amount of manual

effort from 100% to 10%. They also expect to lower the customer acquisition cost by 75% – by reducing the level of agent representation for each policy.

Trust but Verify. In this part of the application, Precedent verifies the information provided by the potential customer. They retrieve a credit report and a motor vehicle report on the applicant, and compare the data with the risk evaluation. If there are gaps between the applicant's entries and the data retrieved from the external systems, the system processes the potential customer as an exception. The comparison of the potential customer's risk rating and the information returned from the external system is done automatically, in Corticon.

Customer Scenarios. Not only is Precedent using Corticon to drive the intelligence and user experience to determine the best healthcare options for their customers, but they can also offer the same feature-rich experience to their customers through simulation. Customers will be able to model and simulate costs of the packages online, running hypothetical treatments through the simulator to better understand costs associated to their claims or potential claims. They can adjust costs and understand claims adjustments, develop hypothetical treatments/costs scenarios associated to healthcare products and packages that are available to them. The rules that the simulation tool uses are the same rules that are used in the online application. Precedent sees this as offering a huge benefit to the customer, with little to no cost to them.

## RESULTS

After just a few months of development and testing, Precedent is ready to go with its initial application. "Implementing Corticon was amazingly easy," said Jeff Sines, Business Analyst. "After our initial training session we got to work. Within a month, we were up and running, modeling and testing some of the most complex insurance underwriting and pricing algorithms. After two months, we were taking advantage of the most advanced features. The product is so easy to use and very intuitive, I feel comfortable calling myself a Corticon Expert."

Company management is confident in the value that this will bring to their business. By streamlining the healthcare application process, and automating risk evaluation, product selection, and rate/coverage determination, Precedent expects to:

- Reduce manual effort associated to underwriting by 90%
- Cut customer acquisition costs in half
- Maintain agility and easily scale as business grows into new states and/or as additional products are introduced to the market
- Enable Actuaries to independently develop, maintain, and manage the intellectual capital, removing the need for a lot of IT support

## FUTURE GROWTH

Precedent sees Corticon as a key element of delivering on their product proposition and differentiators – and they have plans to expand aggressively as they grow their business. "Our business intelligence, our intellectual capital, resides in Corticon," said Ames. "It helps us to develop our application more easily and bring our products to market more quickly." After just a few months, Precedent has already identified several additional projects that will be enhanced with Corticon Business Rules, including:

- Renewals/Retention – process renewal offers to help customers understand fare increases
- Modeling/Simulation/Analysis – review data and run real data simulation for analysis to understand the market, create additional product configurations
- Spanish site – Corticon will be used to build the same rules for their Spanish-language version of the application, planned after future expansion

Precedent is filling an unmet need in the healthcare insurance industry, with a business strategy that is sure to expand the market. And with Corticon Business Rules, its solution will have the agility, flexibility and automated intelligence to help the company stay ahead of the curve and competition.

### About Corticon

Corticon enables organizations to make better, faster decisions by automating business rules. Corticon's patented "no-coding" rules engine is used by over 450 customers to automate their most sophisticated decision processes, reducing development and change cycles by 90%. Automated decision management with Corticon empowers organizations to improve productivity and customer service, and adapt quickly to changing market conditions.

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