

# Optimizing Healthcare Claims Adjudication with a Business Rules Management System



## Technology Challenges of Healthcare Claims Adjudication

From medical coverage to dental insurance, healthcare payers rely on complex business processes that are powered by business rules and calculations. Claims adjudication is among the most rule-heavy of these processes, requiring the calculation of many variables including; policy benefits, providers, clients, and potentially even geographic locations and lines of business.

Many developers and architects must spend a significant amount of time and effort hard-coding calculations and logic related to claims adjudication. When the calculations don't change, everything runs smoothly. Challenges arise when the business requires modifications to maintain compliance with regulations or respond to changes in the market.

Developers and architects must not only sift through code to locate the logic, which is often spread across several applications, but they also must modify the code and test it before deploying the updates. And if there was a miscommunication with the business regarding the change, the cycle must go around and around until the logic performs as needed.

Lastly, keeping a log of all the older rules for re-execution presents challenges. The volume of data and code can quickly become unmanageable.

All of these factors add up to a process that quickly can become complicated, frustrating and overwhelming, costing developers, architects and the company valuable time and money.

## Healthcare Claims Adjudication Solution

To accommodate the growing need for regular business rule modifications, many architects and developers who work for healthcare payers are turning to a Business Rule Management System (BRMS).

When a BRMS is deployed, subject matter experts have the ability to create, author, execute and manage rules in plain English and a custom business vocabulary, skipping the complex technical language. These custom-created rules can also be adjusted over time at a large or small scale as policy and regulation changes occur, and visibility into these rules ensures that organizations are in compliance with industry regulations at all times.

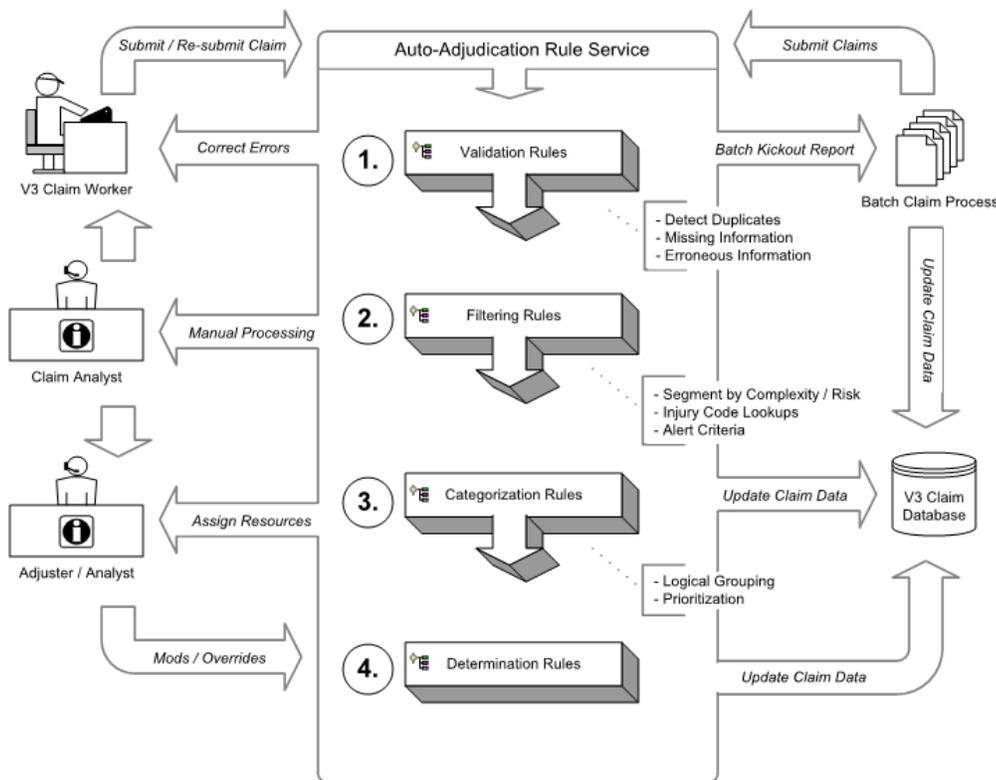
Subject matter experts also have the ability to make small changes to rules and calculations for one-off cases without completely rewriting the entire set. Subject matter experts then will also have the ability to override these sets of rules when necessary.

By putting rule authoring and testing in the hands of the business, architects and developers are free to focus on more strategic, technical projects.

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Healthcare payer organizations can use a BRMS to survey large collections of stored data via schema to examine, update, and change multiple variables associated with each claim. Additionally, this database allows users to access claims history as needed without loading the entire history, giving the subject matter expert precisely what they need.

A BRMS is designed to handle complexity. For example, a fully featured BRMS, such as InRule®, allows users to create rules that pull from multiple fields and locations in a complex object model that applies matching criteria to several sets of data in one action. Therefore, subject matter experts are able to filter through data with ease.



A business rules management system provides the “auto-adjudication rule service” to manage the logic and rules that take place throughout the healthcare claims adjudication process.

## Customer Use Cases

### LARGE, U.K.-BASED SUPPLEMENTAL INSURANCE PROVIDER

As part of a legacy modernization initiative, a large, UK-based private health insurance provider turned to InRule to manage the business rules and calculations associated with claims processing. In addition to implementing InRule, the modernization effort included deployment of Microsoft Dynamics® CRM Online and Microsoft Azure.

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The project went live in less than five months and has provided the organization with the ability to make informed decisions about how claim logic changes will affect future payouts to customers.

The system allows the organization to aggregate and pinpoint nuances in reimbursement amounts by rule. The claims processing solution can handle a large volume of claims, currently processing more than 45,000 per day. Last but not least, the new system provides the scalability to meet the demands of the future as the organization's customer base grows.

## U.S.-BASED HEALTHCARE CLAIMS CLEARINGHOUSE

A large, publicly traded U.S.-based claims clearinghouse uses InRule to cleanse and validate the claims that pass between provider groups and payers.

As part of the organization's revenue cycle management platform, InRule is used to automate the creation of payer files from claim files to streamline the claims process. The platform processes more than 250 million claims each year and approximately two million batch records are processed in under 10 seconds.

By taking custom programming out of the equation, InRule has made it easy for business users to update reimbursement rules. InRule has also provided the organization with a competitive advantage: By using the BRMS, the organization's first pass claim rules yield 98 percent as opposed to the industry average of 90-92 percent.

Learn more about [InRule offerings for medical and dental insurance providers here](#).