

Enhancing Dynamic Case Management in Healthcare Using a Business Rule Management System

A Q&A with InRule Technology® CEO Rik Chomko

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WHAT IS DYNAMIC CASE MANAGEMENT?

The shift to population health management in the healthcare industry today dramatically escalates the requirements for situational awareness and proactive care programs. As disparate data that has traditionally been siloed becomes interrelated, it creates the need for a system that can detect and identify abnormalities across data sets and raise an alert to signify a circumstance requiring special attention.

For example, where insurance eligibility could be managed independently in the past, it now has to correlate with a wide variety of other relevant data, including patient health information, care plans, patient communications, patient monitoring and prescription drug and treatment adherence.

But it's not just the volume of information that poses a challenge—each data element impacts decisionmaking for patient care plans over time. So effective case management isn't as linear as it was in the past. Now each patient and each case is individualized and the workflow is dynamic, changing with each patient and their evolving medical history.

CAN'T MY CRM SYSTEM SUPPORT THIS ONGOING PATIENT CARE MANAGEMENT?

While a powerful CRM system is an important part of the solution, it has one fatal flaw—it doesn't flex to accommodate the continuous decision making that characterizes dynamic case management. So healthcare providers who try to operate a dynamic case management system with CRM alone often end up burdened by overwhelming coding requirements to accommodate the decision logic required for the correlation of medical incidents/history/ events. Dealing with the complex decision logic demanded on this scale becomes a monstrous task, when every decision point and option has to be coded separately. In our experience, the results often end up being costly, clunky and hard to maintain over time.

HOW DOES A BUSINESS RULE MANAGEMENT SYSTEM (BRMS) ENHANCE AND ENABLE DYNAMIC CASE MANAGEMENT?

A BRMS is designed for exactly this type of challenge, because it offers flexible decision logic that can be easily created and updated by developers, architects, and subject matter experts using its inherent rules-based capabilities. That means every potential patient touch point and behavior and every possible decision variable can be used to direct the next step in each patient's individual process.

For example, a BRMS allows healthcare professionals to create a simple set of rules that identify the next step for diabetes management based on a combination of insurance eligibility, patient information, prescription drug adherence, daily glucose testing and reporting, diet, exercise and follow-up doctor's appointments. Instead of having to handle each possible decision manually at any point in time, a BRMS creates a predictable and automated decision-making process that combines the information and delivers the appropriate response. Not only is this a practical approach, it enables timely and individualized patient care that drives better health outcomes.

CAN YOU GIVE AN EXAMPLE OF HOW THE INRULE® BRMS HAS BEEN USED FOR DYNAMIC CASE MANAGEMENT?

We worked with the most populated county in the U.S. to devise a decision support solution for outpatients with chronic asthma and cardiac disease. The county was looking for a way to improve patient outcomes and offer more comprehensive support.

In this implementation, InRule's BRMS defines best practices as business rules, and then executes those rules against patient information such as demographics, lab results, vital signs, and other information in order to make suggestions to healthcare providers regarding the best next step in the patient's care plan.

InRule enables healthcare providers to author and manage business rules without programmer effort, enabling the county Department of Health Services to quickly respond to changes in treatment protocols, patient needs and government regulations.

By using InRule for dynamic case management, the county was able to decrease ambulatory services to outpatients with chronic cardiac disease by 75%.

This is just one example of the many ways we believe the InRule BRMS can help healthcare providers improve population management without excessive coding burdens.

To learn more about how InRule is used in healthcare applications to improve outcomes and reduce costs, please visit www.inrule.com.