

# Under the Microscope:

## Examining Decision Management for Population Health Management



### THE RULES OF POPULATION HEALTH MANAGEMENT

As healthcare systems, hospitals and physician practices shift away from fee-for-service reimbursement systems emphasizing volume over outcomes, there is movement toward a system that favors improved outcomes, reduced costs and greater patient satisfaction as part of a value-based care (VBC) model.

One of the keys to success with VBC is an organization's ability to leverage the intelligence from Electronic Medical Records (EMRs) and the corresponding trend data that can be gleaned from them.

However, most organizations have massive quantities of EMR and other data and it's nearly impossible to derive intelligence from it in its original state. Additionally, when physician practices, hospitals, and medical groups merge and/or undergo acquisitions – a regular occurrence as organizations look to reduce costs and grow market share – the result is an even greater data deluge that further complicates the process of turning data into a useful asset that can be used to advance the objectives of a VBC-focused healthcare organization.

### AUTOMATE YOUR LOGIC TO REDUCE RISK & IMPROVE OUTCOMES

Many healthcare organizations are turning to Business Rules Management Systems (BRMS) to derive value from the seemingly endless quantities of EMRs and other data. Through the use of a BRMS, organizations can leverage that data to successfully execute and manage population health management and wellness programs.

By analyzing and correlating data from EMRs and other systems through rules and workflows, a BRMS can help determine a patient's at-risk category. In addition, based on logic within the system, a BRMS can analyze patient data and recommend the appropriate follow-up through population health management programs.

In addition, as effective management of chronic diseases requires a higher level of engagement with patients, a BRMS can be used to initiate reminders and the delivery of relevant content to patients as healthcare organizations strive to move them from an active diagnosis of a chronic disease or at-risk, to a cured or stable diagnosis.

As population health management continues to evolve, IT can make a significant contribution to a value-based care organization by delivering solutions that make it easy to leverage EMRs and other system data to improve outcomes and patient care while reducing costs.

#### Population Health Management Checklist

Does your population health management program:

- ✓ Leverage evidence-based rules and workflows to provide automated patient care recommendations?
- ✓ Include trend information based on EMRs from various populations or cohorts within a population?
- ✓ Send automatically generated, relevant content and reminders to patients trying to manage chronic diseases?
- ✓ Trigger notifications and alerts for doctors based on specific lab results from patients?

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A BRMS keeps the logic that powers a population health management program separate from application code – making it easy for non-technical personnel to write and modify rules based on evolving medical knowledge and the latest patient care procedures. In addition, a BRMS provides transparency into the rules that are in use at all times, making it easier to maintain compliance with government regulations specific to patient care and reimbursements.

## USE CASE: MAJOR U.S. HEALTH PROVIDER AND INSURER

A major health provider and insurer located in the western United States uses a BRMS for chronic disease management of its patient population. The organization established several categories associated with each of the most common chronic diseases. Through the use of rules and workflows within the BRMS, they are able to segment their patient population into the appropriate category (or categories, in some cases) based on clinical information. This data is then used to track trends within the community, as well as to monitor the success of ongoing wellness programs. The BRMS processes 2.5 million patient EMRs each day, allowing the organization to provide patients with content and reminders that align with their clinical status. By reminding the patient population to make appointments or refill prescriptions and by delivering targeted tips and suggestions to segmented patient populations, the organization has been able to improve patient outcomes and improve patient satisfaction. The organization has realized a cost savings, as well. By reducing the number of patients advancing from “at risk” to be diagnosed with a condition or downgrading patients diagnosed with a condition to a cured or stable diagnosis, the organization has improved the health of the communities it serves while improving its bottom line.

## USE CASE: A LARGE, URBAN U.S. COUNTY HEALTH DEPARTMENT

A county that includes one of the most populous U.S. cities uses a BRMS to manage chronic diseases within its population. The County Health Department leverages data from patient EMRs to create trend data that can be analyzed by health department personnel as they strive to lower the rates of diagnoses within the community. The Health Department also leverages their BRMS for group health interventions, such as sending mammogram reminders to women over age 50 and health maintenance information to diabetes patients. Health Department personnel have been able to write and manage the logic that governs these programs, allowing them to maximize their EMR data and create evidence-based rules that reflect the latest research.

## WHAT'S NEXT

To request a readiness assessment or to learn more about how your organization can use a BRMS to advance population health management initiatives, [please click here](#).