BUSINESS RULES IN HEALTHCARE:
GOOD ADVICE FROM THE REAL WORLD

Phil Simpson, Moderator
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May 4, 2017
HM HEALTH SOLUTIONS

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Manager, Core Architecture

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Senior Architect, Platform Architecture

May 4, 2017
Overview

HM Health Solutions (HMHS) provides innovative, technology-based solutions that enable health plan clients to achieve top-line revenue growth while reducing costs and increasing competitiveness in the market. Launched in 2014, HMHS provides software and technology solutions across multiple product lines, including Medicare, Medicaid, commercial, and individual.

The Enterprise Health Solution (EHS) is a comprehensive cloud-based multi-tenant turnkey solution. When health plan clients invest in EHS, they gain access to experienced people, proven business processes, and an integrated platform. With EHS, health plan clients achieve revenue growth, increased membership, and differentiated member experiences. With HMHS’ commitment to quality, excellence in delivering solutions, and continuous product enhancements, clients can continue to adapt to their rapidly changing market needs.

HMHS is a committed community partner. The company and its employees regularly volunteer time and resources to a number of nonprofit organizations, including Variety, Boy Scouts of America, and the Challenged Athletes Foundation.

Awards & Recognition

**HM Health Solutions earns HITRUST certification**

HM Health Solutions earned HITRUST (Health Information Trust Alliance) Common Security Framework certification for its main claims processing systems as well as for those of affiliate United Concordia Dental. The certification recognizes the highest level of privacy and security for clients and partners.

**HM Health Solutions earns "ISO9001:2008 Quality Management System" certification**

HM Health Solutions’ Output Services has “ISO9001:2008 Quality Management System (QMS)” certification for its two print facilities. HMHS underwent a rigorous auditing process from a third party to demonstrate compliance with the internationally recognized 9001 standard.

Fast Facts

- **9.7 million members managed**

Members managed by HM Health Solutions grew to over 9.7 million — 2 million members were added to the platform through our partnership with Blue Cross Blue Shield of Minnesota.

- **150 million claims processed**

HM Health Solutions processed over 150 million claims in 2016 on behalf of its health plan customers.
Business Rules Management: Capabilities

Leverage for Business Capabilities
- Quickly adapt Business Rules as necessary
- Shorten Development Cycles
- Centralize Decision Logic
- Separate Business Rules from applications and services
- Millions of Rule executions per day

Leverage for IT Capabilities
- Dynamic Rules Updates
- Support multiple versions of rules
- Lightweight business rules engine
- Rules exposed in an “Embedded” and/or “Decision as a Service” mode
Enterprise Health Platform – Event Driven Architecture

Red Hat Business Rules Management System -- (BRMS)

- Web Authoring and Rules Management – Business Central
- Eclipse IDE plug-in for developers
- Business Rules Engine – KieServer

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Enterprise Health Platform – Use Cases

Platform Current Usage

➢ Member Event Interaction Tracking
  Transactions: Approx. 1 Million Per Day
  Rule Complexity: Medium-High

➢ Care Cost Estimator (Proxy Prefix Identifier)
  Transactions: Approx. 1K Per Day
  Rule Complexity: Low

Platform Future Usage

➢ Category of Service (Medicaid, Medicare)
  Transactions: Approx. 200K Per Day
  Rule Complexity: Medium-High

➢ Care Cost Estimator (Projected Care Costs)
  Transactions: Approx. 5K Per Day
  Rule Complexity: High
Enterprise Health Platform – Conceptual Architecture

Key Takeaways

➢ Write Rule Once and deploy it as a Service and/or Embedded option
➢ Custom fit into existing UC Build and UC Deploy procedures using REST API
Define Ownership, Governance, Code Samples and Est. Matrix

**Pilot Owner**
Anthony Roscoe

**Platform Owner**
Michael T Battles

**Capability Manager**
Chi Pham

**Enterprise Architect**
David Nowka

**Platform Architect**
Joyson Jacob

**Platform Support**
Kris Kniha, Shiveeta Mattoo

**Infrastructure Contact**
Aaron Boyd

**Release Management**
Alan Parker

**Database**
Dean Bittner
Evangelizing with Developers

Key Takeaways

- New/Maintenance rules development time reduced by 3:1 ratio
- Reduces and/or eliminates Custom Rule Engine Core development and maintenance
- Industry standard Rule Engine that has algorithms in-built for performance and speed
RED HAT BRMS REDEFINES HEALTHCARE INNOVATION

Robert Barker
Application Director Clinical

Patricia Bogoevici
Director, Consulting

May 4, 2017
Key focal points for this session

- Collaboration, culture change and the removal of silos
- Real world example
- Empowering delivery teams to innovate in US Healthcare
  - The power of DevOps and Agile and modern software engineering
Use Case – Healthcare Provider Incentives Platform

Healthcare Provider

- Benefit
- Eligibility
- Provider
- Claim

INCENTIVES PLATFORM

- Incentives Platform
- Configuration & UX
- Omni-Channel Outreach
- Data Transformation

RED HAT® JBOSS®

BPM SUITE

SHARED ASSETS

- Data (Reporting)
- Quality Feedback

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Big Data & Business Rules Approach

**Business Rule Configuration** versus Code Development: Enables speed to market.

**Volume** (data at rest): terabytes, exabytes, petabytes and zettabytes of data.

**Velocity** (data in motion): capturing and processing streaming data in seconds or milliseconds to meet the need or demand.

**Variety** (data in many forms): structured, unstructured, text, multimedia, video, audio, sensor data, meter data, html, text, emails, etc.

**Variability** (data in change): the differing ways in which the data may be interpreted; different questions require different interpretations. Data flows can be highly inconsistent with periodic peaks.

**Value** (data for co-creation): The relative importance of different data to the decision-making process.
DevOps, Agile and modern software engineering

collaborate

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PANEL DISCUSSION

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LEARN. NETWORK. EXPERIENCE OPEN SOURCE.