

Managing Proactively the Health of Insurance Members

With Event-Driven Processes Running On Red Hat Process Automation Manager

Maurizio Carioli Principal Solution Architect



Agenda

- What is Population Health Management
- A Simple Event Driven Framework
- Demo
- Q&A



Mary's Chronic Condition



- Mary has rheumatoid arthritis
- She takes a
 Disease-Modifying
 Antirheumatic Drug
 (DMARD)
- She runs out of refills

DMARD	Usual maintenance dosage	Route of administration
Adalimumab	40 mg once every other wk*	Subcutaneous
Anakinra	100 mg daily	Subcutaneous
Azathioprine	2 - 3 mg/kg/d	Oral
Cyclosporine	2 - 5 mg/kg/d	Oral
Etanercept	25 mg twice/wk or 50 mg/wk	Subcutaneous
Hydroxychloroquine†	400 mg/d	Oral
Infliximab	3 - 6 mg/kg every 4 - 8 wk	Intravenous
Leflunomide	10 - 20 mg/d	Oral
Methotrexate	7.5 - 25 mg/wk	Oral, subcutaneous
Minocycline [†]	100 mg bid	-
Parenteral gold	25 - 50 mg/wk	Intramuscular
Sulfasalazine	2 - 3 g/d in divided doses	Oral

Genes and Environment

Rheumatoid Arthritis

Traditional cardiovascular risk factors may be more common (e.g., smoking) and may operate differently in patients with RA (e.g., paradoxical effects of lipids and body mass index)

Inflammation (e.g., C-reactive protein), innate immune responses (e.g., activation of innate immune effectors by danger associate molecular patterns); adaptive immune responses (e.g., activation of T lymphocytes and dendritic cells; production of autoantibodies); and cellular stress (e.g., tissue hypoxia, oxidative stress, apoptosis, endothelial damage) play a major role in heart disease among patients with RA

Treatments for RA may increase (e.g., high dose corticosteroids) or decrease (e.g., methotrexate) the risk of heart disease in patients with RA

General population

Traditional cardiovascular risk factors explain a large part of the heart disease in persons without RA

Inflammation / immune responses play a lesser role in heart disease among persons without RA

Heart disease

 DMARD can decrease the chance of heart disease



Population Health Management

- "Population health management refers to the process of improving clinical health outcomes of a defined group of individuals through improved <u>care coordination</u> and <u>patient engagement</u> supported by appropriate financial and care models." American Hospital Association
- PHM is achieved by
 - aggregating patient data across multiple health information sources,
 - · analysing that data into a single, actionable patient record, and
 - <u>performing concrete actions</u> through which care providers and payors can improve both <u>clinical</u>
 and <u>financial</u> outcomes.



This is Population Health Management in Action



 Peter, Mary's doctor, writes a new prescription for her



Robert, the pharmacist, fills the prescription



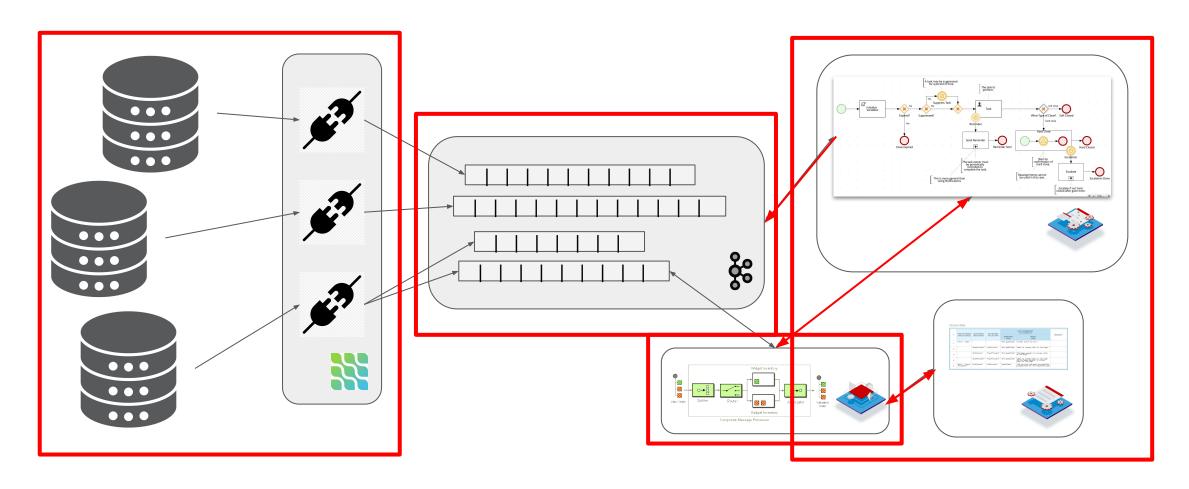
 Mary's health and wellness are taken care of

Mary's (and many others)
 claims cost is under control



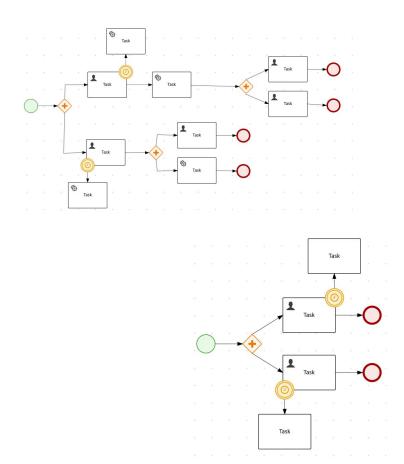


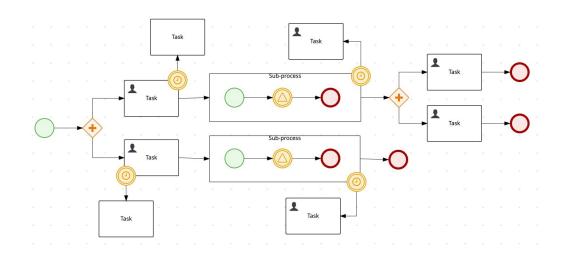
Designing a PHM Architecture that Scales with the # of Events





Designing a PHM Architecture that Scales with the # of Event Definitions

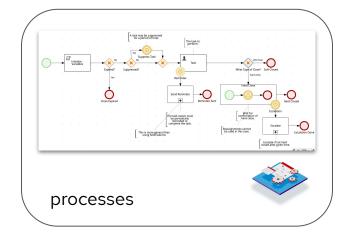






Designing a PHM Architecture that Scales with the # of Event Definitions









end-user-ui



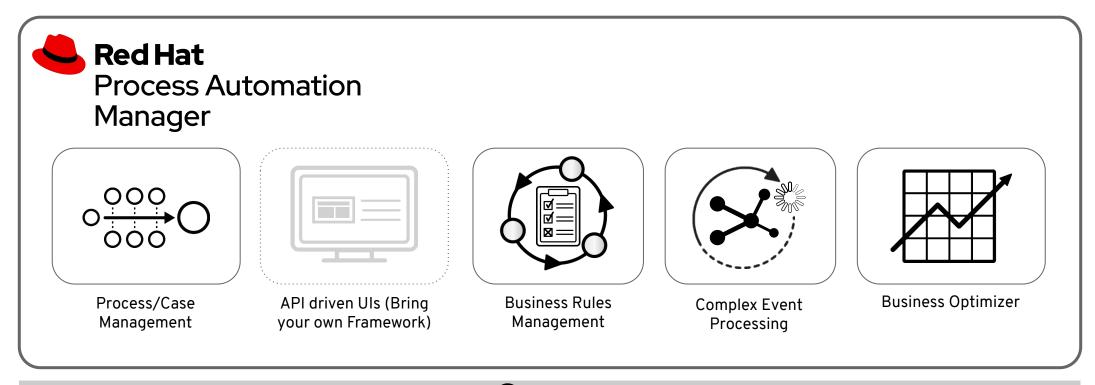


- Configuring workflows with business rules NOT coding
- Data-driven dynamic workflow
- One workflow to rule them all
- Dynamic end-user UI



Business Automation Offering

Key features



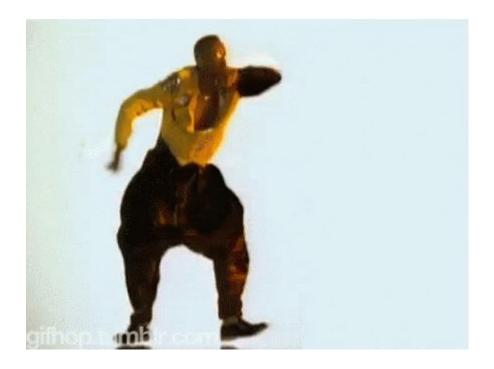


PHYSICAL VIRTUAL PUBLIC CLOUD PRIVATE CLOUD

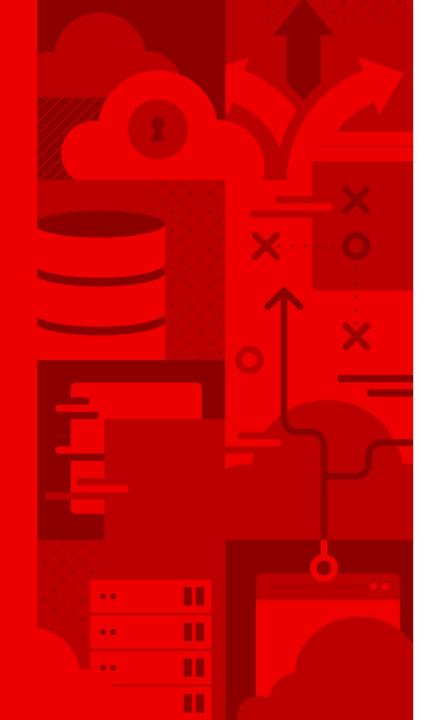




Demo Time

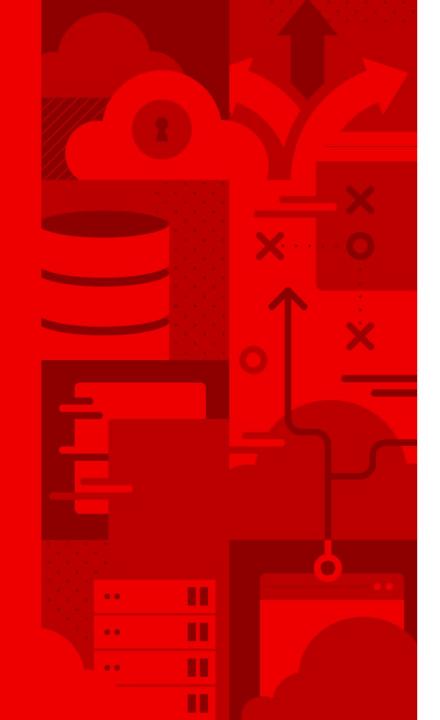






Questions?





Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.

- in linkedin.com/company/red-hat
- f facebook.com/redhatinc
- youtube.com/user/RedHatVideos
- twitter.com/RedHat

