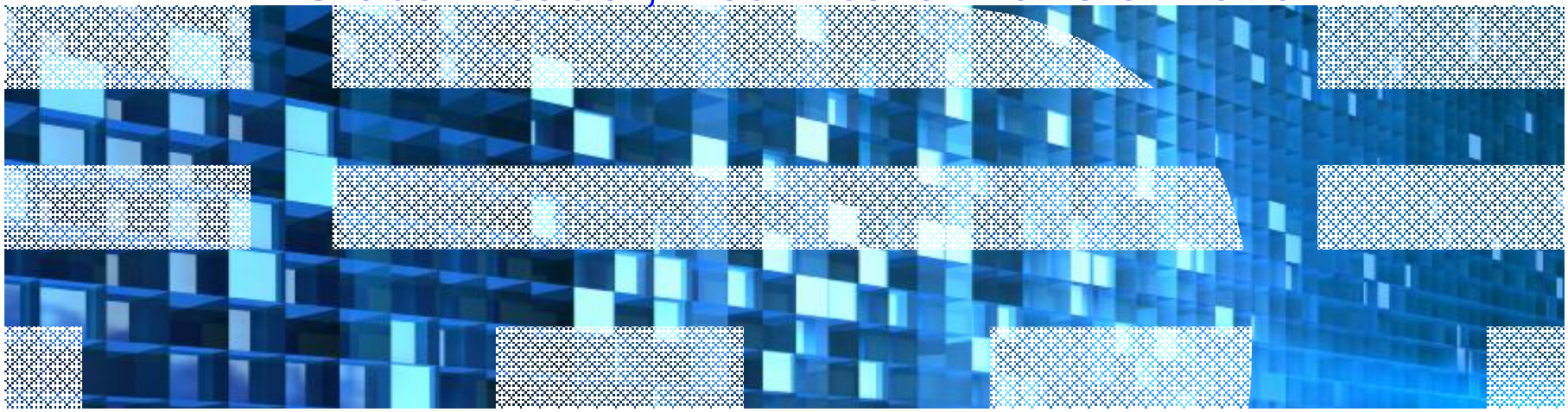
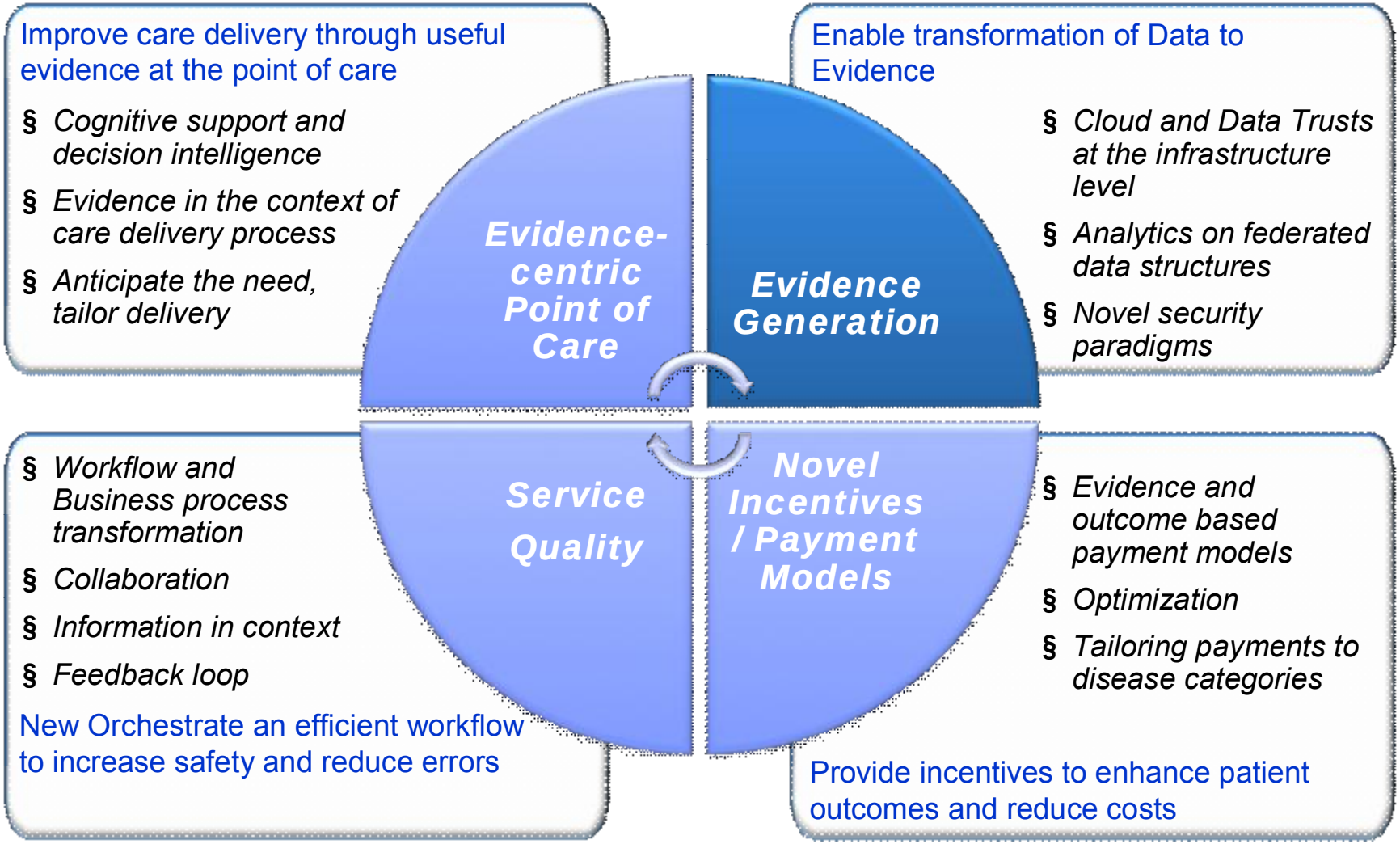
Healthcare Transformation

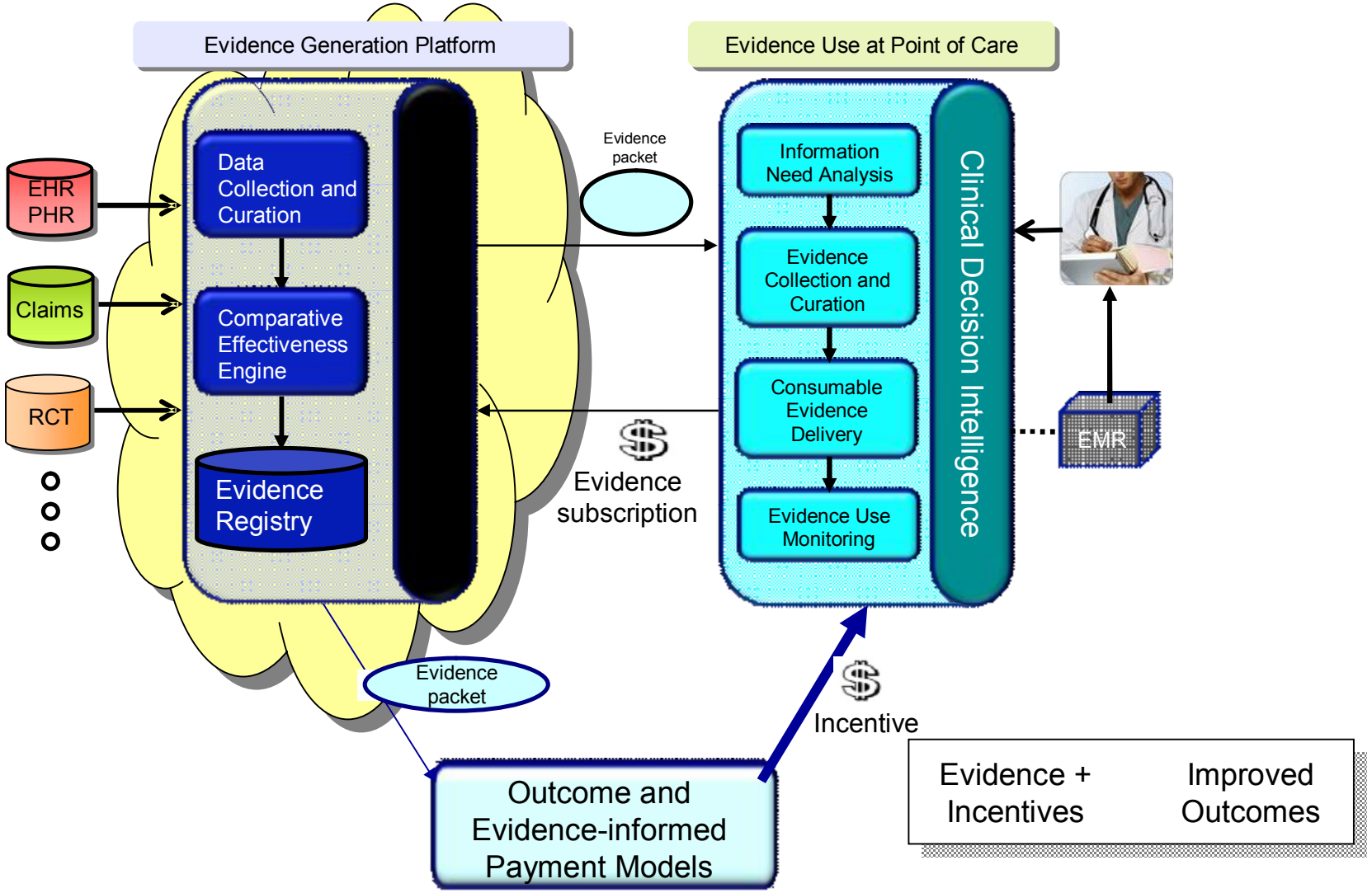
Chalapathy Neti,
Global Leader, Healthcare Transformation



Key components enabling transformation to an evidence-centric ecosystem

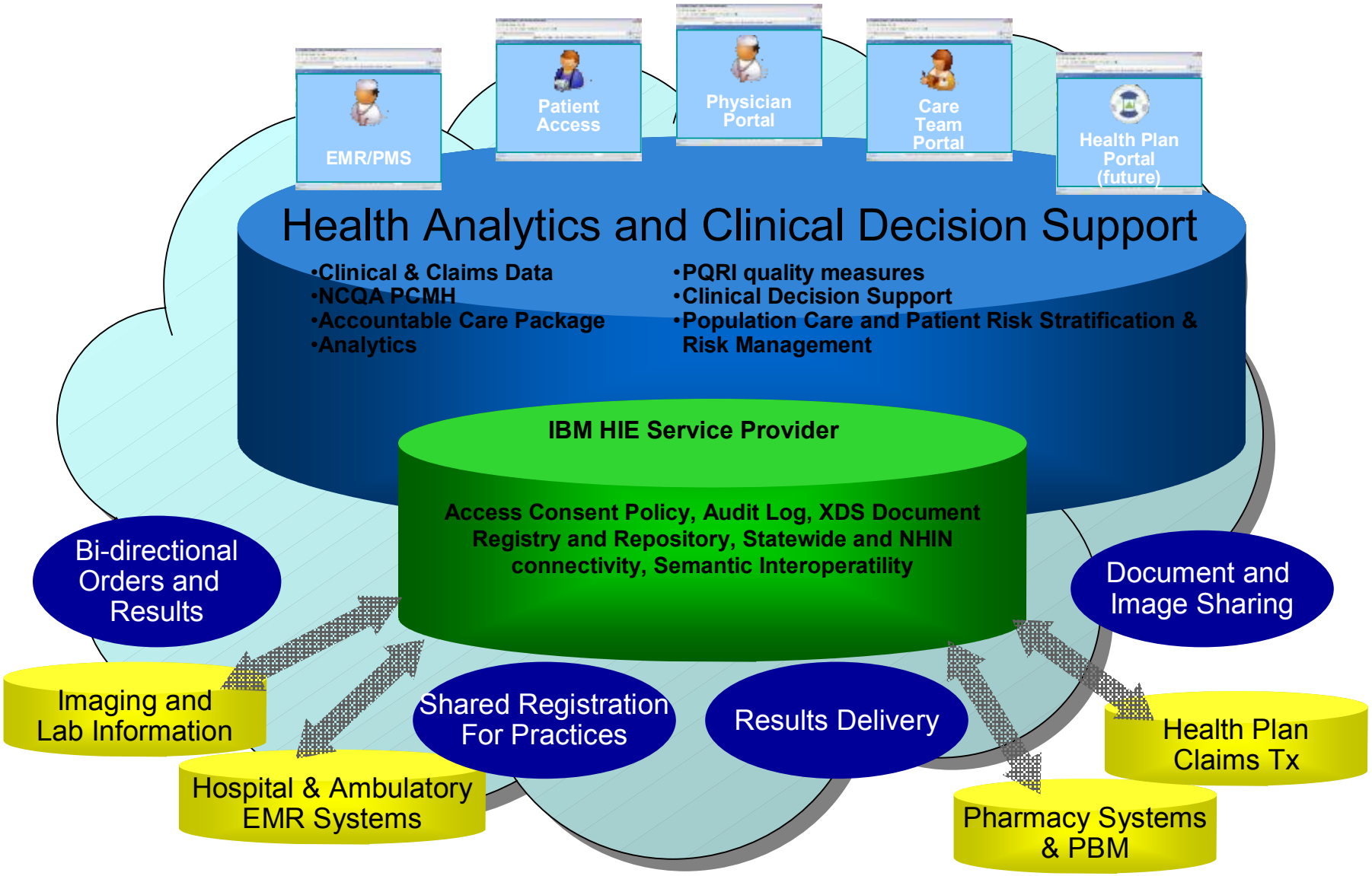


Outcome based payment incentives lead to improved outcomes and demand for evidence at point of care. This requires large scale evidence generation and comparative effectiveness clouds.



EVIDENCE USE

IBM/AHM Collaborative Care Solution



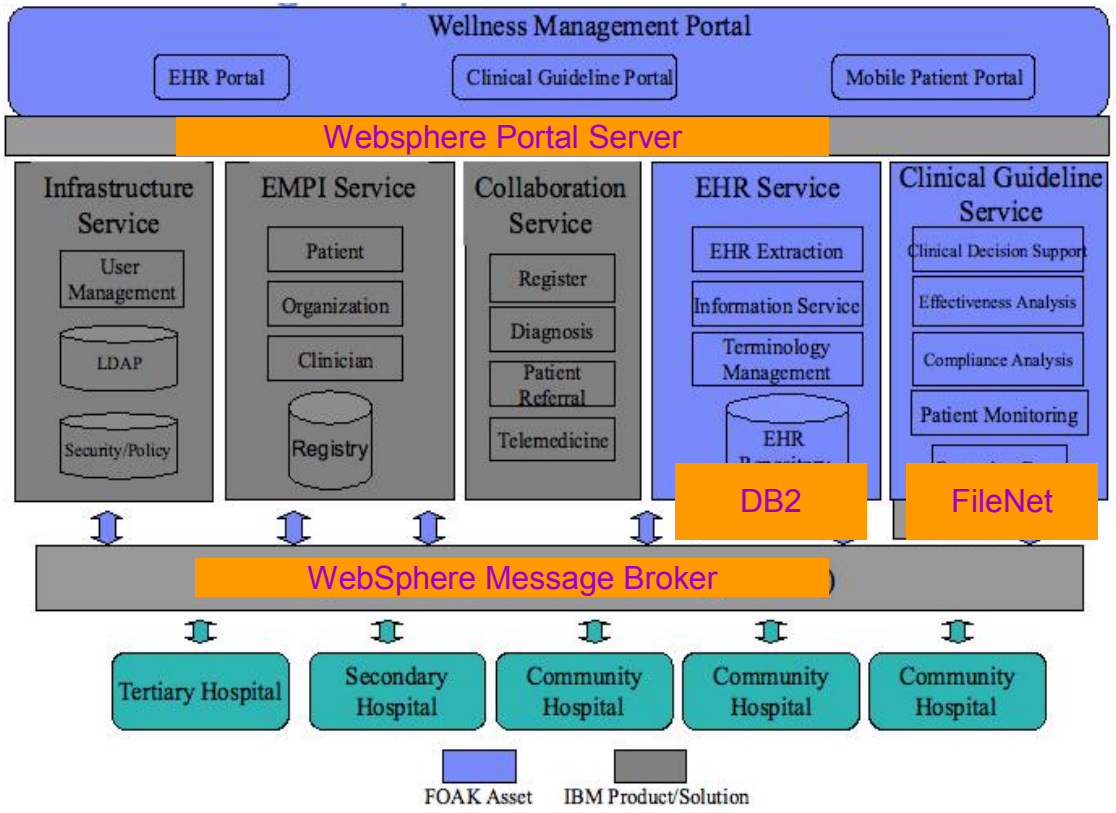
Evidence Use: Enhancements to IBM/AHM Collaborative Care Solution

- Announced jointly with **AHM** (development partner) and **SCMG** (customer) on August 5th, 2010

Evidence-Based Patient-Centered Care (ePC3)

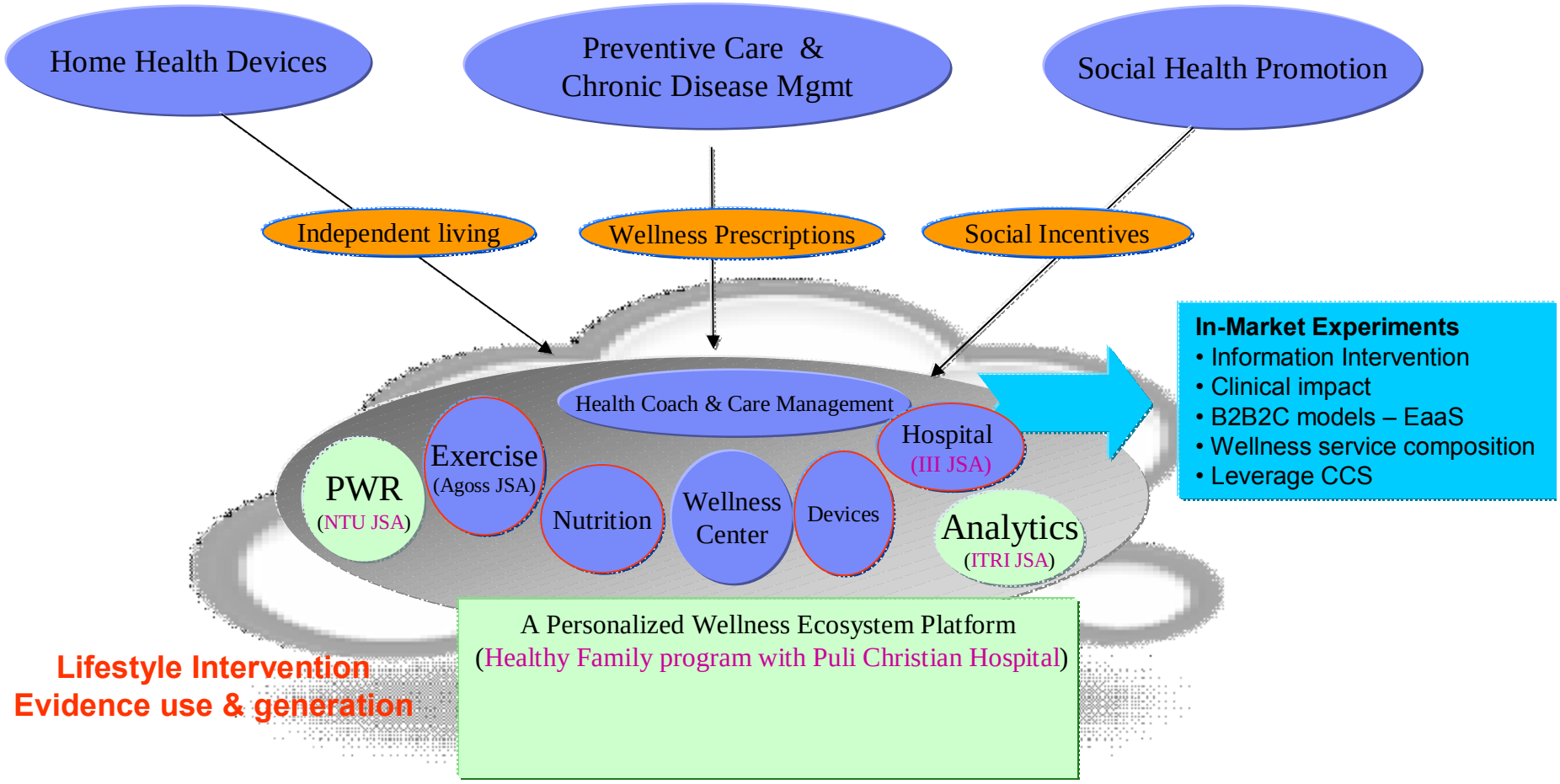
The solution provides evidence-based patient-centered collaborative care to improve the care quality while reducing the cost, with a focus on **chronic disease management** enabled by

- §***integrated health information*** (Longitudinal Health Record for Health Risk Assessment)
- §***best medical evidences*** (Clinical Guideline/Pathway) and
- § ***better patient interactions*** (Mobile-enabled Patient Monitoring and Communication).



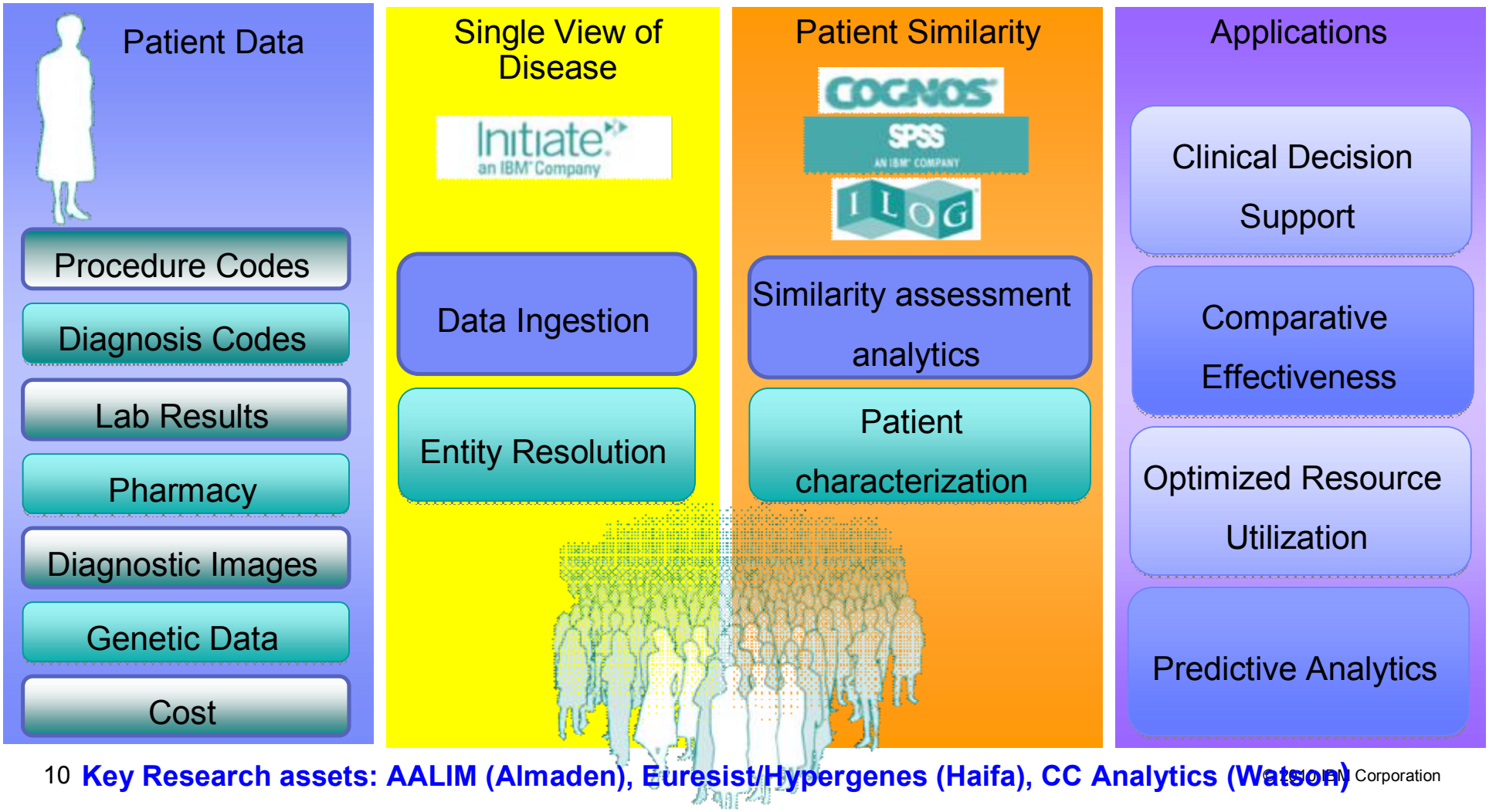
北京大学人民医院 PEKING UNIVERSITY PEOPLE'S HOSPITAL

Taiwan Collaboratory: A Cloud-Enabled Personalized Wellness Ecosystem



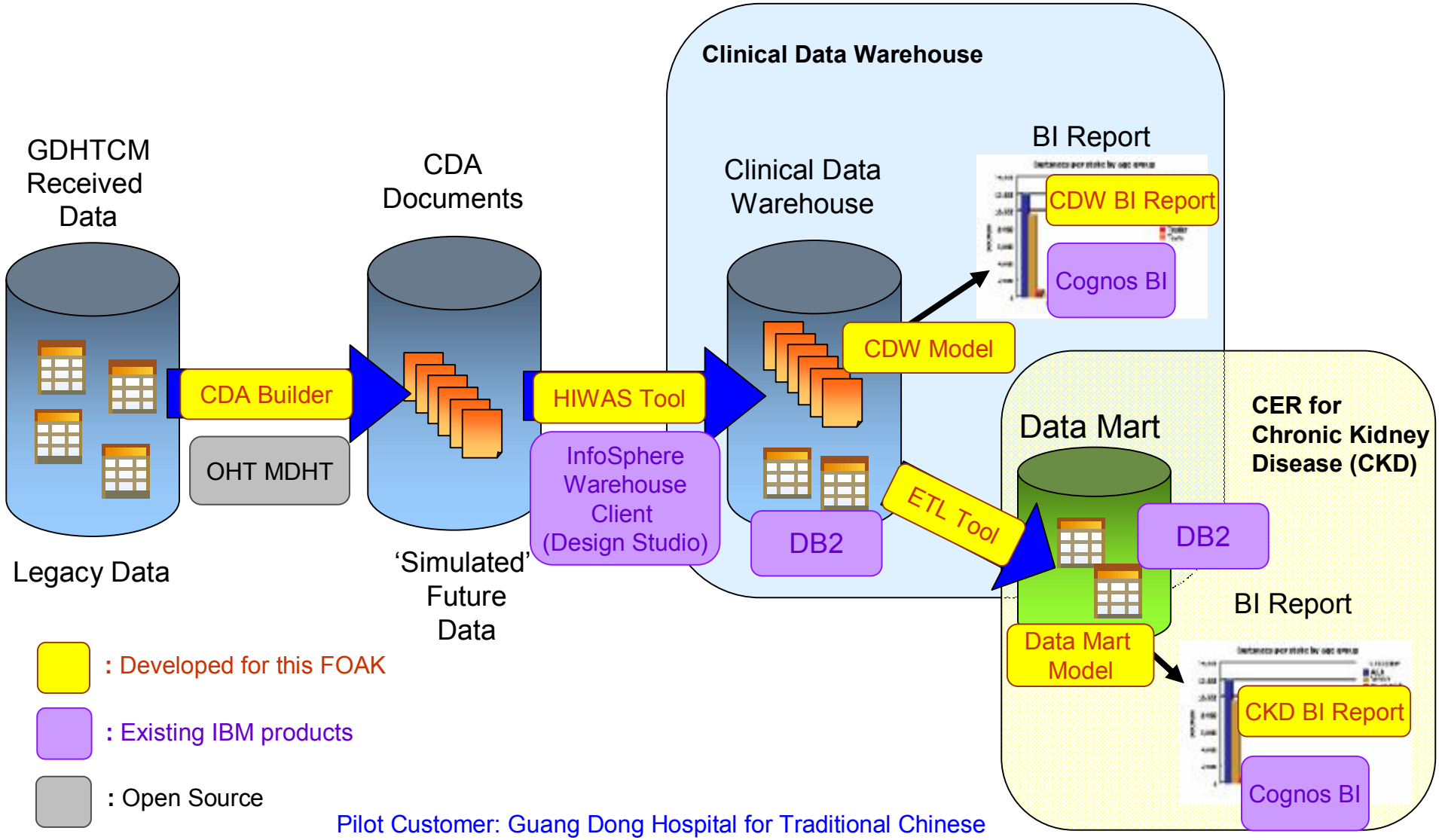
EVIDENCE GENERATION

Evidence Generation: Smart Analytics System for Comparative Effectiveness



10 **Key Research assets: AALIM (Almaden), Euresist/Hypergenes (Haifa), CC Analytics (Watson)**

Single View of Disease - Healthcare Information Warehouse for Analytics and Sharing (HIWAS)



Pilot Customer: Guang Dong Hospital for Traditional Chinese Medicine

EUResist: HAART Therapy Prediction

Predicts in-vivo efficacy of anti-retroviral drug regimens, i.e., reduction in viral load.

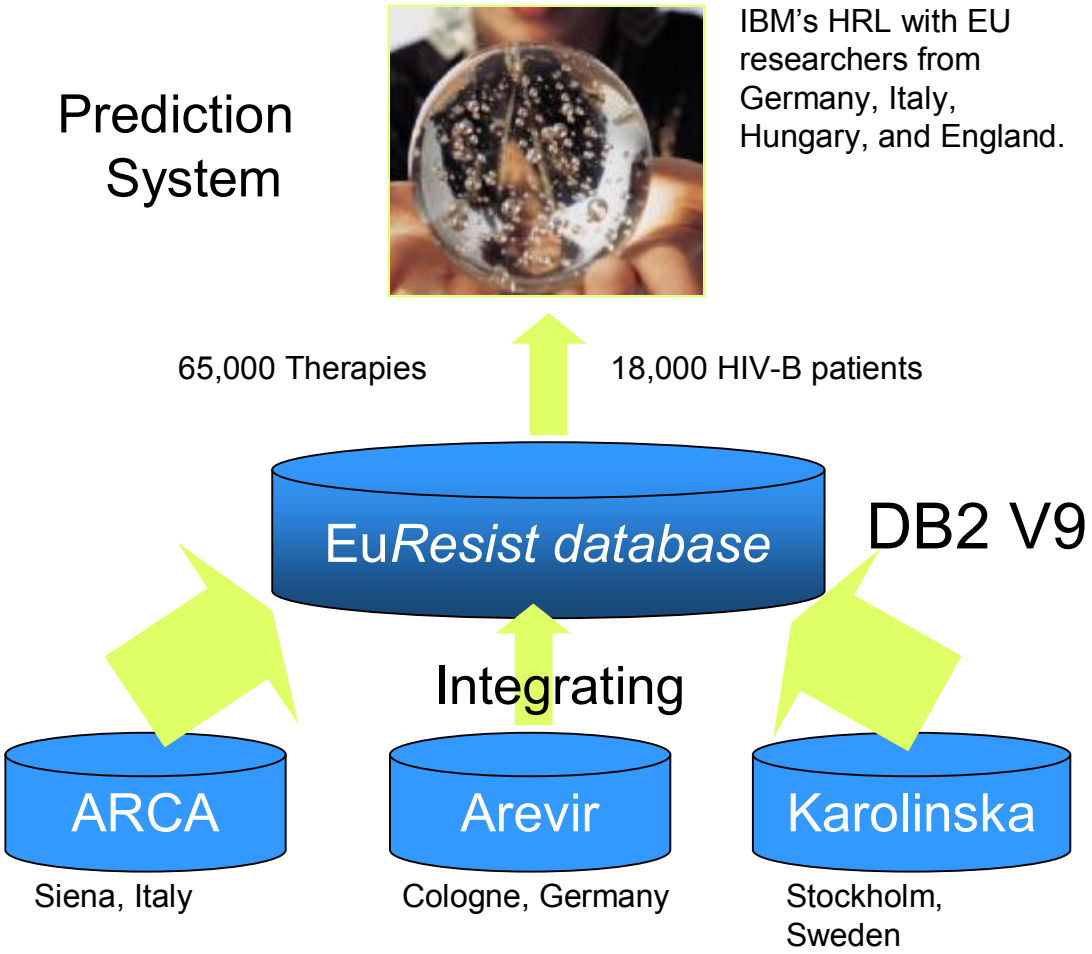
Combines 3 Machine Learning Predictive Technologies

Uses Viral Genome and Patient demographic and clinical data

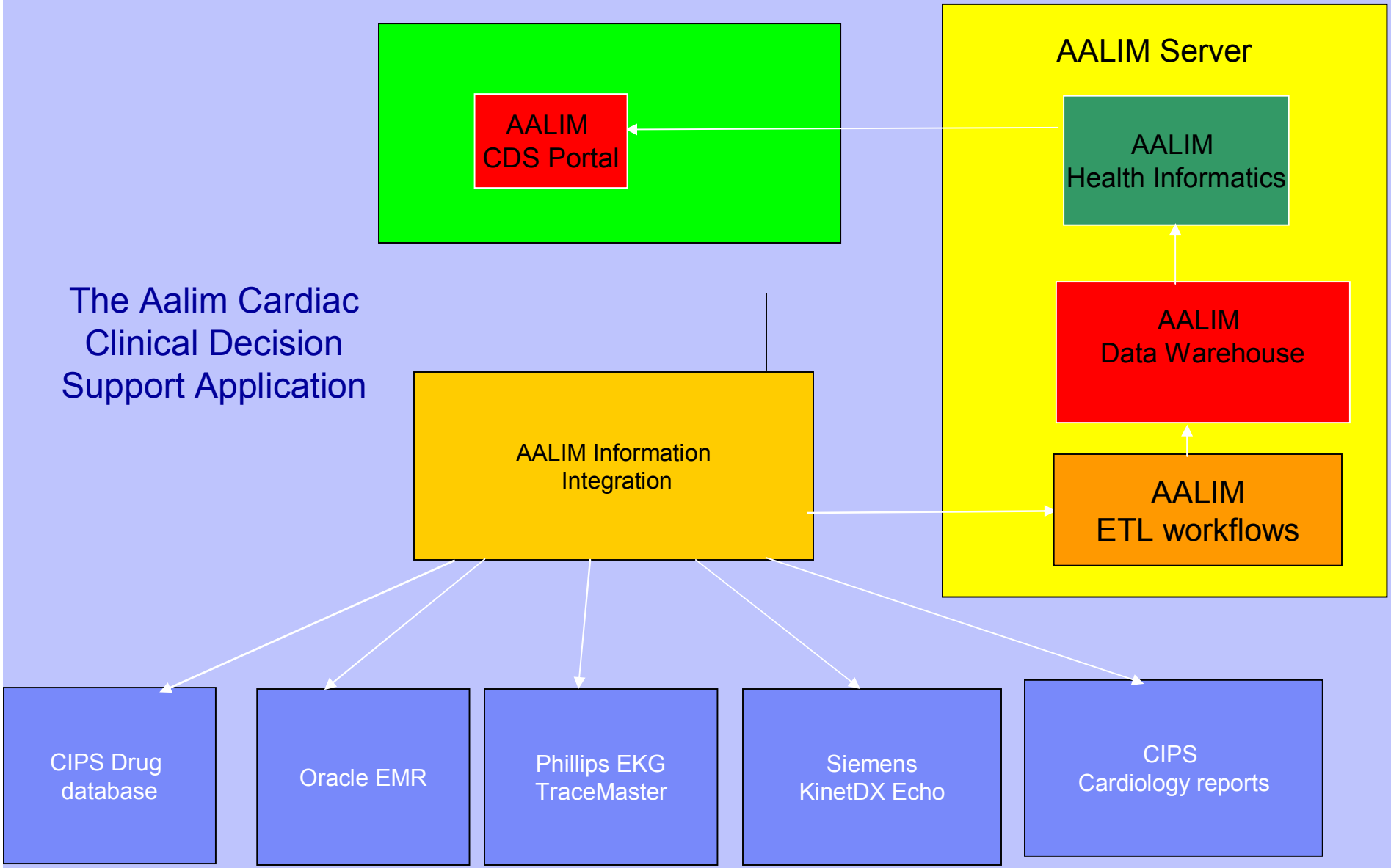
Outperforms leading available resistance interpretation system

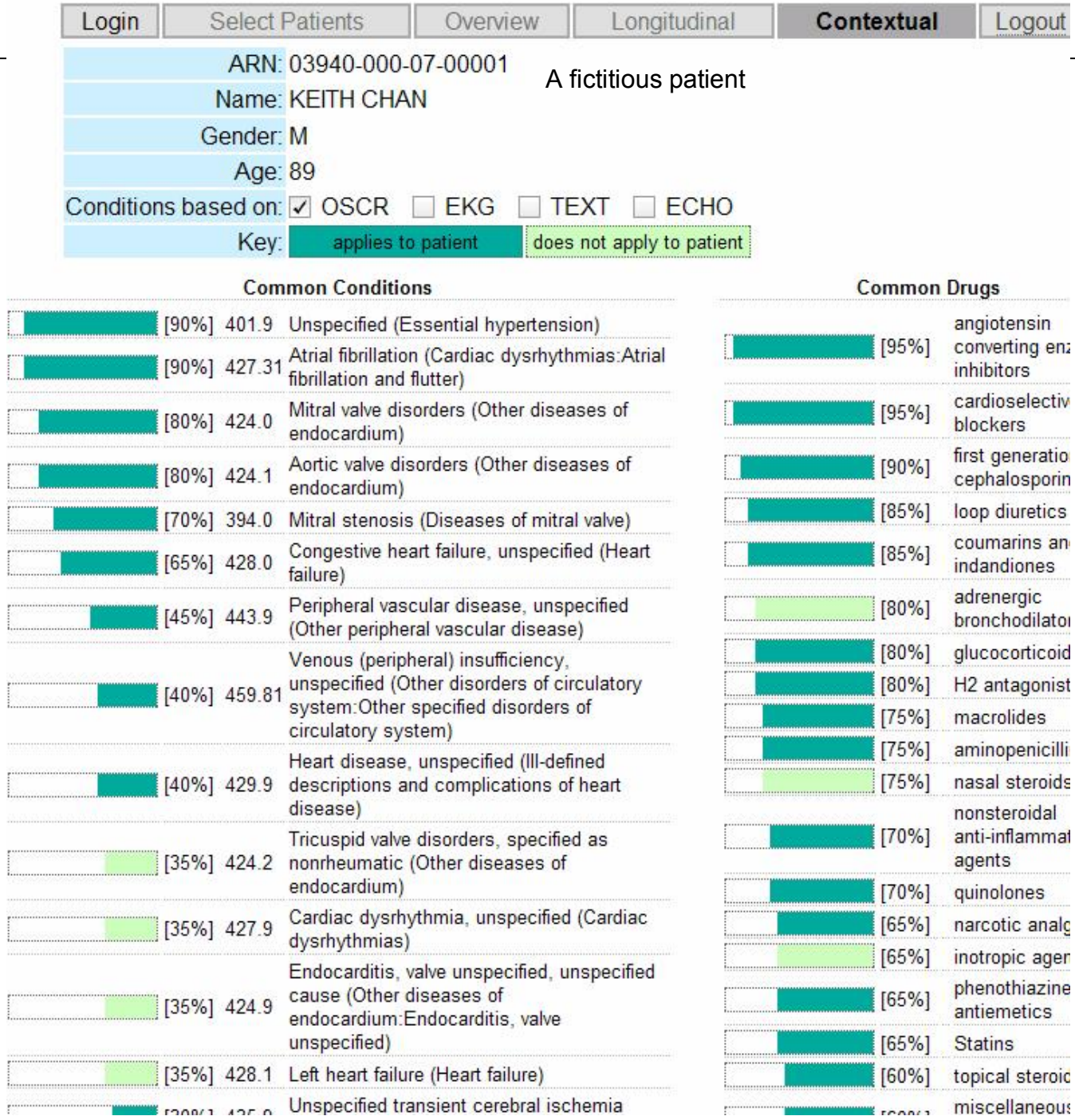
Available on-line at:
http://engine.euresist.org

2009 Computerworld Honors Program Finalist



The Aalim Cardiac Clinical Decision Support Application



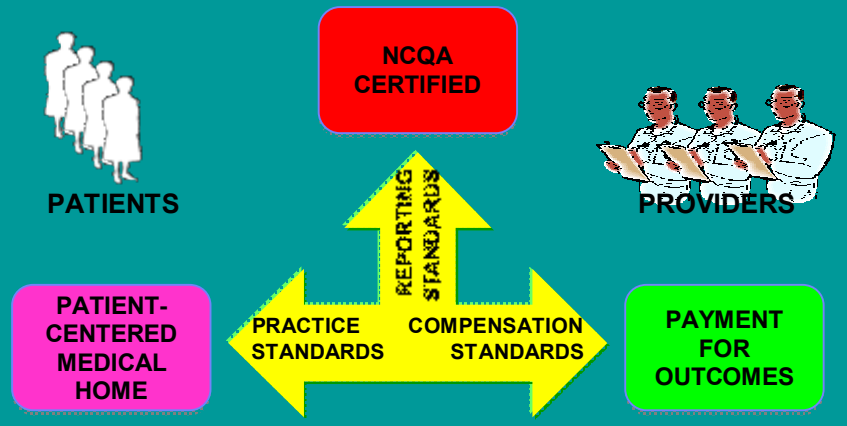


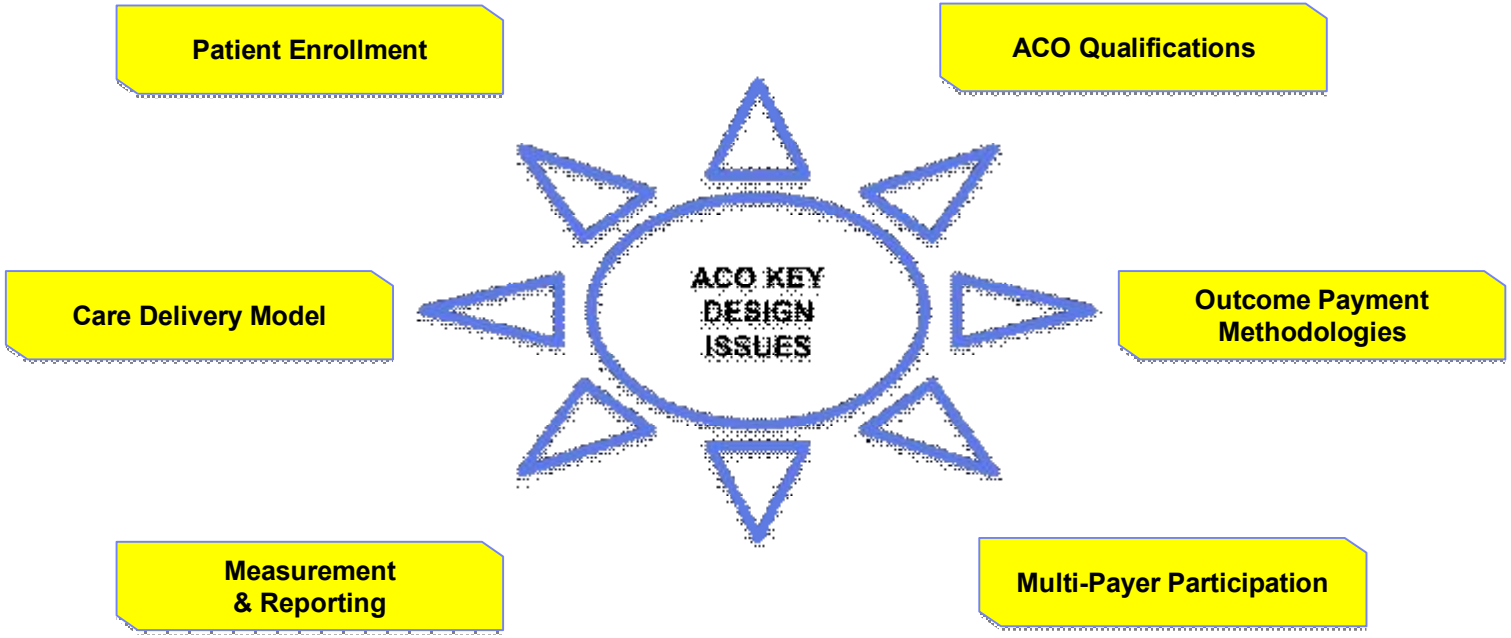
A fictitious patient

PAYMENT POLICY AND SIMULATION

Payment/Incentives: Enable Accountable Care Organizations:

- Physician-led, Risk-bearing Organization
- Implements Collaborative Care
- Measures quality to drive outcome-based payments
- Works in Concert with Payers & financial institutions

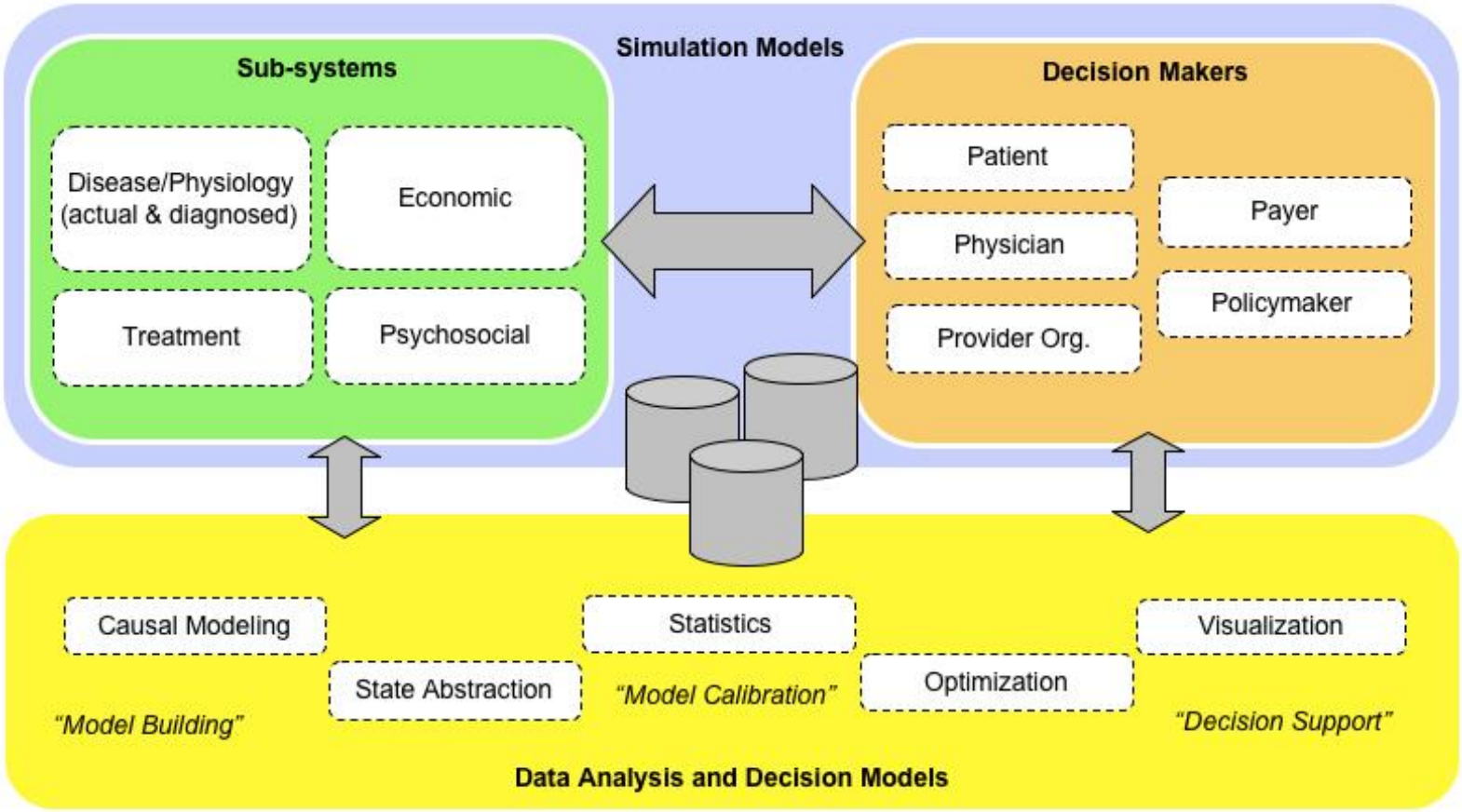




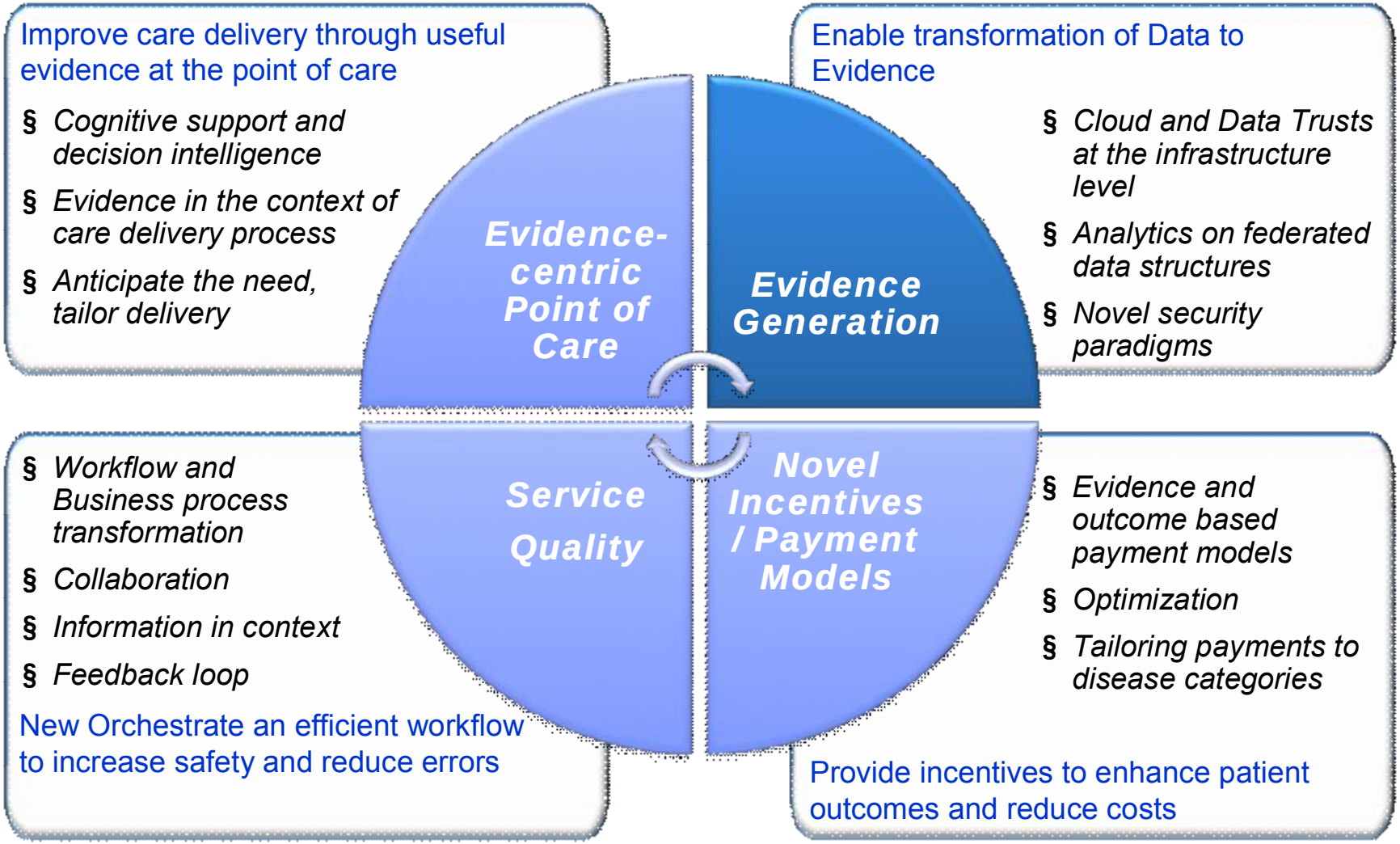
Simulation Overview

§ A simulation based approach that combines disease modeling with economic and behavioral modeling to predict health outcomes and medical expenses.

§ Flexible framework allows users to 'plug-in' and leverage a library of specialized analytic models.



Key components enabling transformation to an evidence-centric ecosystem



Acknowledgments

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- Evidence Generation Team

Bill Cody & IBM Research, Almaden team, Haim Nelken & IBM Research, Haifa team

- Payment & Simulation Team

Shahram Ebadollahi, Robert Sorrentino, Murray Campbell & IBM Research, Watson team, Paul Maglio & IBM Research, Almaden team

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