

An EVIDENCE-ENHANCED HEALTHCARE ECOSYSTEM for Cancer: I/T perspectives

Chalapathy Neti, Ph.D.

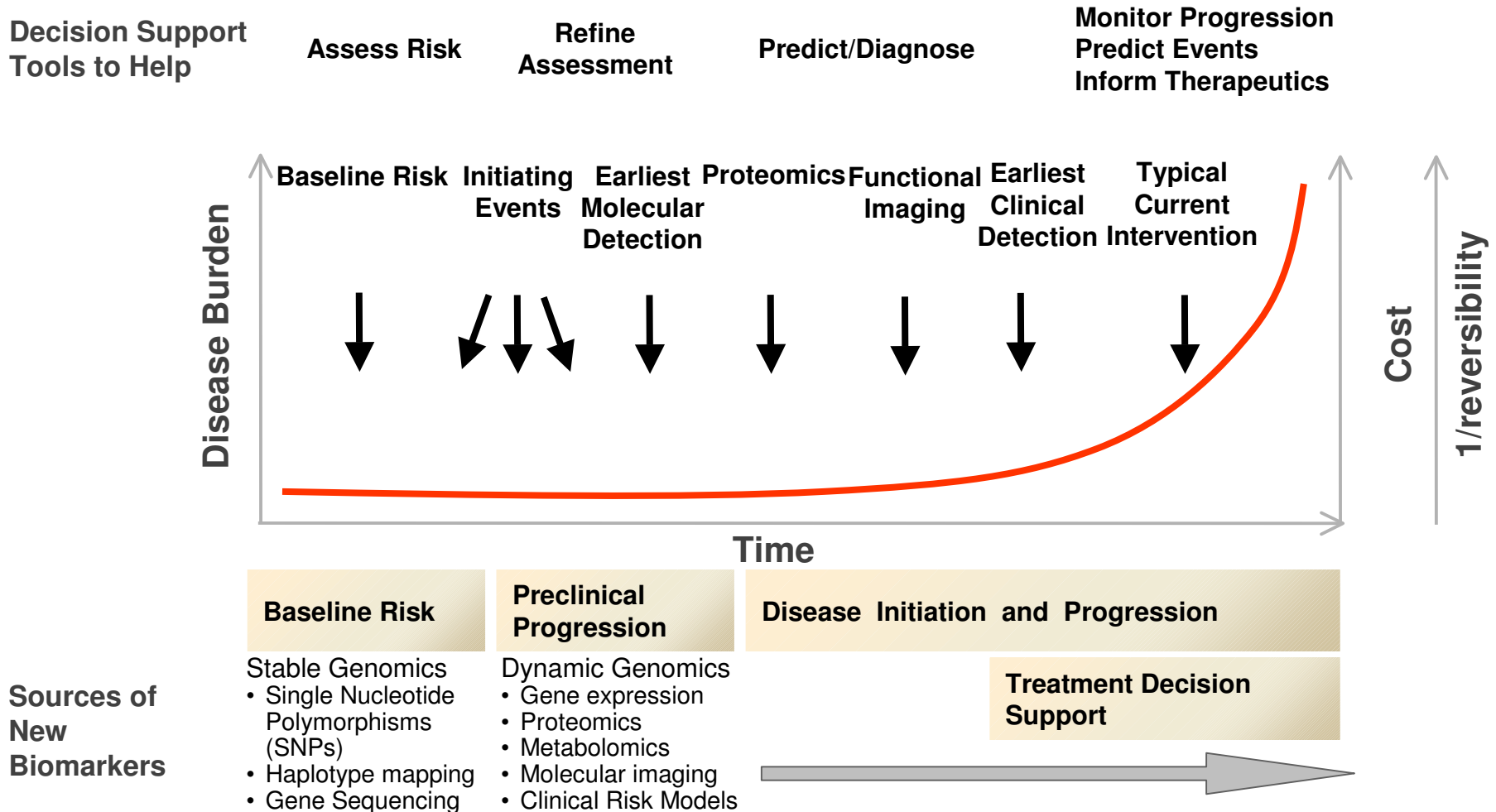
Associate Director, Healthcare Transformation,

Shahram Ebadollahi, Ph.D.

Research Staff Memeber

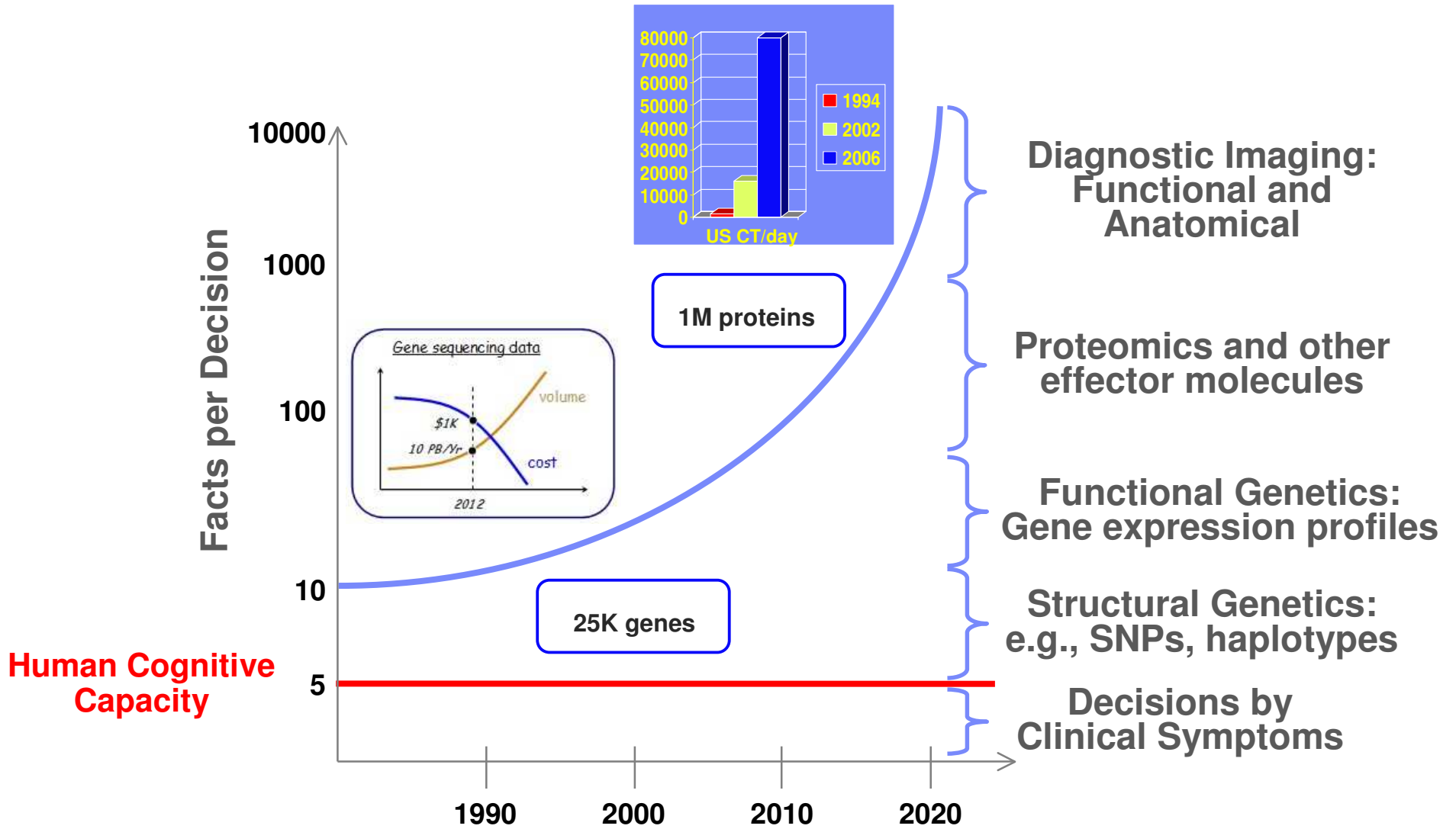
IBM Research, USA.

Early Diagnosis and Intervention – Improve Outcomes and Lower Costs



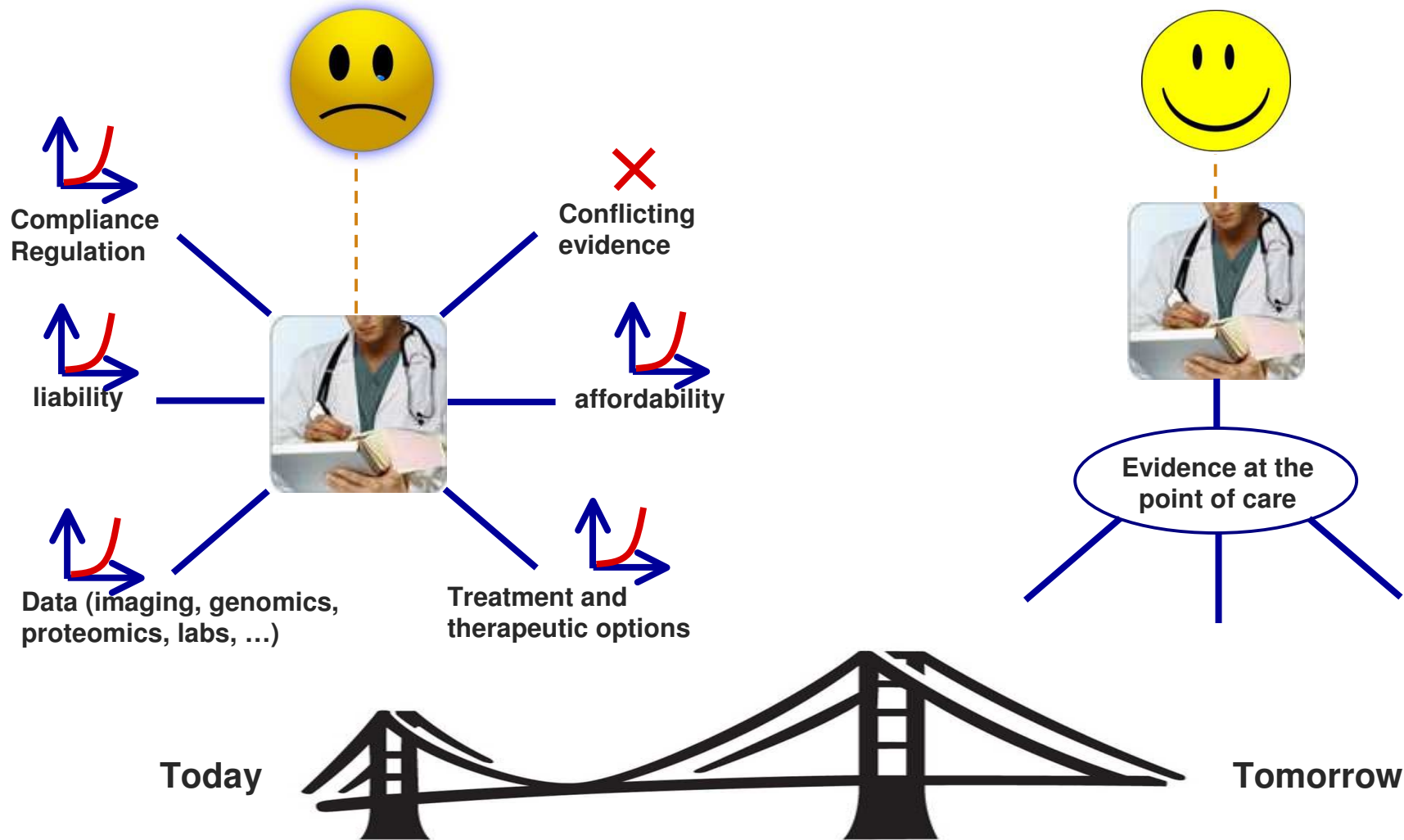
Source: Ralph Synderman, MD

Challenges are Data Explosion and Cognitive Overload

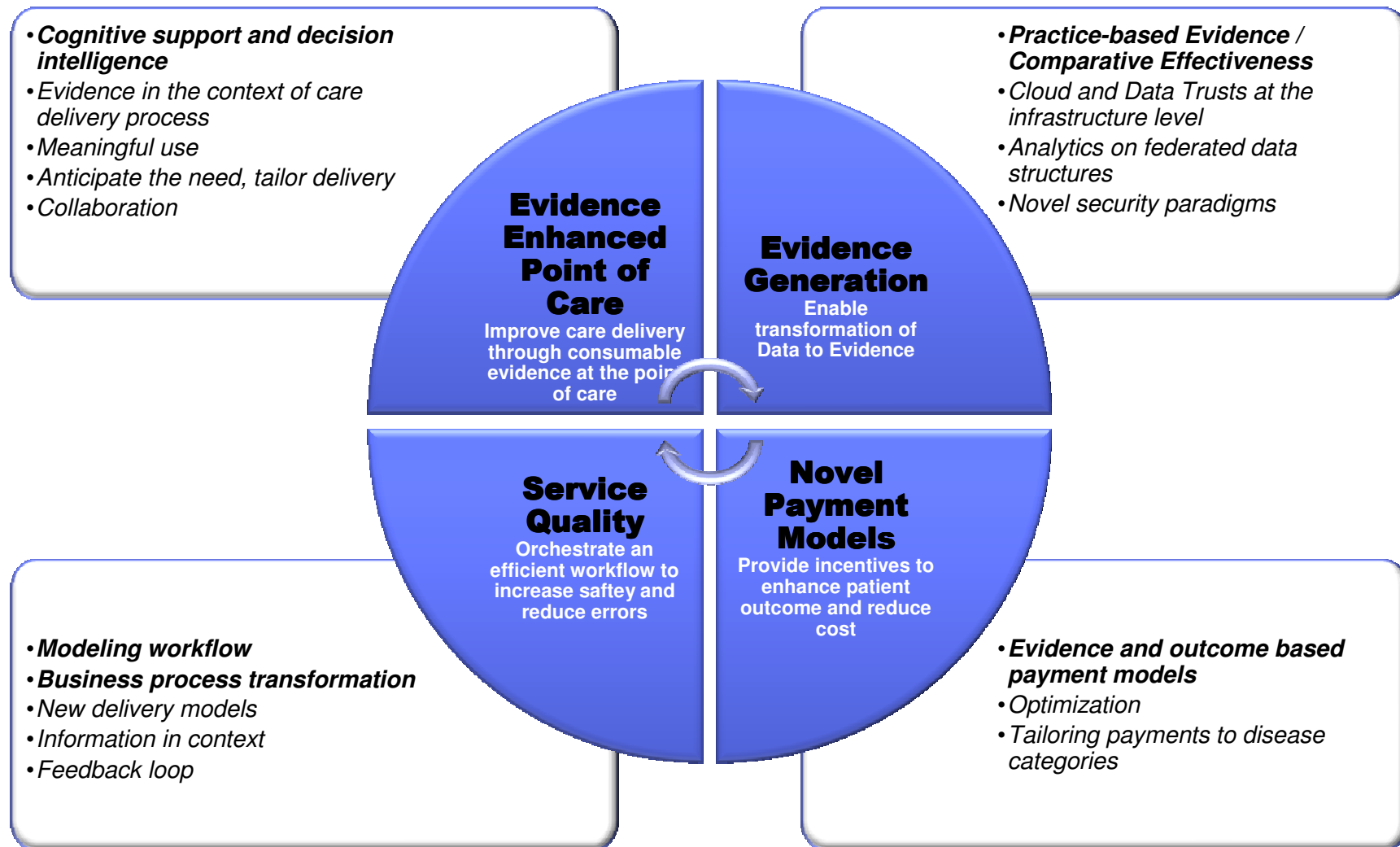


Source: William Stead, MD

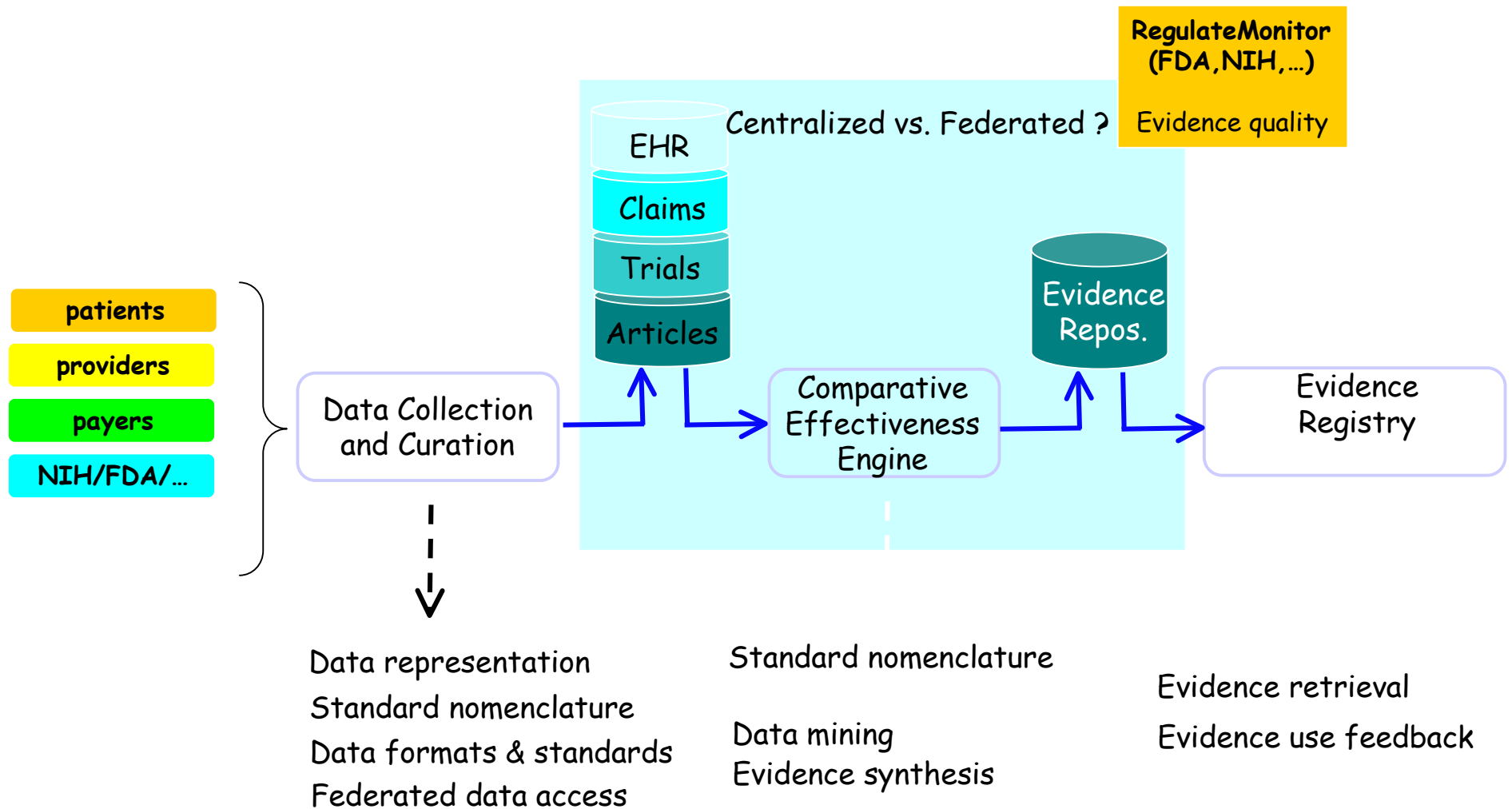
Cognitive Overload => Reduced Quality and Utility



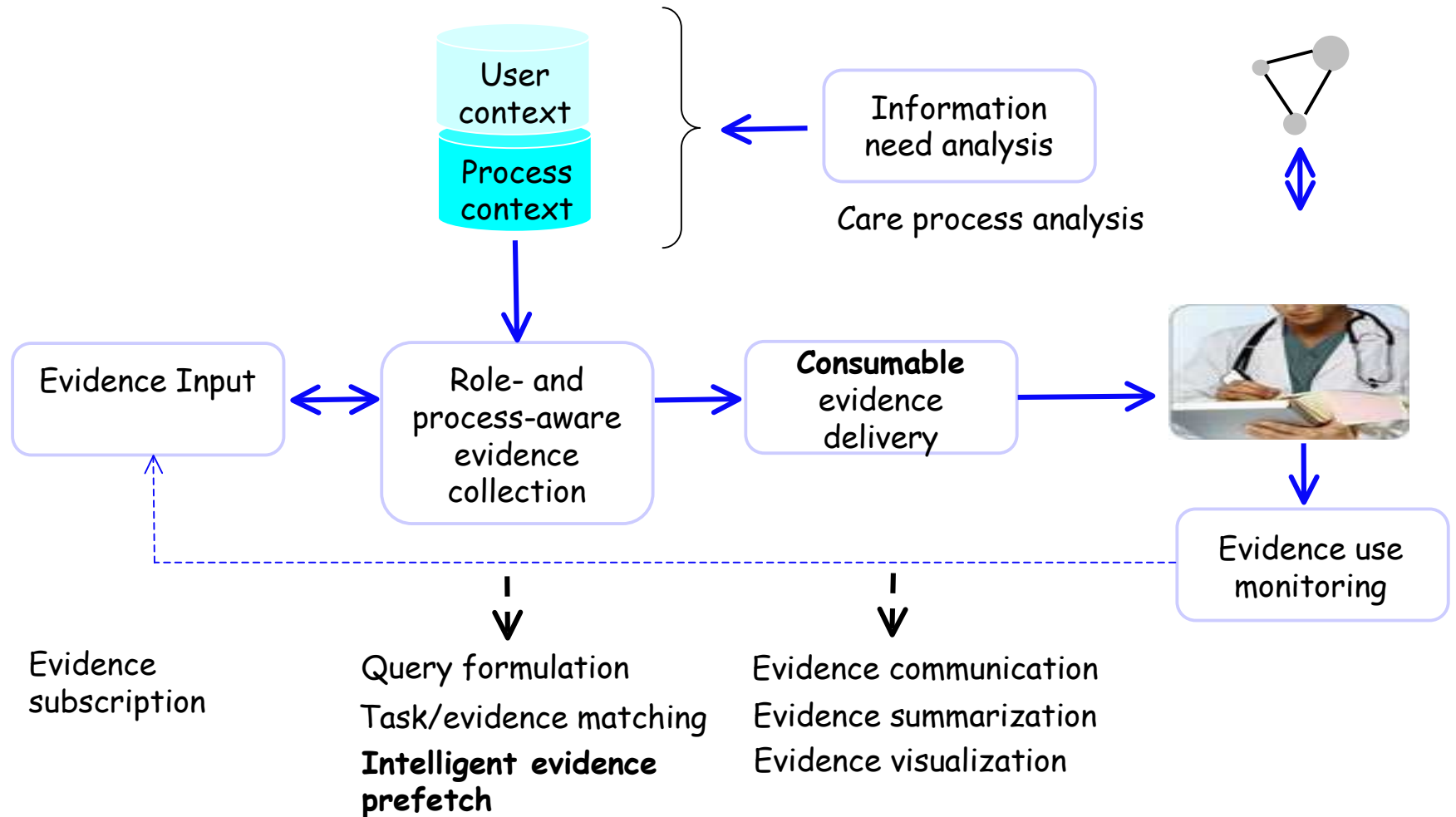
Health System Optimization Through Technology



Evidence generation - Challenges

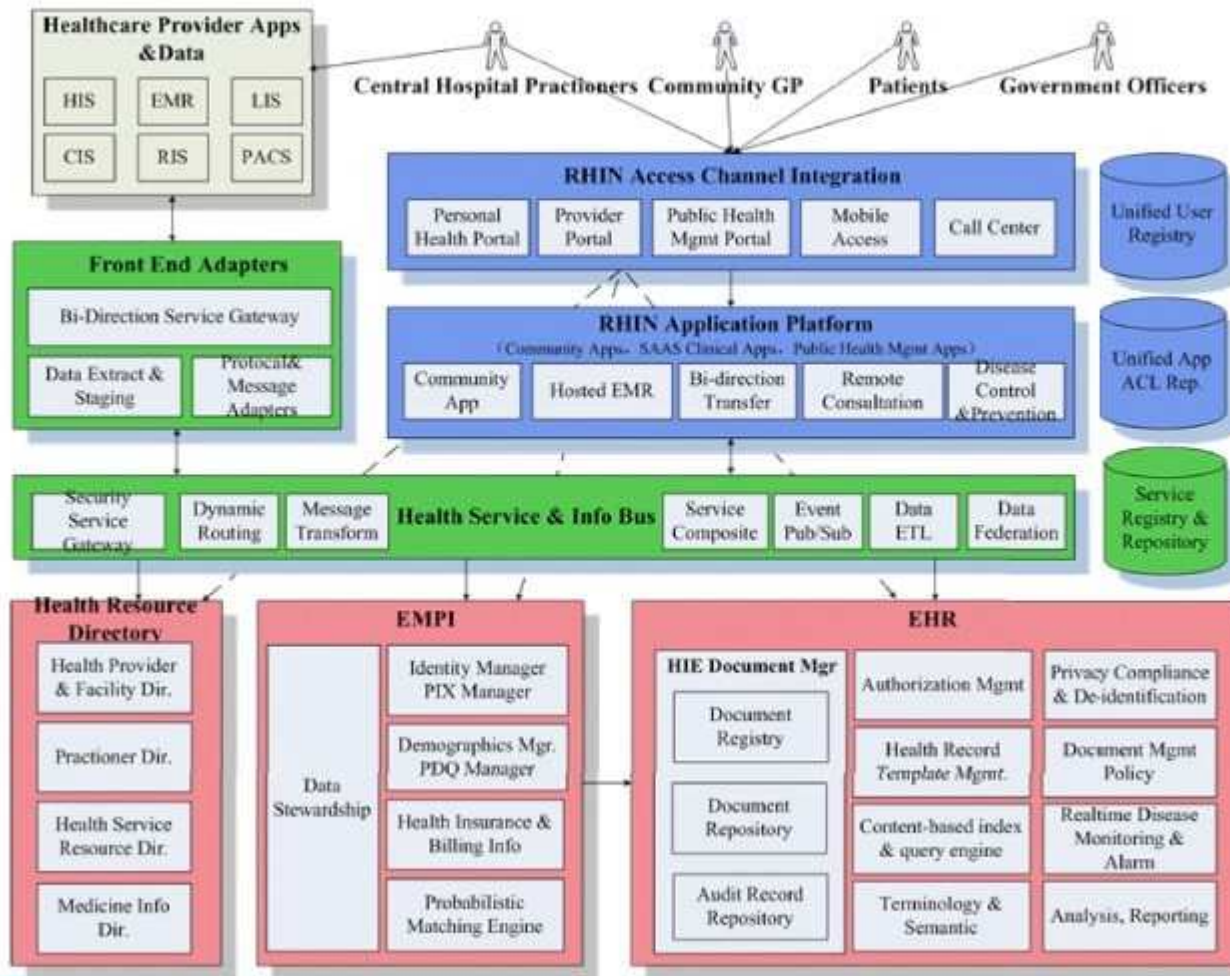


Evidence usage - Challenges

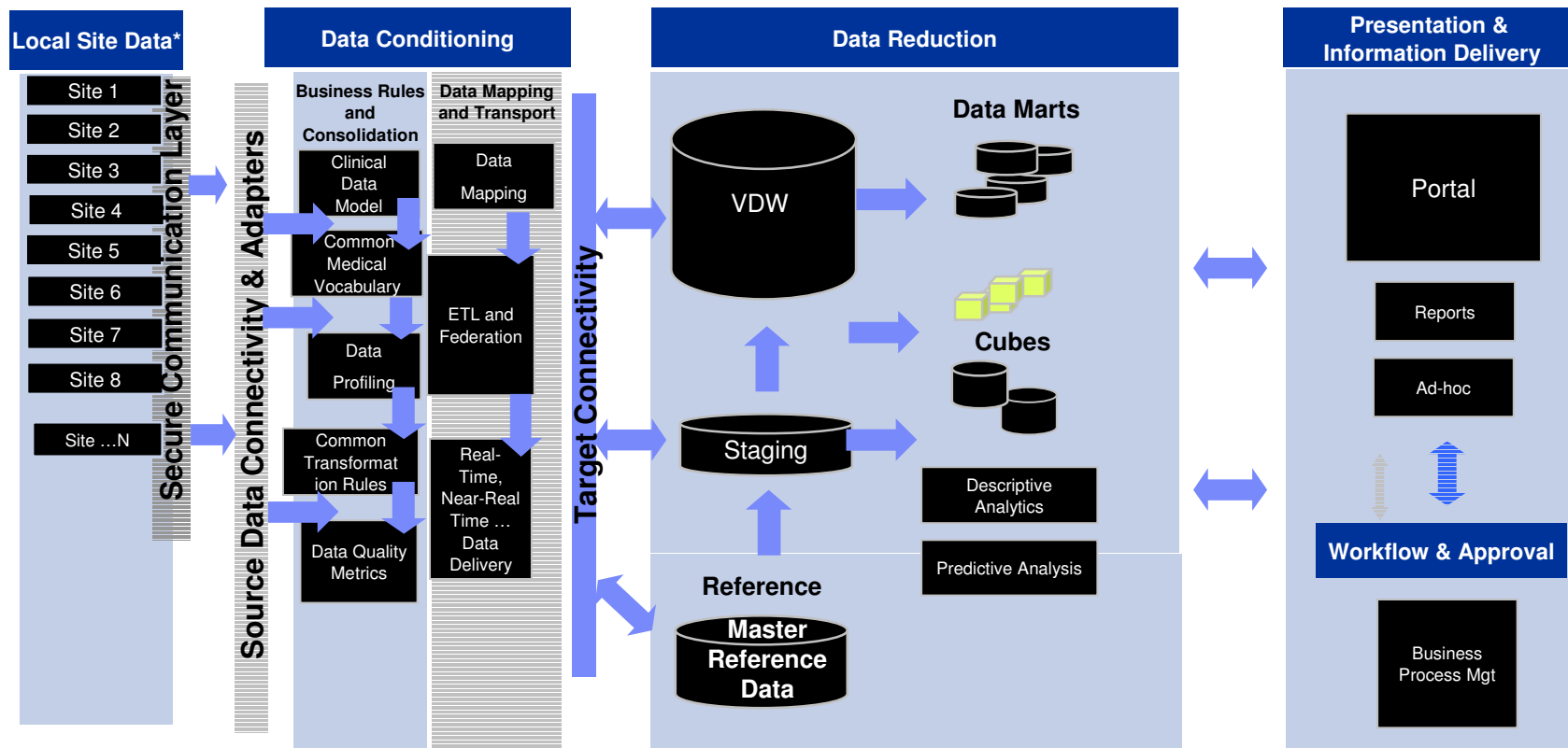




SOA Reference Architecture for Regional Health Information Network (RHIN)



Federated Clinical Data Warehouse Architecture for Analytics



Open Standards and Open Platforms are Key for the Evidence-enhanced Healthcare Ecosystem

Open Standards for omics” and advanced imaging – beyond HL7

Multiple formats and usage modes

Connect the dots (bubble-up versus side-by-side)

Open Standards for analytics

How to present data for analysis and be able to consume it post analysis

International Classification of Diseases (ICD 10), annotations,...

Open Platforms for large-scale data and analytics sharing and collaboration

E.g. Open standard platform like we CaBIG, XIP/AIM, i2b2, etc,...