International Clinical Analytics Summit

Smarter Hospitals

Safer Patients

Better Outcomes

Improving Safety, Quality, and Costs through Shared Innovative Analytics

Keith Salzman, M.D.
Chief Medical Information Officer, IBM

April 2, 2015

7:30 a.m. – 4 p.m.

MITRE Baltimore

2275 Rolling Run Drive, Windsor Mill, MD 21244

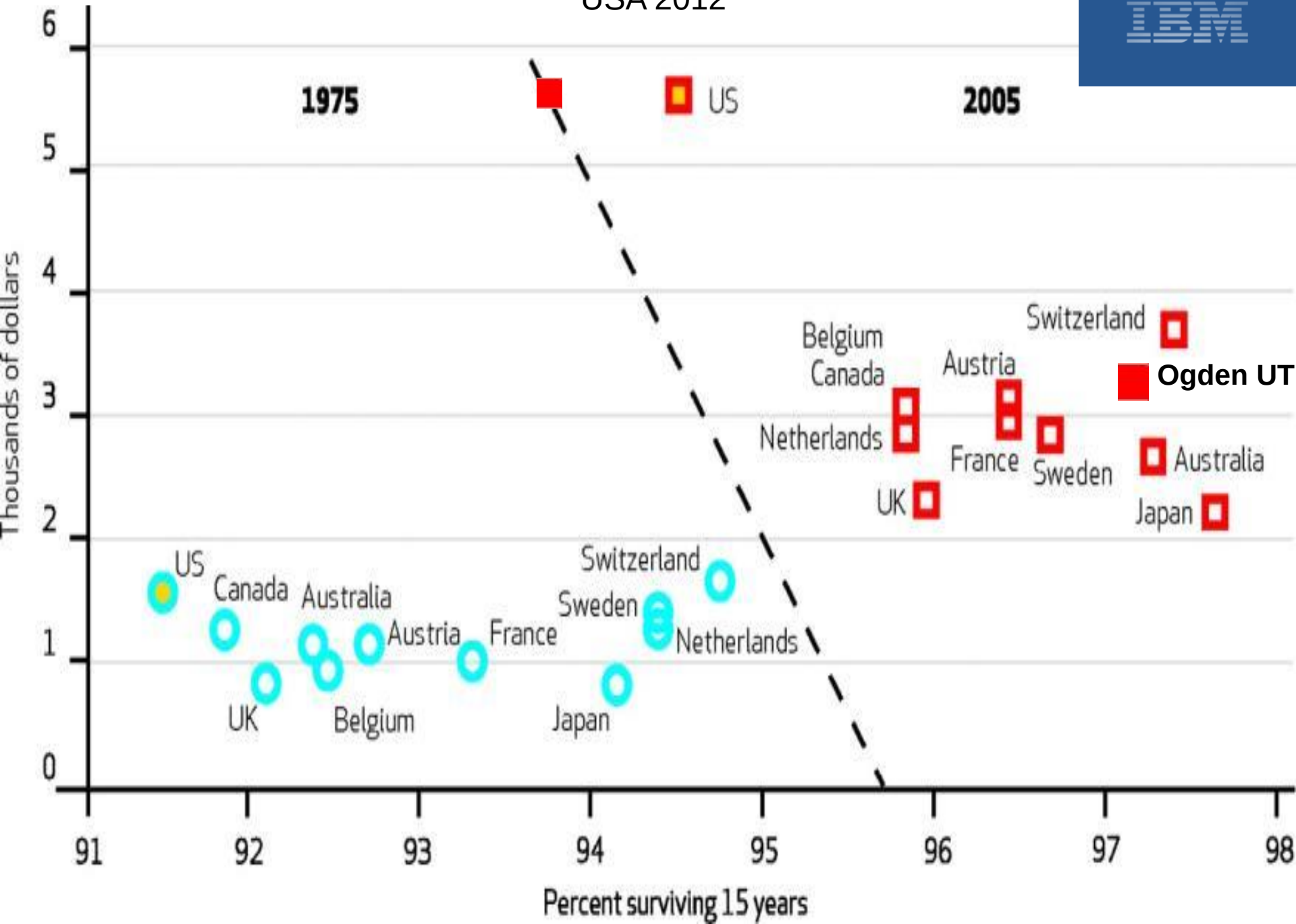
Smarter Care through Transformation

Keith L Salzman, MD, MPH

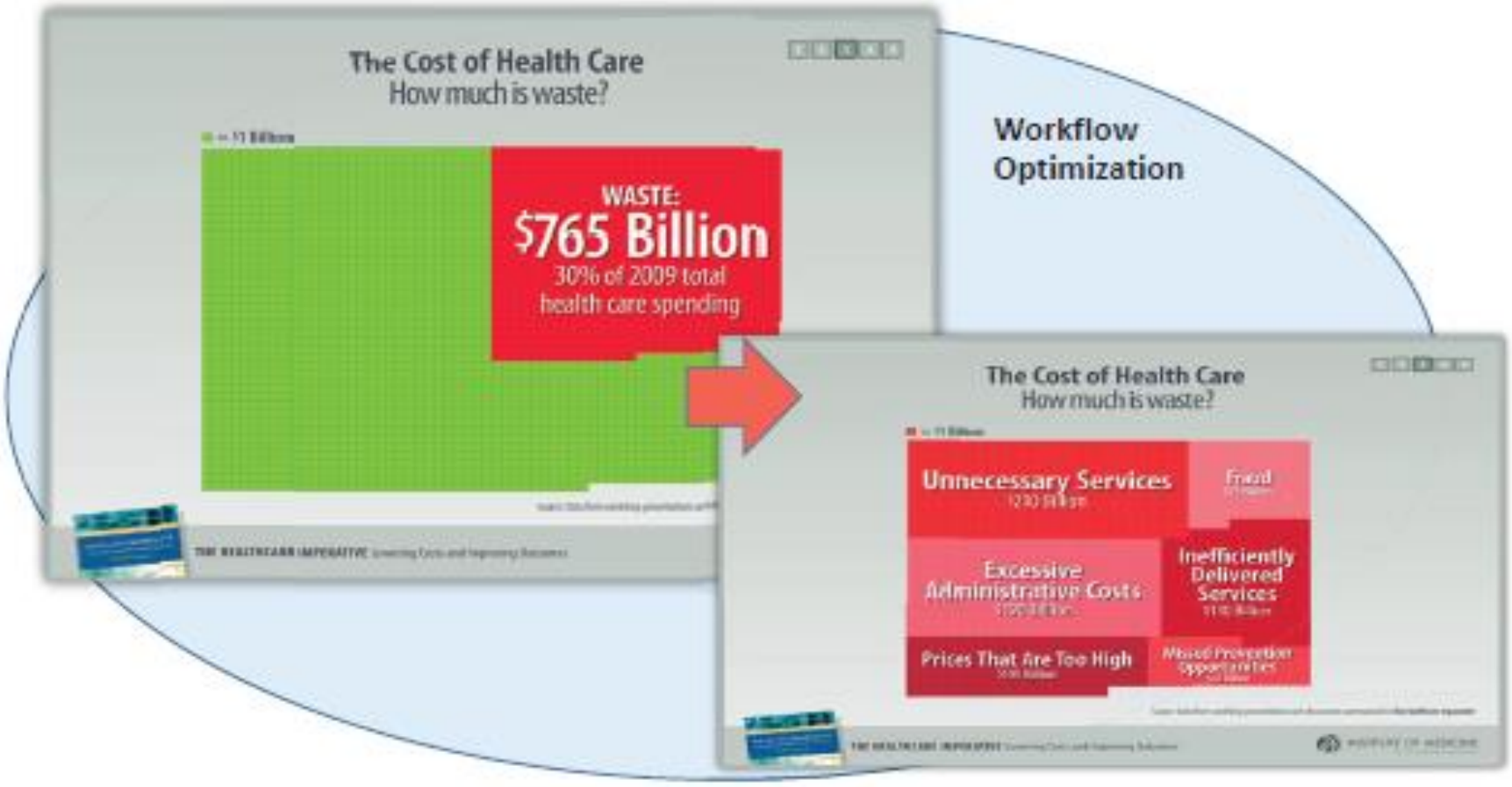
CMIO-IBM GBS Federal

keithsal@us.ibm.com

USA 2012


1975
US
2005
Switzerland
Belgium
Canada
Austria
Ogden UT
Netherlands
France
Sweden
Australia
UK
Japan
US
Canada
Australia
Switzerland
Sweden
Austria
France
Netherlands
UK
Belgium
Japan
Thousands of dollars
0
1
2
3
4
5
6
91
92
93
94
95
96
97
98
Percent surviving 15 years

Workflow Optimization



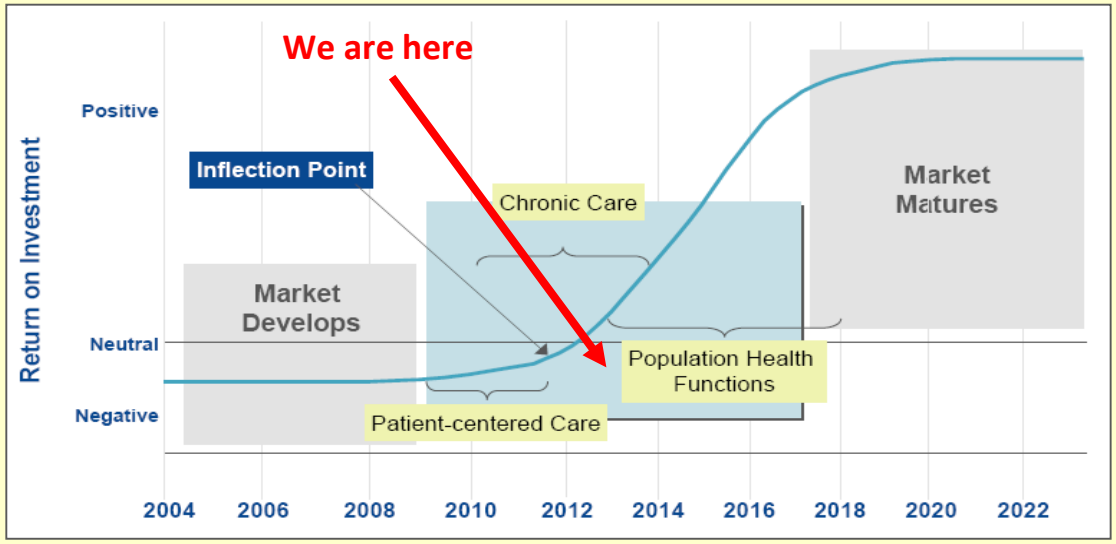
IOM-The Healthcare Imperative: Lowering Costs, Improving Outcomes

http://resources.iom.edu/widgets/vsrt/healthcare-waste.html?keepThis=true&TB_iframe=false&height=729&width=871

What is happening in the Health Industry?

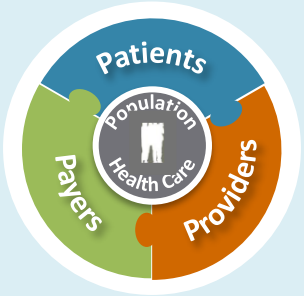
Dynamic transformations with tremendous, disruptive and unprecedented change at an accelerated rate and pace

Driving ROI By Focusing On Population Insights & Patient-Centered Health



Triple Aim = improved access & health outcomes at lower costs

Perfect Storm = increased longevity + massive information access + poor health + unsustainable rising costs



Healthcare in the United States operates as a patient-centered ecosystem, meaning a "system of systems", with numerous and often uncoordinated touch points

Point of Care is Changing ▪ Consumerism of Health & Wellness

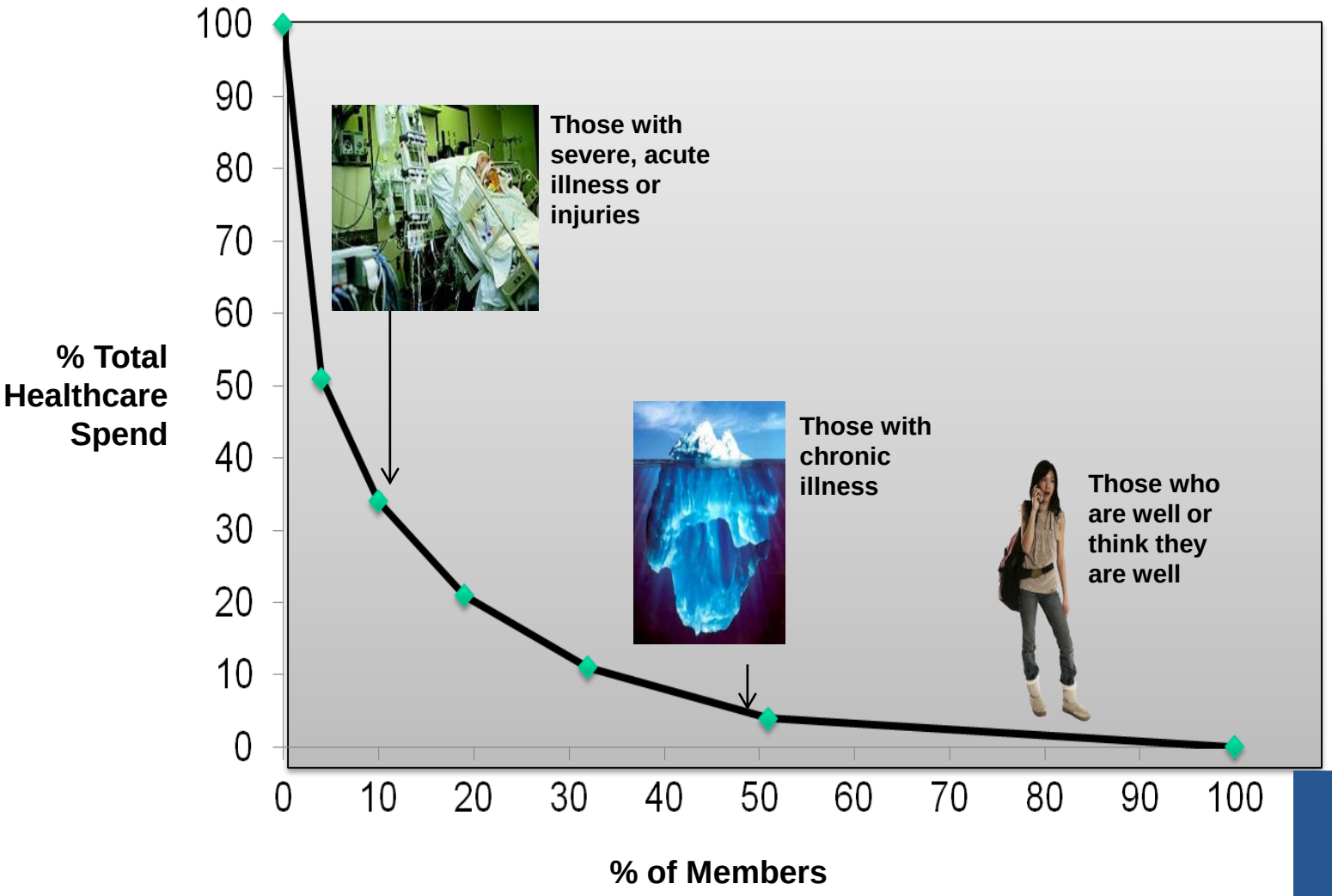
Managing Populations with focus on Preventive & Chronic Care

Evidence-Based Medicine ▪ Personalized Patient Advocacy & Education ▪ Patient Centered Collaborative Care

Shift from Volume to Value driving Payment Reforms in financial reimbursements

Impact of Health Reforms

Benefit Redesign - Patient Engagement
Different Strategies for Different Healthcare Spend Segments



Practice transformation away from episode of care

Master Builder

Preventive Medicine

Chronic Disease Monitoring

Medication Refills

Acute Care

Test Results

DOCTOR

Case Manager

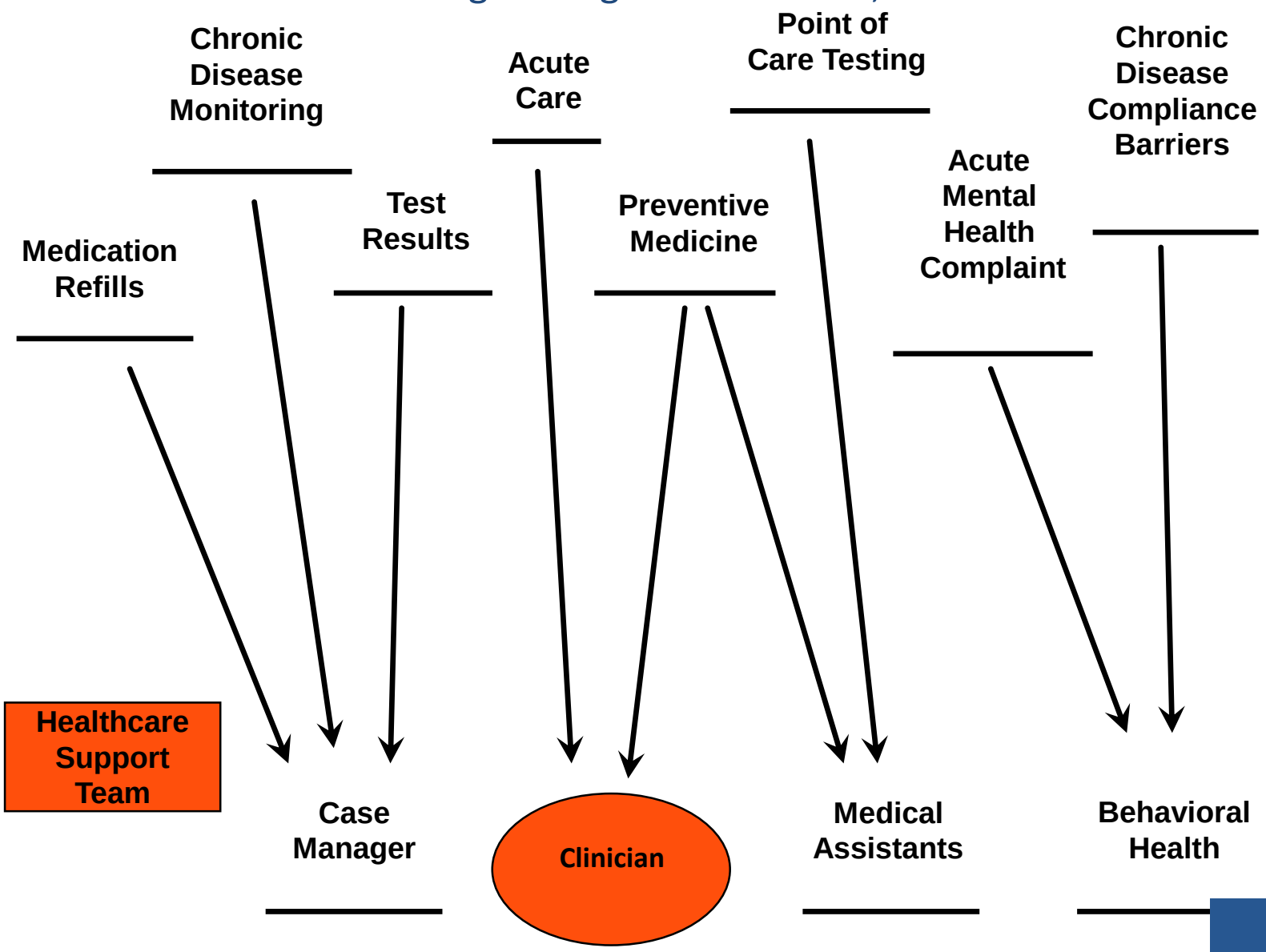
Behavioral Health

Medical Assistants

Nursing

Source: Southcentral Foundation, Anchorage AK

PCMH Parallel Team Flow Design: the glue is real data, not a doctor's brain



Source: Southcentral Foundation, Anchorage AK

Healthcare Will Transform --- Family Medicine for America's Health

Data Driven

Every person has a plan

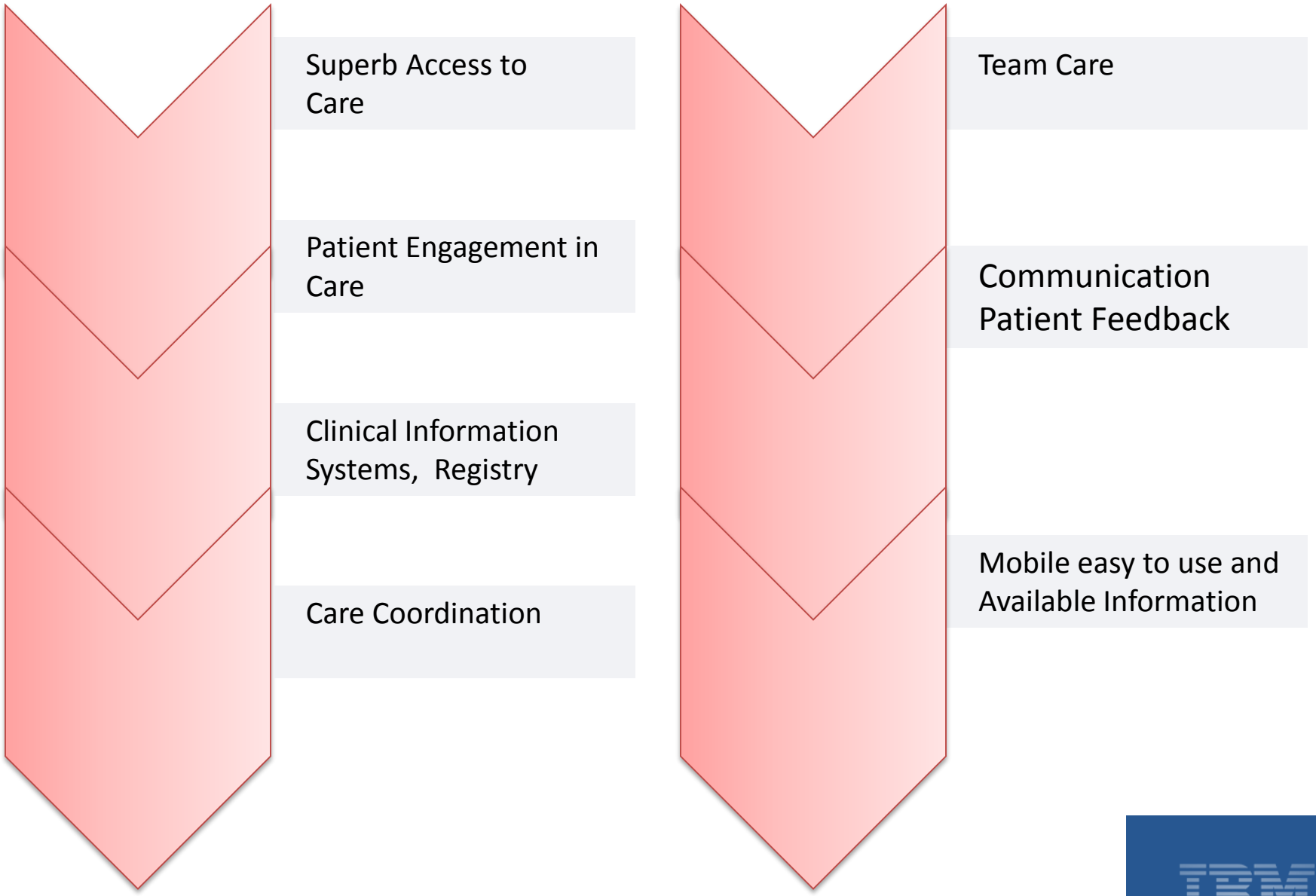
Team based

Managing a population down to the person

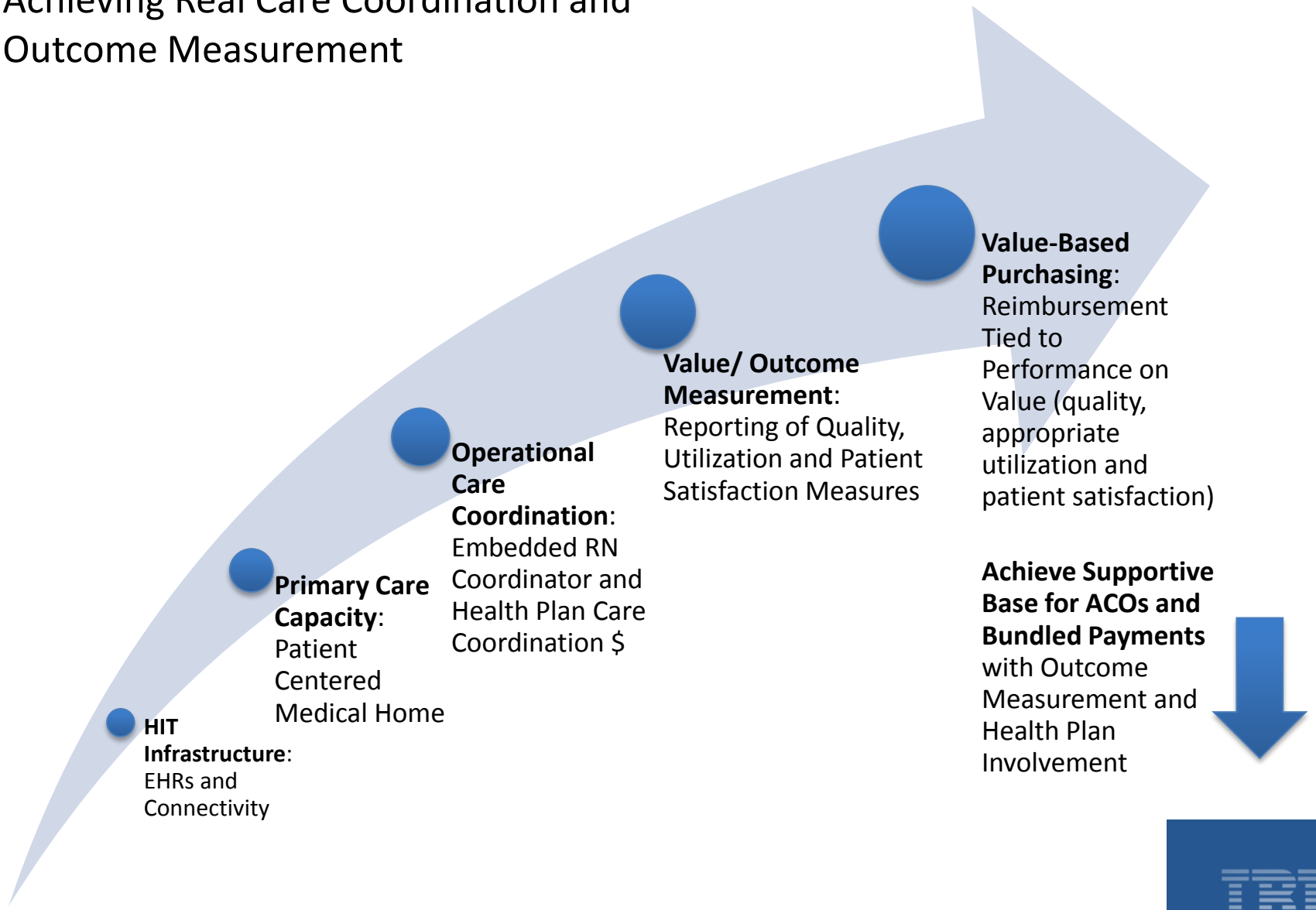
Today's Care	PCMH Care
My patients are those who make appointments to see me	Our patients are the population community
Care is determined by today's problem and time available today	Care is determined by a proactive plan to meet patient needs with or without visits
Care varies by scheduled time and memory or skill of the doctor	Care is standardized according to evidence-based guidelines
I know I deliver high quality care because I'm well trained	We measure our quality and make rapid changes to improve it
Patients are responsible for coordinating their own care	A prepared team of professionals coordinates all patients' care
It's up to the patient to tell us what happened to them	We track tests & consultations, and follow-up after ED & hospital
Clinic operations center on meeting the doctor's needs	A multidisciplinary team works at the top of our licenses to serve patients

Slide from Daniel Duffy MD School of Community Medicine Tulsa Oklahoma

Defining the Care Centered on Patient



Trajectory to Value Based Purchasing: Achieving Real Care Coordination and Outcome Measurement



Source: Hudson Valley Initiative

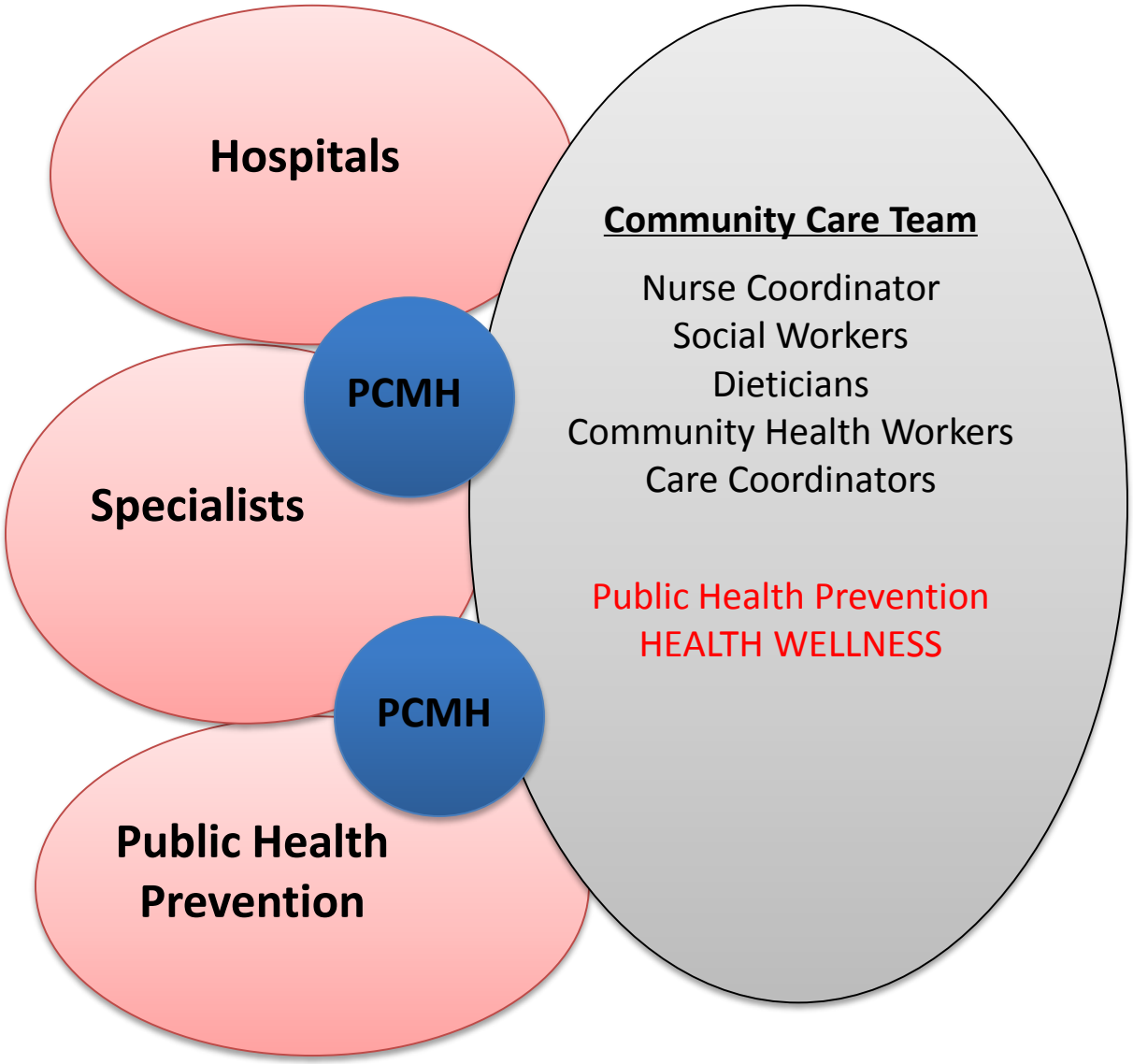
Payment reform requires more than one method, you have dials, adjust them!!!

“fee for health”
“fee for value”

“fee for outcome”
“fee for process”

“fee for belonging
“fee for service”
“fee for satisfaction”

PCMH 2.0 in Action



A Coordinated Health System

Health IT Framework

Global Information Framework

Evaluation Framework

Operations

A comprehensive approach helps reduce costs while improving care

INTERVENTION

Identify and influence individuals and populations, and recognize intervention opportunities

KNOWLEDGE

Drive evidence-based and standardized care planning

LEARNING

Apply new insights from interactions and outcomes to enable continuous transformation

COLLABORATION

Assess and engage individuals and stakeholders to drive individualized care plans

COORDINATION

Deliver care and monitor progress across clinical and social requirements

Summary

- Understand healthcare transformation, support it with intentional adjustments along the way
- Use the digital capabilities to support process improvement rather than dumping digital solutions on analog processes making them fast and inefficient
- Focus on redesign and ubiquity of infrastructure and use SOA/ESB to extend the infrastructure at the margins
- Continue to identify waste and gain the efficiencies of smarter care