Chaos

Different Cultures
Different Sources
Decentralized
Different Databases
Different Methods
Lack of Governance
Data Driven Organization
Centralize Data & Analytics Journey
ONE SOURCE OF TRUTH
BI Developers

BI Analysts

BI Advanced Analytics

BI Systems Developers
Centralized Team
  +
Enterprise Data Warehouse
  +
Common Language (Governance)
  +
Culture Shift

Data Democracy
BRINGING DATA TOGETHER WITH TECHNOLOGY

Source Systems

CDW

Cubes

Hadoop

DV

BI

EDW
DATA GOVERNANCE

- Leadership Support
- Common Dictionary
- Technical Enforcement
- Processes Assessing Data Integrity
Quick

Agile

Dependable Data

Actionable (Needs Vs. Wants)
Horizontal vs. Vertical

Slow, Slow, Slow…

FAST
Federated
Changing Environment of Healthcare
Systems are Set up to Take Care of the Sick
Intervene Before We Get Sick
The Shift

Fee For Service to Value Based
POPULATION HEALTH = SHIFT TO VALUE
Various definitions
Viewed as a tool
Viewed as a technique
Siloed approaches
Lack of coordination
Lack of outcomes
Influencing community, regional, and national policies to impact non-clinical determinants of health

**Policy**

**HEALTH PLAN**
- Keeping members healthy and directing the right members to the right providers to achieve high value care

**HEALTH DELIVERY**
- Delivering the highest value care through the most efficient data driven delivery pathway for members seeking care

**Research & Innovation**
- Creating innovations to keep Sanford Health at the forefront of Population Health

**Data & Analytics**
- Identifying a data driven path with member and delivery segmentations through a “consistent data language”

**CONTRACTING**
- Developing the “rules of the road” to ensure best health outcomes
BUILDING A FOUNDATION

Health Outcomes

Length of Life 50%
Quality of Life 50%

Health Behaviors (30%)

Health Factors

Tobacco Use
Diet & Exercise
Alcohol & Drug Use
Sexual Activity

Clinical Care (20%)

Access to Care
Quality of Care

Social and Economic Factors (40%)

Education
Employment
Income
Family & Social Support
Community Safety

Physical Environment (10%)

Air & Water Quality
Housing & Transit

Policies and Programs

County Health Rankings model © 2014 UMPPR

Robert Wood Johnson & University of Wisconsin Public Health Institute

Expand Skills & Data, Up & Down
COLLABORATION AS A FOUNDATION

Why Sanford Health is sharing patient data with its academic neighbors

Sioux Falls, S.D.-based Sanford Health hopes to improve its own clinical outcomes by sharing patient data with nearby universities.

Through the Sanford Data Collaborative project, six institutions — including Sanford Research, the health system's research arm — will receive patient data stripped of private information. The data, including clinical, financial, operational and quality information, is gathered from patient visits to Sanford's 45 hospitals and almost 300 clinics.

Each of the six institutions pitched their own research project, and will work separately to conduct studies on cancer.
Medical Care to Health Care
AI - Machines Learning From Experience
Questions