Applying Value Driven Outcomes to Evaluate an Age Friendly Health System

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University of Utah Hospital and Clinics
### University of Utah Health

#### ACCESS
- 4 Hospitals
- 12 Community Clinics
- 21 Regional Affiliates
- >10% of the Continental U.S.
- >200,000 Member Health Plan
- >1,400 Providers

#### DISCOVERY
- $291 Million+ Grants in FY2017
- 40+ Disease-Causing Genes Identified
- 11 All-Time Members of National Academy of Science or Medicine
- 1 NCI Comprehensive Cancer Center
- 1 Nobel Laureate

#### PATIENT VISITS
- 1.9 MILLION Patient Visits

#### EXPENSE BUDGET
- $3.6 BILLION Expense Budget FY17

#### EDUCATION
- 1,250 Health Care Providers Trained Annually:
  - School of Medicine
  - College of Nursing
  - College of Pharmacy
  - College of Health
  - School of Dentistry
  - Eccles Health Sciences Library
“... A fundamental and largely unrecognized problem: We don’t know what it costs to deliver health care to individual patients, much less how those costs compare to the outcomes achieved.”

“Understanding costs could be the single most powerful lever to transform the value of health care.”

- Robert S. Kaplan & Michael E. Porter
Ex. Emergency Appendectomy, 3.12 LOS

10:45am - Day 1
Emergency Department
10:45am

Day 2
SICU Surgical ICU
2:16am

Day 3
IMCU Intermediate Care Unit
1:30pm

Day 4 - 1:45pm
SSTU Surgical Specialty & Trans. Unit
3:25pm

Emergency Department
Operating Room
Surgical ICU
Step down and Floor Units

Total Cost of Providing Patient Care

Value Driven Outcomes
Understanding Cost

Average Cost per Case by Provider

Facility Util. Drill (Labor)

Imaging

Lab Drill

Pharmacy Drill

Supplies Drill

Value Driven Outcomes
Detailed Cost Data

- Profitability Analysis
- Population Health
- Provider Engagement
- Total Cost of Care
- Pro-forma
- Physician Variation
- Payer Strategy
- What-if Analysis
- Value Analysis
- Clinical Redesign Impact
- Payer Contract Analysis
- Value Management
- Service Line Performance
- Payer Analysis
- Labor Efficiency
- Variation Analysis
- Budgeting
- Utilization Review
- Cost Reporting
- Health Economics Research
- Longitudinal Analysis
- Portfolio Management
- Technology Assessment
- Value Engineering
Value Equation

\[ V = \frac{Q + S}{C} \]

- Value (V)
  - Quality (Q)
  - Service (S)
- Cost (C)
Engaging Providers with Analytics

• Accurate and actionable data, including metrics that are meaningful to providers
• Involve providers in the development of analytics
• Get specific (provider scorecards, O.R. supplies, specific condition outcomes, etc.)
• Provide support
### Engaging in Analytics

- **Physician Engagement (Chief Value Officers)**
- **Subject Matter Experts**
- **Support Teams**

#### Medical Condition | Department | MD Champion(s) | Value Engineering | Quality | Decision Support |
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<tbody>
<tr>
<td>Sepsis</td>
<td>Medicine</td>
<td>Bob Pendleton/Devin Horton</td>
<td>Collin Seabourne</td>
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<td>Daniel Findley</td>
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<td>Cindy Spangler</td>
<td>Jim Stamos</td>
<td>Candice Crawford</td>
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<td>Ortho</td>
<td>Chris Pelt</td>
<td>Steve Johnson</td>
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<td>Rotator cuff/shoulder</td>
<td>Ortho</td>
<td>Patrick Preis</td>
<td>Lleyton Wade</td>
<td>Tim Nelson</td>
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<td>Neurology/NSG</td>
<td>Jennifer Majersik, Philip Taussky</td>
<td>Andrew McLeod</td>
<td>Brian Black</td>
<td>Blake Bohe</td>
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<td>Low back pain/spine surgery</td>
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<td>Cynthia White</td>
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<td>A fib/A flutter</td>
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<td>Lleyton Wade</td>
<td>Brian Black/Tim Nelson</td>
<td>Tony Clawson</td>
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<td>Eve Thorup</td>
<td>Candice Crawford</td>
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<td>Ben Helland</td>
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<td>Surgery</td>
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<td>Collin Seabourne</td>
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Joint Scorecard

• Metrics
  • Patient was admitted to OTSS
  • No Patient Safety Indicators (PSIs)
  • Patient discharged to home health
  • Patient did not return to ED within 90 days
  • No Hospital Acquired Conditions (HACs)
  • Readmission Rate
  • Anesthesia Technique
Sepsis Scorecard

- **Metrics**
  - Antibiotic delivered within 180 min
  - Blood culture taken within 180 min
  - IV fluid delivered within 180 min
  - Lactate taken within 180 min
  - Readmission rate
  - Clinical length of stay
  - Mortality rate
  - mEWS score (modified early warning score)
Longitudinal Patient View
Improving Value

Drug Costs

Care Redesign

Lab Utilization

Value Driven Outcomes
Making Progress

• VDO provides a necessary data foundation
• Analytics are just the beginning
• Strong cross-functional teams are needed in order to deliver accurate, actionable analytics and support
• Provider engagement requires leadership and culture
Delivering Value

IN THE TOP 10 FOR 9 YEARS IN A ROW
QUALITY + SERVICE

VALUE =

NEARLY HALF OF OUR PROVIDERS ARE IN THE TOP 10*

$\text{AMONG THE LOWEST COST HEALTH CARE IN THE COUNTRY}$