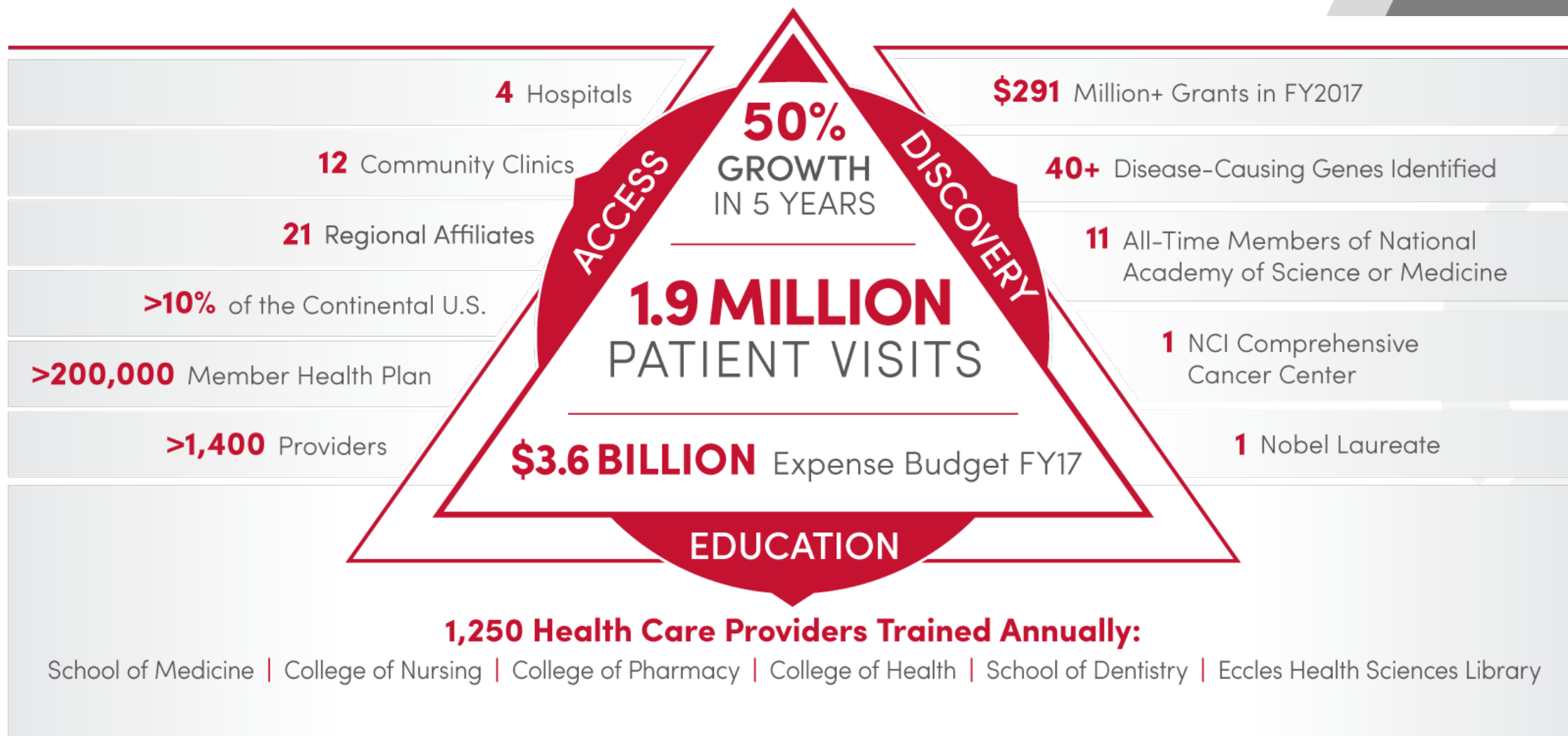


Applying Value Driven Outcomes to Evaluate an Age Friendly Health System



Charlton Park, MBA, MHSM
Chief Financial Officer
University of Utah Hospital and Clinics





Value Measurement



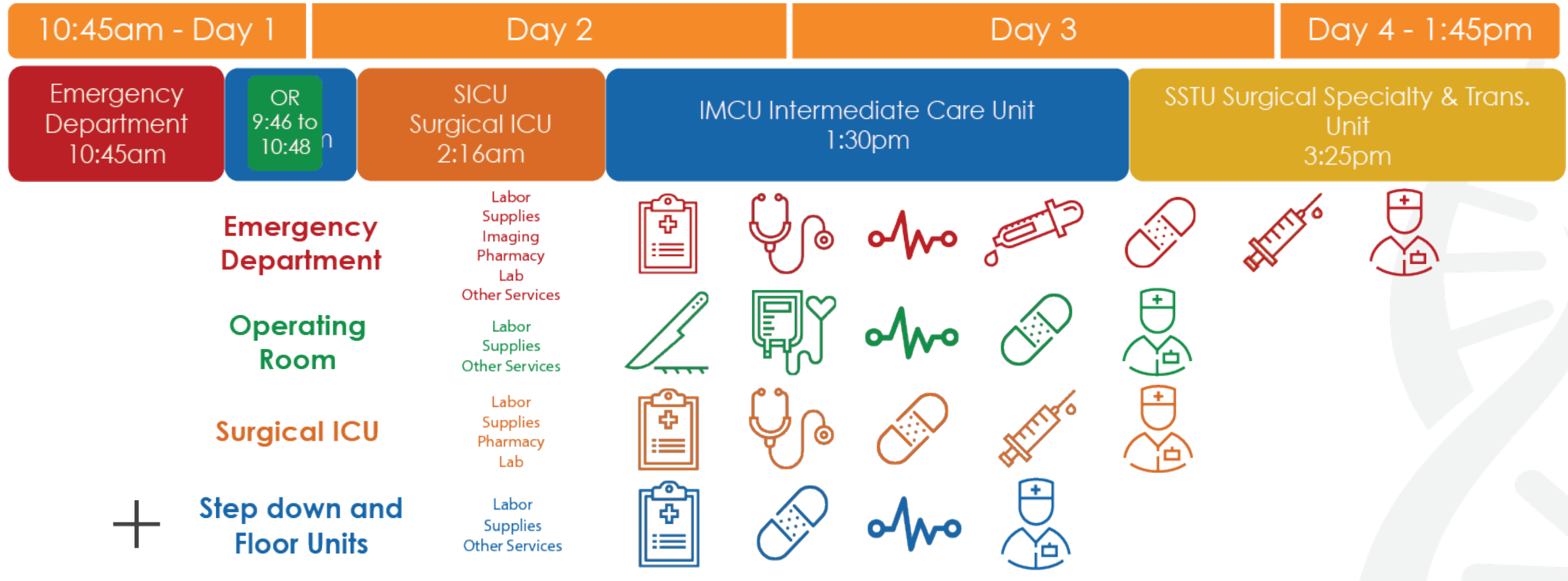
“... A fundamental and largely unrecognized problem: We don’t know what it costs to deliver health care to individual patients, much less how those costs compare to the outcomes achieved.”

“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



Total Cost of Providing Patient Care

Understanding Cost



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Average Cost per Case by Provider

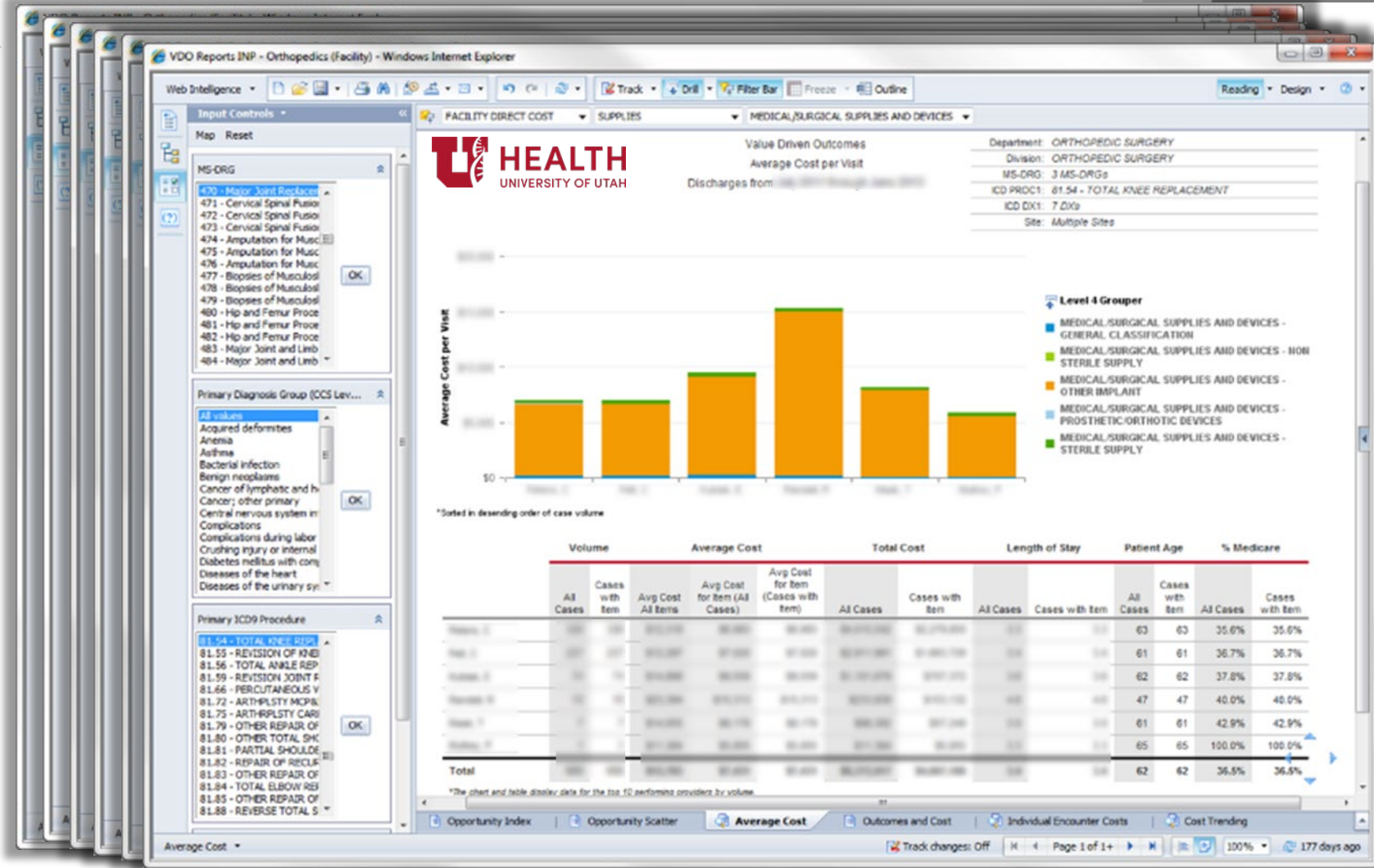
Facility Util. Drill (Labor)

Imaging

Lab Drill

Pharmacy Drill

Supplies Drill



Value Driven Outcomes

Detailed Cost Data



Value Equation



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$$\begin{array}{c} \mathbf{V} \\ \text{(VALUE)} \end{array} = \frac{\begin{array}{c} \mathbf{Q} \\ \text{(QUALITY)} \end{array} + \begin{array}{c} \mathbf{S} \\ \text{(SERVICE)} \end{array}}{\begin{array}{c} \mathbf{\$} \\ \text{(COST)} \end{array}}$$

Engaging Providers with Analytics



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- 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



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

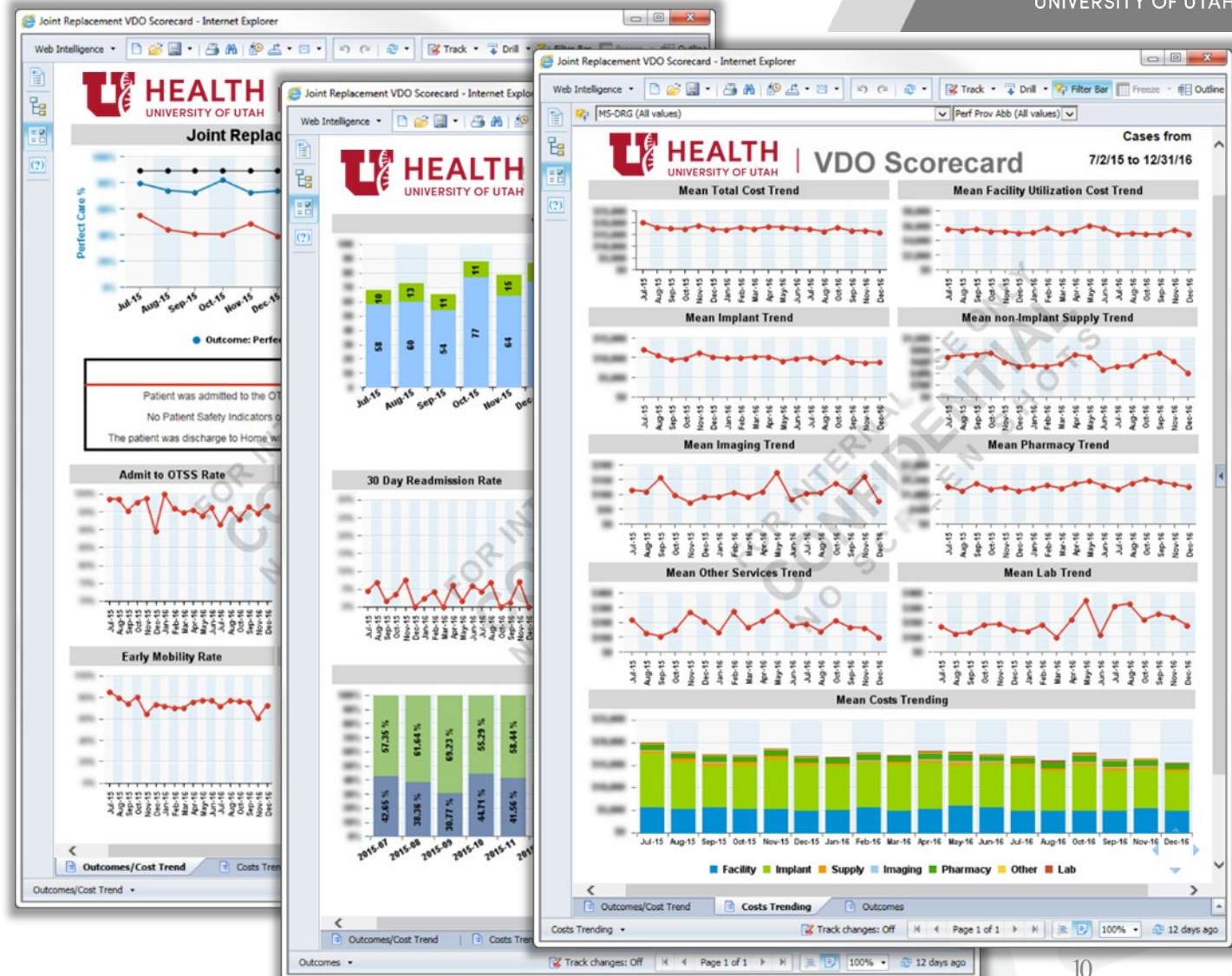
Medical Condition	Department	MD Champion(s)	Value Engineering	Quality	Decision Support
Sepsis	Medicine	Bob Pendleton/Devin Horton	Collin Seabourne	Tim Nelson	Daniel Findley
Heart Failure	Medicine	Jim Fang, Joe Stelik	Cindy Spangler	Jim Stamos	Candice Crawford
Joint replacement	Ortho	Chris Pelt	Steve Johnson	Tim Nelson	Jeff Young
Rotator cuff/shoulder	Ortho	Patrick Preis	Lleyton Wade	Tim Nelson	Jeff Young
Stroke/TIA/intracranial hemm	Neurology/NSG	Jennifer Majersik, Philip Taussky	Andrew McLeod	Brian Black	Blake Bohe
Low back pain/spine surgery	NSG/Ortho	Darrel Brodke, Meic Schmidt	Gavin Brown	Brian Black/Tim Nelson	Blake Bohe/Jeff Young
Neck pain/cervical fusion	NSG	Darrel Brodke, Erica Bisson	Cynthia White	Brian Black/Tim Nelson	Blake Bohe/Jeff Young
A fib/A flutter	Medicine	Nassir Marrouche, Fred Han, John Ryan	Lleyton Wade	Jim Stamos	Candice Crawford
Heart transplant / LVAD	Medicine	Joe Stelik, Mike Gilbert, Craig Selzman	Gavin Brown	Eve Thorup	Tony Clawson
Value Driven Outcomes	Medicine	David Bull, Jack Morshazadeh, Fred Welt	Gavin Brown	Jim Stamos	Candice Crawford
ACCAD/chest pain	Medicine	Craig Selzman	Steve Johnson	Susan Wright	Ben Helland
CABG	Surgery	Howard Sharp	Collin Seabourne	Carol Henderson	William Johnson
ORGYN	ORGYN		Collin Seabourne	Carol Henderson	William Johnson

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 day
- No Hospital Acquired Conditions (HACs)
- Readmission Rate
- Anesthesia Technique

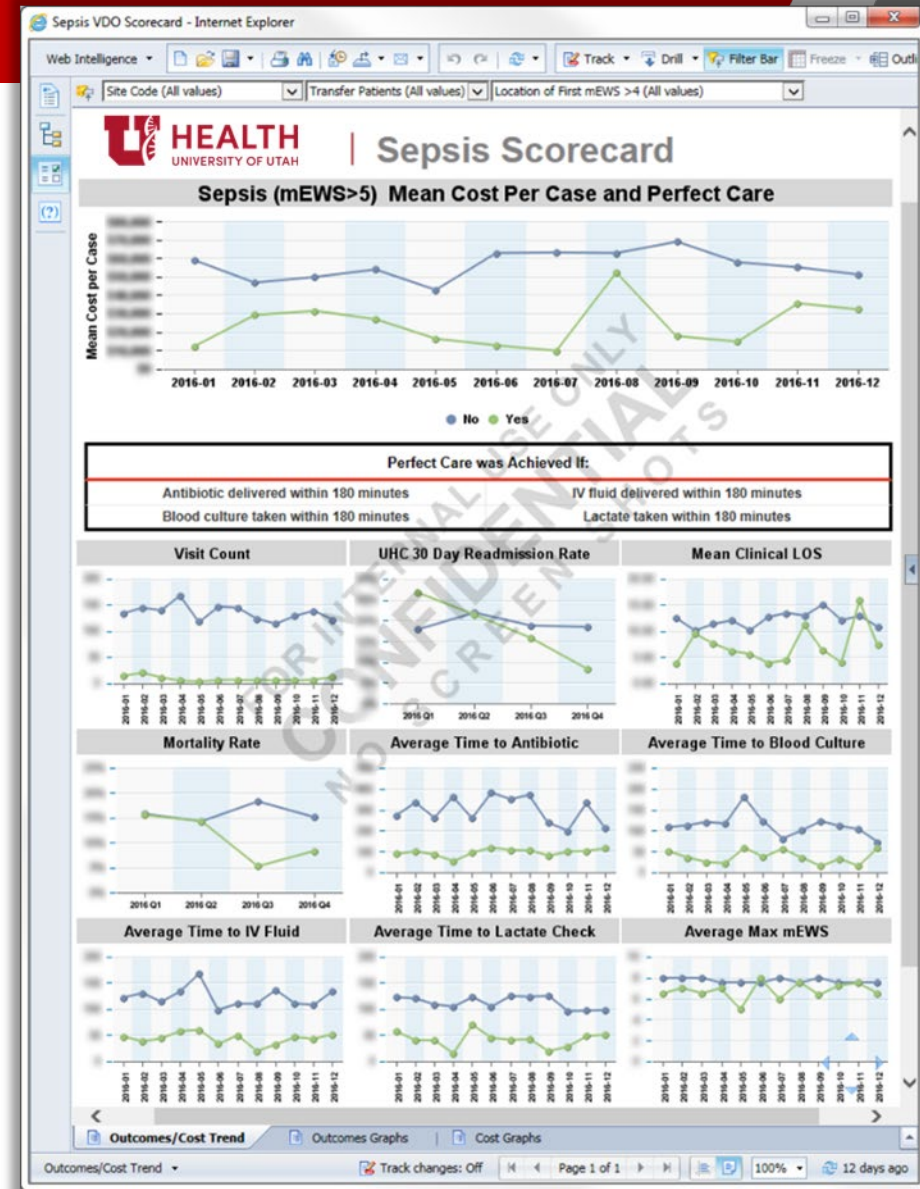


Sepsis Scorecard



- 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



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HEALTH UNIVERSITY OF UTAH | CV Heart Failure Patients

Total Direct Cost

Discharge Date

MRN	State	Dir Cost	Inp	Out	ED
1	UT		4	42	Expired
2	ID		6	102	
3	OK		3	2	Expired
4	MT		3	3	4
5	MT		5	13	
6	UT		9	102	2
7	MT		2	1	Expired
8	NV		3	6	Expired
9	WY		6	79	
10	WY		5	70	
11	UT		5	177	
12	WY		2	122	7
13	CA		4	53	
14	ID		6	24	
15	UT		3	1	
16	UT		6	65	2
17	UT		6	95	4
18	UT		7	72	2
19	UT		6	85	20
20	NM		5	25	
21	UT		8	103	2
22	UT		7	95	2
23	UT		3	82	
24	UT		7	35	Expired

Visit Information

MRN	Visit Number	Admit Date	Admit Day	Disch Date	Disch Day	Patient Class	Admit Source	Admit Type	Patient Type
			Wednesday			INPATIENT	Physician/Self Referral	Emergency	INPATIENT

Unit History

UH EMERGENCY DEPT
UH (OSTU) SAURO SPECIALTY AND TRANSPN SRVCS

Vitals

Weight (kg)	Height (cm)	FIM	EP Diabetic
Max 98.6	167.0	35.4	08
Min 98.6	167.0	35.4	44

Provider

Admitting	Attending	Discharge
General Surgery	General Surgery	General Surg

Facility Utilization

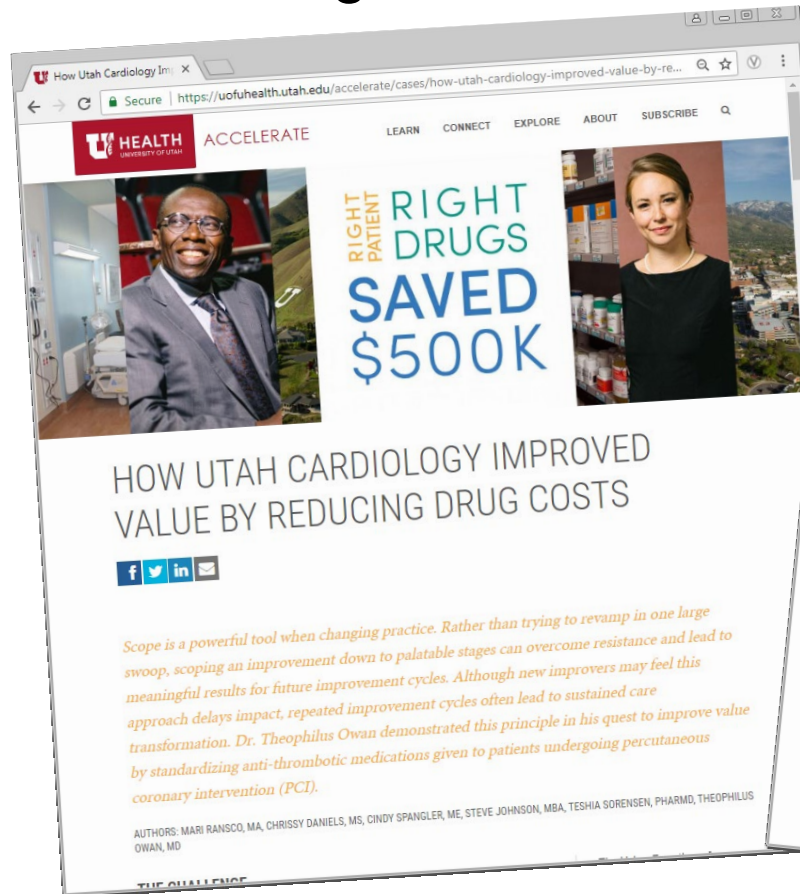
Cost Category	Level 3 Groupset	Level 4 Groupset	Proc Code	Cost	QTY
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2005354 - HB OXYGEN		27
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - General Classification	2000109 - HB CLOG ZAPPER		4
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2019996 - HB TUBING IV 3 PORT NEEDLE FREE		6
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2006434 - HB TUBE FEEDING NASOGASTRIC		4
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2003276 - HB CATH ANGIO 16GA X 1.25 IN		2
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2003513 - HB CATH IV INSYTE 18GA X 1.16 IN		2
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2003743 - HB CATH IV INSYTE 20GA X 1.16 IN		2
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2019981 - HB CATH IV INSYTE 22GA X 1 IN		2
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2002406 - HB BD LUER LOK ACCESS DEVICE BOSTON DICKINSON		4
Supplies	Medical/surgical Supplies And Devices	Medical/surgical Supplies And Devices - Sterile Supply	2002324 - HB BAG FLEXFLO TOP-FILL W/F LUSH		2

Improving Value

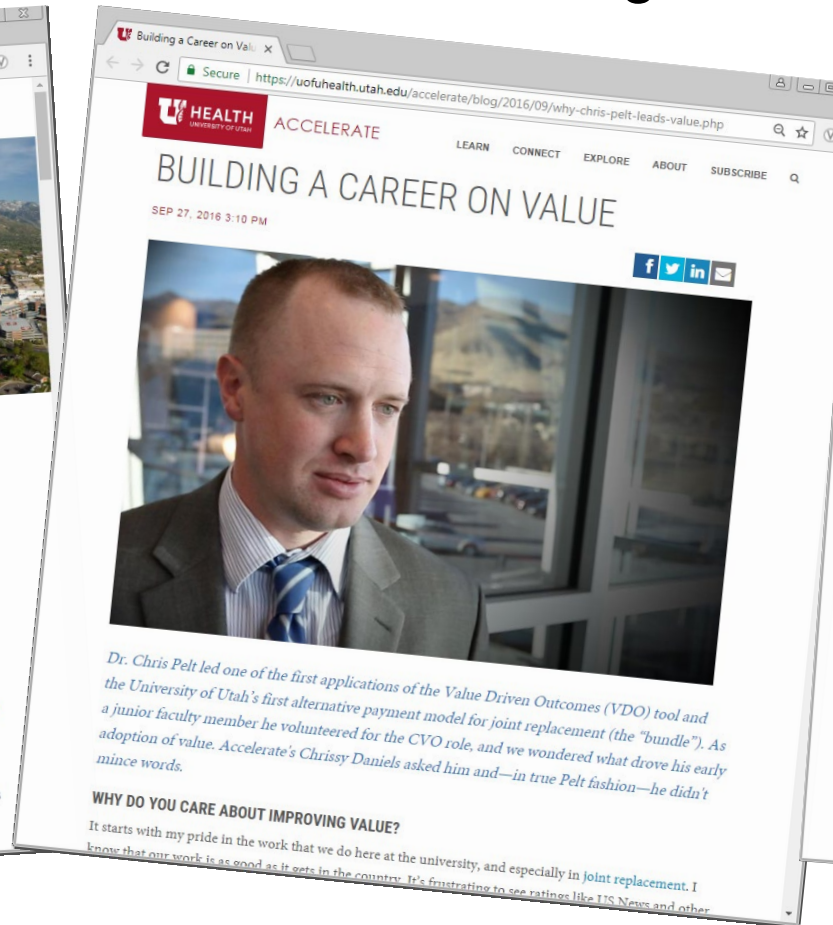


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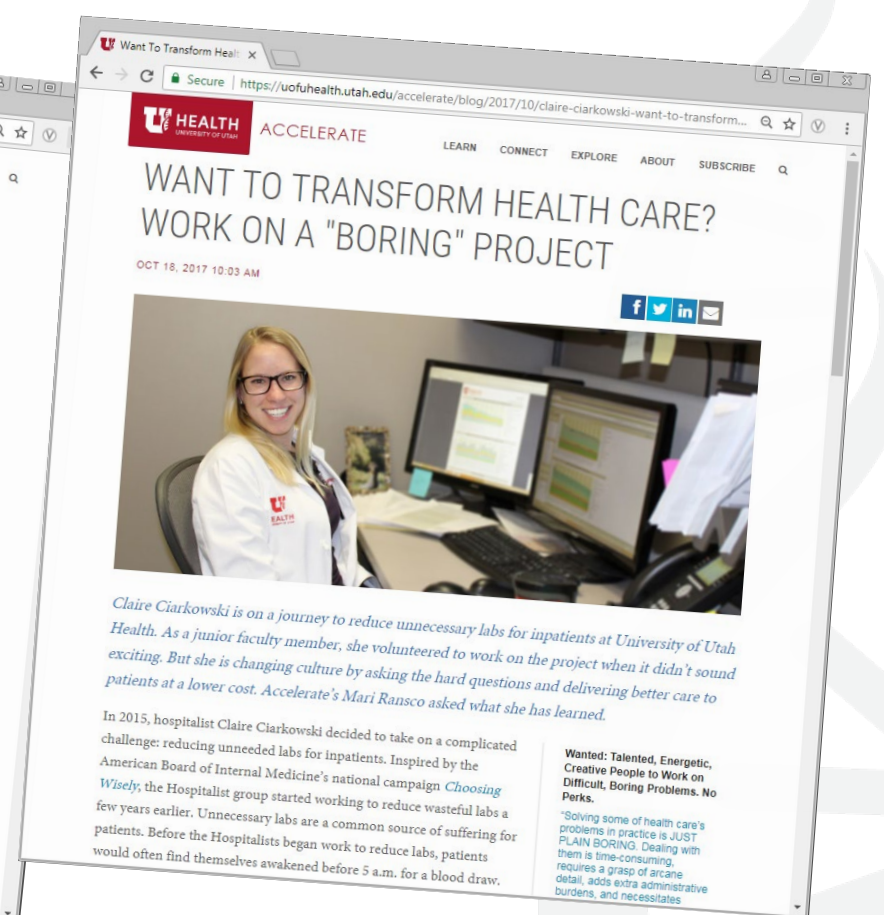
Drug Costs



Care Redesign



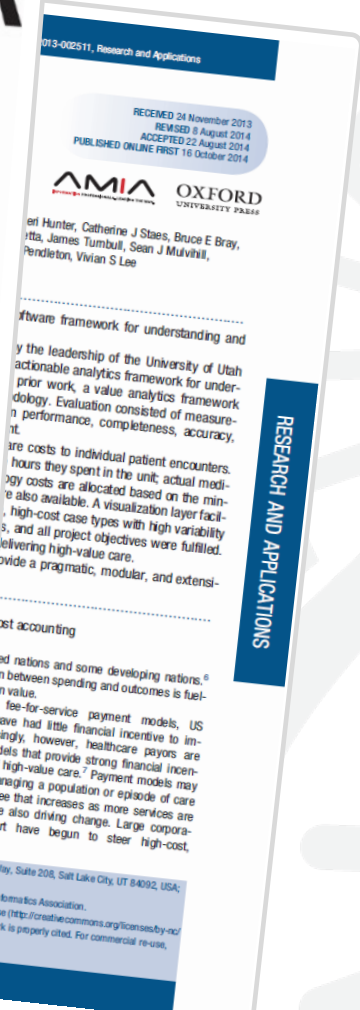
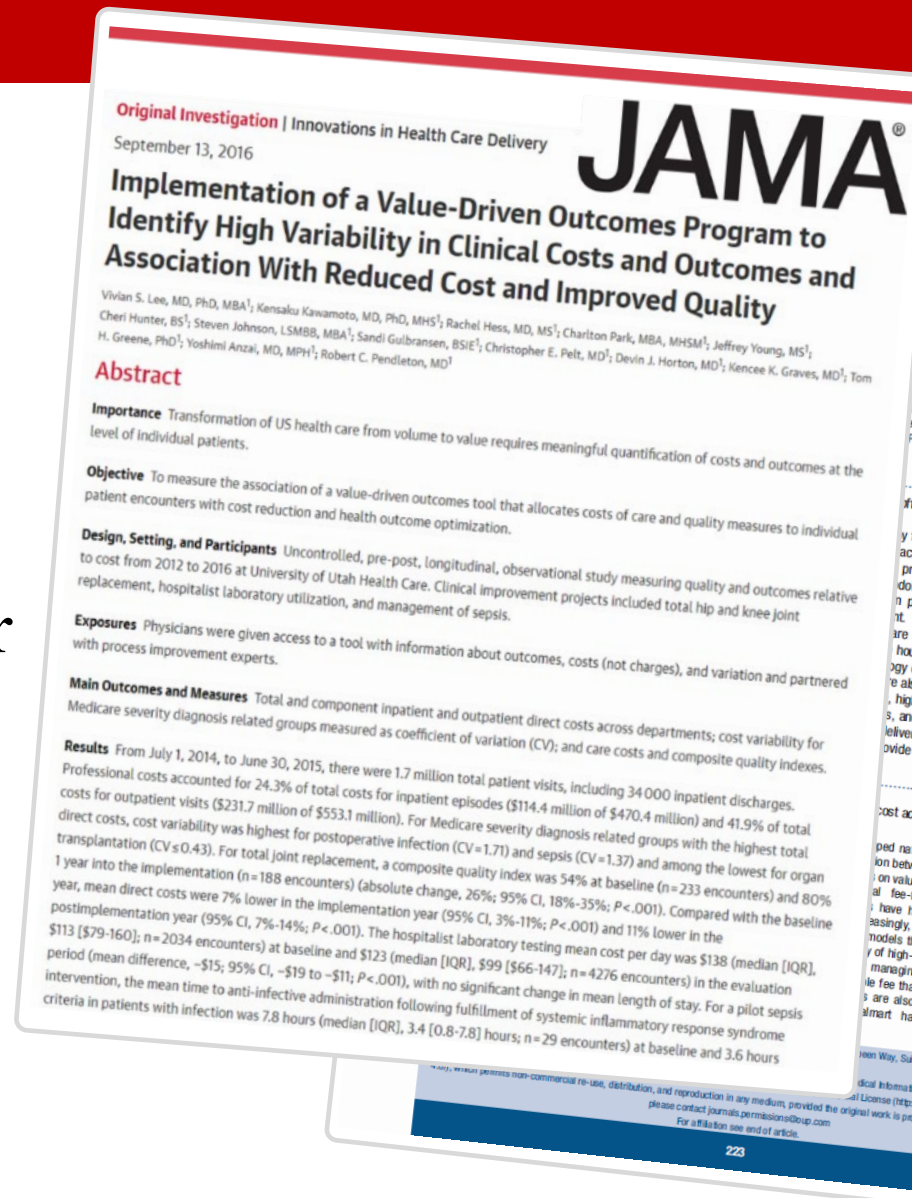
Lab Utilization



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



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VALUE



IN THE **TOP 10**
9 YEARS IN A ROW
QUALITY



NEARLY
HALF OF OUR
PROVIDERS
ARE IN THE
TOP 10%

SERVICE



COST

Questions



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