Transforming the Business of Healthcare

Shane Waslaski

President & CEO, Intelligent InSites

https://twitter.com/SWaslaski

https://www.linkedin.com/in/shanewaslaski/

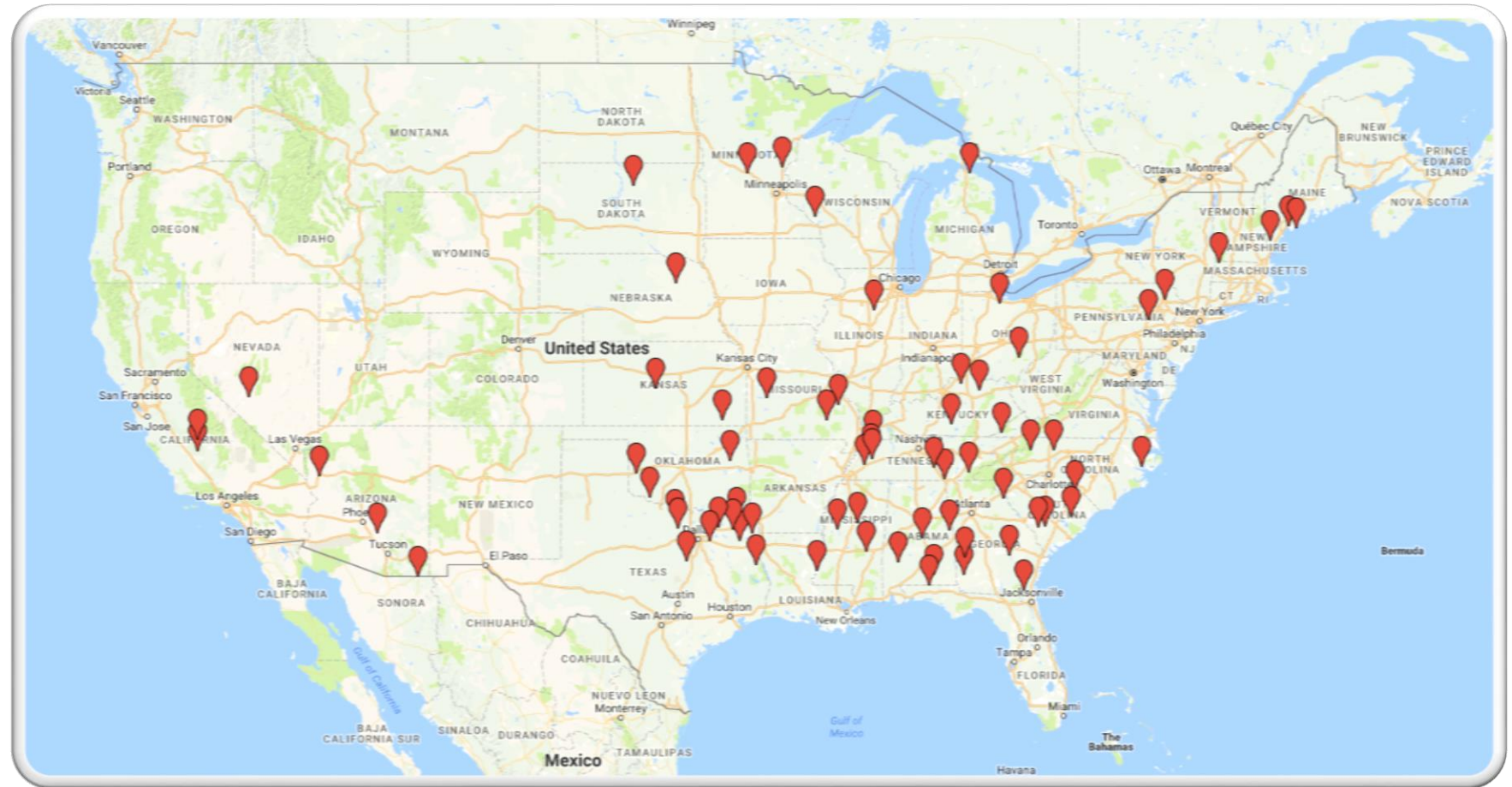HIMSS NORTH DAKOTA Chapter

Intelligent InSites™

Healthcare's Transformational Factors

Health Systems Face Significant Financial Pressures

More than 70 rural hospitals in 25 states have closed since 2010*

*The Journal of Rural Health 32 (2016) 35-43 © 2015 National Rural Health Association
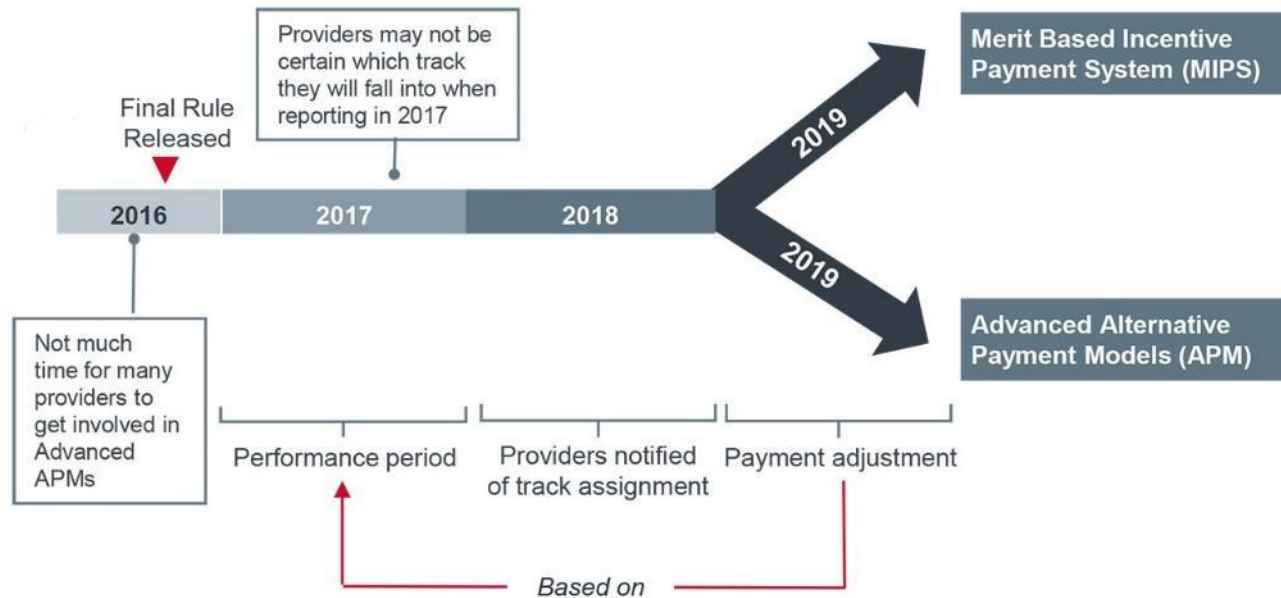
Top 10 issues identified by hospital CEOs in 2016

1. **Financial challenges**
2. Government mandates
3. **Patient safety and quality**
4. **Personnel shortages**
5. **Patient satisfaction**
6. **Access to care**
7. Physician-hospital relations
8. Population health management
9. Technology
10. Reorganization (e.g., mergers, acquisitions, restructuring, partnerships)

Improved with location-based intelligence and process optimization.

American College of Healthcare Executives [survey](#).
2016 - ACHE 13th Annual Surveys of Hospital CEOs - Top Challenges Their Organizations Are Facing.

And, don't forget MACRA

Final Rule Released

Providers may not be certain which track they will fall into when reporting in 2017

2016 | 2017 | 2018

Not much time for many providers to get involved in Advanced APMs

Performance period — Providers notified of track assignment — Payment adjustment

Based on

2019 → Merit Based Incentive Payment System (MIPS)

2019 → Advanced Alternative Payment Models (APM)

MACRA implementation is slated for January 1, 2019. However, CMS has proposed to use performance data from 2017 to determine payment adjustments in 2019. All the more reason to focus on operational metrics now.

Although plans are underway to repeal and replace ACA, MACRA will very likely proceed:

- It has enjoyed strong bipartisan support. The Senate and the House voted in favor of MACRA 92-8 and 392-37 respectively.

- MACRA is partly designed to be a cost-saving mechanism alongside quality measures

- MACRA incentivizes providers to shift to value-based payment models (MIPs/APMs) and serves as the framework for driving future Medicare cost savings.
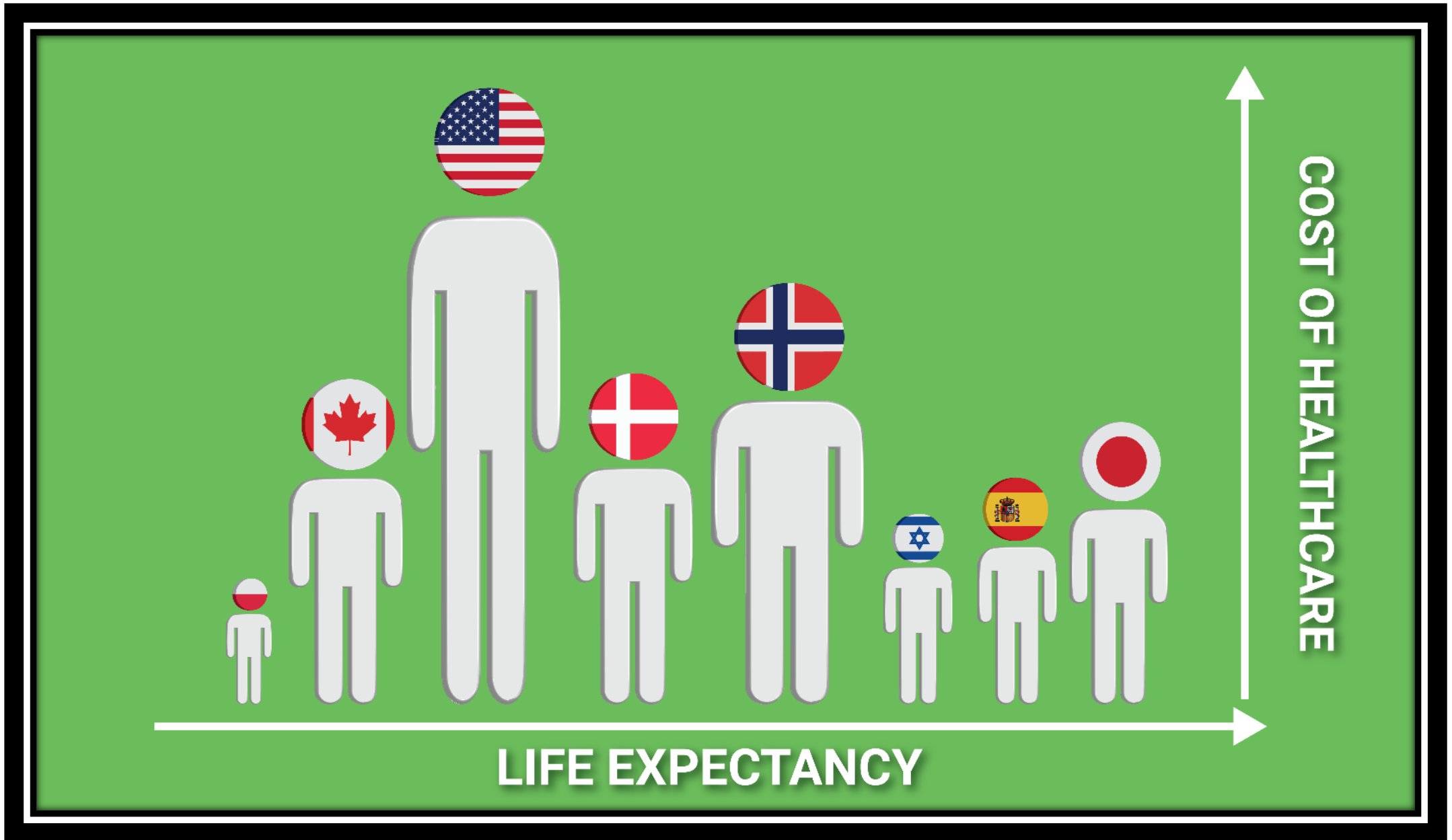
By 2025, the CBO predicts "...60% of hospitals will have negative profit margins if they don't increase efficiency."

www.cbo.gov, "CBO's Analysis of Financial Pressures Facing Hospitals Identifies Need for Additional Research on Hospitals' Productivity and Responses," September 8,2016; 3,000 hospitals analyzed
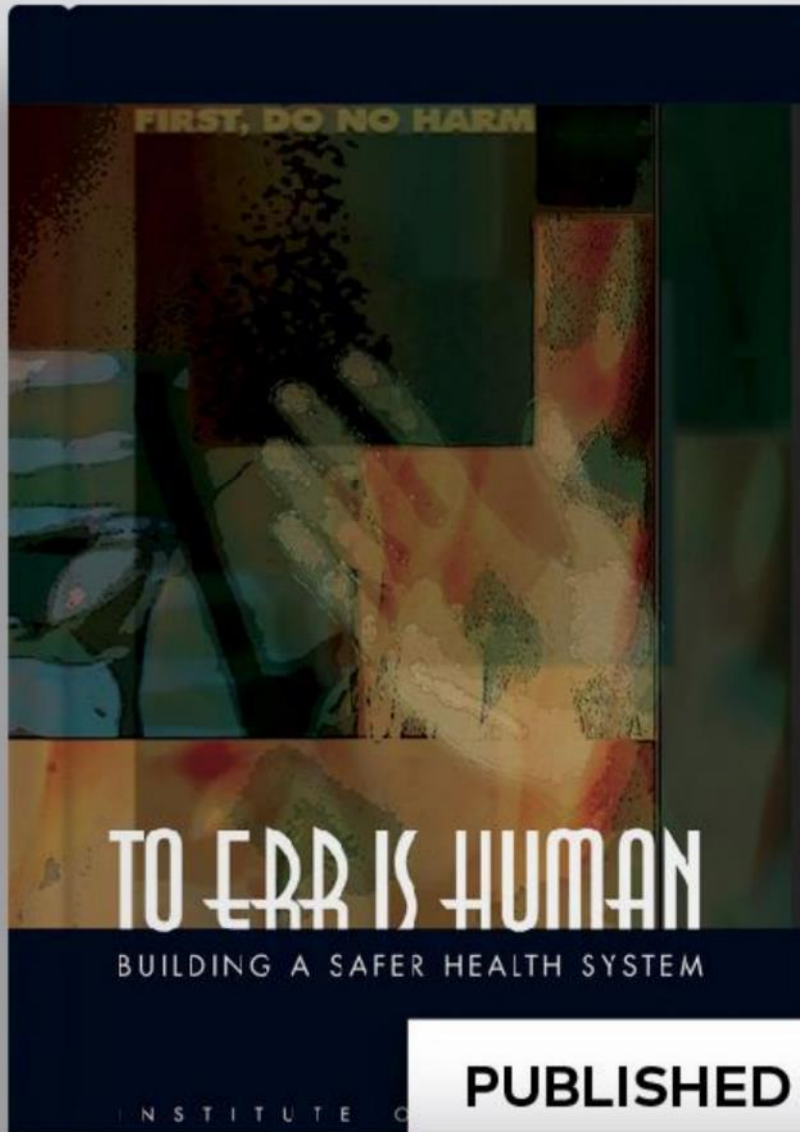
Shifting priorities for healthcare IT

1. Think in terms of revenue and profit. What value will we get with this investment?

2. Drive for greater collaboration among technologists, caregivers, operations – everybody innovating to improve the patient experience

3. Augmenting efficiency and cost reduction with desire for growth in patients, revenue streams, marketability

4. Need to understand all data, including automatically-captured operational data

5. Great need for change agents – don't resist transformation, be the driver of it

What *is* patient experience?

1. **Delivering safe care** – the right diagnosis and procedure; healing, not harming

2. **Delivering high quality care** – treatments that work; not guessing game

3. **Providing optimal experience and satisfaction** – pleasing environment where people are treated kindly and with respect

4. **Driving value and efficiency** – patients get in and out as scheduled after having quality time with caregivers
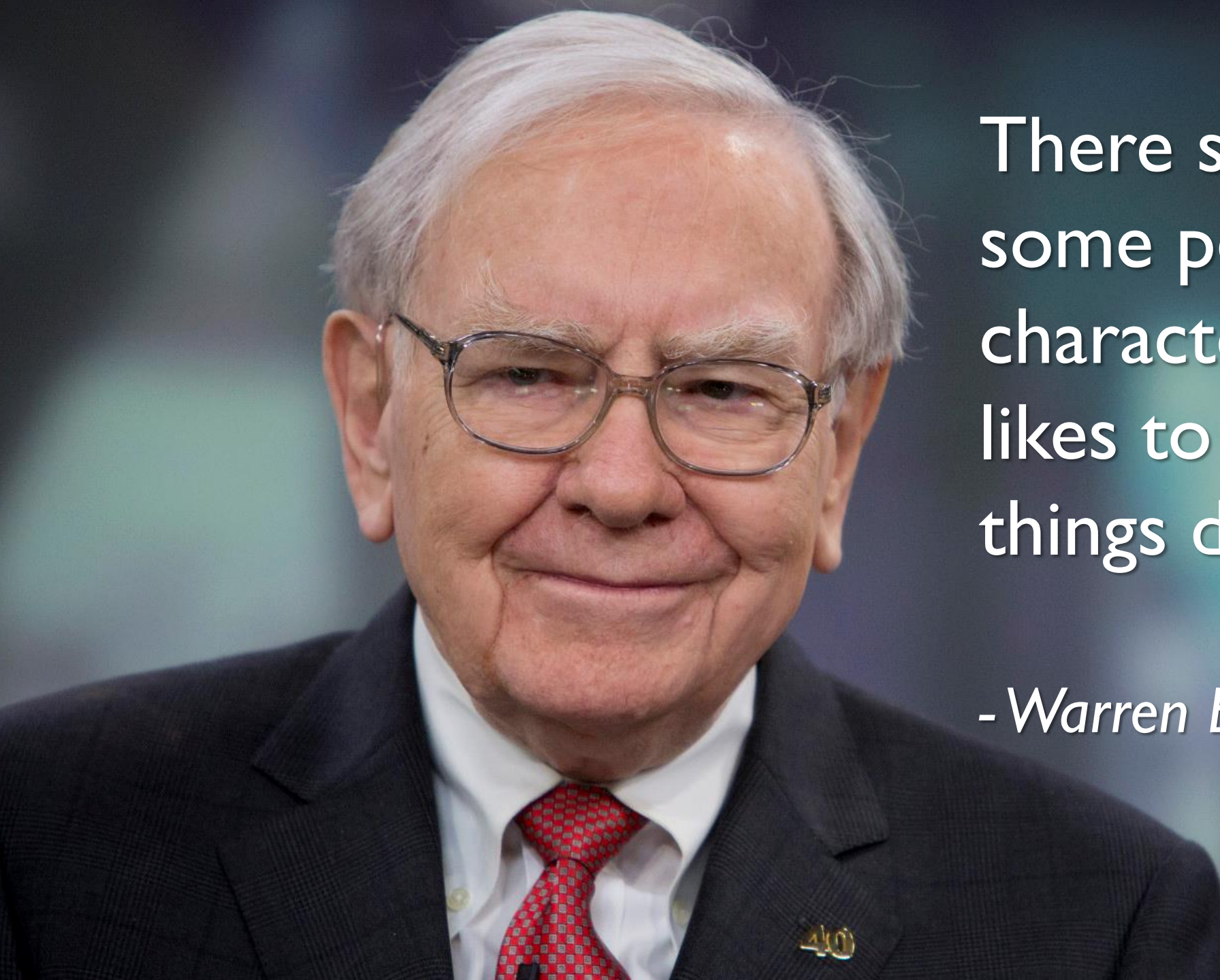
FIRST, DO NO HARM

TO ERR IS HUMAN

BUILDING A SAFER HEALTH SYSTEM

INSTITUTE O

PUBLISHED 1999

To Your Health

Researchers: Medical errors now third leading cause of death in United States

By Ariana Eunjung Cha May 3

These common medical errors are major killers

▶ Play Video 1:16

105/69 (82)

A new study by patient safety researchers shows common medical errors may be the third leading cause of death in the U.S., after heart disease and cancer. (Deirdre O'Regan/The Washington Post)

PUBLISHED 2016

There seems to be some perverse human characteristic that likes to make easy things difficult.

-*Warren Buffet*

Why transform when there are lives to save?

- Costs are skyrocketing with no end in sight while policy debate makes it more complicated

- <u>Those closest to the patient</u> know what needs to be done – and so we need to acknowledge what must change

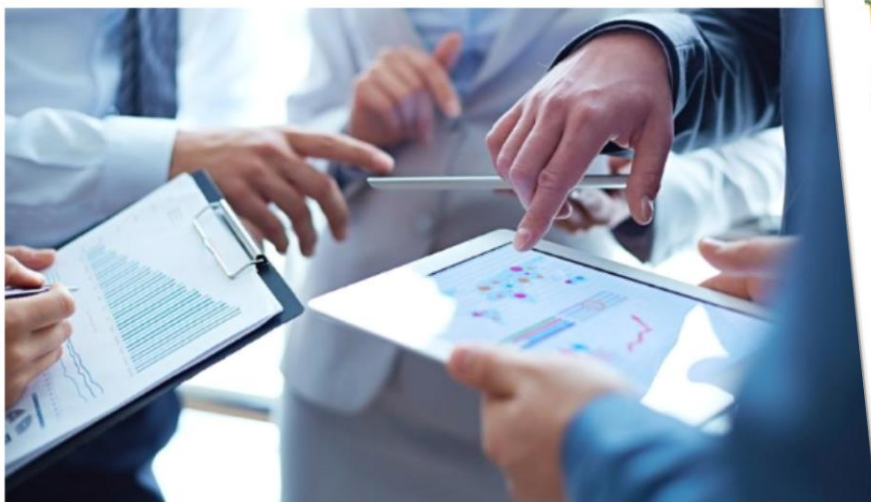# What do you see as the most compelling reason for transformation?

Health IT teams at the strategy table

Deloitte: CIOs Must Be Proactive Change Agents to Succeed

BY JUAN MARTINEZ   JANUARY 3, 2017   💬 1 COMMENT

In a recent Deloitte study, CIOs shared their vision for business and personal success.

0
SHARES

More than 70 percent of Chief Information Officers (CIOs) believe that aligning information technology (IT) activities with business strategies is critical to their personal success, according to recent research from technology consulting firm Deloitte. In order to achieve this alignment, CIOs must proactively come up with solutions to address business challenges rather than settling for a more traditional reactive technological role.

nology that helped severely injured patients survive."

CIO Thoughts: Mission-Motivated in HCA's South A...

Above all else, we are committed to the care and improvement of human life. In the South Atlantic Division, this timeless HCA mission is present in everyt...

healthcareinspired.com

🔁 1   ♥ 2

Health IT teams at the strategy table

HCA IT&S @HCA_IT · 5 Dec 2016
It's not about us, it's about what we can do for the #patient in that bed.
@Hitarchitect #StrategyAllHands

↩   ⟲ 1   ♥ 2

Smitter @smitha61 · 6 Oct 2016
How health IT will help us reach the future of care delivery #NHITweek #interoperability... lnv.gy/2diPOhw #iamlenovo

PATIENT 132-54/B

NEW DATA AVAILABLE   BLOOD RESULTS   PRESCRIPTION   BY DATE

CONTACT
MAIL
INFO

↩   ⟲   ♥ 1

The Bottom Line

THE BIG
10
HEALTHCARE METRICS

- LENGTH OF STAY
- TIME TO SERVICE
- HOSPITAL INCIDENTS
- PATIENT SATISFACTION
- PHYSICIAN PERFORMANCE
- PATIENT READMISSION RATE
- INPATIENT MORTALITY RATE
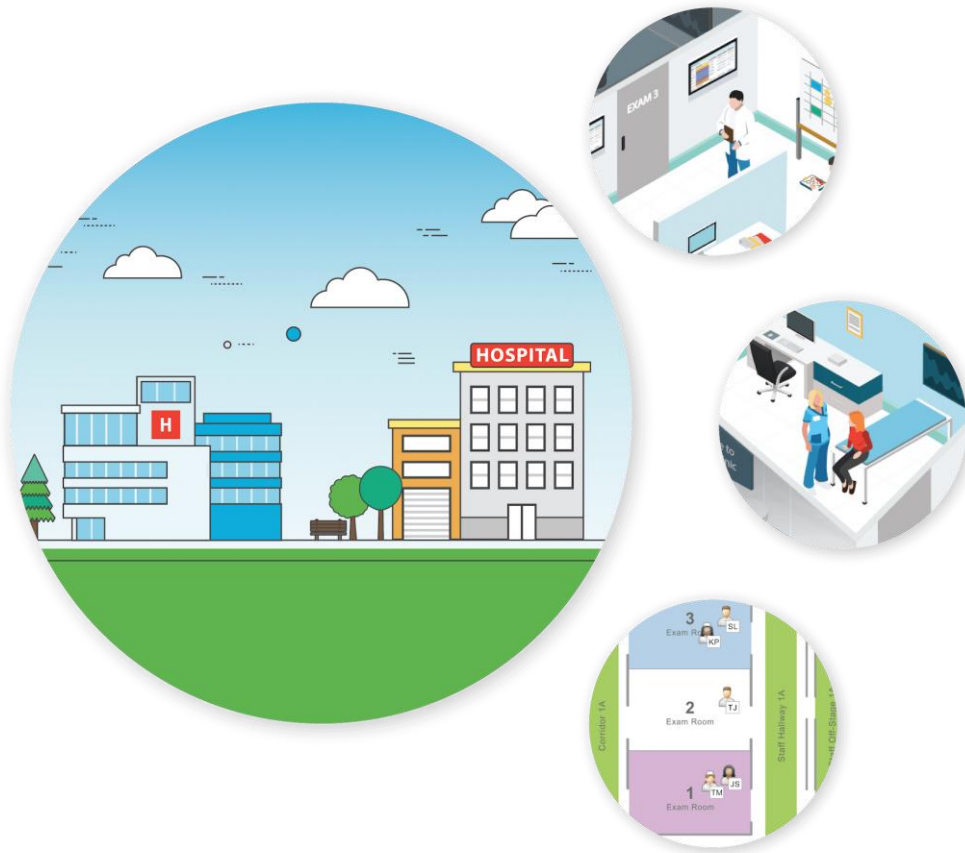- OPERATING MARGIN
- BED OCCUPANCY RATE
- ASSET UTILIZATION RATE

# Case Studies: Improvements to Key Performance Metrics Leveraging Location-Based Intelligence

How Location-Based Intelligence Systems Work

- **Location and care milestone data** is automatically collected as people and equipment move - in real time.
- Data is processed and given context according to business rules and location.
- Intelligence is delivered to the right people at the right time to inform decisions in-the-moment.

How Location-Based Intelligence Systems Work

- **Dashboards** show current counts and flag priority equipment management actions or which patient to see next.
- Reports show details of each patient visit along with aggregates by appointment type and provider.
- Visual queues reveal actual utilization of equipment and exam rooms for best allocation and usage.
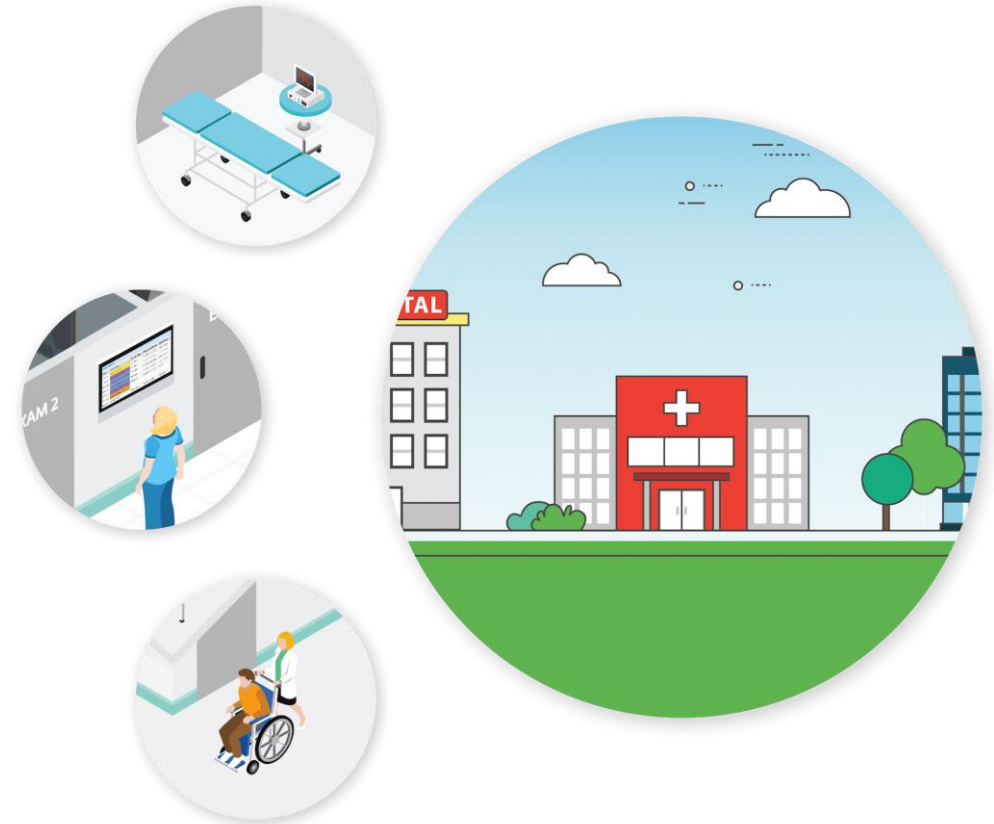
# How Location-Based Intelligence Systems Work

- In the InSites system, your operational data can be analyzed using the InSites reports library or your preferred tool (e.g. Power BI, Tableau, Qlik).
- Our advisors work with your Process and Quality Improvement teams to help you turn data into process improvements and significant increases in throughput and efficiency.

Physicians spend **48%** of time on data entry

...and only **28%** of time with patients

Giving Back Time
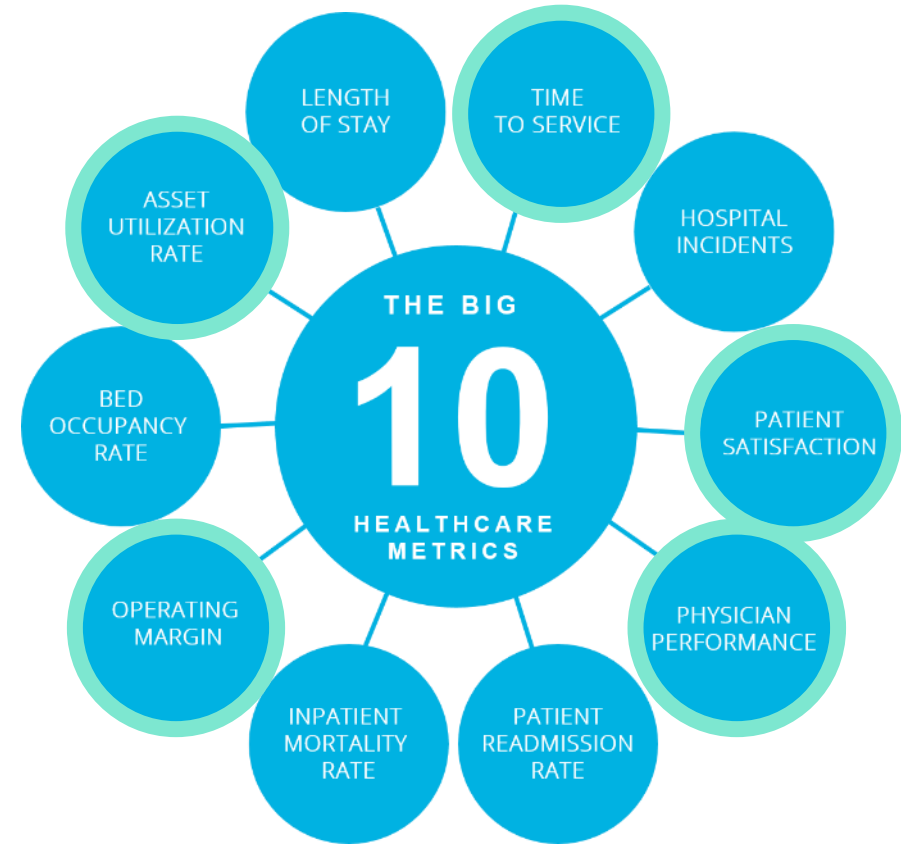
Deployments:

- Various outpatient and acute care facilities
- Software Partner – Intelligent InSites
- RTLS Hardware Partner – CenTrak/Sonitor

Applied Processes and Technologies:

- Business Process Optimization (BPO)
- Real-Time Locating System (RTLS)
- PAR-level Management, Centralized Equipment Management
- Patient Self-Rooming
- Centralized Dispatch
- Business Intelligence

Impact to Operational Metrics

- ✓ Eliminate searching and equipment request calls
- ✓ Cut transport search time in half
- ✓ Decrease time to nurse assessment
- ✓ Remove nurse escort time and eliminate patient wait time for 90%+ of appointment types with patient self-rooming
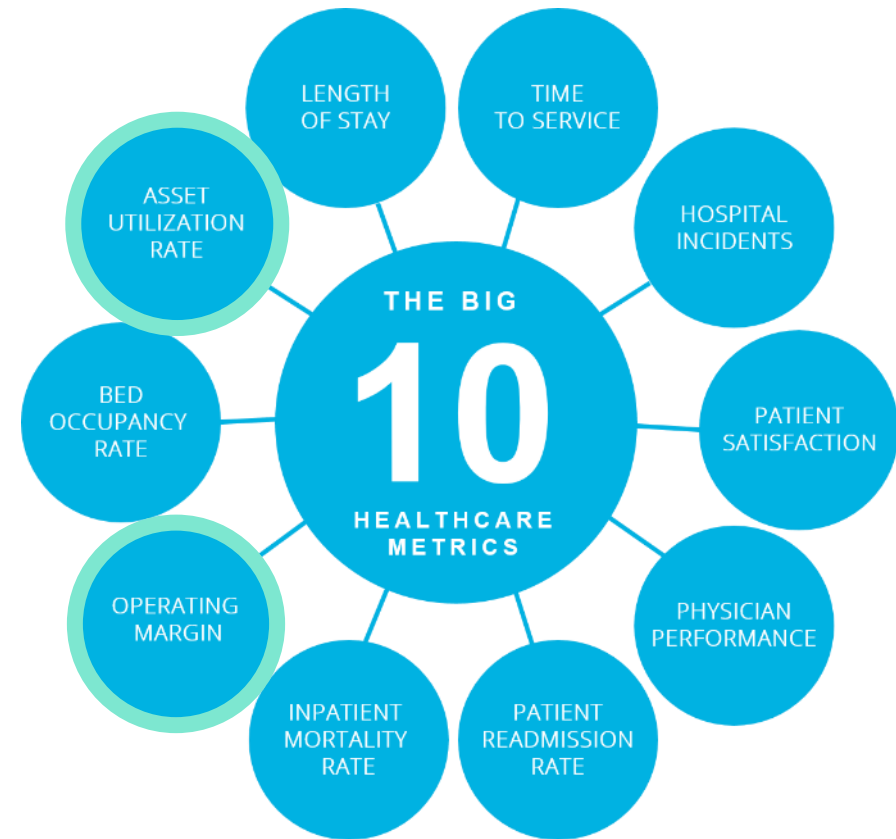
Improving Asset Utilization

Deployment:

- 866-bed hospital, 1.6M sf, 6,150 assets
- Software Partner – Intelligent InSites
- RTLS Hardware Partner – CenTrak

Applied Processes and Technologies:

- Mission Control (central logistics)
- Business Process Optimization (BPO)
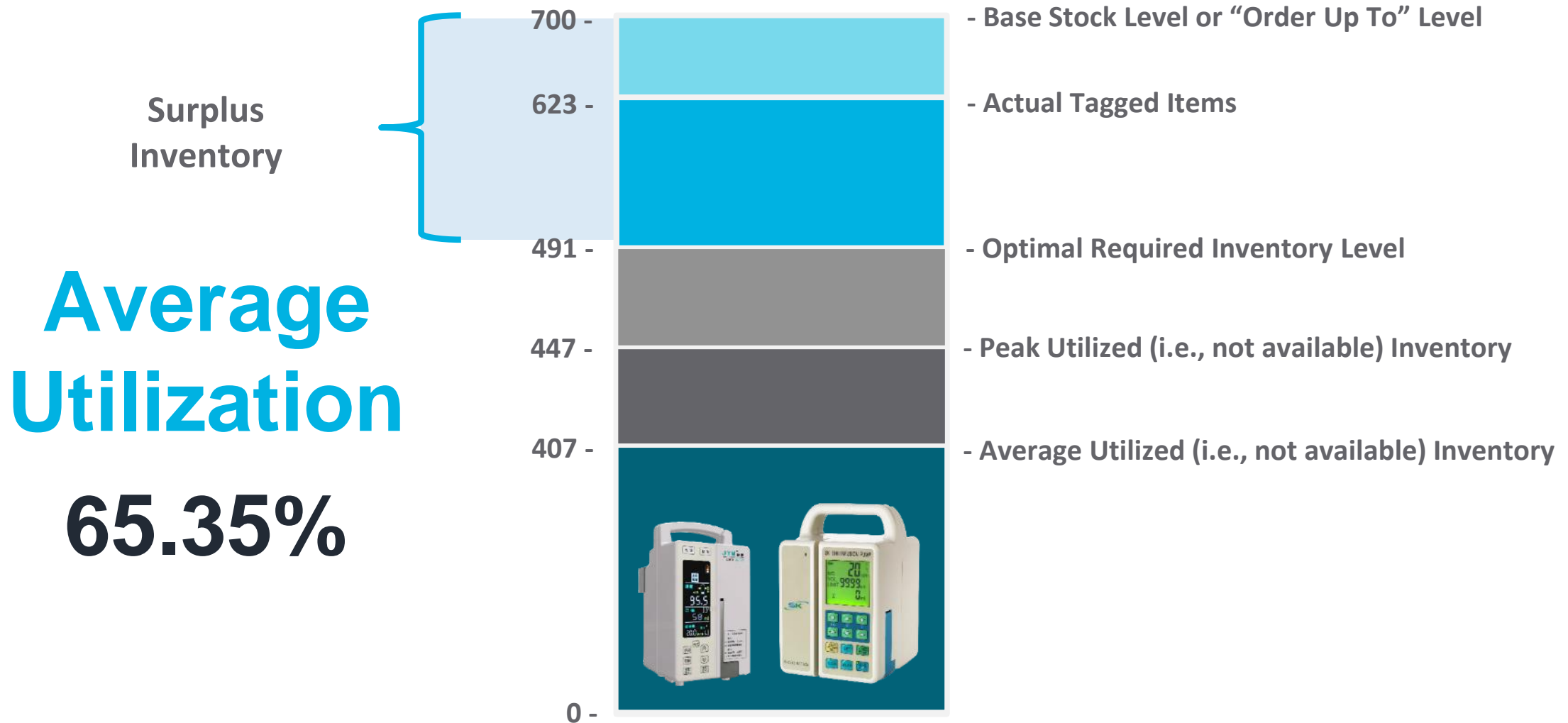- Real-Time Locating System (RTLS)
- Business Intelligence

Impact to Operational Metrics

- ✓ More than $1 Million in savings just in first year
- ✓ $285K on rental equipment
- ✓ $130K on shrinkage
- ✓ $600K on reallocation

Texas Health Resources®

Procurement Analysis – Infusion Pumps

Surplus Inventory

700 - — Base Stock Level or "Order Up To" Level

623 - — Actual Tagged Items

491 - — Optimal Required Inventory Level

447 - — Peak Utilized (i.e., not available) Inventory

407 - — Average Utilized (i.e., not available) Inventory

0 -

Average Utilization

65.35%

Surplus Inventory

Surplus Inventory

700 – — Base Stock Level or "Order Up To" Level

623 – — Actual Tagged Items

491 – — Optimal Required Inventory Level

447 – — Peak Utilized (i.e., not available) Inventory

407 – — Average Utilized (i.e., not available) Inventory

0 –

Average Utilization

65.35%

Surplus Inventory

Average Utilization

82.76%

An increase of 17.41 points

491 -   - Optimal Required Inventory Level

447 -   - Peak Utilized (i.e., not available) Inventory

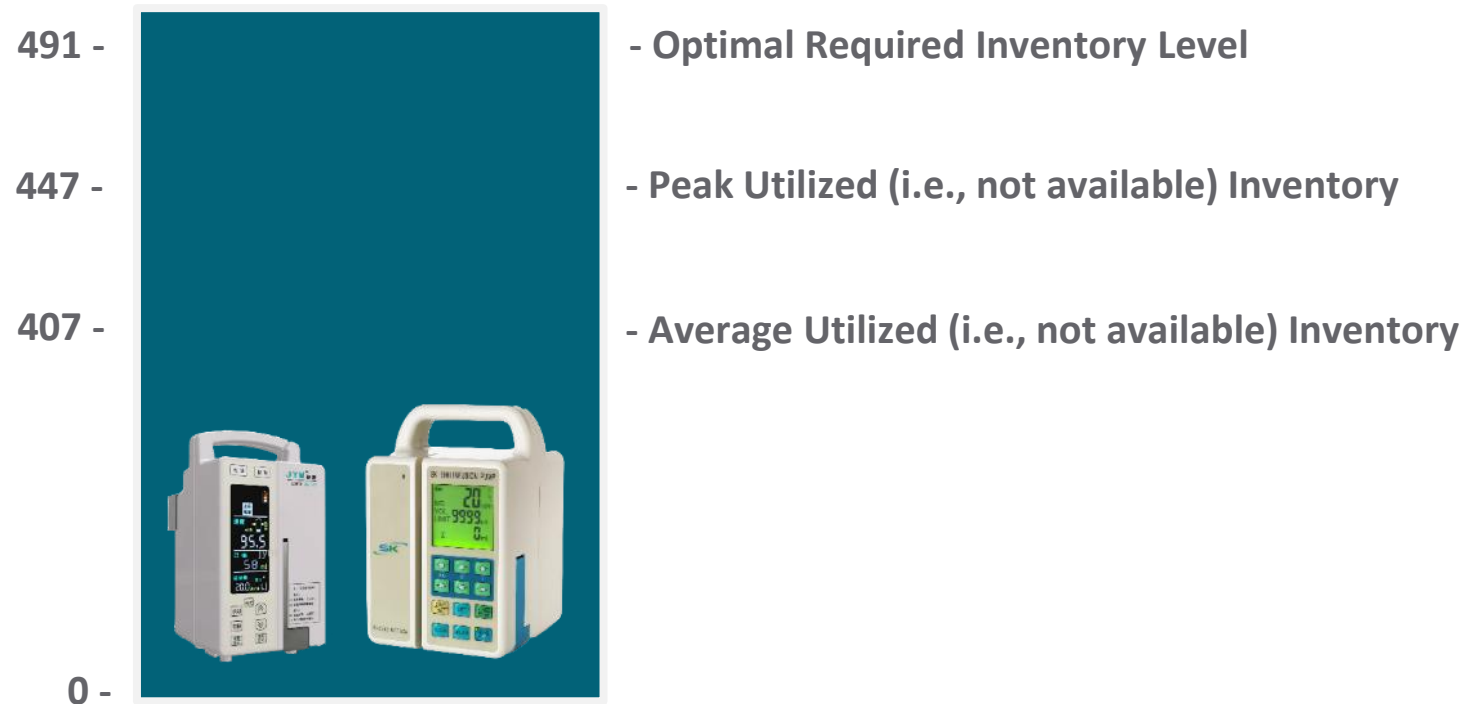407 -   - Average Utilized (i.e., not available) Inventory

0 -

Average Hard-Dollar Savings

Cost Savings Category	Monthly Savings
Reduction in Rentals	$23,657
Reduction in Shrinkage	$8,113
Increase in Utilization	$50,411
Total Savings	**$82,181**

Streamlining Patient Flow

THE BIG **10** HEALTHCARE METRICS

- LENGTH OF STAY
- TIME TO SERVICE
- HOSPITAL INCIDENTS
- PATIENT SATISFACTION
- PHYSICIAN PERFORMANCE
- PATIENT READMISSION RATE
- INPATIENT MORTALITY RATE
- OPERATING MARGIN
- BED OCCUPANCY RATE
- ASSET UTILIZATION RATE
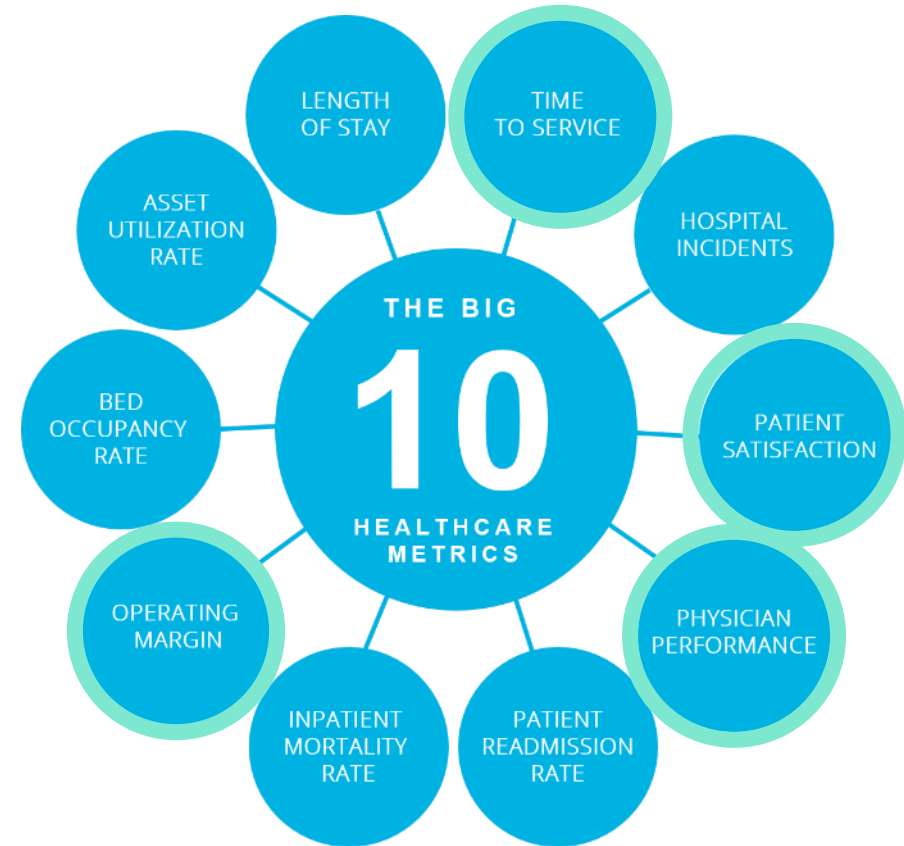
Deployment:

- 14,000 sq. ft., 24 exam rooms, 7 cast bays, 2 x-ray rooms

- Systems

  - Intelligent InSites - SW

  - Sonitor - HW

  - Epic - Connector Integration (I2)

Applied Processes and Technologies:

- Real-Time Locating System (RTLS)

- Business Intelligence

- Business Process Optimization (BPO)

- Patient Self-Rooming

Impact to Operational Metrics

✓ Cycle time decreased by 25%

✓ Added 1,700 more patient visits annually

✓ Reallocated 2,264 nursing hours to other service lines

✓ Eliminated 4,454 min NVA

✓ Increase of 24% in annual net revenue

+Altru HEALTH SYSTEM

Vision and Measurement = Operational Excellence

Time to Service -
IMPROVING ACCESS

INPUTS	
# of Providers	12
# of Add'l Patients Per Provider Per Week	6
Avg. Revenue/Patient	$200
IMPACT	
Add'l Revenue/Week	$14,400
Add'l Revenue/Year	$748,800
Add'l Revenue/Sq Ft	$25.82

info@intelligentinsites.com

Asset Utilization -
OPTIMIZING USAGE

INPUTS	
# of Infusion Pumps	623
Avg. Utilization at Start	65%
# of Points Improved	17.4
IMPACT	
Reduced Rentals/Mo	$23,657
Reduced Shrinkage/Mo	$8,113
Increased Utilization/Mo	$50,411
Total Savings Per Month	$82,181

Patient Satisfaction –
KEY EXPERIENCE LEVERS

- Reduce wait time in waiting area and exam rooms
- Increase patient time with providers and nurses
- Improve access by adding more patients per provider per week
- Decrease total clinic visit cycle time

What are improvement examples you have achieved in critical performance metrics?

To transform the business of healthcare

- ✓ Drive the operational excellence vision for your organization
- ✓ Connect key operational metrics to strategic imperatives
- ✓ Shift thinking from cost to value
- ✓ Connect initiatives to critical, compelling people impacts

The team effort—the perfectly synchronized flow of muscle, oars, boat, and water; the single, whole, unified, and beautiful symphony that a crew in motion becomes—is all that matters. Not the individual, not the self.

Q&A

Thank You

Shane.Waslaski@intelligentinsites.com

https://twitter.com/SWaslaski

https://www.linkedin.com/in/shanewaslaski/