HIMSS18 The leading health information and technology conference

WHERE THE WORLD CONNECTS FOR HEALTH

Conference & Exhibition | March 5–9, 2018

Las Vegas | Venetian – Palazzo – Sands Expo Center

Powering Clinical and Operational Excellence

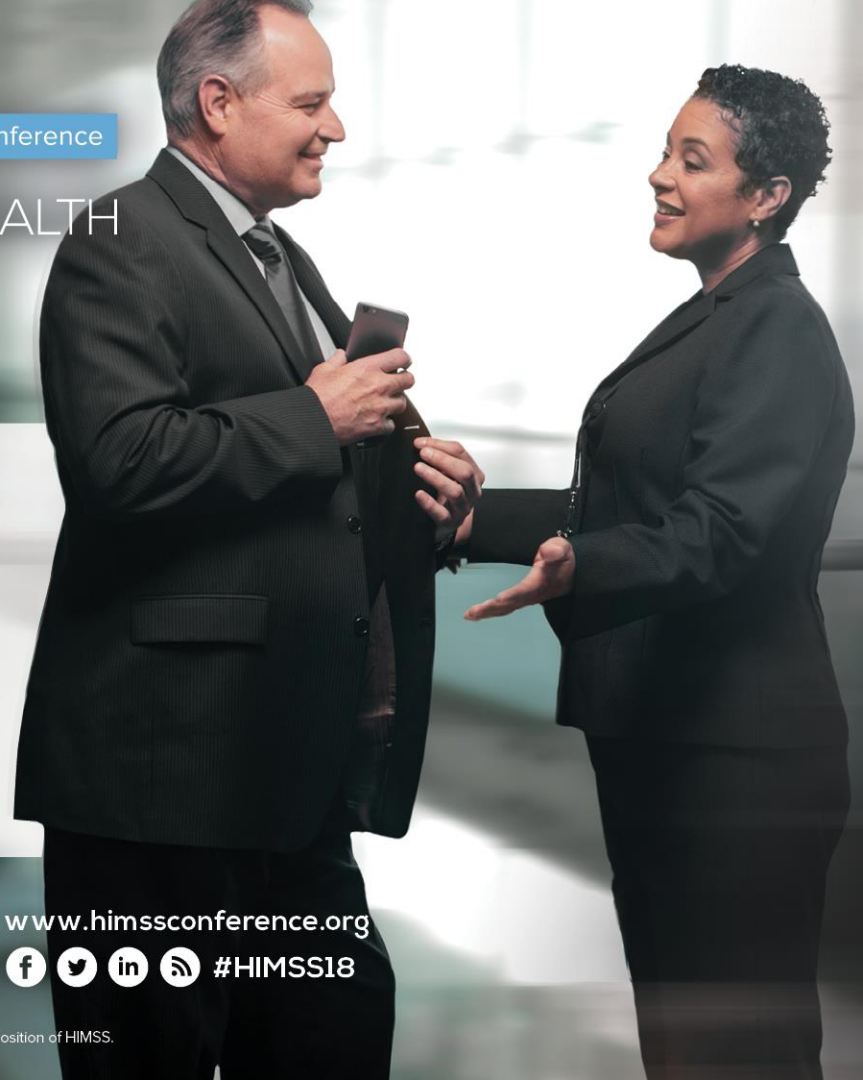
Session #150, March 7, 2018

Joan Thompson, Michael Mann

Lead Systems Analyst, Cleveland Clinic

Cleveland Clinic

COMMITMENT



www.himssconference.org

#HIMSS18

DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.

Agenda

- Background, Business Challenges and Objectives
- Analytics Strategy at Cleveland Clinic
- Analytics in Action
  - Emergency Services
  - Clinical Care Paths
  - Patient Access
  - Executive Operating Review
- Benefits and Next Steps

#HIMSS18
©HIMSS 2018

Background and Context

- Founded in 1921
- 7.1 million patient visits
- 165,000 admissions
- 207,000 surgical cases
- 550,000 ED visits

- 4,435 inpatient beds
- 150 outpatient locations
- 57,000 Caregivers
- 3,000+ physicians

©HIMSS 2018

Cleveland Clinic – Strategic Goals

Patients First

I put every patient first.

WHAT YOU DO

- I provide the same safe quality care at every encounter.
- I am compassionate to my patients and fellow caregivers.
- I seek continuous improvement in my work.
- I have integrity and do the right thing.

Caregivers

I am an engaged caregiver.

WHAT YOU DO

- I am dedicated to my work and proud of what I do.
- I want to improve the health of patients.
- I see how I contribute to Cleveland Clinic's mission.
- I am part of something bigger than myself.

Affordability

I make care affordable.

WHAT YOU DO

- I help achieve value for our patients.
- I am a steward of our resources.
- I share new ideas and support caregivers who do the same.

Growth

I help us grow.

WHAT YOU DO

- I am an ambassador for our culture.
- I agree with the goals we share with our partners.
- I affirm that we are One Cleveland Clinic.

Impact

I make an impact.

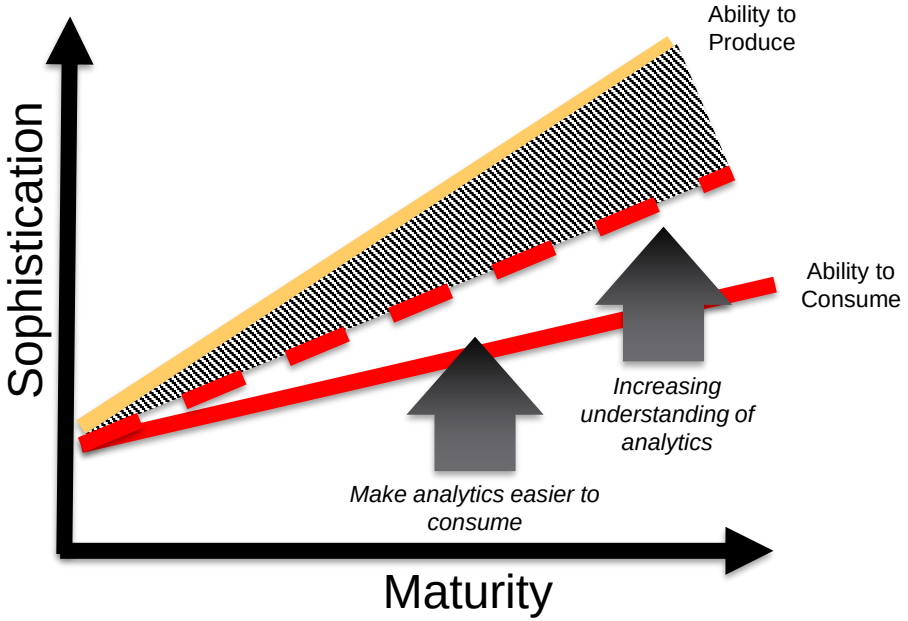
WHAT YOU DO

- I research solutions to problems.
- I innovate new ways of doing the work.
- I educate myself and others to continue developing.

©HIMSS 2018

Business Challenges

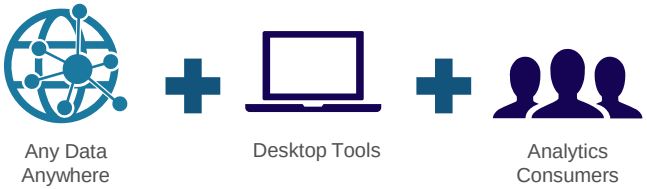
- Multiple audiences
  - Executive, manager, analyst, statistician
- Internal and external sources
- 200+ analytics request per month
- Accessibility to understandable information
  - Right accessibility for the right person
  - Summary vs detail



©HIMSS 2018

Business Objectives

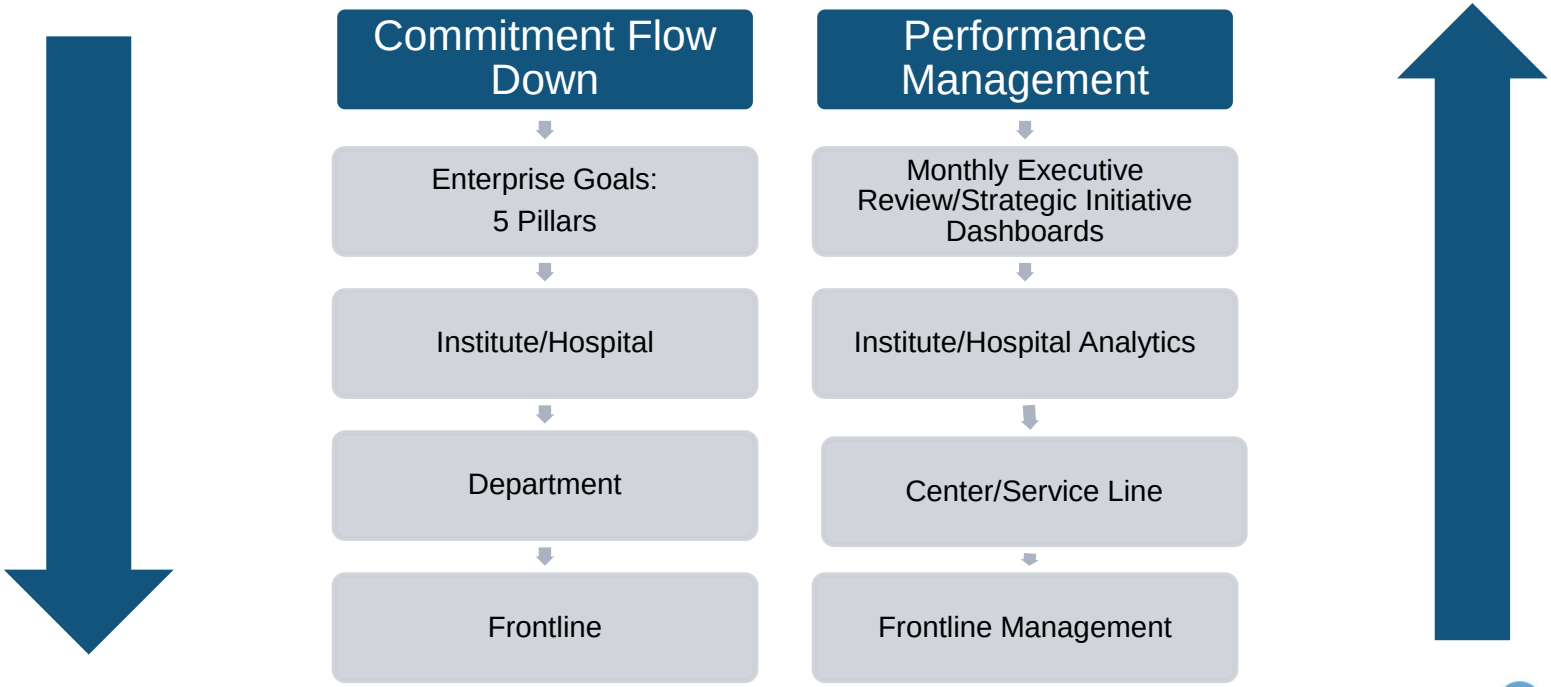
- Analytics quicker to market
  - Decrease visualization development
  - Increase creators
- Executive usability complimented by deep drill
- Shift to self-service
- Empower overall data analytics



©HIMSS 2018

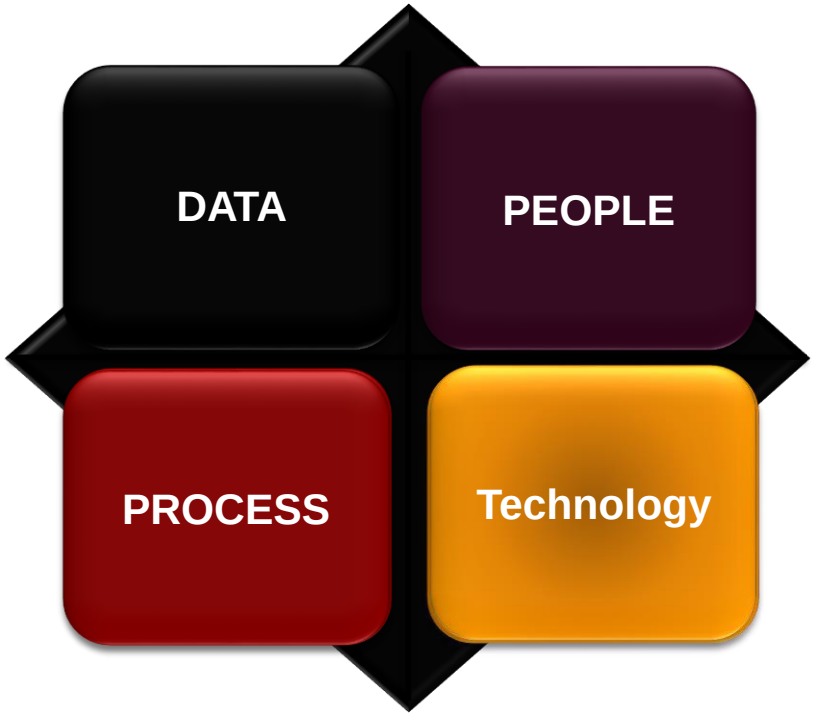
Analytics Strategy

Institutional Alignment



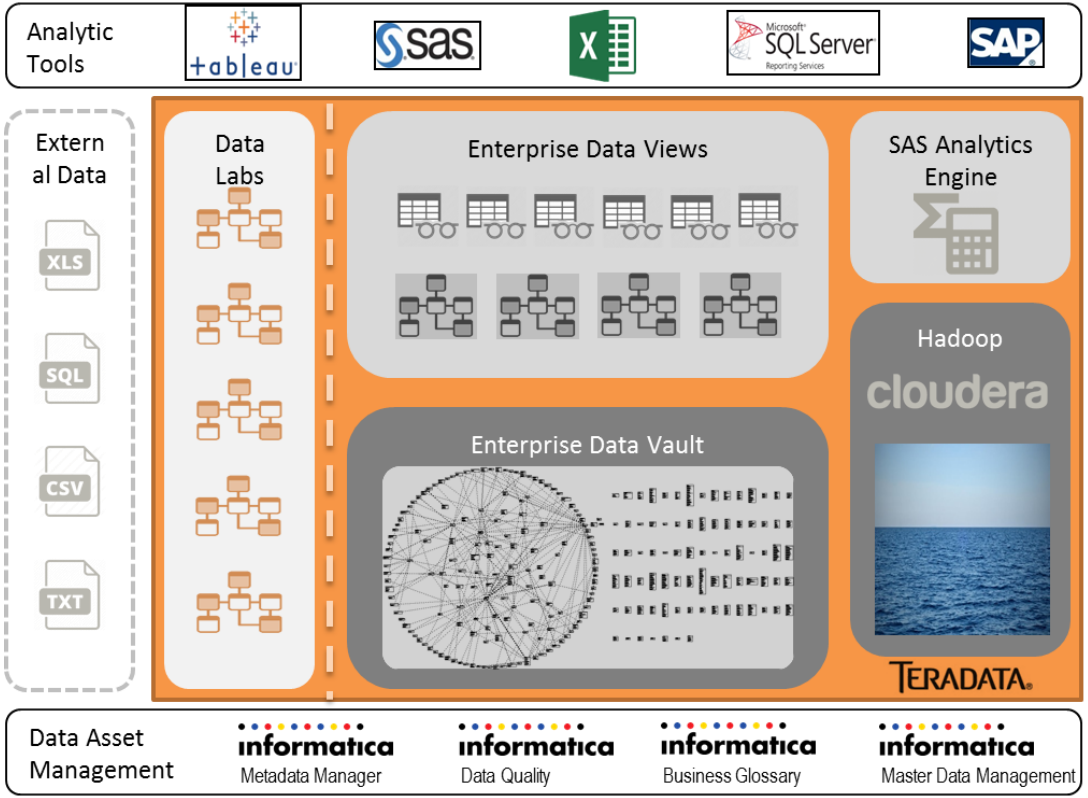
#HIMSS18
©HIMSS 2018

Comprehensive Analytics Strategy



©HIMSS 2018

Analytics Platform



#HIMSS18
©HIMSS 2018

Emergency Services Institute

Driving Institute Performance

Problem Statement:

- 18 emergency departments using EPIC ASAP
- Accessibility to encounter information supplemented with ancillary services

Current Conditions:

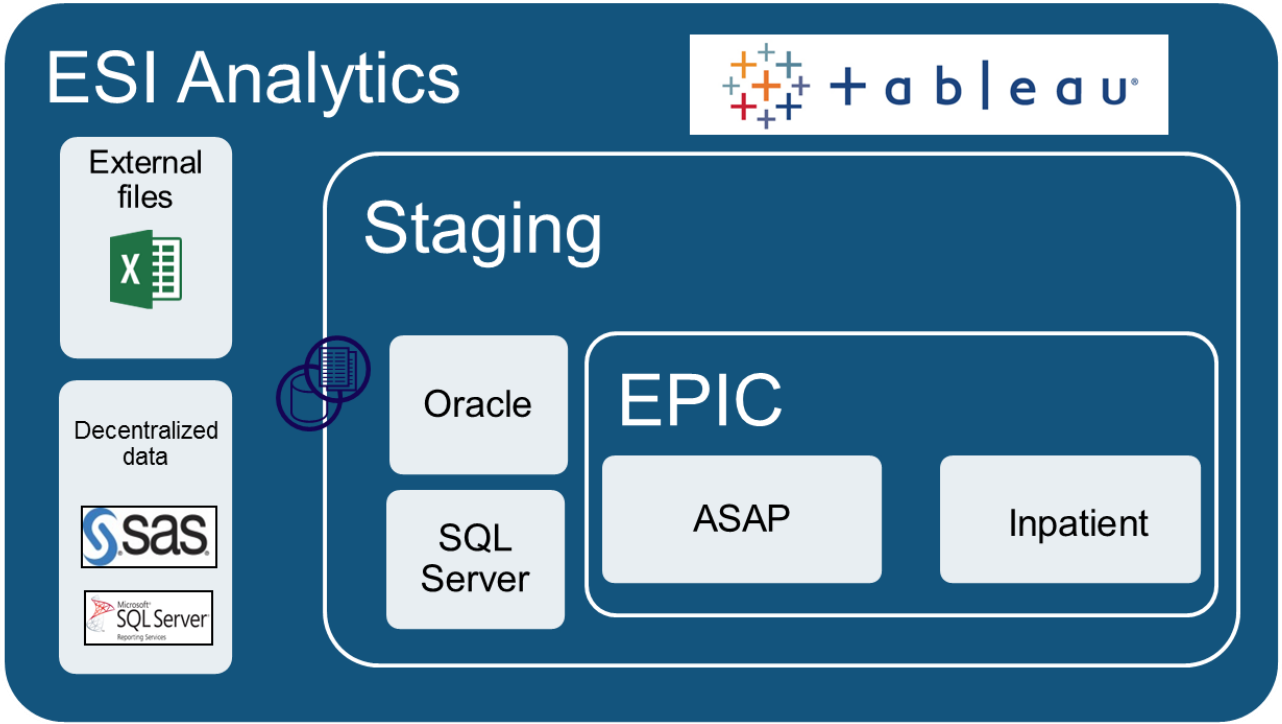
- Wealth of data
- Frequent flyer of analytic requests

Solution:

- Partnered Governance
- Technology enablement
- Self service analytics

#HIMSS18
©HIMSS 2018

Emergency Services Data Model



©HIMSS 2018

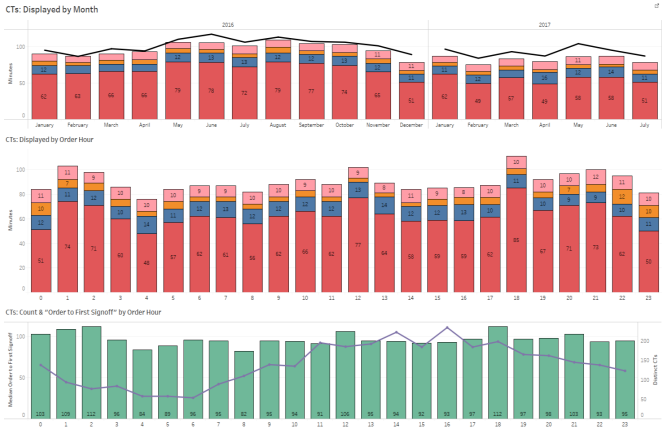
Results

Dashboards that provide value:

- Data replaces anecdotal evidence
- Visualizations highlight opportunities and drive performance improvement
- Transparency and comparative analysis – promotes *friendly* competition

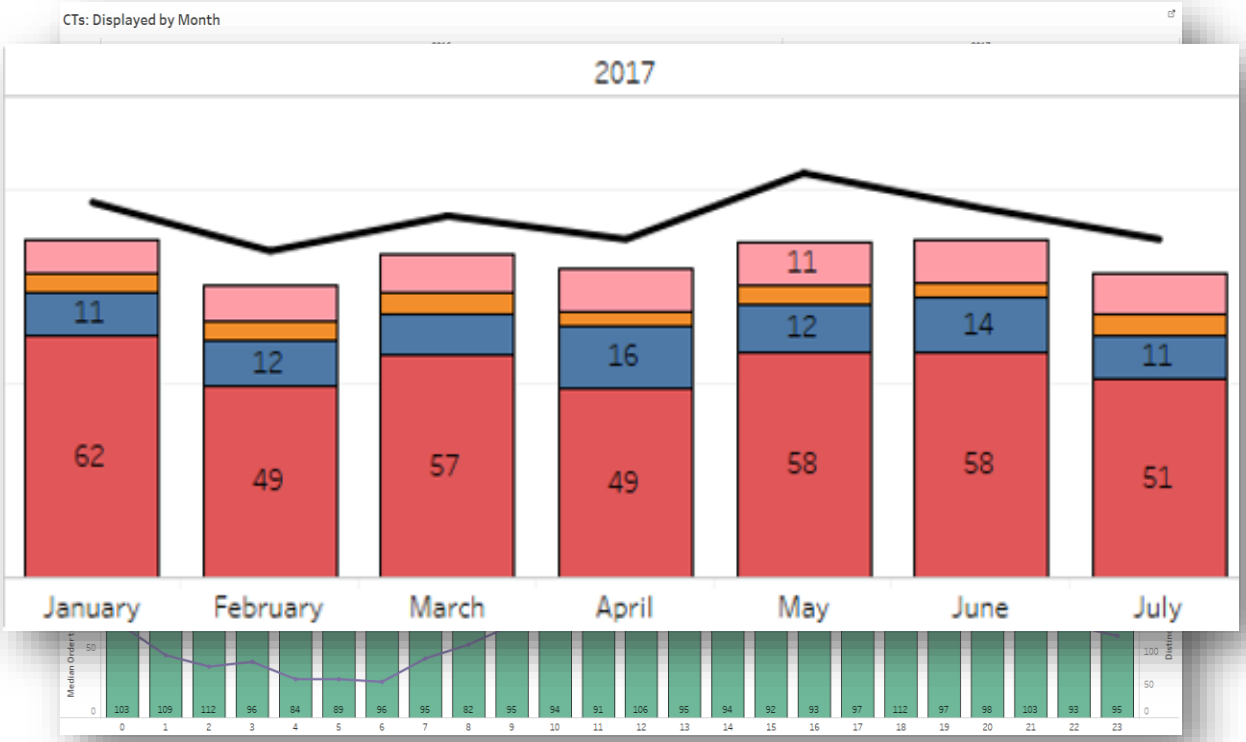
Use Cases:

- Imaging Turnaround Time - Reducing ED LOS



#HIMSS18
©HIMSS 2018

Imaging Turnaround Time



Use Case:

- Turnaround time increases ED LOS

Implications:

- Lower patient satisfaction
- Higher rate of Left Before Treatment
- Increased “boarding”

Measureable Impact:

- Dashboard used in Culture of Improvement model areas
- ED’s reducing TAT in focused cohorts
- Identification of outliers

©HIMSS 2018

ESI dashboards have produced downstream benefits; we are able to more quickly and efficiently meet the demands of our customers.

McKinsey Muir
Analyst, Emergency Services Institute

Care Paths

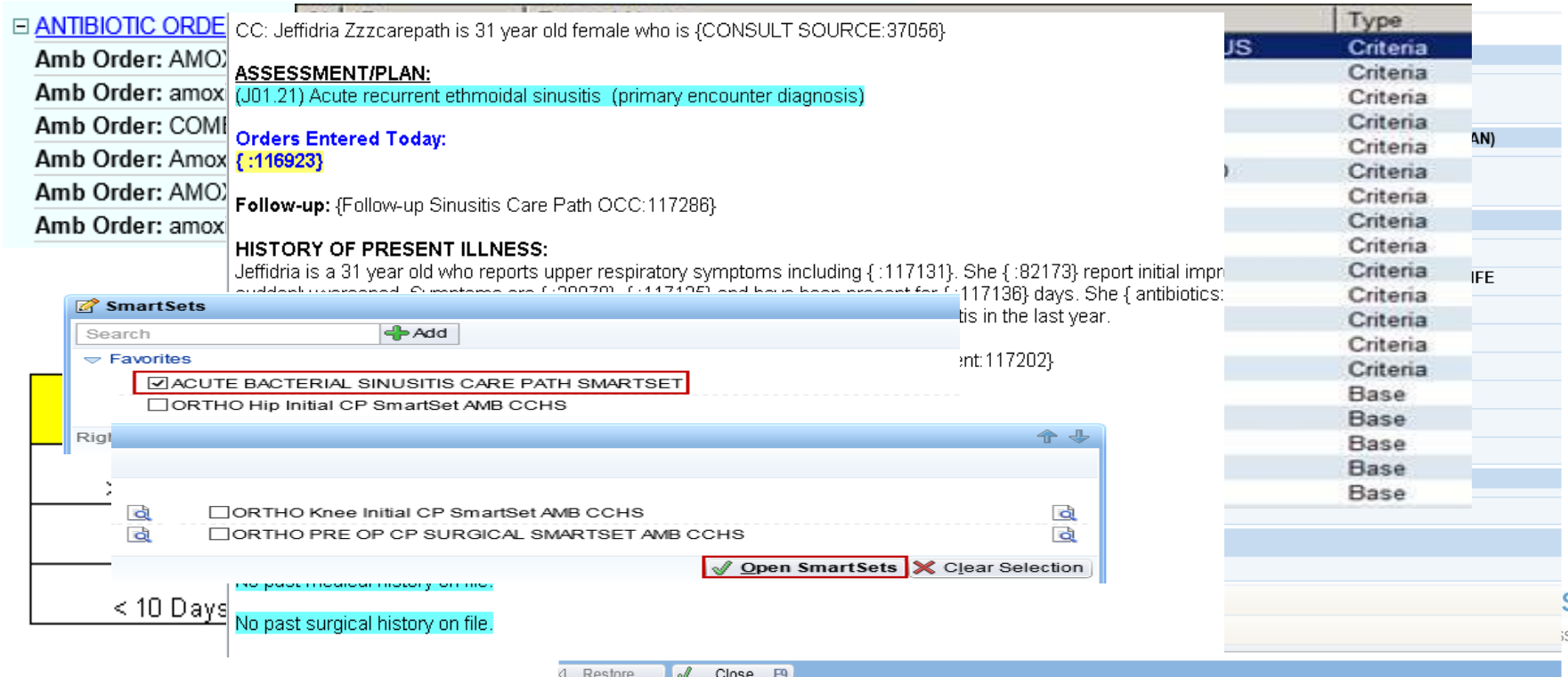
Creating a Path to Improved Patient Care

Process Management Improvement for Healthcare

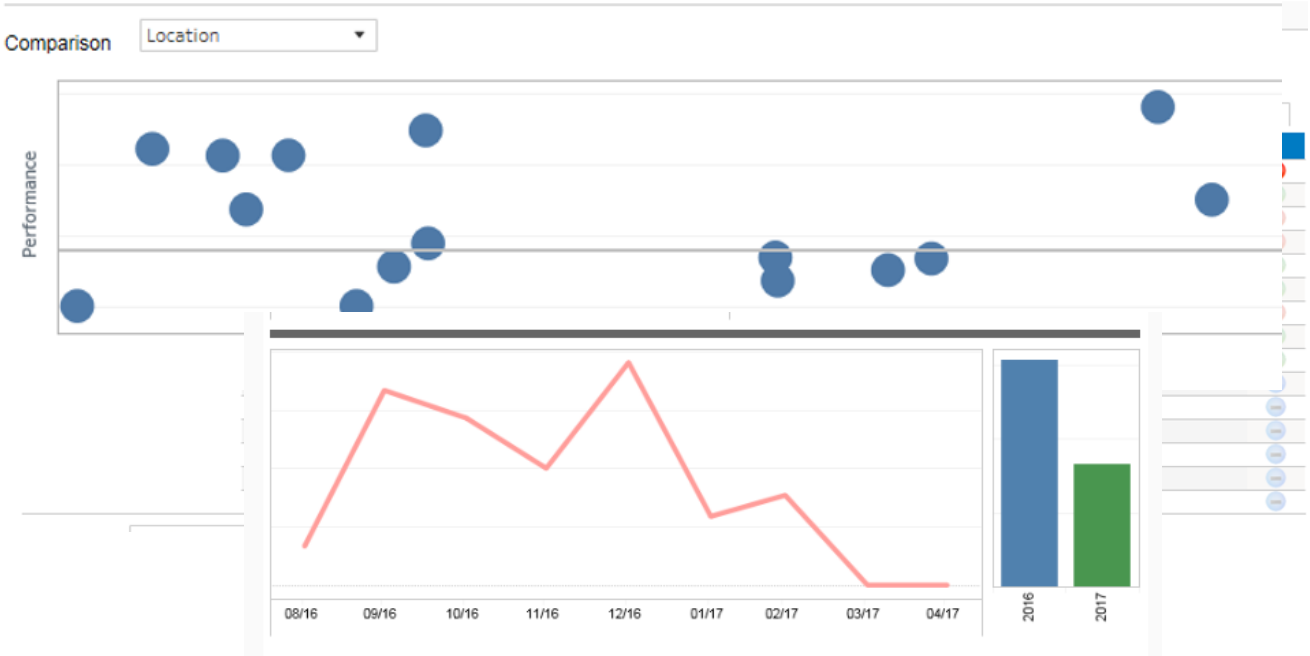
- Optimize patient care
- Reduce practice variation
- Follow established guidelines
- Improve outcomes
- Use of the EMR
- Lower overall care costs

©HIMSS 2018

Care Path and EPIC



Care Path Dashboards



Summarized data

Detail

Flexibility

Trends

Comparisons

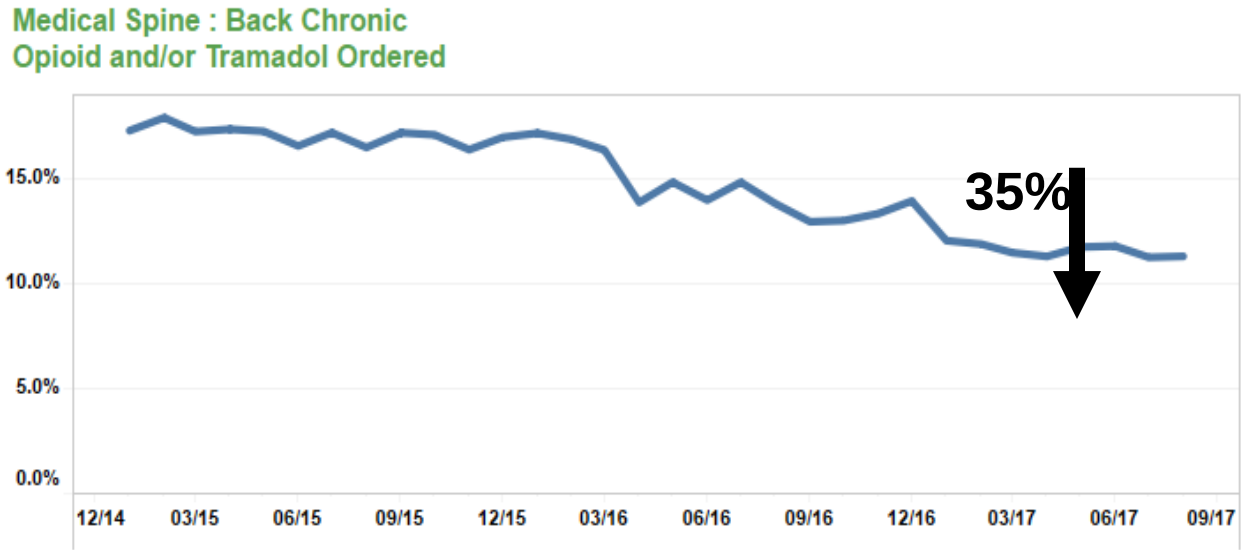
Measure impact

- Why are we doing this?
- What is the impact?

#HIMSS18
©HIMSS 2018

Measureable Impact

- Spine Care Path
  - Cost variables in patient management
  - Improved outcomes
  - Referral to physical therapy
  - Imaging studies
  - Use of opioids



Patient Care

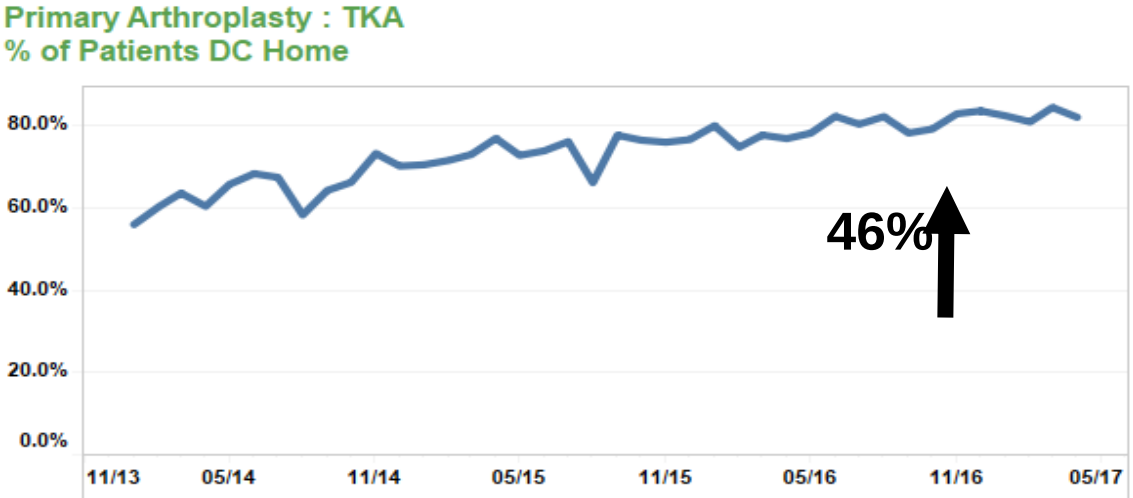
Cost Savings Spine

- Less orders for opioids or tramadol
- Less images ordered

©HIMSS 2018

Measureable Impact

- Total Hip/Total Knee Replacement
  - Elevated hemoglobin
  - Diabetes, heart disease, anemia
  - Appropriate antibiotics
- 30 day readmissions
- 90 day reoperations
- Discharge to home



Patient Care

- More patients discharged to home

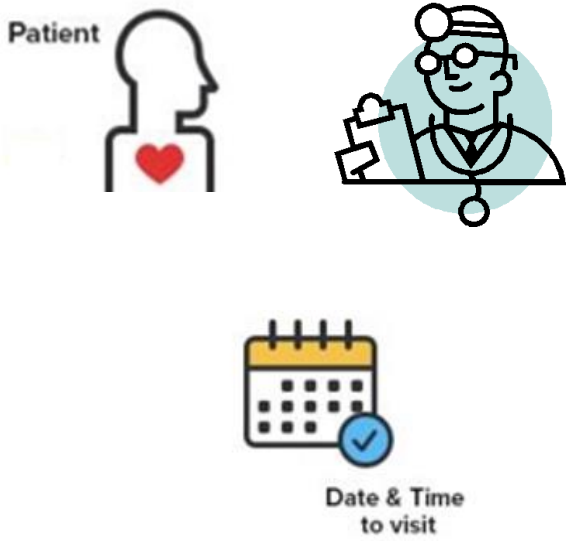
Cost Savings

- Less nursing home days

©HIMSS 2018

Patient Access

Patient Access Factors



#1. Making an appointment

- Provider schedule/template

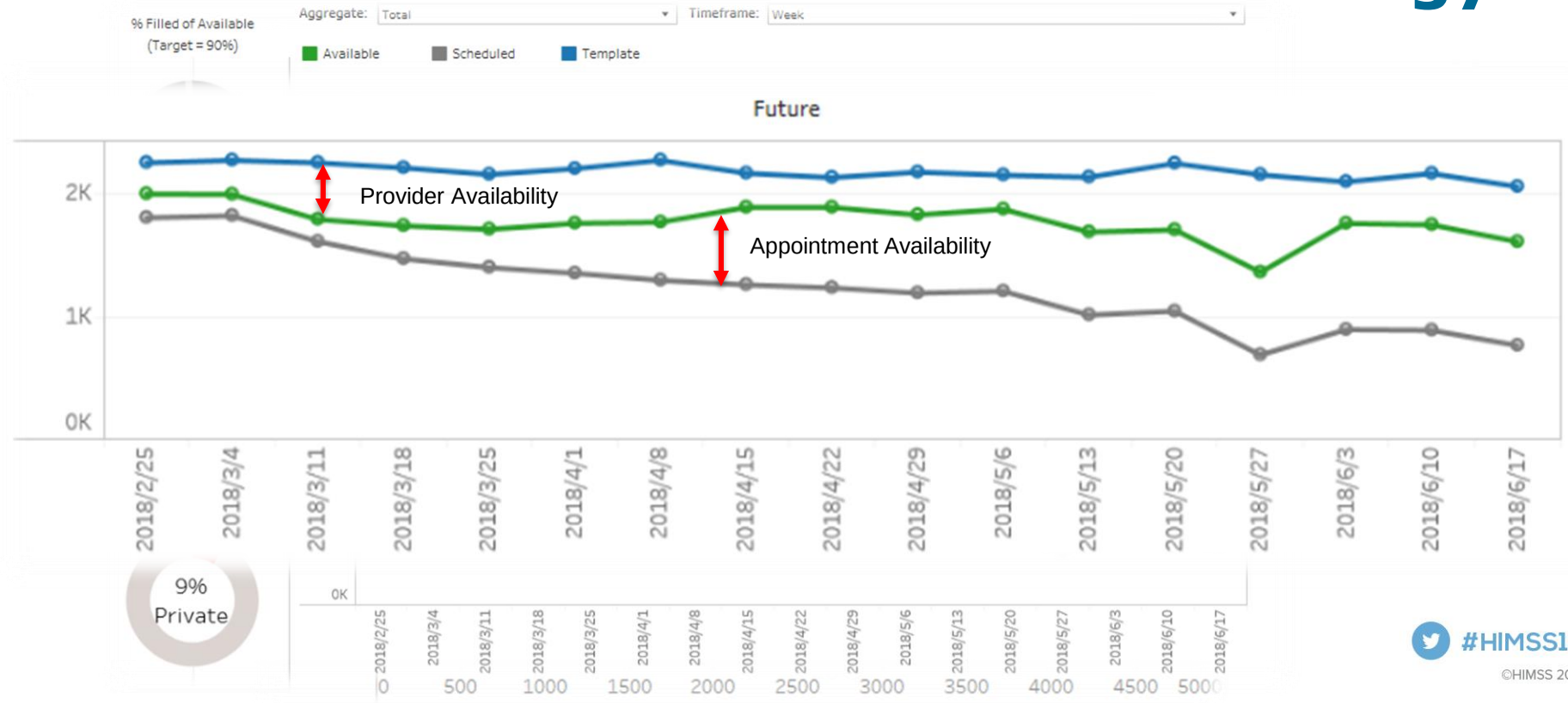
  Appointment type
- Provider availability

  Meetings
  Time off
- Patient availability

  Time
  Location

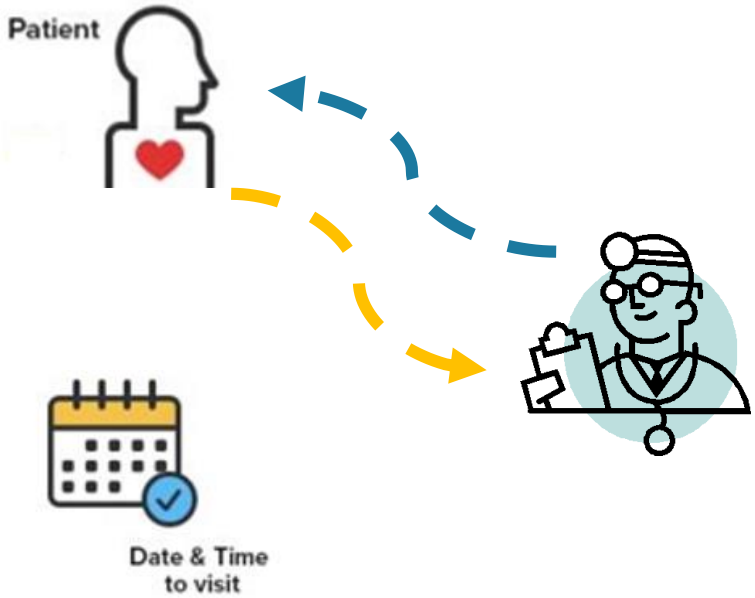
#HIMSS18
©HIMSS 2018

Endocrinology



©HIMSS 2018

Patient Access



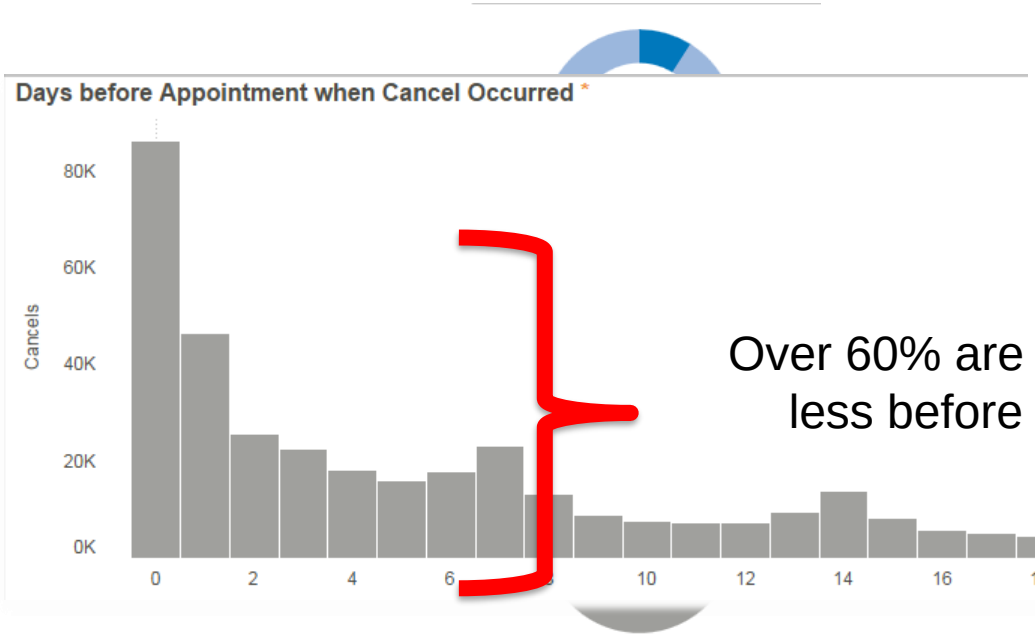
#2. Keeping appointment

Hospital/Office Cancels

Same Day Cancels/No Shows

©HIMSS 2018

Hospital Cancels



Hospital/Office Cancels

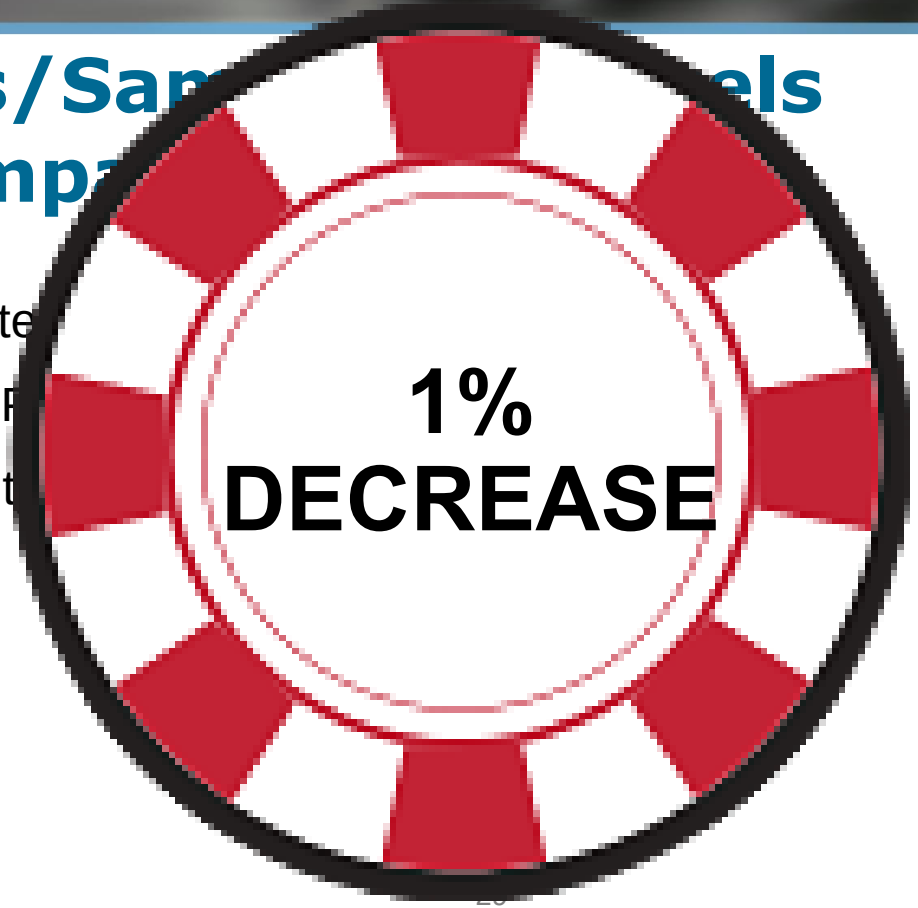
- Provider unavailable
- Schedule changes
- 2% = 30K canceled appointments

Over 60% are canceled 7 days or less before the appointment

#HIMSS18
©HIMSS 2018

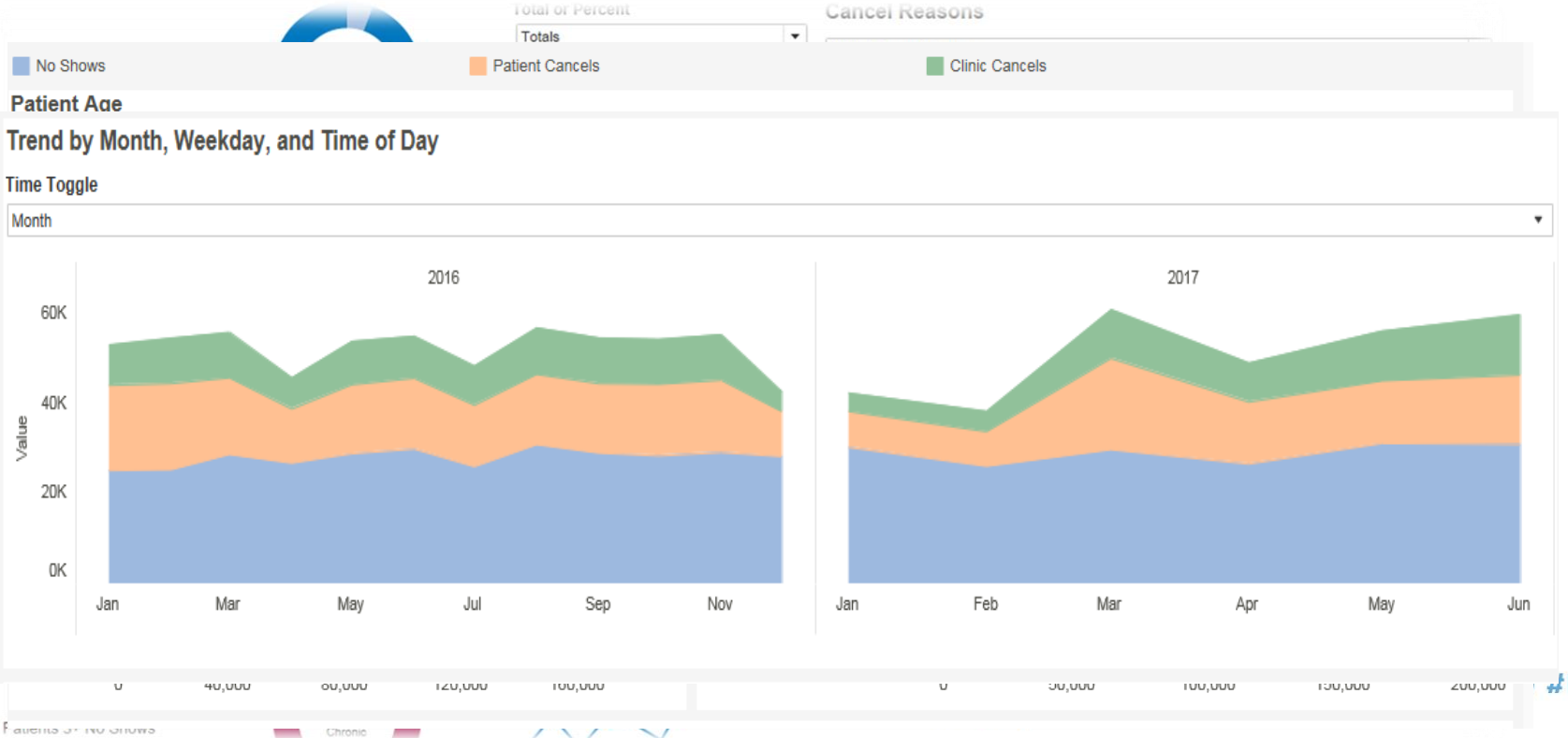
No Shows/San els Overall Impa

- Negatively Affecte
- Artificial Access F
- Office Productivit
- Lost Revenue



©HIMSS 2018

Summary Dashboard

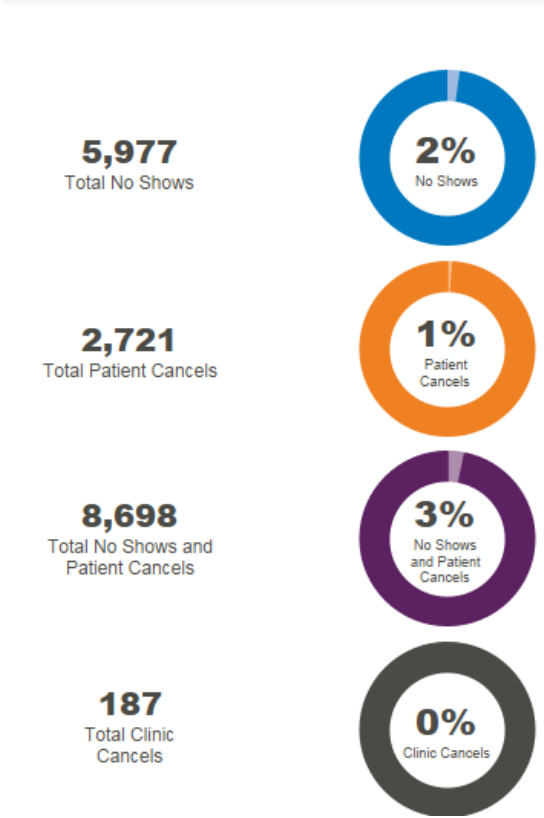


©HIMSS 2018

Endocrinology

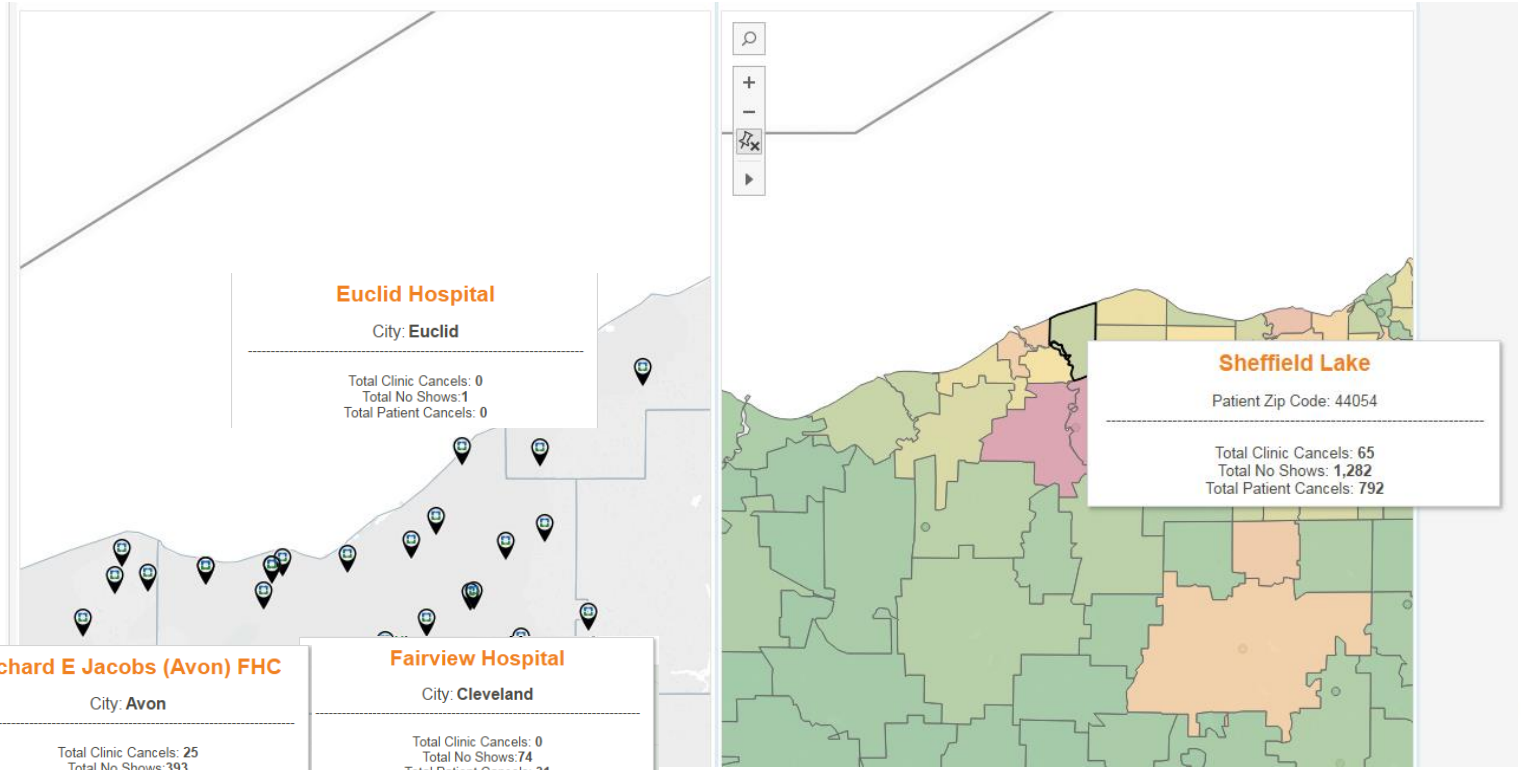
Same Day Cancel Rates

- Lower than Hospital Average
  - No shows: 2% vs 6%
  - Patient Cancels: 1% vs 3%
  - Clinic Cancels: very low



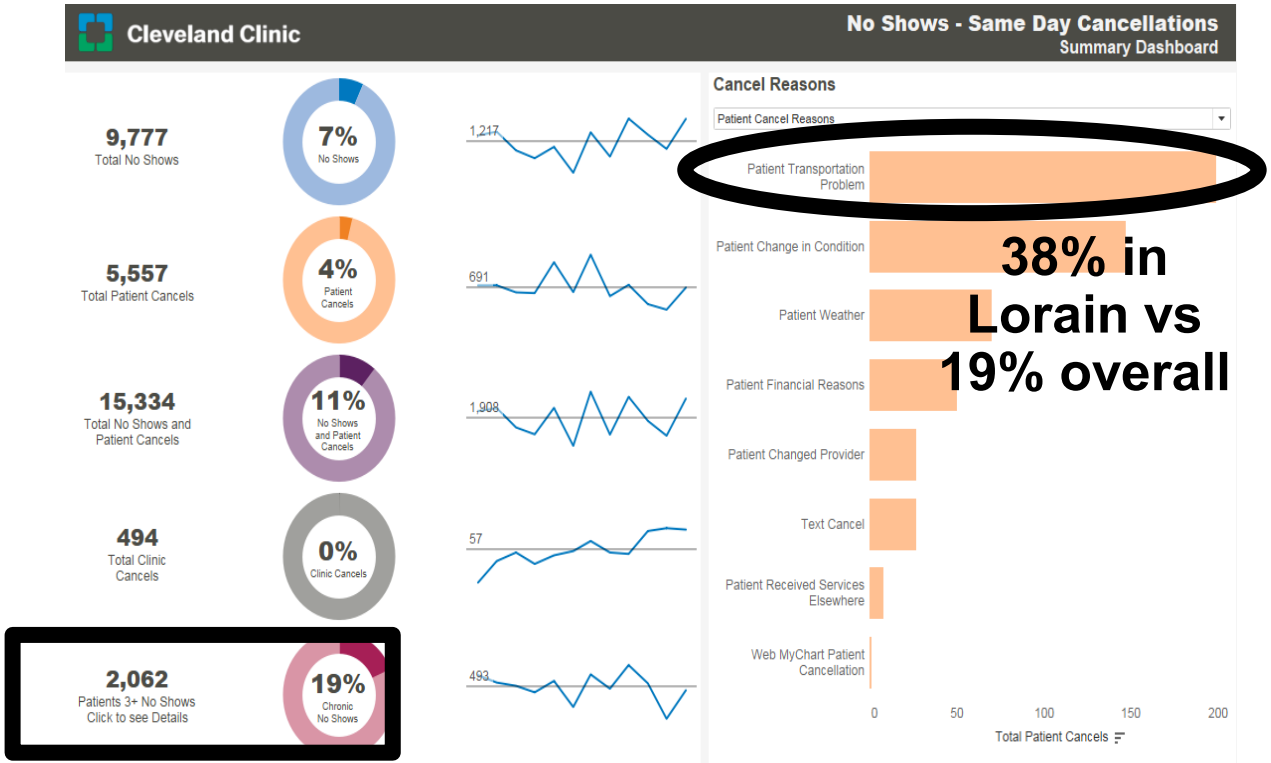
©HIMSS 2018

No Shows & Same Day Cancellations



©HIMSS 2018

Use Case: Lorain & Transportation



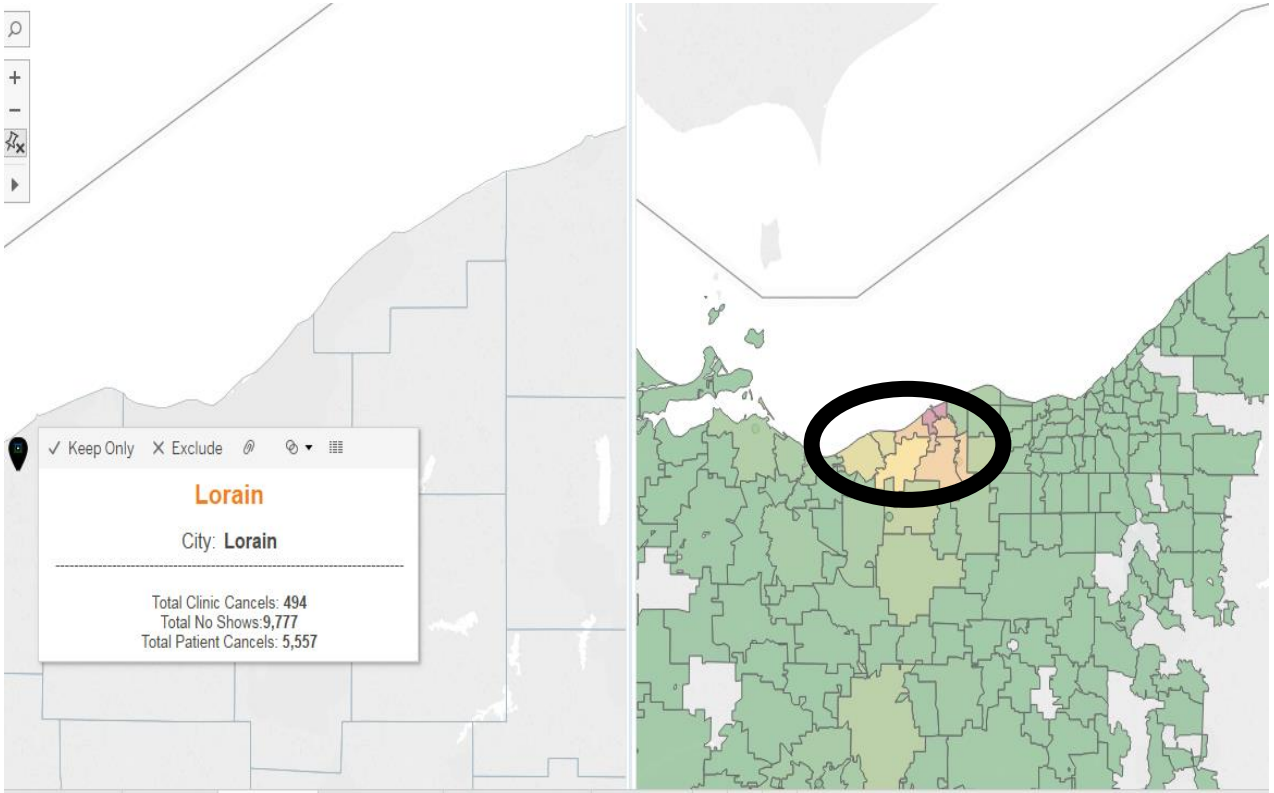
Use Case:

- High percentage of chronic no shows/same day cancels
- Patients cancel due to transportation

#HIMSS18

©HIMSS 2018

Use Case: Lorain & Transportation



Use Case:

- 74% live within 10 miles of the Lorain FHC

Implications:

- Higher health costs
- Higher acuity health issues
- Low patient/provider satisfaction
- Lower productivity

Measurable Impact:

- Pilot program initiation

©HIMSS 2018

Creative Solution

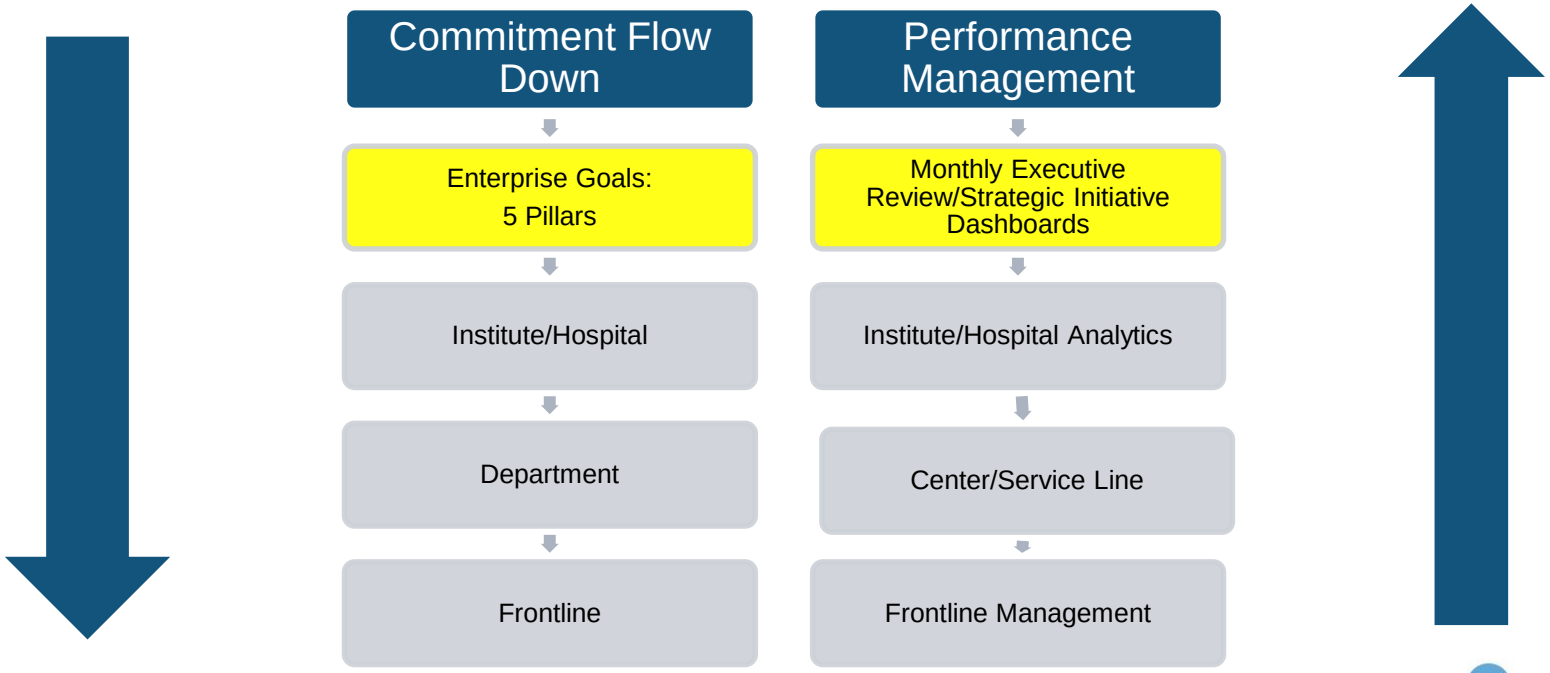
Same Day Cancel

- Patient calls to cancel appointment
- Patient Service Representative asks for reason
- If reason is transportation offer ride program

#HIMSS18
©HIMSS 2018

Executive Operating Review

Institutional Alignment



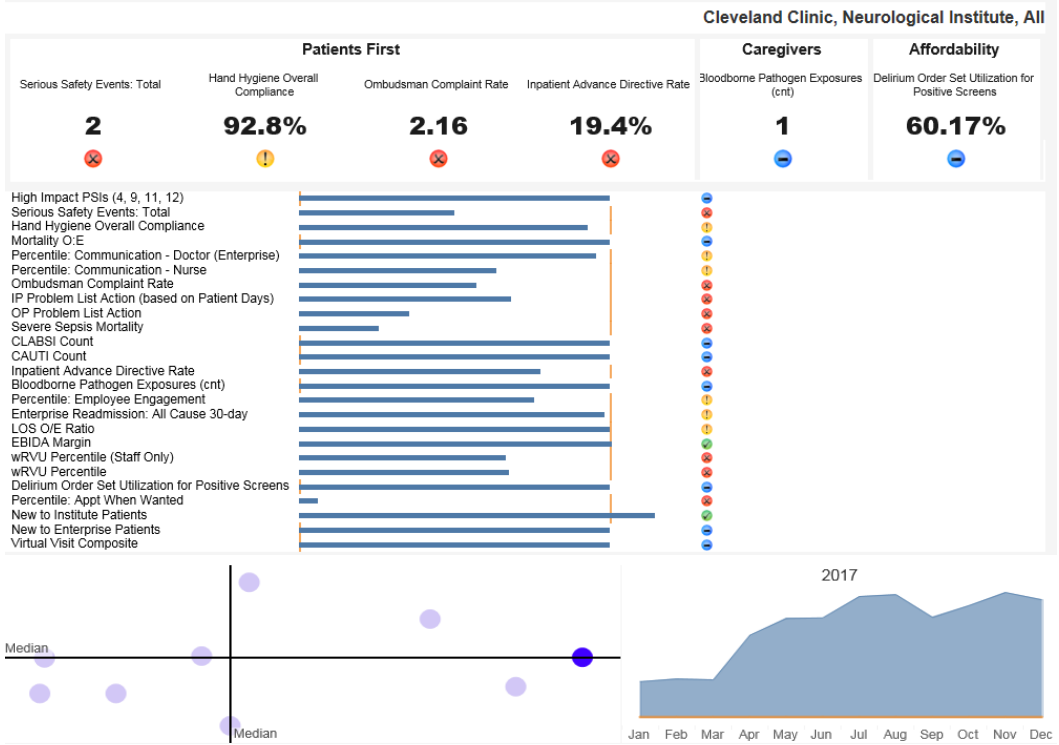
©HIMSS 2018

Strategic Agenda Management

- Designed to facilitate strategic execution
  - Prioritization and focus
  - Alignment among operating units
  - Speed to execution
  - Caregiver connections
- Framework:
  - Enterprise goals (5 Pillars)
  - Clinical Enterprise Priorities
  - Key Performance Indicators (KPIs)

#HIMSS18
©HIMSS 2018

Monthly Operating Review



Use Case:

- Measure the success on KPI's driving the strategic agenda

Current Conditions:

- Identifying & prioritizing critical goals and initiatives
- Collaborative problem solving
- "Close the gap" discussion

Measureable Impact:

- Business unit alignment to Enterprise Goals
- Leveraging of best practices
- Accountability

#HIMSS18
©HIMSS 2018

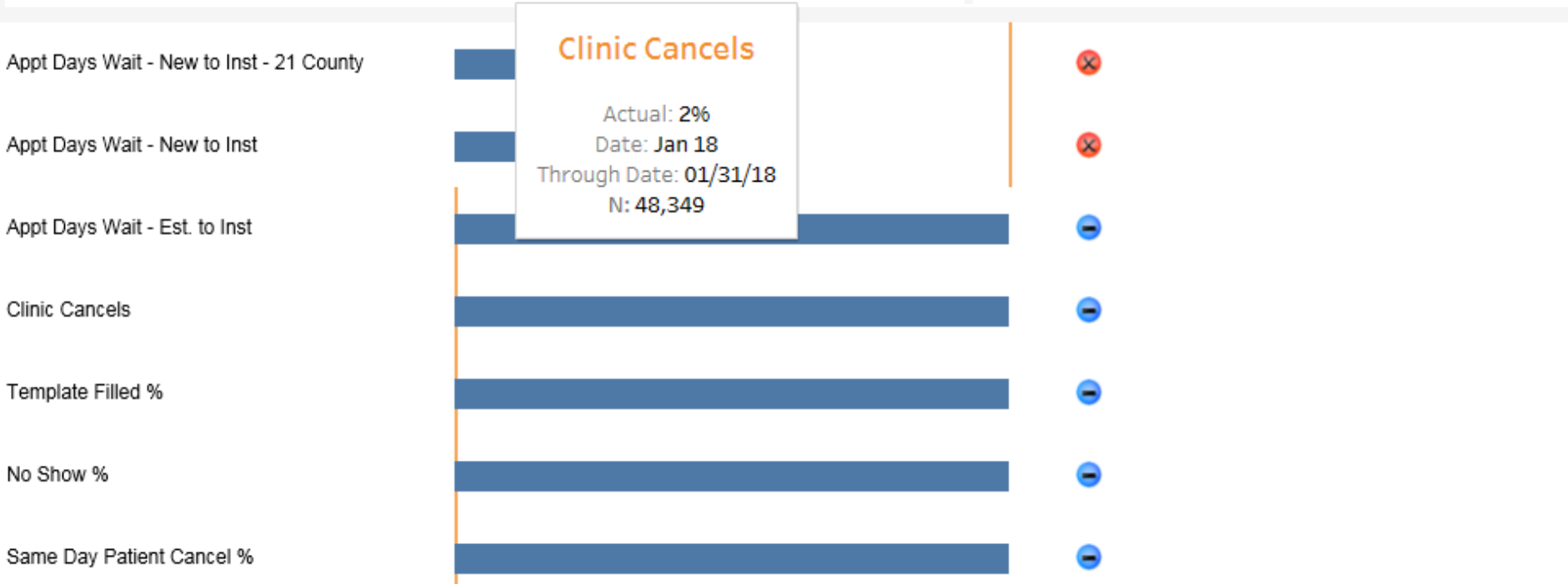
Monthly Operating Review: Neurological

Patients First

Appt Days Wait - New to Inst	Clinic Cancels	Template Filled %
12	2%	84%

Growth

No Show %	Same Day Patient Cancel %
6.86%	4.73%



Benefits and Next Steps

Implementation is a journey…

Divert ad hoc and project requests:

- Analytics delivery up 146%, Distinct users up 54%
- 86% increase in projects of “High” complexity by enterprise resources

Continue self-service direction:

- Increase data accessibility through Enterprise Data Vault
  - Certify and publish data sources to Tableau Server
- Build Power User community for best practice sharing
- Implementation of Analyst University – increase Analyst acumen

©HIMSS 2018

Questions

Cleveland Clinic

Michael Mann mannm4@ccf.org
Joan Thompson thompsj7@ccf.org

Please complete online session evaluation

©HIMSS 2018