

Executive Briefings: Implementing Health Reform

# Variation in Health Care: More than Geography

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American Hospital Association 2011 Annual Member Meeting

April 12, 2011, Washington, DC

## RUSH IN BRIEF

Date founded .....	1837
Medical staff .....	890
Professional nursing staff .....	1,153
Residents and fellows .....	650
Employees .....	8,426

## STAFFED BEDS

Rush University Medical Center .....	600
Johnston R. Bowman Health Center .....	58
Rush Oak Park Hospital .....	128

## BIRTHS

Rush University Medical Center .....	2,054
Rush Oak Park Hospital .....	N/A

## ADMISSIONS

Rush University Medical Center .....	30,699
Rush Oak Park Hospital .....	4,324

## AVERAGE LENGTH OF STAY (DAYS)

Rush University Medical Center .....	5.74
Rush Oak Park Hospital .....	6.45

## PATIENT DAYS

Rush University Medical Center .....	176,200
Rush Oak Park Hospital .....	27,877

## OPERATIONS PERFORMED (inpatient and outpatient)

Rush University Medical Center .....	20,405
Rush Surgicenter .....	5,231
Rush Oak Park Hospital .....	4,899

## EMERGENCY ROOM VISITS

Rush University Medical Center .....	47,767
Rush Oak Park Hospital .....	21,807

## About Rush University Medical Center

An academic medical center based in Chicago

Health sciences university

Recognized for quality, ambition to be a leader



# What did we set out to do?

- Slow down growth in expenses
  - “bend the cost curve”
- Find opportunities for growth in revenue
- Intrigued by the notion of variations
  - Do local variations in care affect cost and quality?
  - Can we reduce variations not driven by patient needs?

# Context for our work

- External
  - Payment reform, healthcare reform
  - Dynamic market, many local players
- Internal
  - Strategic focus on quality, safety and efficiency
  - Campus transformation – new Tower
  - Investment in electronic health record

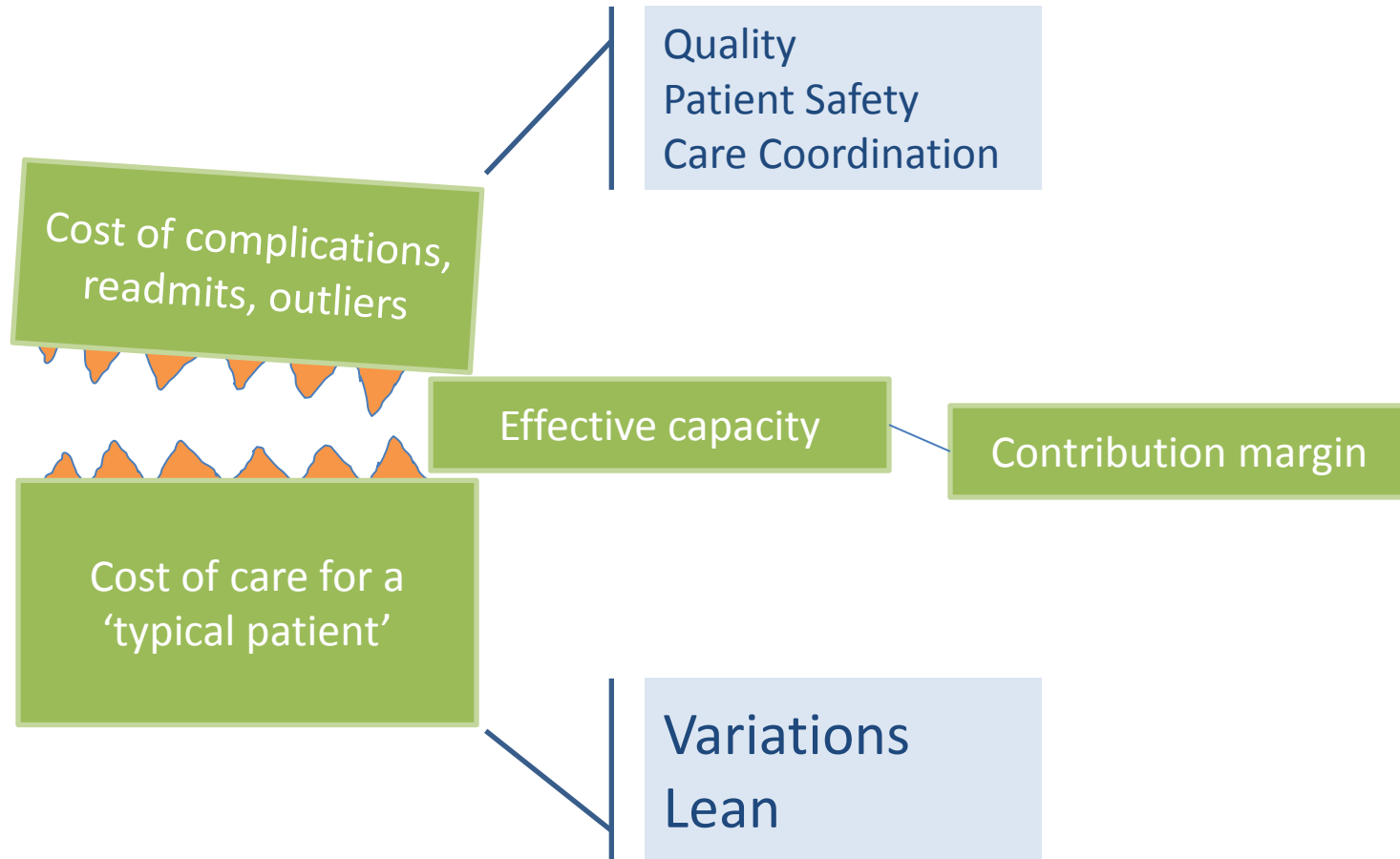
# Guiding principles

- Maintain or improve quality and safety
- Prepare for payment reform and emerging reimbursement models
- This is not a short-term initiative, we want to hardwire new ways of thinking about care delivery

# Approach

- Minimize variations unless driven by patient needs
- No “top down” mandate to “cut costs by x%”
- Initiatives led by physician leaders of clinical programs
- Multi-disciplinary teams, plus
  - Medical leadership, Quality and Finance

# Taming the 'cost dragon'



# Cross-cutting initiatives focus on high cost

Medications

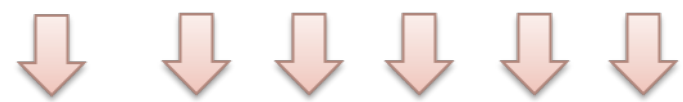
Imaging & Diagnostics

Capacity (Room/Labor)

Laboratory

Blood products

Medical/Surgical Supplies



High-impact resource focus

Examples:

Factor VIIa

Low molecular weight heparin

*Fibrin sealants*

Examples:

*Red blood cells*

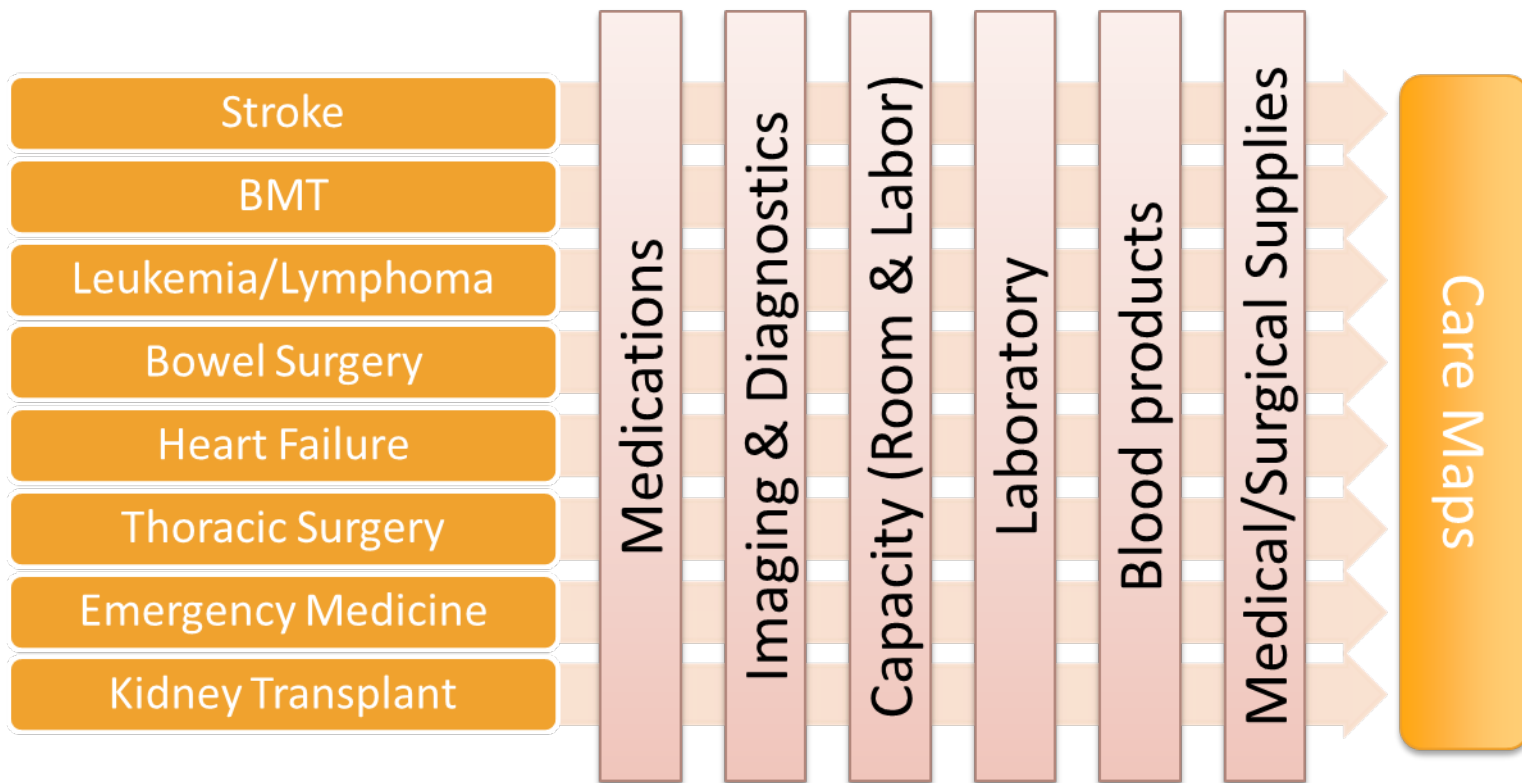
*Platelets*

Examples:

Surgical staplers



# Programmatic focus – quality, cost *and* growth



The unit of analysis is the program – easier to engage physicians; allows use of a systems approach and a chance to identify growth opportunities

# Selecting programs

Definable clinical population

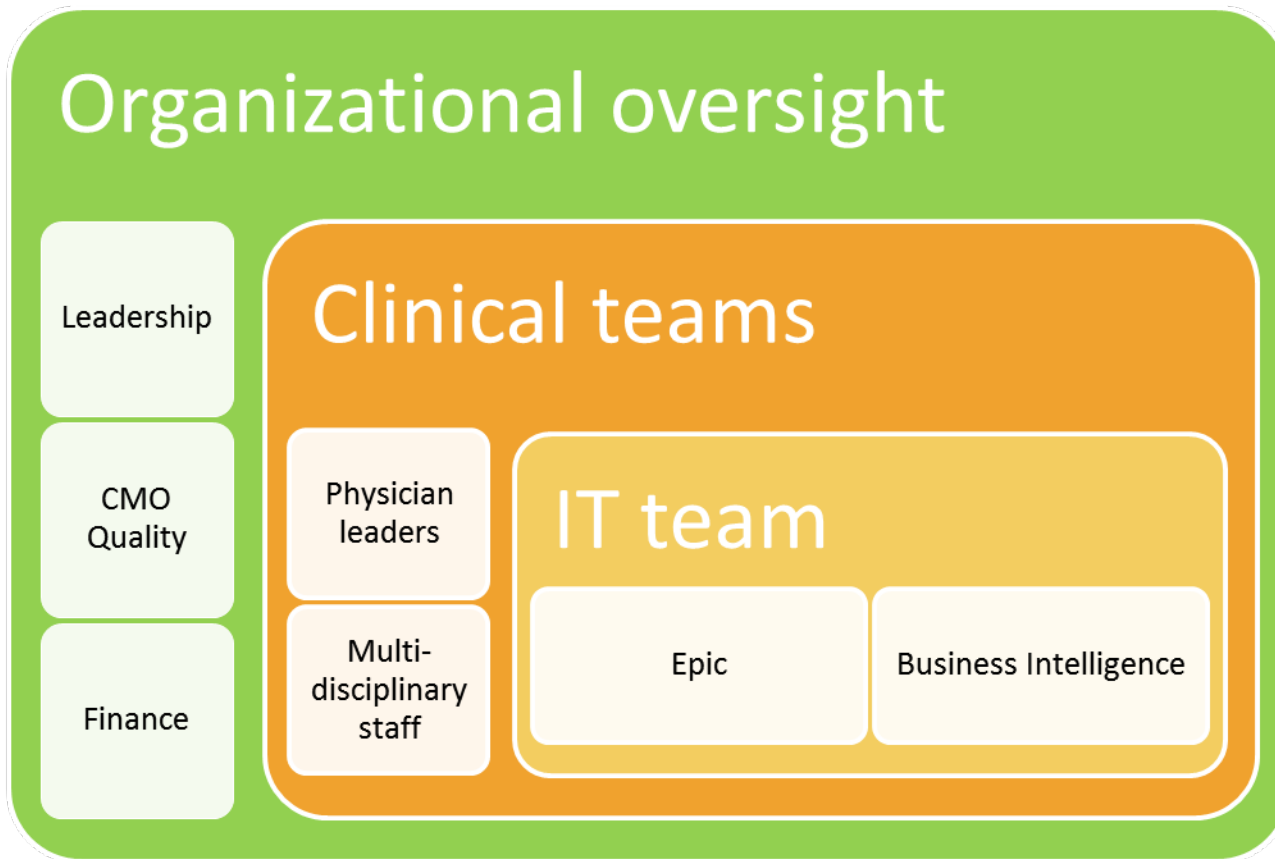
High-volume, and/or relatively high cost per case

Variations in resource use

Start with engaged physicians and staff

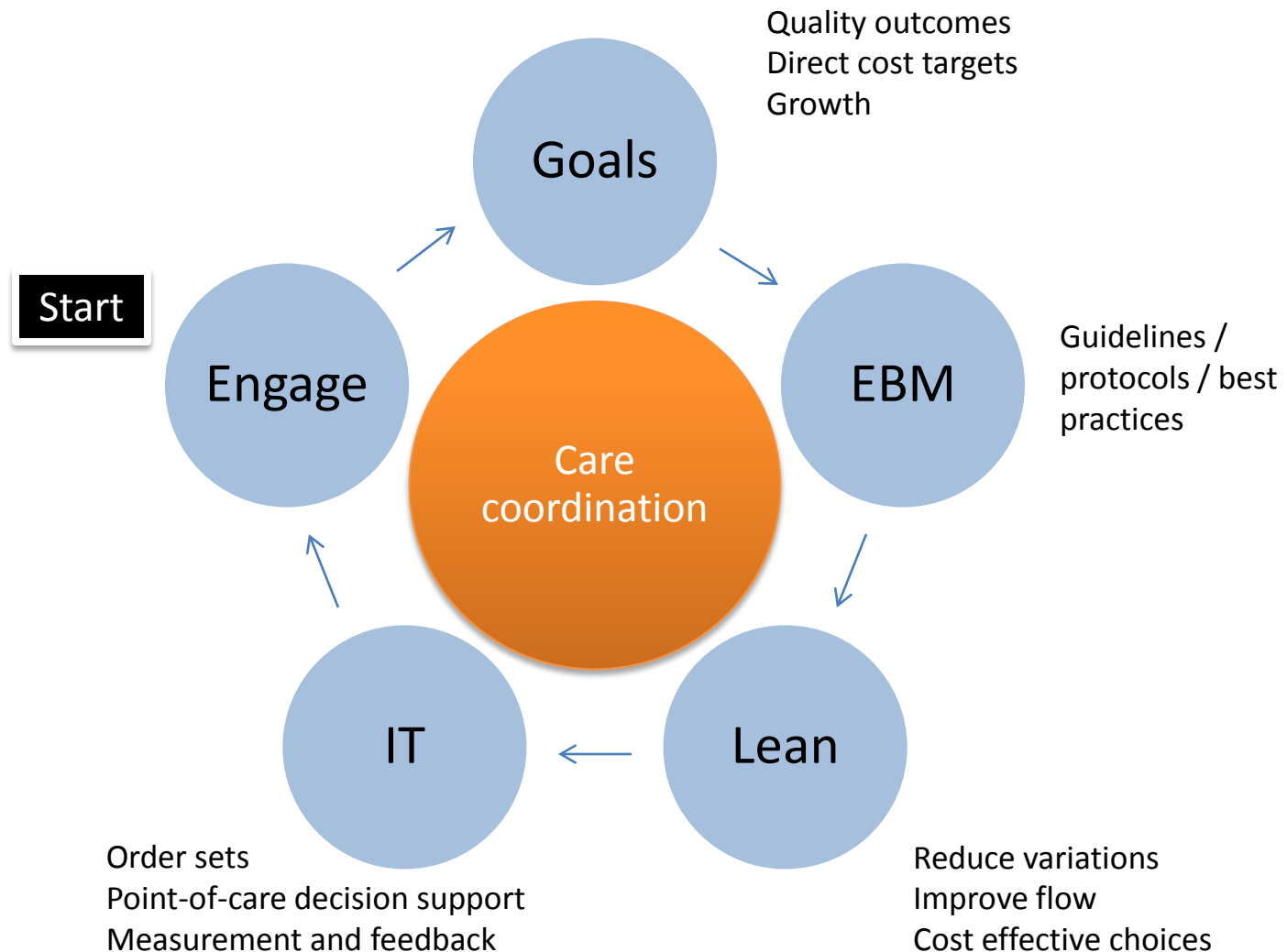
*Message is clear: Being selected is not a bad thing*

# Management structure



# Framework for action

# Evidence-based, Lean Care Maps



# Engaging physicians

Most physicians do not know how much treatments and tests cost

Start with “screening data” – crude, high-level

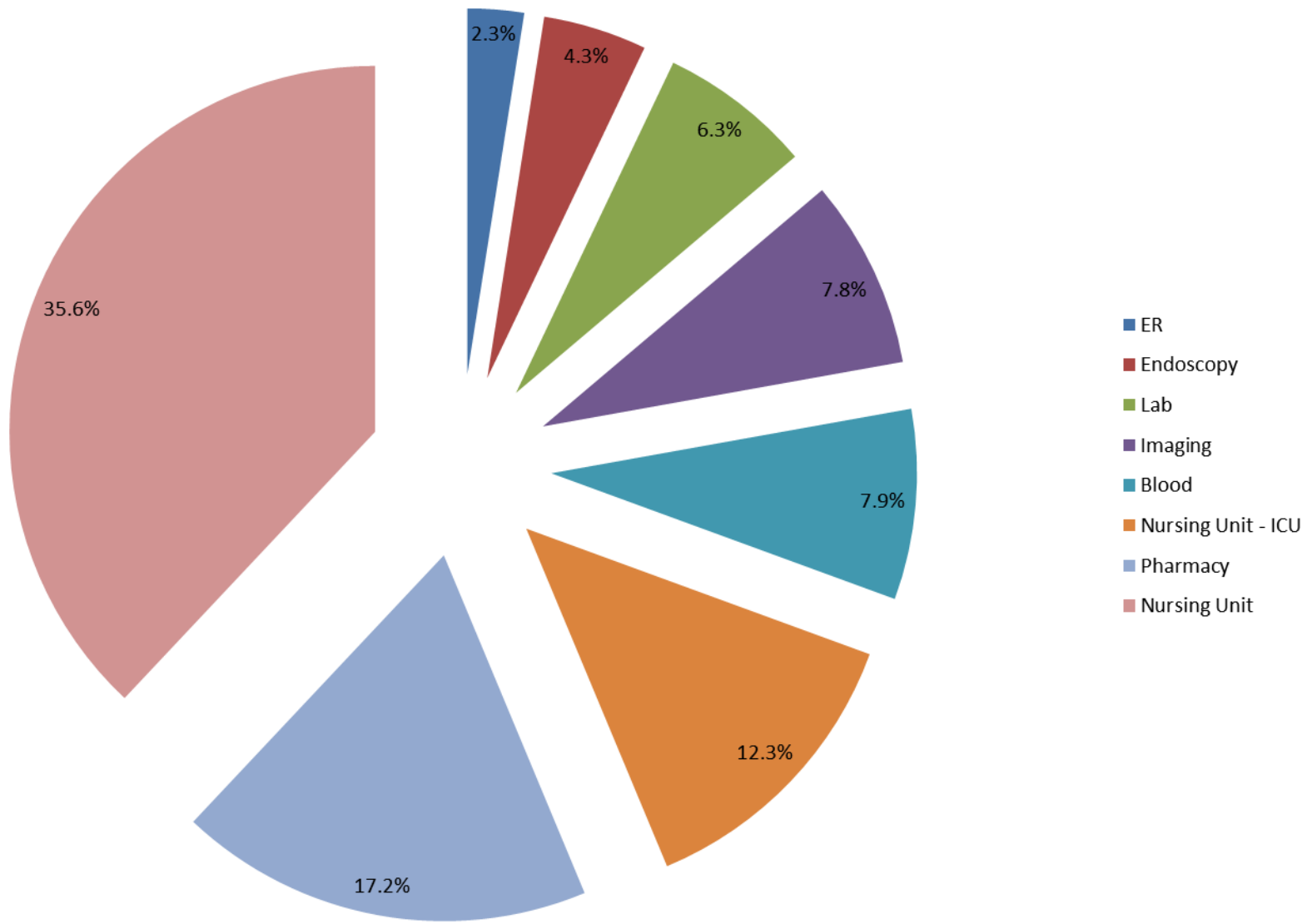
- Total direct cost for patient population
- Costs broken down by major components
  - pharmacy, nursing, laboratory, radiology, etc.
- Data on clinical outcomes

Ask for input, design analysis together

Invite peers who have gone through this to the kickoff

*Tone cannot be “You are spending too much!”*

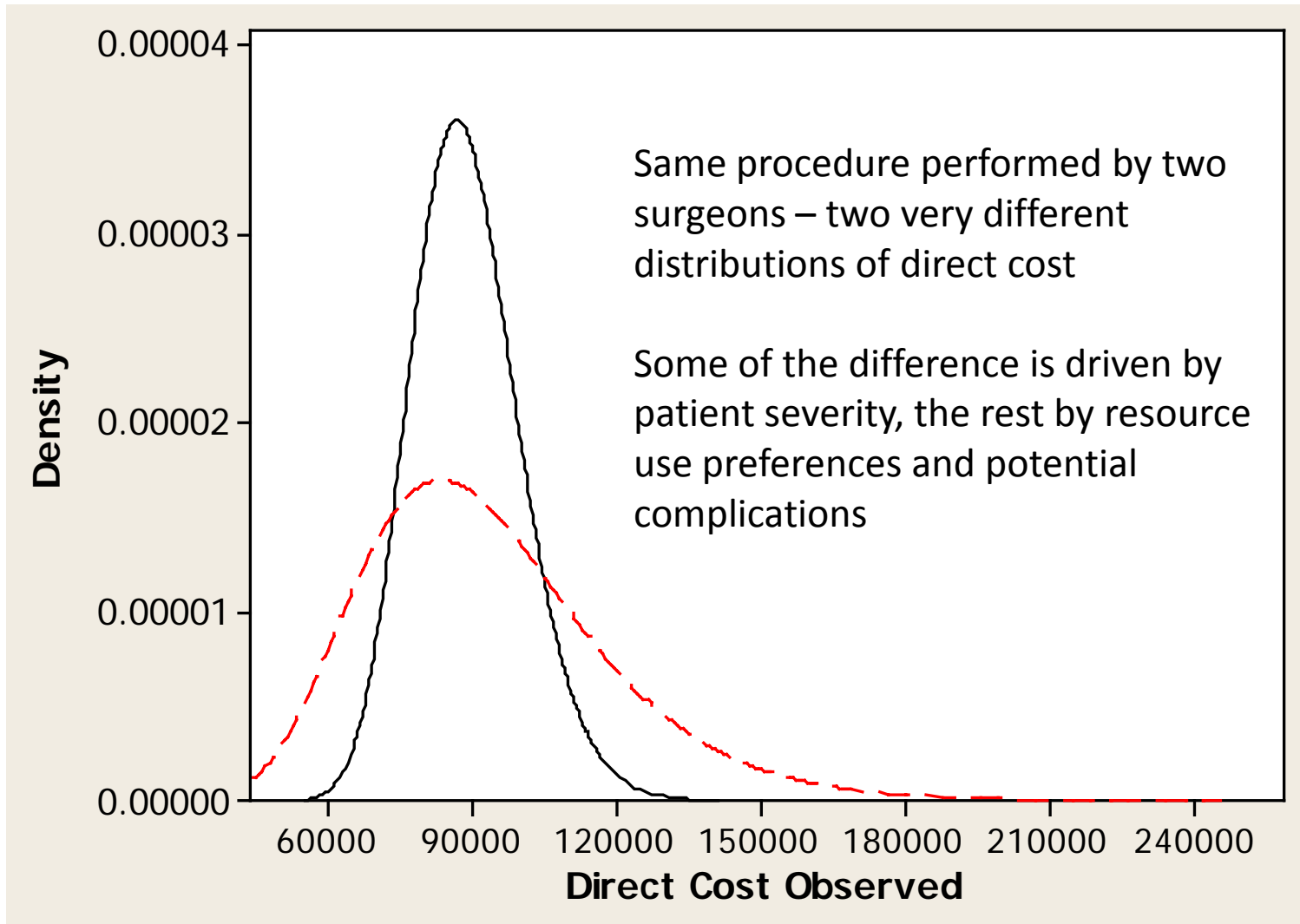
# Relative contributors to cost in Hepatology



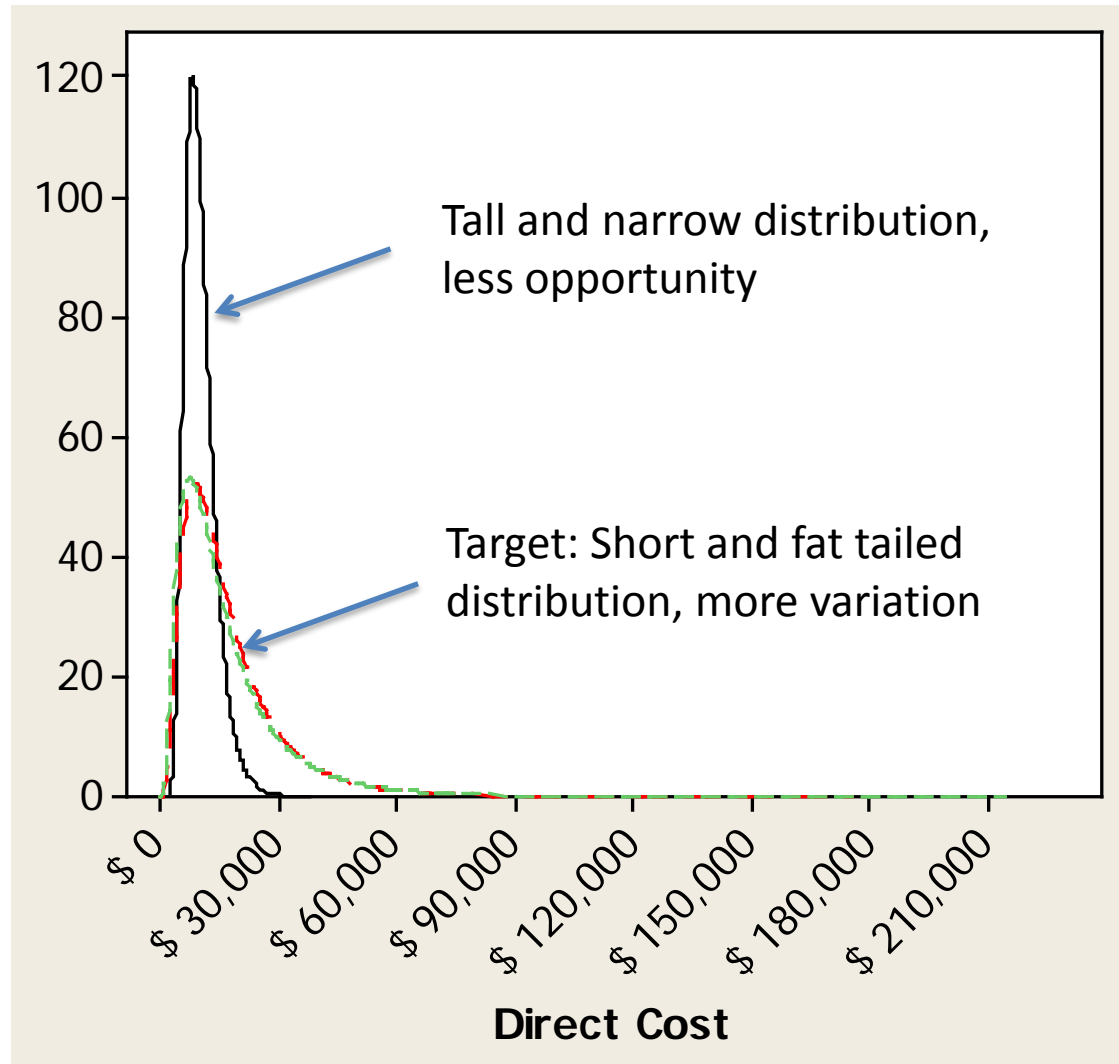
# Use of data to understand variations and key drivers



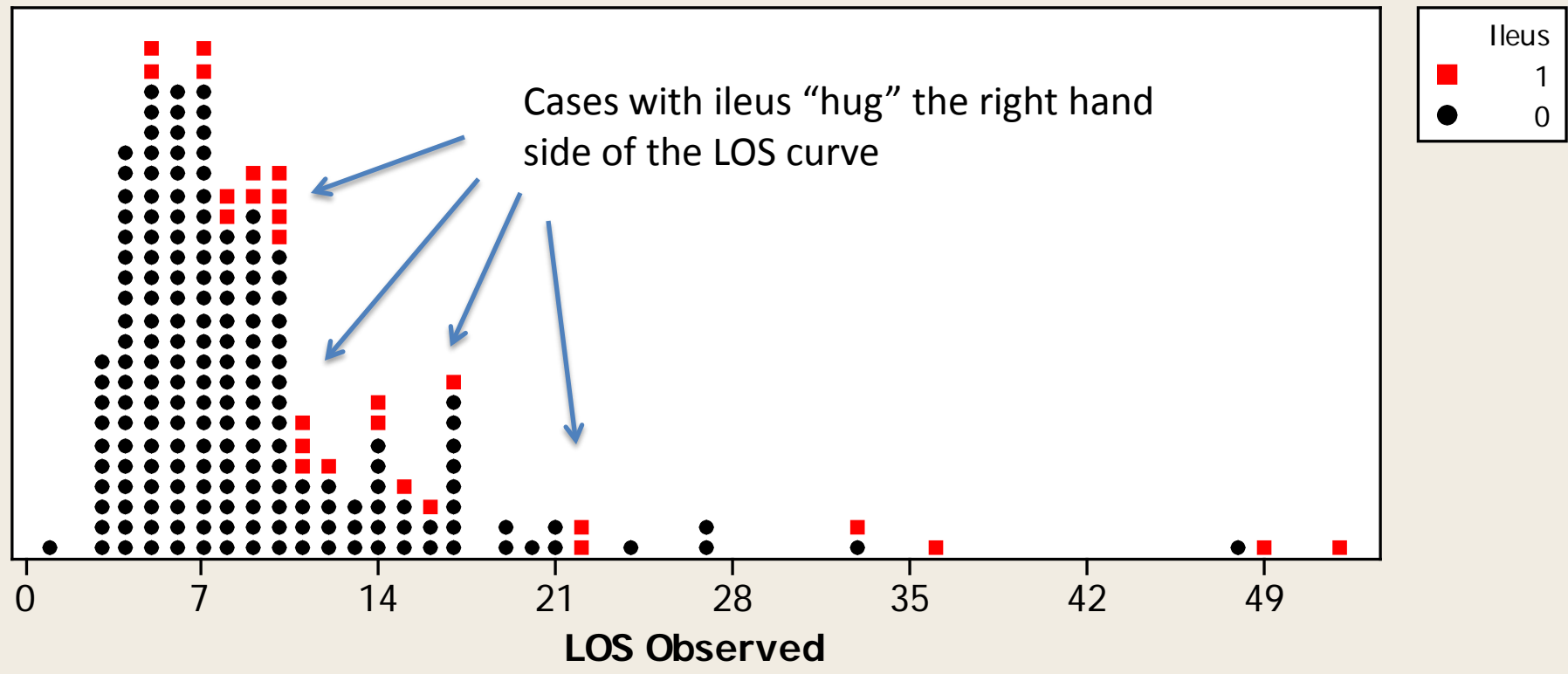
# Physician-to-physician variations in cost



# Finding target areas with greater variation and opportunity



# Impact of *potential* complications: Distribution of post-op ileus cases



# Action Plan Outline

Review quality, costs and current process

Identify evidence-based care standards

Reduce variations in practice and resource use not driven by patient needs

Improve efficiency, remove inefficiencies that do not add value to patient care

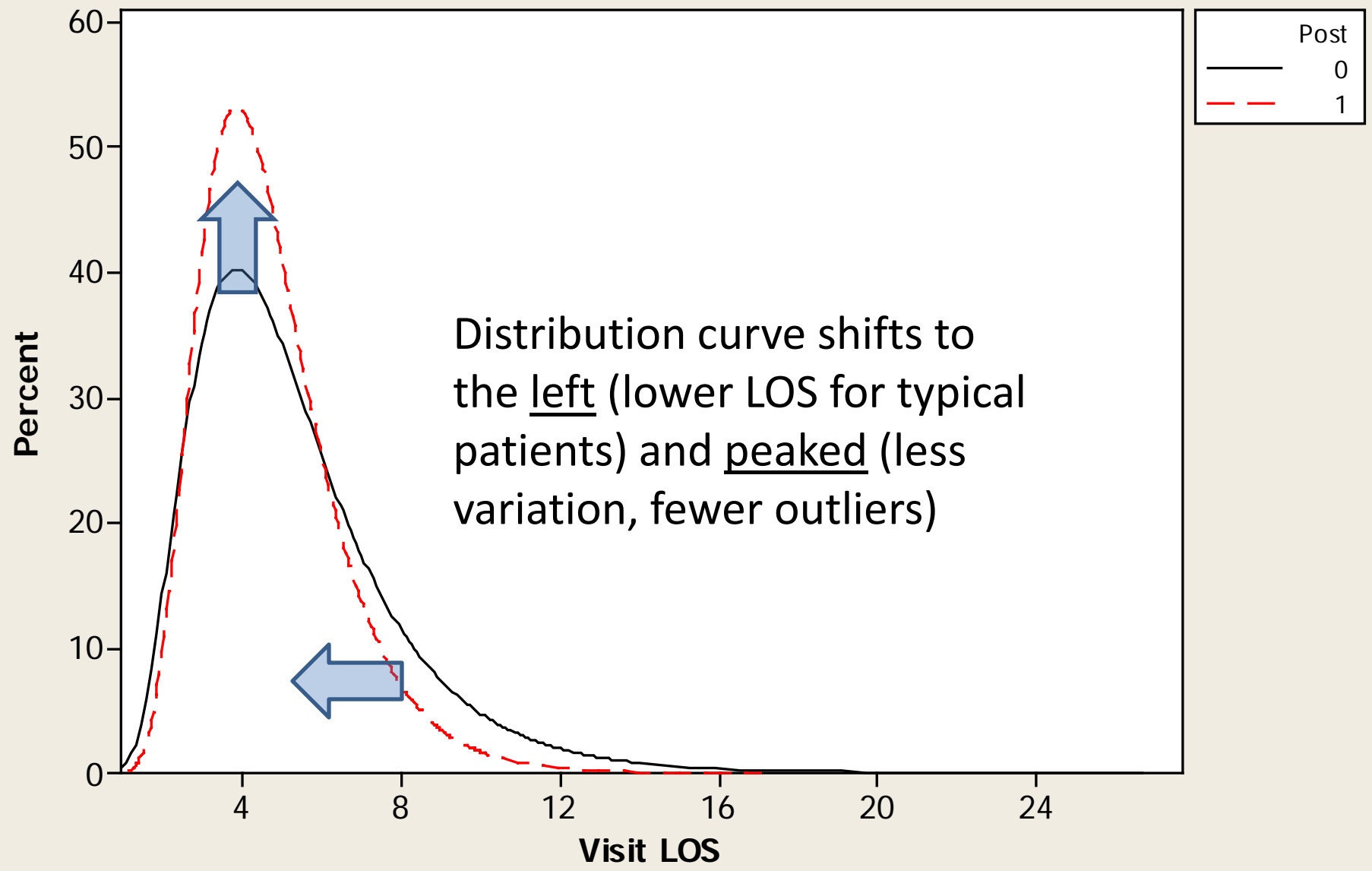
Hardwire and measure care standards, provide feedback

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Lower expenses, quality impact positive or neutral

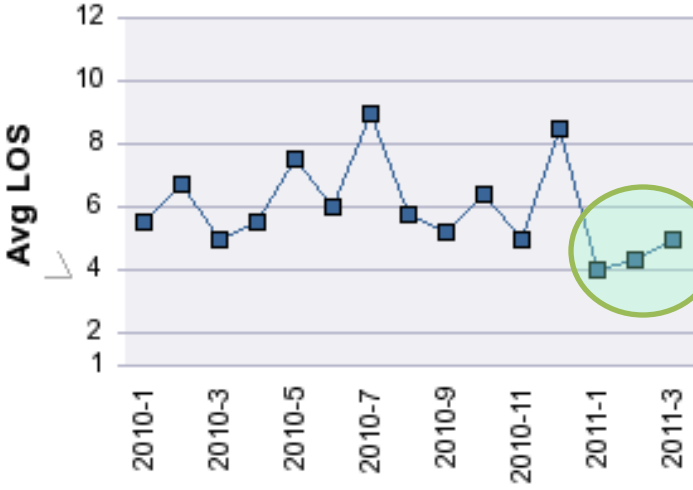
# Examining impact

# Are we making a difference? Laparoscopic colectomy (pre/post)



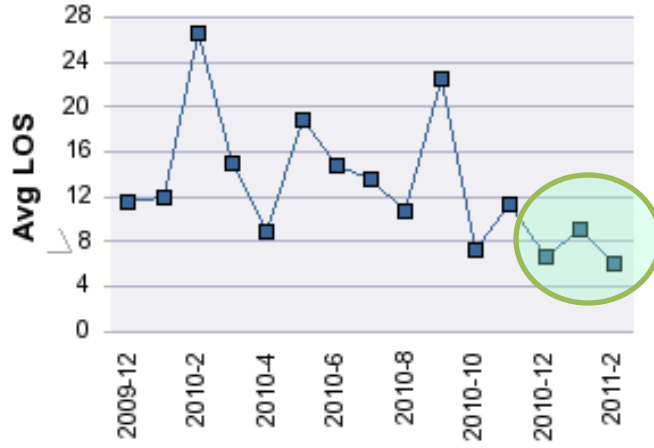
Distribution curve shifts to the left (lower LOS for typical patients) and peaked (less variation, fewer outliers)

# Bowel Surgery: Impact on Length of Stay



[Admit Date by Month Number]

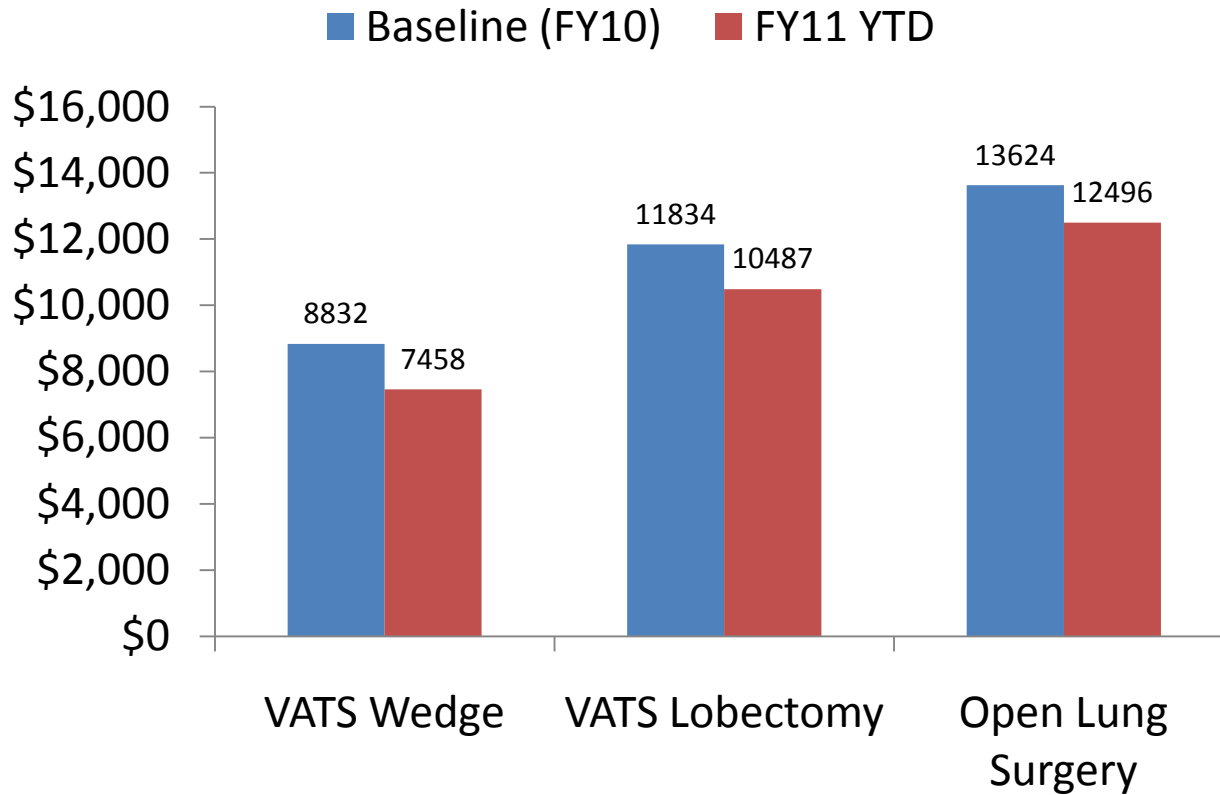
Laparoscopic colectomy:  
 Reduced average LOS; reduced variability after implementation of new protocols



[Admit Date by Month Number]

Open colectomy:  
 Reduced average LOS; reduced variability after implementation of new protocols

# Thoracic Surgery: Impact on direct cost per case (preliminary)



Reduction in direct cost per case of \$1100-\$1300 in each procedure group



# Overall impact to date

- Financial impact in Year 1 and 2 over \$5 million
- Examples of program-specific improvements
  - Reduced readmissions and central line infections in BMT
  - Reduced drug utilization in stroke, BMT
  - Lower LOS in bowel surgery, thoracic surgery
  - Program growth in stroke
- Gradual shift in culture

# Key Lessons

- Reducing variations is only half of the game – new choices must be lean and hardwired
- Physician engagement is essential
- Instead of telling physicians what to do, ask what can be done differently – and provide support
- Medical leadership and collaboration with Finance are essential for success
- Internal benchmarks are good enough
- Don't wait for perfect IT systems or perfect data, use what you have and get started