



Institute for  
Healthcare  
Improvement

March 10, 2015

12:00 PM ET

# Informational Call

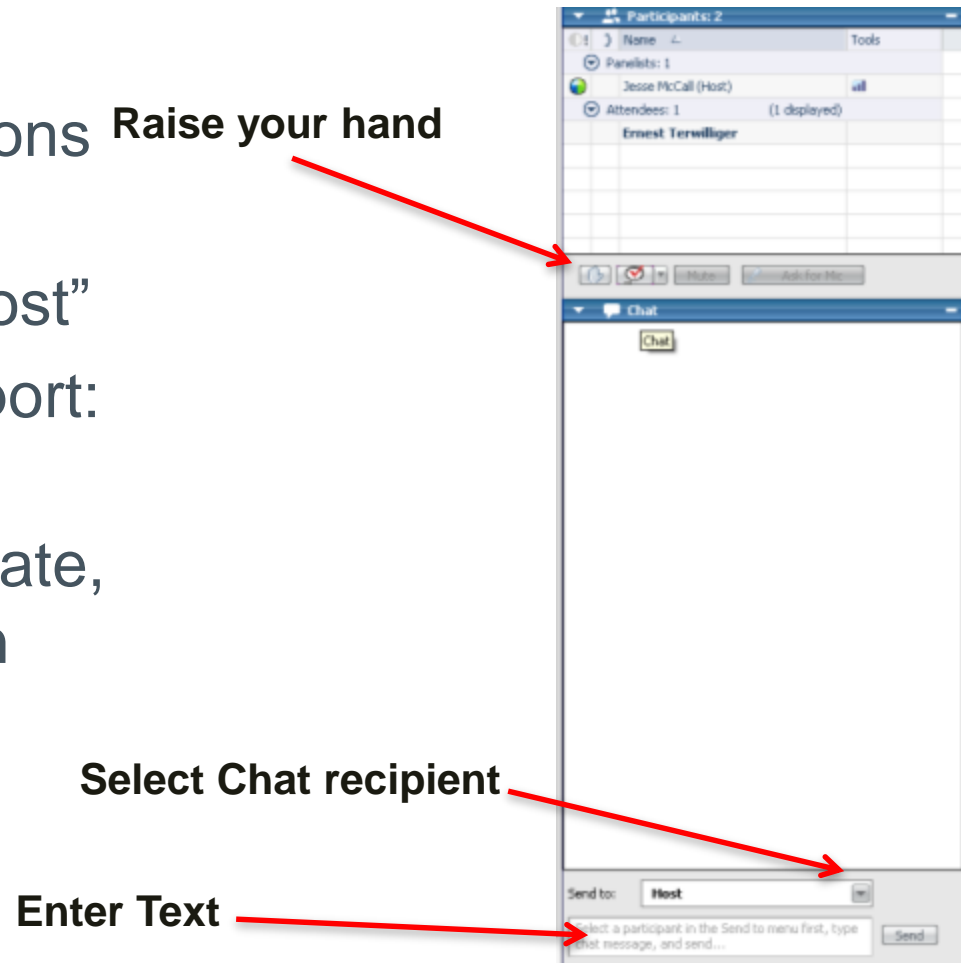
*A Learning Community to Measure and Improve  
Outcomes for Joint Replacement*



**Welcome!**

# WebEx Quick Reference

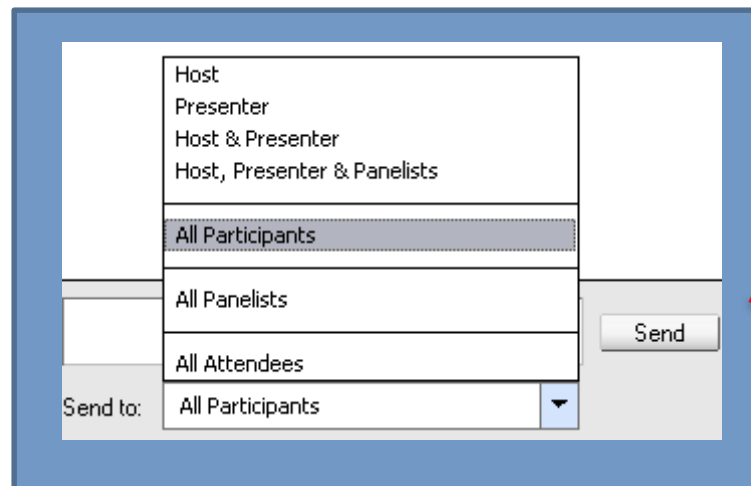
- Please use chat to “All Participants” for questions **Raise your hand**
- For technology issues only, please chat to “Host”
- WebEx Technical Support: 866-569-3239
- Dial-in Info: Communicate, Join Teleconference (in menu)



# When Chatting...

---

Please send your messages to  
*All Participants*



A screenshot of a chat interface. A dropdown menu is open, showing the following options: Host, Presenter, Host & Presenter, Host, Presenter & Panelists, All Participants (highlighted with a dotted border), All Panelists, and All Attendees. Below the dropdown, the 'Send to:' label is followed by a text box containing 'All Participants' and a small downward arrow. To the right of the dropdown is a 'Send' button. A red arrow points from the 'Send' button towards the bottom right corner of the slide.



Please type your **name** and the **organization** you represent in the chat box.

Example: Doug Jones, Midwest Health System



# Today's Hosts

---



**Leigh Carroll**  
Project Coordinator



**Jill Duncan, RN, MS, MPH**  
Executive Director



**Mike Barbati, MHA**  
Faculty – Advocate Health Care



# Agenda

---

Welcome & Introductions

*Program Overview: Joint Replacement  
Learning Community*

Questions

Next Steps





Why focus on improving value in total joint replacement surgery?









On average, how many primary hip and knee replacements does your organization perform annually?

Please send your messages to *All Participants*



## ROI Calculator

10

### Return on Investment (ROI) Calculator for the Joint Replacement Learning Community

Enter number of hip and knee replacements done per year:

Cost per replacement for your hospital:

Percentage of expected savings (please note: IHI's Joint Replacement Learning Community's goal is to reduce cost per procedure by at least 5%):



Subtract \$24,500 (the cost of participating in IHI's Joint Replacement Learning Community):

\$24,500

Calculate



---

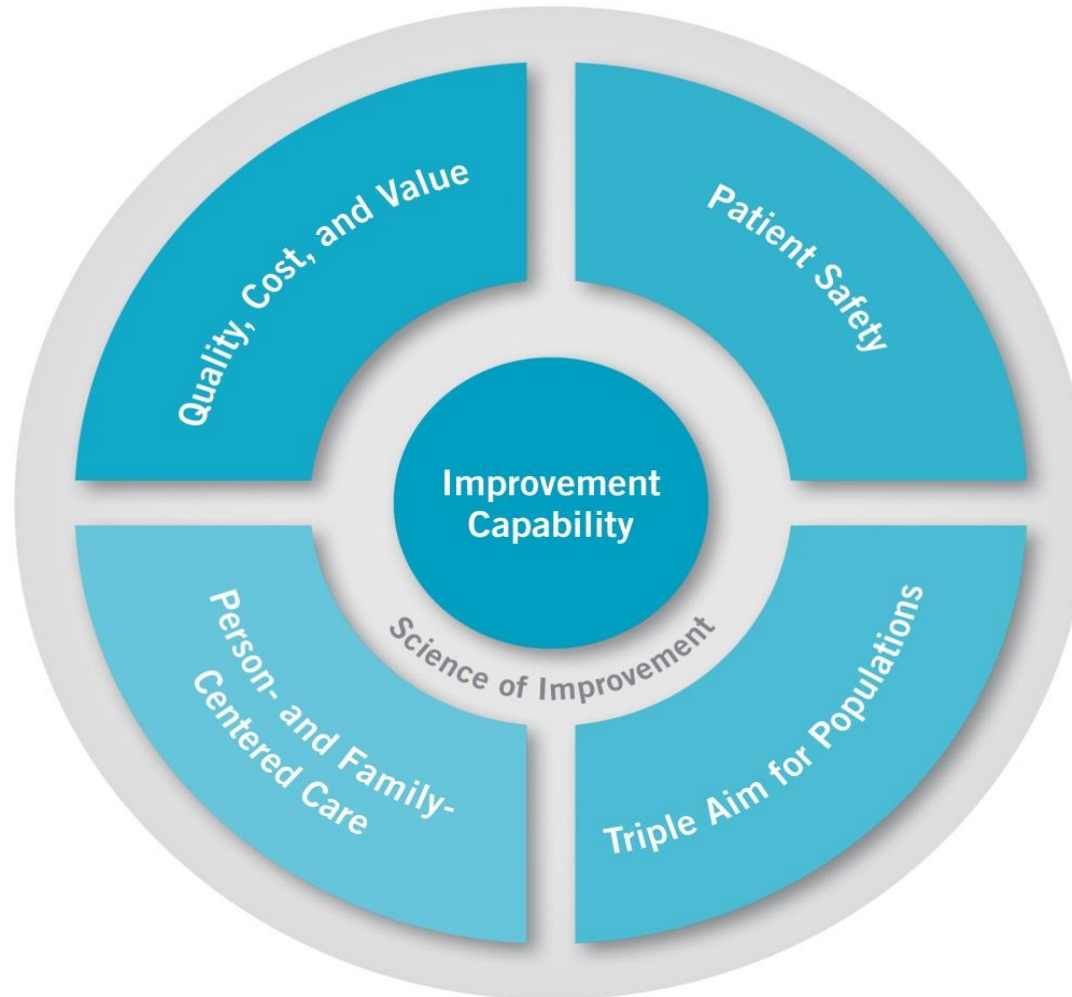
**Our vision:** Everyone has the best care and health possible.

**Our mission:** Improve health and health care worldwide.



# IHI's Work: Five Key Areas

---

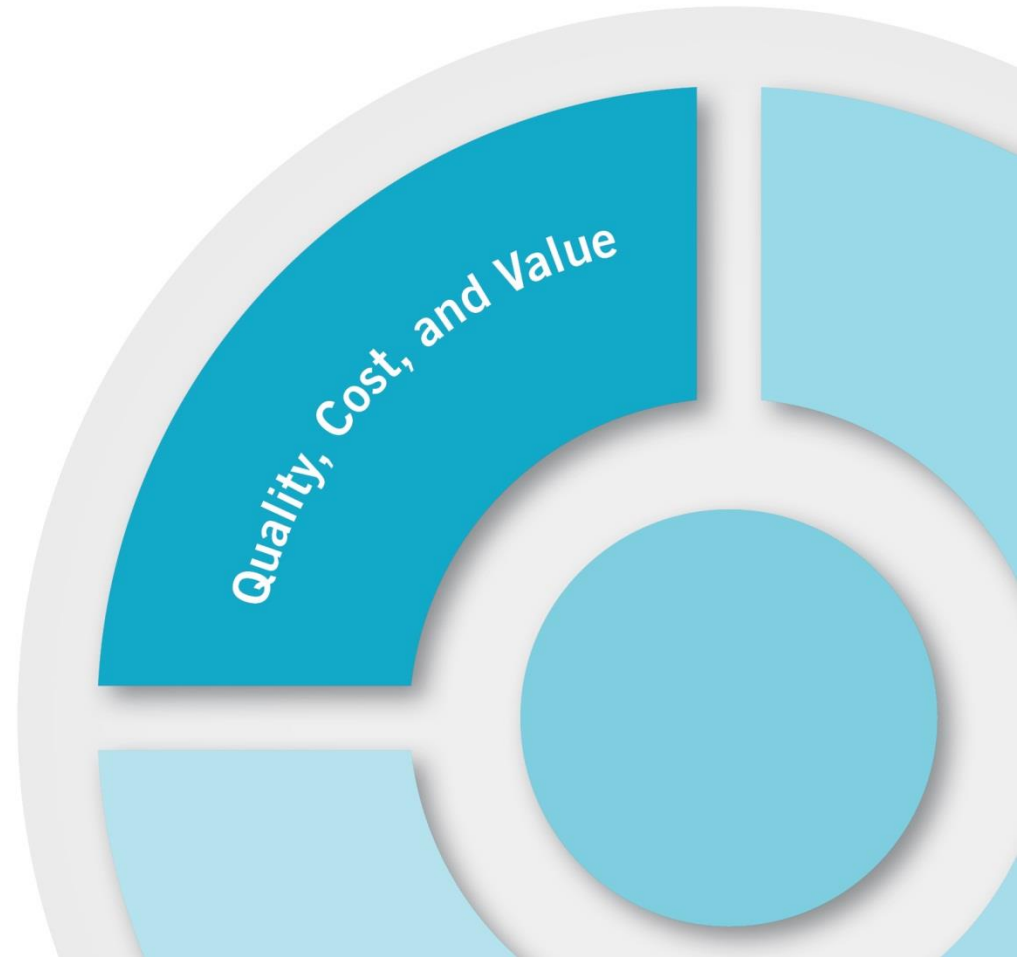


# Quality, Cost, and Value

---

## Our Goal:

Encourage, empower, and enable health care delivery systems to provide truly value-based care that ensures the best health care. We strive to call out and address disparities in health and health care wherever they exist.



Collaboratives



## Joint Replacement

Learning Community



Design a care cycle for hip and knee replacements that improves patient value by reducing 5% dollar costs in surgery (acute care) while maintaining or improving health outcomes.

$$\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}$$



# IHI Team

---



**Kathy Luther, RN, MPM**  
Vice President



**Jill Duncan, RN, MS, MPH**  
Director



**Kevin Little, PhD**  
Improvement Advisor



**Kayla DeVincentis, CHES**  
Project Manager



**Leigh Carroll**  
Project Coordinator



# Faculty Advisors

---



**Kevin Bozic, MD, MBA**  
Orthopedic Surgeon



**Tony DiGioia, MD**  
Orthopedic Surgeon



**Steve Schutzer, MD**  
Orthopedic Surgeon



**Lucy Savitz, PhD, MBA**  
Intermountain Healthcare

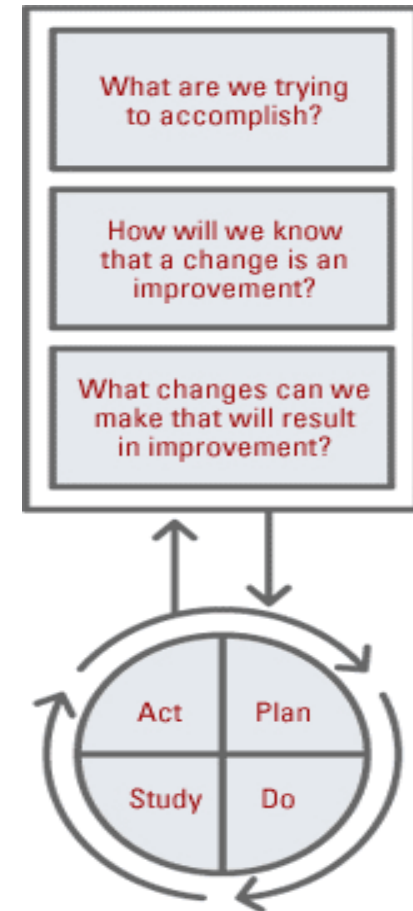


**Mike Barbati, MHA**  
Advocate Health Care



# Process Improvement

- Identify high-value practices: lowest cost, best outcome
- Establish aims and associated measures based on your data
- Identify change opportunities and lead organization specific process improvements
- Learn from variation within each organization and within the community
- Prepare for the bundled payment system



# Program Components

---

## Determine the total cost of care

- Define care segment
- Shadow and create process maps
- Determine cost and time for specific segments of care

## Generate improvements to increase value

- Benchmark cost & outcomes data
- Define Aims & create Charters for specific improvement initiatives

## Improve care processes across the care cycle

- Length of stay
- Discharge to home
- OR efficiency
- Consumables
- Patient Reported Measures

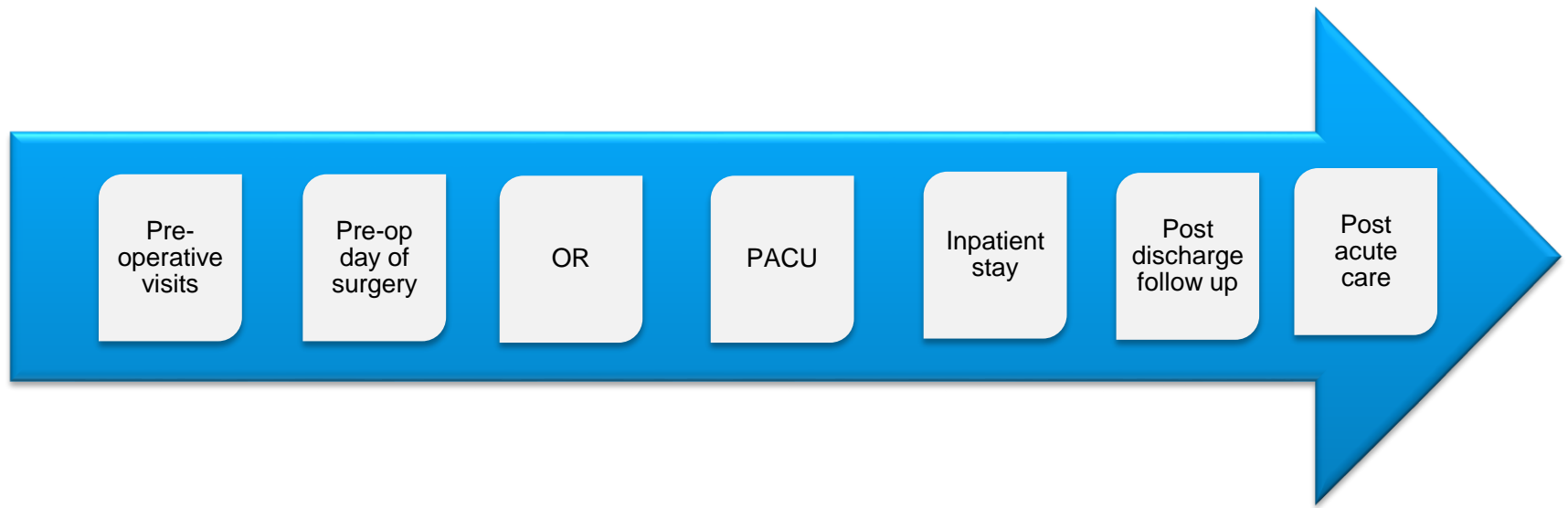
## Re-measure costs & outcomes

- Aim: improve patient value by reducing 5% dollar costs while maintaining or improving health outcomes.



# JRLC Care Cycle

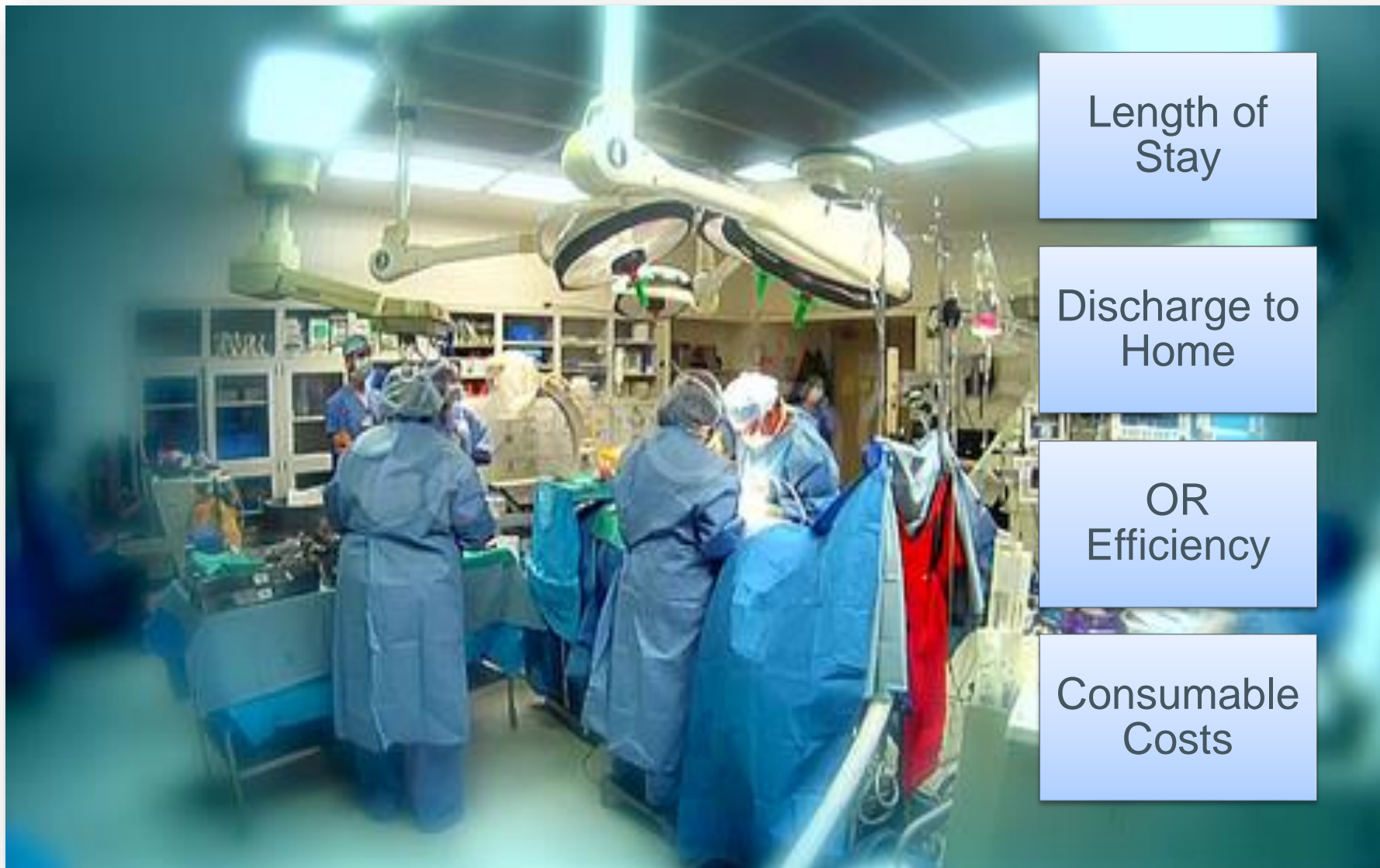
---



30 days pre-op; 90-days post-op  
Primary total knee and hip replacements  
DRG: 470

# Program Activities





Length of  
Stay

Discharge to  
Home

OR  
Efficiency

Consumable  
Costs

Letters of intent will be accepted on a rolling basis through April 10, 2015

[icarroll@ihi.org](mailto:icarroll@ihi.org)





# Improving Value

$$\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}$$

Value Table	Health outcomes		
Cost of Delivering the Outcomes	<i>Decrease</i>	<i>Stay the Same</i>	<i>Improve</i>
<i>Increases</i>	decrease in value	decrease in value	?
<i>Stays the Same</i>	decrease in value	no change in value	Increase in value
<i>Decreases</i>	?	Increase in value	Increase in value

“The lack of a reduction in disparities in either usage or outcomes [for TJR] over an 18-year period is sobering.”

– Jasvinder A Singh & colleagues



# Value in Healthcare

---

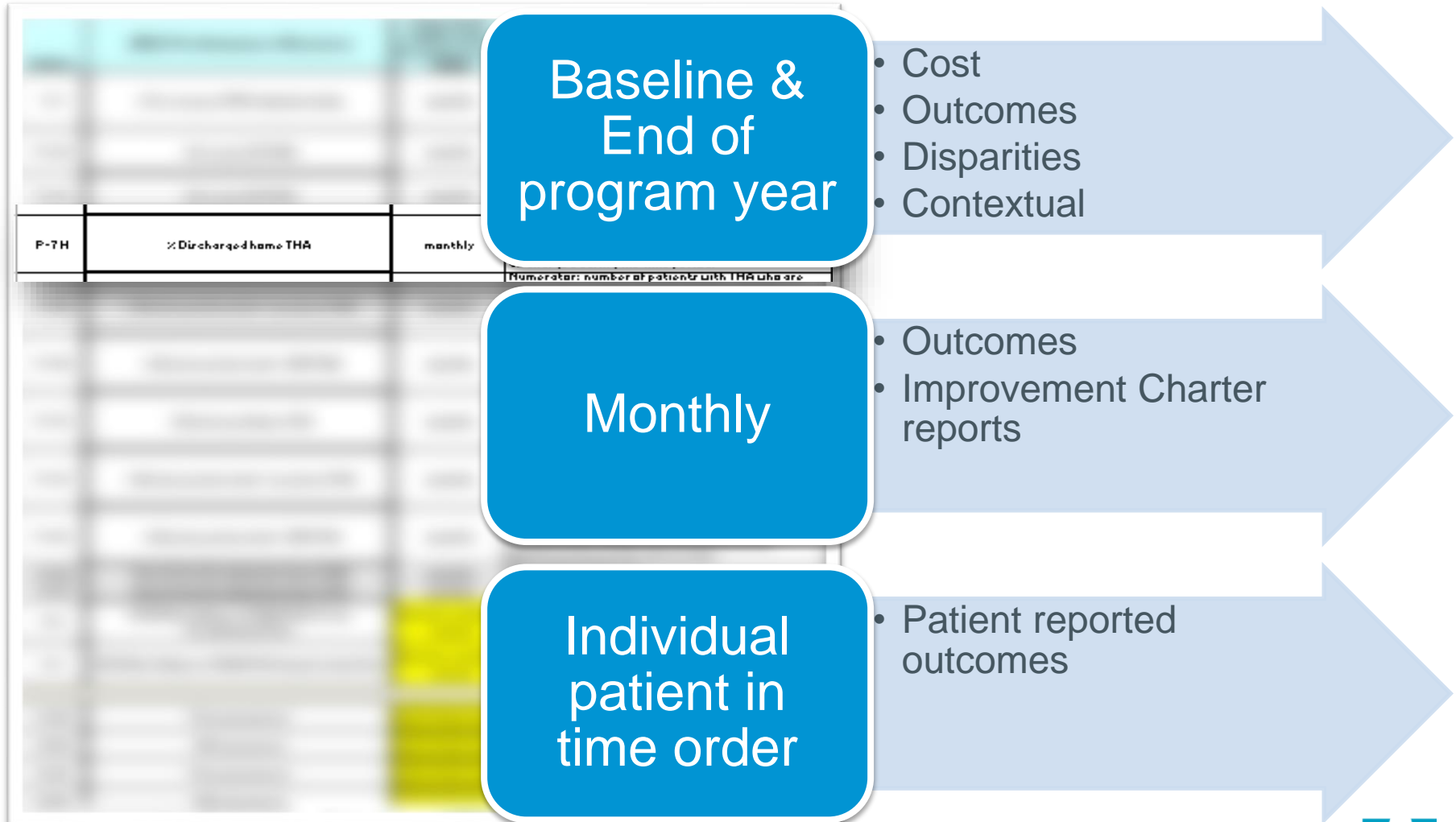
Measures of pain and function are critical components of the health outcomes numerator

$$\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}$$

Patient Reported Measures give the patient's assessment of outcomes like pain and function; we combine these with traditional clinical data.



# Data & Measures



# Participant Criteria

---

- At least 200 primary total joint replacement procedures per year
- Senior-level commitment
- Staff the requisite project team
- Commit to send the core team to the two in-person and one virtual meeting; Project Leader to summative (3rd) in-person meeting

Letters of intent will be accepted on a rolling basis through April 10, 2015

[lcarroll@ihi.org](mailto:lcarroll@ihi.org)



# Suggested Project Team

Team member	Responsibility	Estimated Time (hours/week)
Physician Advisor	Project champion; Provides clinical input and champions the project amongst other clinicians	1 – 2
Project Leader	Coordinates the project and is primary point of contact with the learning collaborative; link to Senior Leadership	10-12
Clinical Operations / Performance Improvement Leader	Driving day-to-day work of the project team; leads process mapping and drives performance improvement testing as well as data sharing	3-5
Financial Analyst	Provides cost data; access to accounting and payroll systems	5-10



# Commitments from IHI

## Better understand and utilize data to drive value

Calculate and define the cost of a hip or knee replacement across a care cycle

Address health disparities data

Collect and utilize patient reported measures

Benchmark clinical outcomes across the care cycle

## Foster new partnerships between finance, quality, and frontline teams

Understanding the current state through collaborative shadowing and process map development

Develop common language to accelerate improving value within each local context

Engage frontline teams in testing, driving, and spreading clinical improvement

## Integrate patient reported measures

Develop an infrastructure for building will and integrating PRM's into local systems

Leverage large data systems, including registry data, to improve PRM integration and utilization

Accelerate shared decision making

## Accelerate results

Virtual and in-person meetings

Monthly webinars

Monthly outcome improvement summaries

Coaching from expert faculty

Listserv

Physician Advisor Calls

Bi-annual Leadership Report





# Expectations of Teams

---

- Join the Project Team virtual kick-off meeting
  - May 7, 2015 2:00 – 3:30 PM ET via WebEx
- Attend 3 Project Team in-person meetings
  - 1st meeting: Saturday, May 30th Capitol Hilton Hotel, Washington, DC
  - 2nd meeting: September 2015 Cambridge, MA
  - 3rd meeting: June 2015 Cambridge, MA
- Participate in monthly webinars
- Participate in coaching calls as needed
- Submit baseline, monthly, and end-of-program data



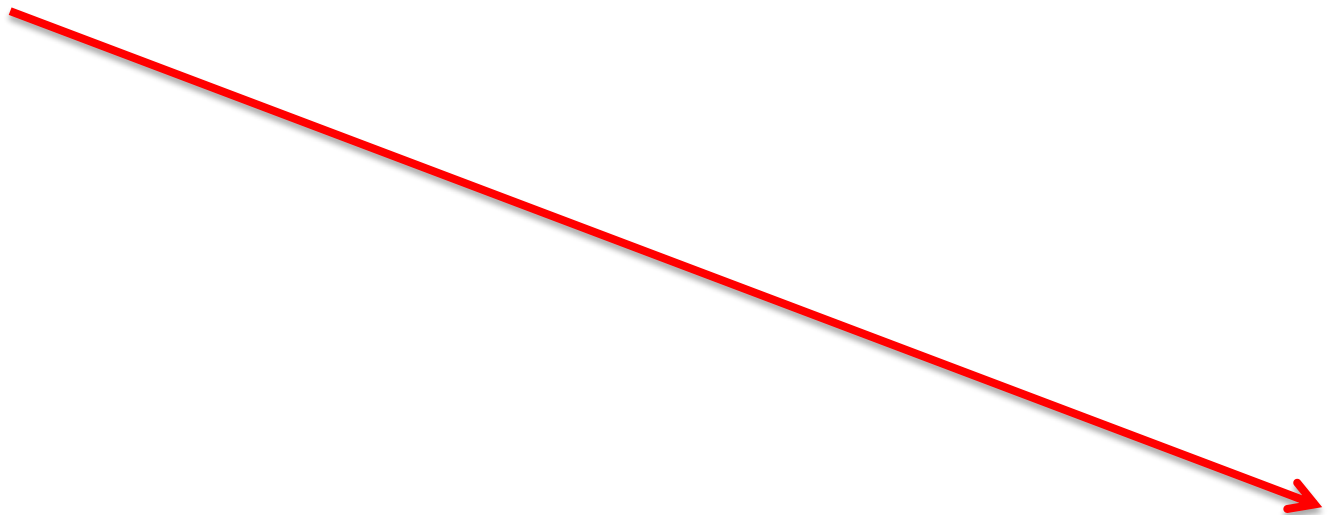
# Questions?

---

Raise your hand



Use the Chat



---

# Learning from Leaders: JRLC Year 1

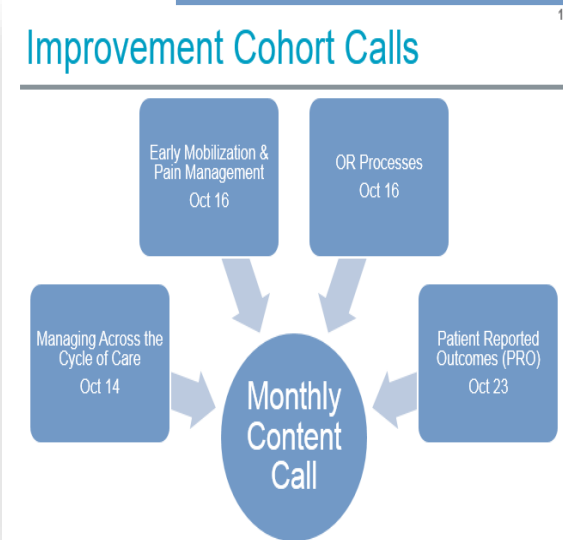
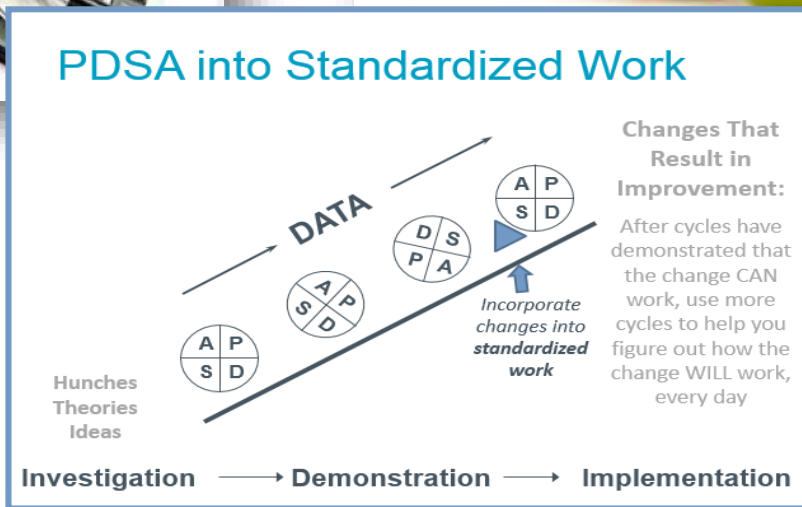
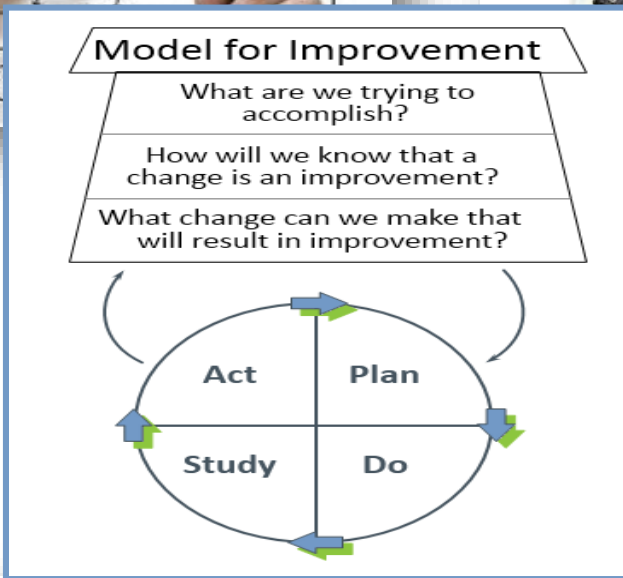




# Joint Replacement

Learning Community

Adventist Medical Center	Hospital Alvorada, Brazil	Providence Alaska Medical Center
Advocate Health Care	Hvidovre Hospital, University of Copenhagen	Providence Sacred Heart Medical Center
Central Dupage Hospital of Cadence Health	Jewish General Hospital, Montreal	Regional Hospital of Scranton
Connecticut Joint Replacement Institute	Johns Hopkins Bayview Medical Center	Sierra Medical Center
Delnor Hospital of Cadence Health	Kadlec Regional Medical Center	Straub Clinic and Hospital
Evergreen Health	Montefiore Medical Center	UMass Memorial Medical Center
Franciscan St. Francis Health - Mooresville	Moses Taylor Hospital of Scranton	University of California, San Francisco
Gundersen Health System	Northside Hospital Forsyth	University of Pittsburgh Medical Center (UPMC)
Hackensack University Medical Center	Northwestern Memorial Hospital	Wake Forest Baptist Medical Center
Henry Ford Physician Network from Henry Ford Health System	Orlando Regional Medical Center	Western Connecticut Health Network - Danbury Hospital
Hoag Orthopedic Institute	Palmetto Health	





Length of  
Stay

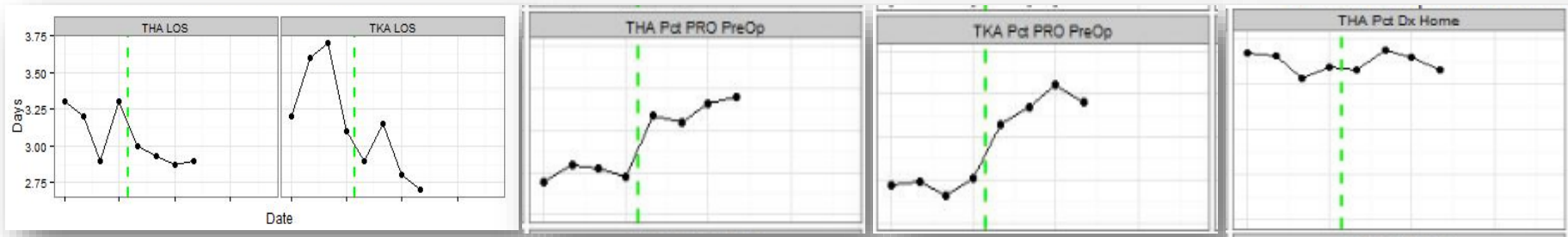
Discharge to  
Home

OR  
Efficiency

Consumable  
Costs



$$\text{Value} = \frac{\text{Health outcomes}}{\text{Costs of delivering the outcomes}}$$



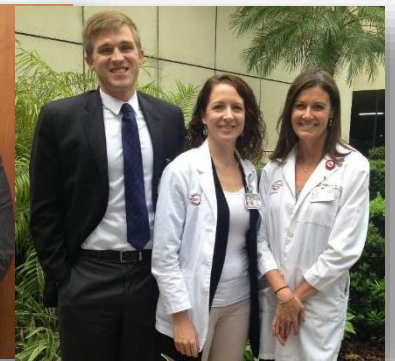
Estimated savings \$793.80 per case, i.e. reducing OR by 10% which is 15 minutes OR charge per minute is \$48.16 (times 15 minutes = \$722.40, Anesthesia charge per minute is \$4.76 (times 15 minutes = \$71.40). Actual cost savings of \$952.00 per patient in cement charges.

LOS- \$39,582  
 Discharge Disposition-\$114,126  
 Consumables- \$50,342

LOS ↓ by .4 days from baseline  
 D/C to home ↑ by 10% for THR and 17% for TKR  
 Readmissions ↓ by 1.1% for TKR and .6% for THR  
 Based on LOS, d/c disposition changes, and readmission data, costs ↓ by 16% for TKR and 14% for THR



# Lessons Learned



# Testimonial

---

*“Our journey with the Joint Replacement Learning Community has really been beneficial to the work we are doing in Clinical Effectiveness. It has helped us become more process-oriented, organized, and methodical in our approach to joint surgery and other projects. We are very excited about taking this to the system level and sharing the improved practice habits and efficiencies more globally.”*

**Debra A. O'Connor, DO**  
Vice President of Clinical Effectiveness  
Advocate Health Care



# Testimonial

---

*“The Joint Replacement Learning Community pushed us. Patient Reported Outcomes would have been on the back burner. IHI really helped make us move faster and surgeons are really excited about the information they will be getting.”*

**Marcie Cobelli, NP**  
Orthopedic Surgery  
Montefiore Medical Center



# Testimonial

---

*“Over the last 11 months, I think that the proudest moment that I’ve had is when we sat down and compared our results, the metrics that we were looking at specifically with length of stay and discharge disposition. Those two probably being the biggest impact and seeing the huge overall cost reduction for our organization. There was a time during this project that I thought that there was no way that we would hit our targets and then to see the fruit of everyone’s work knowing that it’s not my project. It’s not the clinical lead. It’s not the finance guy. It’s not their project. It’s the team’s project. It is that front line team that’s out there making the difference and I’m very, very proud of that front line team and knowing that this model can be used for so many different things is truly outstanding.”*

**Summer Bragg, MS, PT**

Rehabilitation Manager, Orlando Health





Accelerating learning  
Accelerating improvement  
Accelerating change

Letters of intent will be accepted on a rolling basis through April 10, 2015

[lcroll@ihi.org](mailto:lcroll@ihi.org)



## ROI Calculator

### Return on Investment (ROI) Calculator for the Joint Replacement Learning Community

Enter number of hip and knee replacements done per year:

Cost per replacement for your hospital:

Percentage of expected savings (please note: IHI's Joint Replacement Learning Community's goal is to reduce cost per procedure by at least 5%):



Subtract \$24,500 (the cost of participating in IHI's Joint Replacement Learning Community):

Calculate

# Participation Fee: \$24,500



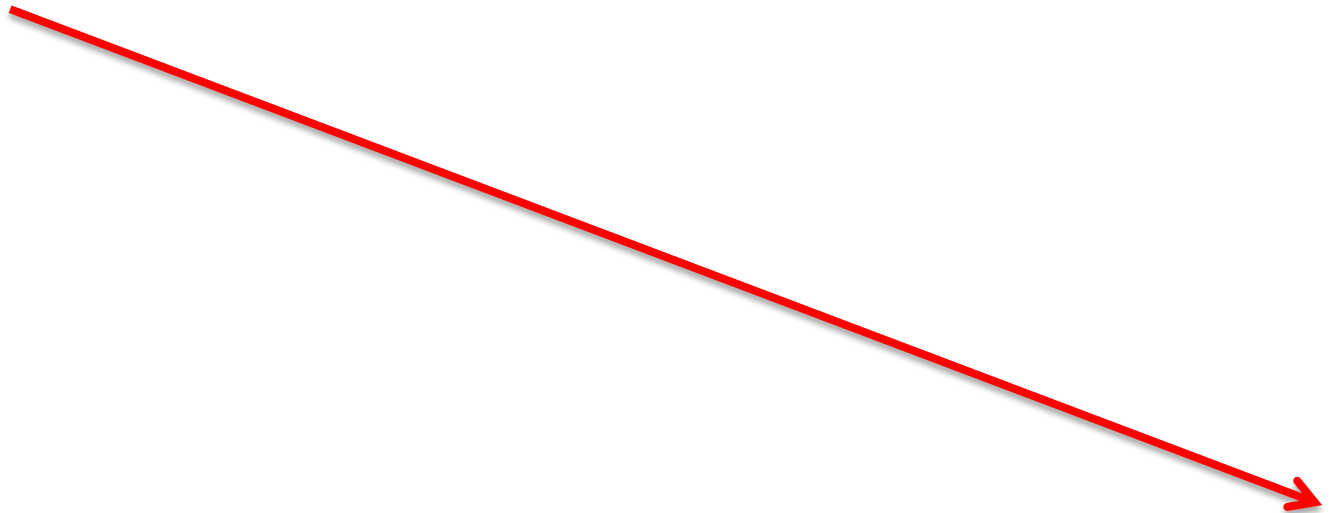
# Questions?

---

Raise your hand



Use the Chat



# Next Steps

---

Visit the website at [www.IHI.org/JRLC](http://www.IHI.org/JRLC)

Submit the ***Letter of Intent*** to Leigh Carroll at [lc Carroll@ihi.org](mailto:lc Carroll@ihi.org) by April 10, 2015





A high-angle, close-up photograph of several surgeons in an operating room. They are wearing blue scrubs, white masks, and blue bouffant caps. Their hands are visible, holding surgical instruments. The background is slightly blurred, focusing attention on the surgical team.

Collaboratives



Joint Replacement  
Learning Community

**Thank you!**

Visit the website at [www.IHI.org/JRLC](http://www.IHI.org/JRLC)

