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
- 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
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

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
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
- Patient Safety
- Science of Improvement
- Triple Aim for Populations
- Person- and Family-Centered Care

Improvement Capability
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.
Aim

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.

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

Source: Porter, Michael, “What is Value in Health Care?” New England Journal of Medicine, December 2010
IHI Team

Kathy Luther, RN, MPM  
Vice President

Jill Duncan, RN, MS, MPH  
Director

Kevin Little, PhD  
Improvement Advisor

Kayla DeVincenitis, 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

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

lcarroll@ihi.org
Improving Value

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

<table>
<thead>
<tr>
<th>Value Table</th>
<th>Decrease</th>
<th>Stay the Same</th>
<th>Improve</th>
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<tr>
<td><strong>Decreases</strong></td>
<td>?</td>
<td>Increase in value</td>
<td>Increase in value</td>
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“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.

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

Baseline & End of program year
- Cost
- Outcomes
- Disparities
- Contextual

Monthly
- Outcomes
- Improvement Charter reports

Individual patient in time order
- Patient reported outcomes
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

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# Suggested Project Team

<table>
<thead>
<tr>
<th>Team member</th>
<th>Responsibility</th>
<th>Estimated Time (hours/week)</th>
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<tbody>
<tr>
<td>Physician Advisor</td>
<td>Project champion; Provides clinical input and champions the project amongst other clinicians</td>
<td>1 – 2</td>
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<tr>
<td>Project Leader</td>
<td>Coordinates the project and is primary point of contact with the learning collaborative; link to Senior Leadership</td>
<td>10-12</td>
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<tr>
<td>Clinical Operations / Performance Improvement Leader</td>
<td>Driving day-to-day work of the project team; leads process mapping and drives performance improvement testing as well as data sharing</td>
<td>3-5</td>
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<tr>
<td>Financial Analyst</td>
<td>Provides cost data; access to accounting and payroll systems</td>
<td>5-10</td>
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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
<table>
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<th>Adventist Medical Center</th>
<th>Hospital Alvorada, Brazil</th>
<th>Providence Alaska Medical Center</th>
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<td>Advocate Health Care</td>
<td>Hvidovre Hospital, University of Copenhagen</td>
<td>Providence Sacred Heart Medical Center</td>
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<tr>
<td>Central Dupage Hospital of Cadence Health</td>
<td>Jewish General Hospital, Montreal</td>
<td>Regional Hospital of Scranton</td>
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<td>Connecticut Joint Replacement Institute</td>
<td>Johns Hopkins Bayview Medical Center</td>
<td>Sierra Medical Center</td>
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<td>Delnor Hospital of Cadence Health</td>
<td>Kadlec Regional Medical Center</td>
<td>Straub Clinic and Hospital</td>
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<tr>
<td>Evergreen Health</td>
<td>Montefiore Medical Center</td>
<td>UMass Memorial Medical Center</td>
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<tr>
<td>Franciscan St. Francis Health - Mooresville</td>
<td>Moses Taylor Hospital of Scranton</td>
<td>University of California, San Francisco</td>
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<td>Gundersen Health System</td>
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<td>University of Pittsburgh Medical Center (UPMC)</td>
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<td>Wake Forest Baptist Medical Center</td>
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<td>Henry Ford Physician Network from Henry Ford Health System</td>
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<td>Hoag Orthopedic Institute</td>
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Model for Improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Act | Plan
---|---
Study | Do

PDSA into Standardized Work

Changes That Result in Improvement:
After cycles have demonstrated that the change CAN work, use more cycles to help you figure out how the change WILL work, every day.

Investigation → Demonstration → Implementation

Improvement Cohort Calls

- Early Mobilization & OR Processes Oct 18
- Managing Across the Cycle of Care Oct 14
- Patient Reported Outcomes (PRO) Oct 23
- Monthly Content Call

Hunches, Theories, Ideas
Incorporate changes into standardized work
Length of Stay
Discharge to Home
OR Efficiency
Consumable Costs
Value = Health outcomes
Costs of delivering the outcomes

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

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
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
“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

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lcarroll@ihi.org
Participation Fee: $24,500
Questions?

Raise your hand

Use the Chat
Next Steps

Visit the website at www.IHI.org/JRLC

Submit the *Letter of Intent* to Leigh Carroll at lcarroll@ihi.org by April 10, 2015
Thank you!

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