# Joint Replacement Team

### I. Background

#### Faculty Hour - Joint Replacement Team

Faculty Hour affords anesthesiologists, surgeons, nurses, and others the opportunity to meet at the start of the day once each week to advance quality and outcomes for patients, to accelerate learning and innovation, and to foster mutual joy in work. Joint replacement and reconstruction offer patients, including the vulnerable elderly, the potential for remarkable gains in function and quality of life. However, despite adherence to conventional approaches such as antibiotic management and skin preparation, infections can occur with devastating and costly consequences. In alignment with the work of the BIDMC Surgical Site Infection Task Force, this team will use a datadriven approach to address this multifaceted complication in order to find new ways among collaborating disciplines to reduce surgical site infections specifically for joint replacement patients at BIDMC.

Additional Goal: Achieve four (4) primary total joint arthroplasties per surgical day in a smooth operating environment.

Doug Ayres, MD Elena Canacari

Avesha Abdeen, MD Don DeSilva, MD Cale Hendricks, MD Rob McKenna Ashley Daigle Barbara DiTullio

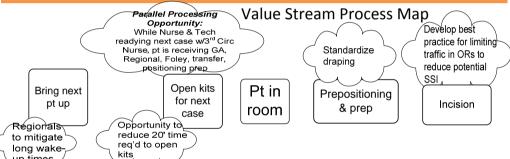
Lisa Kunz, MD Rod McArdle

Proiect Team

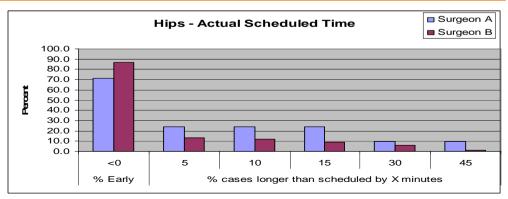
Aldo Rettagliata Anne Riskin

Jennifer Rizzitano Ross Simon Mark Shnider, MD Brett Simon, MD

### **II. Current Condition**



# up times III. Analysis





#### A teaching hospital of Harvard Medical School

# **Business Transformation**

# **IV.** Accomplishments

#### Surgeons' Office

Updated Patient Binder.

#### **Patient Selection**

Developed patient selection criteria for four-case per day. Identified need to get patient in earlier to do four case day. Updated preference list so scheduling reflects type of pt (i.e.: pure)

Trialing two-way phones to improve efficiency of utilizing Interpreters.

#### Blocks

Organized an approach to do preop blocks.

#### Parallel Processing

Developed/tested concept of second circulator to allow patient prep at same time as counting and set-up.

#### **Surgical Site Infection**

Designed new room layout to minimize traffic by the sterile field. Eliminated step of Block Team traffic to bring in ultrasound confirmation.

### Draping

Standardized draping kit.

#### Instrumentation

Built fourth set of knee instruments to accommodate a four-case day.

### **Team Dynamics**

Improved communication and interdisciplinary familiarity.

# V. Proposed Countermeasures

# **New OR Layout Options**

# Feldberg 3 - OR 10

Purpose: To address surgical site infection concerns. rearrange equipment layout to keep traffic away from sterile field.

Actions: Developed two alternate layouts that keep traffic lane away from sterile field.

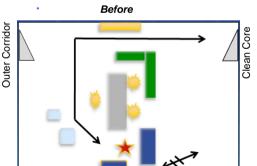
### Advantages of proposed vs. existing layout:

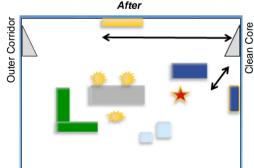
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No traffic by sterile field More accessible for Anesthesia





### **For More Information Contact**

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