Consistency of Care Delivery in Orthopedic Surgery

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Leadership is a Participation Sport

SUCCESS
SECRET No. 3:
IT'S HARD WORK!

The man who rolls up his shirt sleeves is rarely in danger of losing his shirt.
Decide to do something

Knowing is not enough; we must apply.
Willing is not enough; we must do.

–Johann Wolfgang von Goethe

Knowing is not doing…doing is doing.
Anyone ever lift weights?
One fundamental principle underlies growth
Are you optimizing growth?

- Requires putting yourself in an uncomfortable situation
  - As Athletes
  - As Physicians
  - As organizations

- We all need to step up and “stress” ourselves a bit so we can grow, reach new frontiers, and achieve our ultimate potential
We decided to do…
Have a protocol!

Total Joints Care Pathway

Preop
Interop
Postop
Post Discharge
**PREOP**

1. **Standard ERAS Interventions**

   1.1 Patient education to help inform of ERAS approaches that may be unfamiliar (e.g. reducing narcotics, early feeding and ambulation)

   **Who Does?**
   - Surgery MA/RN; POM MA/RN

   1.2 No prolonged fasting

   Clear liquids up to 2 hours prior to surgery (including carbo-loading with Gatorade Prime. Acceptable substitutes: apple juice, Gatorade. Do not use in patients with NGT).

   May have solids up to 8 hours before surgery.

   ![Carb Drink Table](appendix)

   1.3 Chlorhexidine mouth wash (HAP measure)

   **Who Does?**
   - Surgeon/Nurse

   1.4 Chlorhexidine wipe (SSI Bundle)

   **Who Does?**
   - Surgeon/Nurse

   1.5 Standardized PONV Prophylaxis

   **Who Does?**
   - Anesthesia/Nurse

2. **Total Joints Only**

   2.1 Preop antimicrobial prophylaxis

   **Who Does?**
   - Surgeon/Nurse

   - **Prophylaxis depends on the severity of the PCN allergy. Cefazolin for non-severe PCN reactions. Do not use cephalosporins in those with a history of severe penicillin allergy such as anaphylaxis, a severe cutaneous reaction, or positive penicillin skin test - use Vanco**

   - Yes MRSA colonization (unless PCN allergy, then follow above guidelines)

   - Vanco + Cefazolin

   2.2 Preop Risk Stratification for postop mobilization & discharge planning (RAPT tool)

   **To be tested at pilot sites**

3. **Multimodal Pain Management**

   3.1 First line of treatment for pain:

   - If weight greater than or equal to 50 kg, 1 gram acetaminophen IV Q6 hours ATC

   **Who Does?**
   - Anesthesia/Surgeon?
Socialize it!

Total joint replacement
Getting ready for your surgery and recovery
Embed it into your daily work

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TKA-Average Length of Stay

Total Knee-Average Hospital LOS (days)
ERAS Total Knee-ALOS Hospital = ALL

- +3 sigma
- 2.5
- -3 sigma

Nov 18, 2015 16:23:32
TKA- First Ambulation within 12 hours

Total Knee-First Ambulation w/in 12 Hrs
ERAS Total Knee-First Ambulation = ALL

% First Ambulation w/in 12 Hrs


+3 sigma
15.0
-3 sigma

Nov 18, 2015 16:25:42
TKA-Multimodal Analgesia

Total Knee-Multimodal Analgesia
ERAS Total Knee-Multimodal = ALL

% Multimodal Analgesia Given

-3 sigma
21.8
+3 sigma

P Chart
Summary

Nov 18, 2015 16:29:29
TKA-Morphine Equivalence

Total Knee-Morphine Equivalence
ERAS Total Knee-Morphine Equivalence = ALL

Avg Morphine Equivalence (mg)

+3 sigma 67.0
-3 sigma
TKA-Readmission Rate

Total Knee-Readmission Rate
ERAS Total Knee-Readmission = ALL

% Readmission Rate


-3 sigma | +3 sigma

3.4

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We Continue to Push the Frontier thru the Innovation Cycle

NCAL Medical Center Total Joint (Both Hip & Knee) AVG LOS Report: 2012 Q1 - 2015 Q2

Defining the “New Normal”
Arthritis Pathway & Patient Optimization

Arthritis Pathway

What treatments are appropriate for each stage of disease/functional impairment?

Degenerative Arthritis

Self management & patient ed: OT/PT, NSAIDs, NO narcotics

Adding in cortisone injections, avoiding narcotics

Shared decision making conversation around a total joint replacement

Surgical Candidate

Patient Optimization

How do we optimize patient for best surgical outcomes?

BMI > 40
Severe depression
Smoking cessation
Diabetes

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The Secret Sauce

- Decide to do something
- Have a protocol
- Memorialize it
- Socialize it
- Refine it…just not too many times
- Embed it into your daily work
Seeing the frontier
## Context for Orthopedic Redesign

### Today
- Variation in Access
- Variation in practice
- Inconsistent patient experience
- Serendipity

### Redesign process

<table>
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<th>Specialization</th>
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<td>Consistency in care delivery</td>
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<tr>
<td>Consolidation</td>
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<tr>
<td>Integrated collaboration</td>
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<tr>
<td>Technology &amp; informatics</td>
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### Future State
- Hassle free access to sub-specialists
- Appropriate Access
- Consistent clinical and operational practices
- Workflows, systems & people to support patient & physician
Changing the conversation about TJR

From Total Joint Surgery...

... to guiding our patients throughout their journey, from arthritis diagnosis to regaining function and long-term active lives
Our Unique TPMG Value Proposition

Surgery + End-to-End + High Volume + Learning Culture
Seeing the frontiers