Patient Selection, Optimization and Disposition: Tools for Success in Orthopedic Bundles

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Presenters

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Orthopedic Surgeon & President
OrthoCare Florida

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Chief Clinical Officer
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About Our Partners

- Located in Tampa, FL
- 6 orthopedic practices
- 16 hospitals
- 56 physicians

- Headquartered in Dallas, TX
- 240 home health and hospice branches nationally
Agenda

1. Preparing and Engaging Patients Throughout Their Recovery
2. Home Health: Keeping Patients Safe at Home
3. Q&A
Objectives

• Examine how bundled payments affect the delivery of elective orthopedic care

• Learn about factors that inform patient selection, optimization and disposition for joint replacement procedures

• Review transitional care workflows that surgeons and the healthcare team can employ to engage patients and their families to coordinate care across settings

• Demonstrate how patients undergoing elective total joint replacements can recover safely in the home setting
Orthopedics in Bundled Payments

Orthopedic procedures account for a large volume of bundled procedures among providers. They are currently implemented for Medicare patients under 2 programs:

**Bundled Payments for Care Improvement (BPCI)**
- Voluntary participation with providers selecting any of 48 bundles
- Supersedes, or ‘trumps’ participation in mandatory bundling programs

**Comprehensive Care for Joint Replacement (CJR)**
- Mandatory participation for large providers in 34 Metropolitan Statistical Areas (voluntary in 33 other areas)
- Exclusively for joint replacement

Both programs seek to improve value
- Improve quality of services delivered
- Reduce price variation and absolute cost for procedures
Remedy’s Elective Total Joint Replacement Workflow

This workflow is designed to facilitate efficient, comprehensive delivery of care to patients undergoing elective total joint replacements with the goal of recovery at home.

**SELECTION**
- Identify patients who will benefit from surgery

**OPTIMIZATION**
- Prepare patients both medically and functionally for optimal outcomes

**DISPOSITION**
- Identify the most clinically appropriate next site of care pre-operatively.

**FOLLOW-UP**
- Manage comorbidities and reduce risk of readmission
Physician Group Practice Performance: Lower Major Joint Bundles

Patients go home with fewer readmissions

% Discharged Home

<table>
<thead>
<tr>
<th>% Discharged Home</th>
<th>Historic Period= 2009-2012</th>
<th>Post Go-Live = Q3 2015 – Q1 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>43.2%</td>
<td>11.7%</td>
</tr>
<tr>
<td>10%</td>
<td></td>
<td>8.1%</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70%</td>
<td>70.9%</td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

90-Day Readmissions

Percentage of Episodes with Readmission

1. Tools for Success in Orthopedic Bundles

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Preparing and Engaging Patients Throughout Their Recovery

Dr. John Kilgore
Current Payment System VOLUME Based

“Fee for Service”
Costs are DOUBLE those In U.S. vs Other Countries
Shift to “VALUE BASED” Payments

VALUE = \frac{QUALITY}{COST}
BPCI: Bundled Payments for Care Improvement

Improve Quality of Care
Decrease Cost of Care
QUALITY: A Changing Paradigm

THEN:

• Surgery
• Hospital Care
QUALITY: A Changing Paradigm

NOW:

- Patient Selection
- Preparation
- Surgery & Hospital Care
- Appropriate Disposition
- Post-acute Management
- Reduction of Complications and Readmissions

Opportunity for Improvement exists at Every Level.
Where are the Costs?

Post-Discharge Space

Disposition (SNF, Rehab)  ER visits  Readmissions

Part B Charges
PAYMENT MODELS: Volume Based vs. Value Based

VOLUME ONLY
10 Cases @ $1000/case = $10,000
– 50% overhead = $5000

OPTIMIZED VALUE BASED
7 Cases @ $1000/case = $7000
– 50% overhead = $3500
PLUS 50% gainsharing bonus ($3500) = $7000
PAYMENT MODELS: Volume Based vs. Value Based

VALUE BASED, NOT OPTIMIZED
10 Cases @ $1000/case = $10,000
– 50% overhead = $5000

_BUT:_

not optimized so costs $5000 in excess of target (_$5000_)

= _$0_
Opportunity

Proper Patient Selection, Optimization and Disposition Will lead to Improved Quality of Care at a Lower Cost and therefore a HIGHER VALUE

Manage the post-discharge space preemptively
Patient Selection

The right procedure for the right patient.

Know when NOT to offer an Operation.
Patient Selection

Bilateral Elective Total Joint Arthroplasty
Optimization

Modifiable Comorbidities

- Diabetes
- Obesity
- Anemia
Our Dirty Laundry

- 71% of readmissions with the diagnosis of CKD, Anemia, and/or DM.
- Average LOS >3 days
- Majority readmitted from a SNF
- Many were poor surgical candidates
  - Uncontrolled DM
  - Hgb < 11.0
  - Morbid Obesity
Diabetes

Independent Risk Factor for PJI

HbA1c over 7.0 is associated with an increased risk of postoperative complications

Diabetes

Increased 30-day wound complications after TJA reported in patients with average in-hospital blood glucose levels of >200 mg/dL.

Obesity

*Independently associated with complications:*

• Infection (risk increases exponentially with BMI)
• Delayed Wound Healing
• MI
• Stroke
• VTE
Obesity

Associated with Increased Readmission Risk

Obese patients had a 32% higher likelihood of readmission than non obese.

Morbidly Obese (BMI > 40) patients had a 74% higher likelihood of readmission than non obese patients.

CORR 2015 Nov; 473(11)
29% of our readmitted patients had a history of anemia, and 5/7 of those patients required a transfusion upon readmission.
Anemia

Elective Total Joints at MPH: February – September 2016 (6 months)

<table>
<thead>
<tr>
<th>Surgical Procedure</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthroplasty Hip Total</td>
<td>236</td>
</tr>
<tr>
<td>Arthroplasty Knee Total</td>
<td>402</td>
</tr>
<tr>
<td>Total</td>
<td>638</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hgb</th>
<th># Patients</th>
<th># Transfused</th>
<th>% Total</th>
<th>% Transfused</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 11</td>
<td>48</td>
<td>10</td>
<td>7.52%</td>
<td>21.0%</td>
</tr>
<tr>
<td>&gt; 11</td>
<td>590</td>
<td>8</td>
<td>92.48%</td>
<td>1.35%</td>
</tr>
</tbody>
</table>
Summary For Optimization

- BMI < 40
- HbA1c < 8.0
- Hgb 11.0 or greater

Note: this is not a denial of care but an opportunity to improve quality of care through patient optimization.
Optimization: Education

- Class Attendance has been proven to decrease risk, reduce anxiety and increase patient satisfaction
- Only 50% of our 2016 readmissions attended class
- According to AAHKS, standard of care for elective TJA patients is to create a “mandatory” class attendance policy
Disposition

DISCHARGE

- Inpatient Rehab Facility (17 – 18K)
- Skilled Nursing Facility (5 - 10K)
- Home with Home Physical Therapy (1 – 3K)

Descending Cost
Disposition

**PARADIGM SHIFT IN THINKING:**
More is Better  Less is MORE

**HOME** is usually the most appropriate discharge destination
Disposition - HOME SWEET HOME

• Comfortable, Familiar Environment
• Increased Activity Level
  • Reduced VTE risk
  • Faster Recovery
• Improved Patient Confidence
• Better Pain Control
• Reduced Infection Risk
Disposition

Potential for 90% of patients to be discharged HOME

• Good Support (Friends, Family)
• Age and Health Status are considerations
• TUG AND RAPT Scores can help guide decisions
Discharge Disposition by Surgeon

% Home with HHC versus SNF

<table>
<thead>
<tr>
<th>Surgeon</th>
<th>SNF</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>B</td>
<td>7%</td>
<td>93%</td>
</tr>
<tr>
<td>C</td>
<td>12%</td>
<td>88%</td>
</tr>
<tr>
<td>D</td>
<td>18%</td>
<td>82%</td>
</tr>
<tr>
<td>E</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>F</td>
<td>28%</td>
<td>72%</td>
</tr>
<tr>
<td>G</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>H</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>I</td>
<td>7%</td>
<td>93%</td>
</tr>
</tbody>
</table>

90% Average
Disposition

Skilled Nursing Facilities (SNF)

If necessary, use preferred facilities and minimize LOS

Inpatient Rehabilitation Facility (IRF)

Just Say *NO*
OrthoCare Florida Performance: Lower Major Joint

<table>
<thead>
<tr>
<th>All Bundles</th>
<th>2015Q4</th>
<th>2016Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge to HHA</td>
<td>57.3%</td>
<td>67.7%</td>
</tr>
<tr>
<td>Discharge to SNF</td>
<td>36.7%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Discharge to IRF</td>
<td>3.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>% Readmits (90 day)</td>
<td>11.2%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Average SNF Days</td>
<td>26.9</td>
<td>21.4</td>
</tr>
<tr>
<td>Savings Per Episode</td>
<td>$1,343</td>
<td>$2,070</td>
</tr>
</tbody>
</table>

Source: 170830 Monthly Claims Data, At-Risk Bundle Selection for Quarters 2015Q4-2016Q3
### OrthoCare Florida Performance: Lower Major Joint

<table>
<thead>
<tr>
<th>Medicare Claims Data</th>
<th>Episode Connect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Bundles</strong></td>
<td>Pre-Go-Live</td>
</tr>
<tr>
<td>Discharge to HHA</td>
<td>53.5%</td>
</tr>
<tr>
<td>Discharge to SNF</td>
<td>38.8%</td>
</tr>
<tr>
<td>Discharge to IRF</td>
<td>5.0%</td>
</tr>
<tr>
<td>% Readmits (90 day)</td>
<td>13.0%</td>
</tr>
<tr>
<td>Average SNF Days</td>
<td>24.9</td>
</tr>
<tr>
<td>Savings Per Episode</td>
<td>-</td>
</tr>
</tbody>
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Summary

• Value Based Systems WORK and Reward QUALITY
• There is ROOM FOR IMPROVEMENT at every level of care
• These changes require a Shift in our PARADIGM
• Patient Selection, Optimization and Proper Disposition are Keys to early success
• True Success REQUIRES PHYSICIAN ENGAGEMENT
Follow Up at Home

Manage comorbidities and reduce risk of readmission

<table>
<thead>
<tr>
<th>Key Interventions</th>
<th>Home Health Criteria</th>
<th>Home Health Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Build PAC Relationships</strong></td>
<td><strong>Are Patients Homebound?</strong></td>
<td>1. Pre-op Engagement</td>
</tr>
<tr>
<td>• Establish trust</td>
<td>• Require device or assistance, or</td>
<td>2. Care Transitions</td>
</tr>
<tr>
<td>• Hold accountable</td>
<td>leaving home is medically contraindicated and,</td>
<td>3. Standardized Protocols</td>
</tr>
<tr>
<td><strong>Engage Patients</strong></td>
<td>• Normal inability to leave home, and</td>
<td>4. Timely Initiation of Care</td>
</tr>
<tr>
<td>• Review patient goals</td>
<td>it is a considerable and taxing effort</td>
<td>5. Comprehensive Care</td>
</tr>
<tr>
<td>• Set clear expectations</td>
<td><strong>What does this mean?</strong></td>
<td>6. Care Coordination</td>
</tr>
<tr>
<td><strong>Transitions Safely</strong></td>
<td></td>
<td>7. Discharge Planning</td>
</tr>
<tr>
<td>• Standardize protocols</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Innovate together</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OrthoCare & Encompass Case Study

Situation: 76 y/o female, lives alone, 18 meds, RAPT score of 6, went to SNF following previous TKA

Action: Pre-op plan includes working with dtr. to stay with mom starting post op day 7

Result: Safe transition and recovery at home, physician, dtr, patient all satisfied

Action: Patient and dtr agree with home DC. High risk protocol triggered, aide b.i.d. x 3 days and Care Management Division/tech

90 Day Result: Problems proactively identified and addressed, no ER or ACH
OrthoCare Florida and Encompass

<table>
<thead>
<tr>
<th>Home Health Metrics</th>
<th>OrthoCare &amp; EHH</th>
<th>Dr. Kilgore and EHH (n=368)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg # of Visits</td>
<td>10.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Cost Per Episode</td>
<td>$2,301</td>
<td>$1,720</td>
</tr>
<tr>
<td>% of Episodes w/Readmits</td>
<td>4.9%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

**Despite a focus to reduce cost of care and the number of patient encounters...**
- Dr. Kilgore’s patients show:
  - 93% satisfaction compared to national average of 86% (n = 41 returned surveys)
  - 95% improvement in outcome measures compared to 75%
  - 36% LUPAs

* Date from Jan 2016 – June 2017, source: SHP and internal data sources