2019-2020 Orthopedic Collaborative Care Annual Report

Coming together to offer premier orthopedic care
Dear colleagues,

We are happy to celebrate our expanded success story with you.

This annual report for the Beacon Orthopedic Collaborative Care (Co-Management) Program will highlight our 2018-2020 progress as well as spotlight our new collaborative care program that went into effect mid-2020.

Our History
An Orthopedic Collaborative Care program was launched in 2017, when multiple Orthopedic practices collaborated with hospital administration at Elkhart General Hospital and Memorial Hospital of South Bend. The collaboration includes surgeons from Allied Physicians of Michiana, Beacon Bone & Joint Specialists, Orthopedic & Sports Medicine Center of Northern Indiana, Inc., South Bend Clinic, South Bend Orthopedics and other independent practitioners.

The second performance period of the co-management program expired in May 2020. Moving forward, our new co-management structure includes closer ties between Beacon Bone and Joint Specialists and Orthopedic & Sports Medicine Center of Northern Indiana, Inc. and will help us manage the orthopedic service lines at each hospital.

One of our key goals is to achieve Advance Certification of our Total Joint Replacement program by The Joint Commission within the next coming months.

Our Focus
Our initial focus centers on specific Centers for Medicare & Medicaid Services (CMS) total joint replacement bundle payment programs, and enhanced care of our hip fracture patients. We are striving to reduce care variation by developing standardized protocols and uniform care to improve patient experience and outcomes across the system while still containing costs. These challenges are not easy; however, we have already seen significant improvements in a number of key quality and operational initiatives.

The CMS total joint replacement bundle payments performed extremely well with Beacon Health System obtaining $1,896,291 in Medicare reconciliation dollars.
- Elkhart General Hospital completed the Bundled Payments for Care Improvement initiative (BPCI) in 2018 with a CMS reconciliation payment of $1,042,551.
- Memorial Hospital continues to be in the Comprehensive Care for Joint Replacement model (CJR) until 2021, but for performance years 1-3 have received reconciliation payments of $525,748.

83% of our performance metrics showed positive trending in the last two years.

Sam Eldalati, MD
Chief Clinical Officer,
Beacon Health System
Poised for growth and improvement

We continue to evolve our orthopedic co-management program with an eye on becoming the premier providers of comprehensive total joint care in the communities we serve. Our objectives are set on achieving the triple aim of

- Continually improving patient experience and outcomes alongside better-managed costs of care,
- Leveraging improved clinical and operational performance for the business growth, and
- Sustaining our orthopedic care services.

Beacon Health System strives to be known in our community as trusted experts offering a full range of orthopedic and sports medicine services for the entire family.

Coming together to offer premier orthopedic care

Why co-management?
We felt it was the best ways for us work closely with Orthopedic surgeons to enhance quality of care and operational efficiencies while decreasing overall costs. This model of clinical integration allows the Orthopedic program leaders to work together on standard clinical protocols, operational decisions, equipment and staffing needs, and service line initiatives. It also provides a legal framework that allows us to financially incentivize participants for achieving quality and operational goals.

Total Joint Program:
- Better prepare our patient before surgery through education and optimizing their health through pre-testing
- Discharge planning upfront and before their surgery is scheduled
- Standardize clinical care pathways and order sets across the system
- Addition of the ROSA Robotic system to enhance total knee replacements
- Become a Center of Excellence for Total Joint Replacement programs

Geriatric Hip Fracture Program:
- Evidence based model to decrease time for admission to surgery
- Pain control and decreased narcotic use that often times leads to delirium of the geriatric patient by performing Fascia Iliac blocks
- Standardize clinical care pathways and order sets across the system
- Peer review

3 locations
South Bend
Mishawaka
Elkhart

30 providers
9 specialties
Our approach to care

Specialized team
Dedicated orthopedic specialists, including physicians board-certified in Orthopedic surgery and members of the Orthopedic Trauma Association.

Data Driven
Participation in the American Joint Replacement Registry (AJRR) and The National Trauma Registry System (TRACS) to monitor performance and identify opportunities to improve care.

Coordinated care
We offer nurse navigators to coordinate care before, during and after a joint replacement, educate patients & families, and provide a smooth hand-off to post-acute care sites (when applicable).

Innovative services
Beacon Health System offers both traditional and minimally invasive surgery and, in October 2020, started offering robot-assisted surgery for knee replacements.

Quality is the foundation of our care

From June 2018 to May 2020, we targeted 15 cost-saving metrics and 18 pay-for-performance quality and operational initiatives with 94% improvement over time.

The Orthopedic Co-Management had oversight to the Total Joint Bundle Payment performances at both Elkhart General Hospital and Memorial Hospital of South Bend that were successful in lowering the 90-day continuum cost of care compared to national targets set by CMS. Through the bundle payment initiative, it forced us to better prepare, educate and set expectations to patients and families that resulted in:
- Increasing attendance to the Total Joint Class by 45%
- Increasing the total joint patient going through pre-testing by 20%
- Maintaining high patient satisfaction with patients having total joint replacements of 4.8 out of a 5.0 scale
- For patients needing post-acute care to a skilled nursing facility, directing them to use one of our aligned facilities to improve their function quicker and get them home quicker (7% improvement)
- Maintaining low readmissions rates back to the hospital (1.5%)

The Orthopedic Co-Management formed a Hip Fracture Committee to standardize care using evidence based practices that tackled:
- Reducing the time from admission to surgery from 27.5 hours to 18 hours
- Standardized order sets pre & post-surgery
- Implemented the use of Fascia Iliac Blocks to better manage pain and reduce the use of narcotics that may result in delirium for the geriatric patient
- Peer review lengths of stay, complications, mortalities and reasons for readmissions

From an operations perspective, an Operations Committee looked at improving efficiencies in:
- Improving On-time starts for Orthopedic cases
- Decreasing Turn-over times for Orthopedic cases
- Improving case cart failures for Orthopedic cases
- Improving delays in PACU by starting therapy in that setting and connecting patients with their families earlier

Highlights:

- Decreased time of admission to surgery for hip fracture patients to significantly below national average
- Robot-assisted surgery (started Fall of 2020)
Quality metrics from June 2018 – May 2020

Improving key performance

- 18 pay-for-performance quality and operational initiatives showed 94% improvement over 2017
- BPCI Total Joint Replacement Bundle Performance (complete): $1,042,551
- CJR Total Joint Replacement Bundle Performance (performance years 1-3): $525,748

### Total Joints - Hips/Knees

<table>
<thead>
<tr>
<th>Measure</th>
<th>2019 Performance</th>
<th>Improvement over prior year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase % of patients attending approved joint class - EGH</td>
<td>91%</td>
<td>+30%</td>
</tr>
<tr>
<td>Increase % of patients attending approved joint class - MHSB</td>
<td>83%</td>
<td>+46%</td>
</tr>
<tr>
<td>Increase or maintain % of patients attending Pre-testing - EGH</td>
<td>99.7%</td>
<td>+12.7%</td>
</tr>
<tr>
<td>Increase or maintain % of patients attending Pre-testing - MHSB</td>
<td>98%</td>
<td>+25%</td>
</tr>
</tbody>
</table>

### Hip Fracture

<table>
<thead>
<tr>
<th>Measure</th>
<th>2019 Performance</th>
<th>Improvement over prior year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease time of admission to surgery for hip fracture patients - EGH</td>
<td>19:22</td>
<td>+16%</td>
</tr>
<tr>
<td>Decrease time of admission to surgery for hip fracture patients - MHSB</td>
<td>17:12</td>
<td>+62%</td>
</tr>
</tbody>
</table>

### Operational Metrics

<table>
<thead>
<tr>
<th>Measure</th>
<th>2019 Performance</th>
<th>Improvement over prior year</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Orthopedic Surgical case on time start - EGH</td>
<td>63%</td>
<td>+12%</td>
</tr>
<tr>
<td>First Orthopedic Surgical case on time start - MHSB</td>
<td>49%</td>
<td>+17%</td>
</tr>
</tbody>
</table>

### Patient Satisfaction Metrics

<table>
<thead>
<tr>
<th>Measure</th>
<th>BXP - EGH Total Joint Unit</th>
<th>BXP - MHSB 8 East floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient satisfaction</td>
<td>4.8</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Beacon Health System serves over 48,000 orthopedic patients at Elkhart General and Memorial Hospital annually

<table>
<thead>
<tr>
<th>Category</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hip/Knee Replacements</td>
<td>1,322</td>
<td>1,010</td>
</tr>
<tr>
<td>Hip Fractures</td>
<td>331</td>
<td>297</td>
</tr>
</tbody>
</table>
Steven Shonkwiler is a delivery driver who spends his days getting in and out of his truck, walking in and out of his customer locations. One day one of his regulars waved him over and said he wanted Steven to talk with his sister about her hip replacement. This customer had watched how difficult it was for Steven to get into his truck and saw that his limp was getting worse. In fact, Steven had been living with increasing pain and difficulty moving for nearly six years, “Everyone else seemed to realize how bad it was long before I did.”

What started as occasional soreness evolved into his hip locking up regularly when he was walking. “I couldn’t walk up stairs normally - I had to use my hands to swing my leg up just to get in the truck. It got so bad my wife said I moaned in my sleep all night.” Steven and his wife decided it was time to see the doctor and made an appointment with Dr. Gregg Ebersole at Beacon Bone & Joint.

“Dr. Ebersole made me feel comfortable right away. He was very personable and easy to talk to,” shared Steven. After receiving the results of his imaging, Dr. Ebersole told Steven that he recommended a hip replacement to regain the quality of life he desired. From there things moved quickly but Steven never felt rushed. “I knew what to expect from the whole procedure and felt well prepared for recovery. When I was still in the hospital they wanted me up and moving and gave me a walker. Well, it felt so good to take normal strides again that I didn’t even want to use it!”

Steven’s advice for anyone considering hip replacement? What are you waiting for?!

Like many people Steven was worried about how hard recovery might be and how much time he’d have to take off work. “None of that was as bad as the constant pain and hassle I was experiencing every day before I had my hip replaced.” Steven says the hardest part of recovery was “learning how to walk normally again after years of swinging my leg around and assisting it with my hands. I honestly wish I had done it years earlier.”
Her sewing room was in the basement. She was not. With the severe osteoarthritis, Cheryle Barton’s right knee wouldn’t let her get to one of her favorite pastimes – sewing. “I upholster and do mending, and recently I’ve been making facemasks, she explains.”

Suffering with knee pain for years, Cheryle worked to strengthen her knee with walking at the gym. It helped for a time,” she says. She then began to find that her knee wouldn’t lift her own weight and the pain was getting bad again. “My leg also started bowing outward and I began limping. My doctor sent me to Orthopedic & Sports Medicine Center of Northern Indiana, Inc.,” Cheryle says.

Dr. Willis Stevenson saw Cheryle. Together they went over her X-rays and the options she had so she could get moving again. “The doctor was so patient. I like to research-and-research things, so I had many, many questions. He answered every one of them, and he was candid. His honesty and information helped me to make the decision to have the surgery,” she notes.

Cheryle chose to have a full joint replacement on her right knee. The surgery took place September 2020 at Elkhart General Hospital. “I was nervous for weeks beforehand, but the staff at the hospital put me at ease the day of the surgery. And, Dr. Stevenson, his surgery and physical therapy teams were wonderful. What really surprised me was how little pain I had after the surgery,” she says.

“I’m doing well, and like a normal person, I can go up and down the stairs now,” Cheryle explains.

Cheryle is thrilled to be quickly mending... so she can get back mending! In the sewing room, that is.
Performance-based results

30 physicians...
Specialists in total joint replacement; shoulders; knees; hips; back & spine; hand, wrist & elbow; head & neck; trauma; and oncology.

High satisfaction scores...
Performed better than national average in time-to-surgery for hip fractures and patient satisfaction.

Increased education...
Research shows that patients who plan for and are educated on their upcoming surgery, have shorter lengths of hospital stay, better outcomes and lower costs of continuum care (including post-care). Our goal was to increase patient participation in the total joint class and attendance at pre-admit testing to optimize patients for surgery.