Comprehensive Care for Joint Replacement (CJR) Bundled Payment Model: Initial Results

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Agenda

- **Introduction to the Comprehensive Care for Joint Replacement (CJR) Payment Model.**
- **Financial Results**
- **Clinical and Operational Highlights**
  - Health Coach Program
  - Pre-Surgical Optimization/Surgical Readiness
  - Multi-Modal Pain Management
  - Discharge Disposition/Post-Surgical Care Options

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CJR: Background

- Hip and knee replacements are the most common inpatient surgeries for Medicare beneficiaries and can require lengthy recovery and rehabilitation periods.
- In 2014, there were more than 400,000 procedures, costing more than $7 billion for the hospitalizations alone.
- Despite these high volumes, quality and costs of care for hip and knee replacement surgeries still vary greatly among providers.

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What is the CJR Model?

- **The Comprehensive Care for Joint Replacement (CJR) Model is a 90 day bundled payment model for lower extremity joint replacement (hips and knees) for Medicare patients.**

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What is CJR?

- Episode of care includes the joint replacement procedure and related hospital costs, the inpatient stay, as well as all related care covered under Medicare Parts A and B within the 90 days after discharge, including hospital care, post-acute care (PAC) (including the skilled nursing facility (SNF) stay), outpatient care including physical and occupational therapy visits billed under Part B during a person's stay in a nursing center, related readmissions, and physician services.

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What is CJR?

- **The CJR model holds participant hospitals financially accountable for the quality and cost of a CJR episode of care and incentivizes increased coordination of care among hospitals, physicians, and post-acute care providers.**

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CJR

- CMS has required implementation the CJR model in 67 geographic areas, defined by metropolitan statistical areas (MSAs). MSAs are counties associated with a core urban area that has a population of at least 50,000.
- One of these MSAs includes ProHealth's market area.

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CJR Applies To:

- MS-DRG 469 (Major joint replacement or reattachment of lower extremity with major complications or comorbidities)
- MS-DRG 470 (Major joint replacement or reattachment of lower extremity without major complications or comorbidities)

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- ProHealth discharges 1,000 cases annually under MS-DRGs 469 and 470. Approximately 400 are subject to the CMS CJR Bundle Program.
- CJR program is scheduled to run for five performance years, ending on December 31, 2020.

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CJR Target Pricing

TARGET PRICE METHODOLOGY

- Target Prices are a blend of payment amounts from hospital-specific historical episode spending and regional historical spending.
- Over the course of the five Performance Years, target prices will be weighted more heavily on hospital-specific historical claims and shift until the target prices are based completely on regional spending.

TARGET PRICE CHANGES

Year	Hospital-specific	Regional	Baseline Period
PY 1 (Apr-Dec 2016)	2/3	1/3	2012-2014
PY 2 (CY 2017)	2/3	1/3	2012-2014
PY3 (CY 2018)	1/3	2/3	2014-2016
PY 4 (CY 2019)	0/3	3/3	2014-2016
PY 5 (CY 2020)	0/3	3/3	2016-2018

- **CMS will apply an automatic discount to the episode target cost of care. The discount percentage will vary from anywhere in between 1.5 and 3 percent, based upon the hospital's quality composite score**

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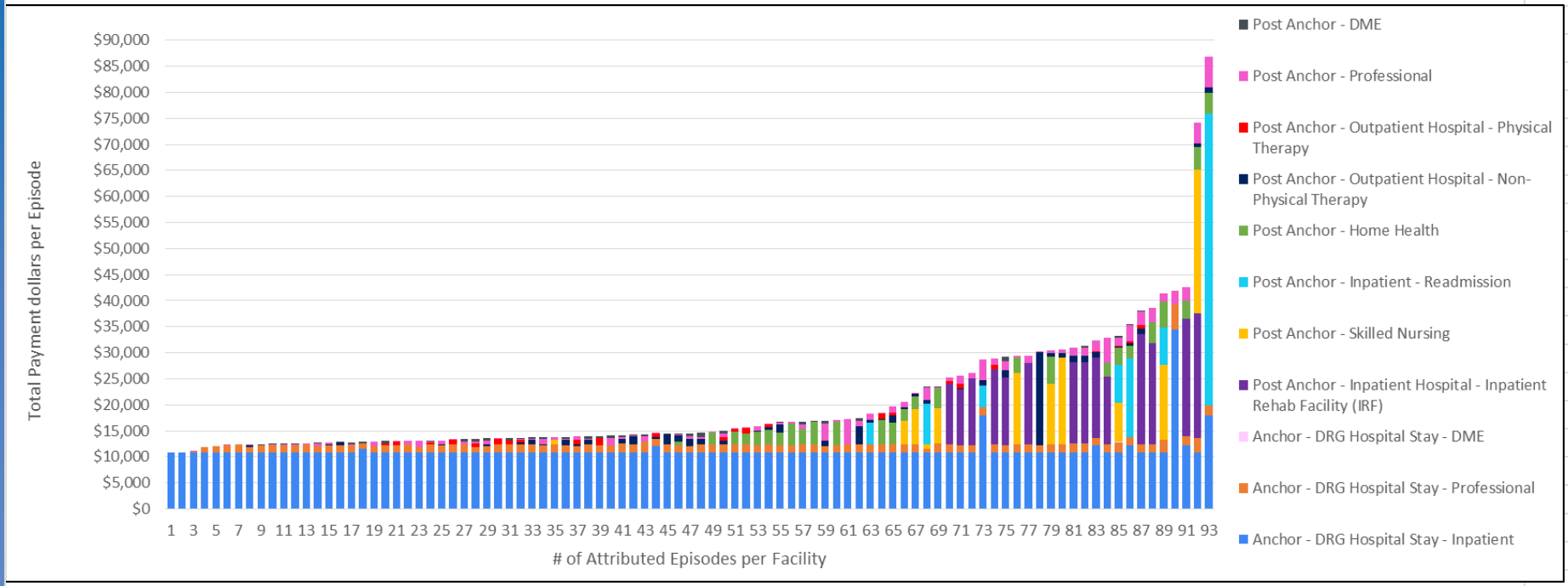
ProHealth Waukesha Memorial Hospital - Total Payments per Episode by Place of Service

Measurement Period: 4/1/16 - 9/30/16

Data Source: CJR Claims Data Feed



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ProHealth Waukesha Memorial Hospital - Financial Dashboard Summary

Measurement Period: 4/1/16 - 9/30/16

Data Source: CJR Claims Data Feed

DRG	LEJR Status	Facility	# of Episodes	2016 CJR Target	Actual $	Variance*
469	Non Fracture	PHWMH	2	$73,720.00	$115,547.95	$41,827.95 Above Target
469	Fracture	PHWMH	1	$52,423.00	$42,245.04	$10,177.96 Below Target
470	Non Fracture	PHWMH	82	$1,742,008.00	$1,511,067.32	$230,940.68 Below Target
470	Fracture	PHWMH	8	$313,576.00	$268,446.60	$45,129.40 Below Target
TOTALS			**93**	**$2,181,727**	**$1,937,307**	**$244,420.09 Below Target**

*Total episode counts and actual dollars are calculated based on claims received by CMS as of the end date of the measurement period. These numbers and calculations may not include all episodes during that timeframe due to billing lag time and include in-process episodes.

Variance Dollars Color Coding Key	
	Below the Target Price
	Above the Target Price
	Equal to the Target Price

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Comprehensive Care for Joint Replacement Payment Model: Clinical and Operational Highlights

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CJR Health Coach

- The Health Coach is a BSN-prepared RN who manages each patient from the time the surgeon deems surgery appropriate all the way through the 90 day episode.
- Completes a surgical readiness questionnaire and assists with scheduling the pre-operative assessment.
- Assists with improvement of health prior to surgery.
- Completes necessary education and helps establish expectations with the patient.
- Assists with the plan after discharge, with a focus on patients being discharged directly to home.
- Follows and monitors patient care post discharge through 90 days.

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Pre-Surgical Optimization/Surgical Readiness

- **Old concept: "Medical Clearance"**
  - Non-standard process
  - Often occurred too late to address medical co-morbidities
- **New concept: Surgical Readiness**
  - Standardized, evidence-based process
  - Allows time to optimize patient's condition prior to surgery

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Pre-Surgical Optimization/Surgical Readiness

- The readiness questionnaire includes such things as a nutritional assessment, dental evaluation, alcohol overuse screen, assessment of opioid use, question about exercise tolerance (as an estimate of functional status), depression screen, and sleep apnea screen using the STOP-BANG tool.

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Criteria for which delay of elective surgeries or procedures should be strongly considered

- **Blood pressure > 170/110** (either systolic or diastolic value exceeded)
- **Pulse oximetry < 90%** May indicate undiagnosed or inadequately controlled pulmonary disease.
- **Diabetics: Most recent HgA1c > 8.0**
- **Exercise Tolerance < 4 METS AND** patient has >1% risk of MACE (major adverse cardiac event) using the NSQIP risk calculator (as suggested in Smart Set) or using the Revised Cardiac Risk Index calculator (RCRI).
- **BMI > 50** for elective TKA/THA. Discussion recommended between surgeon and patient for other elective procedures. **NOTE:** Surgery with a BMI over 40 increases the risk of acute kidney injury which in turn increases the risk of post-surgical CKD/ ESRD.

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Criteria for which delay of elective surgeries or procedures should be strongly considered

- **STOP BANG score ≥ 5 – OR –** Yes to 2 of the "STOP" questions **PLUS** one of the following: BMI > 35, or male gender, or abnormal neck circumference. Further evaluation for sleep apnea recommended.
- **Hemoglobin < 10.** Checked when clinically indicated. Checking is strongly encouraged for TKA/THA surgery. May waive the Hgb 10 level for certain patients, e.g., thalassemia.
- **Albumin < 3.** Checked only if at nutritional risk based on the nutritional risk assessment questions in the surgical readiness questionnaire

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Pain Management

- **Pain increases sympathetic output**
  - Increases myocardial oxygen demand
  - Increase blood pressure and heart rate
  - Blunted immune response
- **Pain limits mobility**
  - Increases risk for DVT/PE
  - Increases risk for pneumonia, atelectasis secondary to splinting
  - For post arthroplasty patients, pain can lead to decreased tolerance to physical therapy and can lead to increased length of stay
- **Pain is a miserable experience**

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Problems with Opioid-Focused Approach

- The efficacy of opioids is limited by the side effects.
- Many patients continue using opioids months after joint replacement.
- Decreased opioid use prior to joint replacement surgery reduces complications, improves surgical outcomes, and increases patient satisfaction.

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Multi-Modal Pain Management

- **Multi-modal analgesia: Several analgesics with different mechanisms of action, each working at different sites in the nervous system.**
  - Acetaminophen
  - NSAIDs (e.g., ketorolac, ibuprofen, celecoxib)
  - Opioids
  - Anticonvulsants (e.g., gabapentin)
  - Antidepressants
  - Local Anesthetics
  - NMDA Antagonists (e.g., ketamine)
  - Non-pharmacological methods

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Care Guide: Multi-Modal Perioperative Pain Management (Total Knee Joint Arthroplasty)

ADVICE

Total Knee Joint Arthroplasty

PATIENT PROMISE

- We will utilize a multi-modal pain management approach that includes evidence-based practice for perioperative pain management
- We, in partnership with the surgeon and nursing, will educate or provide information to the patient and family/caregiver related to pain expectations and the multi-modal perioperative pain management process. This will include provision of materials and content during the surgeon office visit, at Stepping Forward Class, on day of surgery prior to anesthesia and post operatively
- We will review patient history (including comorbidities and medications) and physical exam to individualize the plan for peri-operative pain management to ensure safety
- We will discuss peri-operative pain management options, risks and benefits with the patient and their family/caregiver, and allow the patient to consent for the anesthesia services and/or procedures
- We will engage the patient and family in shared decision making

QUALITY MEASURES

- Monitor the amount of Opioid medications necessary to control pain as measured by Morphine Milligram Equivalents (MME) --goal with less than 50 MME and always less than 90 MME
- Reduce length of hospital stay because of pain related issues (all patient charts will be reviewed who exceed one day stay inpatient stay)
- Monitor for acute kidney injury, worsening of chronic kidney disease or GI bleed due to multi-modal pain management approach (chart review --- part of complications team/watch for trends)
- Evidence of written communication with patient and family on anesthesia approach and pain management (all charts will be reviewed for documentation)
- Audit to ensure the following are present: Individualized plan for patient condition based on evidenced based practice, request for anesthesia, informed consent, site marking and team time out

INCLUSIONS/EXCLUSIONS

Total Knee Joint Arthroplasty

WORKFLOW

PRESURGICAL ENCOUNTERS

- The surgeon or assistant will discuss the multi-modal perioperative pain management plan and pain expectations
- Provision of multi-modal perioperative pain management plan handout (Administrative assistant to complete in office or mail out with surgical packet)
- Provision of Celebrex prescription per Total Knee Arthroplasty-Multi-Modal Perioperative Pain Management Protocol
- Instruct patient to take Acetaminophen per Total Knee Arthroplasty-Multi-Modal Pain Management Protocol

STEPPING FORWARD CLASS VISIT

- Provision of multi-modal perioperative pain management plan and pain expectations education

PRE PROCEDURE RN INTERVIEW AND POSSIBLE HEALTH COACH APPOINTMENT

- Continued provision of patient education related to multi-modal perioperative pain management plan and pain expectations

DAY OF SURGERY PRE-PROCEDURE

- Continued provision of patient education related to multi-modal perioperative pain management plan and pain expectations
- Administration of Celebrex and Acetaminophen if patient reports did not take at home
- Prepare for chosen anesthesia/pain management pathway

INTRA-OPERATIVE, POST-OPERATIVE, POST-ACUTE (See Care Guide Protocol)

Note: *Guideline recommendations apply to populations of patients. Clinical judgment is necessary to design treatment for individual patients*

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Multi-Modal Pain Management

- Adequate postoperative pain control allows for faster rehabilitation and reduces the rate of postoperative complications.
- A shift towards a multimodal approach provides patients with a level of individualized pain control that allows them to actively participate in their recovery.

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Regional Anesthesia

- **Using regional anesthesia as part of the multi-modal approach minimizes usage of opioids, resulting in reduced:**
  - Nausea/vomiting
  - Sedation
  - Ileus
  - Weakness
  - Hypotension
  - Delirium

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EFFECTIVE PAIN RELIEF.[1-13] GETTING PATIENTS BACK TO NORMAL FASTER.[2-3,6-7,14-19] ON-Q* IS ON IT.

Opioid analgesics and short-duration single-shot nerve blocks may compromise surgical outcomes and patient experiences.[3,16-18,20-21] ON-Q* Pain Relief System offers a new total solution for keeping pain management from compromising surgical success. Using a multimodal pain management approach, ON-Q* provides over 3 days of predictable pain relief while reducing opioid use.[1-6] Patients can be both **comfortable** after surgery and **capable** of activity as they move through recovery.[2,6-9,14,22-23] Discover the benefits of ON-Q*:

- Create an optimal postoperative experience
- Reduce postoperative opioid use while achieving pain management

ON-Q® system; Continuous Peripheral Nerve Block (CPNB)

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Multimodal Effects on Opioid Use in TKA

- Total of 28 PHC patients had a TKA prior to implementation of the Multi-Modal Approach/Continuous Peripheral Nerve Block (CPNB) and a second TKA post implementation.
- 10 of 28 had ON-Q/CPNB for 2nd TKA. All had femoral nerve block or adductor canal nerve block for 1st TKA
- Of the remaining 18 patients, most had some elements of MM approach, but not CPNB. All were excluded.
- Evaluation of opioid use in remaining 10 patients showed a marked reduction in 9 of 10.

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MRN	Date of surg	Loc	Surg	Anesth	LOS	Disposition	MMEs Total	Comments
1st knee	8/19/15	OMH	A	D	3	Rehab	154.9	POD2 MME 90. Was on Ultram PTA. Gabapentin pre-op. Toradol X5**. MMEs DOS: 15.4, POD1 49.5, POD2 90; DC day 30**
2nd knee	11/16/16	OMH	A	D	3	Rehab	344.9	On Ultram PTA. Toradol, MS Contin 15, Gabapentin pre-op. Toradol X2 postop Tylenol scheduled TID. Scheduled MS Contin 15 BID. On-Q DC'd POD2. **MMEs: DOS 42.9, POD1 137, POD2 165, DC day 90**
1st knee	10/19/15	WMH	A	E	2	Home	72.8	Oxy 20, Gabapentin, Tylenol IV and Celebrex Pre-op, Celebrex given POD 1&2. **MMEs DOS: 35.3, POD1 37.5,DC date: 37.5**
2nd knee	10/17/16	WMH	A	F	1	Home	42.75	Gabapentin, Celebrex and IV Tyl all preop. **MMEs DOS 42.75, DC date 60**
1st knee	1/22/15	OMH	B	G	2	Home	75	Toradol X2, Tylenol 650 X2 postop. **MMEs: DOS 15, POD1 60, DC day 30**
2nd knee	3/15/16	OMH	B	H	1	Home	0	Tylenol 650X 2 post op. **MME: DOS 0, DC day: 30**
1st knee	10/28/15	OMH	C	I	2	Home	31.25	Toradol X 5 doses. Gabapentin X4. **MMEs: DOS: 11.25, POD1 20, DC day; 15**
2nd knee	4/6/16	OMH	C	H	1	Home	0	Gabapentin and IV Tylenol Preop. **MMEs: DOS:0, DC day 18**
1st knee	10/23/15	WMH	A	J	2	Home	25	Gabapentin and IV Tylenol pre-op. **MMEs: DOS 0 POD1 25, DC day 17.5**
2nd knee	1/16/17	WMH	A	K	1	Home	0	0 MMEs for stay.
1st knee	10/22/15	OMH	B	H	2	Home	147.5	Oxycodone pre-op. Toradol X3 postop. **MMEs: DOS 37.5, POD1 110, DC day 70**
2nd knee	10/27/16	OMH	B	I	1	Home	51.25	MS Contin and gabapentin preop. MMEs: **DOS: 51.25, DC day: 60**
1st knee	10/21/15	OMH	C	D	2	Home /HHC	90	Toradol X2 post op. **MMEs: DOS 30, POD1 60, DC day 40**
2nd knee	10/5/16	OMH	C	Mei	1	Home	46.25	MS Contin Preop. Toradol X2 postop. **MMEs: DOS 46.25, DC day: 20**
1st knee	12/9/15	OMH	C	D	1	Home	87.3	IV Tylenol preop. Toradol X2 post op. **MMEs: DOS 87.3 DC day: 60**
2nd knee	11/30/16	OMH	C	D	1	Home	56.3	MS Contin preop. Toradol X3 postop. **MMEs: DOS: 56.3, DC day: 60**
1st knee	1/8/15	OMH	B	D	2	Home	50	Toradol X4 postop. **MMEs: DOS 5, POD1 45, DC day: 15**
2nd knee	1/14/16	OMH	B	D	2	Home	35	**MMEs: DOS 5, POD1 30, DC day: 15**
1st knee	9/9/15	OMH	C	D	2	Home/HHC	65	Toradol X2 postop. **MMEs: DOS 20, POD1 45, DC day 30**
2nd knee	9/7/16	OMH	C	H	1	Home/HHC	19	**MMEs: DOS;19, DC day: 5**

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Discharge Disposition/Post-Surgical Care Options

- **Most elective total joint replacement patients can be discharged to home.**
  - Requires re-set of expectations
  - Requires planning and support
    - Proactive
    - Coordinated

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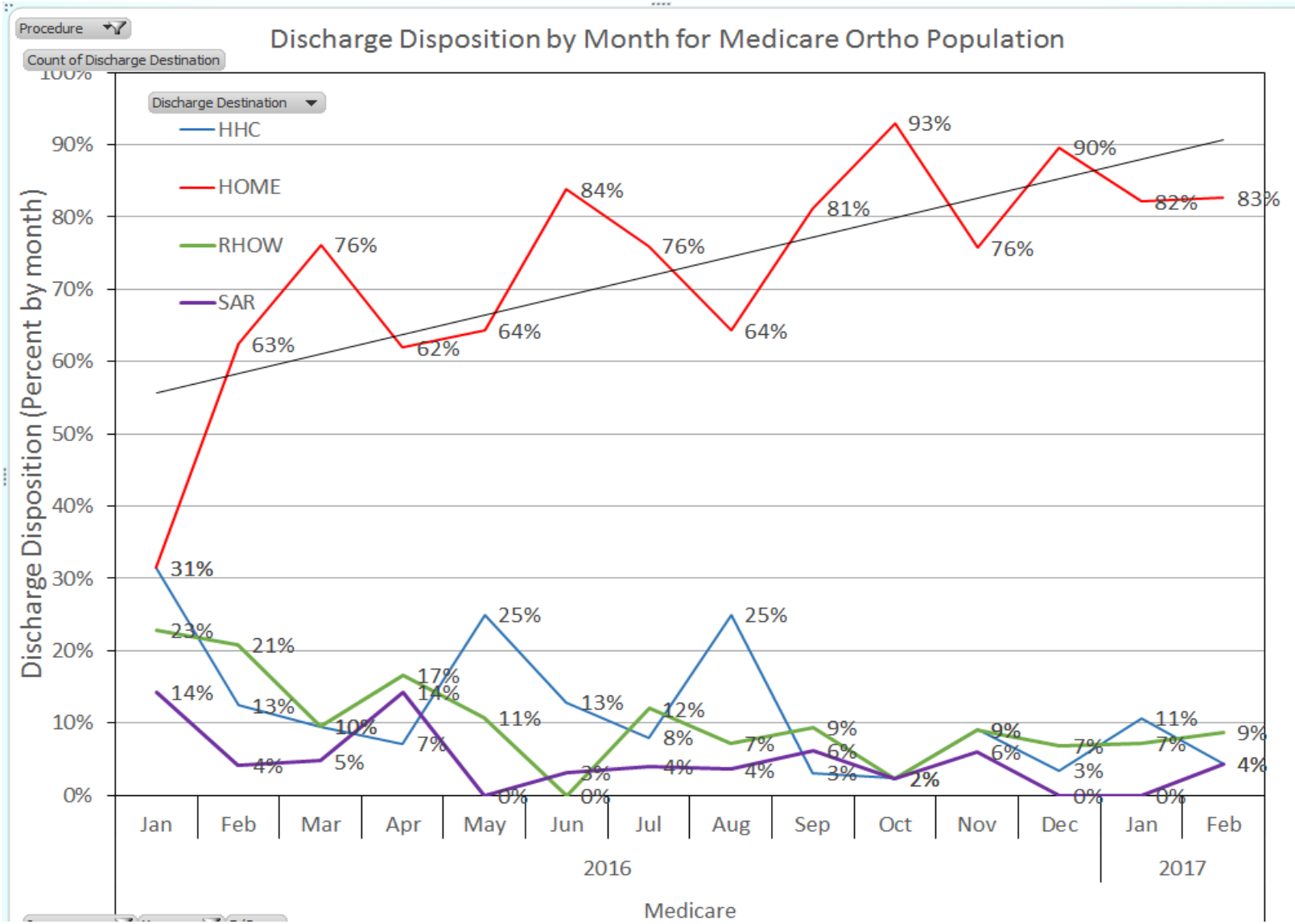
Elective Total Hip/Total Knee Discharge Disposition



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Post Acute Performance Network

- **Rehab hospitals, skilled nursing facilities, home care.**
- **Past:**
  - Incomplete understanding of utilization of each post-acute service
  - Inability to consistently measure ongoing performance
  - Lack of integration to improve quality levers
- **Now and in the future:**
  - Full inventory of service
  - Agreed upon metrics and accountabilities
  - Quality score card

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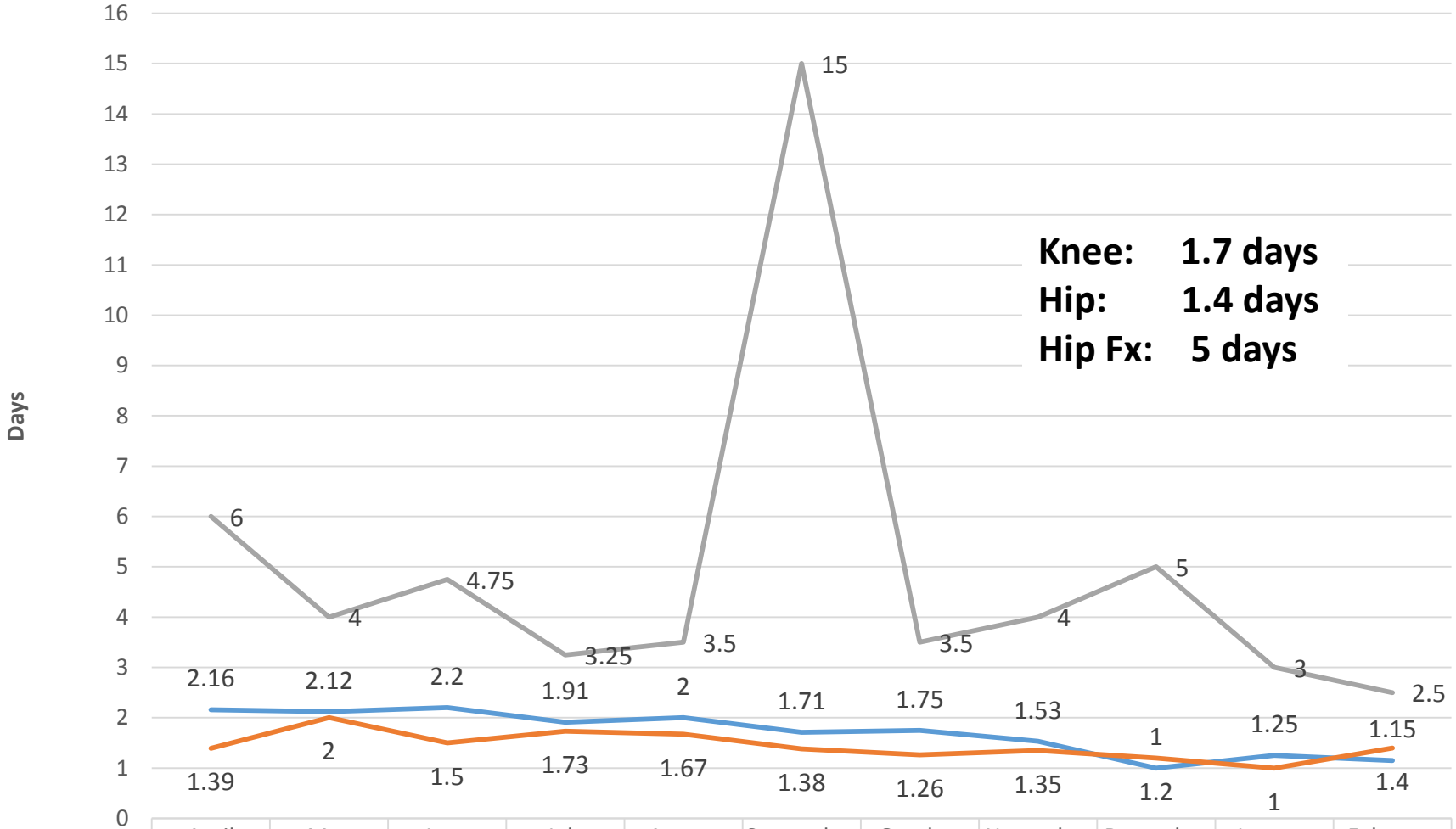
Average Length of Stay for the Operative Encounter



	April	May	June	July	August	September	October	November	December	January	February
KNEE	2.16	2.12	2.2	1.91	2	1.71	1.75	1.53	1	1.25	1.15
Hip	1.39	2	1.5	1.73	1.67	1.38	1.26	1.35	1.2	1	1.4
Hip Fx	6	4	4.75	3.25	3.5	15	3.5	4	5	3	2.5

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What Has Helped CJR Work at ProHealth?

- **Operational Structure**
  - Strategic partnership with large independent orthopedic group
  - Formal Orthopedic Service Line with leadership dyad
    - Service line Executive Committee
    - Clinical Practice Subcommittee with engaged multi-disciplinary membership
- **Agreement to Standardize**
  - Vendors
  - Clinical Protocols

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“We need to look at how we’re practicing, review the evidence, and try to decrease variability within the group.”

-High volume independent orthopedic surgeon

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What Has Helped CJR Work at ProHealth?

- **Patient-Centered**
- **Cooperation across the continuum of care**
  - PCPs with Orthopedic Surgeons
  - Orthopedic Surgeons with Anesthesiologists and Nurses
  - Health coach with patients, PCPs, and Orthopedic Surgeons
  - Hospital system with post-acute care providers
  - Etc.

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Key Lessons

- **Physician Champion and Physician partnerships are critical.**
  - Preferred supply vendor adherence
  - Development and adherence to care guides
  - Standardized pre-op assessment, with commitment to pause and reschedule procedures when patient isn't ready for surgery
- **Post Acute providers are nervous they will lose referrals. Pick the right partnerships and hold them accountable to established care plans.**

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Key Lessons

- Plan on extensive data analytics resources to model and utilize CMS files.
- Utilize analytics and monitor trends in as real time as possible.
- These processes and tools can be replicated as additional bundles are developed by CMS or other payers.
- Next steps.

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Thank You!

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