

MaineHealth

## MaineHealth Knowledge Connection

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MaineHealth Performance Improvement

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2020

### ED Utilization

Adam Rana

*Maine Medical Center*

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### Problem/Impact Statement

Maine has a higher utilization of Emergency Department services than the national average. Avoidable ED visits helps with cost containment, leads to improved patient outcomes, and assists with continuity of care

### Scope

The study MMP Orthopedics Department of Arthroplasty undertook in FY 20 involved evaluating postoperative ED visits for our primary total hip and knee arthroplasty patients.

### Goal/Objective

The goal of our study sought to identify “avoidable” ED visits for our postoperative total hip and knee arthroplasty and work towards reducing / redirecting these patients in a safe / effective manner..

### Baseline Metrics/Current State

FY 2020- Knees	# of Primary Knee Replacements	30 Day ER Visits	# of ER Visits on Weekdays
Q1	215	11 (5.1%)	8 (72%)
Q2	186	10 (5.3%)	8 (80%)
Q3	92	3 (3.2%)	2 (66%)
Q4 (YTD)	165	6 (3.6%)	4 (66%)

FY 2020- Hips	# of Hip Replacements	30 Day ER Visits	# of ER Visits on Weekdays
Q1	282	10 (3.5%)	8 (80%)
Q2	197	7 (3.5%)	6 (85%)
Q3	158	3 (1.8%)	3 (100%)
Q4 (YTD)	261	6 (2.3%)	5 (83%)

### Example of ER Visit Reasons (Q4 Knee Replacements)

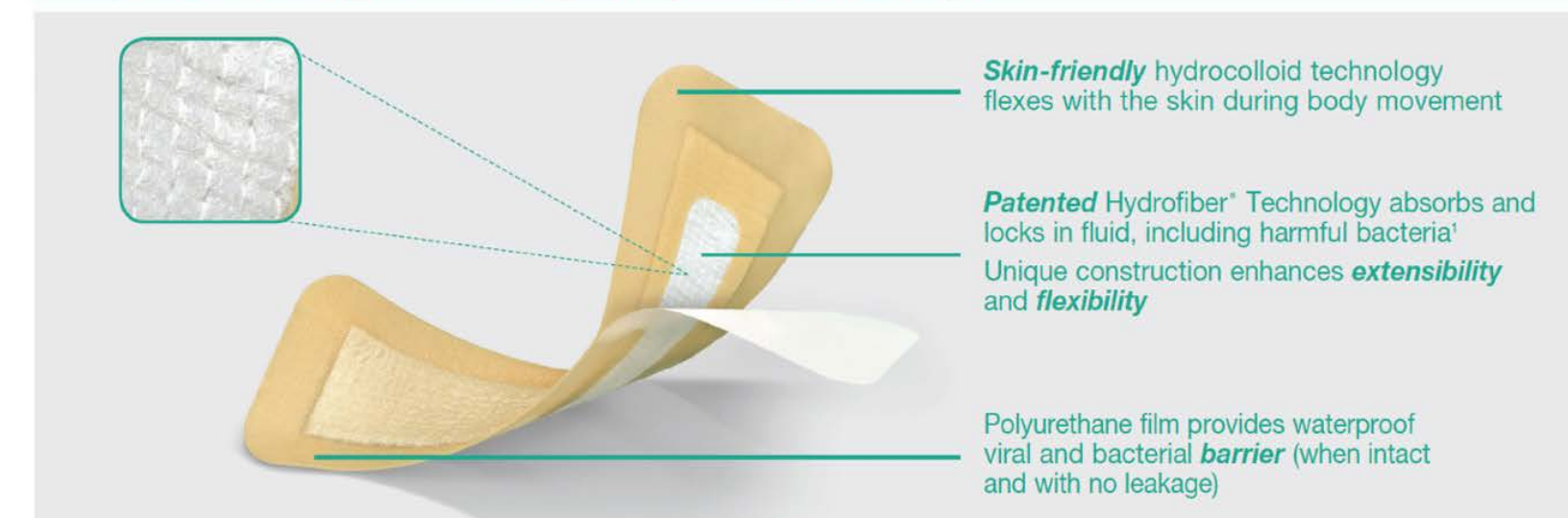
FY	Quarter	ED Chief Complaint	ED Primary DX
FY20	Q4	LOSS OF CONSCIOUSNESS	Syncope, unspecified syncope type
FY20	Q4	ABDOMINAL PAIN	Pain of upper abdomen
FY20	Q4	KNEE PAIN	Pain in right knee
FY20	Q4	FLANK PAIN	Renal calculi
FY20	Q4	ALLERGIC REACTION	Irritant contact dermatitis, unspecified trigger
FY20	Q4	CONSTIPATION	Constipation, unspecified constipation type

### Root Cause Analysis

- After reviewing Q1 data we identified an opportunity to improve consistency of messaging to patients with providers, RN’s, and in patient education materials.
  - Two examples included:
    - “Where to Go For Care”
    - Aquacel / dressing images to educate patients regarding when they need to reach out to the office for dressing changes instead of going to the ER.
- The group also identified an opportunity to improve intervention during weekdays. since the majority of ER visits occurred Monday thru Friday

### A patient's guide to AQUACEL® Ag SURGICAL dressing

An innovative design to handle post-operative challenges



### Where to Go for Care

It is important to avoid going to the emergency room after surgery unless it is truly needed.

**ORTHOPEDIC OFFICE**  
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No cost for surgery-related visits with your surgeons for 90 days after surgery.

**OPEN:** Monday-Friday, 8:00 am-5:00 pm  
• Phone number: 207-781-1551  
• Orthopedic providers are always on call.

**WHEN TO CALL:**  
• Increased redness or drainage around the incision site  
• Severe pain that is not lessened with rest, ice, elevation, or medicine  
• Fever above 101°F and/or shaking chills  
• New rash on your body without difficulty breathing or swallowing  
• A fall that did not result in hitting your head  
• The incision opens up  
• Refills for pain medicine or other medicines prescribed by your surgeon or orthopedic team

**PRIMARY CARE OFFICE**  
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**OPEN:** Weekdays. Some offices have early, late and weekend appointments. Providers always on call.

**WHEN TO CALL:**  
• Refills for home medicines  
• Illness that isn't related to your surgery  
• Sore throat  
• High blood pressure  
• Sinus pain  
• Increased feelings of depression or anxiety

**911 or EMERGENCY ROOM**  
\$\$\$

Immediate care for life-threatening conditions, including heart attack and stroke.

**OPEN:** Always.

**WHEN TO CALL:**  
• Chest pain  
• Difficulty breathing  
• A fall that resulted in hitting your head or caused extreme pain  
• A new rash on your body with difficulty breathing or swallowing

**PLAN AHEAD FOR MEDICATION REFILLS**  
Call the Orthopedic Office during the following times:  
1. Monday-Thursday, 8:00 am-4:00 pm    2. Friday, 8:00 am-Noon  
\*We will not be able to provide medication refills after hours or on weekends.

### Countermeasures

By When & Status*	Who	Deliverable
End Q1	A. Rana B. McGrory M. Becker P. Guay N. Colacchio G. Babikian	Review existing where to go/call for care patient education materials to manage expectations; edit/add if needed. Data collection (pending MMP wide reporting); reasons for office referrals or patient self referrals to ED.
End Q2		Review data, identify key themes & plan an intervention
End Q3		Implement intervention (PDSA cycle)
End Q4		Refine intervention (PDSA cycle) and plan FY21 if needed. Create sustainment plan.

Do

Study

Act

### Outcomes

- We saw reductions of ER visits for both THR and TKR from Q1 to Q4
  - THR ER admissions were reduced from 3.5% to 2.3%
  - TKR ER admissions were reduced from 5.1% to 3.6%
- A reduction in weekday ER visits for TKR replacements patients was seen from 72% to 66%.
- Positive trend downward with wound/bandage concerns and constipation-related visits. Decrease coincides with “Where to go for care “ patient education project and dressing images.

### Next Steps

- The group will continue to evaluate ED visit data on a monthly basis. Patients that visit the ER will have their charts review by ortho RNs to evaluate reason, intervention and possible learning points.
- The group will also explore the opportunity to improve accounting ER visits at non-Maine Health facilities (via Health Info Net)