Reduction in the Average Length of Stay(LOS) for Elective Hip/Knee Replacements

The Team that said “YES”

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EBP Fellowship

Pico Question - For patients undergoing elective hip/knee replacements, can implementing a discharge education letter targeted towards setting the discharge expectation to home at the preoperative appointment reduce average length of stay (LOS)?

The Plan - Reduce the Portland VA Hospital average LOS to three days or less. Current LOS for Fiscal Year 2016 (baseline data) was 4.5 days with 193 surgeries completed.

Primary Intervention: Set the discharge expectation to home!

Baseline Data

LOS data for elective hips and knee replacements per the VA Utilization Management Database: FY 2016

- National Average (all VA Hospitals) = 4.1
- VISN 20 (Portland, Seattle, Boise, Spokane, Roseburg) = 4.1
- Portland = 4.5 (highest in the VISN) Boise = 3.6 (lowest in the VISN)
- Other VA's:
  - Palo Alto = 4.3
  - Denver and San Diego = 3.0
  - Minneapolis = 4.1
  - Boston 4.7

Boise – Called the UM Manager and asked for information on their DC pre/post operative processes.

Denver – Contacted the Orthopedic Surgeon and asked what the department was doing to achieve a the 3.0 LOS.

Chart Review

Chart Reviews:

17 of the 193 cases from FY 16 revealed 2 primary delays:

1. Delay in going to the VA Community Living Center (CLC) for rehabilitation.
2. Delays in pre-authorization of their private insurance for community rehabilitation placement.

Inconsistent use of the Risk Assessment and Prediction Tool (RAPT)

- The RAPT questionnaire consists of six questions and was developed to use preoperatively to identify patients most likely to need post acute rehabilitation.
- **The patient can score 0-12 points**
- 0-6 – 90% will go to post acute rehabilitation
- 7-9 – 60 % will go to post acute rehabilitation
- 10-12 – 98% will discharge to home

Literature Review by UM RN Revealed 3 Trends

1. Setting a Discharge expectation pre-operatively to home increased patients disposition to home.

2. The RAPT score is a valid predictor of discharge disposition allowing time to plan for post acute care preoperatively.

3. The number one reason a patient will discharge to rehabilitation vs home is the patient lives alone or lack of caregiver support.

- ****One study also stated that a delay in getting a patient to rehab when inpatient goals are not met did not change patients long term outcomes and recommended early discharge to rehab.

The Discharge Letter

- The original letter for this project came form the Boise VA.

- The Portland version involved a collaborative team: The Education Department, Orthopedic Team, Social Work and Utilization Management.
- The top portion of the discharge letter sets the expectation for discharge on post operative day 2-3 to home.
- The bottom portion of the discharge letter focusses on community rehabilitation placement using Medicare or private insurance on post operative day 2-3.

GOALS

- Decrease LOS
- A safe patient plan of care with discharge home in 1-3 days post-op
- Increased availability of post-op beds for other veterans
- Maintain/improve timely access to care
- Efficient use of resources and services

Intervention

- February 1, 2017 – The discharge education letter was introduced into the Orthopedic Pre-Operative Clinic.
- The RN Care Coordinator reviewed the letter with each patient and answered questions about their upcoming elective surgery and individual discharge plan.
- The expectation for discharge to home or rehabilitation was set for post op day two or three with an emphasis on discharge to home.

Additional Interventions

- Inpatient Staff Education - Dr. Anissian gave in-service education to 9D inpatient staff regarding the acute post-op care and needs of total joint patients.
- Patients are encouraged to prepare for community rehabilitation placement if this is indicated pre-operatively by the RAPT score.
- Patients are also placed on the VA Community Living Center (CLC) admit list for potential rehabilitation.
- UM attends the weekly Orthopedic indications meeting to keep current with the team, share data and discuss new ideas.

Successes

- Consistent completion of the RAPT Tool by all team members during the pre operative assessment.
- Consistent review of the RAPT score pre-operatively to identify patients with rehabilitation needs and plan proactively for the CLC or Community Placement.
- Consistent message to the patient from the Orthopedic Team, PT and nursing staff stating discharge on day 2-3 to home or rehabilitation.

UM Data Review

Number of Cases:		Average Length of Stay (days):
FY 16	193	4.5
FY 17	202	3.5
▶ Oct	23	4.2
▶ Nov	26	5.3

***Reduction of surgical beds**

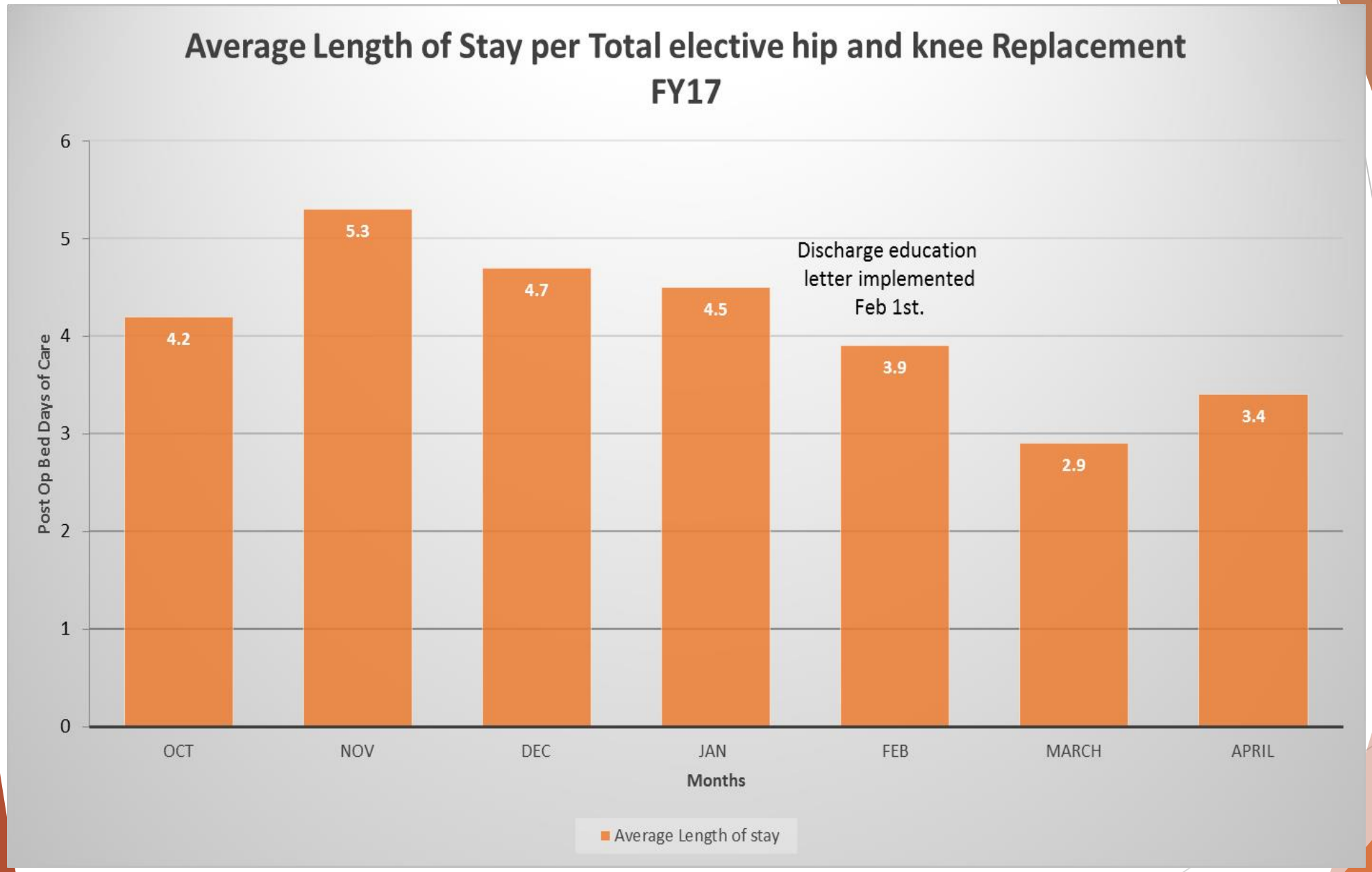
▶ Dec	15	4.7
▶ Jan	15	4.5

****Discharge expectation education letter implemented**

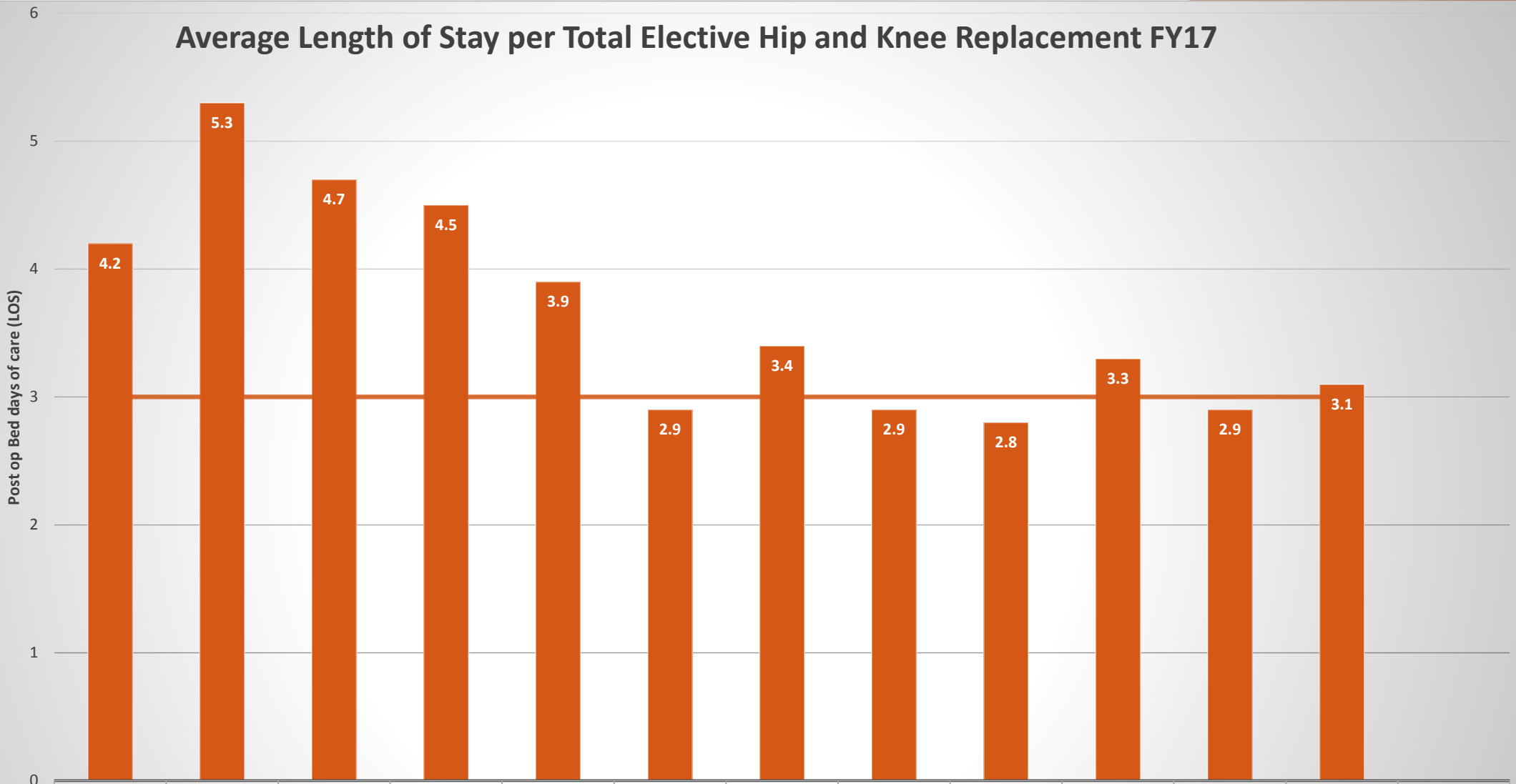
▶ **Feb**	**18**	**3.9**
▶ **Mar**	**18**	**2.9**
▶ **April**	**13**	**3.4**

Average LOS for first three months = 3.4

*****Per Ortho Team there have been no readmits or complications post DC**


Average Length of Stay per Total elective hip and knee Replacement
FY17
Post Op Bed Days of Care
6
5
4
3
2
1
0
5.3
4.7
4.5
4.2
3.9
2.9
3.4
Discharge education letter implemented Feb 1st.
OCT
NOV
DEC
JAN
FEB
MARCH
APRIL
Months
Average Length of stay

Average Length of Stay per Total Elective Hip and Knee Replacement FY17



	Oct FY17	NOV FY17	DEC FY17	JAN FY17	FEB FY17	MAR FY17	APR FY17	MAY FY17	JUNE FY17	JULY FY17	AUG FY17	SEPT FY17
Length of stay	4.2	5.3	4.7	4.5	3.9	2.9	3.4	2.9	2.8	3.3	2.9	3.1
Benchmark	3	3	3	3	3	3	3	3	3	3	3	3

Hospital Bed Days	FEB FY17	MAR FY17	APR FY17	MAY FY17	JUN FY17	JUL FY17	AUG FY17	SEPT FY17	OCT FY18	Nov FY18	Dec FY18	JAN FY18	Average LOS from FEB 2017- Jan 2017	FY17
National - VA	3.6	3.2	3.2	3.2	3.1	3.2	3.2	3.1	3.1	**2.9**	**2.9**	3.4	3.2	3.3
VA - 1a-High Complexity	3.3	3.4	3.4	3.4	3.1	3.4	3.3	3.1	3.5	3.1	3.5	3.9	3.4	3.5
VISN 20	3.3	**2.7**	3	3.4	**2.7**	3.3	**3**	**3**	**2.6**	**2.7**	3.7	**2.6**	3	4.1
VA-Portland	3.3	**2.7**	**2.9**	**2.9**	**2.8**	3.3	**2.9**	3.1	**2.6**	**2.3**	**2.9**	**2.1**	**2.8**	3.5

Reason for LOS > than 3 Days

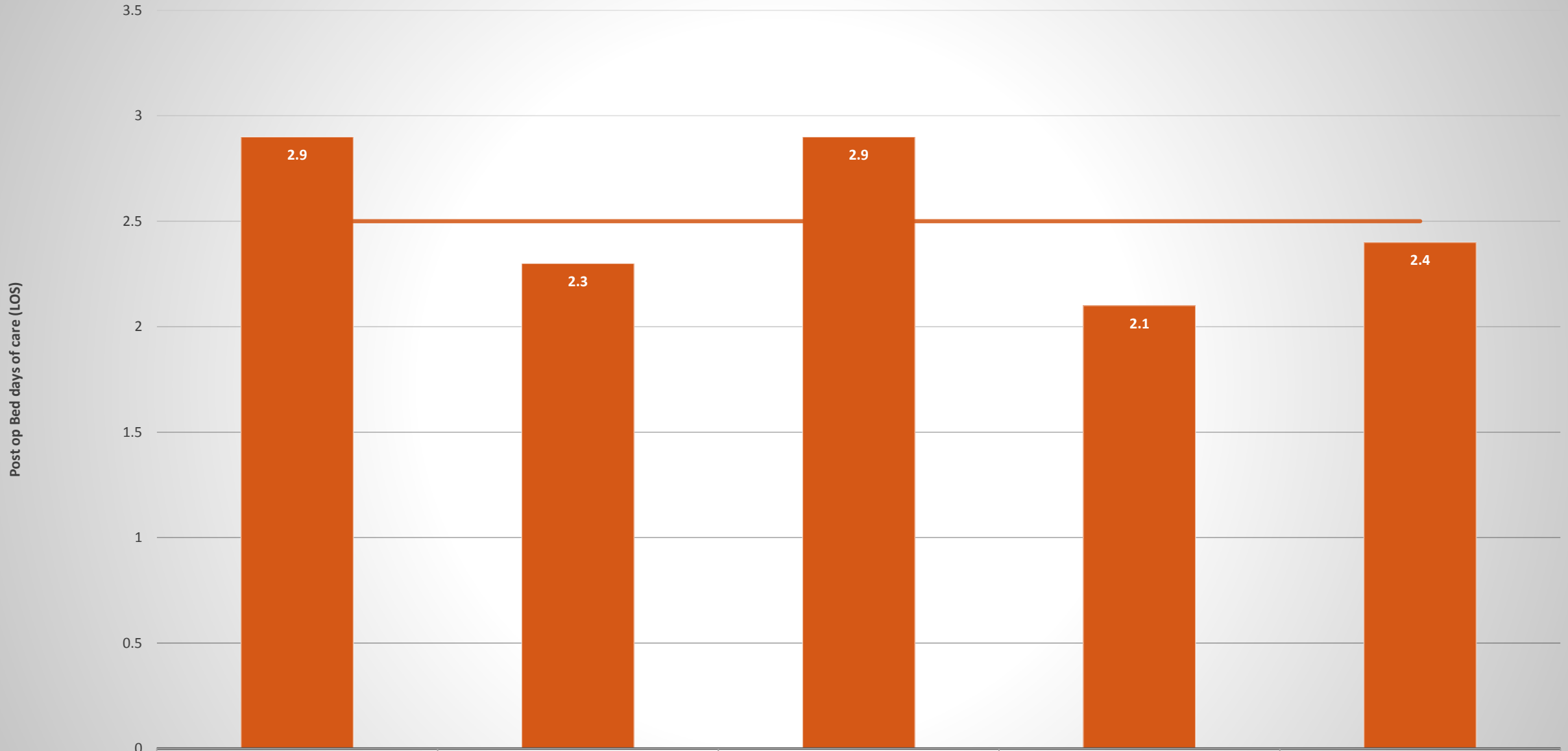
Since the project began on February 1, 2017 through January 31, 2018.

34 patients have had a LOS greater than 3 days

- 1. Medical Issue (18) = 53%
- 2. Placement delays to a SNF (7) = 20%
- 3. Patients needing extra day of PT (5) = 15%
- 4. Falls (2) = 6%
- 5. No ride home/unprepared for DC (2)= 6%

- One 30 day post surgery readmit.

Average Length of Stay per Total Elective Hip and Knee Replacement FY18 YTD 2.5 days



	OCT FY18	NOV FY18	DEC FY18	JAN FY18	FEB FY18
VAPORHCS LOS	2.9	2.3	2.9	2.1	2.4
Ortho Goal	2.5	2.5	2.5	2.5	2.5

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