

## Implementing Electronic Patient Engagement and Navigation in TJR Pathway

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# Implementing Electronic Patient Engagement and Navigation in TJR Pathway

Ryan Bone

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## BACKGROUND / INTRODUCTION

Knee and hip replacements are the result of poor joint health:

- Osteoarthritis
- Rheumatoid Arthritis
- Avascular Necrosis

In 2014, there was a total of 2.5 million people living with artificial hips and 4.7 million people living with artificial knees.<sup>1</sup>

The CDC estimates 332,000 hip replacements and 719,000 knee replacement procedures are done every year.<sup>2</sup>

The Baby Boomers age and average age of total joint replacement patients are overlapping.

- Ages 45-64 make up 42% of all knee replacements<sup>3</sup>
- Ages 65-84 make up 53.3% of all knee replacements

Knee replacements are expected to rise 673% and hip replacements are expected to rise 174% in the next 20 years.<sup>4</sup>

In 2014, 18% of ages 65+ had smartphones which increased to 27% in 2015<sup>5</sup>

## METHODS

A total joint replacement pathway are standardized steps taken by the provider for the patient in order to ensure the highest quality of care and the best outcomes.

Improvements in the TJR pathway in regards to cost savings, length of stay, and educational class attendance.

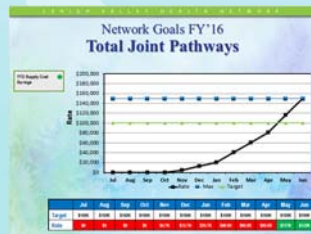
The next phase of the total joint replacement pathway is to implement a patient engagement and navigation tool.

CareSense is an example of patient engagement and navigation app. There are benefits for both patient and provider by implementing such a tool.

**Engagement and Navigation App Benefits:** Reduce missed appointments, lower surgical cancellations, increase compliance, enhance patient education, and improve satisfaction.

**Pathway Benefits:** Saves time, reduce readmissions, track outcomes, lower costs, and prepare for CJR.

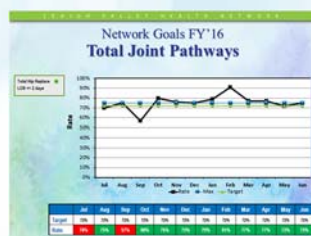
## OUTCOMES



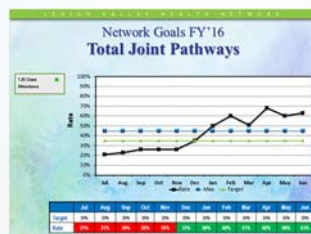
There has been a steady increase of cost savings over the past 8 months since the start of the pathway.



The goal for length of stay for knee replacement surgery 60% of patients are discharged within 2 days of surgery.



The goal for length of stay for hip replacement surgery is 72% of patients discharged within 2 days of surgery.



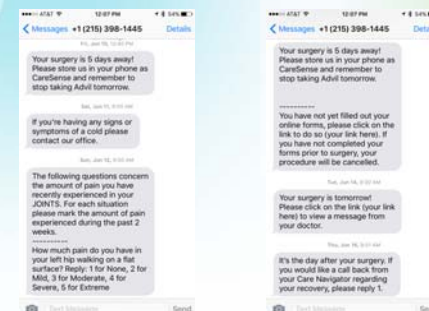
The goal for total joint replacement educational class attendance is 35%

## RESULTS

Implementation of a technology based patient engagement and navigation program will not be put into the TJR pathway until a later date.

This addition to the pathway will create a stronger form of clinical standardization which results in better outcomes and improved cost savings.

Predicted increase of volume for TJR that that is due to the large aging population, clinical standardization is key to successfully caring for the patients while providing the best outcomes.



Examples of CareSense text message to patient

## CONCLUSIONS

The next steps to implementing this aspect of the pathway is to consult with the LVHN IS team to explore solutions for implementing electronic patient engagement and navigation in TJR pathway.

Before full implementation, it is encouraged to start with a small group of patients before rolling it across all aspects of orthopedics

- Start with one doctor's patients and receive feedback and analyze the data that is being collected.

By implementing a patient engagement and navigation app, it will benefit both the patient and enhance clinical standardization which will lower cost and produce better outcomes.

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