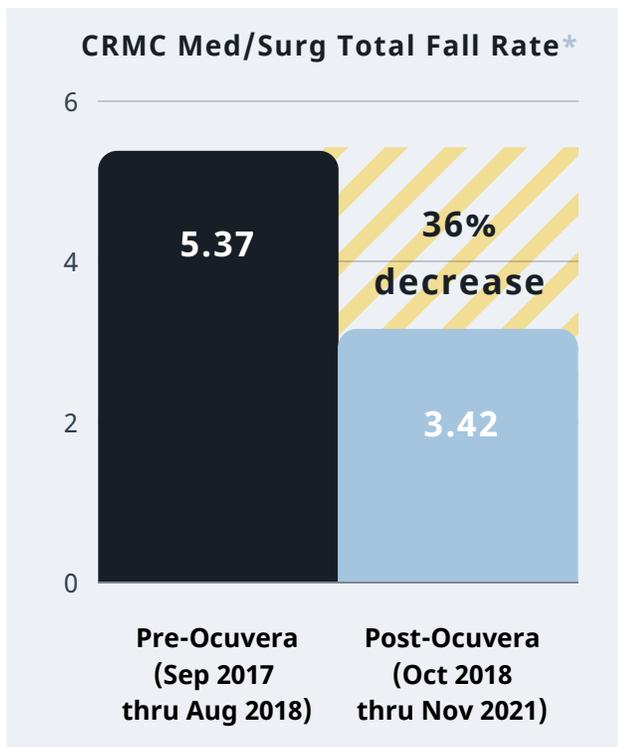


## STATISTICAL SIGNIFICANCE

of Fall Rate Reductions with the Ocuvera System

CLARK REGIONAL MEDICAL CENTER



CRMC Total fall rates before vs. after Ocuvera system was implemented.

### ABOUT OCUVERA

The Ocuvera system is designed to reduce the risk of patients falling from their bed or chair. Using artificial intelligence, the system automatically monitors patients and sends a video alert to nursing staff if a patient tries to get up on their own. These predictive alerts let nurses respond to patient needs.

### PURPOSE OF THE REPORT

We analyze whether Clark Regional Medical Center's (CRMC) Med/Surg unit achieved a statistically significant reduction in falls originating from the bed or chair with use of the Ocuvera system.



## STATISTICALLY SIGNIFICANT

### Reduction in Unassisted, Bed-Origin falls

	Events	Patient Days	Fall Rate (per 1000 pt. days)	P Value
Before Ocuvera	16	5217	3.066897	NA
After Ocuvera	28	18423	1.519839	0.0400



#### Data

Ocuvera performed this analysis based on fall data from CRMC. This data included falls from Before Ocuvera (Sept 2017 - Aug 2018) and After Ocuvera (Oct 2018 - Nov 2021).



#### Methodology

Looking at bed-origin, unassisted falls, the data was separated into two categories: before and after the Ocuvera system was implemented. The two-tailed Mann-Whitney-Wilcoxon rank sum test was performed to analyze the difference between the two groups.



#### Hypothesis

The claim is that CRMC Med/Surg has achieved a statistically significant decrease in their unassisted, bed-origin fall rate with use of the Ocuvera system.

#### RESULTS

From the results in the table above, with a p-value of  $< 0.05$ , we reject the null hypothesis and conclude that the fall rates are statistically significant with a claim of a statistically significant decrease in unassisted, bed-origin fall rates after the Ocuvera system was implemented.

#### CONCLUSION

We can conclude from the statistics provided that fall rate in CRMC's med/surg unit achieved a statistically significant decrease in unassisted, bed-origin fall rates with use of the Ocuvera system. Moreover, comparing the entire baseline period to the intervention phase, we find that the overall fall rate is almost statistically significant in support of a decrease in fall rates.