Vancomycin Level Ordering Standardization Brian Gulbis, Heather Chipuk, Clyde Marquis, Sandy Young March 08, 2017

Intervention

Beginning the week of January 29, 2017, a pilot was implemented to standardize the ordering of vancomycin levels in CVICU. Providers were asked to cease ordering vancomycin levels via the Vancomycin Request orderable, and to avoid using the Early AM option.

Goal

The goal of the intervention was to ensure that all orders for vancomycin levels were actual lab orders with a specific date and time for collection. The anticipated result of these changes was an increase in the percent of vancomycin levels which were collected in a timely manner.

A level is timely if it is collected within 60 minutes of the scheduled collection time.

Results

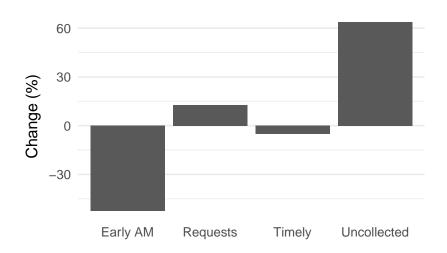


Figure 1: Percent change in outcomes following pilot intervention relative to baseline period.

During the pilot period, there was a decrease in the number of vancomycin levels ordered using Early AM. There was a slight increase the number of Vancomycin Requests, however, this was primarily the result of an increase in a single week. The percent of

timely levels was relatively steady throughout the pilot period, while there was a consistent increase in the percent of uncollected levels.

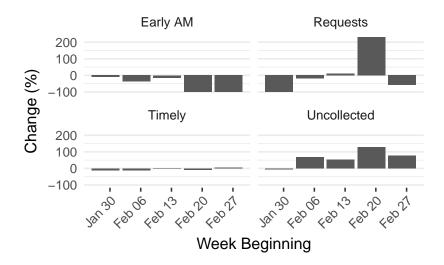


Figure 2: Percent change in weekly outcomes relative to the weekly mean during the baseline period.

There has been a consistent decrease in the percent of Early AM orders during the pilot. The percent of orders by Vancomycin Request decreased throughout the pilot period with the exception of a significant increase during the week of February 20, 2017. It should be noted that there much fewer vancomycin levels ordered during this week, which may be skewing the percent change.

The percent of timely levels has remained relatively stable from week-to-week throughout the pilot. There has been an unexpected increase in the percent of uncollected levels each week during the pilot, with no obvious explanation.

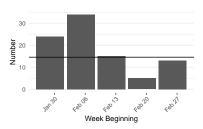


Figure 3: Number of vancomycin levels ordered during the pilot period. For comparison, the weekly mean during the baseline period is indicated by the horizontal line.