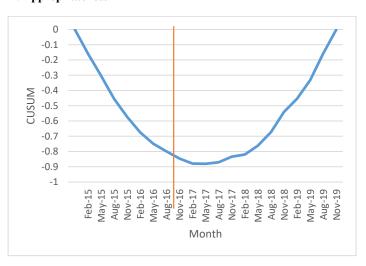
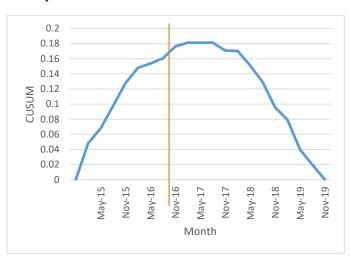
## in 52 Michigan hospitals

## A. Appropriateness

Supplemental material



## **B.** Complication rates



Note: Cumulative sum curves illustrate the relationship between values at each time and the overall average over time. A downward slope indicates a period of time where performance was below the overall average whereas an upward slope indicates a time period of above average performance across hospitals. A change in the slope of the curve indicates a sudden shift or change in the average values. Looking at figure A., the chart takes a sudden turn in direction around February 2017. This indicates that the average shifted around this time. Before the change in direction, CUSUM slopes downward indicating that initially the appropriateness levels were below the 4-year average. After the change, CUSUM slopes upward indicating that the appropriateness levels are above the 4-year average.