Insights to Improving ‘Time To’ Processes

Children's Hospital Colorado reduced time to administer first antibiotic on inpatient, non-ICU units.

Challenge

The time to first administration of antibiotics in pediatric sepsis patients is critical. From 2013 to mid-2017, Children's Hospital Colorado only met the goal to distribute antibiotics to sepsis patients within 60 minutes 43% of the time on inpatient units. To increase compliance with early antibiotic administration goals, the team needed to first reduce it’s “time to” processes.

“We had to focus on communication first. There is a general feeling that people, especially in our acute care units, are hesitant to use the word sepsis. We wanted to increase institutional awareness.”

Approach

At a kickoff Kaizen event in 2017, the pediatric team gathered frontline providers and key stakeholders to map the acute care process and identify and prioritize causes. After implementing the suspected sepsis order set, a goal was set to increase the proportion of children whose antibiotic order-to-delivery time is less than or equal to 60 minutes from 43% to 52% on inpatient units by January 1, 2021.

Key drivers for this goal:

- Expedite IV access.
- Optimize ordering process.
- Increase institutional awareness of sepsis.

An education and awareness campaign within the hospital was the next step for improved outcomes. Incorporating swag and marketing into the “Is This Sepsis?” campaign aided a culture change within the hospital. After one year, a follow up Kaizen event examined each unit individually to determine delays.

Results of this event included:

- “Going to Gemba,” meant visiting each unit to observe frontline staff.
- Frontline staff reviewed Kaizen output and provided answers, feedback.
- Discovered there was no standard process, lack of urgency for delivering care.

Results and Outcomes

In three years, Children’s Colorado saw a shift in the proportion of children whose antibiotic order-to-delivery time was equal to or less than 60 minutes increase from 43.3%, past the 52% goal, up to 70% on inpatient units.

Most importantly, efforts to reduce these order-to-delivery processes resulted in a cultural shift within the hospital in regard to sepsis. Positive shifts in data can be attributed to an increase in education and awareness.