Implementing Lean Daily Management System to Improve CVOR First Case On-Time Starts

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Implementing Lean Daily Management System to Improve CVOR First Case On-Time Starts

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Introduction and Aim Statement

**PROBLEM:** CVOR First case on-time starts for Jan 2017-Aug 2017 was on average 55%.

**AIM:** The goal of CVOR First case on-time starts is to show improvement from an average of 55% to an average of 70% or above for FY2018.

- Daily Management System (DMS) 2.1 Metrics and 2.2 Readiness lean workshops were held for the CVOR team in July and August 2017.
- The team selected this as a delivery metric to align with the hospital's True North-Patient Centered, Every Action, Every Day.
- Within the first month after the workshop the goal was increased to 70% and gradually increased to the current goal of 85%.

Results

- **CVOR First Case On-Time (before 030, within 5 minutes of scheduled Start) Jan 2017-Aug 2018**

![CVOR First Case On-Time Graph](image)

Methods

- First case on time starts (FCOTS) were discussed one day each week at the CVOR daily readiness huddle with visible tracking on the CVOR Metrics board.
- Gained surgeon, anesthesia, perfusion and CVOR staff buy in to meet the scheduled start time.
- Abnormality tracker used to track delays. Delays were discussed at huddles and frontline staff implemented changes in getting ready for first case of day to prevent reoccurrence of the cause for the delay.
- When delays occurred, leadership discussed reason with associated disciplines to come up with a plan to eliminate barriers.
- Some of the changes implemented were physicians’ meetings ending on time, anesthesia setting room up before meetings, and proactive timing of versus being given earlier.
- Improved communication between CVOR staff and CVOR APRN's.
- Sent out monthly e-mails to all disciplines with the data showing results, highlighting successes, areas for improvements and asking for commitment to achieve goal.
- The CVOR nursing staff was empowered and given the professional autonomy to initiate collaboration to improve on-time starts with others within their own team as well as other disciplines. This was the driving force in the success of the metric.

Conclusion

- First case on-time starts rapidly improved due to the CVOR team engagement on improving the start times. The goal was increased from 60% to 70% within the first month after the DMS workshop held in August 2017. And reached 100% in January 2018. The current FY19 Goal has been set to 85%.
- Average has consistently been improving since Sept 2017, with a 31% increase from 55% to 86% and have only had 1 month below goal (Dec 2017).
- Leveraging the daily management system that Children's Mercy Lean System (CMLS) has to offer and looking at metrics daily engages the whole team in identifying problems and empowering them to solve them.
- Professional autonomy leads to nursing staff that are empowered.
- Commitment is a result of nursing staff being empowered.
- Having a dedicated surgical team and improving communication among team members leads to improvement in a team's performance.
- Increased accountability leads to improved results in addition to nursing empowerment.

References

- Spainhoward, Richard; O'Brien, Dr. St. Louis, Dr. Douglas, Cardiac Anesthesia, and Perfusion Team

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