



Improving Ways to Increase Hospital Operating Room First-Case On-Time Starts

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Introduction

As a result of the 2010 Affordable Care Act, the United States' healthcare system has shifted from a fee-for-service system to a value-based system. This shift, paired with declining reimbursement rates has led hospital management teams to turn their focus on cost containment measures, customer satisfaction and quality improvement. One metric that hospital leadership teams are beginning to measure are operating room (OR) first-case ontime starts. Beginning a surgical procedure on time is vital for a hospital's OR to operate at an efficient level.

Problem

A hospital in the Dallas-Fort Worth area was experiencing an average monthly first case ontime start rate of **37**% since 2017.

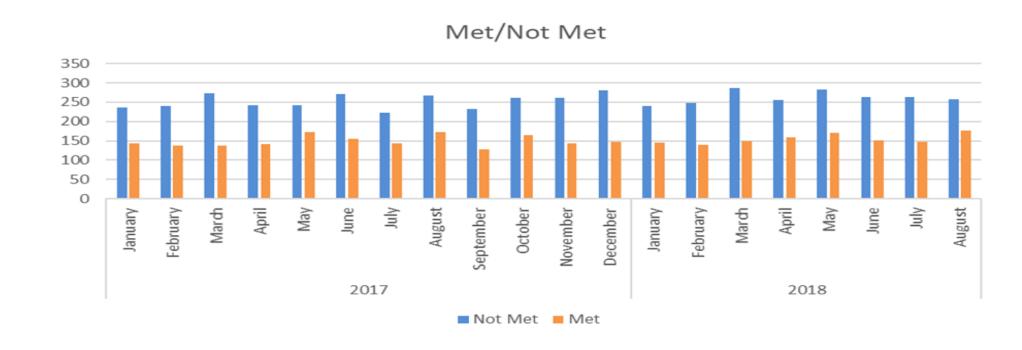
Methods

To obtain our data samples:

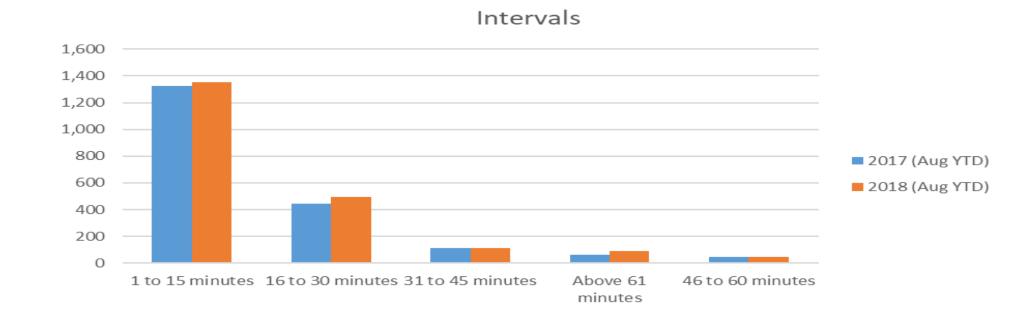
- We retrospectively extracted surgical first-case data from January 2017 to August of 2018 via the OR database.
- Data that was extracted were scheduled first cases of the day from 6 to 9am per room, Monday to Friday.
- Emergency and Add-On cases were excluded.
- Monthly meetings were held to review and discuss data findings.

Findings

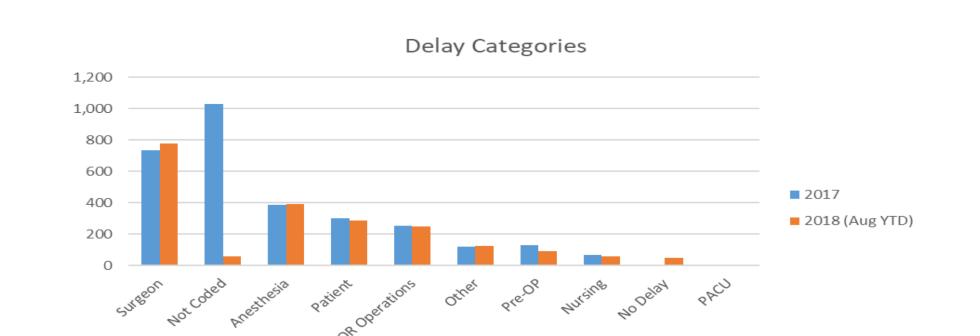
• Delayed start times were consistent between January 2017 and August 2018.



- The 7am time slot was the most popular and the most number of delayed cases: More than 2,000 delays in 2017 and more than 1,400 delays through August 2018.
- Impact of delayed starts was measured by intervals:



- Surgeon and anesthesiology delays were the leading cause for delayed on-time starts.
- Patient and OR operational-issues were also major causes for concern.





Conclusions

- There are many factors that are contributing to a 37% on-time start rate.
- Physician tardiness was the leading cause for delayed start times.
- Before the issue is addressed to medical staff, first find out *why* physicians are tardy.
 - Difficult situation when addressing physicians as they can take business to competitor.
- We cannot place the entire blame on physicians.
- Patient flow processes need to be further investigated; this may help explain why physicians are tardy.

Acknowledgments

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Further Information

For further questions and discussions, please feel free to contact me at: wrt318@utexas.edu

Literature Cited

Abrams, Melinda K., Rachel Nuzum, Mark A. Zezza, Jamie Ryan, Jordan Kiszla, and Stuart Guterman. "The Affordable Care Act's Payment and Delivery System Reforms: A Progress Report at Five Years." The Commonwealth Fund 12, (May 2015): 1-16.

Cox Bauer, Callie M., Danielle M. Greer, Kiley B. Vander Wyst, and Scott A. Kamelle. "First-Case Operating Room Delays: Patterns Across Urban Hospitals of a Single Health Care System." Journal of Patient-Centered Research and Reviews 3, no. 3 (August 2016): 125-135. 10.17294/2330-0698.1265.

Darwish, Alex, Pratik Mehta, Ahmed Mahmoud, Amr El-Sergany, and David Culberson. "Improving Operating Room Start Times in a Community Teaching Hospital." Journal of Hospital Administration 5, (March 2016): 33-39. https://doi.org/10.5430/jha.v5n3p33.

Foglia, Robert P., Juan E. Ruiz, Lorrie S. Burkhalter. "An Evolutionary Change in First Case on Time Starts Using Perioperative Process Improvement, Communication and Enhanced Data Integrity." Global Journal of Perioperative Medicine 1, no. 1 (March 2017): 13-16.

Integrity." Global Journal of Perioperative Medicine 1, no. 1 (March 2017): 13-16.

Health Communities. "Preoperative Procedures." Accessed on October 25, 2018. http://www.healthcommunities.com/before-after-surgery/preoperative-procedures-surgery.shtml.

Investopedia. "Affordable Care Act." Accessed on October 24, 2018. "https://www.investopedia.com/terms/a/affordable-care-act.asp."

Medicare. "Survey of Patients' Experiences (HCAHPS) Star Ratings." Accessed October 24, 2018. "https://www.medicare.gov/hospitalcompare/Data/HCAHPS-Star-Ratings.html.

Overdyk, Frank J., Susan C. Harvey, Richard L. Fishman, and Ford Shippey. "Successful Strategies for Improving Operating Room Efficiency at Academic Institutions." Anesthesia & Analgesia 86. (April 1998): 896-906. doi: 10.1213/00000539-199804000-00039.

Van Winkle, Rachelle A., Mary T. Champagne, Meri Gilman-Mays, and Julia Aucoin. "Operating Room Delays: Meaningful Use in Electronic Health Record." Computers, Informatics, Nursing 34, no. 6 (June 2016): 247-253. doi: 10.1097/CIN.0000000000000233.

Wachtel, Ruth E., and Franklin Dexter. "Reducing Tardiness from Scheduled Start Times by Making Adjustments to the Operating Room Schedule." Anesthesia & Analgesia 108, no. 6 (June 2009): 1902-1909, doi: 10.1213/ane.0b013e31819f9fd2.