

A QI Project to Decrease Day of Surgery Wait Times for Children with Bleeding Disorders

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INTRODUCTION

Introduction: Children with bleeding disorders (BDOs) requiring surgery must be pre-treated to prevent bleeding with their procedures. At a 302 bed pediatric hospital our practice is to have each child come to hematology/oncology (HO) clinic for pre-treatment, have a lab drawn to show efficacy of treatment, then proceed to same-day surgery for their procedure. We noticed that delays in care happened frequently, and evaluated the delays. We learned that with 41 surgical cases in children with BDOs in 2011, the mean and median time from arrival at the HO clinic to in-room time in the operating room (OR) was 5.5 hours (SD 0.064).

METHODS

A multi-disciplinary team was created to evaluate the issues with the goal of decreasing wait times to 3-4 hours. Team members included: a hematologist, hemophilia nurses, HO clinic nurses, laboratory providers, a pharmacist, an anesthesiologist, surgery schedulers, and the same-day surgery manager.

Several interventions were initiated which include:

1. Development of a tool to monitor wait times for patients with BDOs on day of surgery.
2. Improved communication with OR schedulers about pre-op requirements for each child's case.
3. Communication measures to improve hand-offs between departments. For example, HO nurses notify the lab of when STAT factor levels will be drawn.
4. Hemophilia nurses to begin providing projected timeline to each child and family for day of surgery, giving updates as needed throughout the day.
5. Hemophilia nurses to monitor each patient's progress through the preparation steps on day of surgery, investigate delays, and remediate as indicated.

Wait time > 3.5 hours

Group	Longer than 3.5 hrs	Less than 3.5 hrs	Total/Percent
Pre-intervention	38 (92.7%)	3 (7.3%)	100%
Post intervention	40 (81.6%)	9 (18.4%)	100%

Using Pearson Chi-Square method this is not statistically significant, $p = .125$.

Wait time > 4 hours

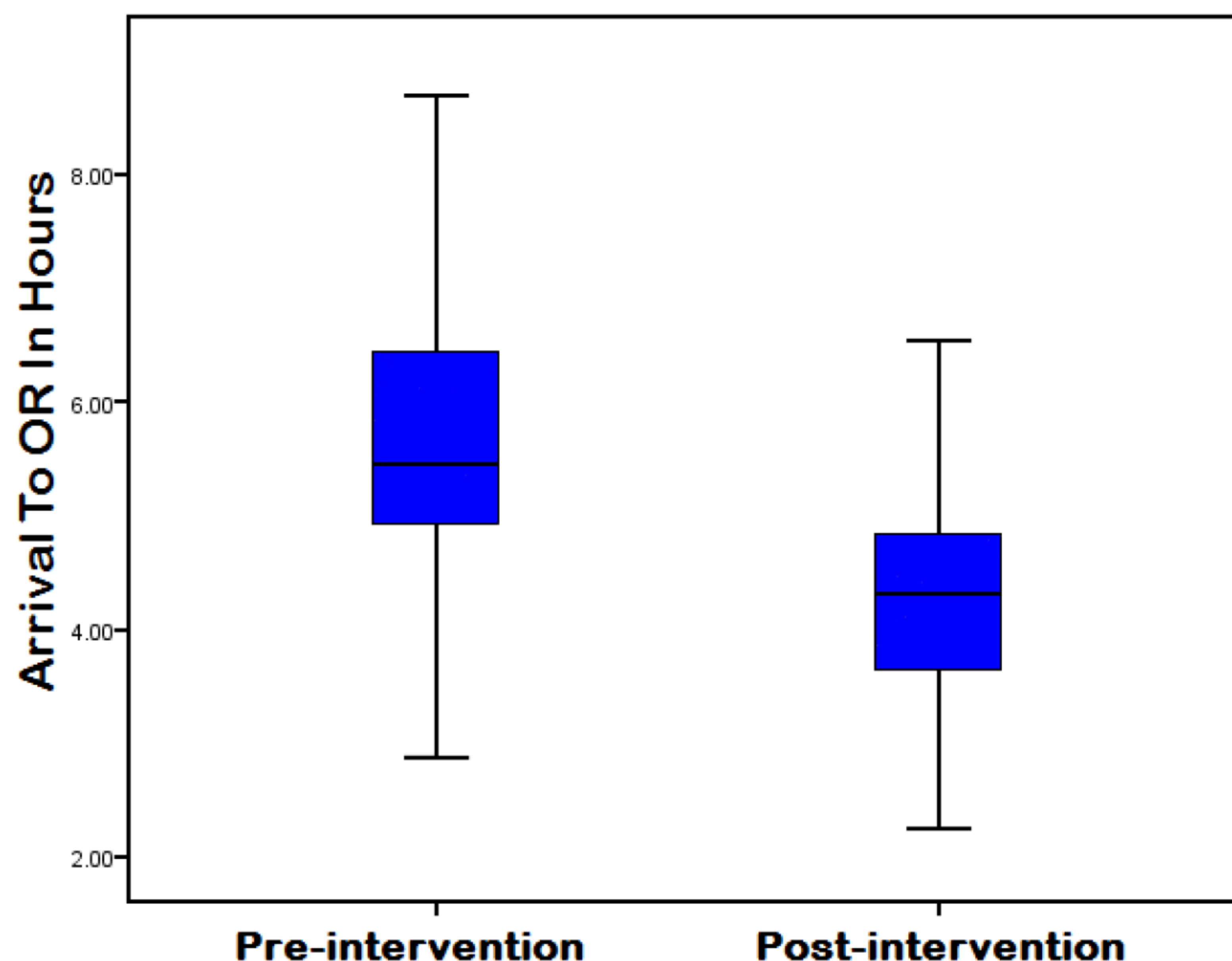
Group	Longer than 4 hrs	Less than 4 hrs	Total/Percent
Pre-intervention	35 (85.4%)	6 (14.6%)	100%
Post intervention	40 (59.2%)	20 (40.8%)	100%

Statistically significant, $p = .006$.

RESULTS

One year after initiating this project we are now able to show that our mean/median wait time for children with BDOs has decreased to 4.14/4.13 hours (SD 0.036) respectively. Additionally, the percentage of cases where wait time was less than 4 hours rose from 14.6% (pre-intervention) to 40.8% (post-intervention) which was statistically significant, $p=0.006$.

Surgery schedulers, anesthesiologists, and laboratory technicians all report increased satisfaction with changes that were made citing improved communication between departments.



CONCLUSION

Unexplained and excessive wait times on day of surgery can add stress to a stressful situation. Healthcare providers' demonstrating awareness of the value of patient's time relieves anxiety and improves patient satisfaction.¹ Inadequate communication between healthcare providers is often the cause of process failure and delays in the surgical setting.² Our multi-disciplinary interventions to improve communication with patients and family members and between departments has resulted in decreased wait time for children with BDOs on day of surgery, improving operating room utilization and patient staff experience.

REFERENCES

1. Freeman K, Denham S, 2008. Improving patient satisfaction by addressing same day surgery wait times. *Journal of PeriAnesthesia Nursing*, 23(6); 387-93.
2. Bonavita B, Chen J, Damon S & McKinstrie L, 2012. Ambulatory Surgery Report. Retrieved from http://iwsp.human.cornell.edu/file_uploads/Amb_Surg_Becker_Class.REPORT.pdf

