838 CONTINUOUS IMPROVEMENT EFFORT SHOWN TO BE WORTH ITS WEIGHT IN BLOOD

Wade Stewart, Tom Stipe. Penn State Hershey Medical Centre, US

10.1136/bmj-2017-111.2

Background The Department of Pathology identified an opportunity to optimise specimen turn-around-time (TAT) to meet customer expectation (patient and providers). More than 10% of the blood specimen are not resulted within the 60 min customer expectation. The team focused on the top five specimen analytes representing over 80% of the volume through the lab. The team followed the DMAIC process to utilising Lean and Six Sigma tools to identify predicted and unpredicted opportunities in specimen processing.

Objectives Optimised specimen turn-around to create a process that meet customer expectation of=60 mins 95% of the time.

Methods Implementation of project improvements by the team included a daily shift huddles using a common format with visual controls, supervisor standard work to view huddles weekly, elimination of multiple non-value activities (e.g., specimen initializing), level loading, cross-training, and the identification of a daily 'Flow Master' to communicate issues in real-time. These combined improvements yielded significant TAT reductions in all 5 tests. The improvements in TAT among the five test ranged from 8% to 26%.

Results

Abstract 838 Table 1

Test	TAT Mean Before	TAT Mean After	Mean P-value	% TAT Improv
HGB	28.08	20.73	0.001	26
K	44.70	39.56	0.001	11
pH	12.51	11.34	0.001	9
PTT	34.94	31.95	0.001	9
TNI	58.80	51.75	0.001	12
Overall	37.16	31.79	0.001	14

Conclusions Since the implementation of solutions the laboratory continues to track and maintain improvements. A control plan is in place to evaluate laboratory performance when it is out of specification and action is required. This project clearly demonstrated that improvements can be magnified when used in combination with Lean Six Sigma methodology and tools.

841 ROUTINE SUPPLEMENTATION OF PROBIOTICS FOR PREVENTION OF NECROTIZING ENTEROCOLITIS IN PREMATURE INFANTS—A QI PROJECT

¹Asaph Rolnitsky, ¹Eugene Ng, ²Yasmin Shama, ¹Maren Garche, ¹Michael Dunn. ¹Sunnybrook Health Sciences Centre, Canada; ²SickKids, Canada

10.1136/bmj-2017-111.3

Background Necrotizing enterocolitis (NEC) carries high rates of mortality and morbidity in perterm infants. Our NEC rates over 6 years, were in higher quartiles of the Vermont-Oxford Network and prompted an improvement project.

Abstract 841 Figure 1 p Chart: % infants<33 wks given biogaia

Abstract 841 Figure 2 p Chart: NEC rates, infants<33 wks GA