



Time is of the Essence!-Improving ED Code FAST Turnaround Time

Keith Nelson, Sue Saccomanno, Arlene Lim, Aisha Coutee, Jessy Jacob, Donna Kolinski, Fareed Ghafoor



ABSTRACT:

AMITA Health Resurrection Medical Center Laboratory is continuously striving to be a center of excellence, by providing efficient quality testing, while eliminating waste within the process. We sought to improve turnaround times, further standardize processes, eliminate communication gaps and reduce manual intervention by implementing our Problem Solving Process (PSP). With a goal of improving ED Code FAST turnaround time, we developed standardized specimen handling and prioritization, implemented visual cues, and created a more efficient processing area by performing a 5S activity.

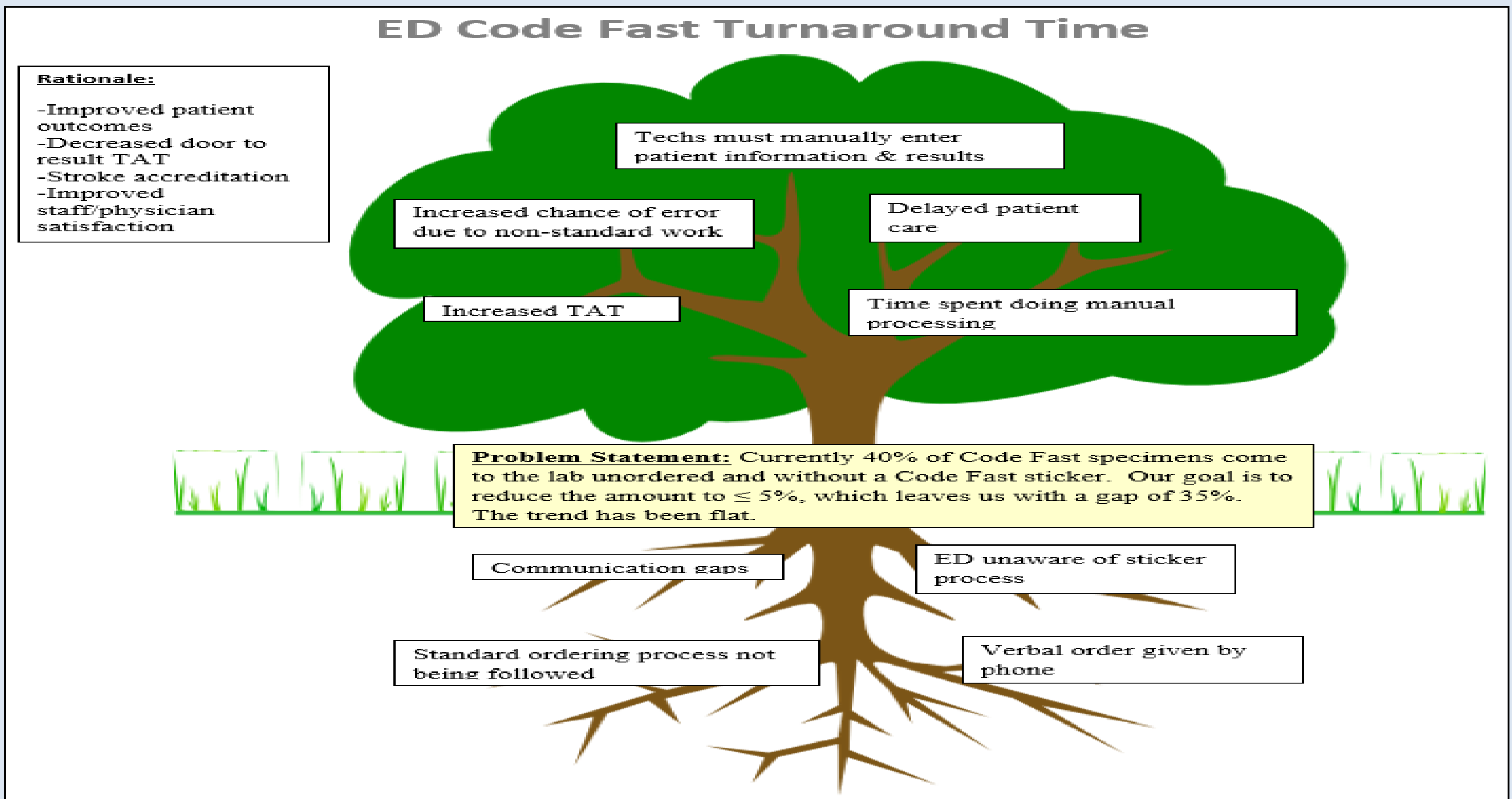
This resulted in:

1. Reducing the number of Code FAST specimens sent to the Laboratory without orders or “stickers” from 40% to **≤1%**!
2. Code FAST Door to Result time reduced to **39 minutes** in 2019 from an average of 62 minutes in 2016, 52 minutes in 2017 and 42 minutes in 2018.
3. Decreased pre-analytical processing time by **16 minutes** from an average of 38 minutes in 2016 to 22 minutes in 2019.
4. Increased staff satisfaction

BACKGROUND:

The AMITA Health Resurrection Medical Center Chicago team was receiving multiple Code FAST specimens from the ED that did not have orders. The lack of orders was causing a delay in turnaround time, as well as an increased potential for errors. As a result, the team decided to address the issue using the problem solving process (PSP). The team wanted to focus our efforts on: reducing the number of Code FAST specimens that come to the laboratory without orders and must be processed manually. We also focused on increasing the number of Code FAST specimens that come to the laboratory with a Code FAST “sticker” that alerts lab. Overall, we wanted to reduce the turnaround time of the pre-analytical process.

PROBLEM SOLVING TREE:



PROBLEM STATEMENT:

- 40% of ED Code FAST specimens came to the lab unordered or without a Code FAST sticker.
- The target (goal) was ≤ 5%
- This created a gap of 35%
- There was a flat trend

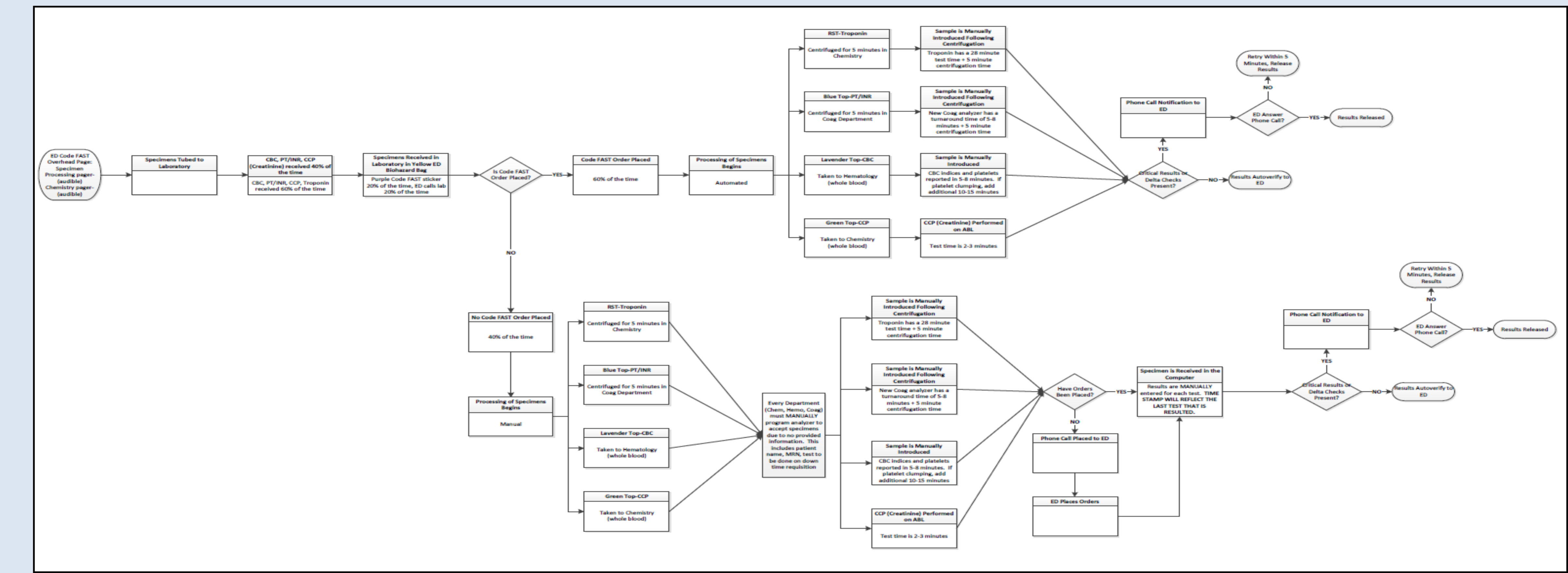
KEY DELIVERABLES:

- Improvement in turnaround time
- Standardization of specimen handling and prioritization
- Reduction of wasted motion and time
- Sample flow optimization
- Improved patient outcomes

METHODS & TOOLS USED:

- Problem Solving Tree
- Process Map/Waste Identification
- Observation at Gemba
- Collection and review of data
- 5S Activity

CURRENT STATE PROCESS MAP:



WASTE IDENTIFICATION:

- Communication gaps
- Motion/Movement of material
- Rework due to no order received
- Waiting on the phone to have critical result accepted
- Manually entering results after order is placed
- Process variation
- Waiting on ED to order tests and then resend results
- Filling out downtime requisitions
- Manually programming analyzers to accept specimens that have not been ordered



Reduce Time to Treatment

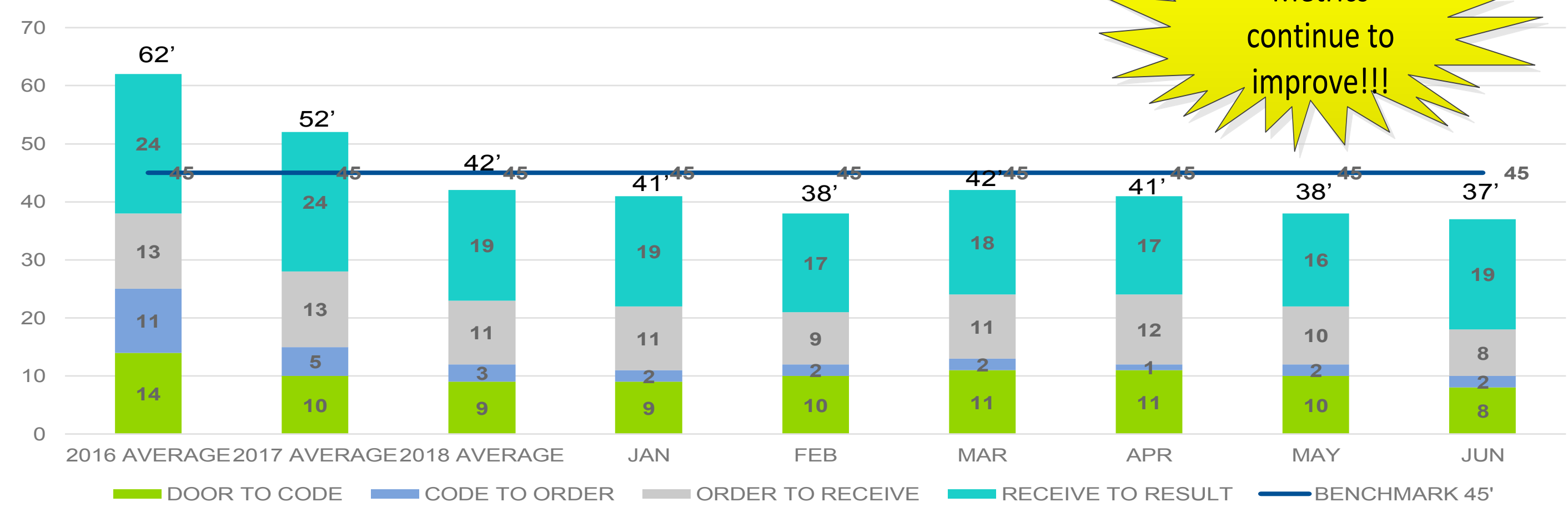
In critical and life-threatening conditions, every second counts. Strokes must be met with rapid, flawless response. All teams must work together in a coordinated effort to maximize the likelihood of positive outcomes!

SUMMARY AND CONCLUSION:

KEY BENEFITS:

- Reduced the number of Code FAST specimens sent to the laboratory without orders or “stickers” from **40%** to **<1%**!
- Decreased ED Code FAST Door to Result time to **39 minutes** from an average of 62 minutes in 2016, 52 minutes in 2017 and 42 minutes in 2018!
- Decreased pre-analytical processing time by **16 minutes** from an average of 38 minutes in 2016 to 22 minutes in 2019.
- Decreased Tech time spent programming analyzers and entering results.
- Increased staff satisfaction due to eliminating waste and manual interventions in the process, as well as a reduction in phone calls from the ED.

ED Average Minutes PT/INR Door to Result 2019



Ref No	Location	Action Item	Owner	Start Date	Targeted Completion Date	Impact	Comments
1	Lab	ED will label all Code FAST patient specimens with purple Code FAST sticker on outside of biohazard bag to provide a visual cue to the Laboratory specimen processing.	Sue	1/22/2018	1/25/2018	Ensure procedure is consistent and effective, implement standard work	Complete
2	Lab	Laboratory specimen processing will affix individual Code FAST stickers to each sample to alert techs to Code FAST patient	Sue	1/22/2018	1/25/2018	Reduce rework, increase efficiency (time), decrease potential for error	Complete
3	Lab	Laboratory will communicate percentage of unordered Code FAST to ED Manager on weekly basis	Keith	1/22/2018	2/5/2018	Improved communication and real time performance data	Complete
4	Lab	Coagulation centrifuge to be moved to Specimen Processing area for immediate spin before going to the department	Arlene	1/22/2018	2/15/2018	Decreased TAT, reduced motion, reduced wait time	Complete