



ED to Imaging Turn Around Time

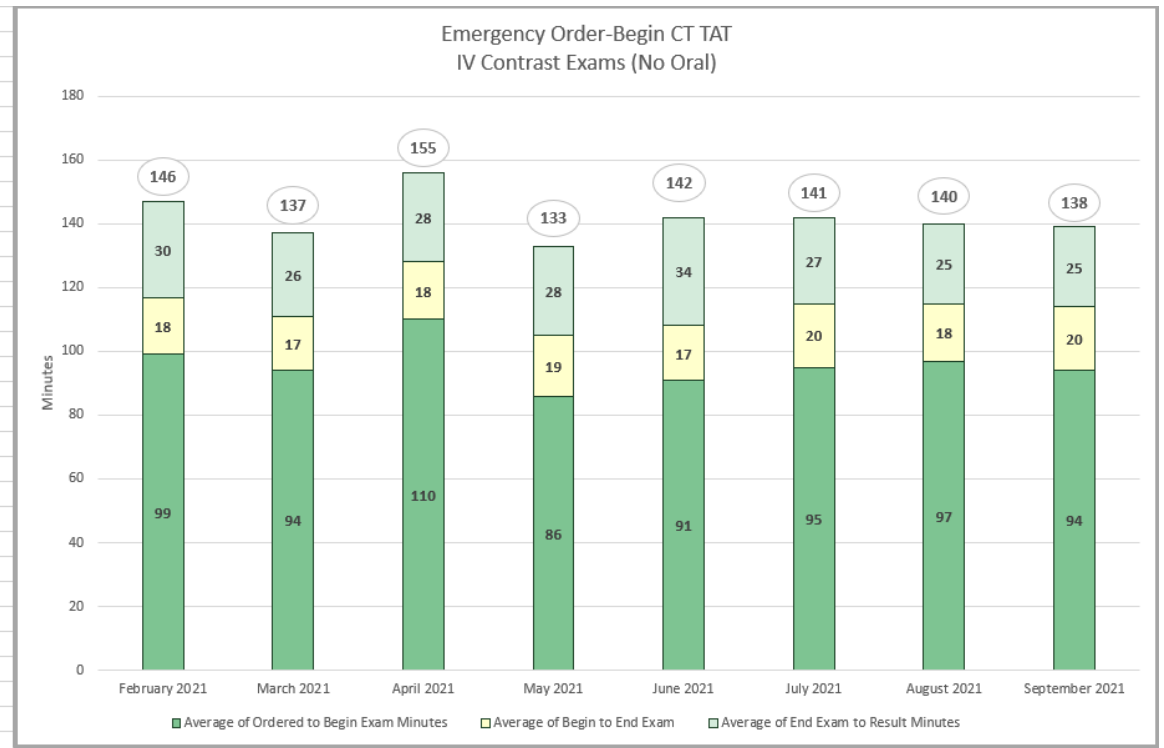
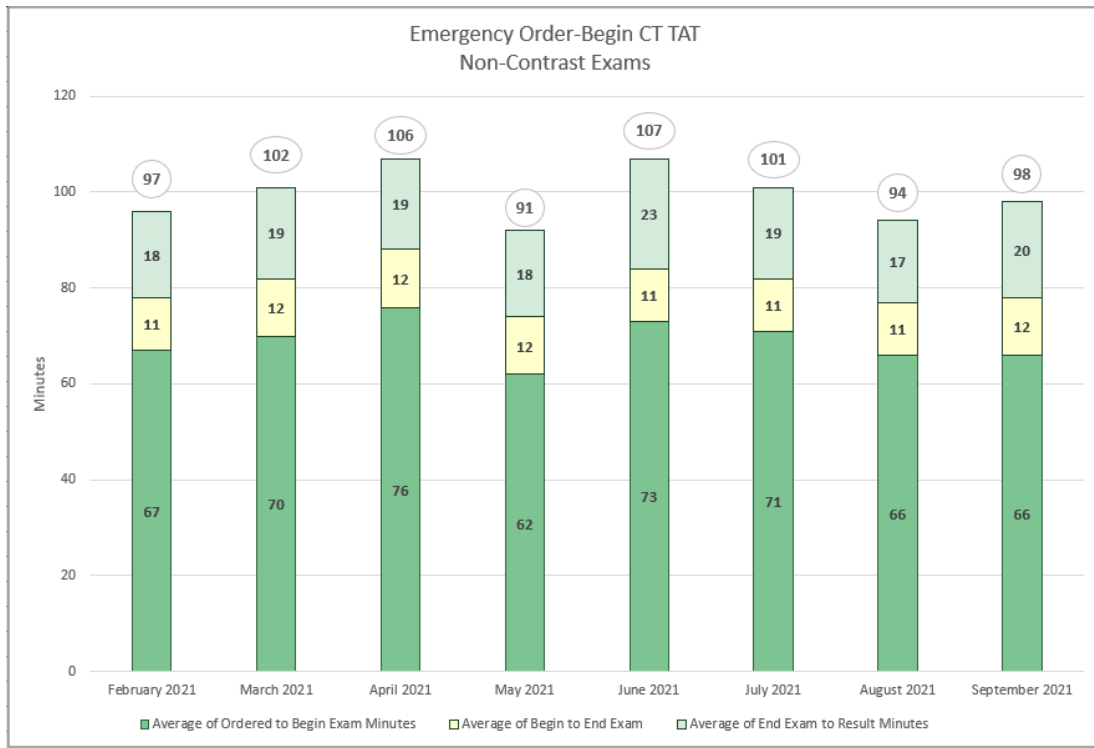
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Fisher and Alan Graham

Date: 10/27/2021

Defining the Opportunity for Improvement

- *Through data analytics, we determined that the ED to imaging turn around time was well above the national benchmark of 77 minutes from time of imaging order to final read.*
- *While reviewing the data, we realized that the area of opportunity for improvement was prior to the patient being seen in imaging.*
- *Realized the opportunity to engage and collaborate with the ED, transport, EPIC, and the lab to begin PDSA cycles to improve TAT.*





What Are We Trying To Accomplish?



We will design and implement a standardized process for CT scans of ED patients to meet the National Benchmark of 77 mins TAT. We will develop Standard Work using evidence-based guidelines for ordering, transport, technologists and radiologist workflows.



We will...

IMPROVE

INCREASE

DECREASE

REDUCE

Decrease CT TAT to meet EDDBA Standards

(outcome metric)

From our baseline of:

112 minutes

%

Mins

(circle one)

Hours

Days

To our goal of:

77 minutes

%

Mins

(circle one)

Hours

Days

By the date of:

11/1/2021

Better Health

This strategically aligns to:

1. Redesign care to continue to provide the best health outcomes to our patients and the community we serve

1. Redesign key work processes to better meet customer requirements



What Changes Did We Make to Solve for the Problem?

- Updated creatinine policy to decrease # pts requiring lab work prior to imaging.
- Trialed the use of a dedicated ‘facilitator’ in the ED to evaluate and prepare patients for CT, resulting in a 20-minute decrease in TAT.
- Collaborating with Lab to establish standards for resulting EPOC lab tests
- Collaborating with Transport/ED to explore options for more efficient transport between the ED and Radiology.



Problem Solving:

- Developing EPIC based CT scheduling function for INPTS requiring non emergent CT scans. The feature would assign CT times to INPTS during periods of low ED CT volumes (i.e. 6a-10a).
- Provider in Triage: Reduce the time from Arrival to first Emergency Provider (3/2021)
- Protocol Bay: Reduce the time from order to collection and IV started (5/2021)
 - Visual Management for Complete and Accurate Labs/IV for CT Readiness
 - Initiation of Lab partnership for Point of Care (POC) Creatinine lab study (Started 9/2021)

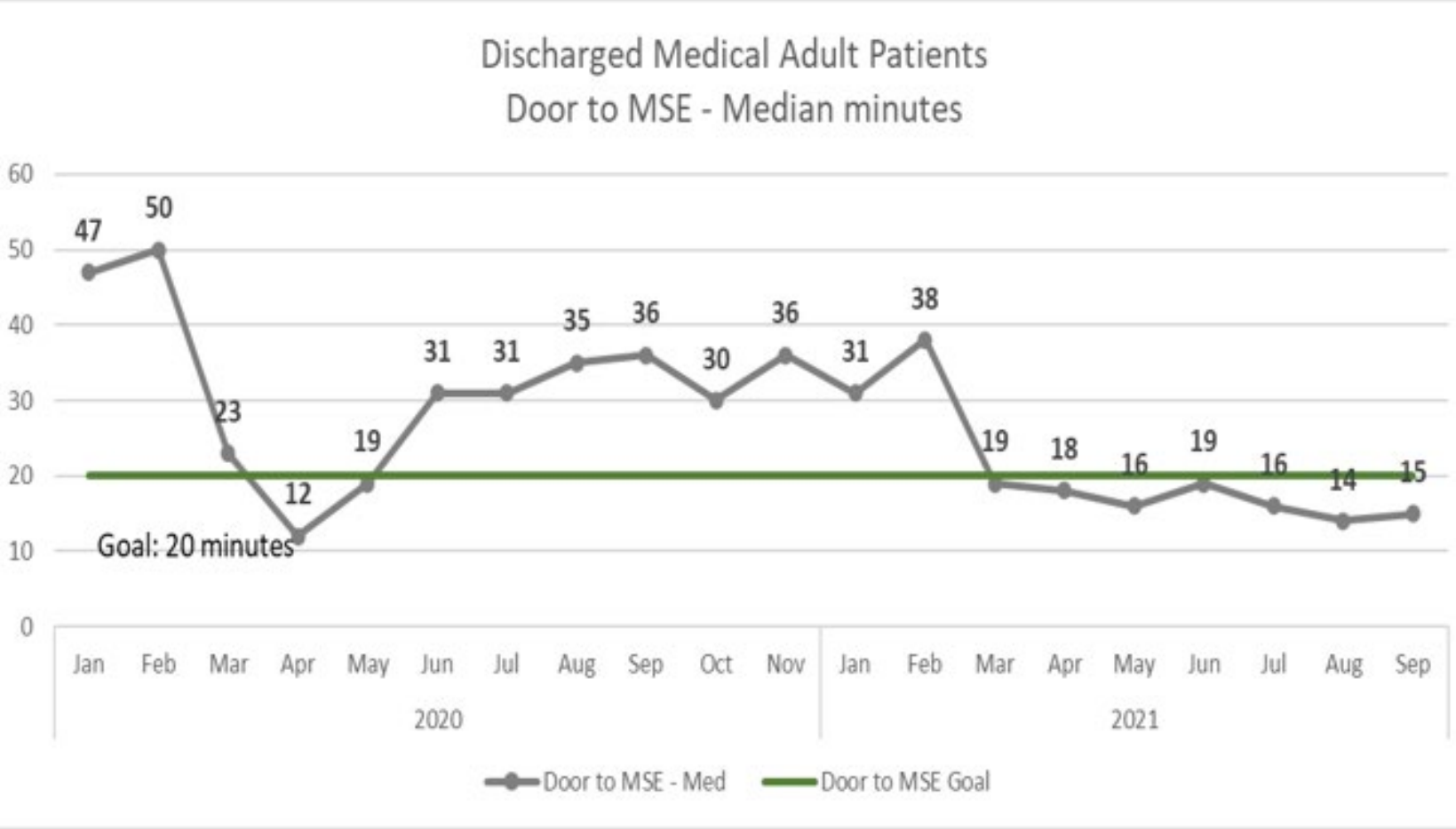


Outcomes & Lessons Learned



Provider in Triage

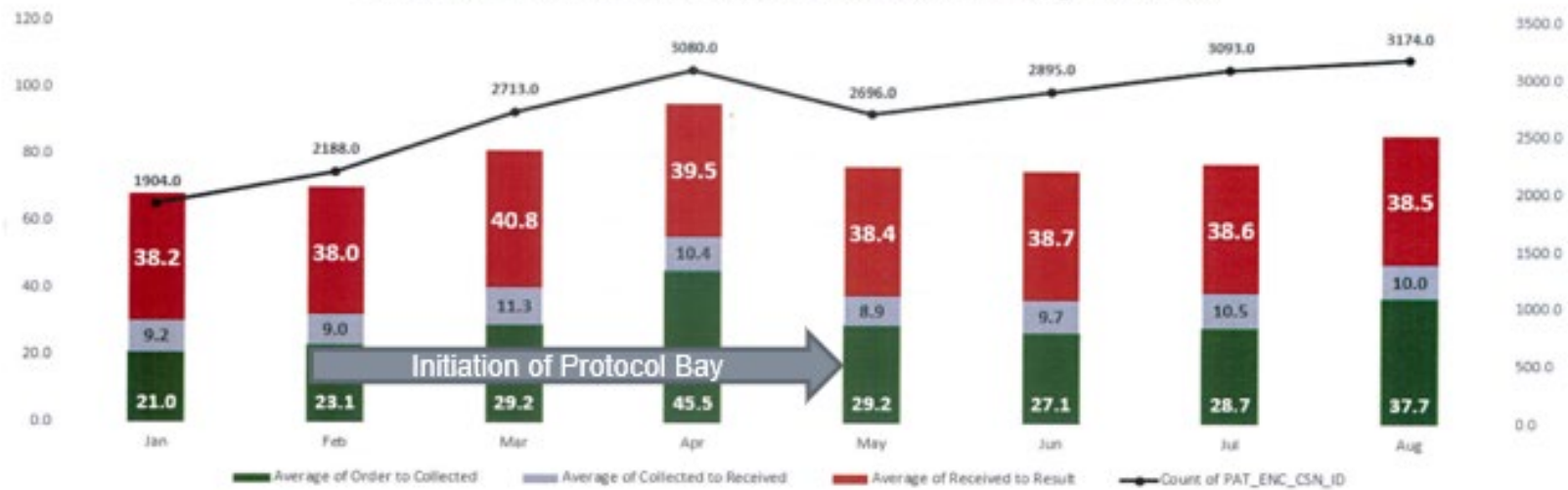
Discharged Medical Adult Patients
Door to MSE - Median minutes





Protocol Bay- Reducing Lab Turn-Around Time

CMP/BMP TAT Breakdown vs Ordered Tests - Average Minutes





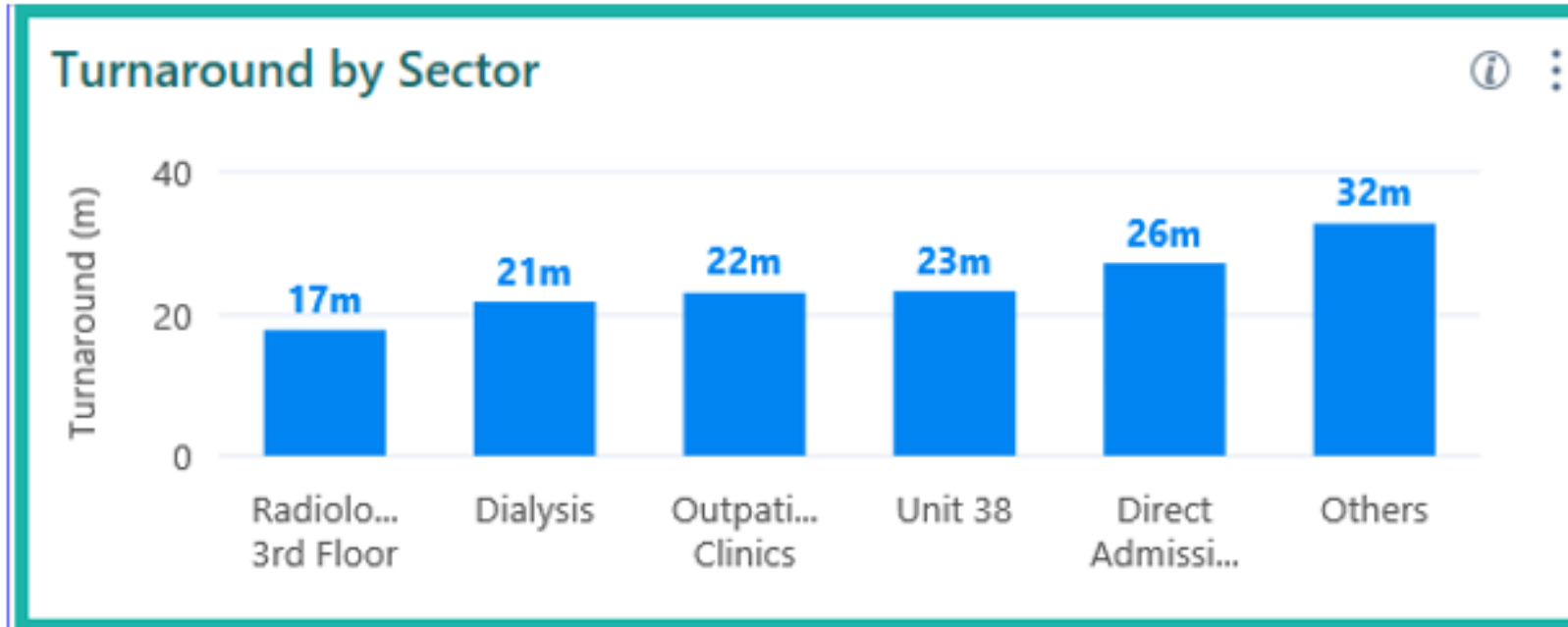
Creatinine Pilot EPOC Whole Blood vs. Serum Creatinine Turnaround Times

Event	Total number of Patients tested*	Time (minutes)	Goal (minutes)	Goal Met
EPOC Average turnaround time - Received to Verify	86	15.7	15.0	Not Met
Improved average turnaround time whole blood to serum	86	23.0	>20.0	Yes

Event	Total number of Patients tested*	Variance (mg/dl)	Goal (mg/dl)	Goal Met
Variance between whole blood and serum creatinine values	86	0.22	Less than 0.3	Yes

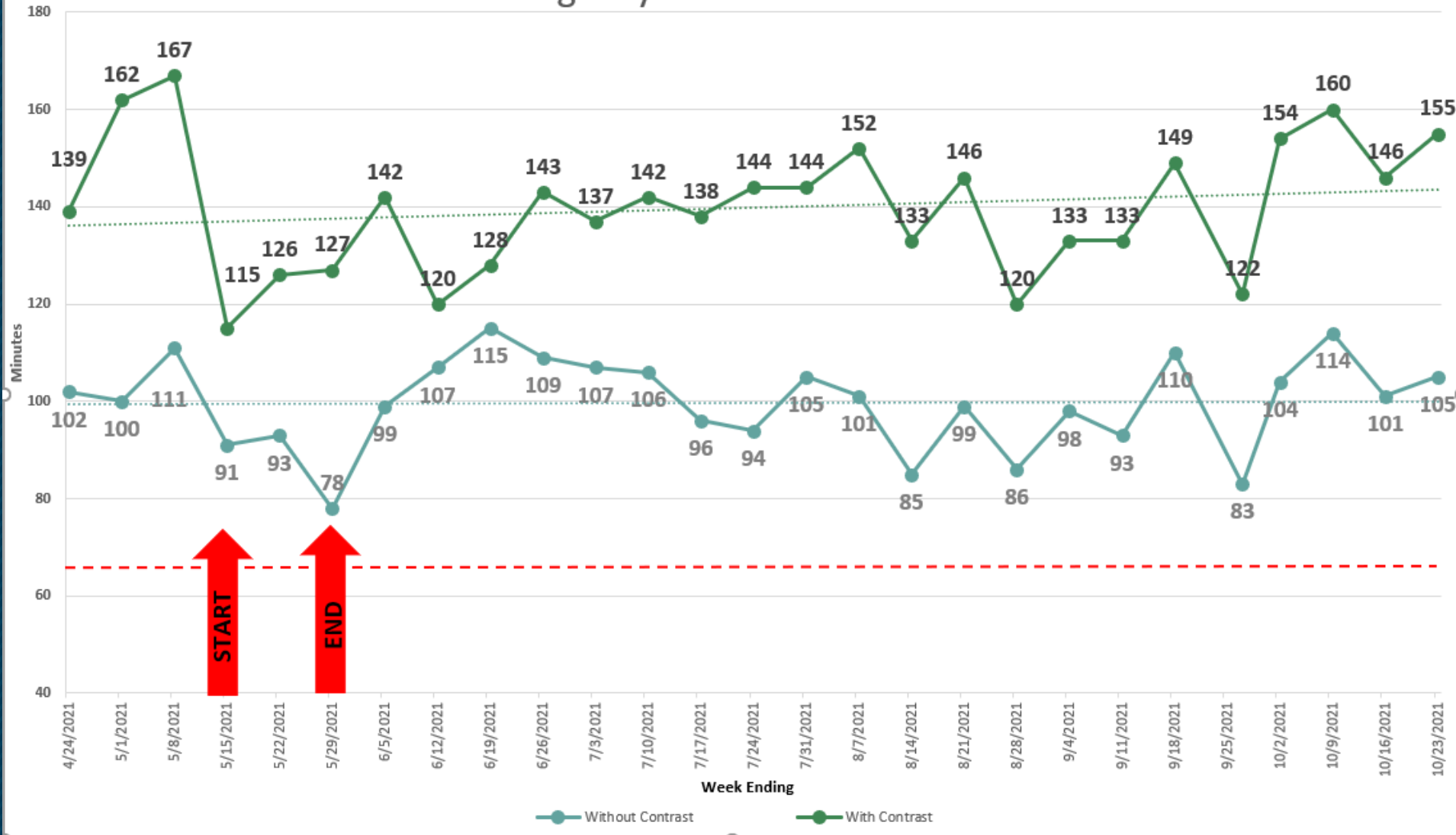
* Total number Patients Tested - 3 patients were excluded due to ordering irregularities.

October 2021





Emergency CT Order-Result TAT



Next Steps



- *INPT CT scheduling*
- *Continued collaboration with transport to assign a transporter for ED-Imaging during peak volumes*
- *Continued monthly meetings between Imaging, ED, and Lab to monitor lab TAT*
- *Continued collaboration with ED to evaluate “facilitator role” for patient readiness*
- *Collaboration with Transport to work with Epic to create a rover notification to the radiology team, so they know transport has acknowledge the job.*





QUESTIONS?

COMMENTS?