

# PRIORITIZE, OPTIMIZE AND ACHIEVE: ENHANCING STAT IMAGING ORDER EFFICIENCY FOR REDUCED TURN AROUND TIME!

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# Imaging Reclassification: CT Head WO Contrast



Overall Status

Problem: CY2022 data showed that 68% of all CT Head WO Contrast orders were ordered STAT. Furthermore, the data showed that 45% of all imaging orders\* at TGH were ordered STAT.

The goal: Reduce unnecessary STAT utilization for CT Head WO contrast orders from 68% to 45%

Secondary outcome: Improve STAT turnaround time.

## Project Timeline — *planned completion date*



**Feb 2023**  
*Defined scope*



**May 2023**  
*Priority reclassification*



**July 2023**  
*Finalize order attestation*



**Sept 1, 2023**  
*New CT Head WO Contrast order go-live!*

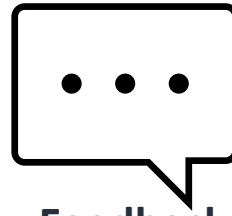
Modality	Total Inpatient & Outpatient Orders	Inpatient & Outpatient Orders Per Day	# Stat	# Stat Per Day	% STAT
CT	18929	52	11911	33	63%
Main Rad	33008	90	14510	40	44%
MRI	11655	32	7233	20	62%
Nuc Med	6989	19	1808	5	26%
US	25806	71	8093	22	31%
ALL	96387	264	43555	119	45%

*Inpatient and Outpatient patient classes included; portables excluded.*



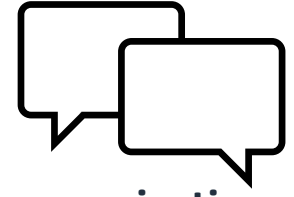
## Multidisciplinary Team

- Imaging
- Hospitalists
- Process Engineer
- Neurology
- Cardiology
- Emergency Medicine



## Feedback

- Priority classification
- Provider feedback for change management



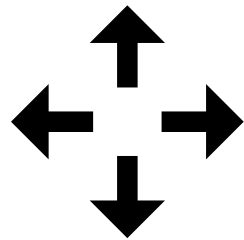
## Open Communication

- Provider education
- Lessons learned
- Continuous review of outcomes



## Data Driven Decisions

- Current performance
- Impact analysis
- KPIs
- Balancing measures



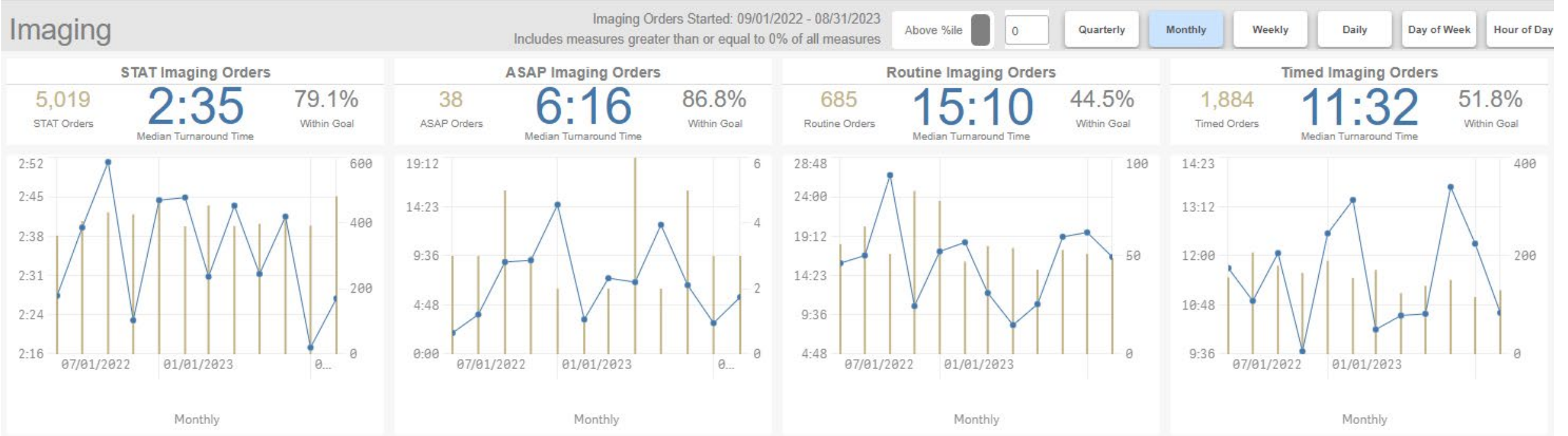
## Change Management

- Epic order changes
- Clinical Decision support tool for physicians
- 24/7/365 techs
- Dedicated transport
- Patient readiness with AI

# Our Approach



# Baseline Data



Source: Imaging Dashboard

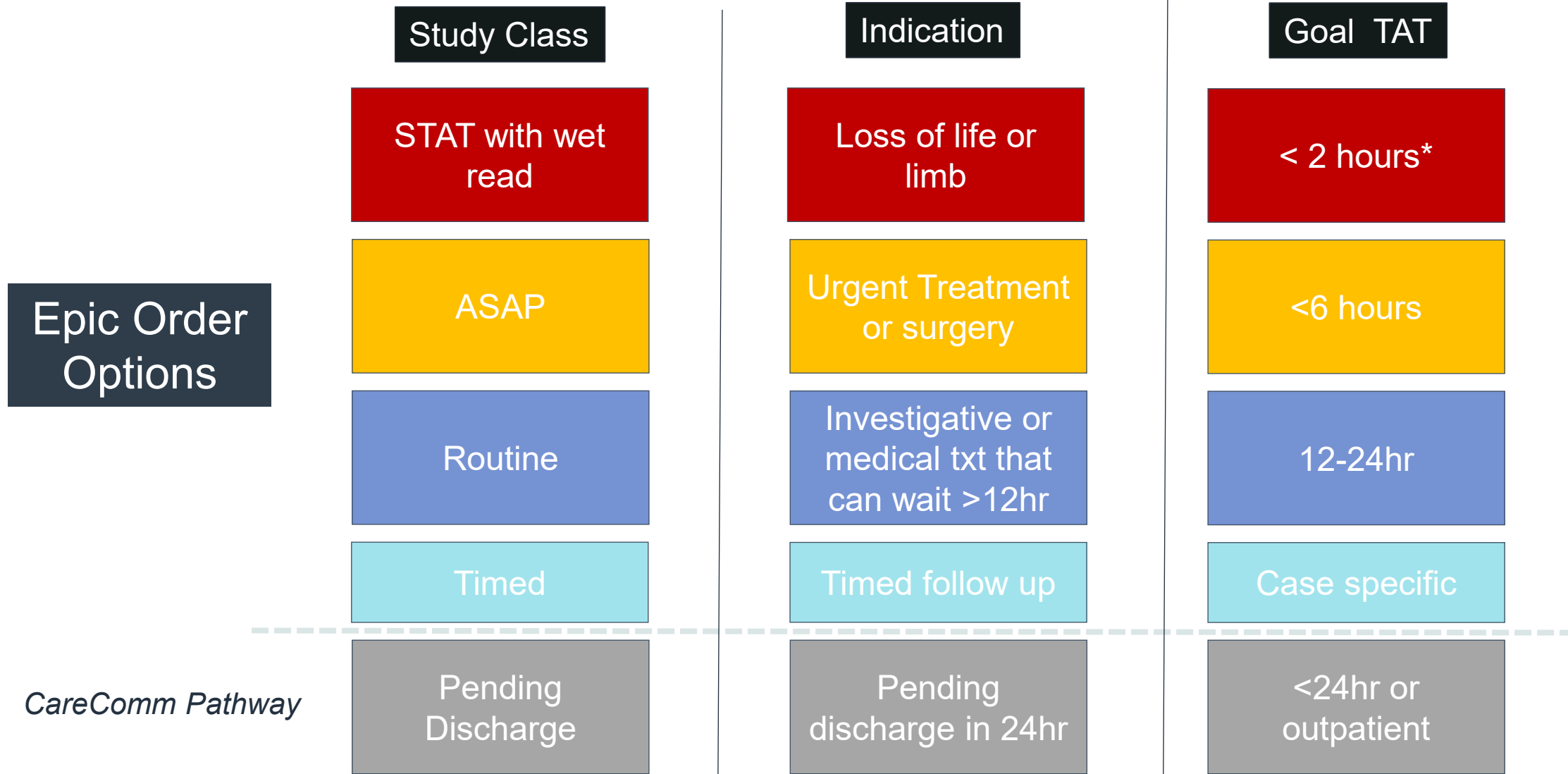
Filters applied: median, CT head WO contrast

Time period: 09/01/2022 – 08/31/2023



# Imaging Case Classification

We established institutional definitions of imaging priorities for indication & estimated turnaround time. This was distributed across many forums to the medical staff.



*Excludes patients in ED and OR*

\*patient ready for image



# Epic Order Changes

**Epic** | Pt Station | In Basket | Schedule | Orders | Build Tools | Record Viewer | Content Review | My Reports | OB Suite Log | NICU Suite Log | Pregnancy Wheel

Beaker, Testone

Snapshot | Order Inq... | Speci... | Summary | Chart ... | Synopsis | Results | Revie... | Problems | History | Notes | Demo... | Medic... | Allergies

**Manage Orders**

Active | Signed & Held | Home Meds | Cosign | Order History

Go to: Continuous Medications

**Continuous Medications**

- heparin (porcine) infusion CONCENTRATED 25,0 UNITS/250 ML
- magnesium sulfate 20g in 500 mL infusion

**CT BRAIN/HEAD WO CONTRAST**

This study IS being ordered due to potential loss of life or limb - STAT

This study IS NOT being ordered due to potential loss of life or limb

**CT BRAIN/HEAD WO CONTRAST**

This study IS NOT being ordered due to potential loss of life or limb

CT BRAIN/HEAD WO CONTRAST

Priority: STAT w/ WET READ | Routine | ASAP | Timed

Frequency: **1 TIME IMAGING**

At: 8/17/2023 | Today | Tomorrow | 0859

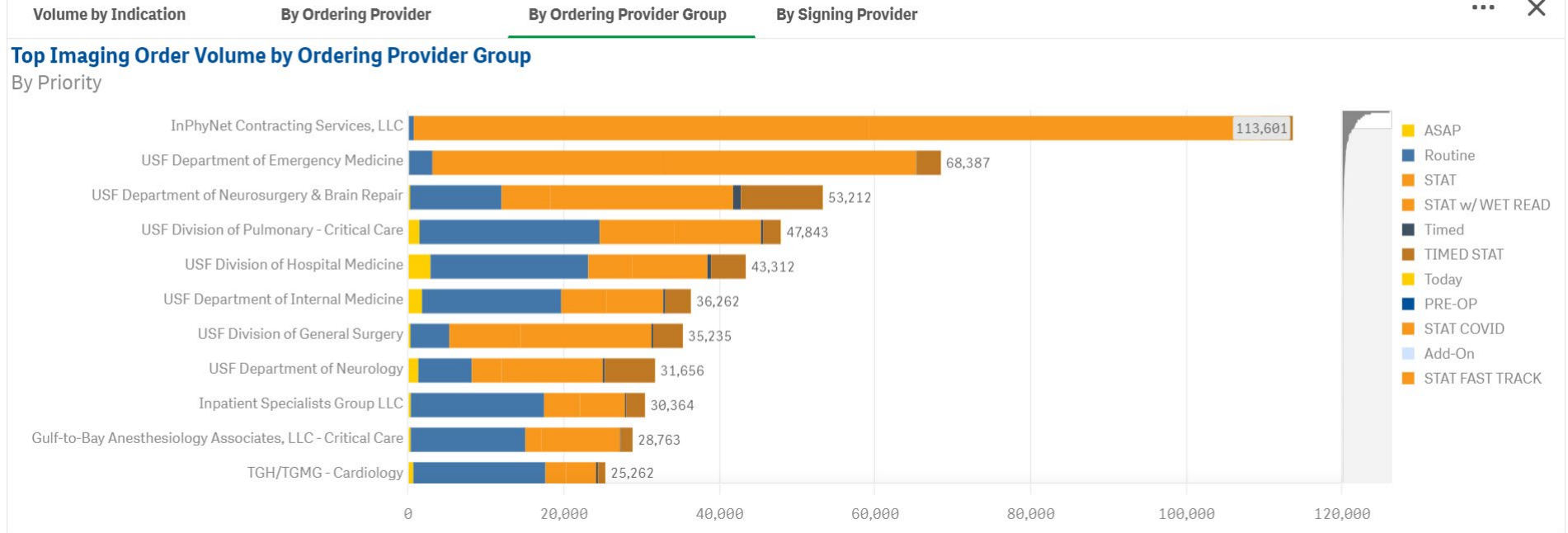
Release to patient: Immediate | Delayed release (72 hours)

Comments: | 100%

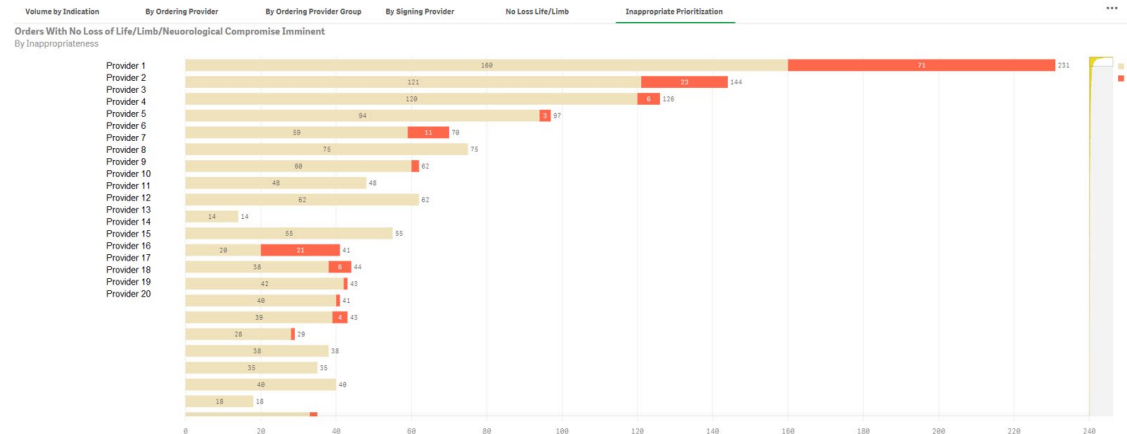
# Imaging Executive Dashboard

- ✓ Additional criteria has been added to identify ordering provider and provider group
- ✓ This data classification will help us connect with providers to understand barriers when placing imaging orders. Additionally, we can optimize our education efforts in general.

Imaging Orders with Indications: 865,684 Orders from 01/01/2021 to 08/29/2023

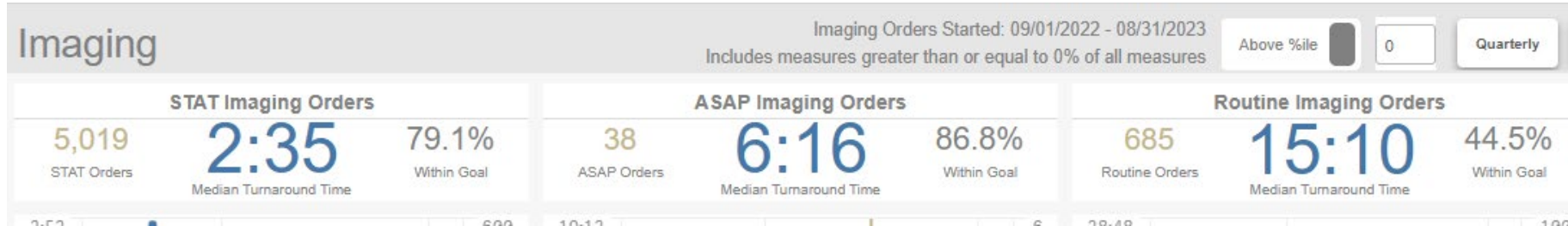


## Provider Feedback



# Intervention Performance

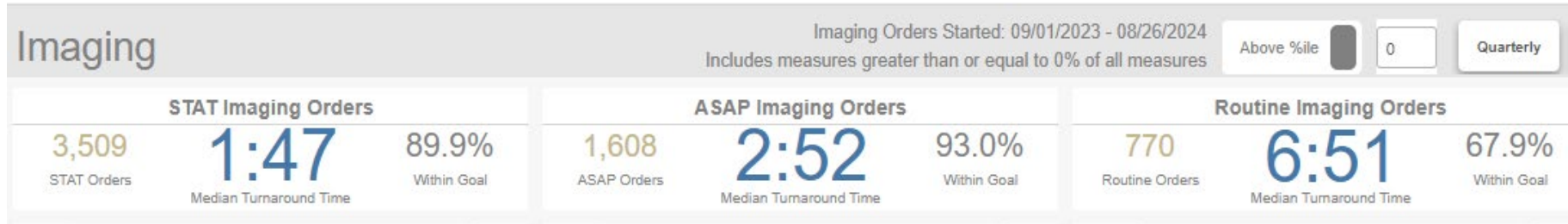
Pre-intervention



66% STAT

\*not pictured: 1884 timed studies

Post-intervention



47% STAT

\*not pictured: 1567 timed studies

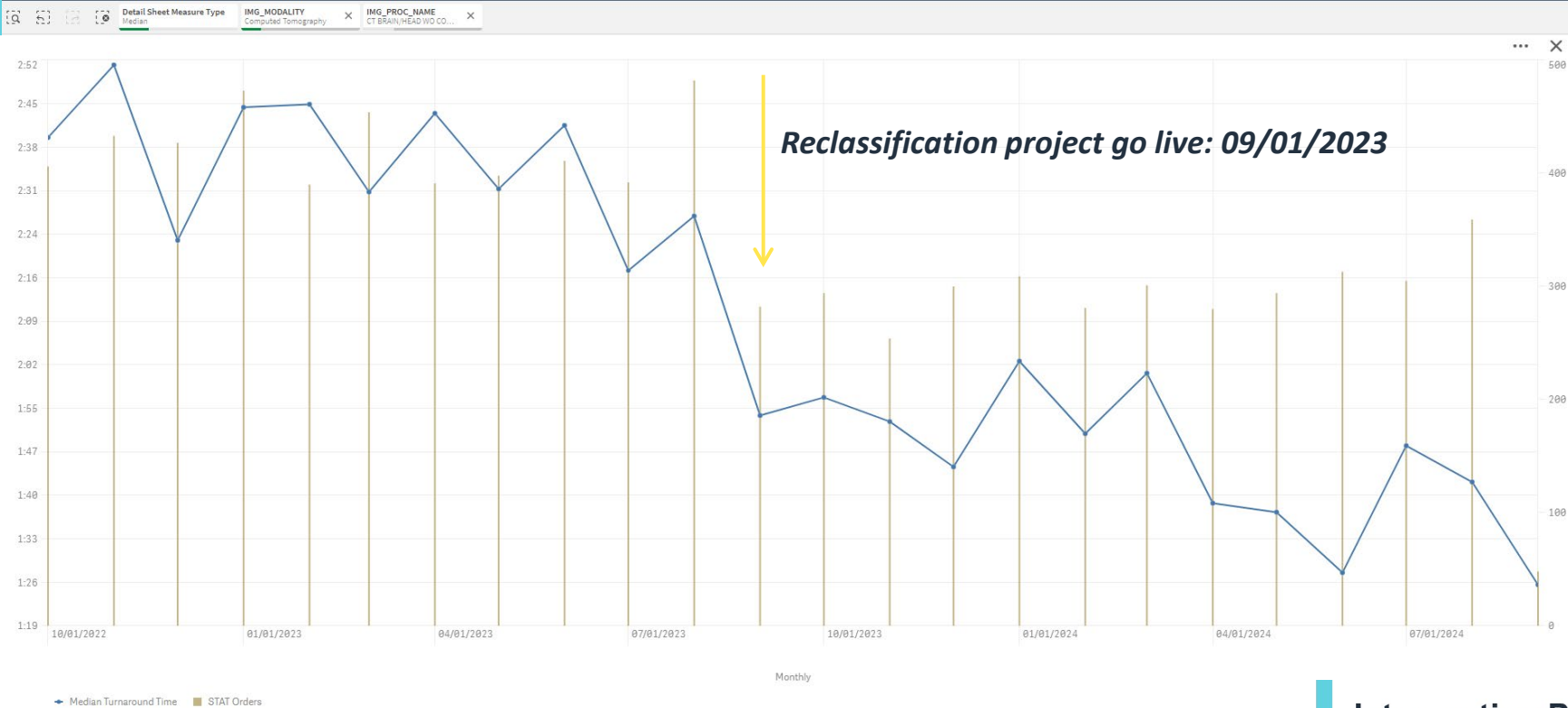
Source: Imaging Dashboard

Filters applied: median, CT head WO contrast

Time period: 09/01/2023- 08/26/2024



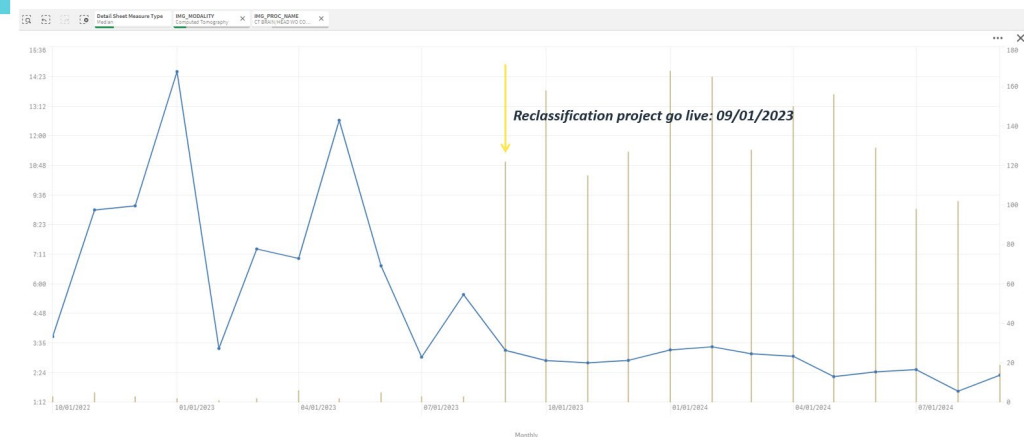
# Intervention Performance: STAT Utilization



## Balancing Measures to CT Head WO contrast

Month	Volume	"Real" meaning diagnosed-Ischemic, Hem. or TIA
January '23	49	31%
February	35	31%
March	44	39%
April	25	40%
May	32	19%
June	26	23%
July	40	28%
August	49	31%
September	67	39%
October	43	19%
November	42	36%
December	59	36%
January '24	53	23%
February	33	24%
March	54	33%

## Intervention Performance: ASAP Utilization



Source: Imaging Dashboard ;Filters applied: median, CT head WO contrast; Time period: 10/01/2022-08/31/2024

# Conclusion

- In summary, **prioritizing, optimizing, and achieving efficiency in STAT imaging orders** plays a critical role in minimizing turnaround times and enhancing patient care.
- By streamlining workflows, leveraging teamwork across multidisciplinary teams, and adopting targeted process improvements, Tampa General Hospital has demonstrated a commitment to operational excellence.
- The collaboration among radiologists, technologists, administrators, and project managers ensures that urgent imaging requests are addressed swiftly, ultimately improving diagnostic timelines and patient outcomes.
- Continued monitoring and refinement of these strategies will be essential to maintain and enhance efficiency in the future.