



Background:

The classic Dr. Seuss story of The Cat in The Hat, “the cat falls while trying to balance too many things and drops everything that he was holding”. This holds true at the CAT Scan department of SBH, between inpatients, outpatients, Pet/CT, IR CT guidance procedures, CT pending discharges, etc., it is a balancing act and quite challenging on how to prioritize patients needed to get done first according to the level of acuity, and the demands from the inpatient population. Effective patient throughput is a keystone to ensure timely and appropriate care provision within the hospital. Evidence based-practice supports that a well implemented patient throughput not only help realized quality patient care but also achieve better financial performance for the hospital.

AIM

The overarching goal of this process improvement initiative is to decrease the CT inpatients Turn Around Time from 25 hours to 5 Hours within 18 months and onward.

PLAN:

Provide evidence-based best practices on patient throughput specifically in CT Scan as follows:

- Change the LDM better Health Metric to The # of Pending Inpatient CT's by 7AM Daily
- The metric is 7 Inpatient CT's pending at 7AM and is being met each day
- Pending CT's is a standing item at Morning Huddle
- Pending CT's is a required Shift Report Item

DO

- A MRI/ CT manager has joined the staff.
- A continued focus on CT TAT will be emphasized.
 - At Morning Huddle
 - Included in the Shift report
- A contract with a school to Train CT techs has been implemented
- The goal is to have an adequate number of CT techs to operate both Scanners on the 4th floor on the day and evening shifts
- A Policy has been put in place to ask the attending physician to cancel CT's after three failed attempts and reorder when the patient is able to Travel to Radiology

ACT

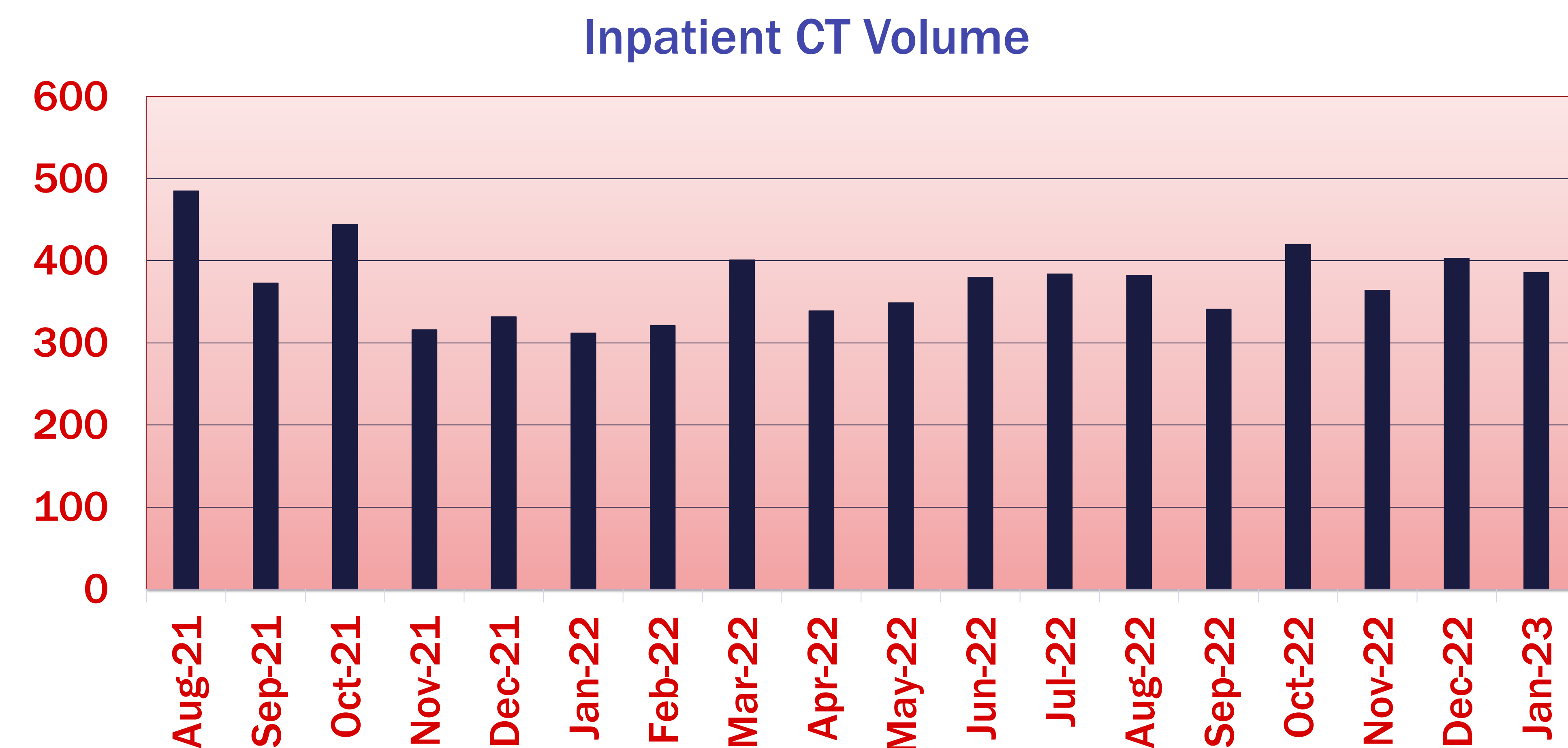
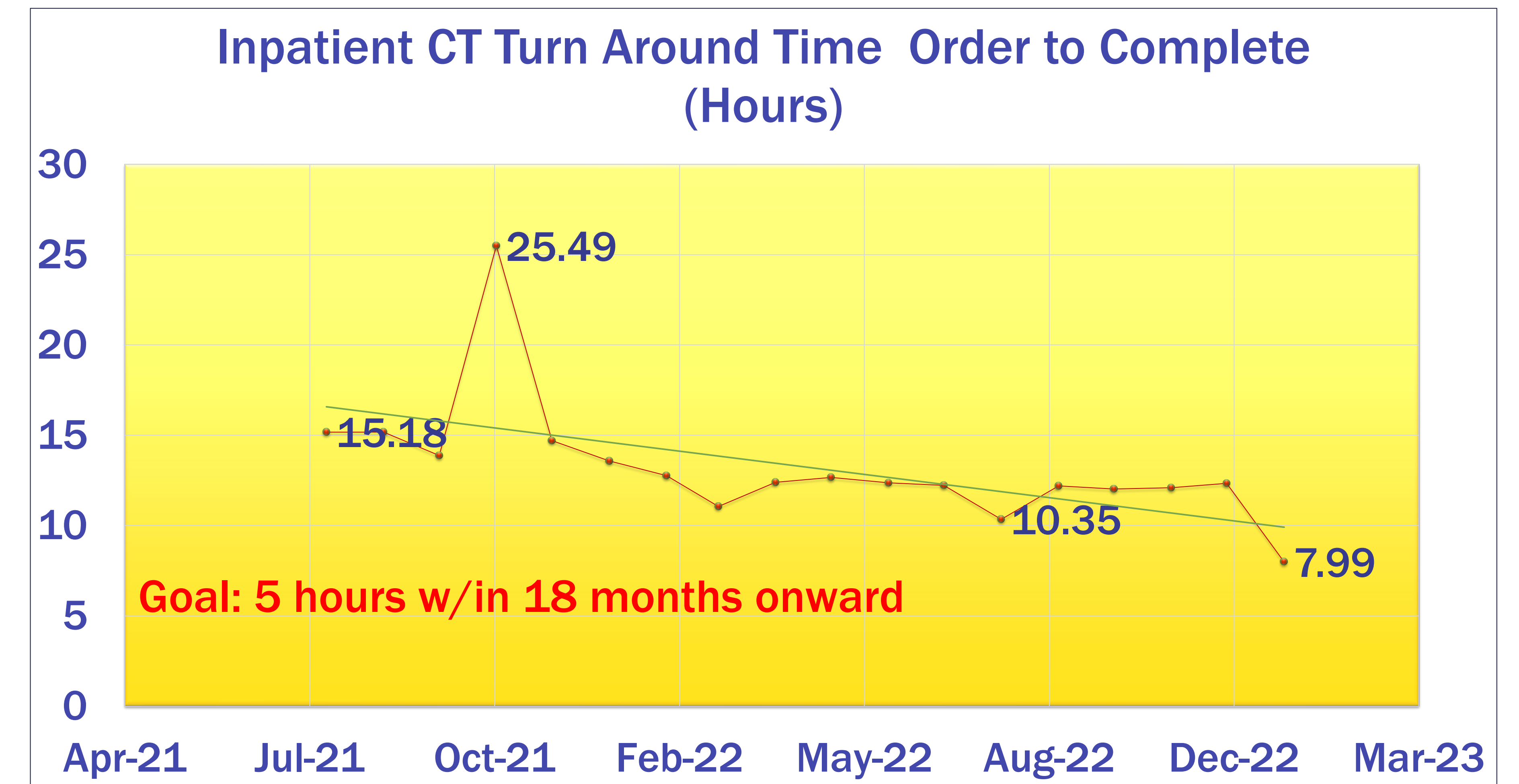
- Inpatient CT orders leftover from day before are tracked daily as part of LDM and daily department huddle
- If patients are not available due to current condition, the department will continue to attempt to send for the patient up to 3 times, otherwise the ordering clinician will be contacted to cancel order and reenter when patient is ready.
- Coordinate with ordering physicians to notify department for pending discharge and priority patients
- Cross trained technologists, monitor their efficiency and workflow to achieve desired outcome

Evidence of Improvement

The reduction in the Turn Around Time of inpatient CT drives improvement as follows::

- Qualitative value added includes better patient experience, improved satisfaction from the ordering clinicians, and provided a more calming and less chaotic environment for the CT technologists performing the studies.
- Quantitative value added include shorter length of stay and earlier patient discharges; better technologists productivity

STUDY



Evaluation of Findings: Data yielded a dramatic improvement from Nov 2021 at 25.49 hours with 316 orders versus January 2023 at 7.99 hours with higher volume of 386 inpatient CT orders

Implication of Findings: A major implication from the results indicated that with correct balancing of CT orders along with creative and sustainable plan of actions can lead to a better Turn Around Time, improved satisfactions both from the technologists and ordering physicians, and the hospital financial bottom line

References:

1. <https://www.prindleinstitute.org/books/the-cat-in-the-hat/> accessed 2/20/23
2. Strategies for Improving Patient Throughput in an Acute Care Setting Resulting in Improved Outcomes: A Systematic Review NURSING ECONOMIC\$/November-December 2016/Vol. 34/No. 6

Acknowledgements:

1. SBH Analytics Department
2. Durney, Gerry, Former Director of Radiology SBH