ASCO Quality Training Program

Physician burnout: An Innovative way to find "Sanity out of Madness" in the Infusion Center of a Cancer Institute

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Laurie Kaufman, Irina Veytsman

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Institutional Overview

- Medstar Washington Hospital Center (WHC) is a 912-bed major teaching and research institute.

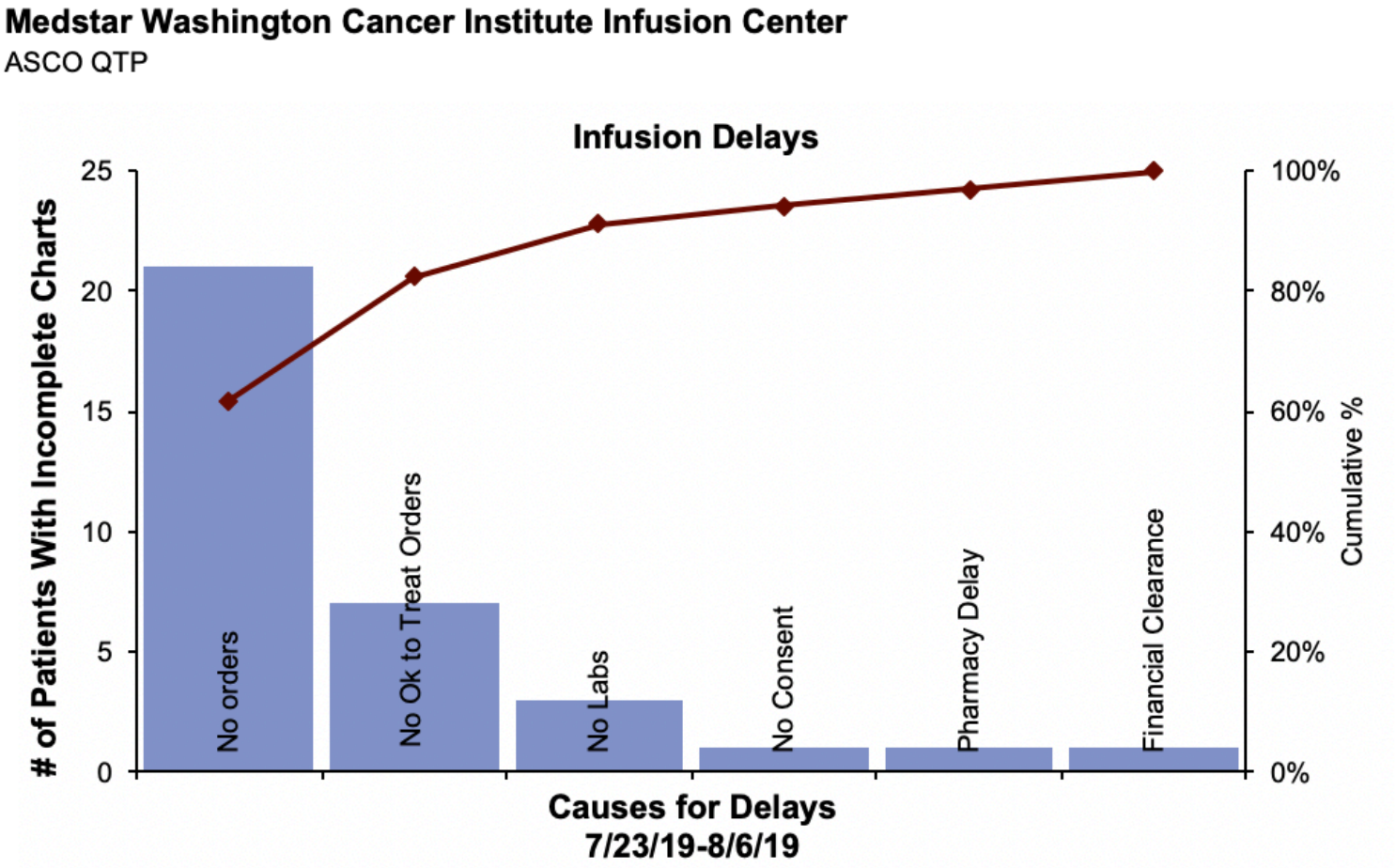
- A tertiary care referral center and a major trauma center.
- Washington Cancer Institute (WCI) within WHC caters to a diverse patient population within the tristate area.
- There are over 2,200 patients seen at the Washington Cancer Institute, accounting for over 14,000 annual medical oncology/hematology visits.
- Our 29-bed infusion center provides treatment to over 900 patients a month.

Team members

- Chris Gallagher, Cancer Center Director / Project Sponsor
- Irina Veytsman, Medical Director of the Hematology/Oncology Department / Team leader
- Laurie Kaufman, QTP Facilitator
- Sarah Sewaralthahab, Oncology-Hematology Fellow / Core Team Member
- Linda King, Ambulatory Nurse Coordinator / Core Team Member
- Shaunika Thorne, Clinical Nurse, Infusion Center / Core Team Member
- Carrie Miller, Sr Clinical Social Work Coordinator / Team Member
- Debolina Goswami, Ambulatory Practice Manager/ Team Member

Process Measure

Diagnostic Data



Problem Statement

In the time period from June 21st 2019 to August 30th 2019, we noted that 13.18% of patients scheduled to receive chemotherapy at WCI infusion center had missing orders on the day of the infusion, which resulted in up to a 111-minute delay in starting chemotherapy. This, in turn, resulted in stress/burnout among 42.1% of providers and 55.6% of supportive staff in addition to patient dissatisfaction.

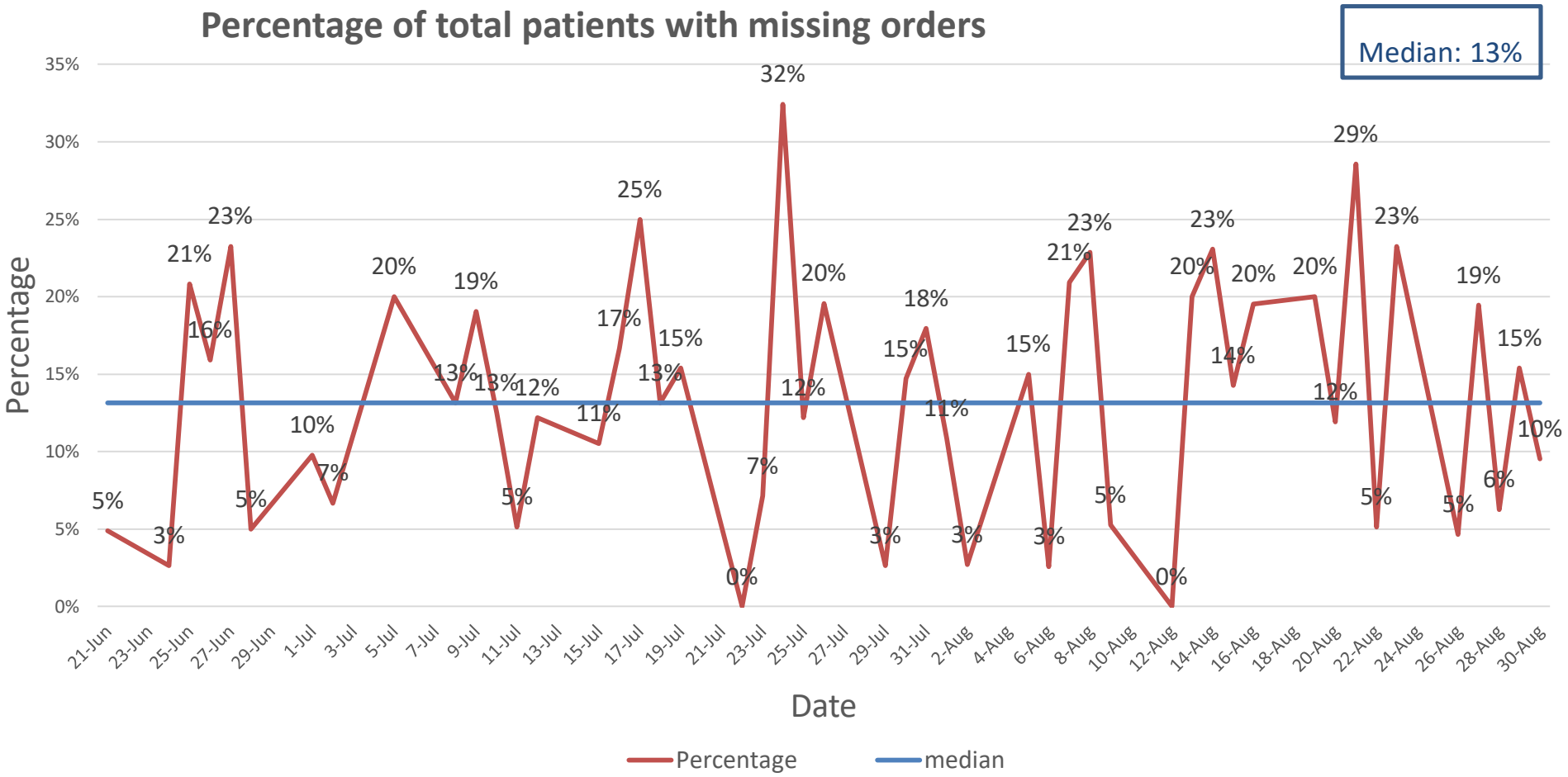
Process Measure

Baseline data summary

Item	Description
Measure:	Number or % of missing orders by 8 am on day of Chemo Infusion
Patient population: *(Exclusions, if any)*	All Hematology/Oncology patients presenting to WCI infusion center, excluding GYN Oncology patients
Calculation methodology: *(i.e. numerator & denominator)*	# of patients with missing orders / # of total patients receiving chemo the same day
Data source:	Infusion center data collection
Data collection frequency:	Daily
Data limitations: *(if applicable)*	difficulty to retrospectively extract the type of missing data (missing chemo orders vs un-signed orders vs missing labs).

Outcome Measure

Baseline data



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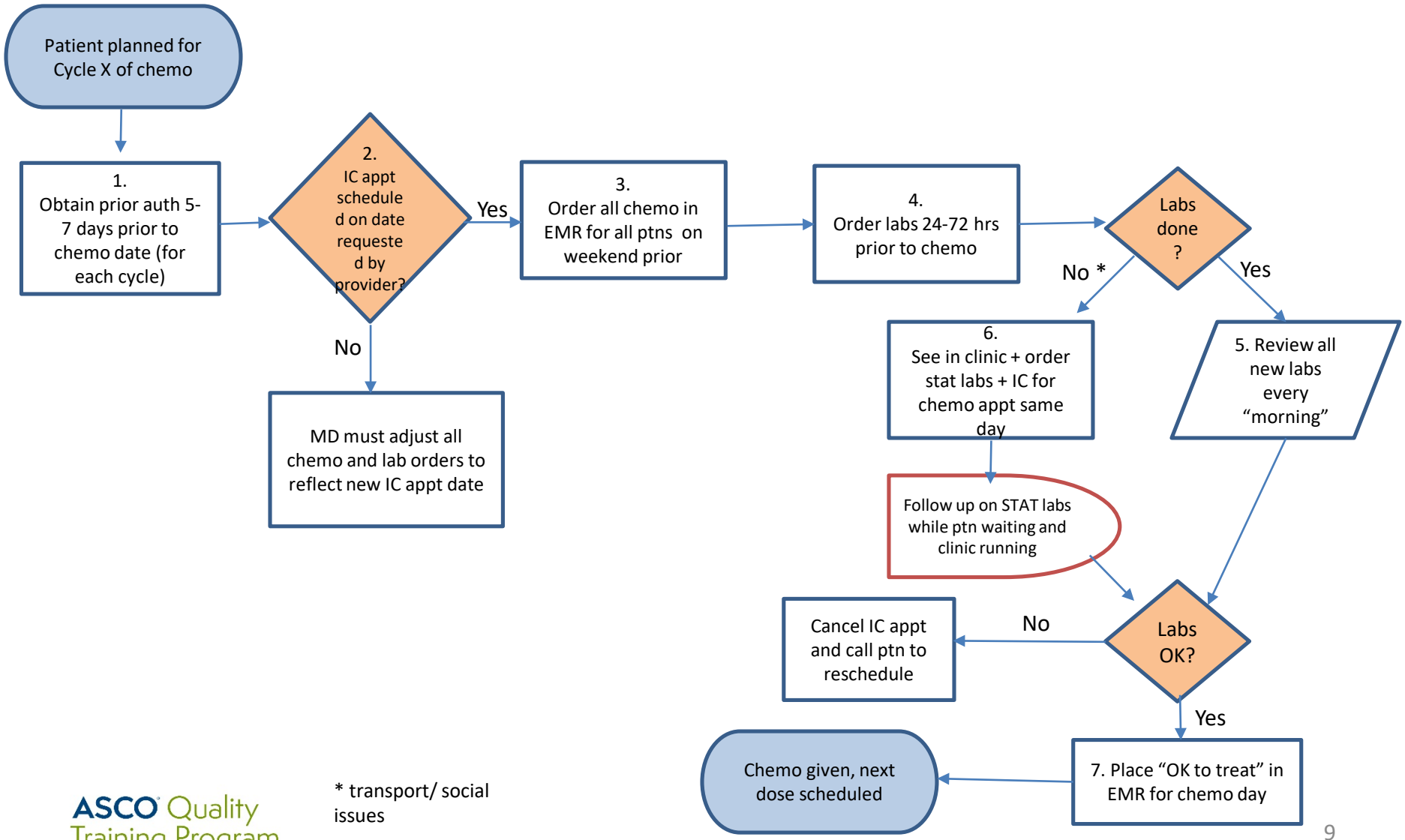
Aim Statement

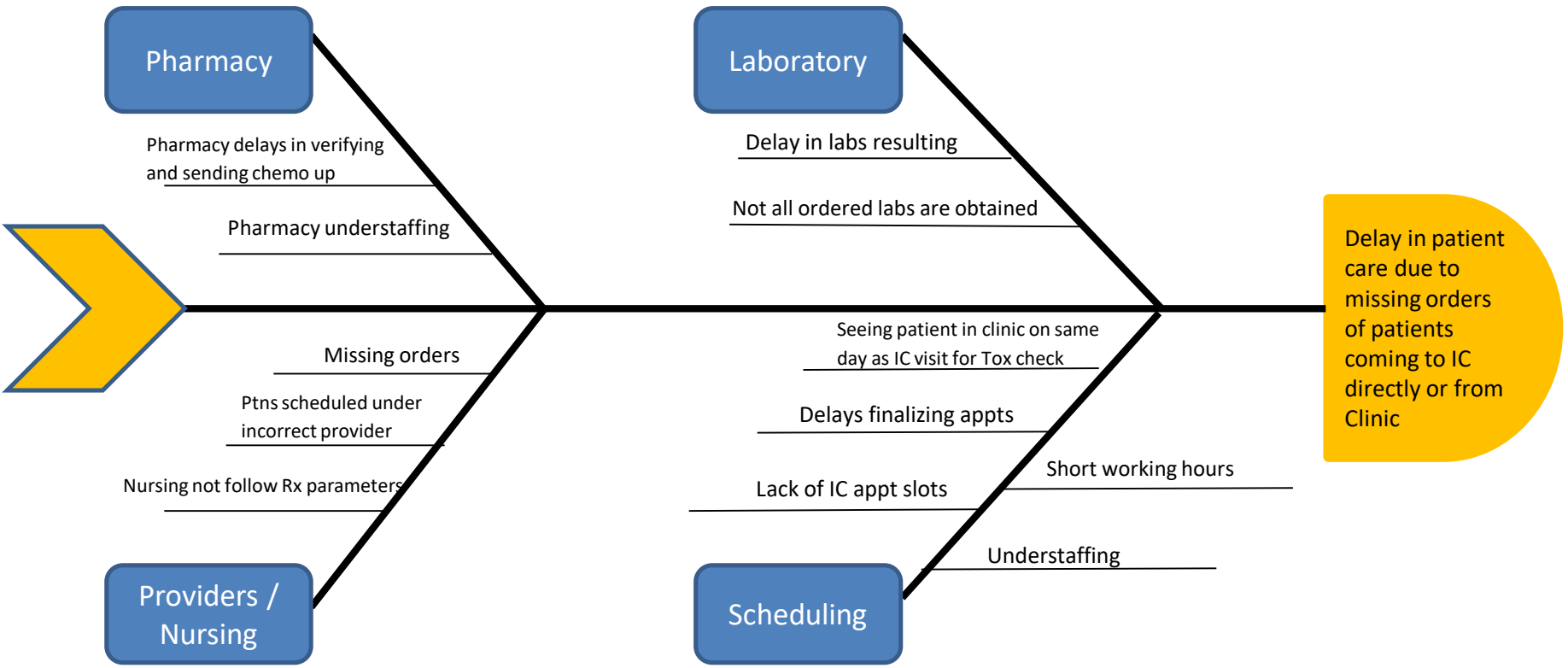
Decrease the number of missing orders of patients coming to the IC directly or from the clinic by 50% by Nov. 20, 2019 in an effort to decrease resultant stress on providers and IC nurses.

Process map



* transport/ social issues

Cause and Effect diagram

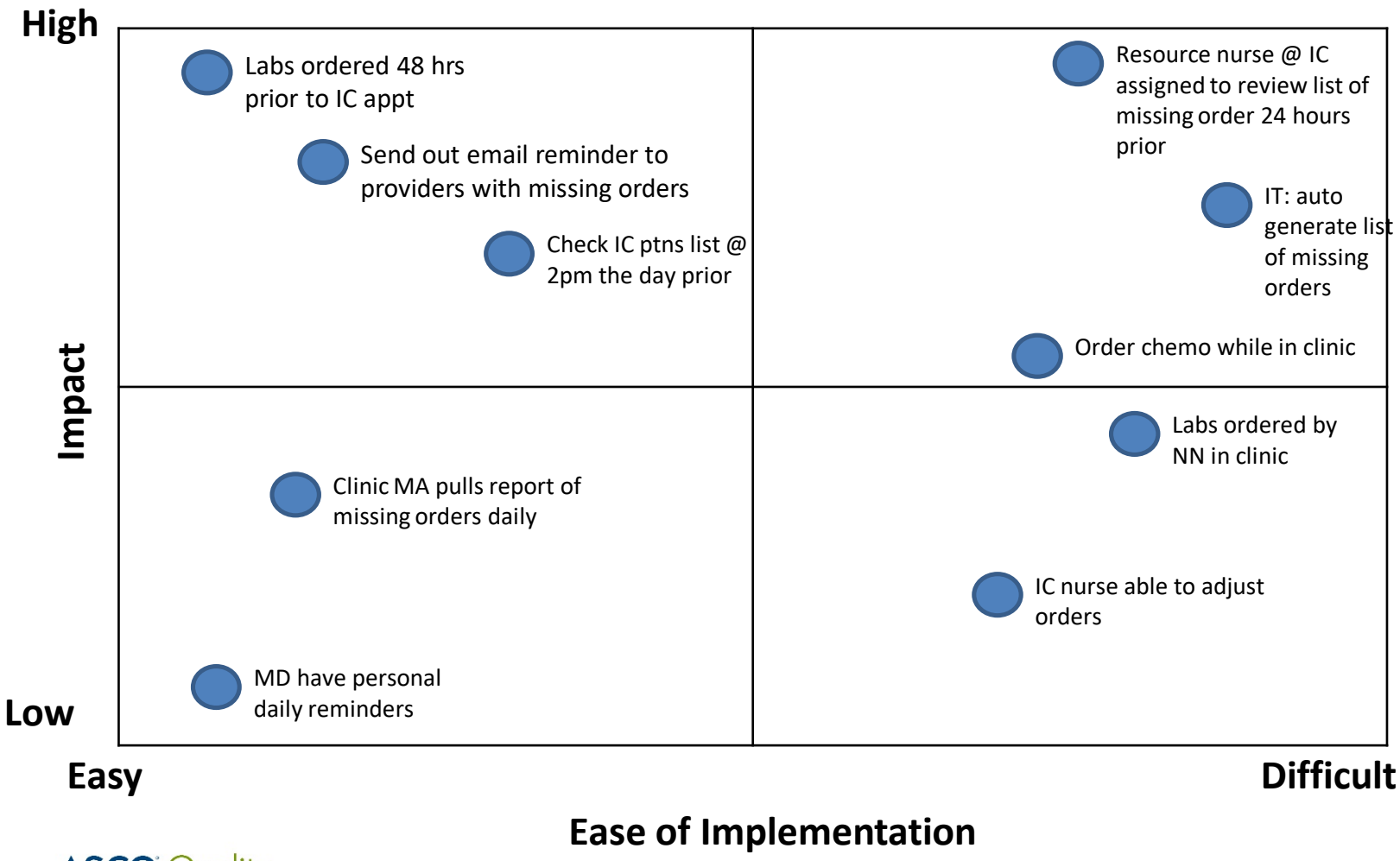


Summary of Learning:

- Most delays are due to scheduling issues (not IC slots, delays in scheduling, empiric appts).
- Improving communication between providers & nurses is key.

Priority / Pay-off Matrix

Countermeasures



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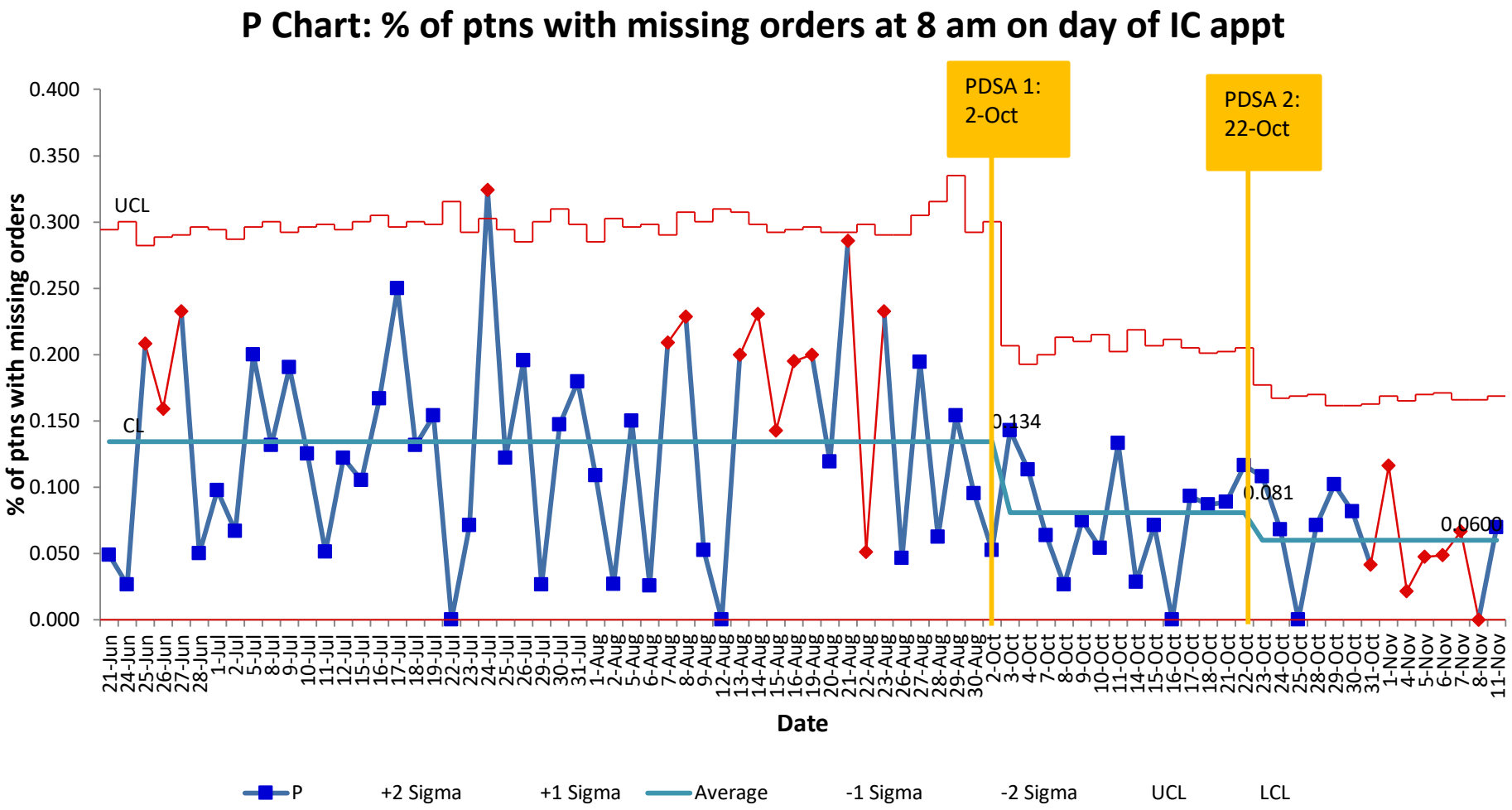
Test of Change

PDSA Plan

Date	PDSA Description	Result
10/2/19 – 10/21/19	PDSA 1: - Send email notification to all providers and nurse navigators regarding missing orders 48 hours prior to IC appointment. - Encourage providers to obtain necessary labs 48 hours prior to IC appointment - Review labs and sign orders by 2 pm the day prior to IC appointment.	Decrease in the median % of patients with missing orders to 7%
10/22/19 – 11/11/19	PDSA 2: - Pharmacy to release premedication even if chemo order needs dose adjustment. - Reinforce PDSA1 changes	Median % of patients with missing orders noted to further decrease down to 5% for the time period 11/4 – 11/11.

Process Measure

Change Data



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Conclusion

- We met our aim of decreasing the number of missing orders by ~50%!
- Our mean was reduced from 13% down to 7% in PDSA 1 & 2.
- No change in % of missing orders between PDSA1 & PDSA2.
- Reinforcing the importance of ordering labs 48 hours prior to appointments and signing chemo order by 2 pm the day prior to IC appointment will likely result in further improvements.
- Further data is needed to determine the long term effects of delays in treatment.
- The effects of this intervention on burnout will be evaluated down the line.

Next steps

Sustainability Plan

Next Steps	Owner
Train multiple administrators in the administration office to run reports identifying missing orders	Debolina Goswami
Train nurse navigators to run reports to identify missing orders in case of administrators are unable to	Linda King / Debolina Goswami
Continue to monitor data daily with review of finding every 2 weeks during operational leadership meeting	Shaunika Thorne
Identify new opportunities for PDSA interventions and implementation. Continue to analyze data on a regular basis to help identify new challenges.	Sarah Sewaralthahab / Irina Veytsman

Thank you

Sarah Sewaralthahab, MD, MPH. Hematology/Oncology Fellow
Irina Veytsman, MD. Medical Director of Hematology/Oncology Department

Washington Cancer Institute

MedStar Washington Hospital Center

Physician burnout: An Innovative way to find "Sanity out of Madness" in the Infusion Center of a Cancer Institute

AIM: Decrease the number of missing orders of patients coming to the IC directly or from the clinic by 50% by Nov. 20, 2019 in an effort to decrease resultant stress on providers and IC nurses.

INTERVENTION:

PDSA 1

- Send email notification to all providers and nurse navigators regarding missing order 48 hours prior to IC appointment.
- Encourage providers to obtain necessary labs 48 hours prior to IC appointment
- Providers to review labs and sign orders by 2 pm the day prior to IC appointment.
- Administrator will run a report to identify the number of missing order for each day at 8 am.

PDSA 1

- Pharmacy to release premedication even if chemo order needs dose adjustment.

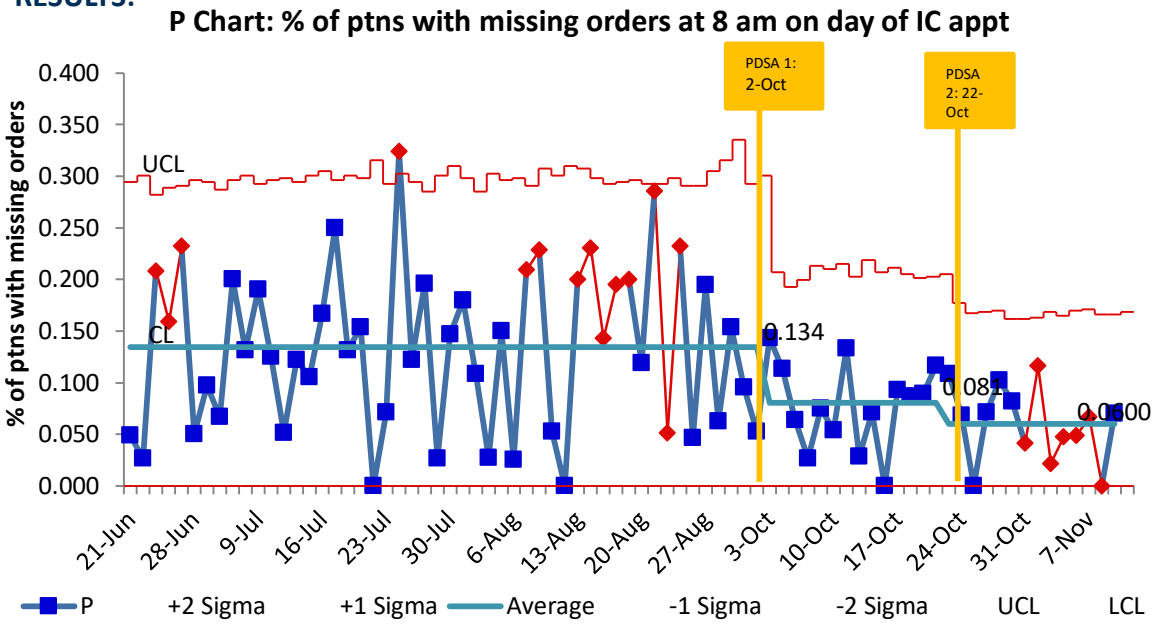
TEAM:

- Linda King, WCI
- Shaunika Throne, WCI
- Carrie Miller, WCI
- Debolina Goswami, WCI
- Laurie Kaufman, MD Anderson

PROJECT SPONSORS:

- Chris Gallagher, Cancer Center Director / Project Sponsor

RESULTS:



CONCLUSIONS:

- Our aim of decreasing the number of missing orders by 50% was met; the median decreased from 13% down to 7% during PDSA 1&2
- No difference on % of missing orders between PDSA 1 and PDSA 2.

NEXT STEPS:

- Reinforce the practice of ordering labs 48 hours prior to IC appointment and placing chemo orders 24 hours prior.
- Train the nurse navigators and administrators to run reports of missing providers.
- Build automated physician reminders into upcoming EMR system

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