

**Project Title: Reducing Early and Late Arrivals of Medical Oncology
Patients to Infusion for Treatment**

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Institution: Allegheny Health Network

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ASCO Team Members

Name	Role
Lisa Ciafre RN Quality Director Cancer Institute	Project Sponsor
Sharon Kauffman PhD, RN, OCN, NPD-BC, Clinical Coordinator ACMO	Project Team Leader
Scott Long MD, PhD, President ACMO, System Director, MO AHNCI	Project Team Member
Juliette Och RN, BSN, Clinical Informatics Nurse	Project Team Member
Casey Gormley CRNP	ACMO Team Member
Diane Steimer CMA	ACMO Team Member
Janet Kline NP	ACMO Team Member
Katy Towle PAC	ACMO Team Member
Lindsay Rodgers Infusion RN	ACMO Team Member
Michelle Grenesko Infusion RN	ACMO Team Member
Nicole Revtai CMA	ACMO Team Member
Laura Kaufman, MSN, RN, CPHQ, CMQ	ASCO Coach

Institutional Overview

Division of Medical Oncology

- 111,000 annual visits
- 17 clinic sites
- 40 physicians
- 49 APPs
- 69 pharmacy staff
- 183 RNs
- 43,000 annual infusions
- 270 infusion chairs
- 142 exam rooms



Allegheny Health Network Cancer Institute - Allegheny General

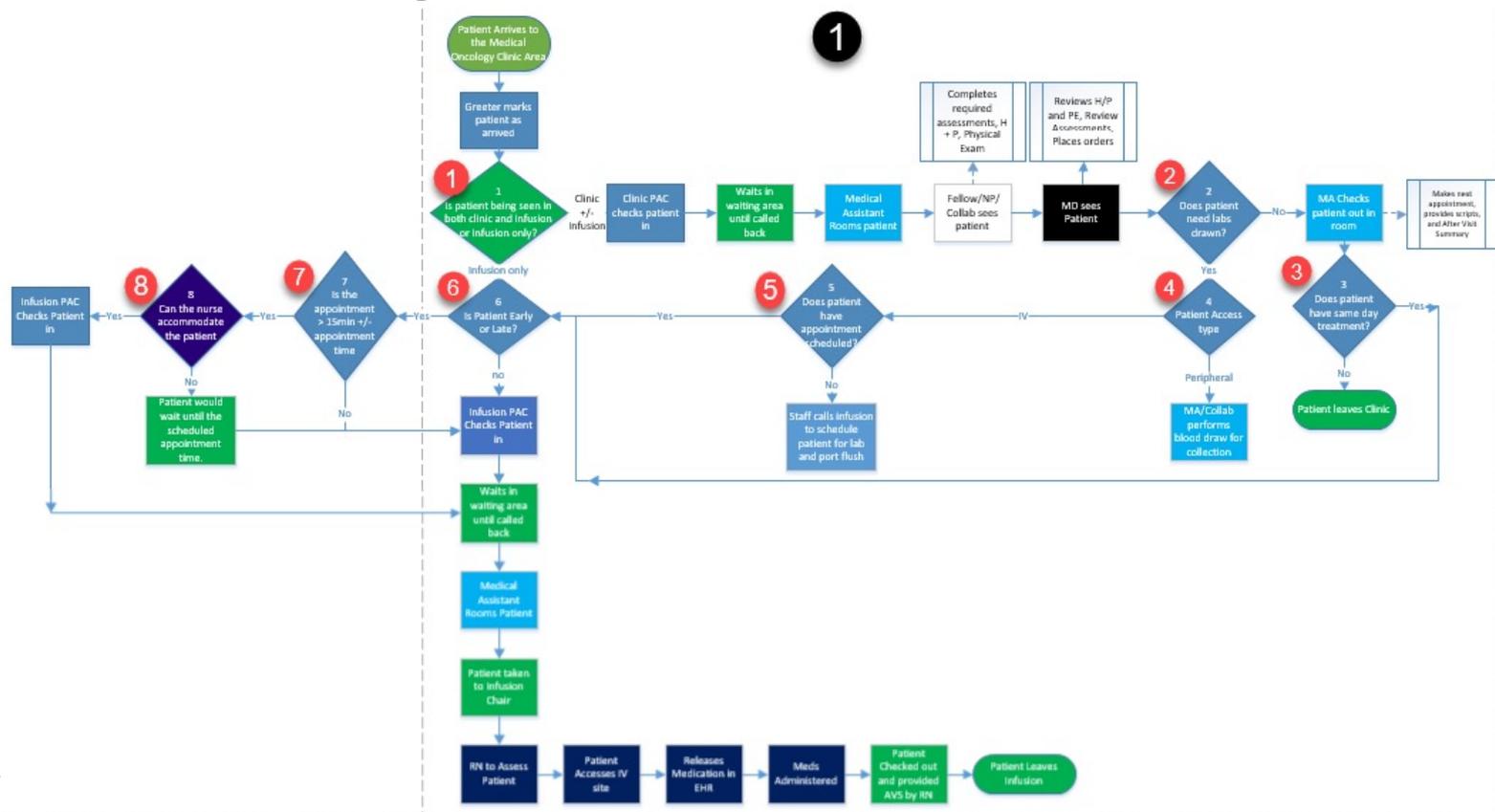
Problem Statement

- At the Allegheny General Hospital (AGH) Cancer Institute
 - For the period from January 18 through January 29, 2021
 - 51% of the established medical oncology patients arrived to their scheduled infusion appointment greater than or equal to 15 minutes earlier (37%), or later (14%), from their scheduled appointment time
 - Of 373 patient appointments, 32% were coupled and 68% were uncoupled
 - Among those with coupled visits, 40% arrived early and 24% arrived late totally 64%
 - Deviations in patient arrival times to infusion creates disruptions to patient outcomes, staff satisfaction, and overall patient experience
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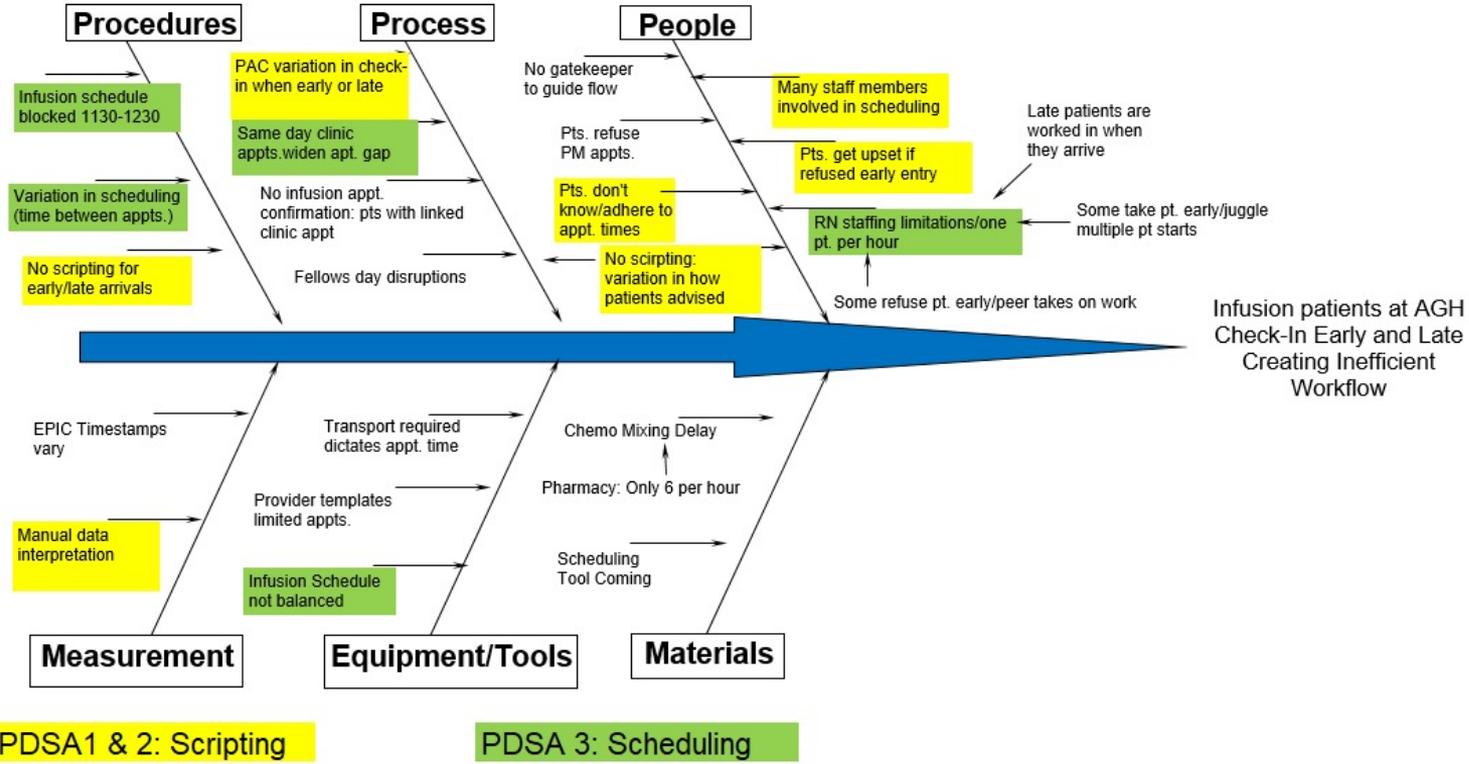
Aim Statement

Reduce the 64% rate of patients with coupled medical oncology visits who arrive in infusion early or late by 50% by December 6, 2021.

Process Map



Cause & Effect Diagram



Prioritized List of Changes (Priority/Pay –Off Matrix)

Impact	High <ul style="list-style-type: none"> ▪ Scripting with the staff/patients for check-in ▪ Update automated message (myChart, call, text) ▪ Education regarding infusion scheduling ▪ EPIC access-Infusion RNs 	<ul style="list-style-type: none"> ▪ Modify infusion scheduling during lunch hours ▪ Change infusion schedule template ▪ De linking Thursday appointments ▪ Identify schedulers to centralize scheduling and ensure consistency ▪ Develop guidelines for coupled visits
	Low <ul style="list-style-type: none"> ▪ EPIC access-Clinic MAs ▪ Scripting with the patients to facilitate on-time arrivals 	<p>N/A</p>
	Easy	Difficult
	Ease of Implementation	

PDSA Plan

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
<p>#1 October 4- October 22</p>	<ul style="list-style-type: none"> Standardize staff communication to patients by using scripting for appointment check-in 	<p>Baseline: 0% of staff used scripted communication Post PDSA1: Scripting average 50% Week 3: Scripting average 42% Variations by discipline/day (Thursday not used)</p>	<p>Education Cue cards</p>
<p>#2 October 25- November 5</p>	<ul style="list-style-type: none"> Reinforce/re-educate all staff about scripting practices and provide focused education (lists) for specific user groups Begin scripting on Thursdays (infusion only) 	<p>Post PDSA2: Scripting average 53%</p>	<p>Re-educate by email, meetings, rounding Provide list for clinic RN/physicians Re-educate infusion staff Collaborate with RN supervisors/manager</p>

Process Measure: Scripting

- Measure: Scripting in Medical Oncology Clinic & Infusion
- Calculation methodology:
Number of scripted early arrivals to infusion/Number of total early arrivals to infusion
- Data source/collection: EMR weekly
- Data limitations: Manual review/interpretation

All Patient Care Roles Script

Includes: Pre-teach, Check-in, Check-out

We want to give every patient the same quality of care without rushing, so we ask that you arrive 15 minutes before your scheduled appointments, no earlier or no later, for your clinic or infusion appointments.

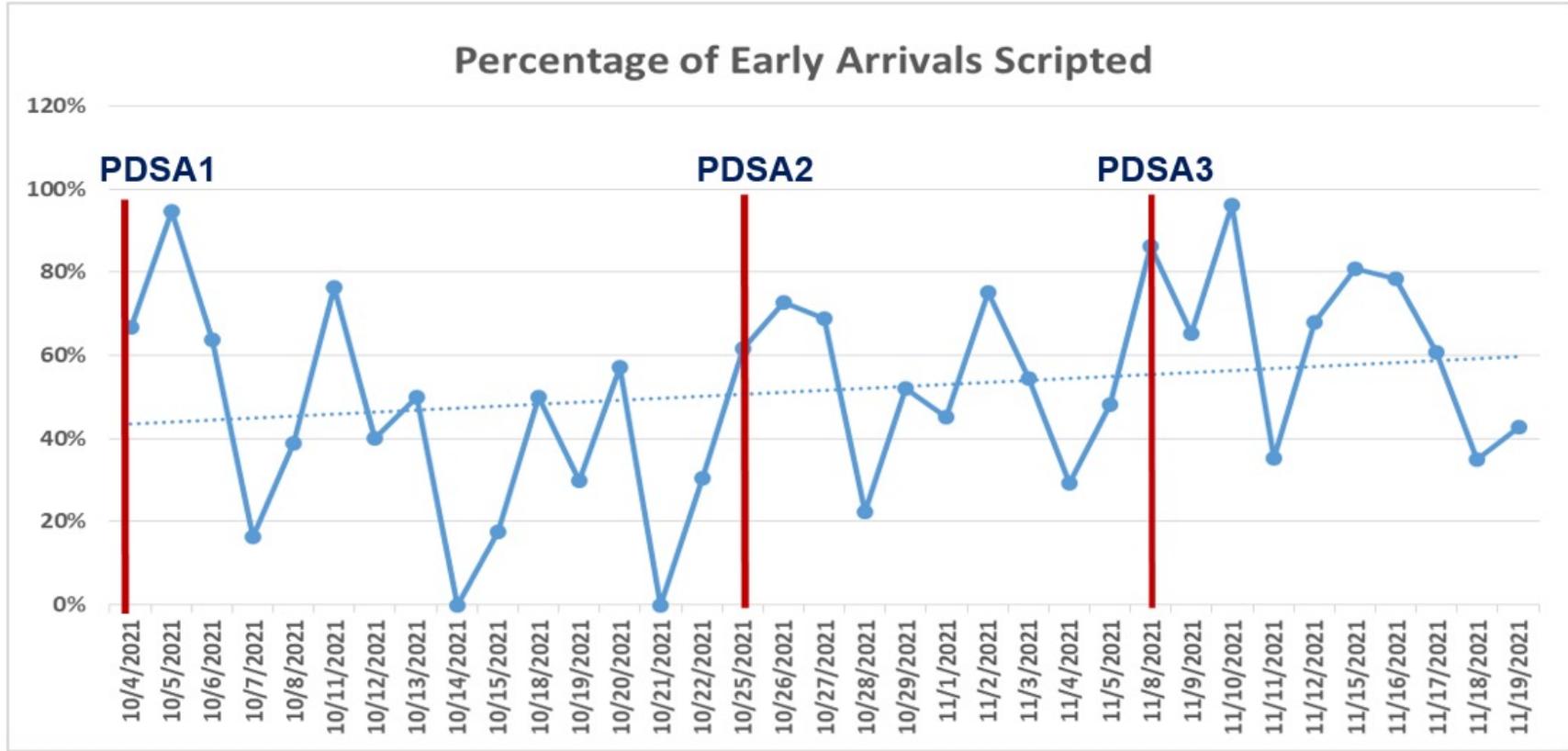
Greeter Script

Good Morning/Afternoon - I see you are here for infusion/clinic appointment, and I will mark you as arrived at (current time). Your appointment time is (scheduled time). We want to give every patient the same quality of care without rushing.

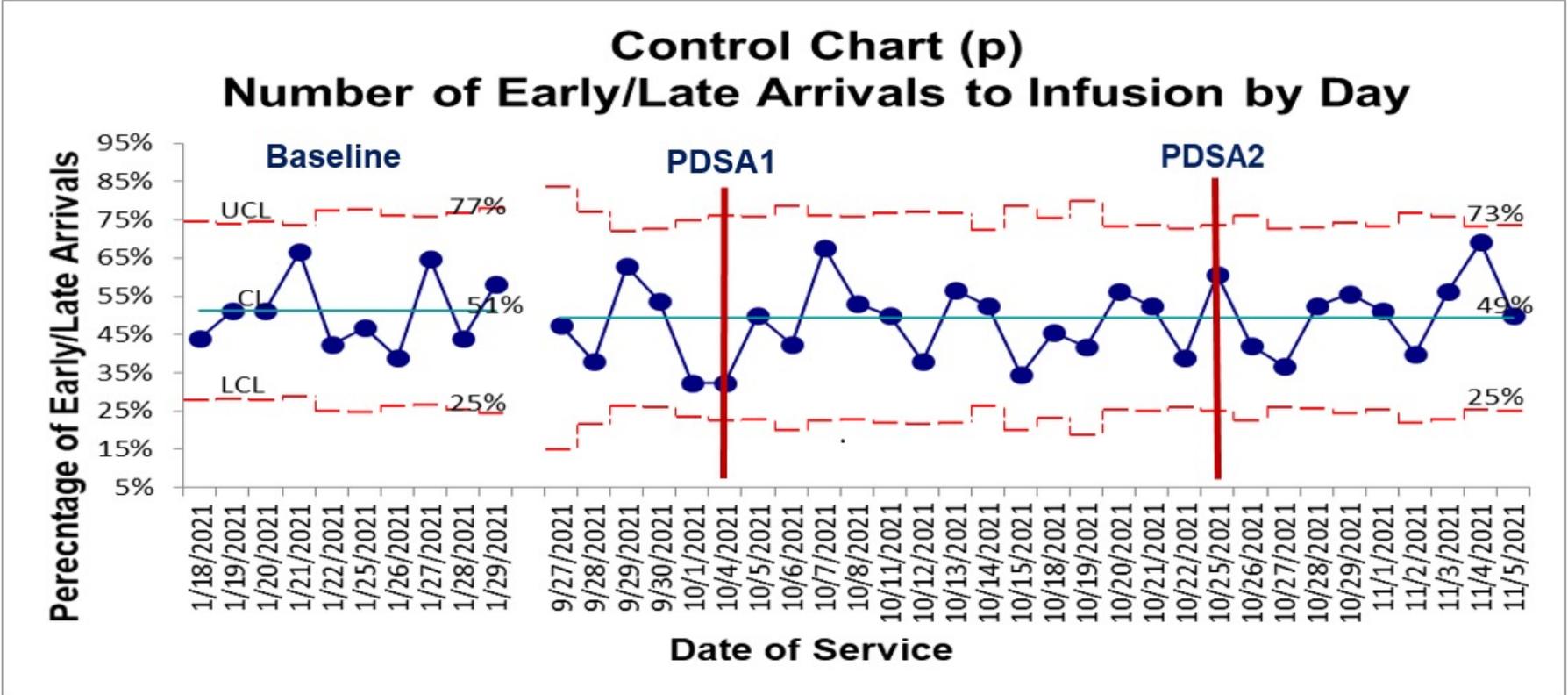
Clinic- Please have a seat and enjoy our refreshment center. We will call you to check-in within 15 minutes of your scheduled appointment.

Infusion- Please enjoy a beverage and proceed downstairs. (Infusion PAC name) will check you in within 15 minutes of your scheduled appointment time.

Process Measure: Scripting for All Patient Arrivals



Change Data: All Patient Arrivals

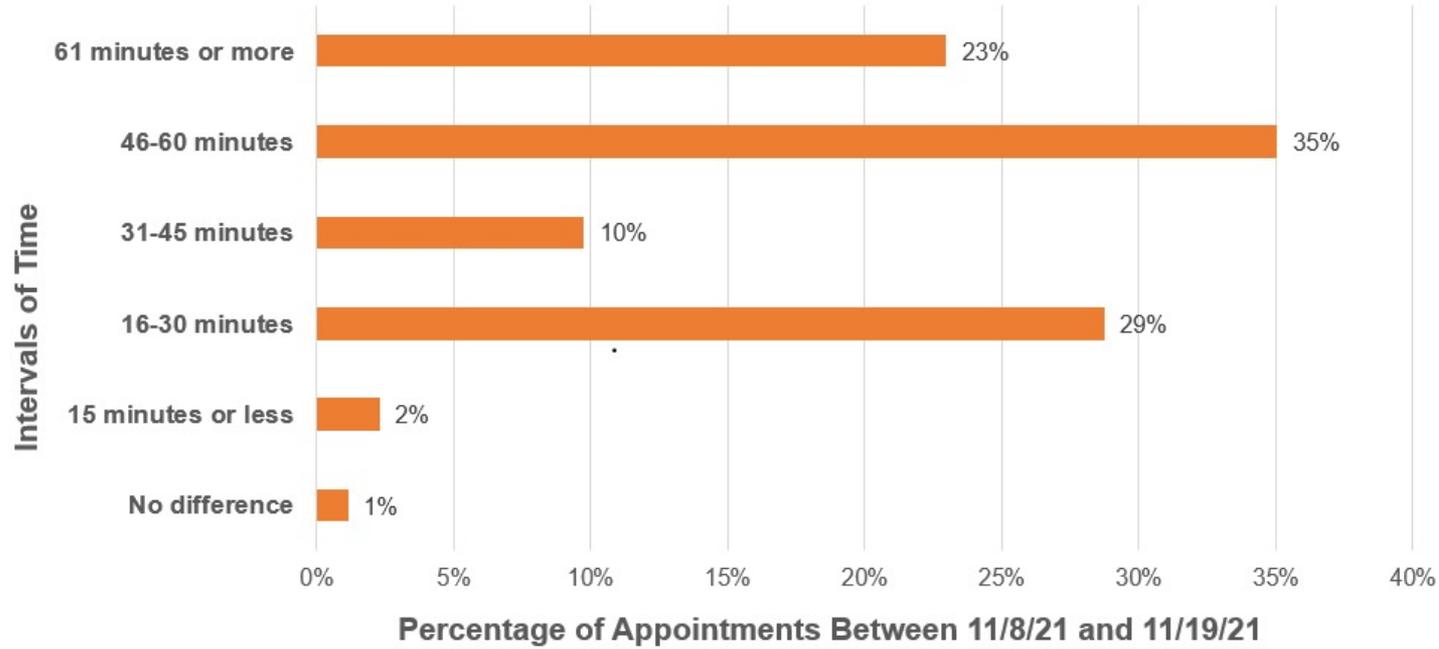


Summary of Coupled Visits

Average Percentages	Early Coupled Visits	Late Coupled Visits	Total Early/Late Visits
Baseline	40%	24%	64%
Post-PDSA 1	21%	33%	54%
Post- PDSA 2	26%	32%	58%

Diagnostic Data for PDSA#3

Time Intervals Between Clinic and Infusion Appointments



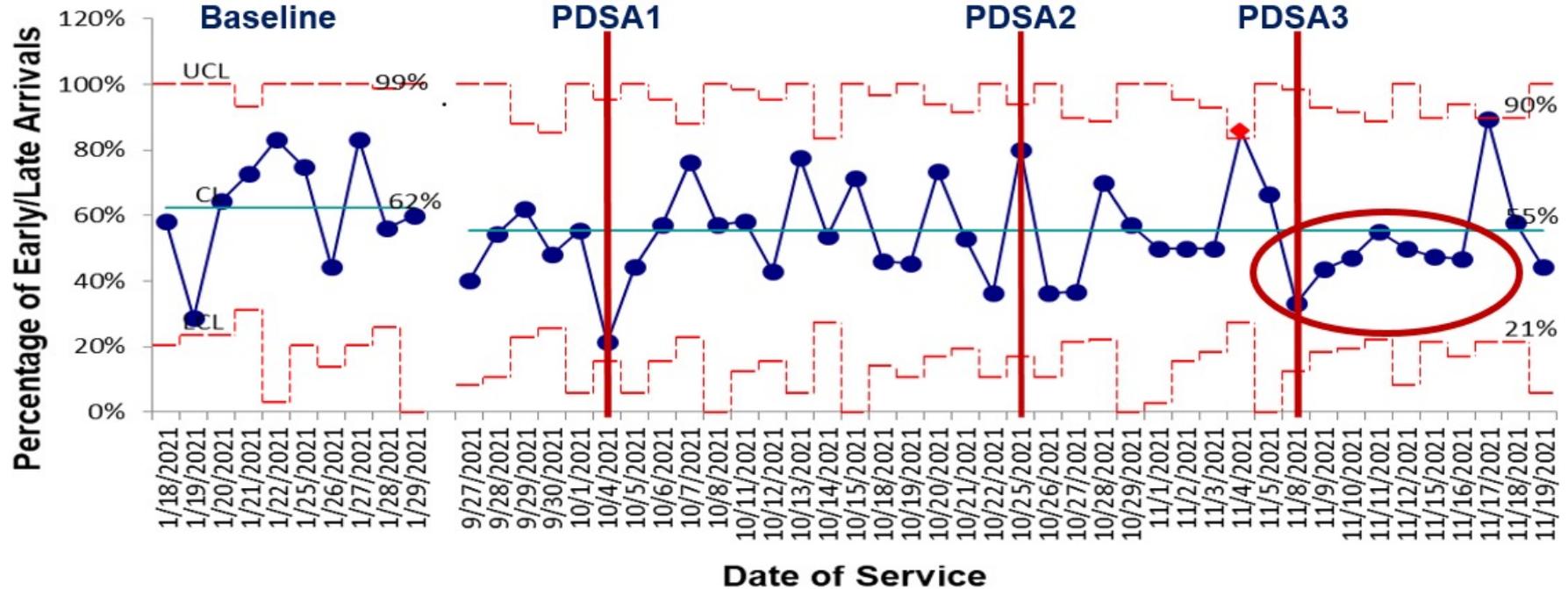
PDSA Plan

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
#3 November 8- November 19	<ul style="list-style-type: none"> Reduce the number of linked appointments with greater than 60 minute gap between clinic and infusion 	Baseline: Average 23% patients with greater than 60 minute gap; and 42% with less than 46 minute gap (total 65% of patients did not have 46-60 minutes between clinic and infusion appts.	Quantify linked appt. gaps in intervals RN supervisor reschedule patients with more than 60 minute gap (11/15) Develop new infusion scheduling criteria

Change Data: Coupled Appointments

Control Chart (p)

Number of Early and Late Coupled Appointments



Conclusion

PDSA Impact on Coupled Visits

Average Percentages	Early Coupled Visits	Late Coupled Visits	Total Early/Late Coupled Visits
Baseline	40%	24%	64%
Post-PDSA 1 (1 weeks)	21%	33%	54%
Post- PDSA 2 (2 weeks)	26%	32%	58%
PDSA 3 (2 weeks)	22%	31%	53%

Next Steps/Plan for Sustainability

- Continue to reinforce scripting practices with all stakeholders
- Continue/refine scheduling processes as initiated in PDSA #3
- Continue scheduled group meetings to evaluate changes and obtain staff feedback
- Re-evaluate patient experience and staff satisfaction periodically

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Aim: Reduce the 64% rate of patients with coupled medical oncology visits who arrive in infusion early or late by 50% by December 6, 2021.

TEAM: Allegheny Clinic Medical Oncology Team Members

INTERVENTION: Significant variation in staffing practices and patient arrival times to infusion was observed. Our first intervention, scripting, was implemented to standardize communication among staff and patients, while resetting expectations for patients arriving to the clinic. Each staff member received cue cards specific to their role to guide conversations with patients. Due to some challenges with staff buy-in and patient dissatisfaction, the value of scripting was reinforced and targeted re-education was provided for team members. Scripting has become a standard component of a newly designed clinic workflow. Additional interventions have been initiated to evaluate scheduling processes for coupled appointments and modify existing scheduling criteria.

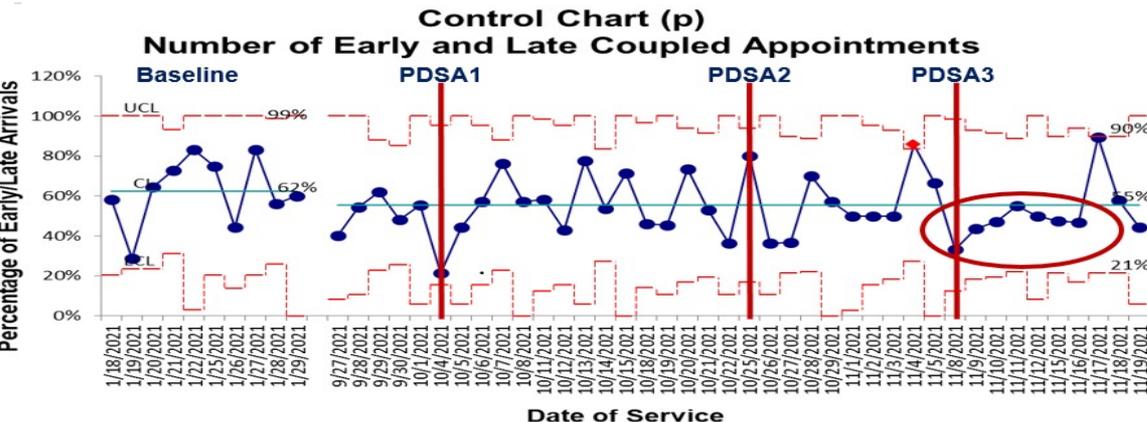
PROJECT SPONSOR: Lisa Ciafre, Quality Director ANHCI

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CONCLUSIONS: The number of early and late arrivals to infusion was reduced to an average of 53%, demonstrating only a modest improvement. While our aim statement, of reducing our baseline average of 64% by half, was not met, further modifications and improvements will continue in an effort to address a multifaceted problem.

NEXT STEPS: Reinforce scripting practices as standard workflow, modify scheduling practices as part of PDSA#3, continue to monitor change data, and evaluate staff and patient satisfaction over time.

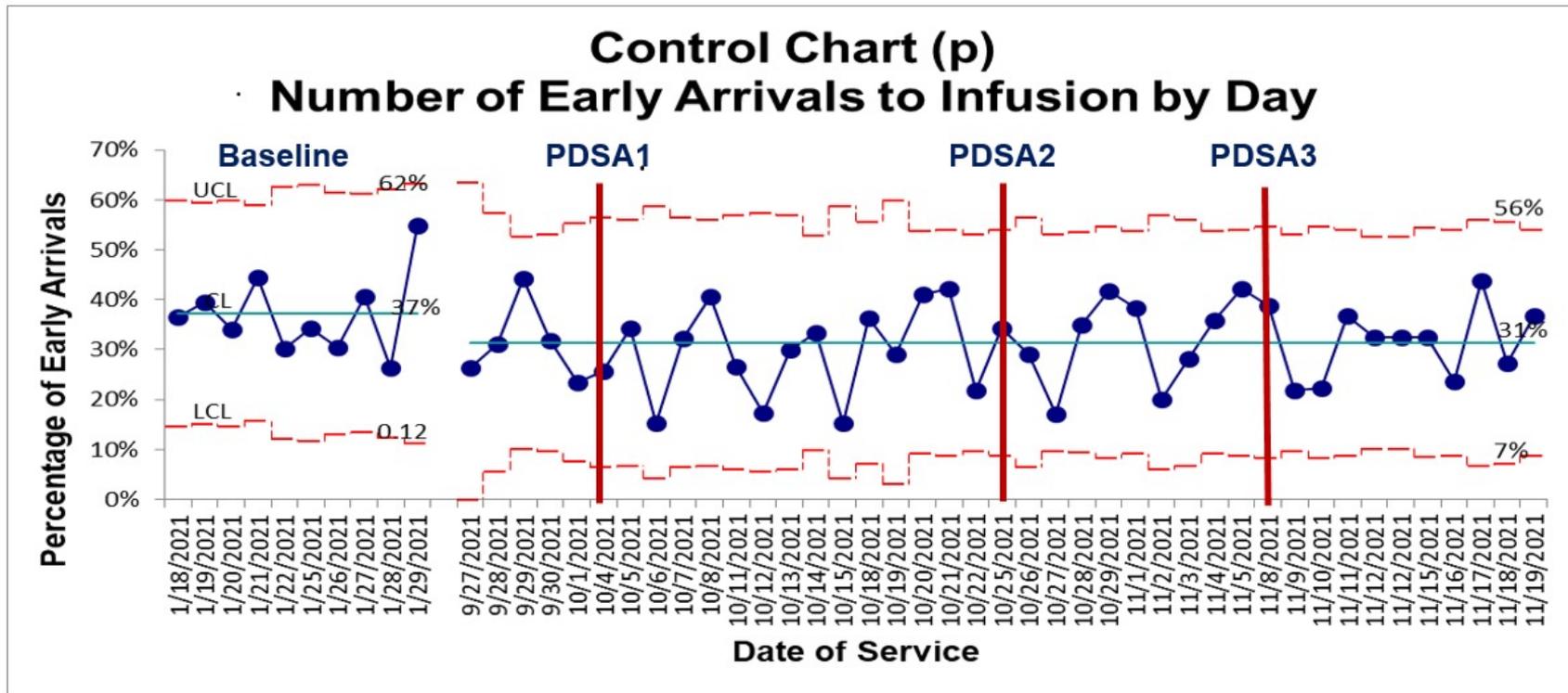
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Appendix

Additional Slides

Change Data: All Patient Arrivals



Change Data: All Patient Arrivals

