

Improving Wait Times for GI Oncology Patients at Hartford Hospital Infusion Center

Hartford HealthCare Cancer Institute

December 8th, 2023

Institutional Overview

- Hartford Healthcare in Connecticut has 7 Acute Care Hospitals and 13 Oncology Infusion sites.
- The Hartford Healthcare Cancer Institute has 34 Medical Oncologists.
- All Practices are QOPI certified and our focus aligns with the Vision of Hartford Healthcare of Delivering Personalized Coordinated Care and Improve the health and lives of the communities we serve.

Northwest Region

- ★ HOCC Torrington Medical Oncology & Infusion

Central Region

- ★ HOCC Meriden Medical Oncology & Infusion
- ★ HOCC Plainville/New Britain/Southington Medical Oncology & Infusion

Fairfield Region

- ★ Fairfield Medical Oncology & Infusion
- ★ SVMC Medical Oncology & Infusion



Hartford Region

- ★ Avon Medical Oncology & Infusion
- ★ Hartford Medical Oncology & Infusion
- ★ Manchester Medical Oncology & Infusion

East Region

- ★ Norwich/Backus Medical Oncology & Infusion
- ★ Plainfield Medical Oncology & Infusion
- ★ Waterford Medical Oncology & Infusion
- ★ Windham Medical Oncology & Infusion

Team Members

Project Sponsor: Peter Yu MD

Team Leader: Rajani Nadkarni, MD

QTP Team Members:

Kelly Brennan, PharmD, BCOP

Sabra Dunn, RN, MSN, OCN

Rajvi Patel, MD

Shannon Pindar, BSN, RN

Holley Stallings, RN, MPH, CPH, CPHQ

Local Team Members:

Nina Benvenuto, RN

Charley Borden, MBA

Anshu Chen

Analisa Eichstedt

Timothy Hong, MD

Letitia Lewis

Kelley Richmond, PharmD, BCOP

Alexis Vasquez, RN

Problem Statement

GI Oncology patients receiving chemotherapy at the Hartford Infusion Center experience a mean wait time of 81 minutes from the start of check-in to the start of their first medication, resulting in patient and staff dissatisfaction and inefficient use of resources.

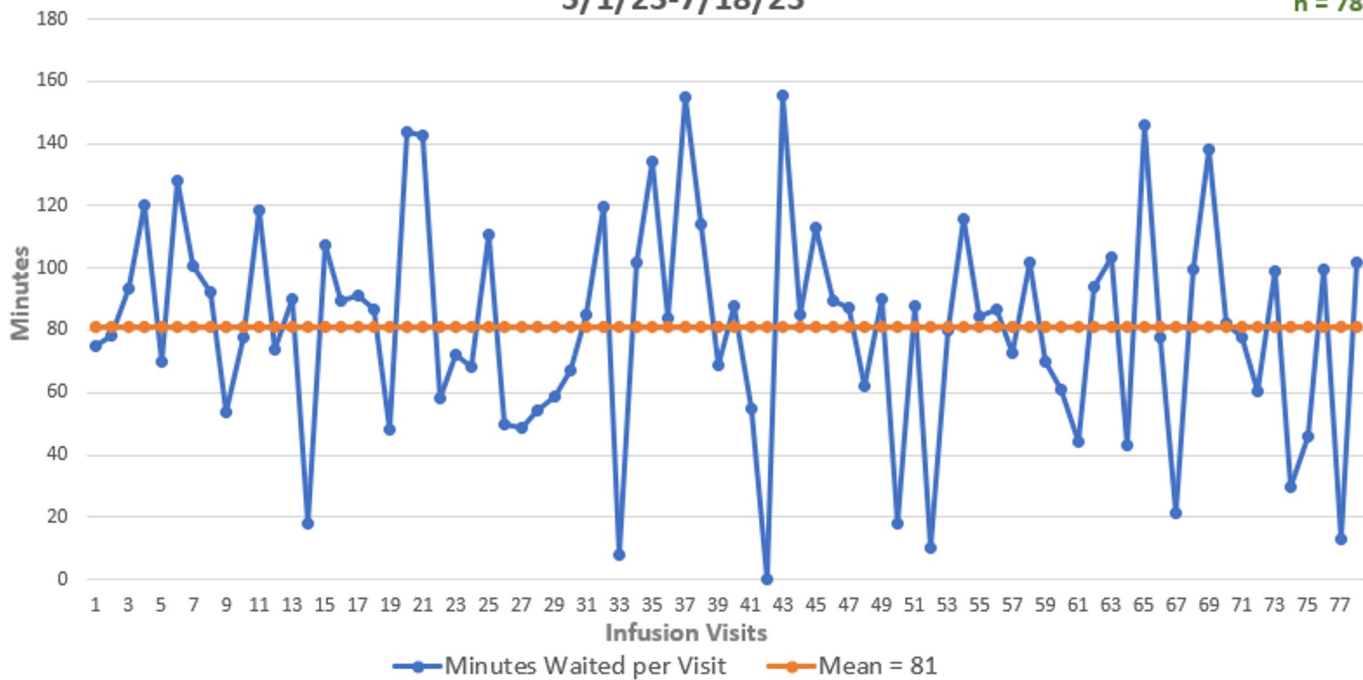
Outcome Measure: Baseline Data Summary

Item	Description
Measure:	Time from check-in to first administered medication
Patient Population:	GI oncology patients receiving chemotherapy treatment at the Hartford Hospital Outpatient Infusion Center
Calculation Methodology:	Time in minutes from check-in to treatment start time Time Dissection: Time from patient check-in at Infusion Center until first medication was scanned for administration
Data Source:	iQueue; Epic Reports
Data Collection Frequency:	Problem statement data collected from all GI oncology patients seen in the Infusion Center between May 1st 2023 and July 18th 2023
Data Limitations	First medication includes pre-medications so may not reflect time to first chemotherapy drug; Data collected manually

Outcome Measure: Baseline Data

Minutes from Check-In to First Drug Administered for GI Oncology
Patients of Dr. Hong & Dr. Thumar
5/1/23-7/18/23

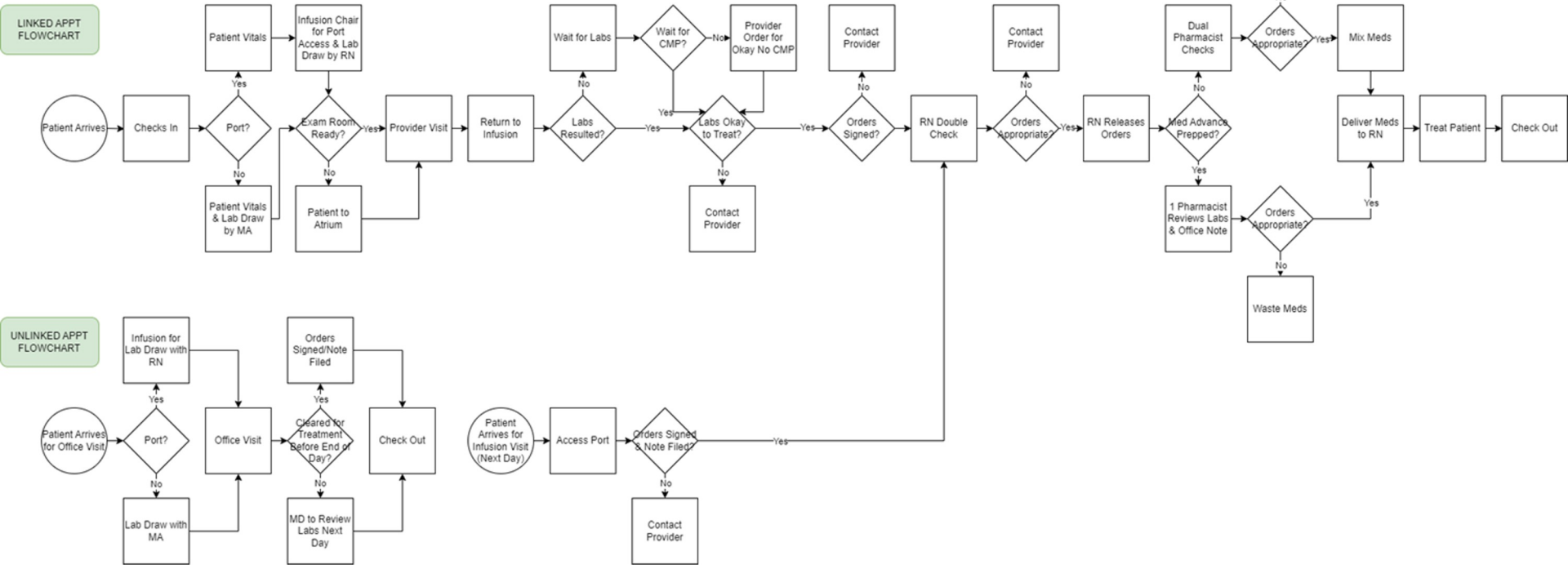
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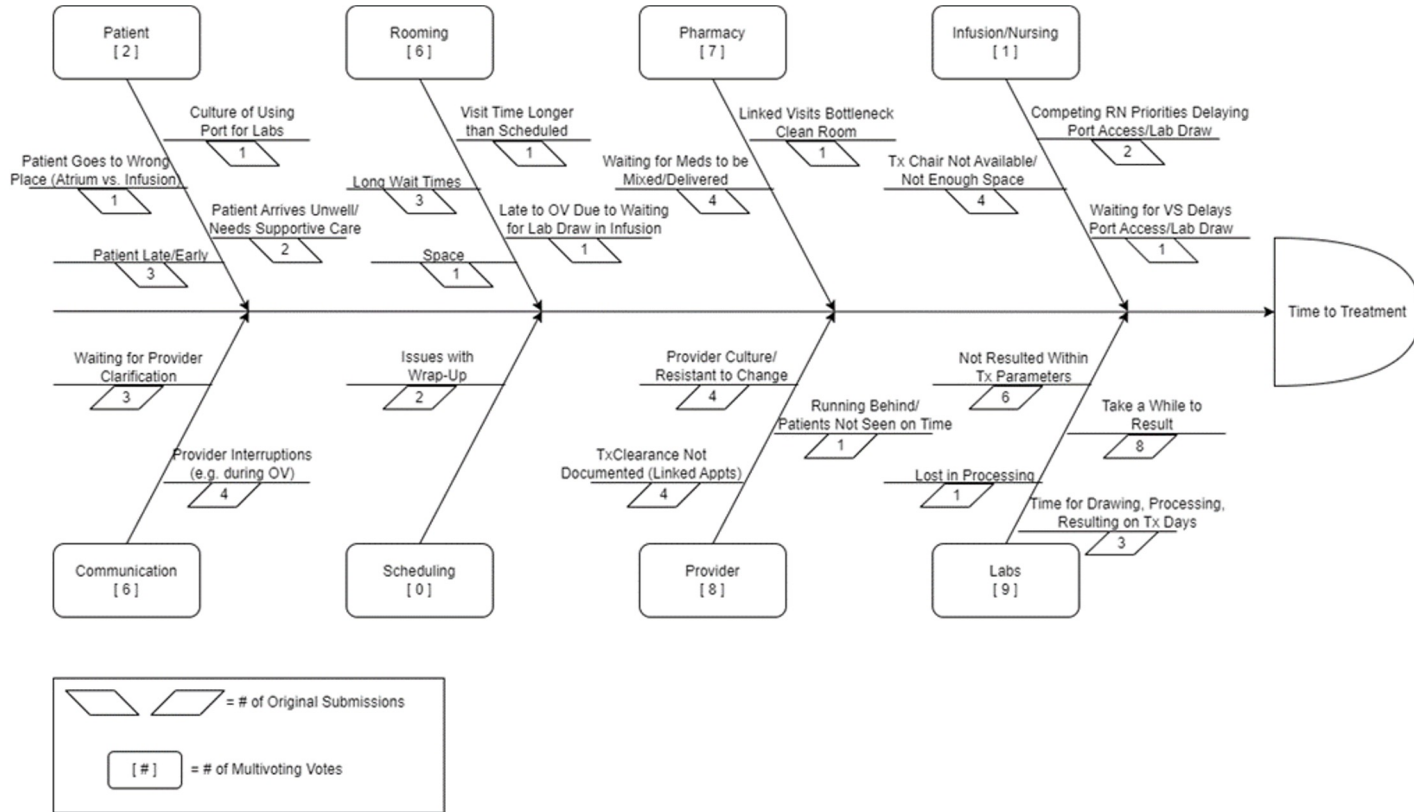
Aim Statement

We will reduce the mean wait time to less than 60 minutes from the start of check-in to the start of the first medication for GI patients receiving chemotherapy at the Hartford Infusion Center by December 2023.

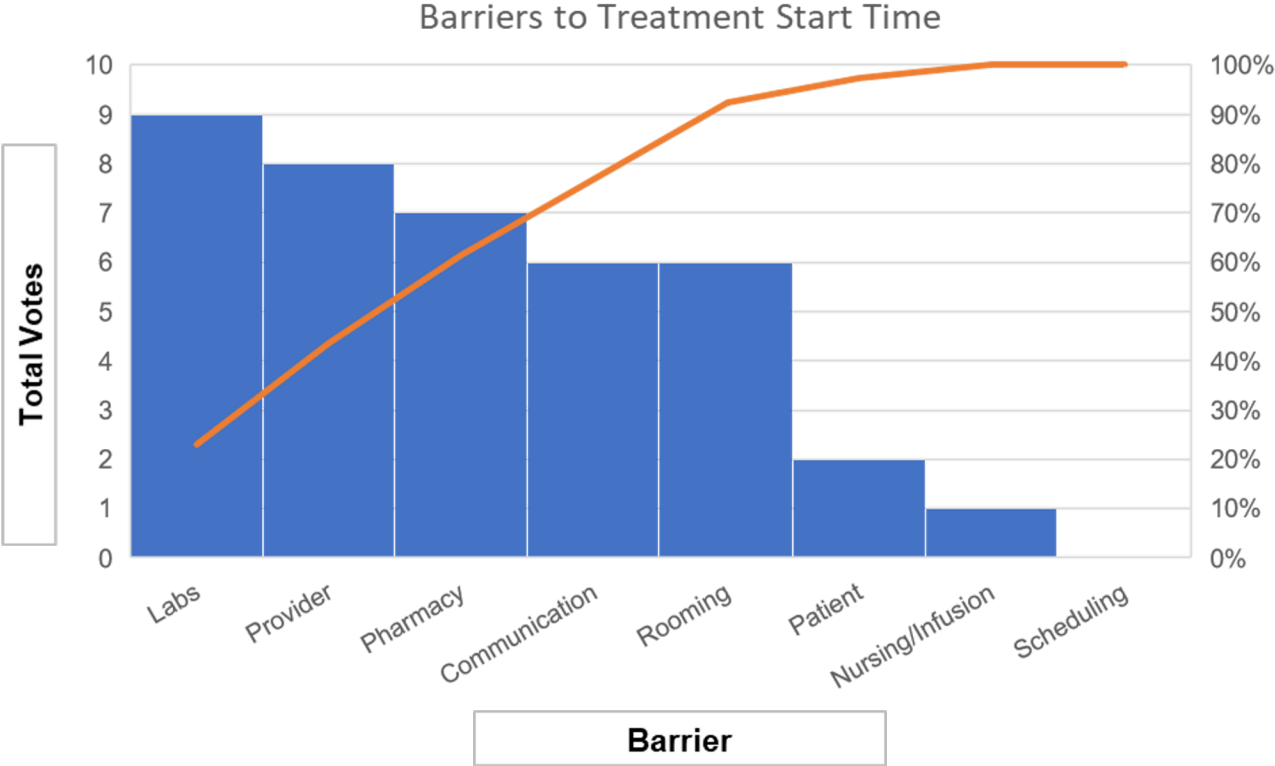
Process Map



Cause and Effect Diagram



Process Measure: Diagnostic Data



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

Impact	High	<ul style="list-style-type: none">● Streamline communication via common flowsheet to document advance prep steps	<ul style="list-style-type: none">● Unlinking provider & lab visits from chemo infusion visits● Purchase CMP machine
	Low		<ul style="list-style-type: none">● Increase physical office space to avoid rooming delays
		Easy	Difficult

Ease of Implementation

PDSA Plan (Test of Change) Go-Live: 10/16/2023

Date	Description of Intervention	Action Steps
10/2 to 10/13	Unlink visits	Create workflow to unlink provider/lab visit from infusion visit
10/2 to 10/13	Create advance prep process	Reallocate FTEs
10/2 to 10/13	Educate schedulers, providers, nurses, and medical assistants on new workflows	Create FAQs/talking points for staff and patients

Materials Developed

Patient and Staff FAQs

- A document was created to hand out to patients and to serve as a talking points to the team, when discussing the culture change in appointment scheduling.
- This document outlined the benefit and expectations of the scheduling changes to patients.

Advance Prep Process

- RN FTEs reallocated to focus on this process in conjunction with a pharmacist.
- Document created that serves as a guideline and expectations of the advance prep nurse.
- Assigned a daily APP to be the first point of contact for advance prep questions.
- Communication guidelines set and documentation standardization created.

RN Pre & Post-Pilot Survey

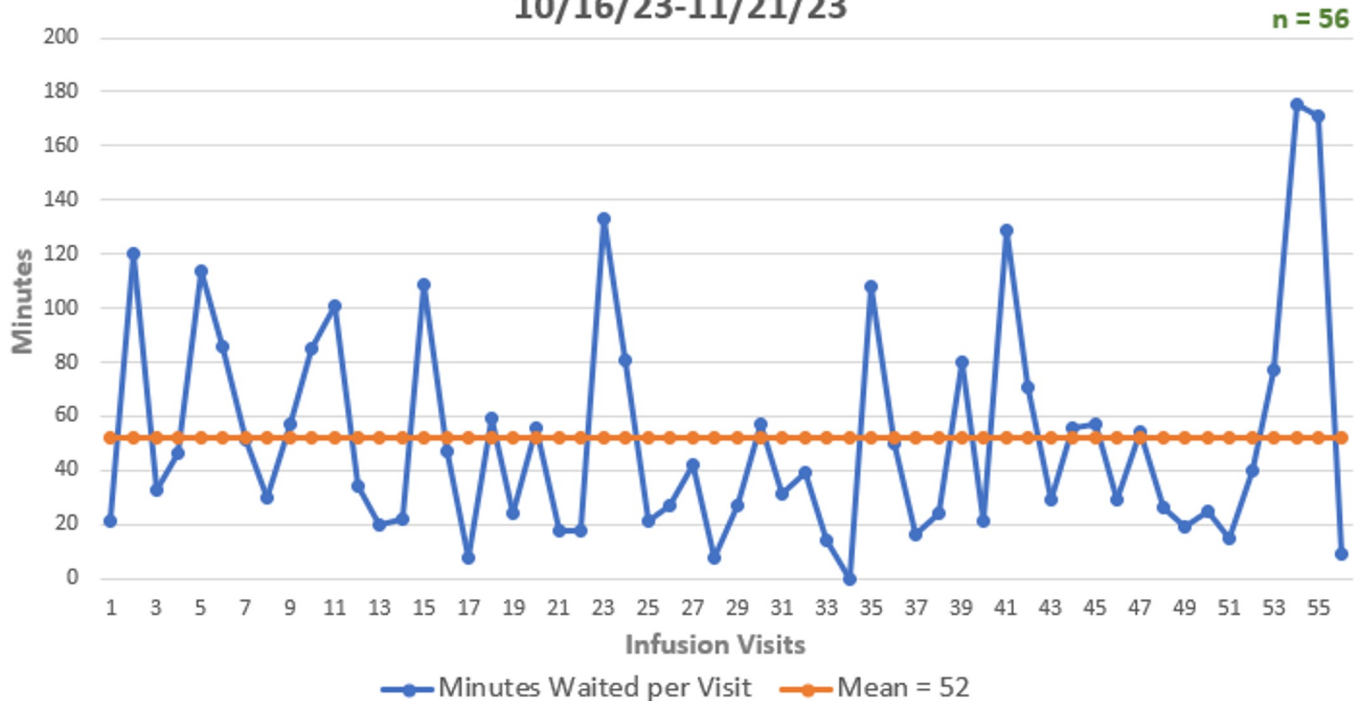
- Satisfaction with infusion workflow
- Communication with providers
- Face-time with patients
- Chemotherapy safety
- Perception of patient satisfaction

Change Data

- Check in to first med time decreased from 81 minutes to an average of 53 minutes reflecting a 54% reduction in wait time.
- Linked vs unlinked- Dr. Hong increased his unlinked visits by 39%. Dr. Thumar continued with roughly the same percentage.
- An estimated amount of 12.6 hrs of chair time made available per week equaling 4 patients per week depending on length of treatment.
- Potential revenue increase, with continuing to unlink appointments, in \$188,021.6 annually.
- RNs were more satisfied with the workflow for patients who were cleared for treatment prior to their infusion visit.
- RNs reported that they felt they were able to spend more time with their patients and felt less rushed.
- Most patients appreciated the decrease in wait time and understood the initiative.
- Few patients did not like having to have appointments on two different days.

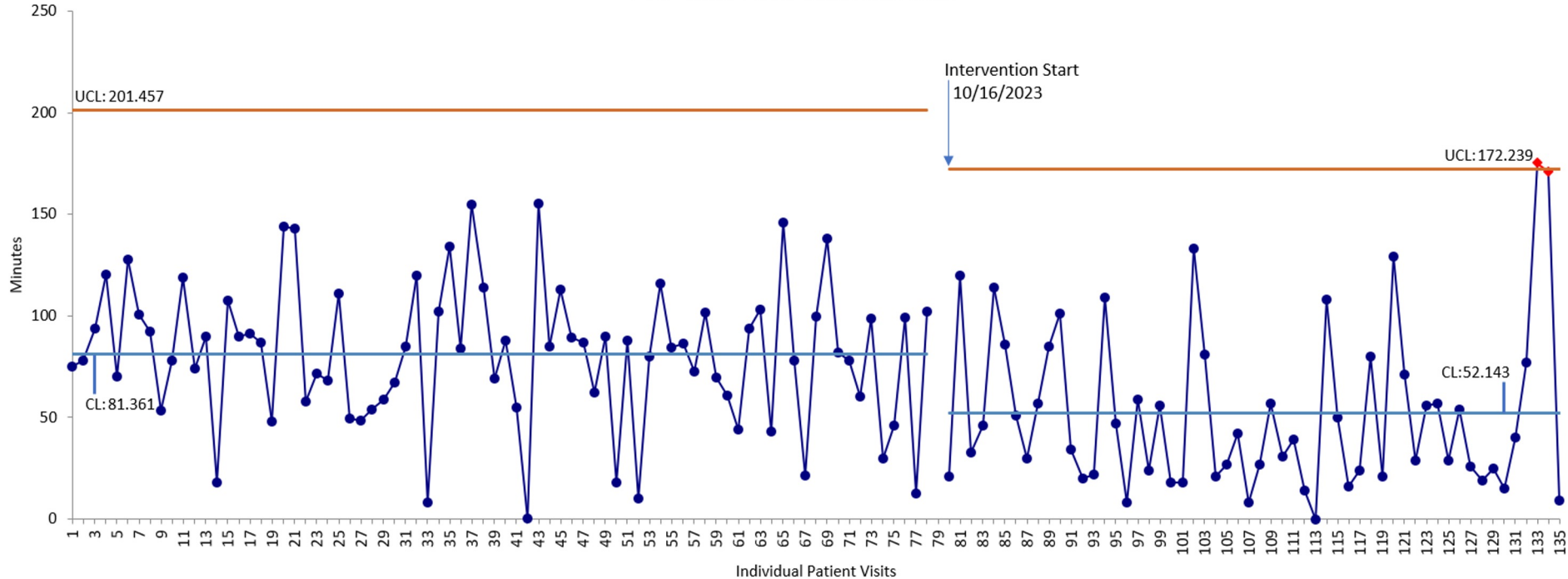
Change Data

Minutes from Check-In to First Drug Administered for GI
Oncology Patients of Dr. Hong & Dr. Thumar
10/16/23-11/21/23



Change Data: Pre/Post Intervention

Minutes from Check-In to First Drug Administered for GI Oncology Patients of Dr. Hong & Dr. Thumar
Pre- and Post-Intervention



Change Data

Breakdown by appointment type:

Pre-Pilot Data	N	%	Mean Wait Time (Minutes)
Linked Appointments	70	90%	85
Unlinked Appointments	8	10%	50

Post-Pilot Data	N	%	Mean Wait Time (Minutes)
Linked Appointments	20	36%	58
Unlinked Appointments	36	64%	49

RN Satisfaction Results

- Overall, do you feel satisfied with the process for treating patients in infusion?
Pre Pilot: 83.33% NO Post Pilot: 89% YES
- How often would you say that you are required to reach out to providers for clarification related to your patients' treatment/plan of care?
Pre Pilot: 83.3% USUALLY 16.7 % SOMETIMES 0% RARELY
Post Pilot: 33% USUALLY 67 % SOMETIMES or RARELY
- Do you feel that the dual RN chemotherapy verification process for patients who are unlinked leaves you with more time to provide value added care?
Pre Pilot: 67 % (*Felt time was taken away from patients*)
Post Pilot: 78% YES 11% NEUTRAL
- Do you feel that the process for treating patients who have been unlinked increases satisfaction, safety, and the amount of time spent with patients?
Post Pilot: 89 % YES 11% NEUTRAL

OVERALL PATIENT SATISFACTION: Increased score from 90% to 91.67% (October to November)

Provider Feedback

- *“I feel we are getting less interruptions.”*
- Medical Oncology APPs
- *“Overall pilot went well. However, not all patients are agreeable to the change, and we need exceptions for certain patients for unlinking of visits (examples: shorter infusions-30 mins, frail patients, and patients with transportation limitations).”*
- Dr. Hong
- *“There has been an improvement in the workflow with implementing an advanced prep process. Standardizing communication to minimize interruptions, or duplicate messages remains an opportunity to improve upon.”*
- Dr. Thumar

Conclusions

- Mean Time for GI Oncology patients of Dr. Hong and Dr.Thumar from check-in to first drug administration was reduced from 81 mins to 52 minutes. Hence our AIM was met.
- We also saw a reduction of time to first drug for other patients receiving chemotherapy during our pilot period (Hawthorne effect)
- We improved staff satisfaction.
- Overall patient satisfaction scores increased.
- We need to continue to optimize process.

Next Steps/Plan for Sustainability

- Continue new process.
- Continue to explore the Pharmacy resource to advance mix certain treatments.
- Identify dedicated personnel to sustain process (advance prep team)
- Optimize Epic messaging/communication from multiple interdisciplinary team members about same question.

Improving Wait Times for GI Oncology Patients at Hartford Hospital Infusion Center

AIM: Reduce the mean wait time to less than 60 minutes from time of check-in to start of the first medication for GI patients receiving chemotherapy at the Hartford Infusion Center by December 2023

INTERVENTION: Unlink provider & lab visits from chemotherapy infusion visits

Unlinking visits involves separating the provider visit from the chemotherapy visit so that labs can be collected, orders can be reviewed, and chemotherapy can be mixed prior to patients arriving for their infusion visits

Preparation for intervention

- Create workflow to unlink provider/lab visit from infusion visit
- Create advance prep process including re-allocating resources to support
- Create FAQs/talking points for staff and patients and educate team about new workflow & processes

ASCO QTP TEAM:

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- Sabra Dunn, MSN, RN, OCN
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- Rajvi Patel, MD
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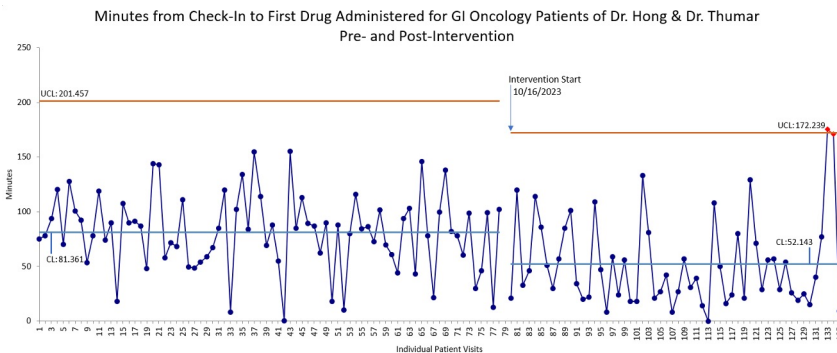
PROJECT SPONSOR:

- Peter Yu, MD-Physician-in-Chief
Hartford HealthCare Cancer Institute

HH INFUSION CENTER

RESULTS:

Mean time for GI Oncology patients of Dr. Hong and Dr. Thumar from check-in to first drug administration was reduced from 81 mins to 52 minutes



CONCLUSIONS:

- Decreased wait times
- Improved staff satisfaction
- Overall patient satisfaction scores increased

NEXT STEPS:

- Continue new process
- Identify dedicated personnel to sustain process (advance prep team)
- Optimize Epic messaging/communication from multiple interdisciplinary team members about same question