ASCO Quality Training Program

Targeting Laboratory Order Entry To Improve EMR Workflow

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Institutional Overview

Smilow Cancer Care Network is the largest cancer system in Connecticut

13 locations

43 physicians, 15 APPs

300 + staff

7,000 medical oncology visits per month

90,000 treatment visits

45% of newly diagnosed patients in Connecticut

Team members

Title	Name
Team Leader	Tara Sanft
Team Members	Harold Tara Natalie Wallace
Facilitators	Kim Severino Tom Collins
Participants	Neal Fischbach Justin Persico Jerry Malefatto David Witt Michael Cohenuram Elizabeth Rosenberg
Project Sponsors	Anne Chiang Kerin Adelson
Coach	Holley Stallings

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Problem Statement

The burnout rate for Oncologists at YNHH is 53%

Excess EMR Documentation is the highest driver of burnout

Time spent in laboratory order entry leads to excess EMR use

MDs in the Trumbull office spend 20 minutes per day putting in orders

MDs across network spend 10 minutes per day

**MDs in Trumbull spent twice as long entering orders per day**

Baseline data summary

Item	Description
Measure:	Time spent in orders
Patient population: *(Exclusions, if any)*	Dr. Neal Fischbach and Dr. Justin Persico patients
Calculation methodology: *(i.e. numerator & denominator)*	Time spent in orders (min/day)/Med Onc Avg # orders entered/patients per clinic # missed orders/patients per clinic
Data source:	Clinic lists worksheet Epic Userweb
Data collection frequency:	Every 2 weeks
Data limitations: *(if applicable)*	Relies on multiple people to start and finish data collection

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Outcome Measure

Baseline data

Average time spent on order entry per day

Providers

Red = Trumbull Providers
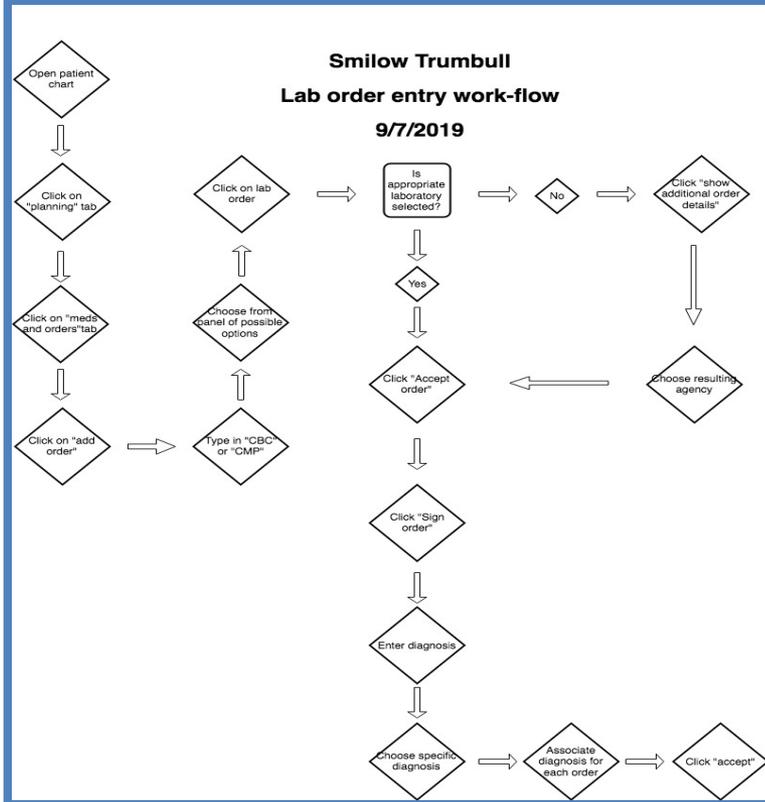
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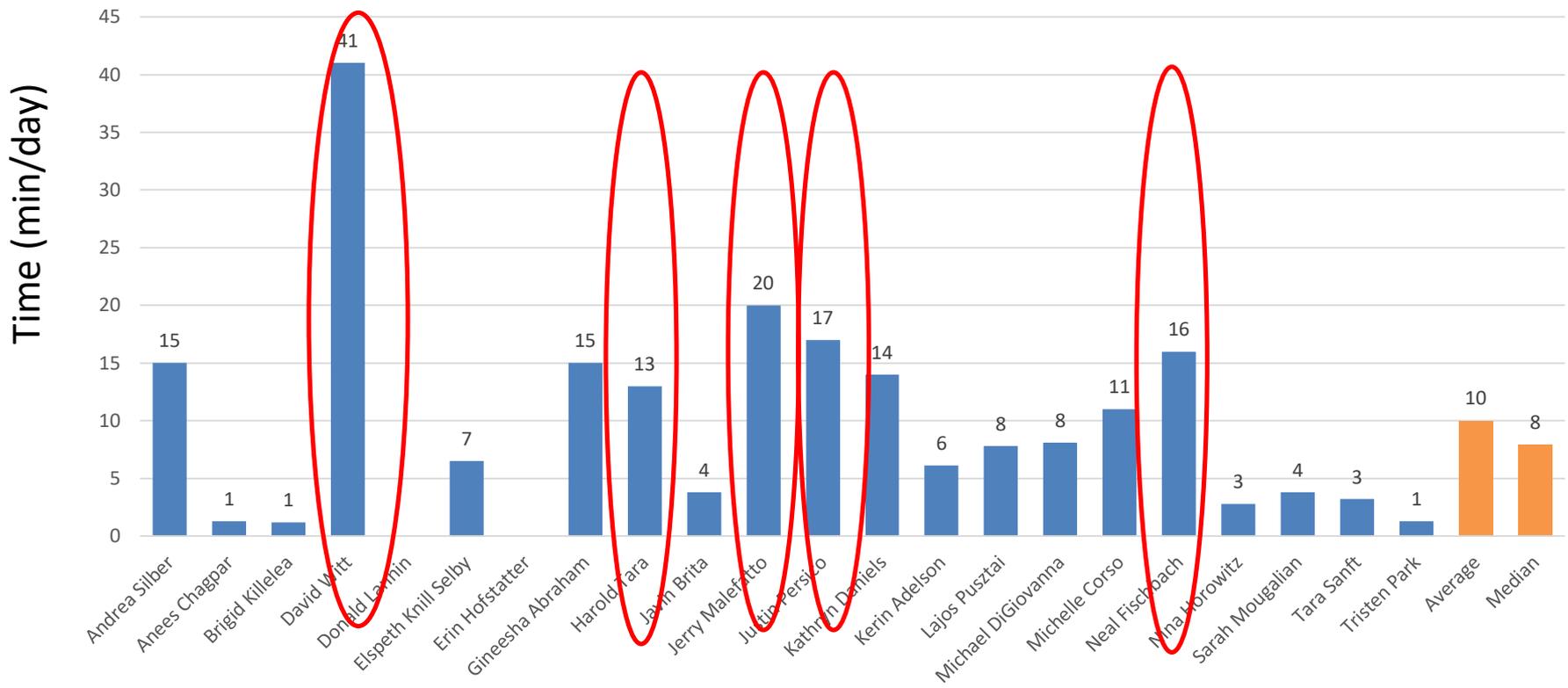
Aim Statement

Providers rated excess order entry as a top cause of burnout, *our goal is to institute a new order entry work flow with APP support.*

We aim to reduce time spent in orders by Trumbull MDs by 10% by November 26, 2019 (20 minutes/day to 18 minutes/day)
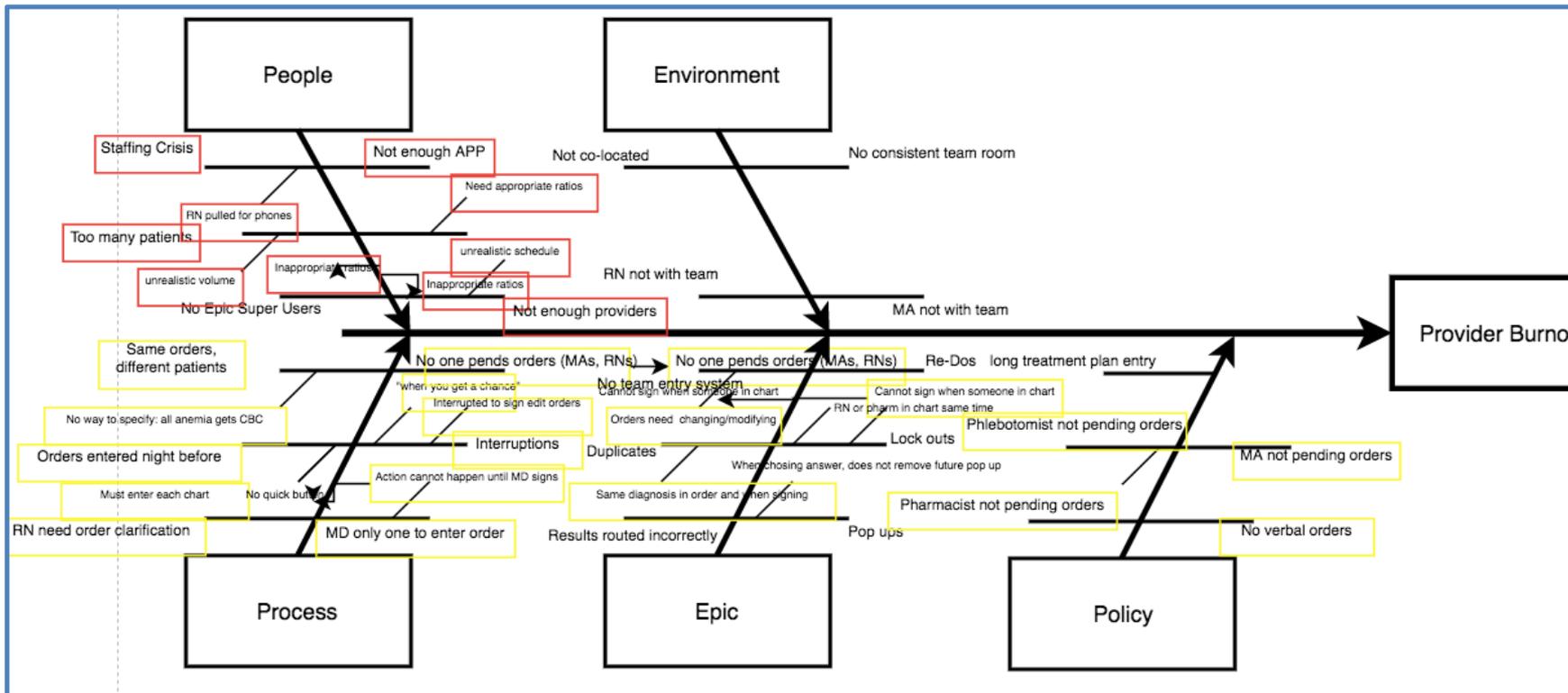
Process map

Smilow Trumbull
Lab order entry work-flow
9/7/2019

28 seconds/order
x average 2 orders/patient
x 20 patients/day
=18.6 minutes/day

The time it takes to enter orders for a clinic is almost 20 minutes daily
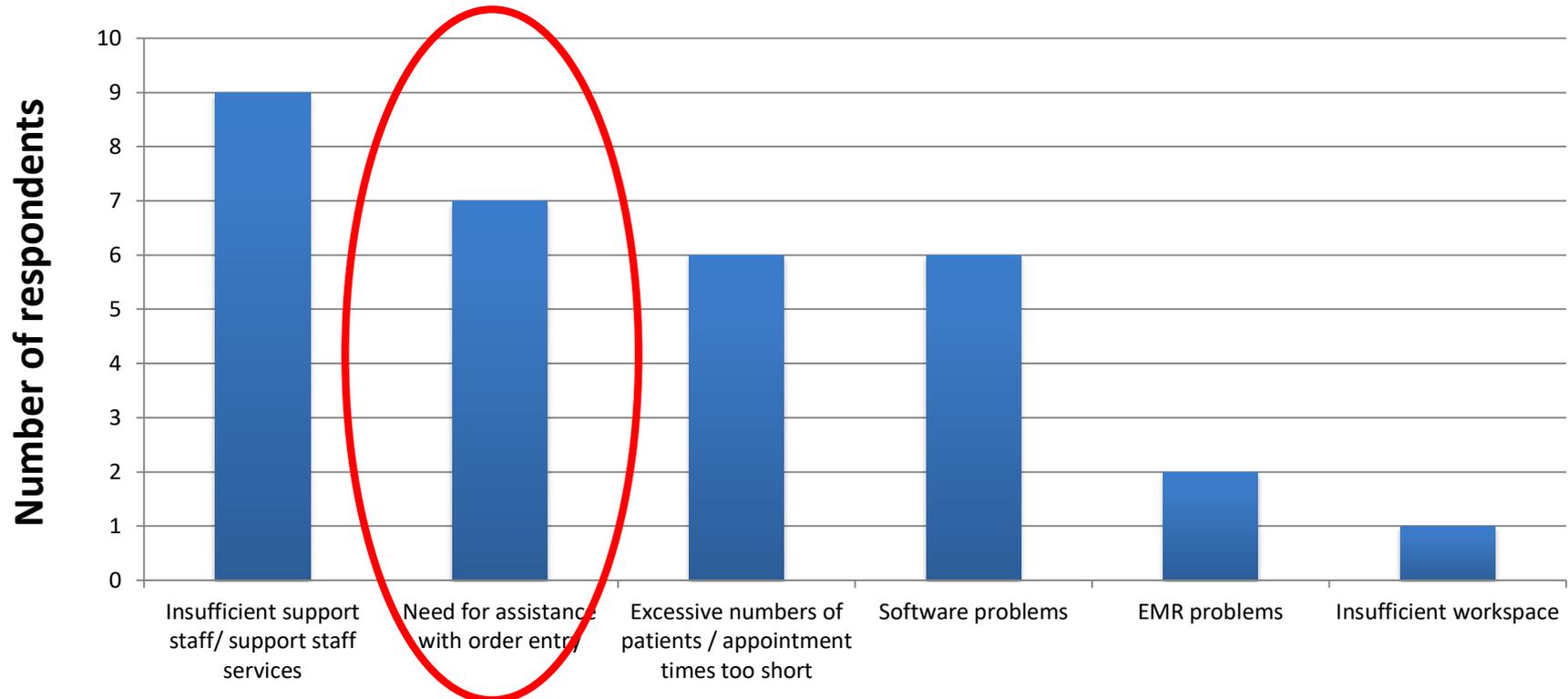
Each order requires 16 clicks

Cause and Effect diagram

The highest volume of drivers of burnout are issues related to order entry

The red boxes reflect staffing problems

Diagnostic Data

Reasons for burnout - Smilow Trumbull

Countermeasures

	Easy ← Ease of Implementation → Difficult
High Verbal orders during protected time daily	RN to enter and pend orders APP to enter and sign orders Scribes to enter orders Hire new staff to enter orders Medical Assistants to enter orders
Impact Educate MDs to enter orders Email providers to sign orders **Low**	Create an order set no one uses

Easy   **Difficult**

Ease of Implementation

Diagnostic Data summary

Item	Description
Measure:	Time spent in orders
Patient population: *(Exclusions, if any)*	Drs. Neal Fischbach and Dr. Justin Persico patients
Calculation methodology: *(i.e. numerator & denominator)*	Time Spent in Orders (min/day) ---------------------------------- Medical Oncology Average (min/day)
Data source:	Epic UserWeb Signal Data
Data collection frequency:	Every other week
Data limitations: *(if applicable)*	If volume increases the time in orders will increase (avg pt/day is 23-25)

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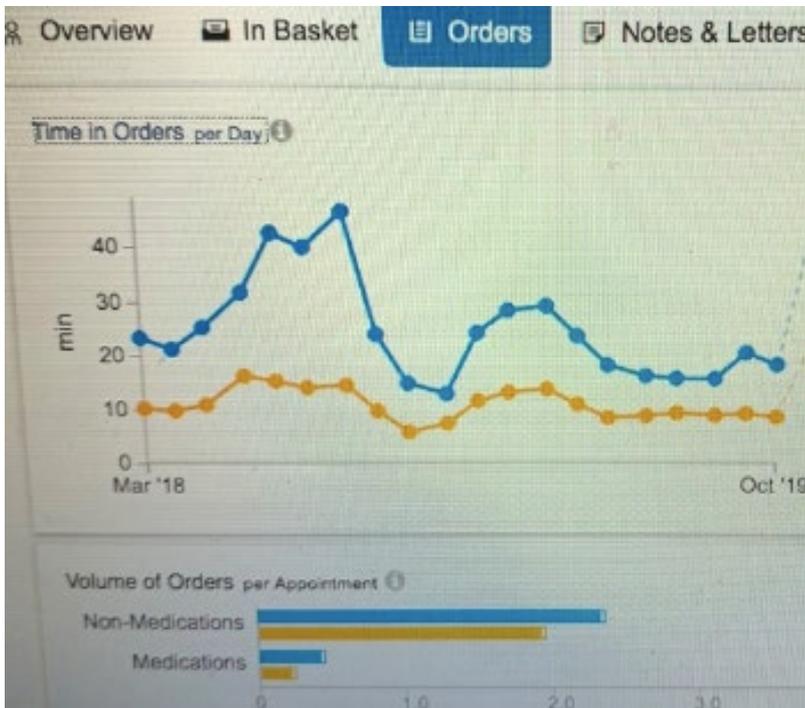
Neal Fischbach (blue)
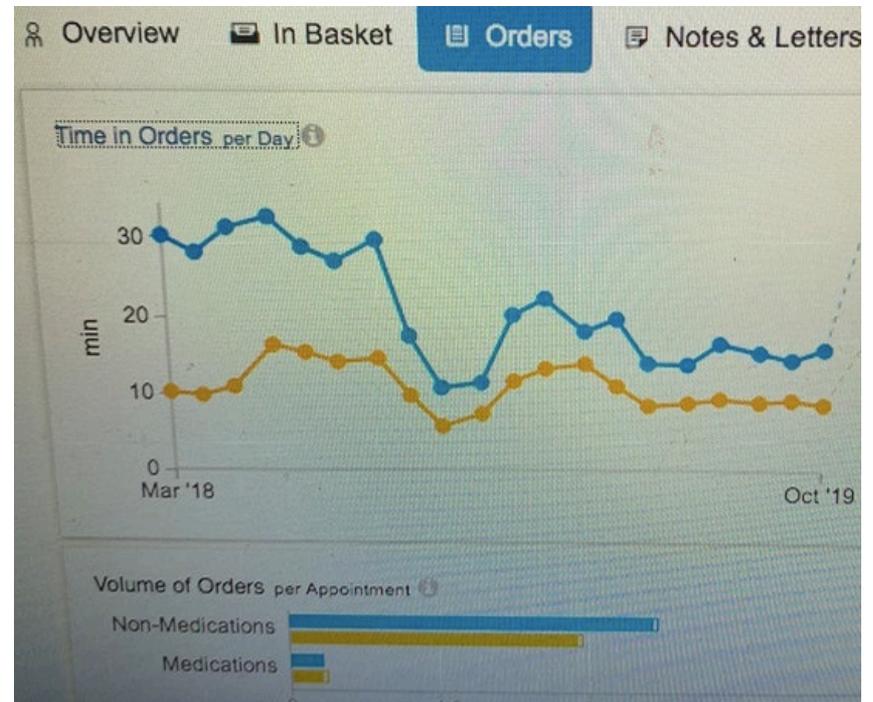
Avg Med Onc (yellow)

Justin Persico (blue)

Test of Change
PDSA Plan

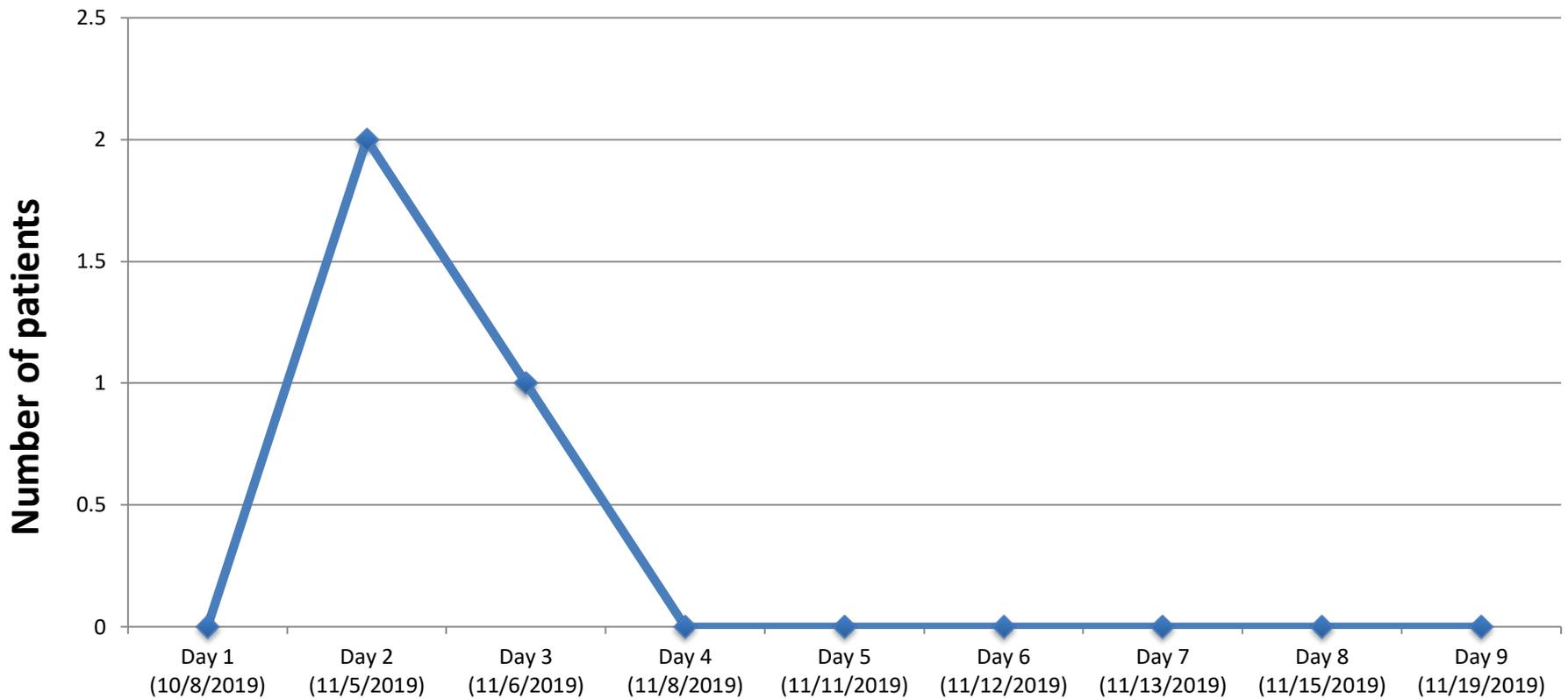| Date	PDSA Description	Result
10/15/19	- Phlebotomist generates list 24 hrs - Circle names of those without labs - APP/RN split orders, do in AM during protected time - After clinic, list kept with notes about extra orders/extra sticks	List printed with not enough time before clinic Not enough protected time for RN/APP
11/1/19	- Process continued with more dedicated APP block time and goal to complete 48 hrs ahead of clinic - Dr. Tara added as 3rd MD - APPs able to be forwarded order requests to help with team documentation and order entry to better help providers	MDs felt more effect with second PDSA and want to continue with new workflow

Change Data

Patients without labs entered

Change Data

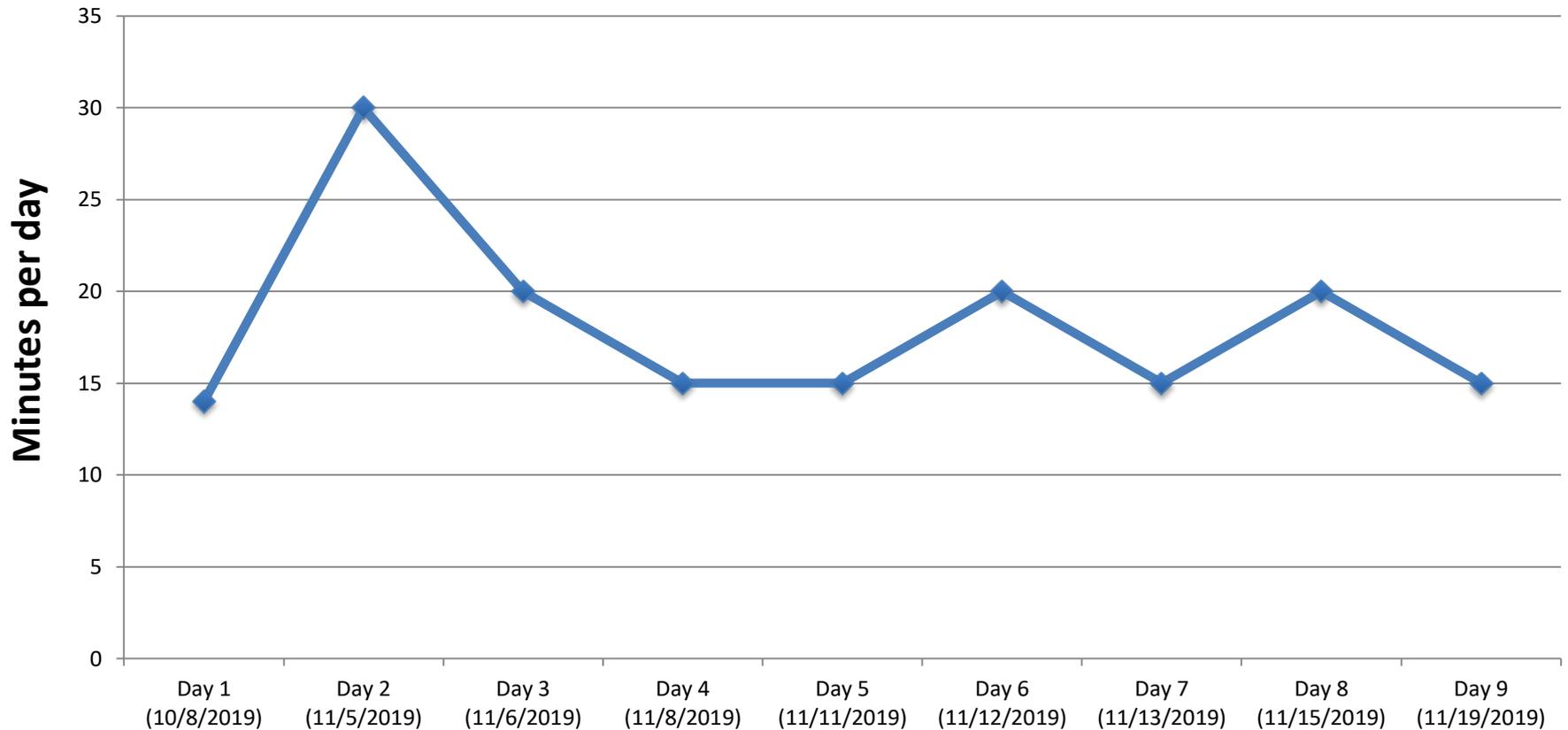**Patients requiring an additional laboratory draw during visit due to missing labs**
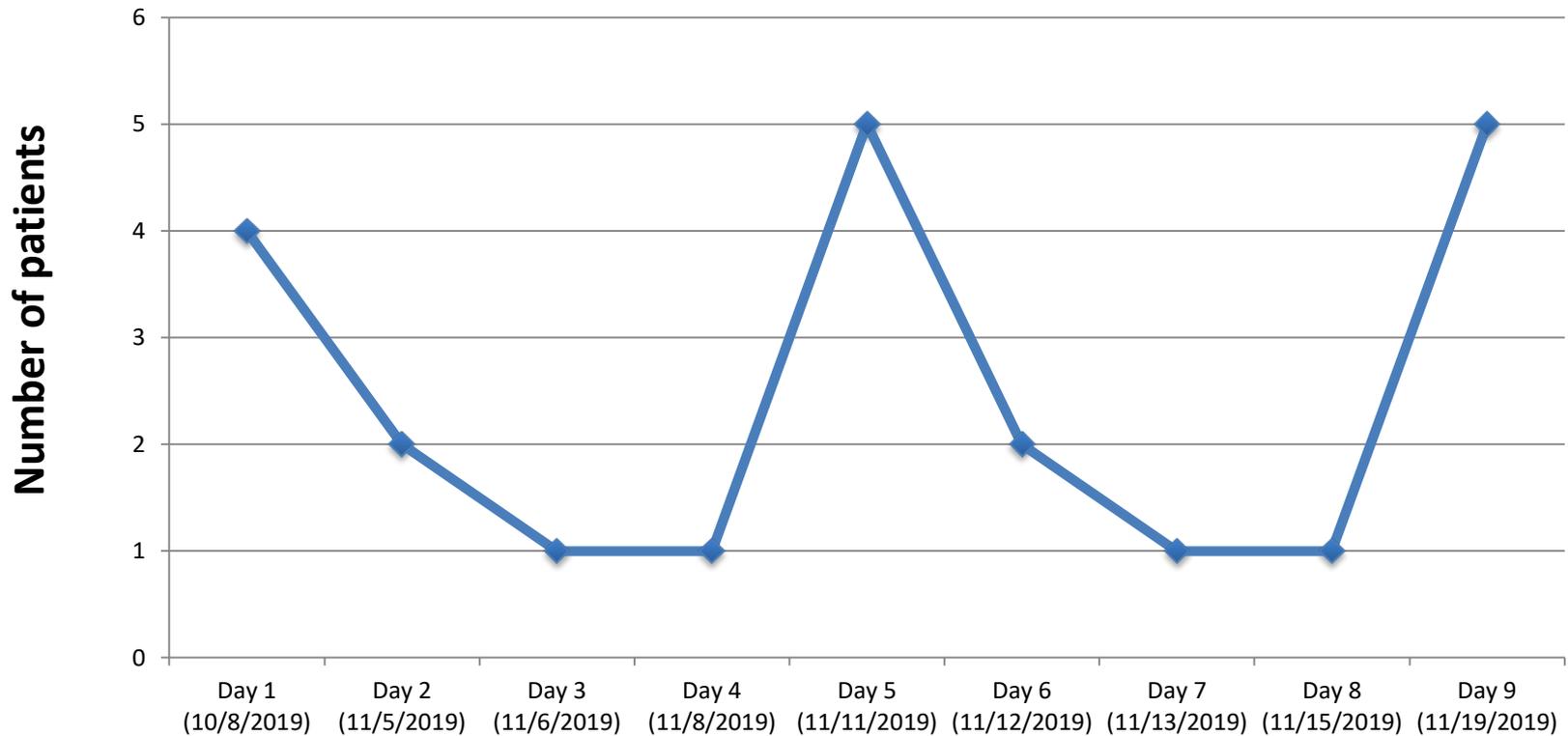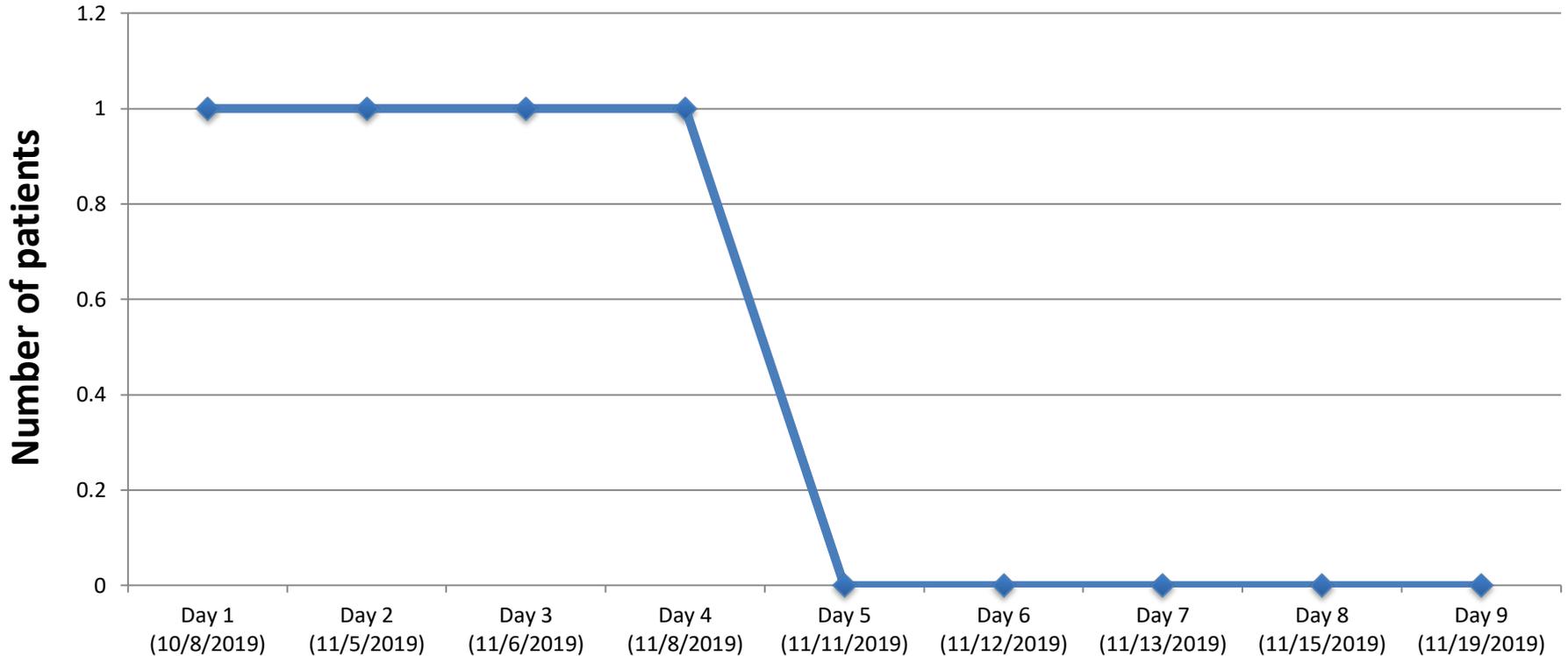
Outcome Measure
Change Data

Time required each day for order entry by APP

Change Data

Epic User Web Data for November not yet available

Sustainability Plan

Next Steps	Owner
APPs continue at Trumbull Care Center to perform laboratory order entry prior to the clinic	Hal Tara
Roll out to remaining providers	Hal Tara
Consider additional steps to roll out to all care centers	Tara Sanft Anne Chiang

Conclusion

- Burnout levels are high among medical oncologists at Smilow

- The Trumbull MDs identified laboratory order entry as a driver of burnout

- The Trumbull MDs spend twice the time in orders/day compared to MDs average across network

- Support staff entering lab orders improved perception of work burden

- Awaiting additional UserWeb data to show change in time in orders/day

Lessons Learned: Process took longer due to vacations; buy-in took longer, but eventually team had positive reviews