

ASCO's Quality Training Program



Oral Anticancer Medication Adherence

Institutional Overview



First Cancer Center of Excellence in the state.

Academic partnership with Emory and Morehouse physicians.

The largest hospital in the state of Georgia.

The busiest level 1 trauma center in the country.

The fifth largest hospital in the United States.

Problem Statement

A retrospective review of 30 patients during 2013-2016 demonstrated a 30% adherence to oral anticancer medications (OAM).

Adherence*: Drug available $\geq 80\%$ to $< 120\%$ of days evaluated.

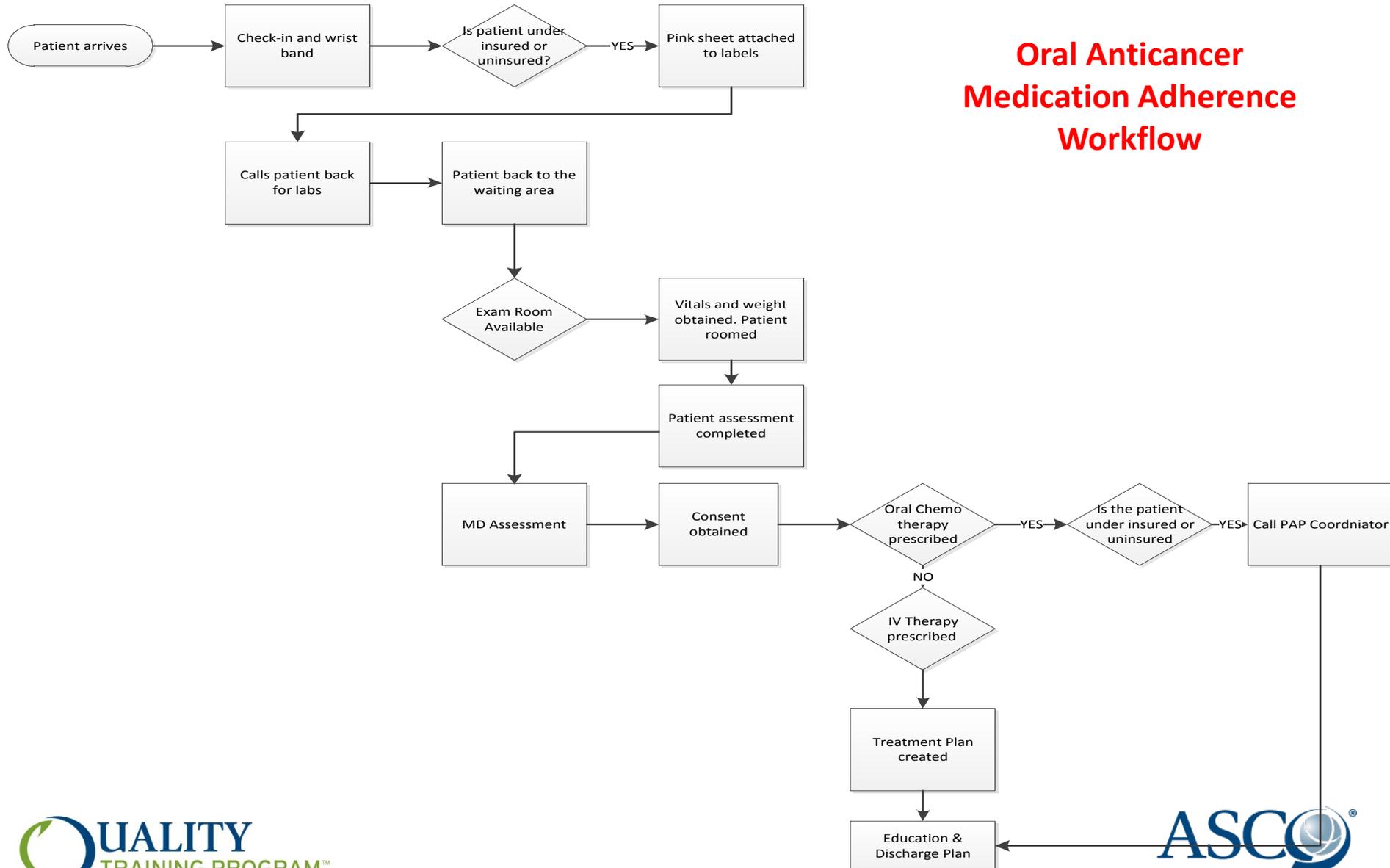
*Adherence was calculated using the “days covered” method.

Team Members

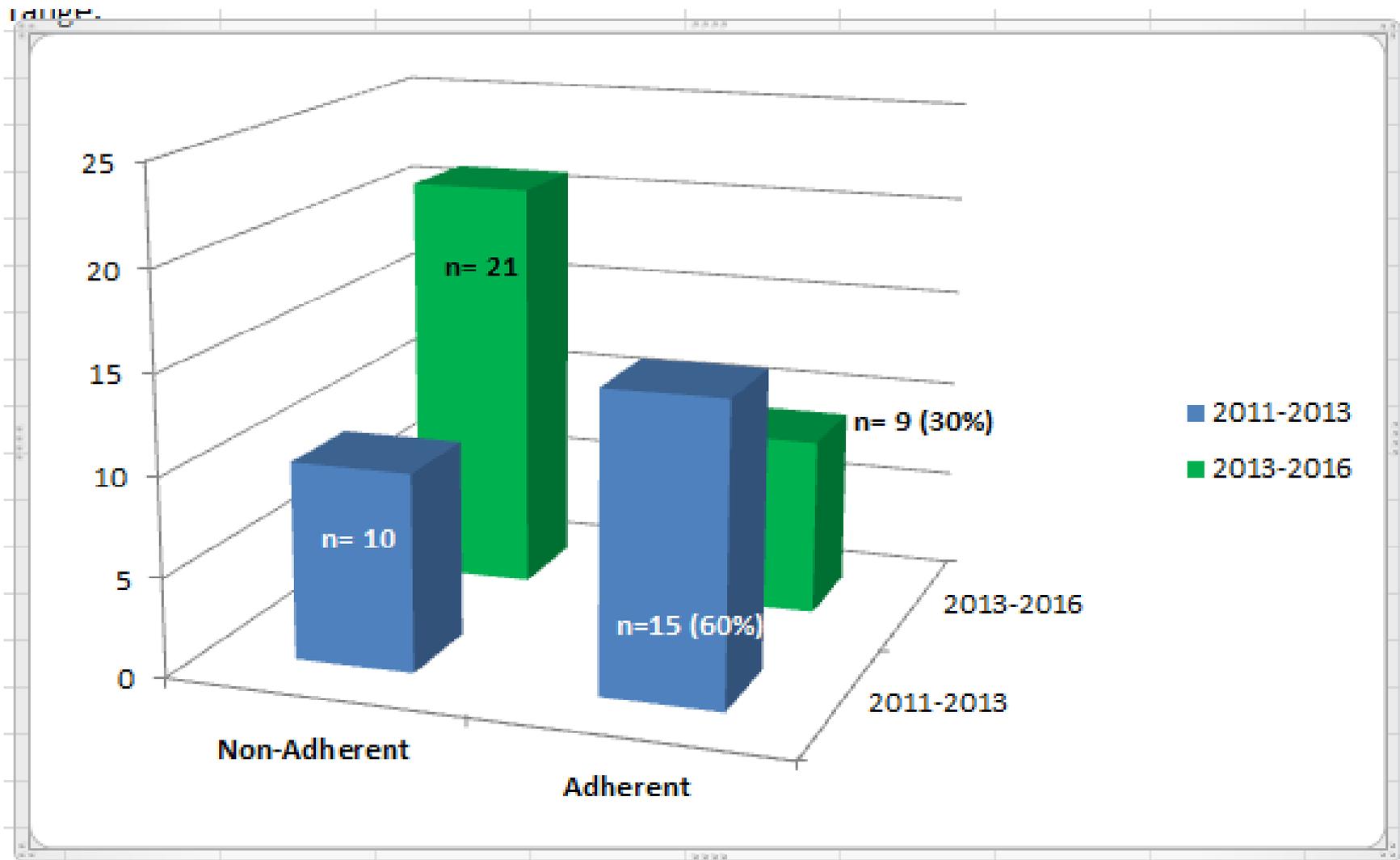
Team Member	Role/Discipline
Leon Bernal-Mizrachi, MD	Hematologist
Craig Tindall	SVP Clinical Operations – Project Sponsor
Marjorie Curry, PharmD, BCOP	Clinical Pharmacist, Hematology/Oncology
Winifred Bell, RN	Oncology Nurse Supervisor
Darica Flood	Oncology Manager
Pooja Mishra	Executive Director
Steve Power	QTP Coach
Arif Kamal, MD	QTP Coach

Process Map – Pre Intervention

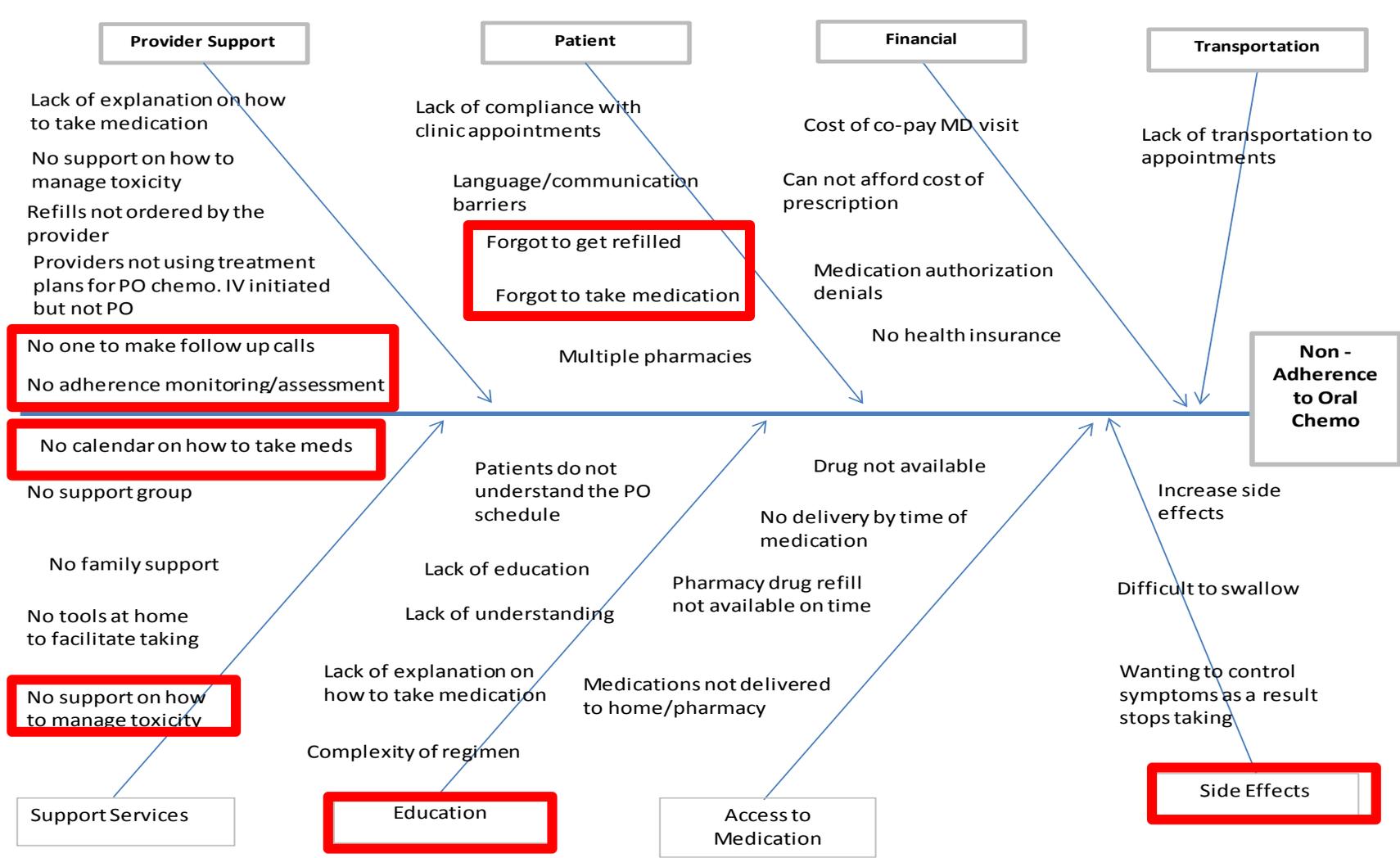
Oral Anticancer Medication Adherence Workflow



Diagnostic Data



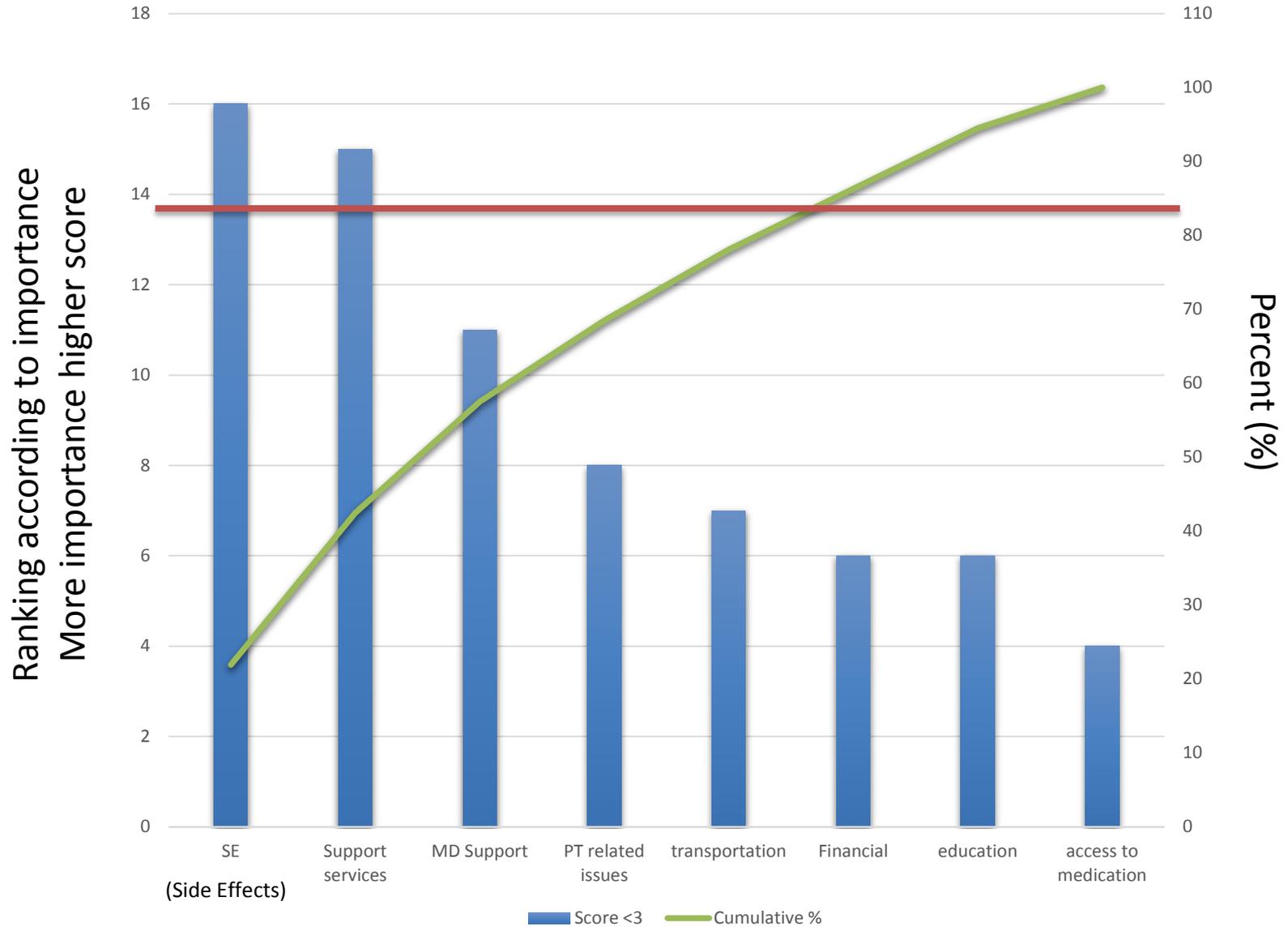
Cause & Effect Diagram



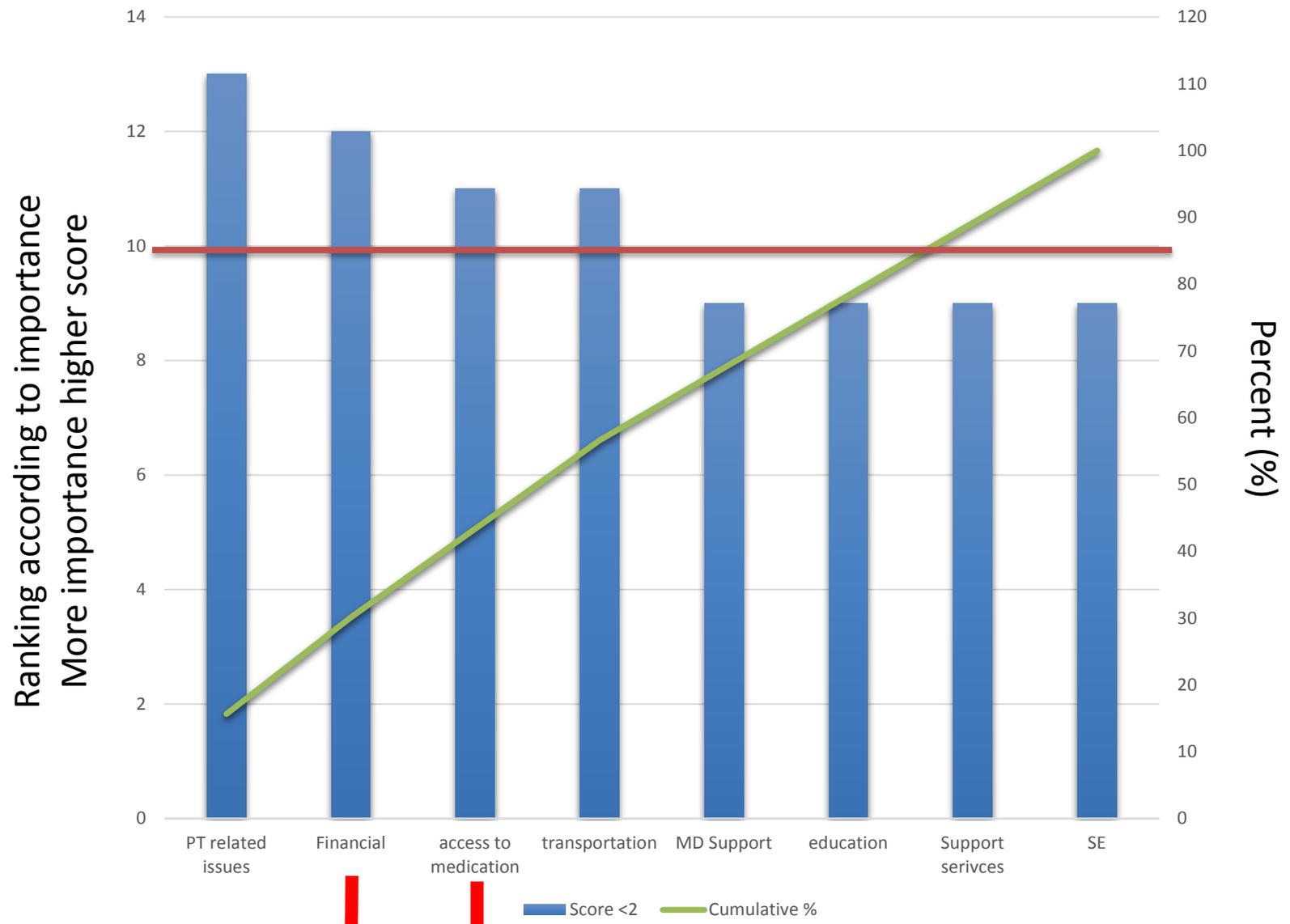
Areas selected for intervention

Diagnostic Data - Cause and Effect Diagram

Questionnaire Patient Group (n=24)



Diagnostic Data - Cause and Effect Diagram Questionnaire -Health Care Provider Group (n=23)



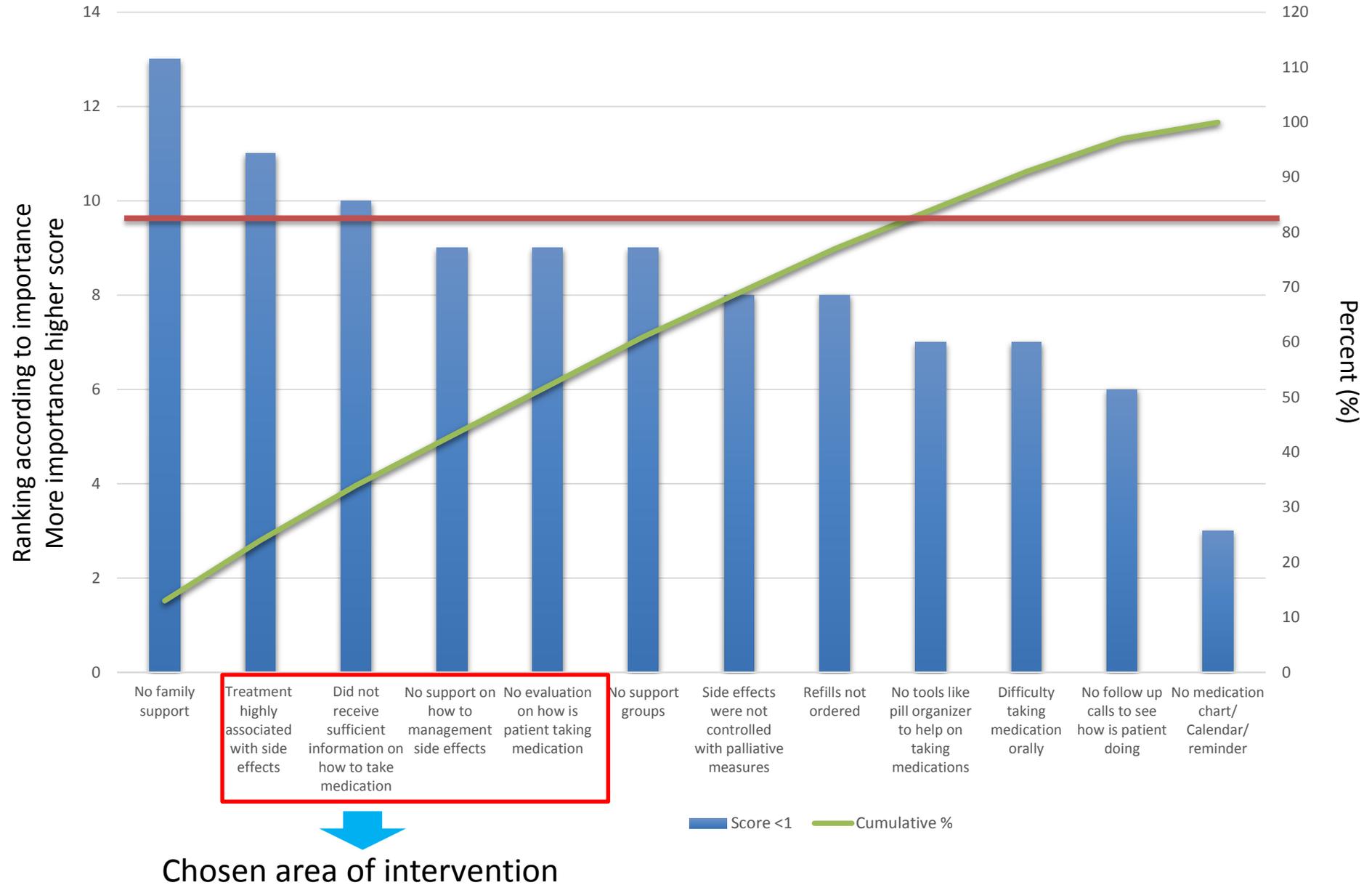
Georgia Cancer
State Aid Program



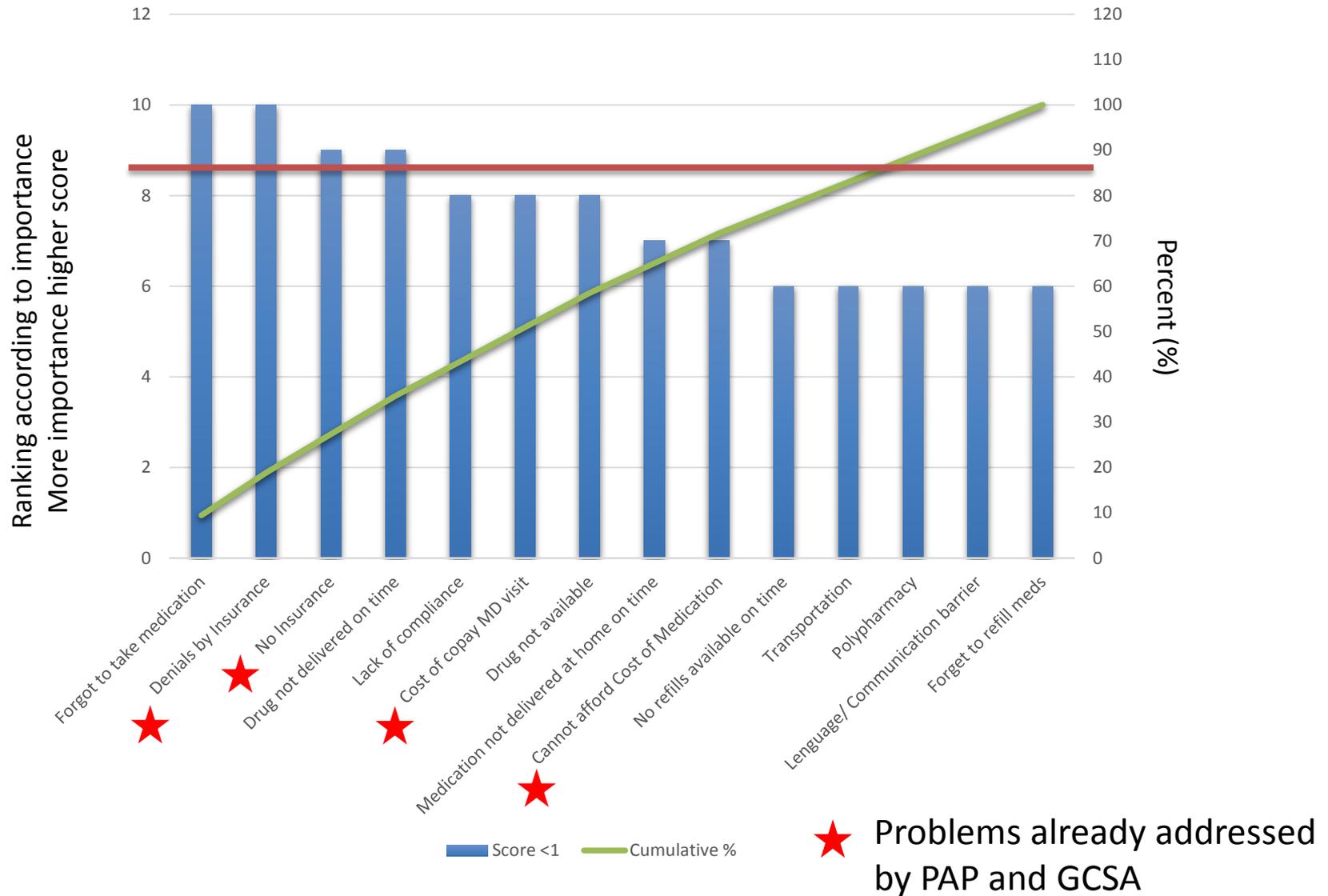
PAP

Score <2 Cumulative %

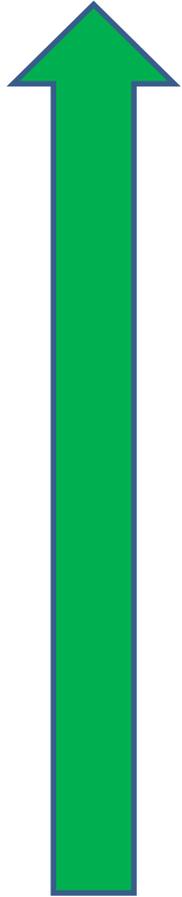
Distribution of the 3 Most Important Specific Factors Derived From Major Categories - Patient Focused Group



Distribution of the 4 Major Specific Factors Derived From Major Categories - Providers Focused Group (N=23)



Aim Statement



Increase adherence by **20%** by December 2016 and 30% by March 2017

Measures

Measure

- Patient adherence to oral anticancer medication (OAM) regimen.
- Adherence is defined as having drug available $\geq 80\%$ to $< 120\%$ of days evaluated.

Patient Population

- Patients seen by providers at the Georgia Cancer Center for Excellence at Grady
- Filling prescriptions for OAMs at the Cancer Center Pharmacy

Calculation Method

- Adherence was calculated using the “days covered” method whereby the total number of doses available to the patient in a given time period is divided by the number of doses necessary to achieve 100% adherence during the same time period.

Data Source

- Epic (Beacon) Treatment plans and Medication Prescription History
- RX30 and Symphony, outpatient prescription system

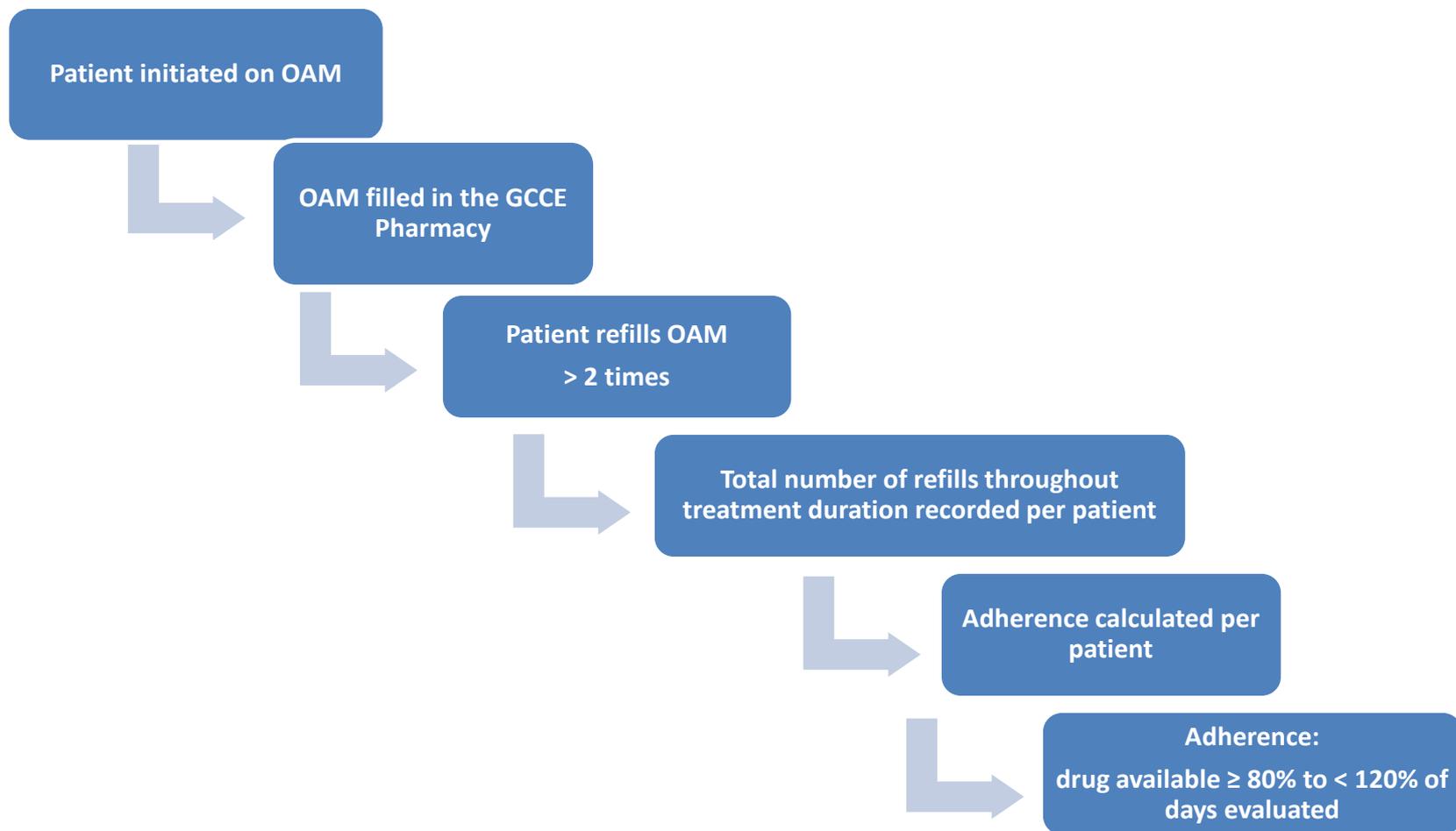
Data collection frequency

- April 1, 2013 – September 9, 2016

Data quality (any limitations)

- Utilizing prescription refill history, an indirect measure of adherence
- Prescriptions filled through specialty pharmacies or outside pharmacies
- Lack of documentation within the medical record to document treatment delays
- Low utilization of Beacon Treatment Plans

PreIntervention Data



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

Impact	High	<p><i>Pill Organizer</i></p> <p><i>Calendar</i></p> <p><i>Update Patient Instructions</i></p>	<p><i>Call Reminders</i></p> <p><i>Pharmacy Clinic</i></p> <p><i>After Hours Access</i></p> <p>Community Health Worker</p>
	Low		<p>Oral Chemotherapy</p> <p>Reminder Application</p>
		Easy	Difficult

PDSA Plan (Test of Change)

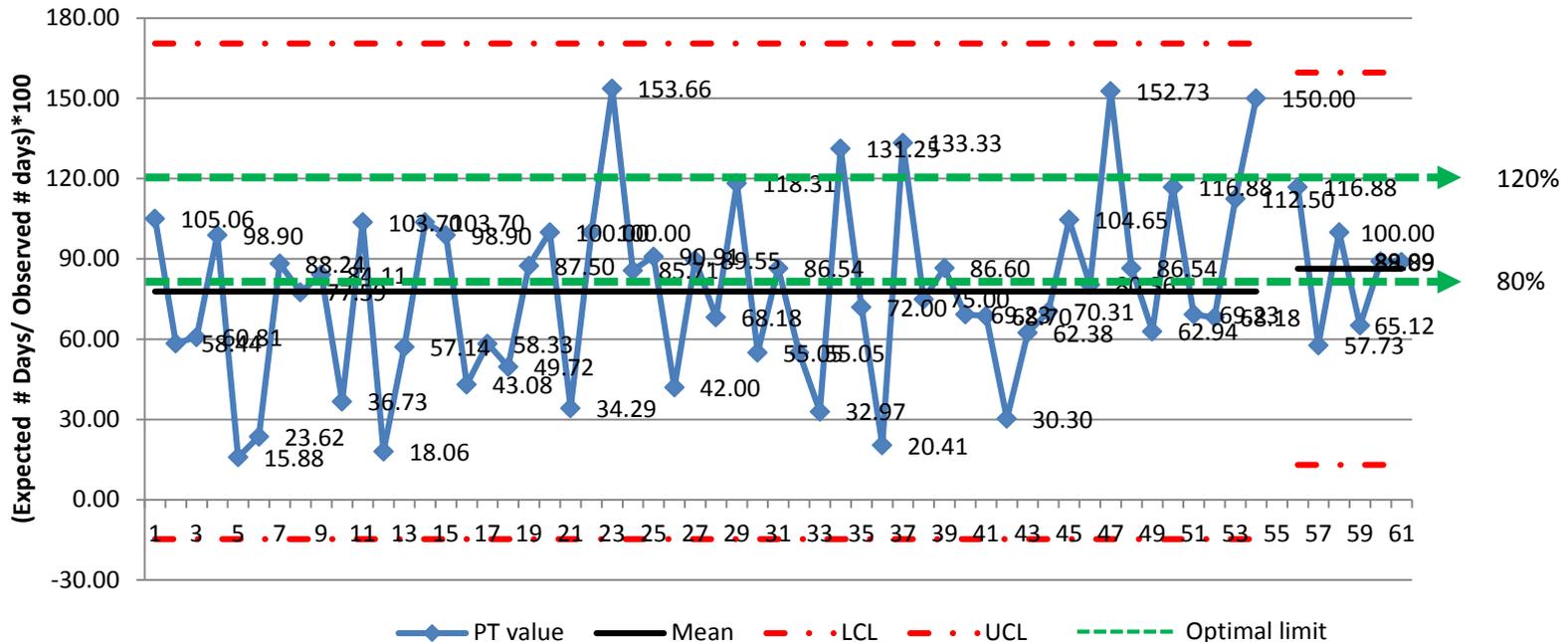
Date of PDSA Cycle	Description of Intervention	Results	Action Steps
November	Pill Organizer/Calendars	15 patients	On going
November	Pharmacy visit at treatment initiation	9 patients	On going
December 2016 - present	Pharmacy visit mid-cycle for toxicity assessment and Follow up	15 patients	On going

METHODOLOGY

- Evaluated patients prescribed oral therapy for cancer from 8/2015 to 8/2016
- Adherence evaluated across 4 quarters throughout the year
- Results demonstrated that adherence during the first 3 months (3 prescription fills) represent adherence throughout the year
- Prospectively adherence data was evaluated for the first 3 months of treatment

Change Data

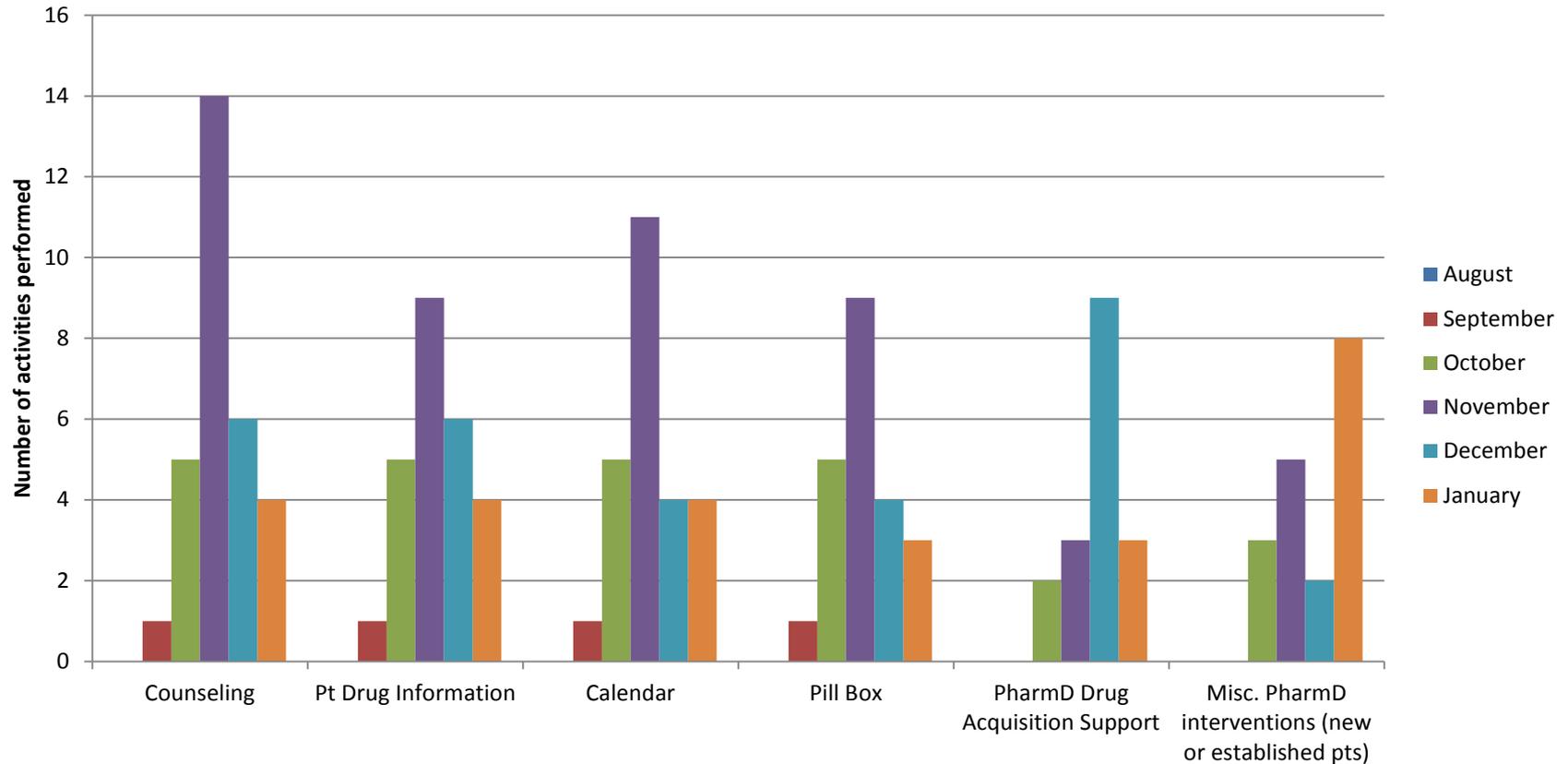
Comparison of Adherence from period 12/2015-8/2016 vs 11/2016- Present



Disclosure: Intervention group has been followed prospectively for a short time. Out of 6 patients only 2 have received 3 cycles and 4 have received 2 cycles of oral therapy for cancer..

Change Data

Number of Interventions (4 month period)



Conclusions

- The combination of pill organizer, calendar and involvement of pharmacy on the first visit as well as follow up in 13 patients shows a significant impact on patient adherence
- No patient was interested in using an APP to assist in treatment adherence
- A dedicated pharmacist will have significant impact on treatment adherence and patients navigation throughout treatment

Next Steps/Plan for Sustainability

- Collect data to negotiate with leadership for an **additional Pharmacy FTE** to assist in treatment initiation and during the first 3 months of treatment
- **Establish a pharmacy clinic** for new patients to evaluate adherence mid-cycle for 3 cycles
- **Expand the number of clinics that utilize the intervention combo** for patient adherence
- Evaluate the possibility of a **community health worker** to assist in early detection of toxicity and difficulty on patient adherence