

# The Development and Implementation of an Oral Chemotherapy Orientation

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**What is oral  
chemotherapy?**

**?**

**What can I expect  
with this therapy?**

**?**

**How much is this  
going to cost?**

**?**



# Disclosure Statement

## Amir Ali, PharmD

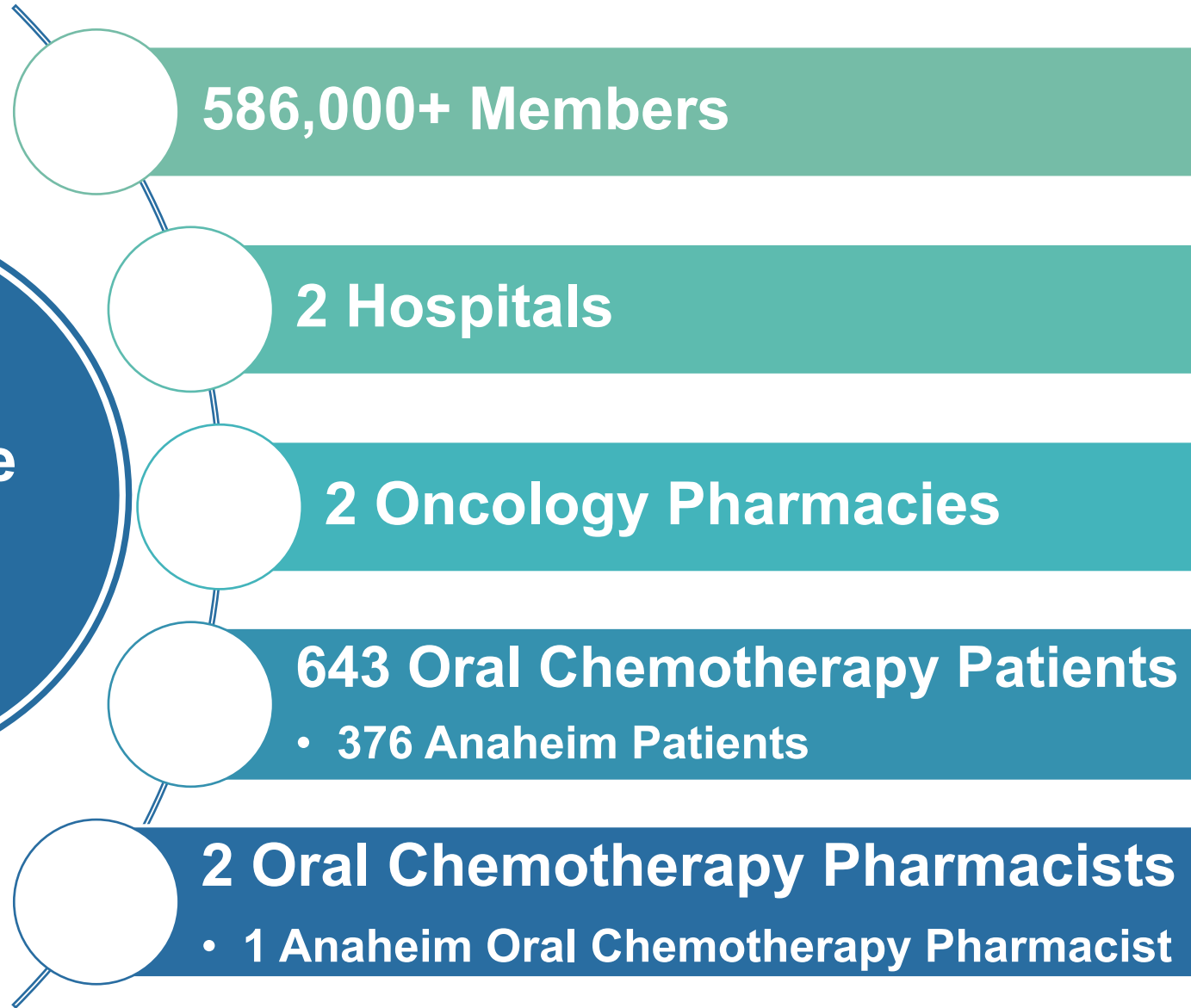
- Potential conflicts of interest: **None**
- Sponsorship: **None**
- Proprietary information or results of ongoing research may be subject to different interpretations.
- Speaker's presentation is educational in nature and indicates agreement to abide by the non-commercialism guidelines provided.

# Learning Objective

Describe the process of implementing a patient education orientation for oral chemotherapy.



**Kaiser  
Permanente  
Orange  
County**

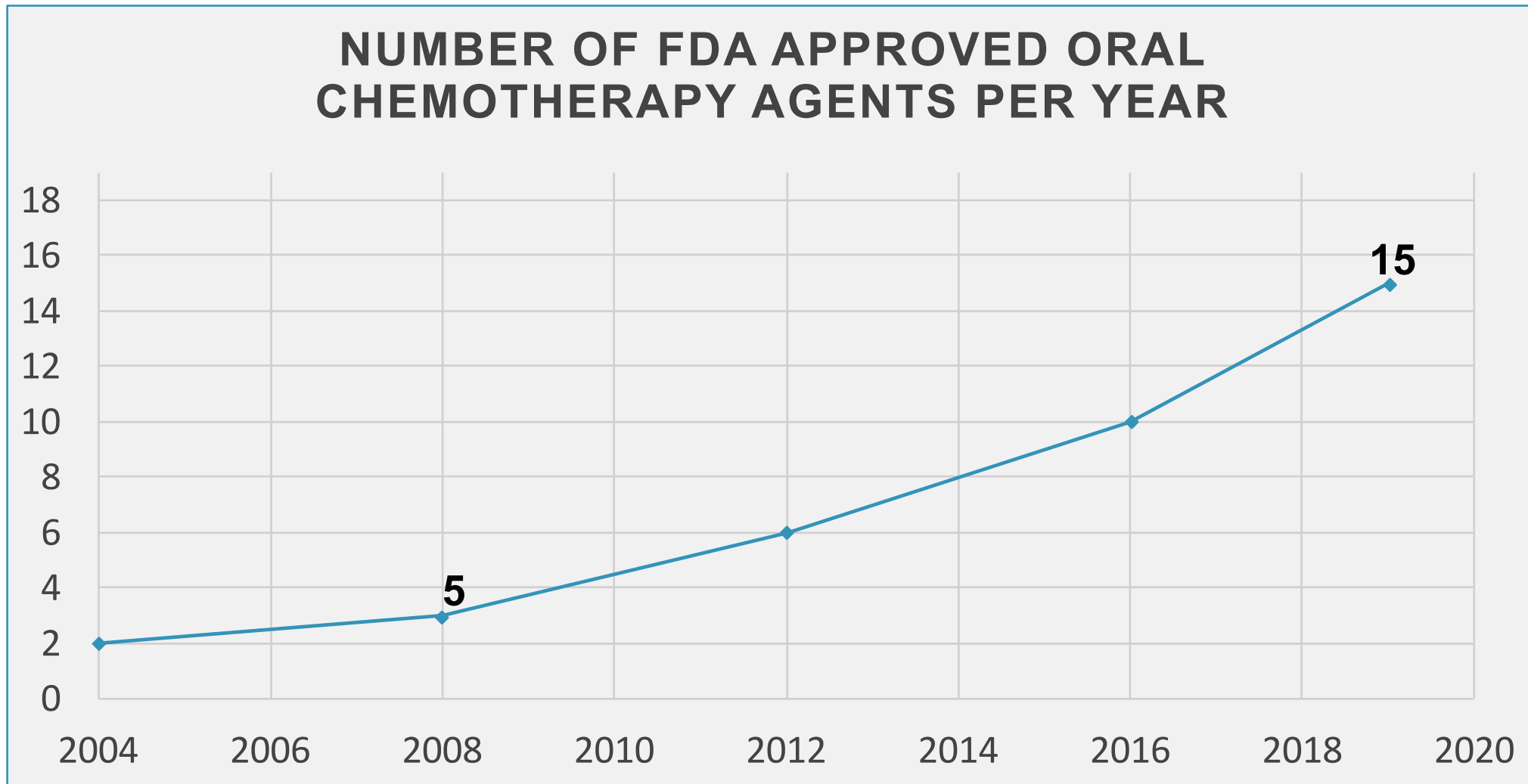


# Pre-Test Assessment Questions

## True or False?

1. The number of yearly FDA approved oral chemotherapy agents have tripled within the past decade.
2. Unlike IV chemotherapy, oral chemotherapy does not cause major side effects.
3. Implementation of the workflow practice was one of the limitations in this study.

# FDA Approved Oral Chemotherapy



<http://www.accessdata.fda.gov/scripts/cder/drugsatfda>

# Challenges of Oral Chemotherapy



Adherence



Drug Interactions



Adverse Effects



High Cost



Dosing Schedule



Laboratory Monitoring

# Traditional Practice



1

## Oncologist

- Orders oral chemotherapy during an office visit
- Informs oncology pharmacist

2

## Oncology Pharmacist

- General telephonic counseling points (~30 minutes)
- Within a week of the initial office visit

3

## Pharmacist Follow-up

- Regular lab tests
- Reassessment

# Encounters



Office Visits



Online Messaging



Telephonic

Oncologists, Nurses, Oncology  
Pharmacists, and Oncology Coordinators

# New Workflow

1

## Oncologist

- Orders oral chemotherapy during an office visit

2

## Orientation

- Medical Assistant shows patient a 12-minute general orientation video
- Provides education packet

3

## Oncology Pharmacist

- Specific telephonic counseling points

4

## Pharmacist Follow-up

- Regular lab tests
- Reassessment

# Topics Covered in New Orientation Video and Handouts

**Overview of Cancer and Oral Chemotherapy**

**Expectations of Treatment and General Side Effects**

**Importance of Adherence to Labs**

**Role of the Oncology Pharmacist**

**Financial Information**

**Points of Contact**

# Project Goal

The purpose of this project is to assess the impact of education materials and a standardized patient orientation workflow.

# Population



## Inclusion Criteria

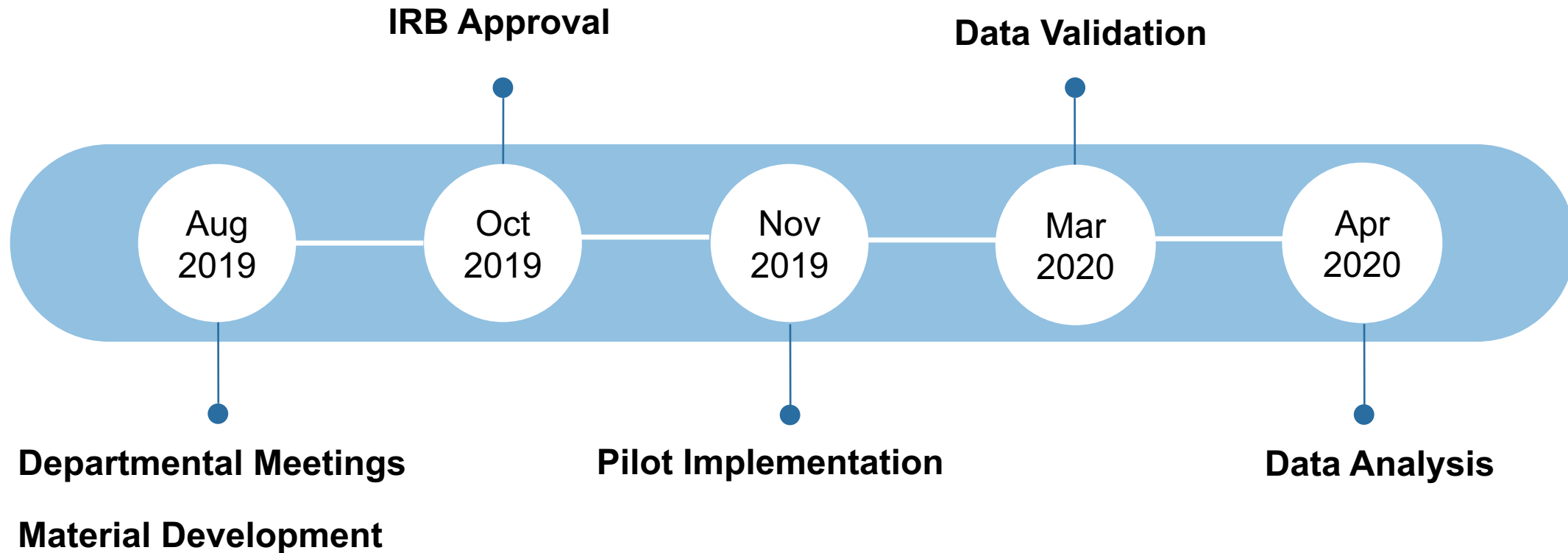
- New start oral chemotherapy
- Kaiser Permanente Anaheim



## Exclusion Criteria

- $\leq 18$  years old
- Clinical trial patients
- New start oral chemotherapy in hospital

# Project Timeline

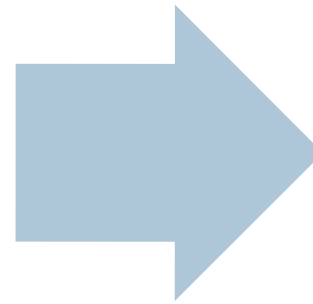


# Study Design

**07/01/2019 – 10/31/2019\***

**Pre-implementation**

Traditional Practice



**11/1/2019 – 01/31/2020\***

**Post-implementation**

New Oral Chemotherapy  
Orientation/Workflow

\*Study outcomes were measured within 30 days of initiation of new-start oral chemotherapy.

# Endpoints

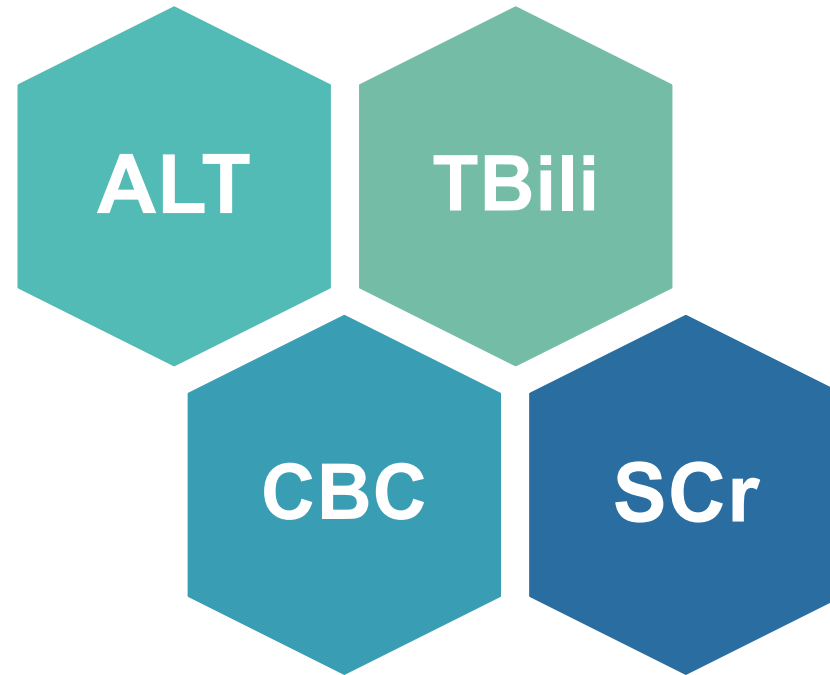
## Primary Endpoint

- Number of encounters within the oncology department within 30 days of new-start oral chemotherapy prescribing

## Secondary Endpoints

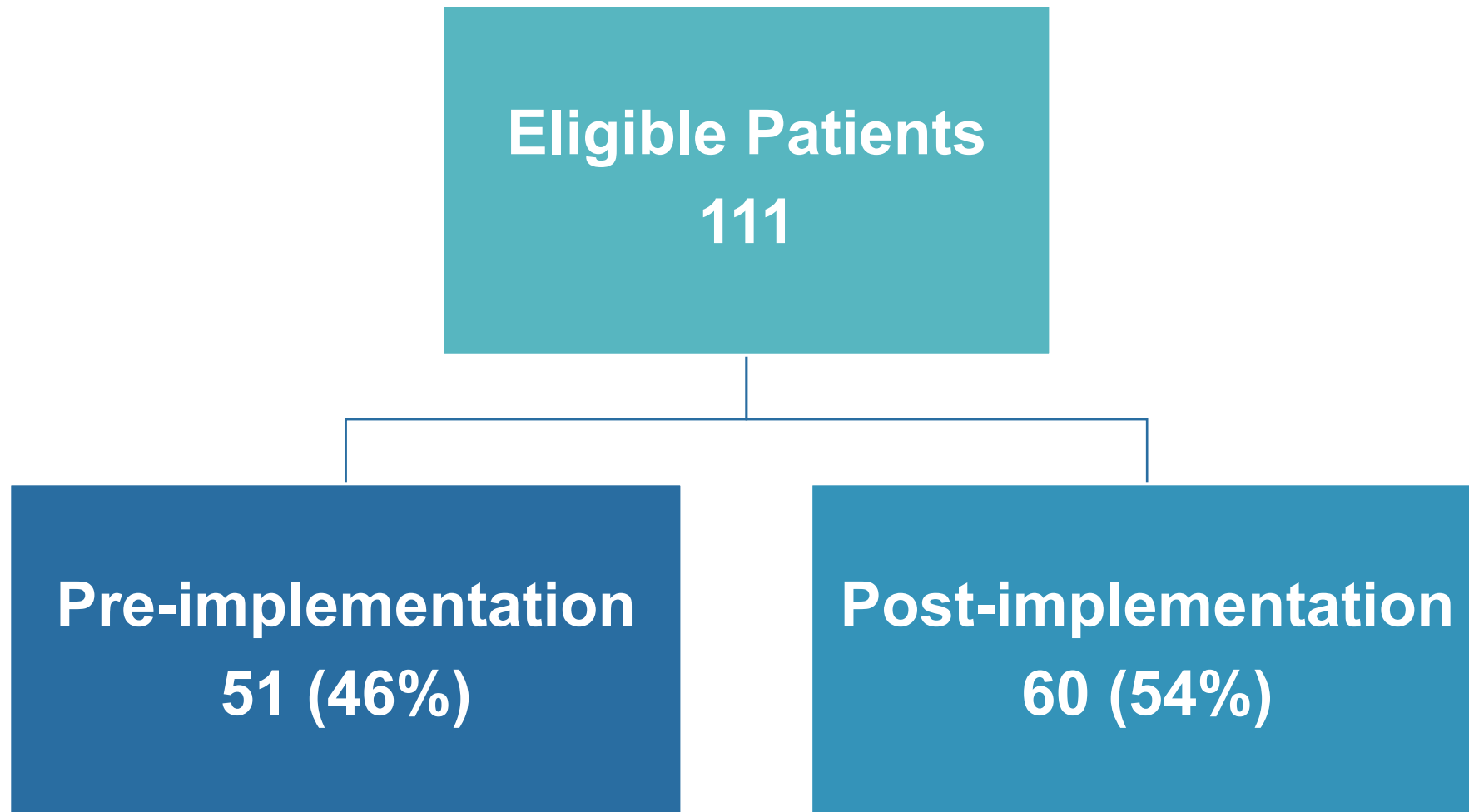
- Time to initiation of oral chemotherapy
- Patient adherence to ordered lab tests

# Laboratory Monitoring



Non-adherence to labs was defined as completion within 3 days prior to second refill being due

# Population



# Baseline Characteristics

	Pre-implementation (n = 51)	Post-implementation (n = 60)	<i>P-value</i>
<b>Age, years</b> (Mean $\pm$ SD)	66 $\pm$ 13	63 $\pm$ 13	0.30
<b>Female, n (%)</b>	21 (44%)	29 (48%)	0.64

SD = standard deviation. Mean age difference was analyzed using a t-test. Gender difference was analyzed using a Chi-square test. Power: 82%

# Results

	Pre-implementation (n = 51)	Post-implementation (n = 60)	<i>P-value</i>
<b>Number of Encounters per Patient</b> (Mean ± SD)	7.7 ± 5.4	5.8 ± 4.1	0.046
<b>Time to Initiation, Days</b>	15.4	8.03	0.003
<b>Adherence to Labs, %</b>	27 (63%)	37 (65%)	0.82

SD = standard deviation. Mean encounters and initiation time were analyzed using a t-test. Adherence to labs was analyzed using a Chi-square test.

# Conclusions



Implementation of a standardized patient education orientation decreased encounters



The orientation workflow decreased time to initiation of therapy



The orientation workflow did not statistically improve adherence to lab tests

# Learnings

- Importance of multidisciplinary collaboration
- Implementation of a pilot program
- Development of an educational video for patients

# Challenges

- Change in practice
- Language barrier (only English)

# Next Steps

Share Learnings  
with SCAL  
Oncology Peers

Extend to Irvine

Translate to  
Spanish

# Post-Test Assessment Questions

## True or False?

- True** 1. The number of yearly FDA approved oral chemotherapy agents have tripled within the past decade.
- False** 2. Unlike IV chemotherapy, oral chemotherapy does not cause major side effects.
- True** 3. Implementation of the workflow practice was one of the limitations in this study.