

Project Title: Anthem Home Health Anti-Emetic Compliance

Presenter's Name: Jennifer Valerin, MD PhD

Institution: University of California, Irvine

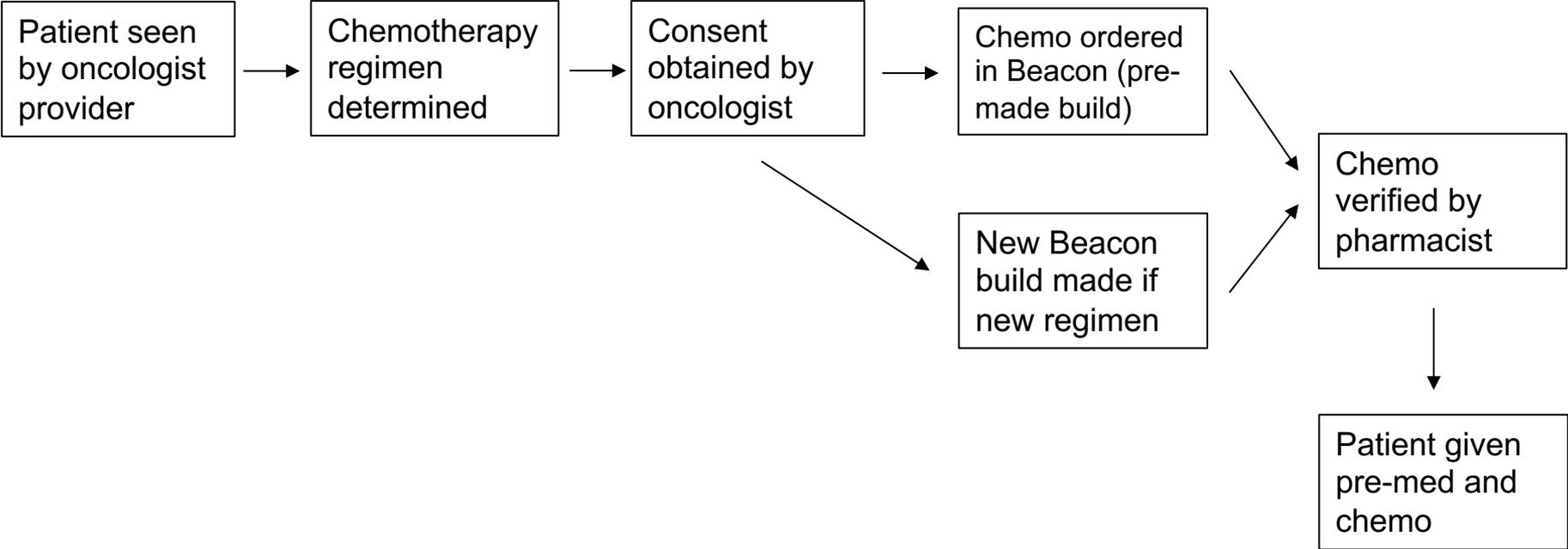
Date: 12/10/2021

Problem Statement

Only 20% of patients enrolled in the Chao Family Cancer Center Anthem Home Care Program and receiving highly emetogenic treatment are within compliance with day 1 anti-emetic pre-medications leading to:

- Poor patient satisfaction
- Increased need for provider communication
- Increased ED visits

Process map



Institutional Overview

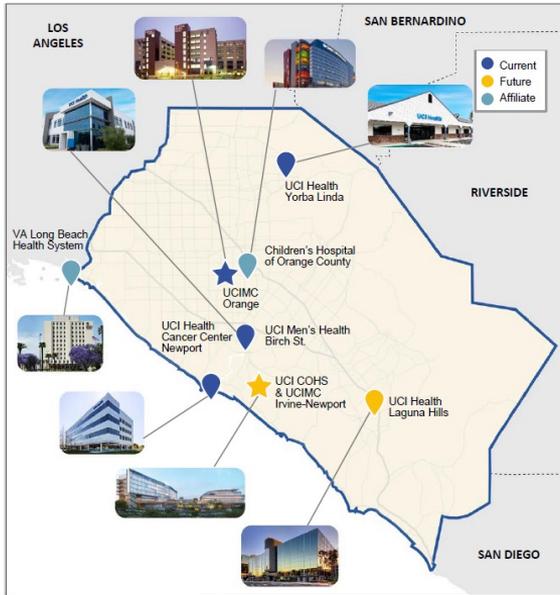


Figure 4. Current and Future UCI Health / CFCCC Footprint in Orange County. Existing facilities include UCI Medical Center (UCIMC) in Orange, and outpatient locations in Newport Beach, Birch Street and Yorba Linda. Planned facilities include UCI Health Laguna Hills (2021), and UCI Medical Center Irvine-Newport, with an outpatient Cancer Center building (2023) and a specialty hospital (2025). The locations of the two CFCCC affiliates (CHOC Children's Hospital and Long Beach VA Health System) are indicated.

- Orange County (OC) is home to 3.176 million residents
- OC is a majority-minority county (34% Latino and 21% Asian including the largest Vietnamese population in U.S.)
- UC Irvine Chao Family Cancer Center (CFCC) is the only academic cancer center based in OC
- Approximately 6000 cancer patient visits a month

Team members

Core Members:

Maki Yamamoto, MD

Jennifer Valerin (Goldstein), MD PhD

Kristen Neumann, NP

Supporting Members:

Abinav Baweja, MD

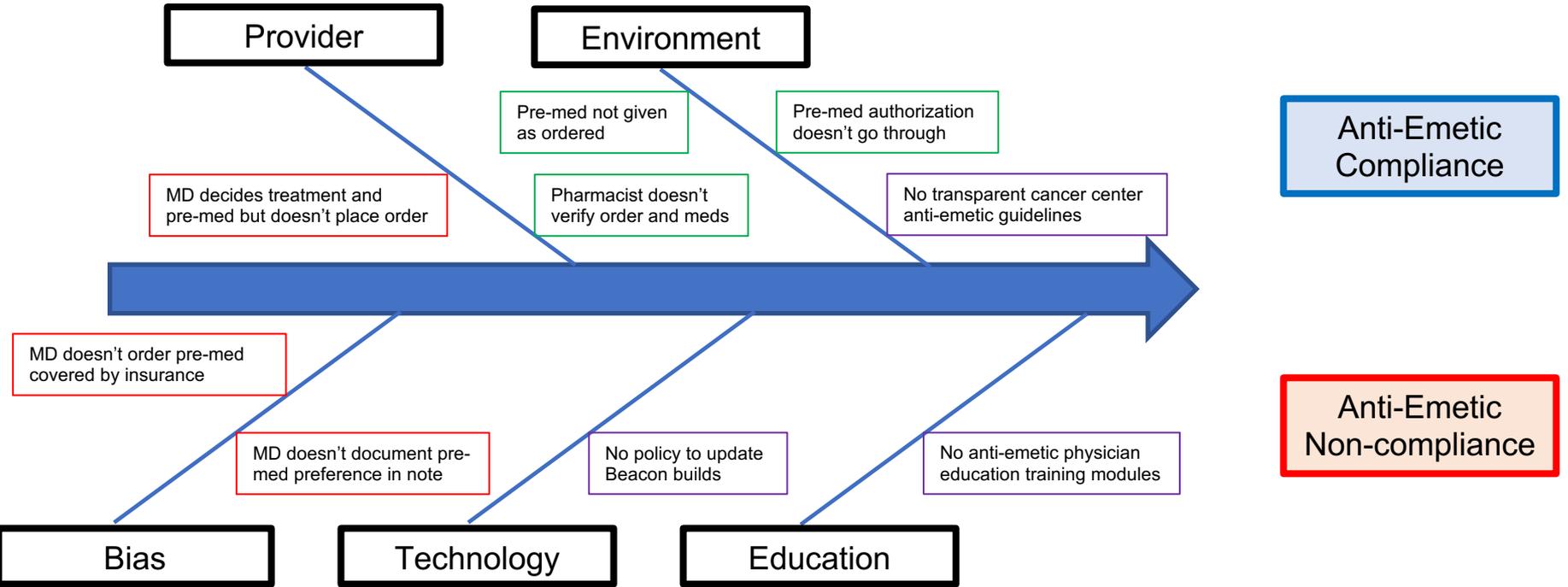
Alexandre Chan, PharmD, MPH

Benjamin Lee, PharmD

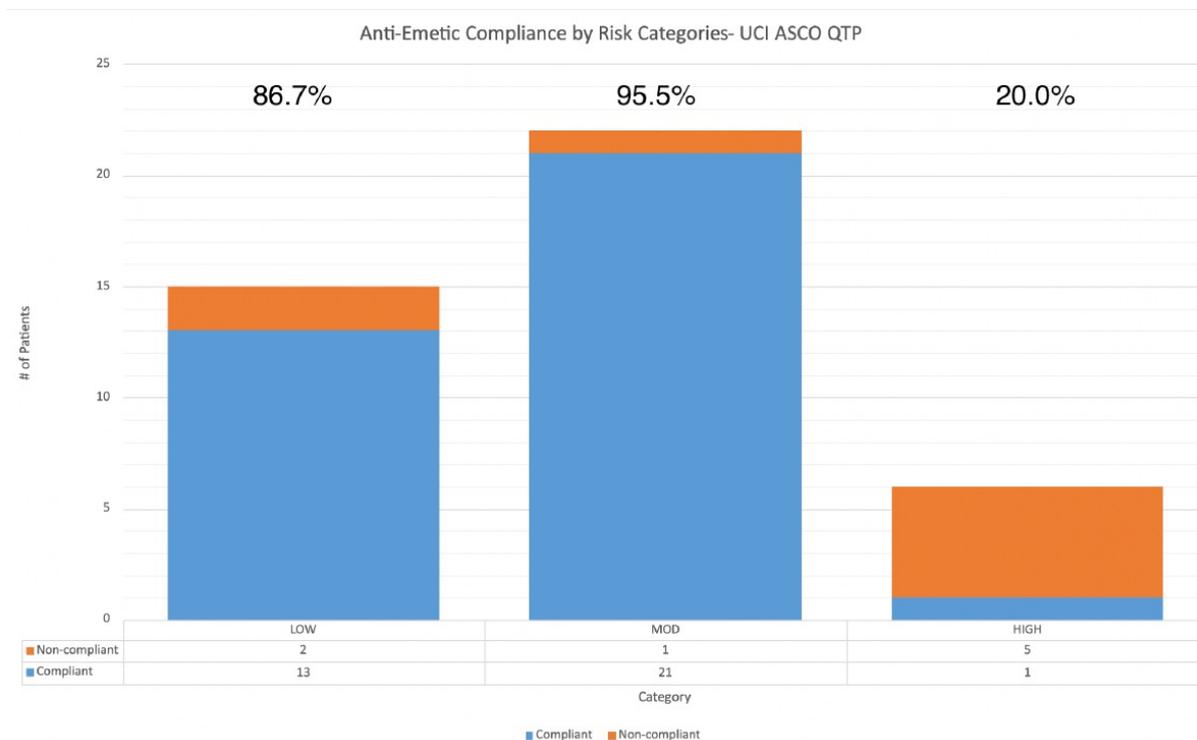
Daniel Hoang, PharmD

Naomie Devico Marciano, MS, MS1

Cause and Effect Diagram

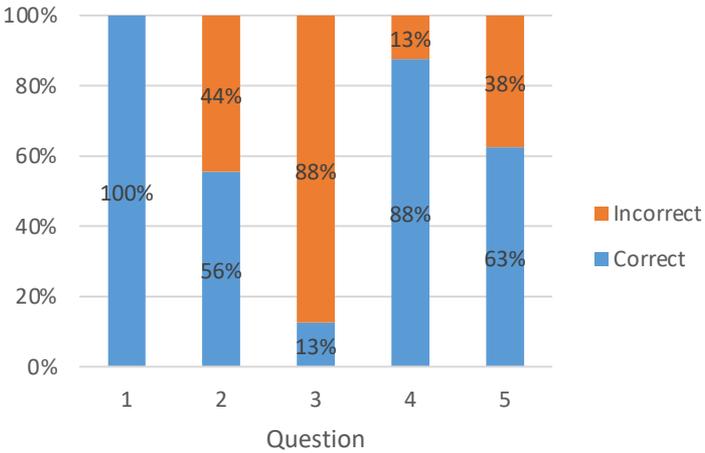


Diagnostic Data – Anti-emetic Compliance

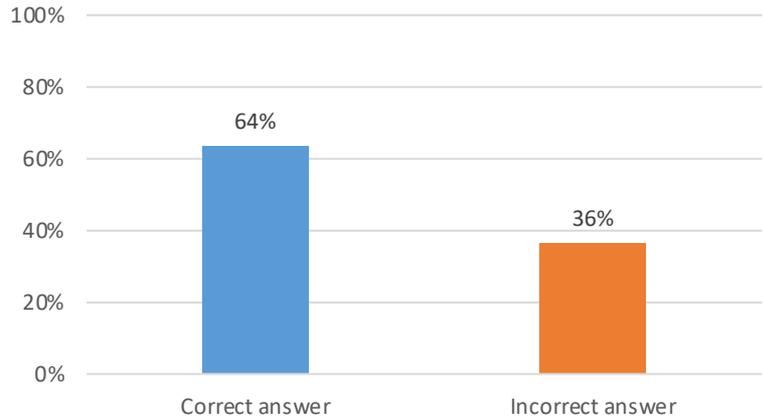


Diagnostic Data – Physician Education

Pre-test: Individual Questions



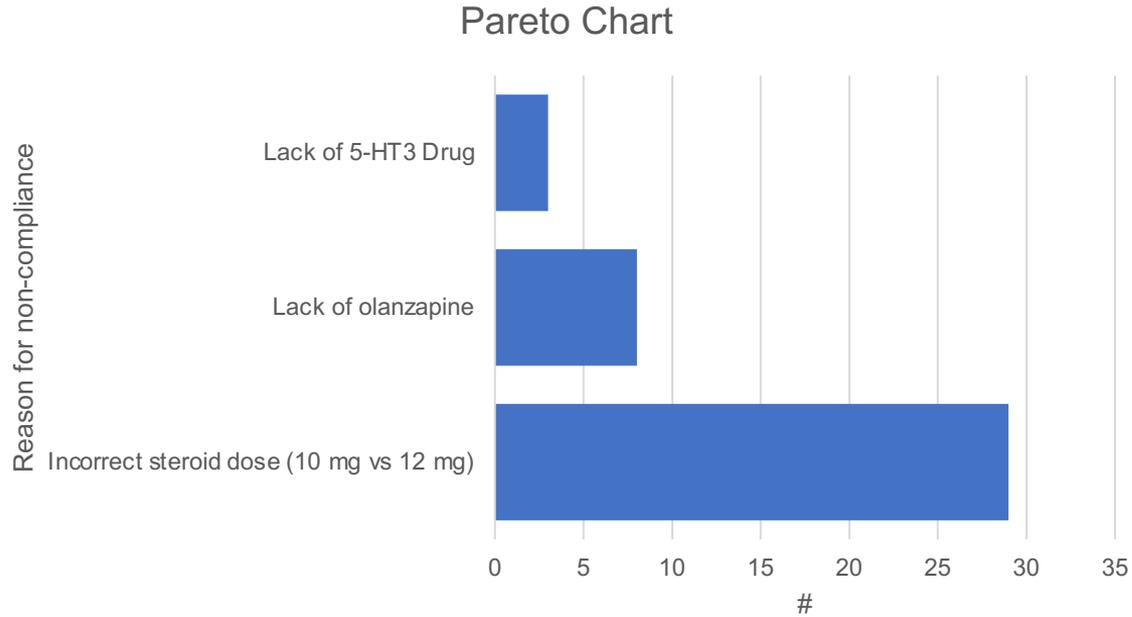
Pre-test: average of all 5 questions



Pre-test item objectives:

1. To evaluate clinicians' understanding of anti-emetic risk category
2. To assess clinicians' ability to identify category 1 pre-medication anti-emetic regimens
3. To assess clinicians' ability to correctly verify dosing of anti-emetic medications
4. To assess clinicians' ability to identify category 1 pre-medication anti-emetic regimens
5. To assess clinicians' ability to identify category 1 pre-medication anti-emetic regimens

Diagnostic Data



Aim Statement

To improve the percentage of patients enrolled in the Chao Family Cancer Center Anthem Home Care Program receiving highly emetogenic treatment compliance with chemotherapy induced nausea pre-medications from 20% to 80% by January 1st 2022

Measures

Item	Description
Measure:	Surrogate measure of patient pre-medication compliance from process measure
Patient population: <i>(Exclusions, if any)</i>	Patients undergoing systemic treatment for all cancer histologies at the Chao Family Cancer Center enrolled in the Anthem Home Care Program
Calculation methodology: <i>(i.e. numerator & denominator)</i>	High emetogenic: 6 Moderate emetogenic: 22 Low emetogenic: 15
Data source:	CFCC Infusion Center records, Epic, Anthem database
Data collection frequency:	Weekly
Data limitations: <i>(if applicable)</i>	Patient repeat records, recording of hospital admissions, actually scheduled admissions, etc

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

Impact	High	1. Physician education	1. Patient education program for oncology infusion therapies 2. Epic Beacon build for anti-emetics (inclusion of olanzapine)
	Low	1. Steroid dose compliance	1. Streamline insurance authorization for medications
		Easy	Difficult
Ease of Implementation			

PDSA Plan (Test of Change)

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
10/26/2021	Anti-emetic compliance assessment	Only 20% of patients at UCI Chao CCC Anthem Home Care are compliant with day 1 anti-emetics	Develop tools with pharmacy, IT to improve anti-emetic compliance in highly emetogenic regimens
11/30/2021	Anti-emetic regimen modification	75% of 101 regimen builds have been modified to include compliant anti-emetics	Continue to modify regimen builds and assess compliance rates as a result
1/2022	Physician Education	Pre-test results show 64% correct responses for anti-emetic topics at baseline	Repeat post-test at UCI faculty meeting in 1/2022 to assess impact of intervention

Change Data

- Anti-emetic compliance rates across UCI Chao Family Comprehensive Cancer Center
- Physician education metrics
- Run-data to be assessed for anti-emetic compliance, pending ongoing data accrual at UCI Chao Family CCC

Conclusions

- Importance of anti-emetic compliance
 - Safety
 - Enhanced therapeutic efficacy
- Lower compliance can be mitigated through a multidisciplinary intervention
 - Stakeholders: Pharmacists, physicians, nurses, students, information technology

Next Steps/Plan for Sustainability

- Short-term goals
 - Improve quality of care and patient satisfaction
 - Add olanzapine to anti-emetic regimen builds in Epic Beacon
 - Improve physician education as component of compliance
- Long term goals
 - Measure ongoing anti-emetic compliance metrics
 - Patient education (chemotherapy, infusions, side effects)
 - Model for cancer care delivery (sustainable, equitable)