

ASCO's Quality Training Program

Improving Adherence With Oral Antiemetic Agents in Breast Cancer Patients Receiving Chemotherapy

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Center for Breast Health
Bethesda, MD

March 6, 2014

Practice Overview



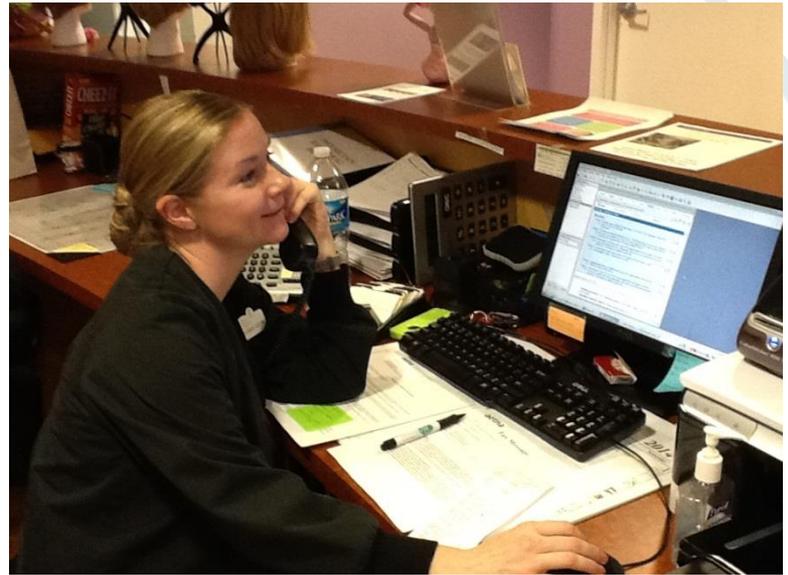
- A private practice in suburban Maryland with one medical oncologist and one nurse practitioner/DNP dedicated to quality breast cancer care
- Affiliated with the NAPBC[®]-accredited Johns Hopkins Suburban Breast Center
- Approximately 350 new patients, 2000 infusions and 4000 follow-up visits in 2013

Problem Statement

- **Only 59% of breast cancer patients are compliant with medication prescribed for chemotherapy-induced nausea and vomiting (CINV), leading to:**
 - Increased nausea and vomiting during chemotherapy
 - Decreased ability to perform normal activities
 - Additional office visits for hydration and parenteral antiemetics
 - Aversion to subsequent cycles of chemotherapy
 - Poor patient experience

Team Members

- Team Leader: Carolyn B. Hendricks, MD
- Team members
 - Susan S. Moreland, DNP, CRNP, AOCNP
 - Chrissy Wiles, RN
 - Lola Saavedra, Medical Assistant
 - Vicki Hardwick and Celia Frame, Administrative Assistants
 - Kelly Rosemond, Practice Administrator



Fishbone Diagram

MD tasks

MD decides chemo needed but not relayed

MD /DNP doesn't obtain consent

MD decides regimen but not relayed

MD/DNP doesn't task clinical

MD doesn't document by macro

MD/DNP doesn't review checklist

Orders written & faxed to SH: not written or faxed

Clinical doesn't create template

Clinical doesn't contact pt

Clinical doesn't verify pharmacy

Clinical tasks

Clinical doesn't verify e-Rx

Clinical sends Rx and asks pt. to bring to consent visit: doesn't send and not brought to visit

Clinical evaluates on Day 2 for symptoms and does med reconciliation

Antiemetic adherence

Front desk doesn't prints/scans documents

Front desk doesn't hand pt. anti emetic forms

Consent visit not scheduled

Front desk to take calls, but doesn't task clinical

No new start task for office manager

Front desk doesn't schedules pt visits

Pt. doesn't schedule visits

Pt doesn't call with symptoms

Pt doesn't pick up Rx

Family or caregivers not facilitating adherence

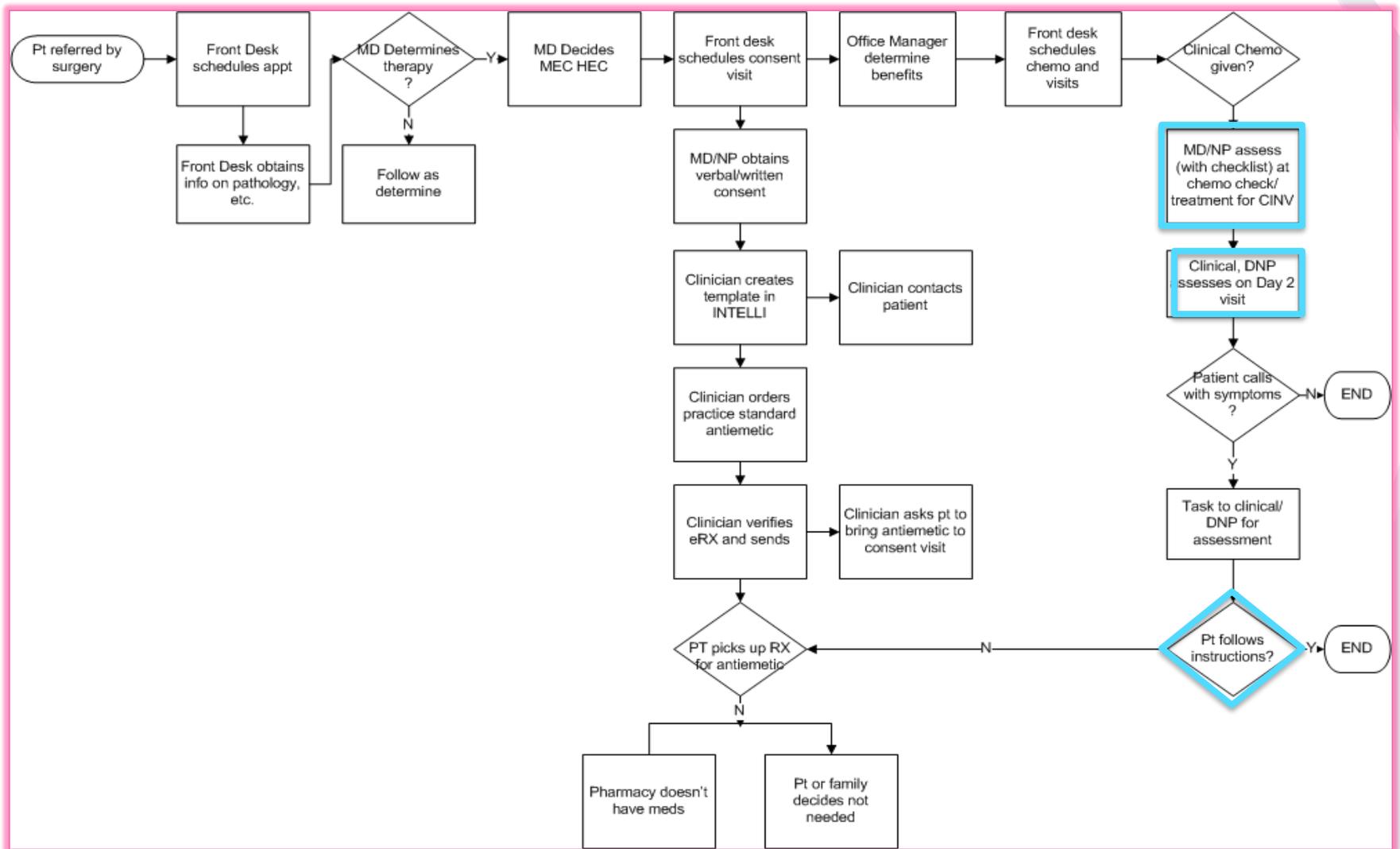
Pt. doesn't take meds as ordered

Pharmacy doesn't have medication

Front desk tasks

Patient/family tasks

Process Map

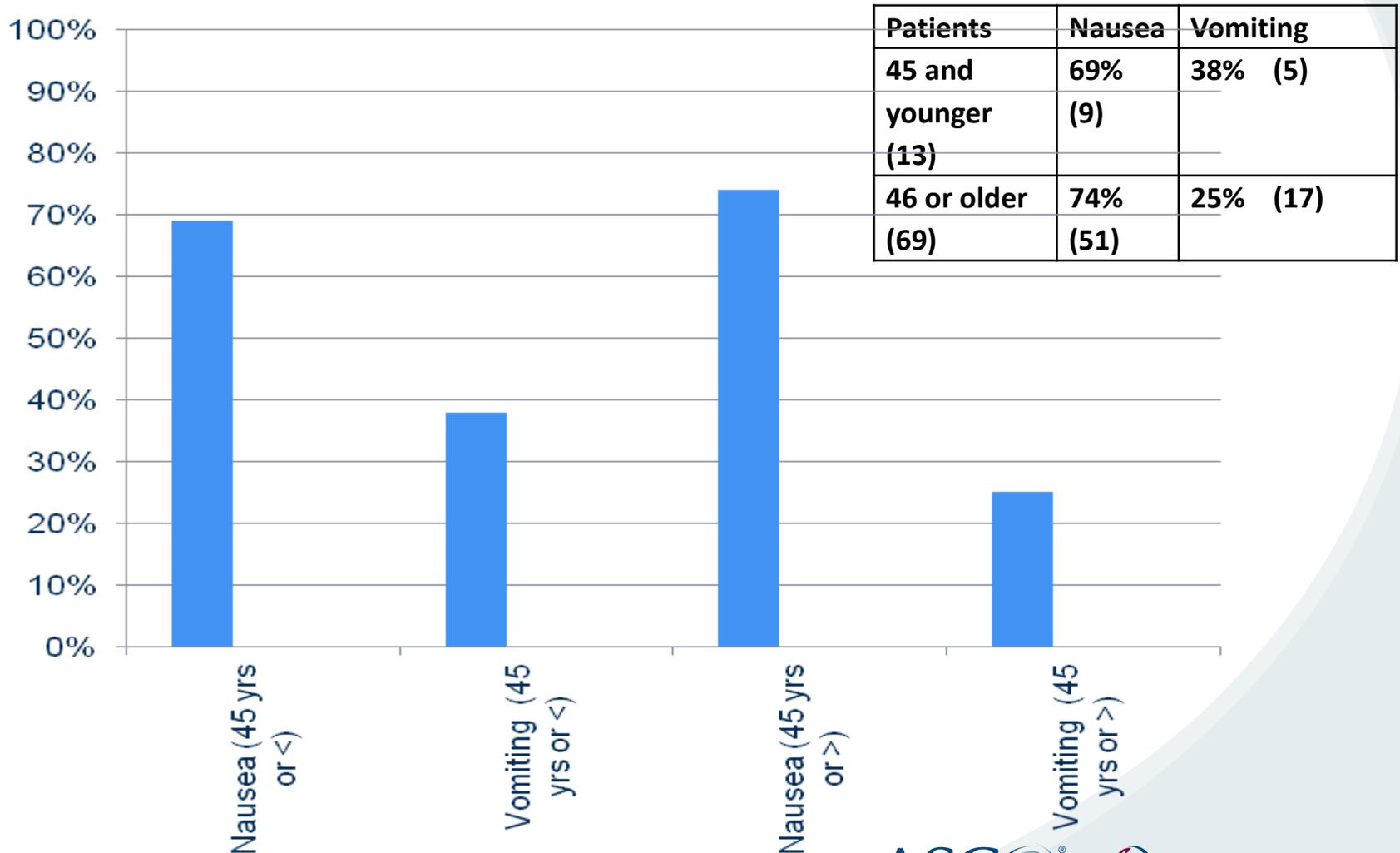


Aim Statement

- To improve the percentage of breast cancer patients receiving moderately or highly emetogenic chemotherapy who take oral antiemetic agents as prescribed for CINV from 59% to 90% by March 6, 2014

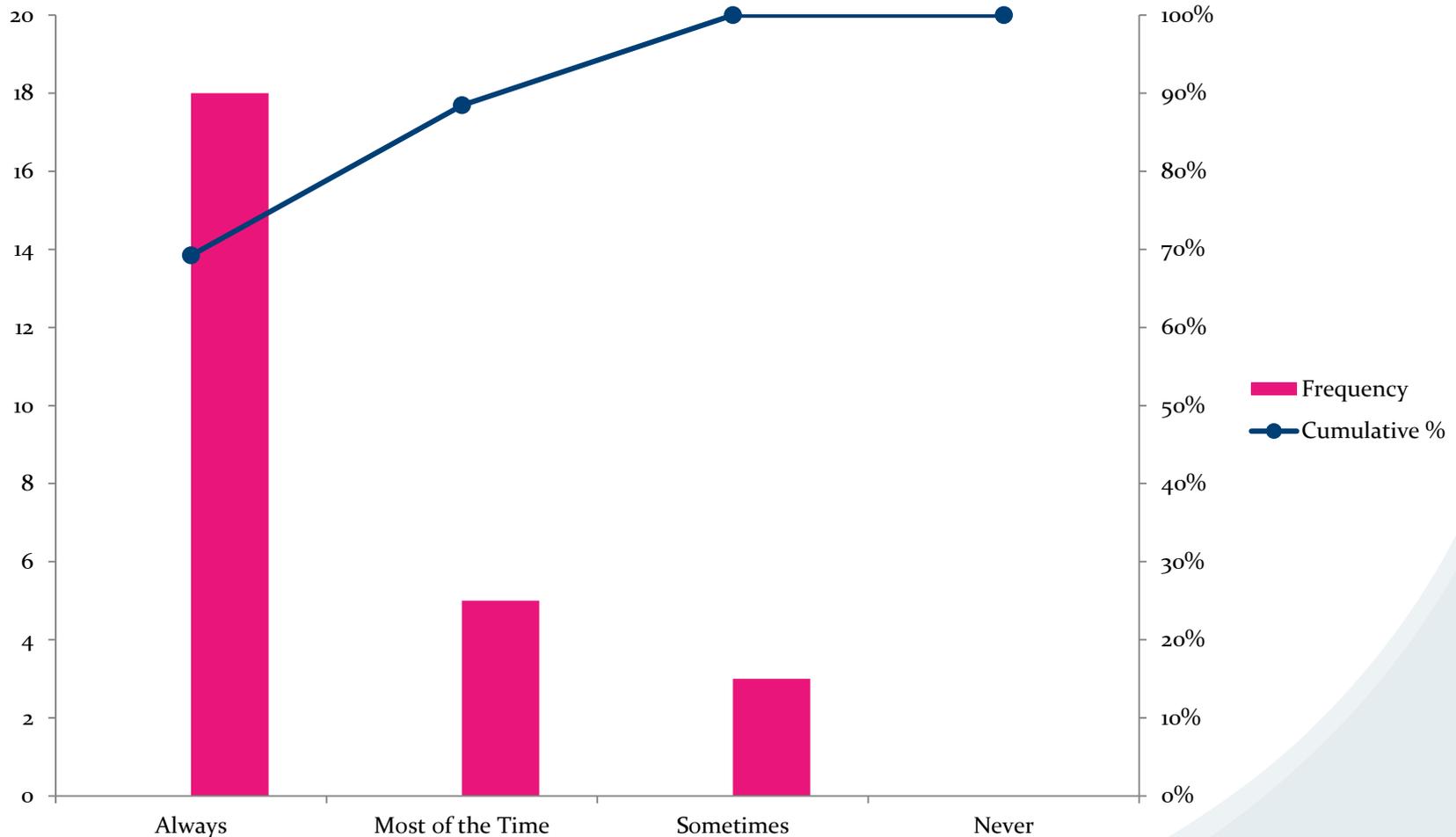
Baseline Data: Chart Review

Frequency of Nausea and Vomiting in Patients Receiving MEC/HEC Regimens



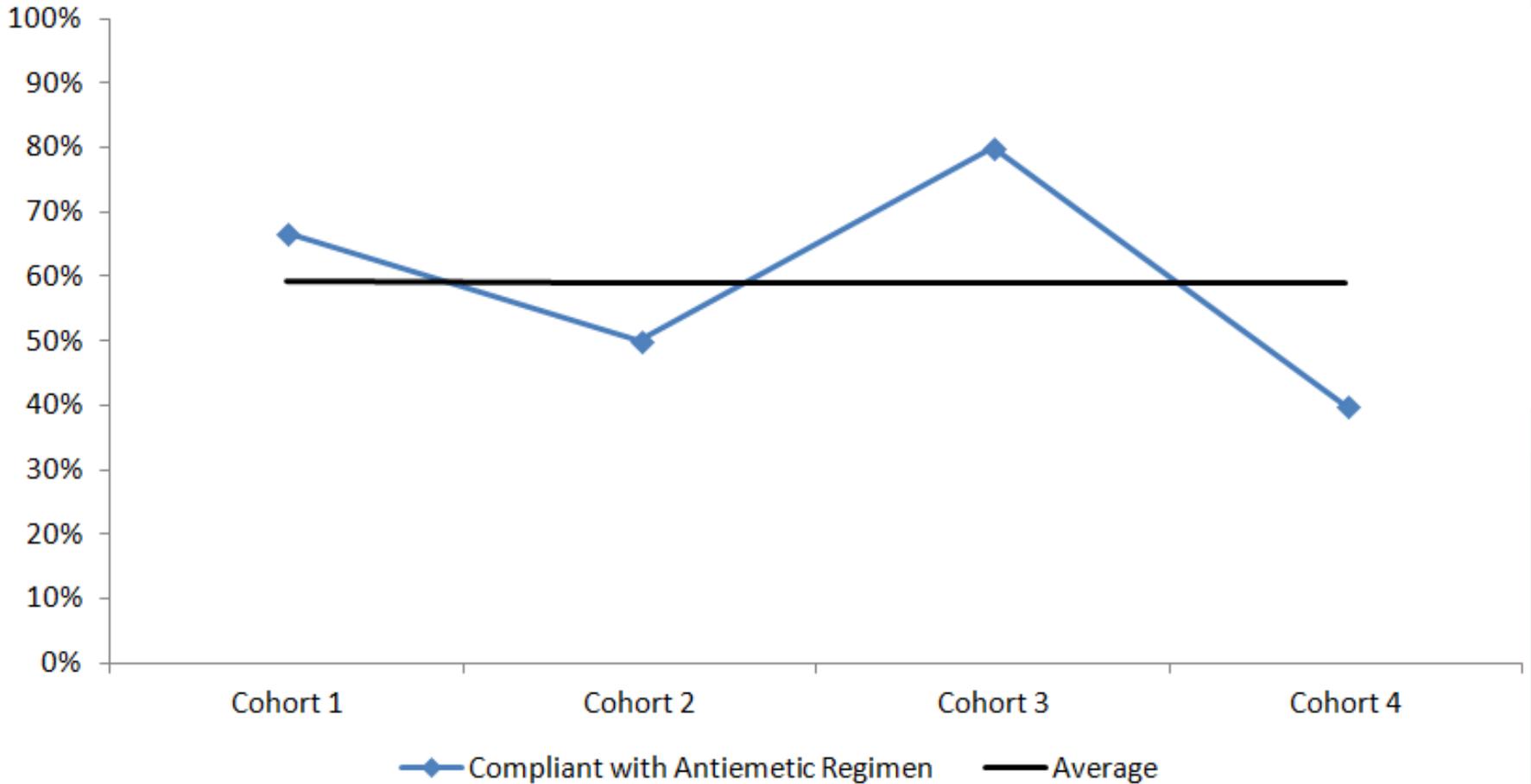
Baseline Data: Patient Survey

Patient Reported Antiemetic Adherence with MEC/HEC Regimens



Baseline Data: Chart Documentation of Adherence

Patients Adherent to Antiemetic Regimen



Measure: Percentage compliant with oral antiemetics as prescribed

- Patient population: breast cancer patients receiving moderate (MEC) or highly emetogenic chemotherapy (HEC) regimens
- Calculation methodology:
 - **Numerator:** Number of patients compliant with antiemetic regimen per cycle
 - **Denominator:** All the patients presently receiving moderate or highly emetogenic regimens
- Data source: Documentation in EHRs (Intergy[©] and Intellidose[®])
- Data collection frequency: Every cycle of chemotherapy (every two or three weeks)
- Data quality (any limitations): Short time for data collection

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

Impact	High	Add emphasis on importance of adherence to antiemetics as prescribed during CRNP Consent Visit	Messaging by CRNP on day 4 of chemotherapy cycle by phone/e-mail
	Low	Template construction and insertion into EHR to improve documentation	Day 2 questionnaire by MA/infusion RN with EHR documentation
		Easy	Difficult
Ease of Implementation			

Materials Developed

- Survey Monkey™ questionnaire
 - <https://www.surveymonkey.com/s/5M7M8NL>
- EHR templates for chemotherapy visits
- Questionnaire for day 2 visits with MA/RN
- Script for day 4 phone contact and secure messaging
- Checklist for chart abstraction

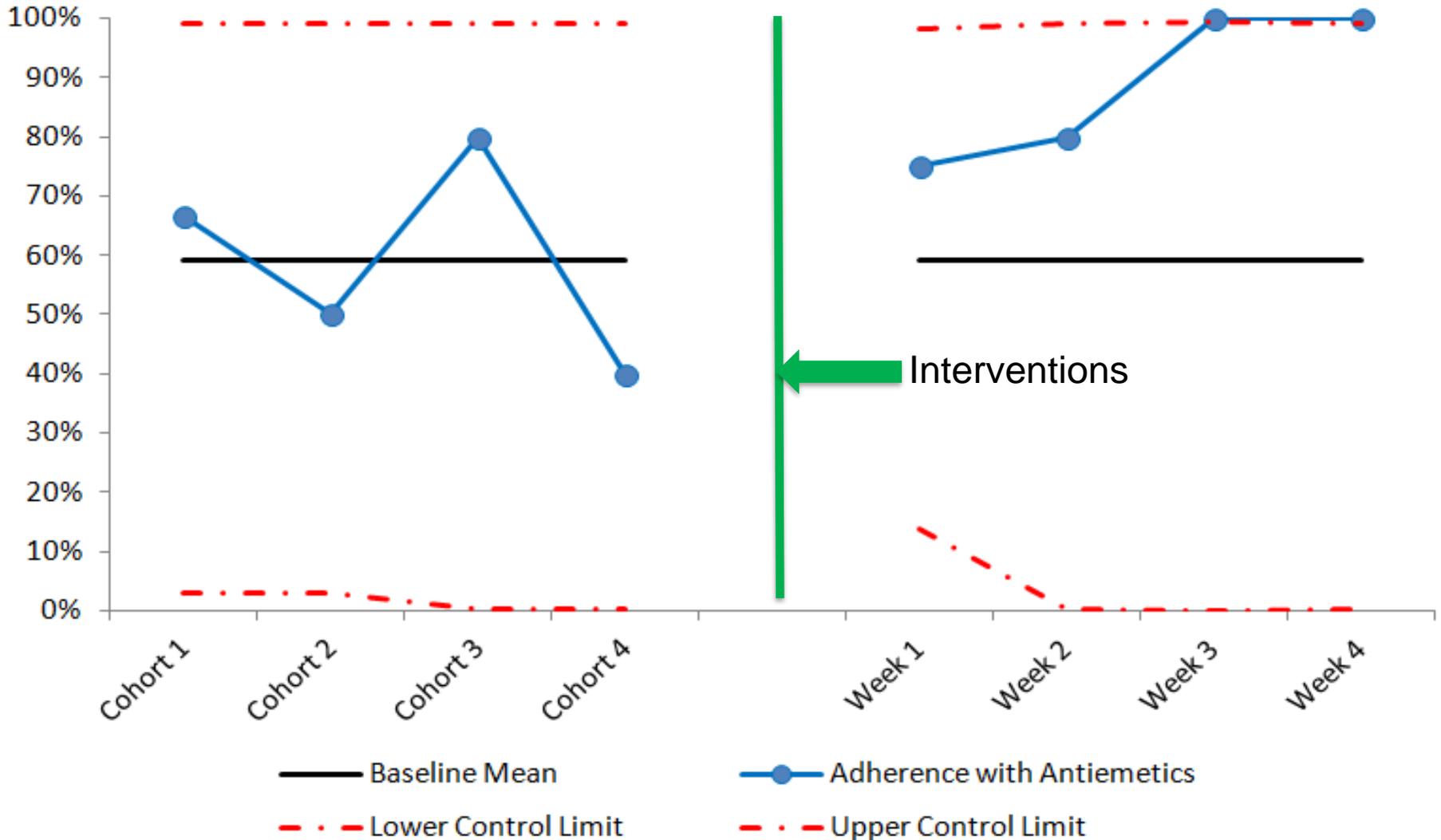
PDSA Plan (Tests of Change)

Date of PDSA cycle	Description of intervention	Results	Action steps
1/20/2014-2/24/2014	Verification of antiemetics and documentation in CRNP consent visit	Discussion on antiemetic regimen done with all patients but documentation in EHR in 5/15	Add this to our consent template to improve documentation
1/27/14-2/27/2014	Day 2 RN/MA questionnaire and documentation; Day 4 CRNP contact on adherence	9/12 13/15 documented Most by phone contact, not e-mail	Continue documentation Continue contact Work on secure messaging
1/30/2014-2/27/2014	Completion of Checklist Adherence template in EHR	14/15	Continue to populate notes with template

Change Data

Patients Adherent to Antiemetic Regimen

(p-chart 3-sigma)



Conclusions

- Improvement was demonstrated by an increase from baseline compliance of 59% to 89%.
- Template creation was the easiest way to remind us about CINV adherence and improve documentation
- Phone contact and use of the day 2 questionnaire helped with adherence. Patients were more receptive to phone contact rather than e-mail contact.
- Secure messaging could not be successfully implemented via our EHR patient portal.

Next Steps/Plan for Sustainability

- Continue to track and report on adherence rates during monthly staff meetings
- Add a new template for Consent Visit documentation of patient education about antiemetics.
- Continue to try to implement secure messaging to communicate about CINV in order to reduce the more resource-intensive phone contact
- Resurvey patients in 3-6 months and elicit feedback about this approach to improve antiemetic adherence
- Extend this project to improve adherence with endocrine and oral chemotherapy agents



Improving Adherence to Oral Antiemetics in Breast Cancer Patients Receiving Chemotherapy

AIM: To improve the percentage of breast cancer patients taking oral antiemetic therapy as prescribed from 59% to 90% by March 6, 2014.

INTERVENTION: In this small breast cancer-dedicated private practice, a retrospective chart review disclosed the following: (1) a significant rate of chemotherapy related nausea and vomiting (CINV), (2) discordance between patient reported compliance with prescribed antiemetics and chart documentation of compliance. We took the following steps to improve adherence: (1) enhanced patient education at time of chemotherapy consent, (2) implementation of standardized in-person, phone and e-mail contact with our chemotherapy patients, (3) improvement of our electronic health record documentation. Using chart abstraction, we measured the percentage of our patients receiving moderately or highly emetogenic chemotherapy who took their antiemetics as prescribed prior to and after these interventions.

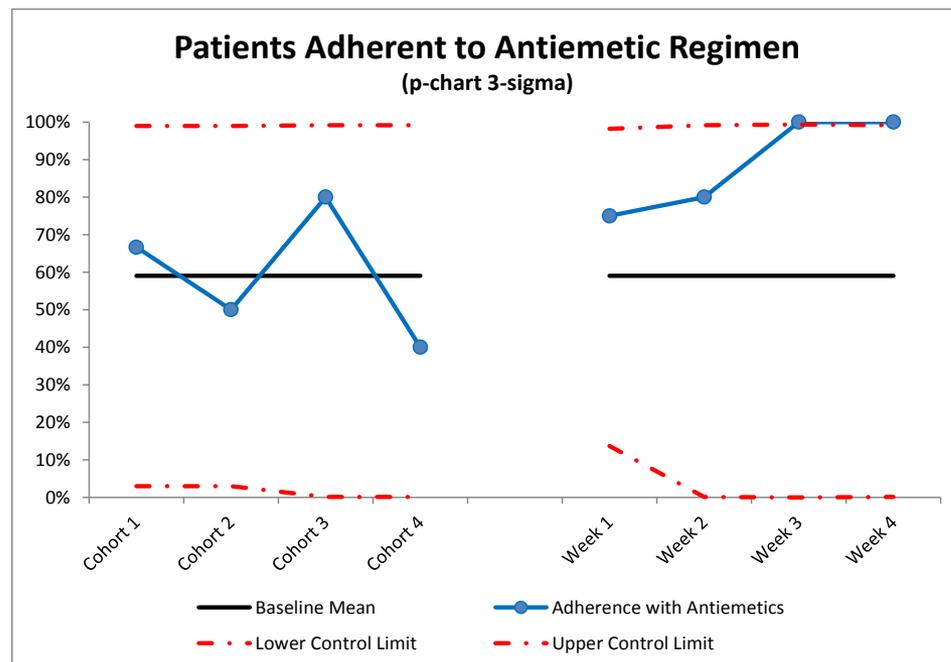
TEAM:

- Susan S. Moreland, DNP, CRNP
- Chrissy Wiles, RN
- Lola Saveedra, MA
- Vicki Hardwick, Administrative Assistant
- Kelly Rosemond, Practice Administrator

PROJECT LEADER:

- Carolyn B. Hendricks, MD
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RESULTS:



CONCLUSIONS: Significant improvement in the percentage of patients who took their antiemetics as prescribed was demonstrated after our interventions.

NEXT STEPS:

- (1) Continued assessment and reporting of adherence rates
- (2) Creation of an additional template for Consent Visit education and documentation
- (3) Continue to try and implement secure messaging for communication about CINV
- (4) Resurvey patients in 3-6 months to elicit feedback about this approach
- (5) Expand these interventions to endocrine and oral chemotherapy agents