



**Department
of Health**

A Demonstration Project to Improve Cancer Screening Rates in New York State Federally Qualified Health Centers

**Gina O'Sullivan, MPH, Erin Shortt, MS, Heather Dacus, DO, MPH, Ian Brissette,
PhD, Katherine Pfisterer, MPH**

September 19, 2017

Project Background

- In 2012, NYSDOH received CDC funding to implement a 5 year innovative demonstration project to advance population-based cancer screening by improving the capacity of federally qualified health centers (FQHCs) to deliver quality preventive care for breast, colorectal and cervical cancer

NYSDOH collaborated with Community Health Care Association of New York State (CHCANYS) and IPRO to develop and implement the 5-year demonstration project



Heather Dacus, DO, MPH,
Director, Bureau of Cancer
Prevention and Control



Lisa Perry, MBA, MPP,
Vice President, Quality
and Technology Initiatives



Alan Silver, MD, MPH,
Medical Director

Ian Brissette, PhD,
Director, Bureau of
Chronic Disease
Evaluation and Research

Diane Ferran, MD, MPH,
Senior Director of Quality
Improvement

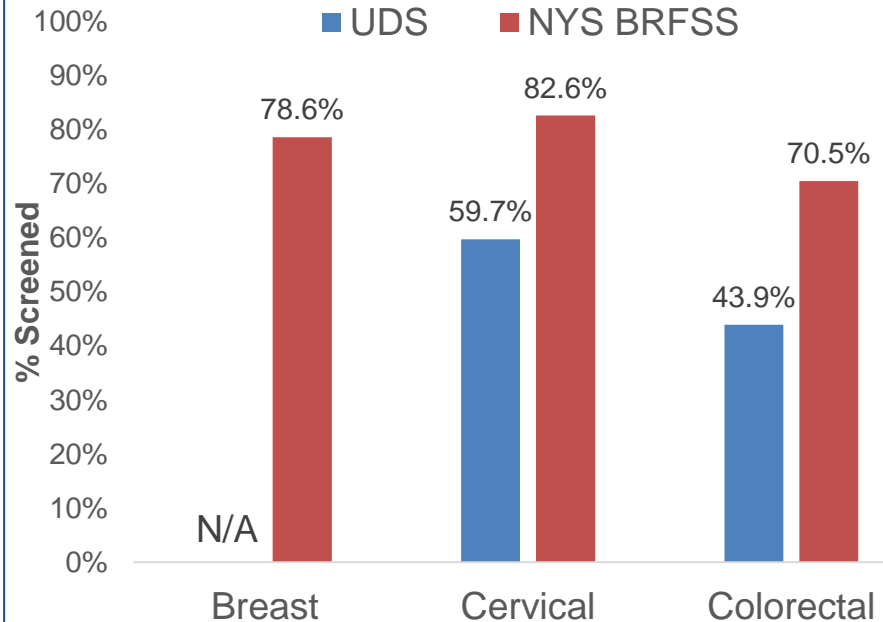


NYS FQHCs

65 FQHCs serve
1.9 million patients

- ▶ **87%** low income
(below 200% of FPL)
- ▶ **57%** utilize Medicaid
- ▶ **17%** uninsured
- ▶ **26%** speak a language
other than English

When compared to **NYS residents**, patients in **NYS FQHCs** are less likely to be up-to-date with cancer screening



Project Purpose: Develop and use a clinical information system to support quality improvement (QI) efforts related to cancer screening

Project Objectives

Clinical Information System

- Build screening metrics in system
- Connect at least 75% of NYS FQHCs to system
- Validate data between system and FQHC EMRs

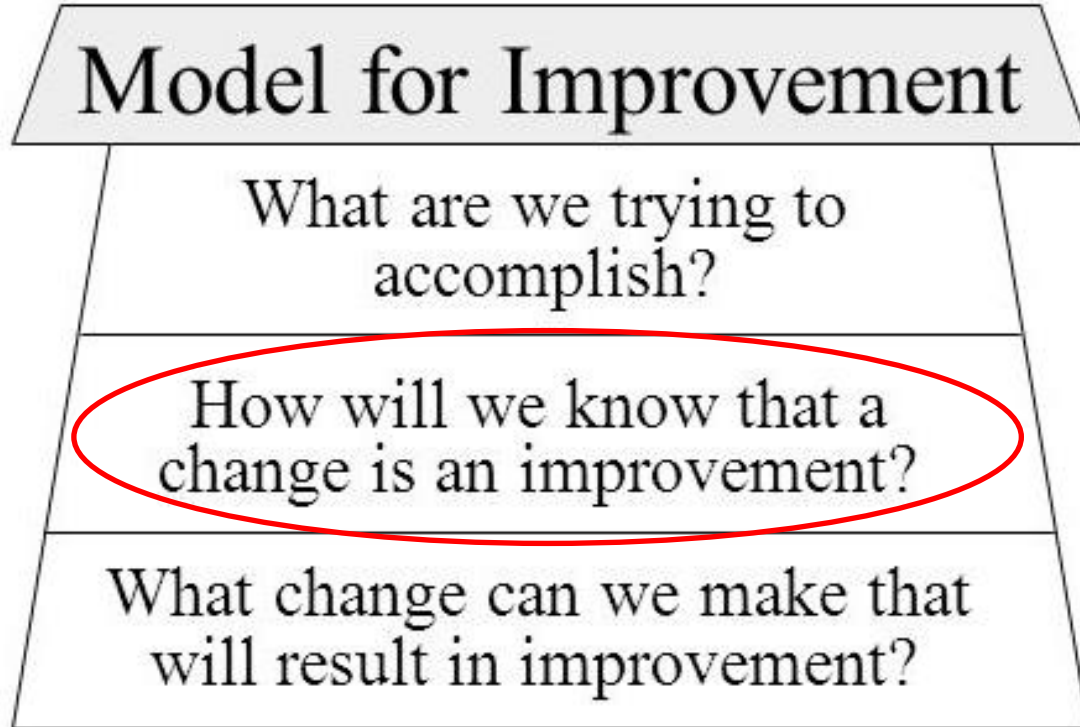
Quality Improvement

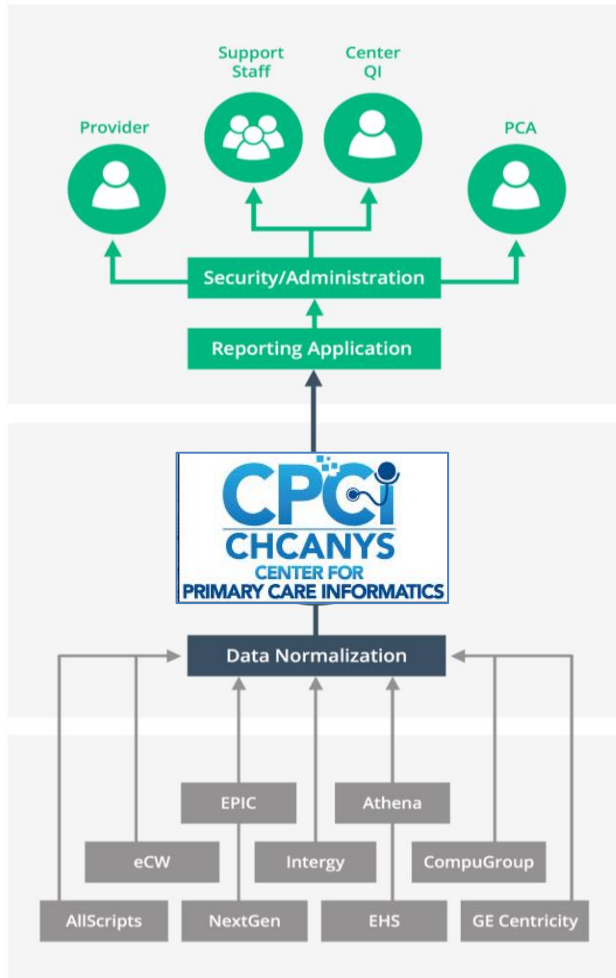
- Deliver 12-months of data quality and quality improvement support to FQHCs

Project Goal

Increase breast, cervical, and colorectal screening rates among participating FQHCs by at least 10%

Rationale for Prioritizing Clinical Information System

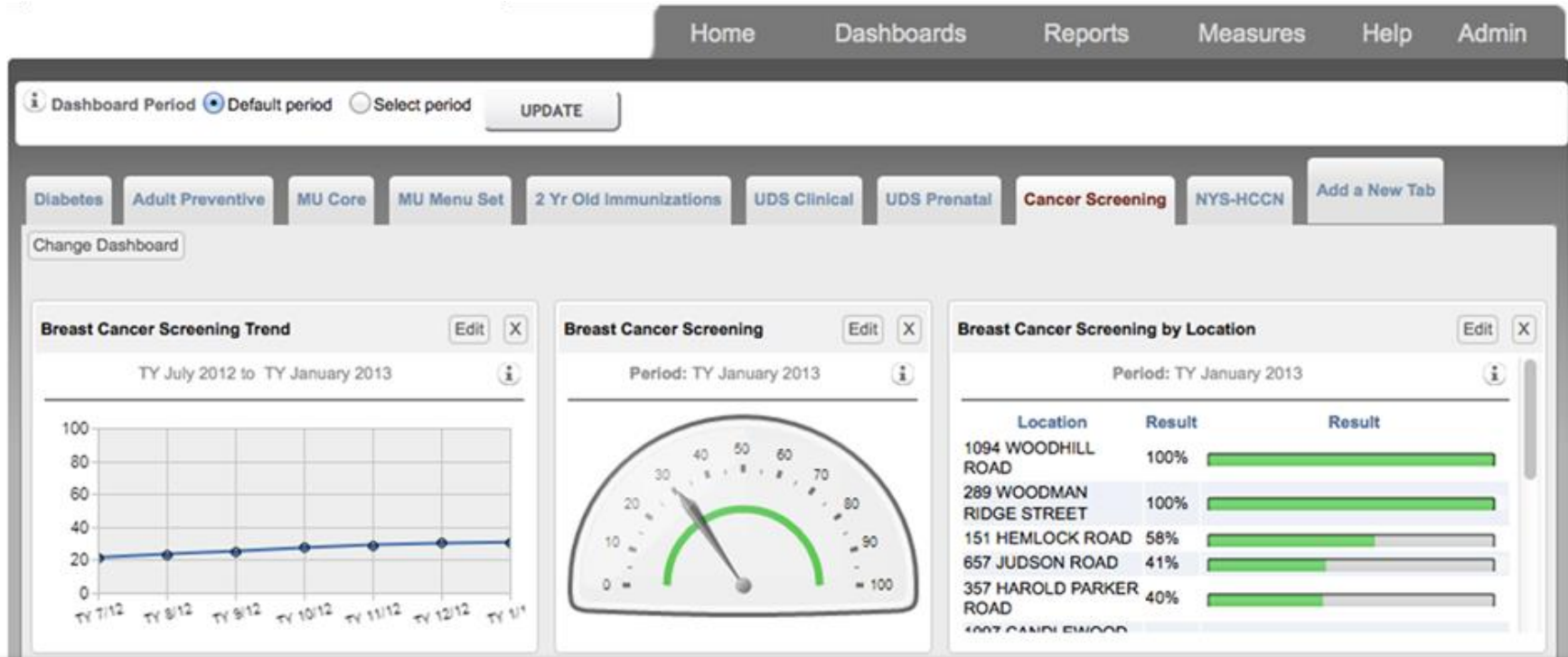




Data System = CHCANYS Center for Primary Care Informatics (CPCI)

- Extracts data from EHRs
- Calculates performance results
- Displays performance dashboards
- Provides clinical workflow tools

CPCI Cancer Screening Dashboard



**Provides actionable data and valuable reporting at multiple levels:
Statewide, FQHC, FQHC site, Provider, Patient**

Key Project Activities



FQHC Recruitment



Data Validation



Quality Improvement



Measuring Outcomes

FQHC Recruitment → Project Reach

CHCANYS recruited **45 NY FQHCs** to connect to CPCI and to participate in 12-months of QI support

	Number of FQHCS	Number of Practice Sites	Number of EHR Types
Cohort 1	12	73	3
Cohort 2	11	41	4
Cohort 3	22	73	7

Data Validation

Purpose: Understand data quality in CPCI and support data quality assurance activities

- Completed prior to each yearlong QI initiative
- Sample of CPCI patient data compared to data from clinic EHRs
- Calculated agreement statistics for each measure
- Practice-specific feedback → actionable results shared with FQHCs

Summary of Data Validation Findings

Categories of data quality errors identified:

1. Erroneous inclusions/exclusions
2. Inappropriate use of codes/data mapping
3. Inconsistent workflow processes re: data entry

Strategies to address data quality issues:

- Data mapping errors between EHRs and the CPCD
- Opportunities to train FQHC staff about documentation in structured fields
- Involvement of practice IT staff to assist

Quality Improvement

QI Pre-Work

Data Validation

- Used to identify and prioritize areas for data quality improvement

Workflow Assessment

- Gain understanding of existing processes and systems that each practice used to get patients screened

Quality Improvement

Project Kick-Off

Kick-Off Meeting with Health Center QI Teams

- Review data validation and workflow assessment results
- Identify key areas to focus QI activities and direct practices to select strategies to address these issues

Quality Improvement

12-Months QI Support

Webinars, Emails, Coaching Calls

- Data quality and QI strategies

In-Person Meetings

- Mid-year and year-end sessions with all health centers
- Sharing best practices via individual team presentations

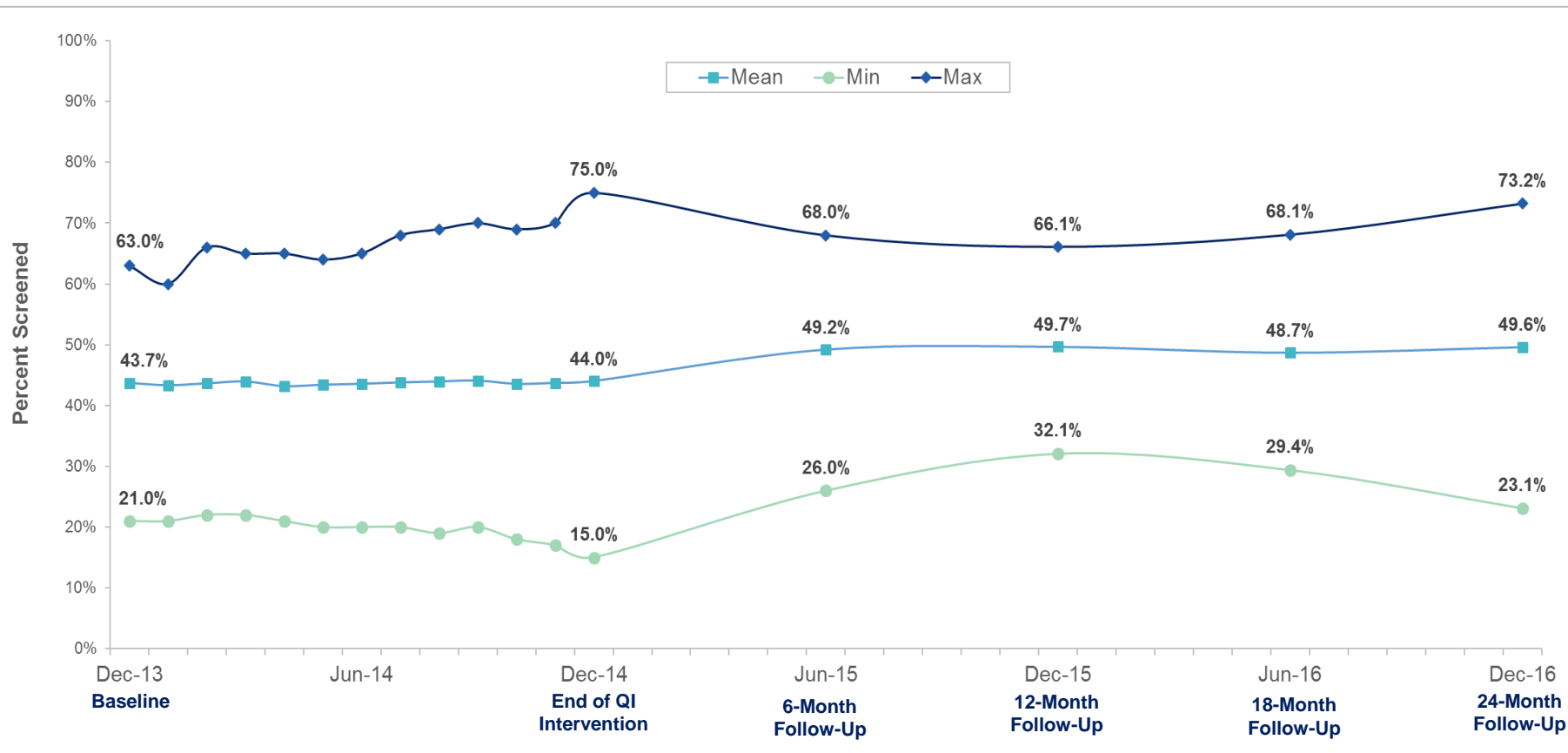
Examples of QI Strategies

- ▶ Policy for cancer screening
- ▶ Evidence-based interventions
 - Provider recommendations
 - Practice reminder systems
 - Tracking and monitoring
- ▶ Data quality assurance
- ▶ Sustainability and spread

Measuring Screening Outcomes

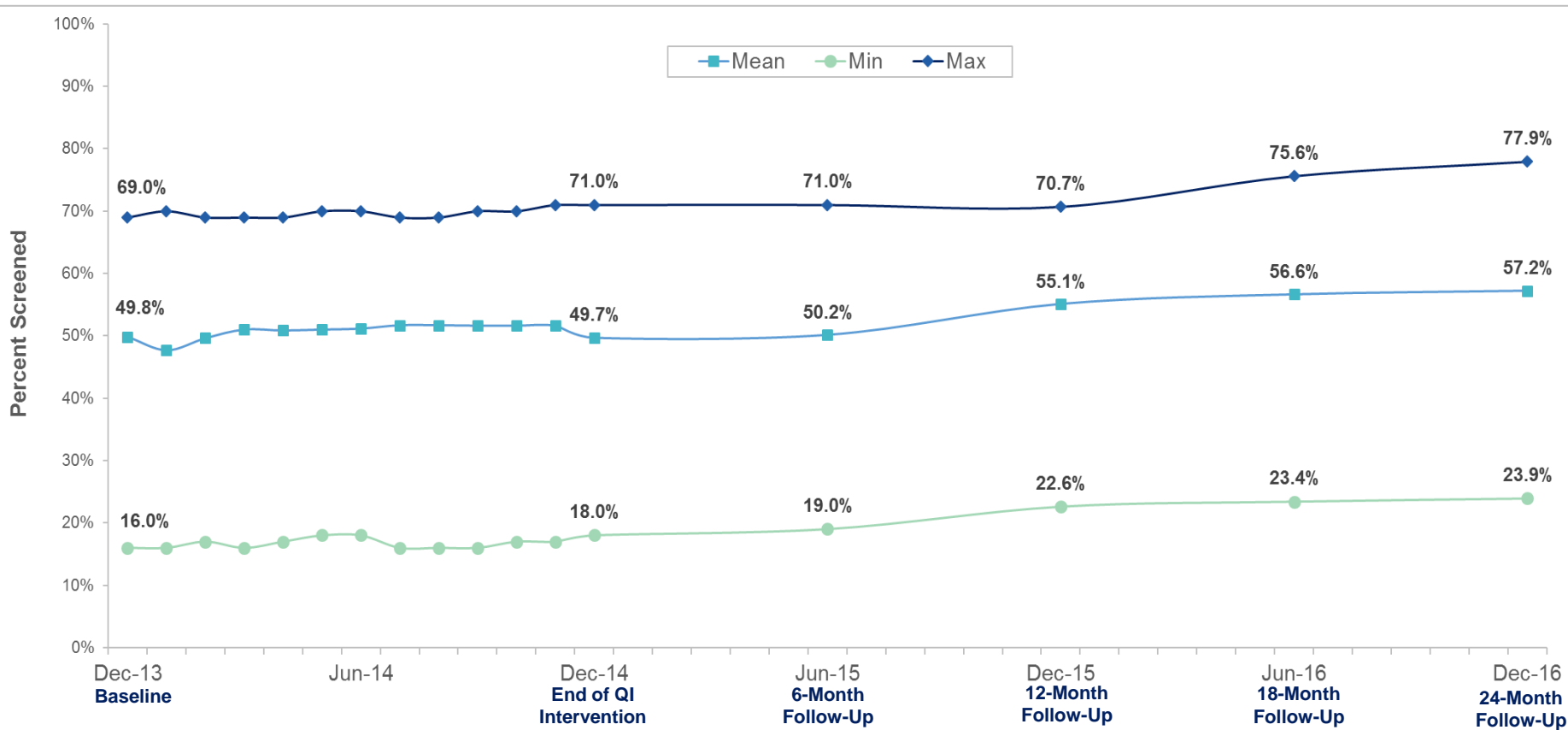
- CPCI screening data were used to monitor health center performance
- Monthly comparison of screening rates with baseline during course of QI intervention
- Continued follow-up at 6-month intervals post QI intervention

Cohort 1 TY Monthly Breast Cancer Screening Rates, (N=14*)



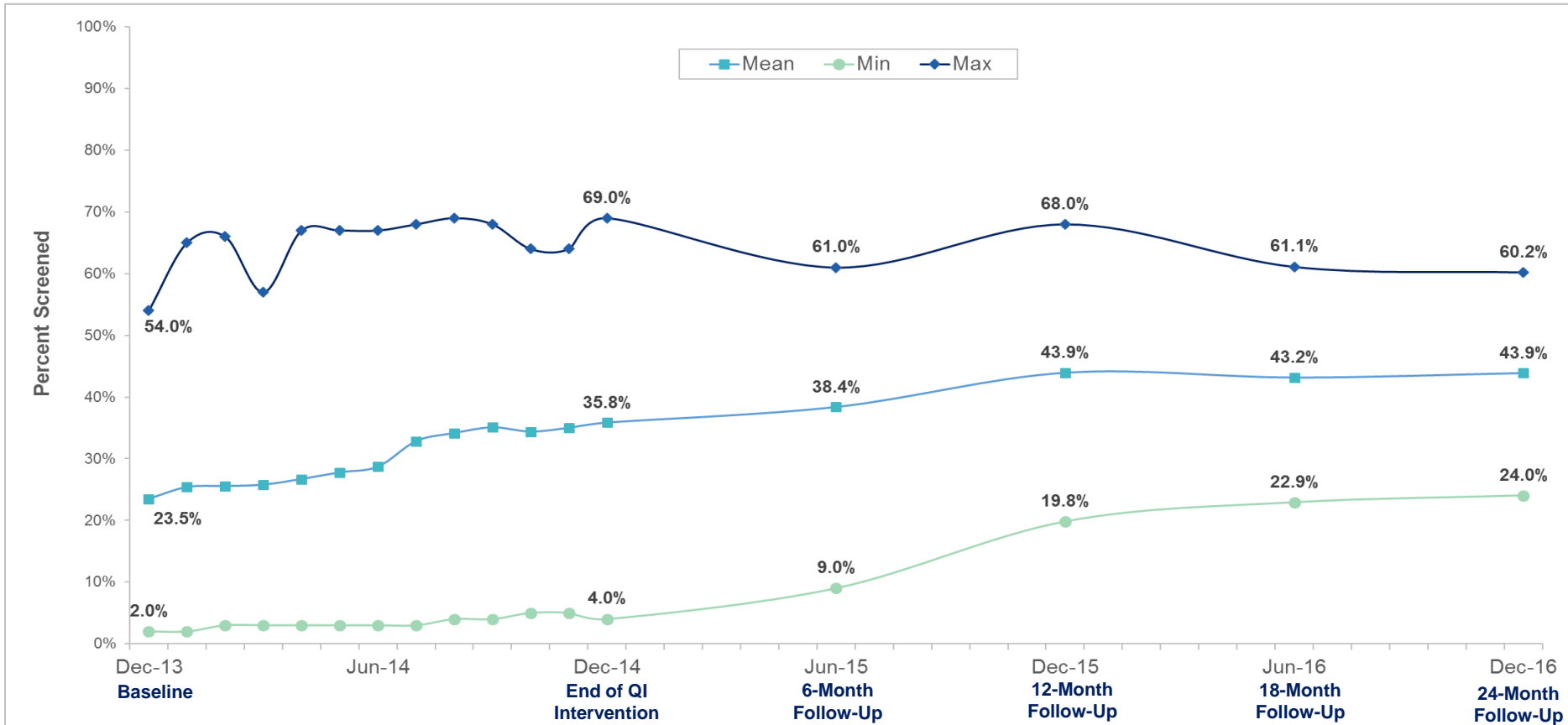
* 14 Health care settings (5 practices and 9 practice sites) participated in Cohort 1; data from 1 practice excluded; As of TY June 2016 missing data from 1 practice site due to site closure.

Cohort 1 TY Monthly Cervical Cancer Screening Rates, (N=14*)



* 14 Health care settings (5 practices and 9 practice sites) participated in Cohort 1; data from 1 practice excluded; As of TY June 2016 missing data from 1 practice site due to site closure.

Cohort 1 TY Monthly Colorectal Cancer Screening Rates, (N=14*)



* 14 Health care settings (5 practices and 9 practice sites) participated in Cohort 1; data from 1 practice excluded; As of TY June 2016 missing data from 1 practice site due to site closure.

Cohort 1 Progress to Date: Baseline [Dec-13] to 24-Month Follow-Up [Dec-16]

	Breast	Cervical	Colorectal
% Change in Screening Rate	↑ 8.9%	↑ 14.2%	↑ 83.5%
# Patients Up-to-Date with Screening	1,036	3,805	4,292

***9,133 additional patients
are now up-to-date with breast,
cervical or colorectal cancer screening***

Cohort 2 Progress to Date: Baseline [Dec-14] to 12-Month Follow-Up [Dec-16]

	Breast	Cervical	Colorectal
% Change in Screening Rate	↑ 15.9%	↑ 13.5%	↑ 18.9%
# Patients Up-to-Date with Screening	+850	+1,929	+1,661

***4,440 additional patients
are now up-to-date with breast, cervical
or colorectal cancer screening***

Cohort 3 Preliminary Outcomes: Baseline [Mar-16] – QI Project End [Feb-17]

	Breast	Cervical	Colorectal
% Change in Screening Rate	↑23.3%	↑9.9%	↑13.0%
# of Patients Up-to-Date with Screening	+1,529	+746	+788

Summary and Conclusions

Current Status of CIS-Related Project Objectives

Build screening metrics in clinical information system

Completed – Year 1 (2012)

Connect at least 75% of NYS FQHCs to system

70% of NY FQHCs connected to CPCI as of June 2017

Validate data between system and FQHC EMRs

Participating FQHCs completed data validation process prior to QI work

Summary and Conclusions

Current Status of QI Objectives and Goals

Deliver 12-months of data quality and quality improvement support to FQHCs

3 cohorts representing 45 FQHCs participated in yearlong QI interventions

Increase FQHC cancer screening rates by 10% over baseline

Across cohorts sustained improvements in cancer screening rates at >10% over baseline

Summary and Conclusions

Results to date suggest that combination of data quality activities and quality improvement support has led to:

- Adoption of improved workflows by FQHCs
- Use of clinical information system to support QI
- Sustained improvements in average cancer screening rates

Lessons Learned

Value of Collaboration

- Benefits of diverse team

Data Quality is Not Guaranteed

- Cannot be assumed and must be an ongoing focus

Focus QI Efforts

- Small scale tests of change (center v. site focus; focus on 1-2 metrics v. all 3)

Lessons Learned

Effects of Changing HIT Environment

- Switching EHRs
- Measure specification changes
- Changes in codes

Sustainability

- Continued learning and TA after QI support
- Established relationships with FQHCs to support additional projects to promote cancer screening (ex: patient navigation)

Contact Information

Erin Shortt, Project Manager

Bureau of Cancer Prevention and Control

erin.shortt@health.ny.gov

Gina O'Sullivan, Program Evaluator

Bureau of Chronic Disease Evaluation and Research

gina.osullivan@health.ny.gov