NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Improving Health Outcomes: Strategic Data-Driven Interventions

Thursday, January 29, 2026
3:00 - 4:00pm Eastern / 12:00 - 1:00pm Pacific

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $550,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Continuing Education Credits (CEUs)

Through MWHS, the Weitzman Institute can award continuing education credit (CEUs) to physicians, nurse practitioners, pharmacists, nurses, physician associates/assistants, dentists, psychologists, social workers, and dietitians. Please note that continuing education credit requirements differ by state, jurisdiction, and licensing agency. It is your responsibility to confirm if your licensing/credentialing agency will accept the credits offered by Weitzman Education activities.

To learn more, please visit:
https://education.weitzmaninstitute.org/content/about-us

JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Disclosure

- With respect to the following presentation, there has been no relevant (direct or indirect) financial relationship between the party listed above (or spouse/partner) and any for-profit company in the past 12 months which would be considered a conflict of interest.
- The views expressed in this presentation are those of the presenters and may not reflect official policy of Community Health Center, Inc. and its Weitzman Institute.
- We strive to create a respectful and welcoming learning environment. If anything in today's session makes you feel uncomfortable, please let us know via email at nca@chc1.com.
- We are obligated to disclose any products which are off-label, unlabeled, experimental, and/or under investigation (not FDA approved) and any limitations on the information that we present, such as data that are preliminary or that represent ongoing research, interim analyses, and/or unsupported opinion.
- This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $550,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

MOSES/WEITZMAN
Health System

Always groundbreaking. Always grounded.

Community Health Center, Inc.

A leading Federally Qualified Health Center based in Connecticut.

CeCN

A national eConsult platform improving patient access to specialty care.

The Consortium for Advanced Practice Providers

A membership, education, advocacy, and accreditation organization for APP postgraduate training.

National Institute for Medical Assistant Advancement

An accredited educational institution that trains medical assistants for a career in team-based care environments.

The Weitzman Institute

A center for innovative research, education, and policy.

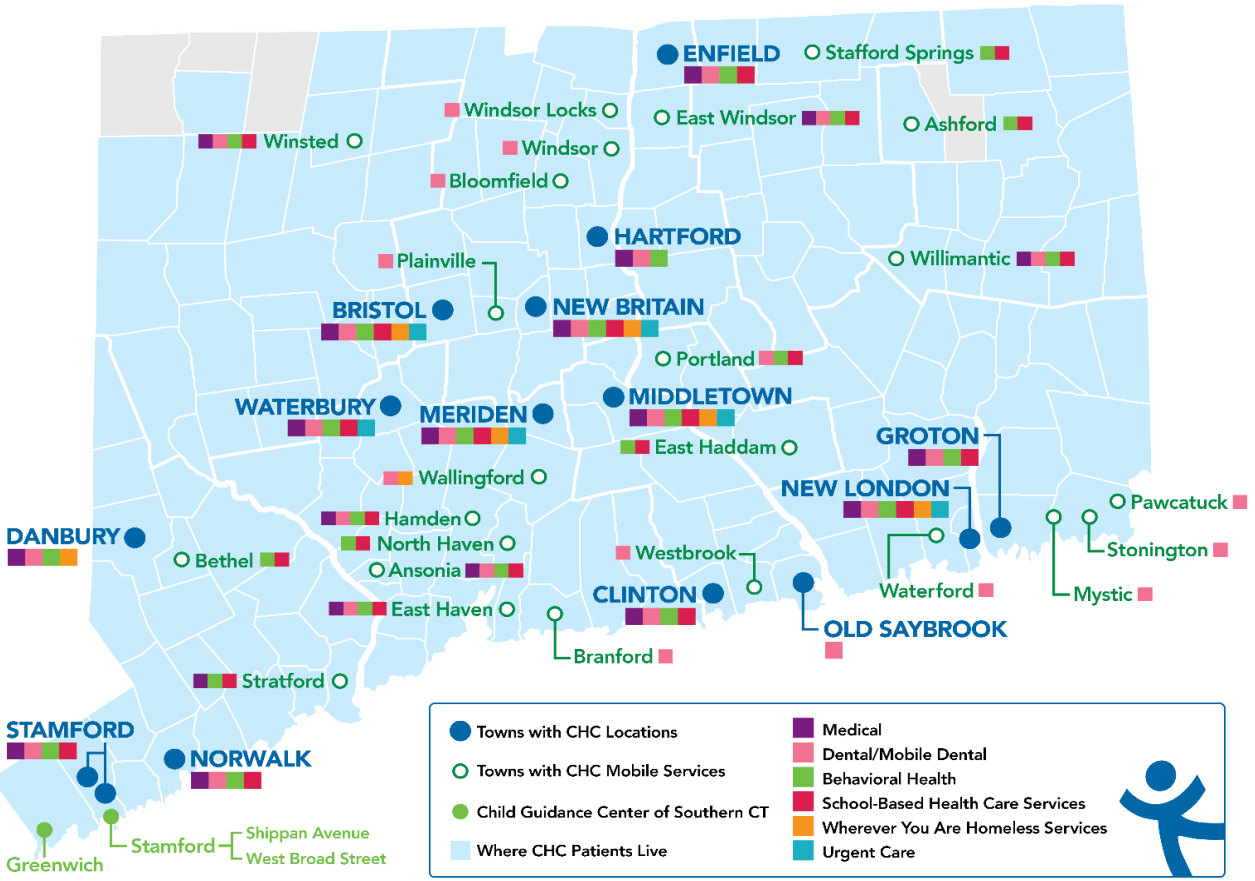
Center for Key Populations

A health program with international reach, focused on the most vulnerable among us.

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Community Health Center, Inc.

Locations & Service Sites



THREE FOUNDATIONAL PILLARS

1	2	3
Clinical Excellence	Research and Development	Training the Next Generation

Overview

- Founded: May 1, 1972
- Staff: 1,400
- Active Patients: 150,000
- Patients CY: 107,225
- SBHCs across CT: 152

Year	2022	2023	2024
Patients Seen	102,275	104,917	107,225

National Training and Technical Assistance Partners (NTTAP)
Clinical Workforce Development

Provides **free** training and technical assistance to federally funded health centers and look-alikes across the nation through webinars, activity sessions, communities of practice, trainings, publications, and more!

To learn more, please visit https://www.weitzmaninstitute.org/nca.

Speakers

- Karoline Oliveira, Ed. D, Chief of Clinical Excellence, Moses/Weitzman Health System
- Tierney Giannotti, MPA, Director, Population Health; Community Health Center, Inc.

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Learning Objectives

1. Describe the significance of collecting demographic data for community member health and access to care
2. Understand how CHCI's data is reflected based on patient data reporting
3. Understand how patient demographic data is used to support health outcomes

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Patient Demographic Data

- Race
- Ethnicity
- Language
- Housing Status
- Household Income

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Improving Health Outcomes Requires:

- ✓Develop strategies to improve health outcomes across our patient populations
- ✓Screen for and address health related needs that contribute to improving health outcomes
- ✓Collect demographic data in order to understand who our patients are for the purpose of developing appropriate practices and interventions

How is demographic data used to improve health outcomes?

Ensuring access to care members of our surrounding community

Ensuring health of our individual community members

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Ensuring Access to Care

Document important differences in access between patient groups

Supports targeted efforts to promote access to care within communities that seek primary care at a lower rate

Ensuring Health for Community Members

Identifying the prevalence of various health conditions and related risk factors within specific groups

Understanding risks at the individual or community level

Allocation of resources for the development of targeted health interventions

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Note…

- It is important to understand, however, the practice of collecting demographic data or describing health related needs, alone, do not lead to better health outcomes or clinical experiences for patients
- Demographic data must be incorporated into the development and implementation of policies and practices in order to effectively address health related needs
- AND…the data must be complete, reliable and robust

Reporting Race of CHC Patients

Denominator: Patients who DO report race
Finding: 25% of our patients are Black/African American

Patients By Race & Ethnicity (as reported to UDS for 2024)	%
Racial and/or Ethnic Minority Patients	78.33%
Black/African American Patients	27.74%
Hispanic/Latino Patients	58.23%
Non-Hispanic White Patients	39.37%
Asian Patients	6.05%
Native Hawaiian/Other Pacific Islander Patients	0.58%
American Indian/Alaska Native Patients	1.01%
More than one race Patients	1.79%

Denominator: ALL of our patients regardless of whether we have data on their race
Finding: 12% of our patients are Black/African American

Patients By Race & Ethnicity (where denominator includes patients of unknown ethnicity or race)	%
Racial and/or Ethnic Minority Patients	67.58%
Black/African American Patients	13.18%
Hispanic/Latino Patients	53.67%
Non-Hispanic White Patients	18.70%
Asian Patients	2.88%
Native Hawaiian/Other Pacific Islander Patients	0.28%
American Indian/Alaska Native Patients	0.48%
More than one race Patients	0.85%

Patient Feedback

Patients have questions about what we use the data for

Trust:

Patients are more likely to share if they trust the relationship

Timing:

Patients may feel more comfortable after seeing the clinical provider rather than at the time of registration

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Strategies for Data Collection

- Conduct focus groups
- Recorded videos in patient waiting areas
- Live trainings for appropriate staff
- Text messaging to patients
- Grand Rounds to front line clinical teams

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Alicia Video

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Key Take-A-Ways…

1. Collecting demographic data is part of the pursuit of improving health outcomes
2. Collecting demographic data is fundamental to
   - Ensuring health of our community members
   - Ensuring access to care
3. We all contribute to the collection of patient demographic data

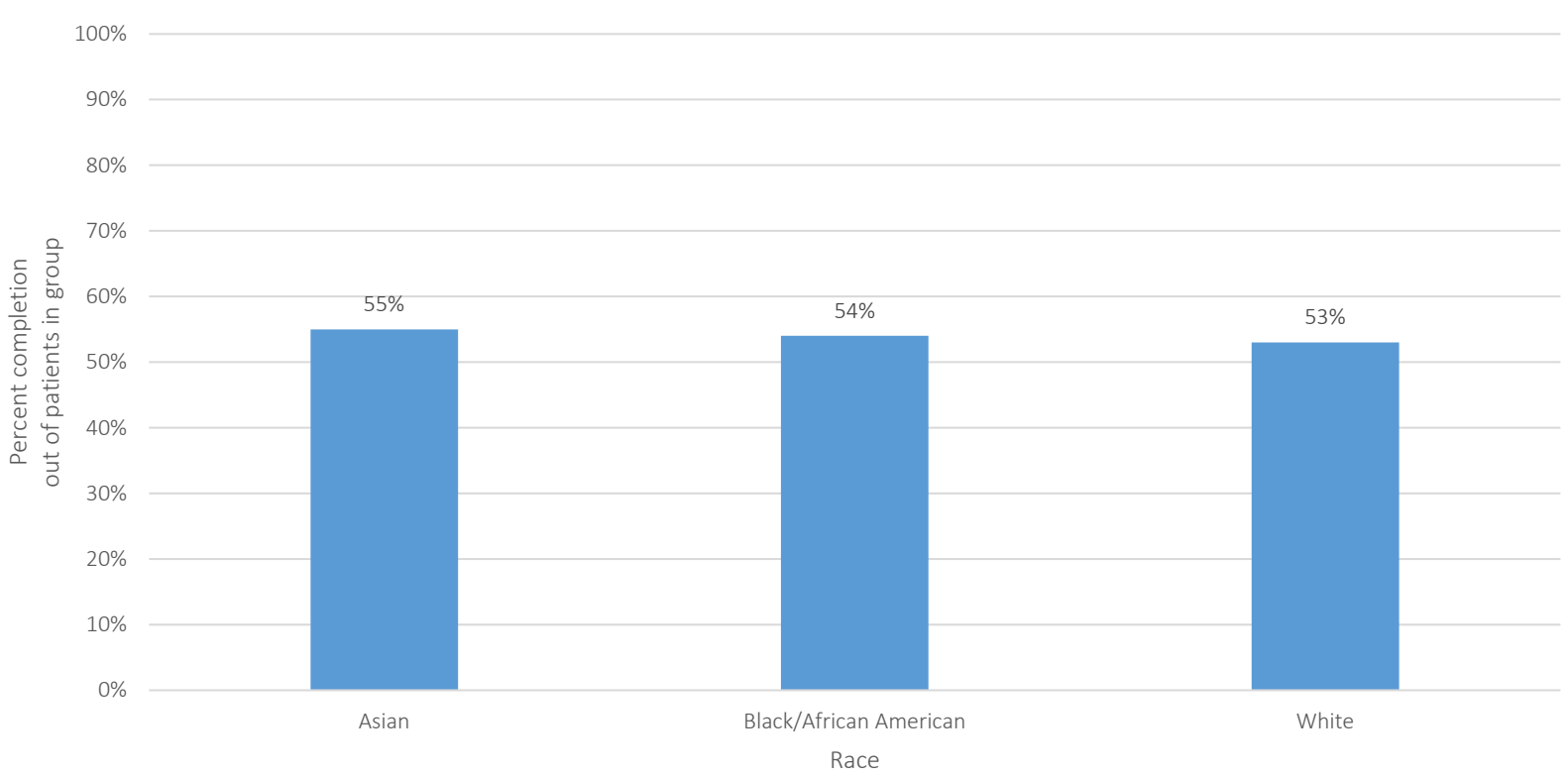
NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Putting Data to Use

Using Demographic Data

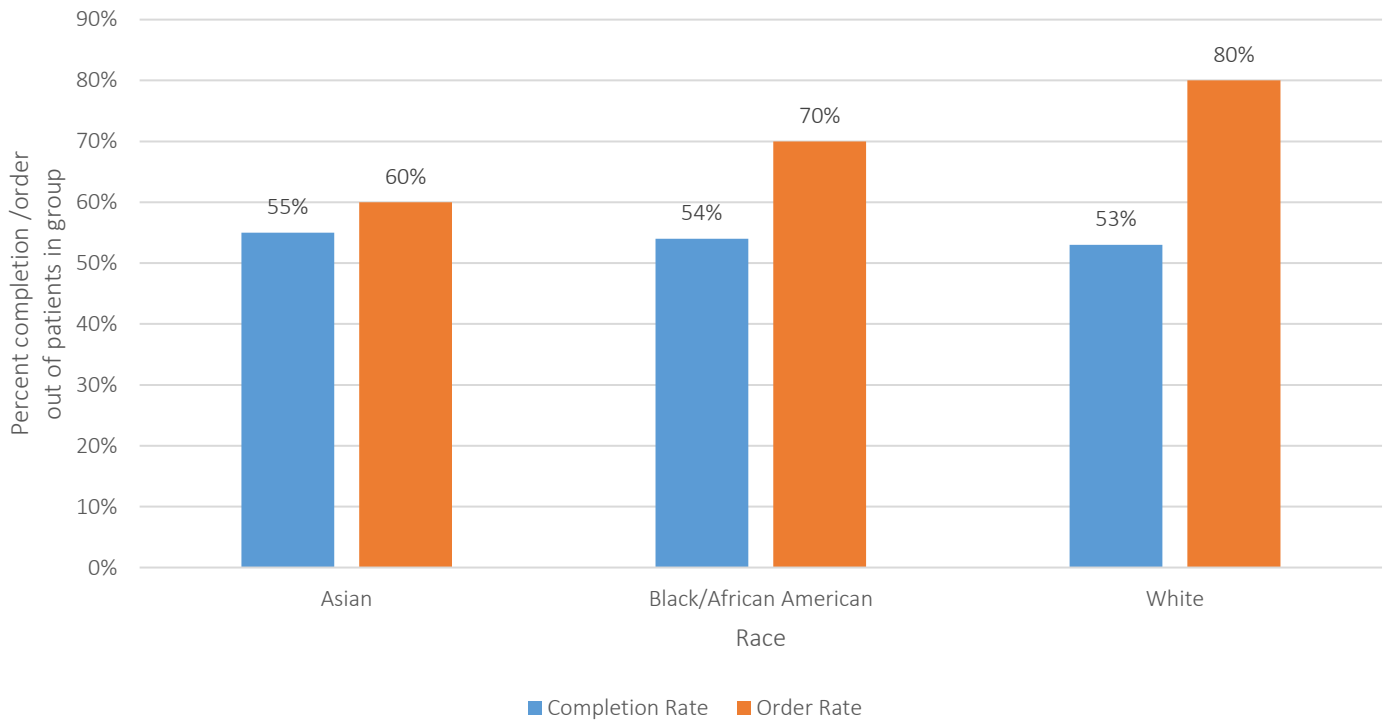
- Analyze the population of patients seen at the health center and in the communities where the site is located
  - Example: Identify the make up of the city where your site is located and then look at the population of patients you serve. If 13% of the city is Black/African American, you want 13% of your patients to be Black/ African American
- Analyze quality measure rates by key demographic variables. Disaggregate the measures to identify differences
  - Example: UDS cancer screening rates – look at rate of orders and completion by race, ethnicity, preferred language

Patients up to date with Colorectal Cancer Screening



Preliminary Analysis: There is no difference in colorectal cancer screening by race

Colorectal Cancer Screening: Completed and Order Rate for Patients Not Up to Date



Add in the rate of ordering screening for patients who are not up to date: There is a difference in the ORDERING OF colorectal cancer screening by race

Analysis of Means (ANOM)

- Similar to analysis of variance (ANOVA)
- Created by engineers to provide a visual display of results
- Provides multiple comparisons and corrects for the number of comparisons
- Comparison is to the overall average
- Do not compare individual results to one another

ANOM: Template

Analysis of Means (ANOM) Template for Percent Data for 2 groups

Follow the steps for an ANOM that has 2 groups:
1) Type or paste your numerator and denominator into the formulas section below (columns B & C).
2) Type the Group names into this same section to the left (column A)
3) If you to sort the percent data (ascending or descending then select the groups to lower limits cells, go to Data pull-down menu and select Sort by percent.
4) Adjust where x-axis crosses the y-axis. Go to the chart - Double click on y-axis - go to scales tab. Change x-axis crosses at to the overall percent.

formulas section

Groups	Numerator	Denomerato	percent	upper limit	lower limit
Group 1			#DIV/0!	#DIV/0!	#DIV/0!
Group 2			#DIV/0!	#DIV/0!	#DIV/0!
overall	0	0	#DIV/0!	overall percent	

******* don't forget the x-axis crosses the y-axis at the overall percent (instruction 4)

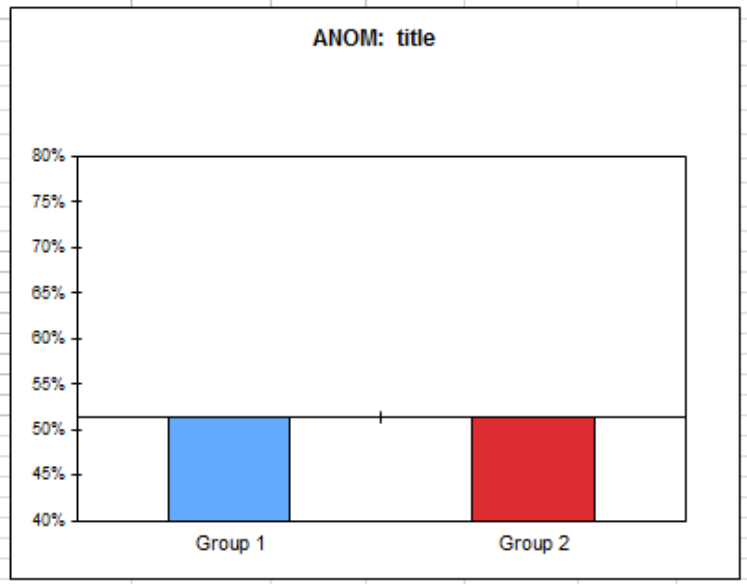
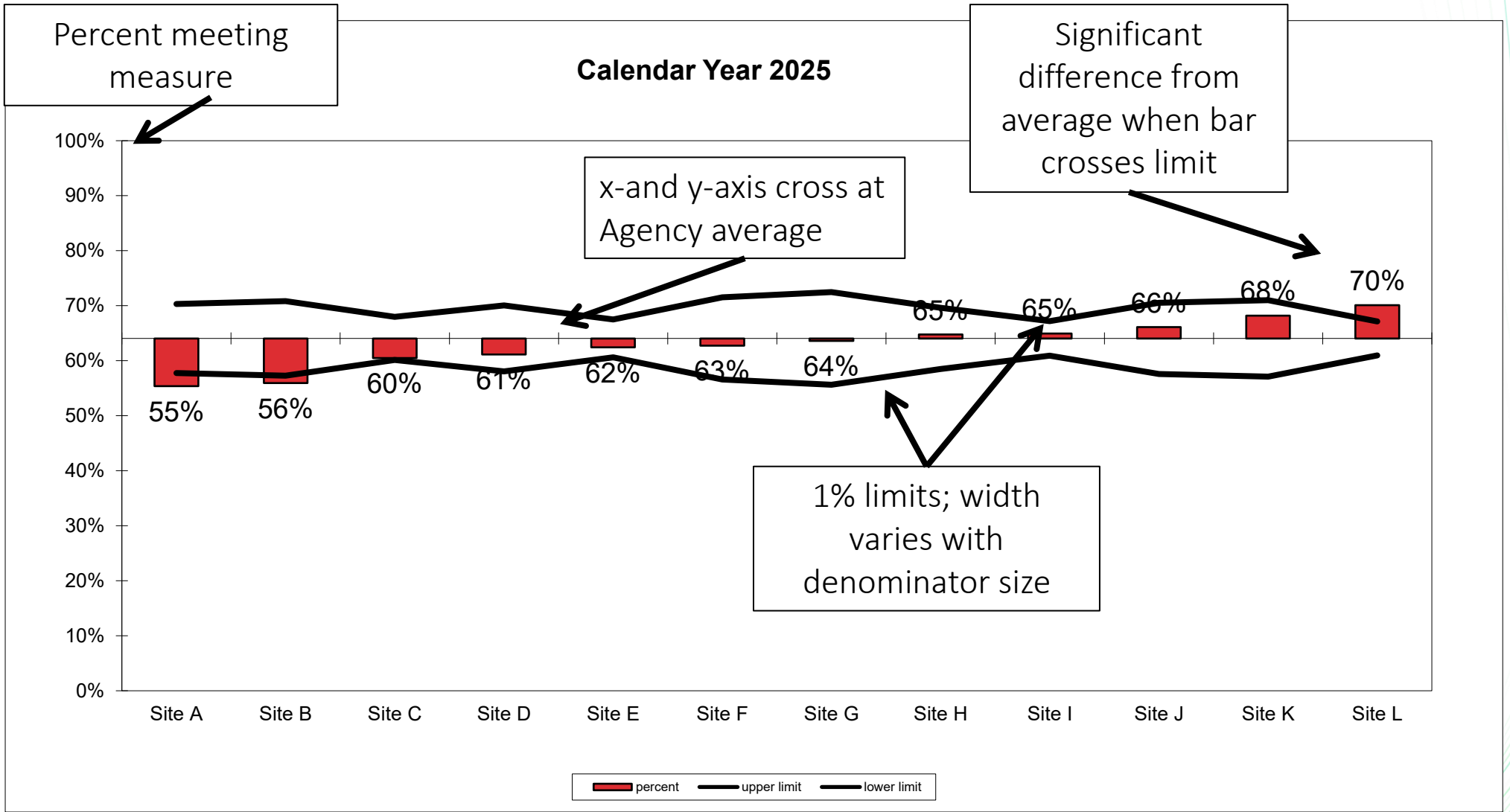


Table of Factors for Percent Data ANOM

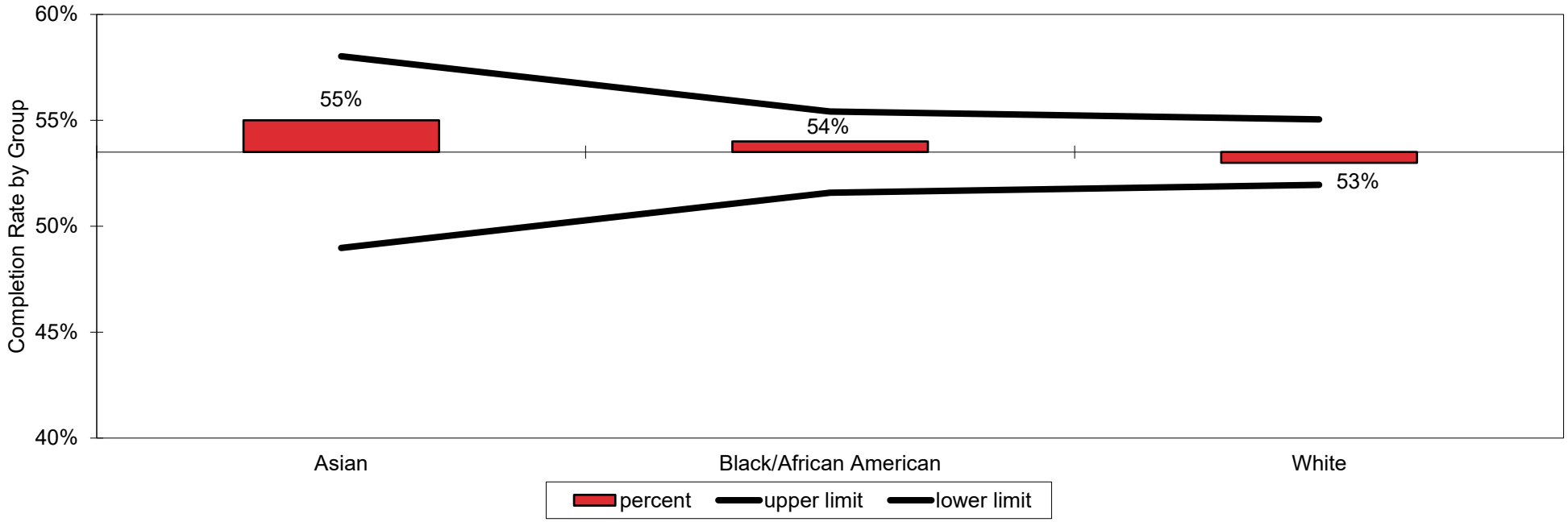
Number of Groups being compared	Risk 10%	5%	1%
2	1.16	1.39	1.82
3	1.73	1.95	2.4
4	1.93	2.16	2.62
5	2.07	2.3	2.76
6	2.18	2.41	2.87
7	2.26	2.49	2.95
8	2.33	2.55	3.02
9	2.39	2.61	3.07
10	2.44	2.66	3.12
15	2.61	2.83	3.29
20	2.73	2.94	3.39
30	2.88	3.09	3.53
40	2.98	3.18	3.62
50	3.05	3.25	3.68
60	3.11	3.31	3.73

Chapter 8, p. 159 from Davis Ballestracci text

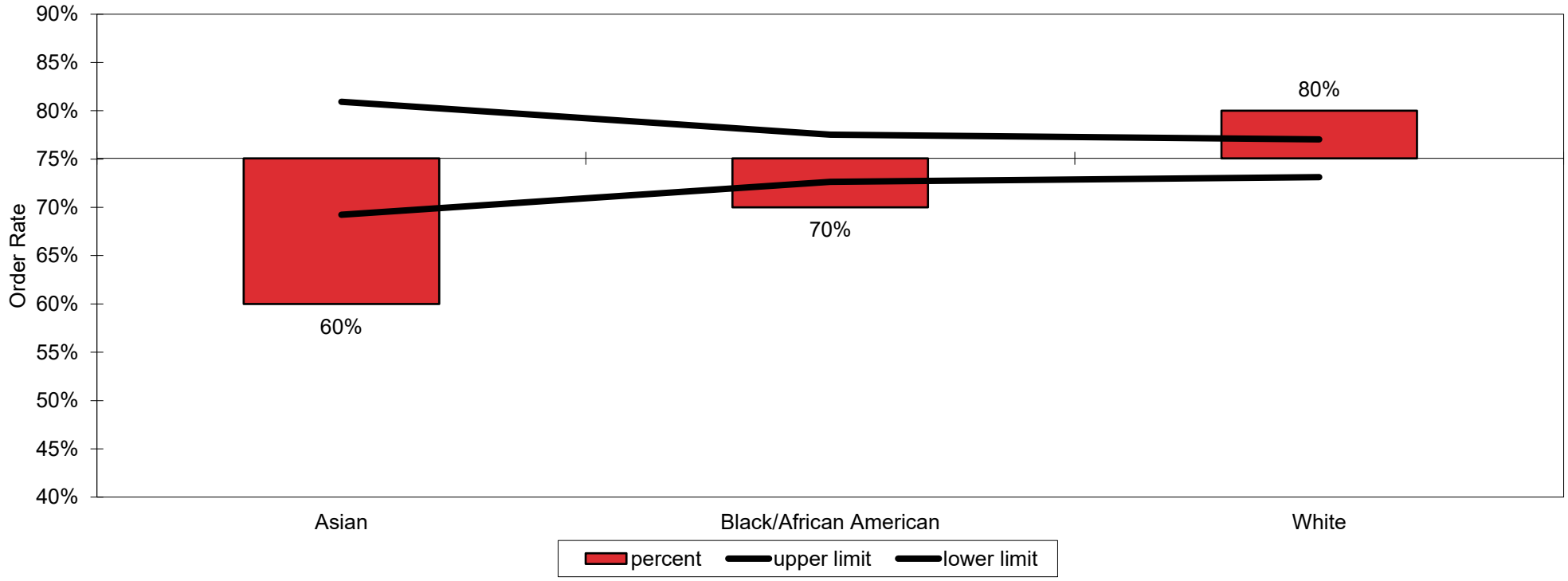
Analysis of Means



Colorectal Cancer Screening Rate by Race



Patients not Up to Date with Colorectal Cancer Screening: Rate of Orders



NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Key Points

Using analysis of means may be helpful for identifying variation at a disaggregated level when it appears that rates may be stagnant

This example also shows the importance of digging deeper and understanding the workflow behind the data

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

References

- Data Display
  - ✓ George ML, Rowlands D, Price M, and Maxley J. The Lean Six Sigma Pocket Toolbook. New York, NY: McGraw-Hill, 2005. Chapters 6 and 7, pp 104-118.
  - ✓ Tufte ER. The Visual Display of Quantitative Information. Cheshire, CT: Graphics Press, 1983. Introduction and Chapter 1, pp 9-53.
- Control Charts
  - ✓ Amin SG. Control charts 101: a guide to health care applications. Quality Management in Health Care. 2001; 9:1-28.
  - ✓ Benneyan JC, Lloyd RC, Plsek PE. Statistical process control as a tool for research and healthcare improvement. Qual Saf Health Care. 2003; 12:458-464.
- Analysis of Means
  - ✓ Balestracci D, Barlow JL. Statistical stratification: analysis of means. In Quality Improvement: Practical Applications for Medical Group Practice (2nd Ed). Center for Research in Ambul Health Care Administration: Englewood, CO, 1996; pp. 151-189.
  - ✓ Homa K. Analysis of means used to compare providers' referral patterns. Qual Manag Health Care. 2007;16(3):256-64.

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Questions?

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Wrap-Up

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

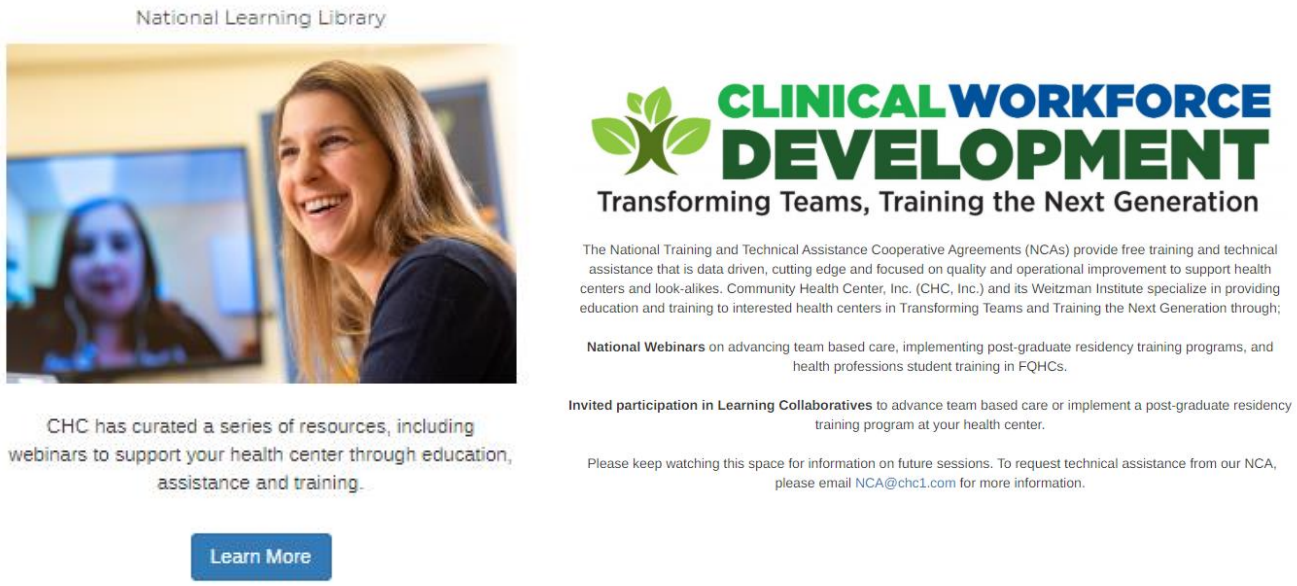
Activity Session - Improving Health Outcomes: Strategic Data-Driven Interventions

- Join subject matter experts from Community Health Center, Inc. (CHCI) for an interactive 60-minute activity session on designing meaningful community health interventions. Through hands-on case studies and collaborative discussions, this session will explore the importance of data, connect their individual mission to broader healthcare goals, and develop practical strategies for robust data collection, impactful patient outreach, and transformative care delivery.
- **When**: Thursday, February 12th, 2026
- **Time:** 3:00 - 4:00pm Eastern / 12:00 - 1:00pm Pacific
- https://education.weitzmaninstitute.org/content/activity-session-improving-health-outcomes-strategic-data-driven-interventions

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Explore more resources!

National Learning Library:
Resources for Clinical Workforce Development



https://www.weitzmaninstitute.org/ncaresources

Health Center Resource Clearinghouse

https://www.healthcenterinfo.org/

NTTAP
National Health Center Training & Technical Assistance Partners
Clinical Workforce Development
A project of Community Health Center, Inc. and the MOSES/WEITZMAN Health System

Contact Information

For information on future webinars, activity sessions, and communities of practice: please reach out to nca@chc1.com or visit https://www.chc1.com/nca

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $550,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.