American Cancer Society | NATIONAL COLORECTAL CANCER ROUNDTABLE

Panel:
Timely Colonoscopy Follow-Up to Positive (Abnormal) Non-Colonoscopy Tests

9:30 AM – 10:30 AM

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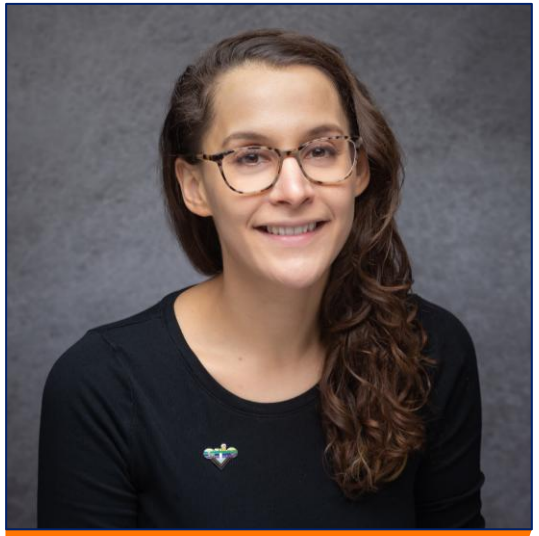
Moderator
Laura Makaroff, DO
American Cancer Society

David Lieberman, MD
Oregon Health and Science University

Francis Colangelo, MD, MS-HQS, FACP
Allegheny Health Network



Miranda Hart, MD
Erie Family Health Centers

Colorectal Cancer Screening Continuum: Non-invasive test to Colonoscopy

David Lieberman MD

Emeritus Professor of Medicine

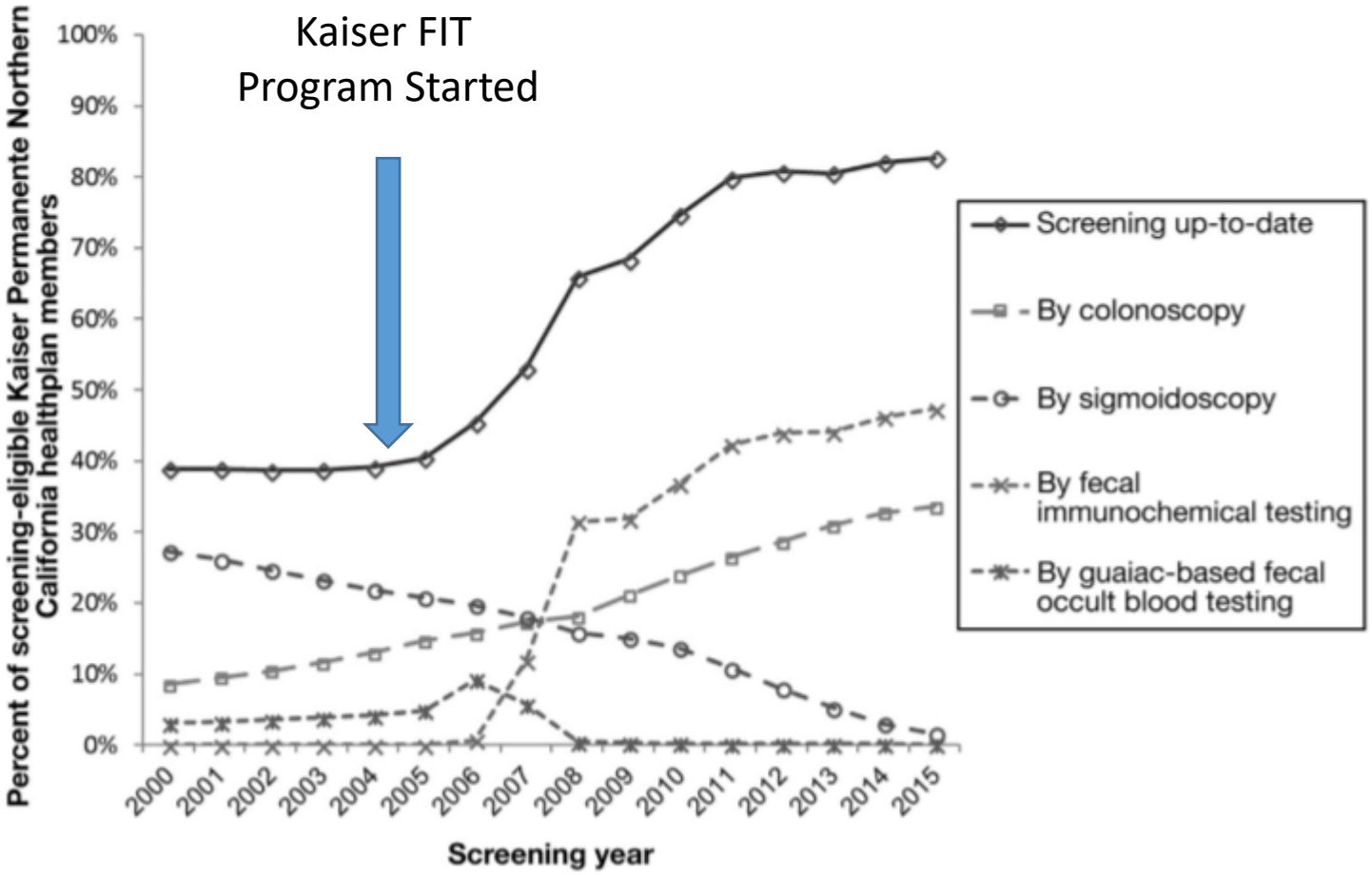
Oregon Health and Science University

NCCRT 11/20/25

Disclosures

- Scientific Advisory Boards:
  - ColoWrap
  - Geneoscopy
  - UDX

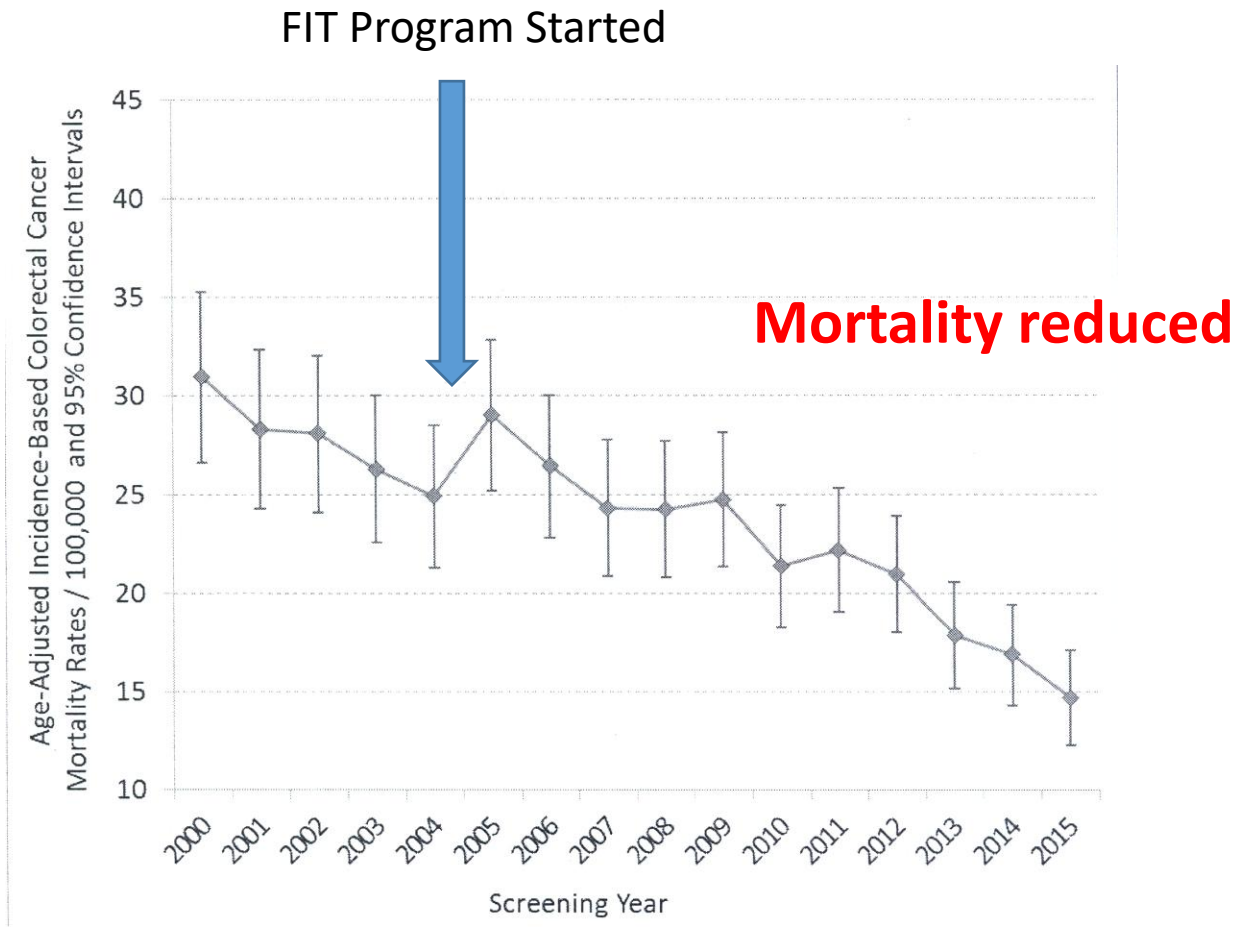
A Well-Organized FIT Program Can Work: Depends on Adherence to Screening and Follow-up



Completion of Colonoscopy for (+) FIT: 80%

Levin TR, et al. *Gastroenterology.* 2018;155:1383-1391.

A Well-Organized FIT Program Can Work:



2024: Nested Case Control Study

1279 CRC deaths

10,226 matched controls

	CRC Death OR (95% CI)
FIT exposure	0.67 (0.59-0.76)
Right Colon	0.83 (0.69-1.01)
Left Colon (+rectum)	**0.58 (0.48-0.71)**
Race/Ethnicity	
- White	0.70 (0.57-0.86)
- Black	0.58 (0.39-0.85
- Asian	0.37 (0.23-0.59)
- Hispanic	0.78 (0.57-1.08)

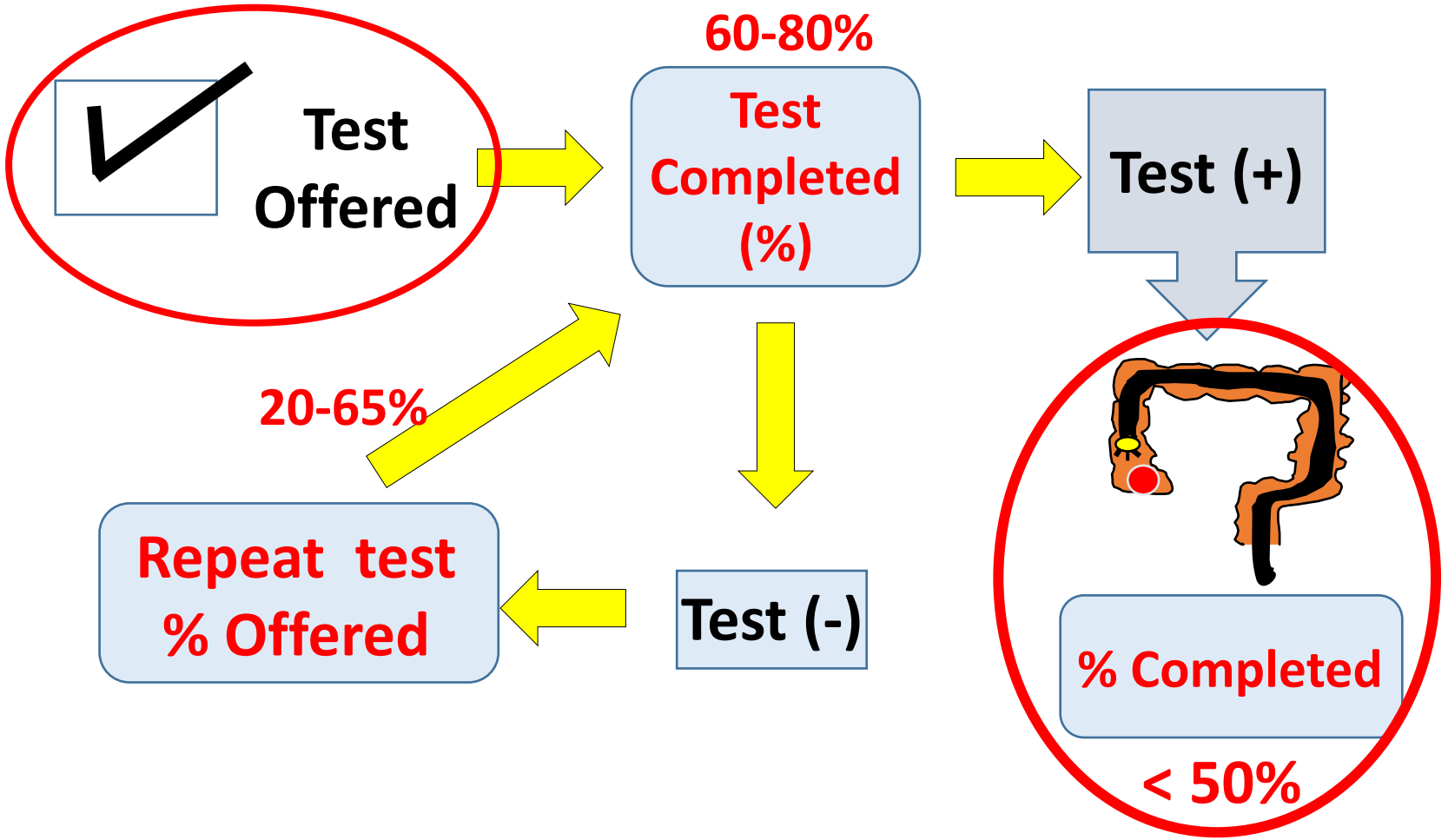
Levin TR, et al. *Gastroenterology.* 2018;155:1383-1391

Doubeni et al; JAMA Network Open. 2024;7(7):e2423671.doi:10.1001/jamanetworkopen.2024.23671

Adherence: Achilles Heel of non-invasive CRC Screening:

1. **Timely follow-up of abnormal tests**
2. **Repeat test at appropriate interval for negative tests**

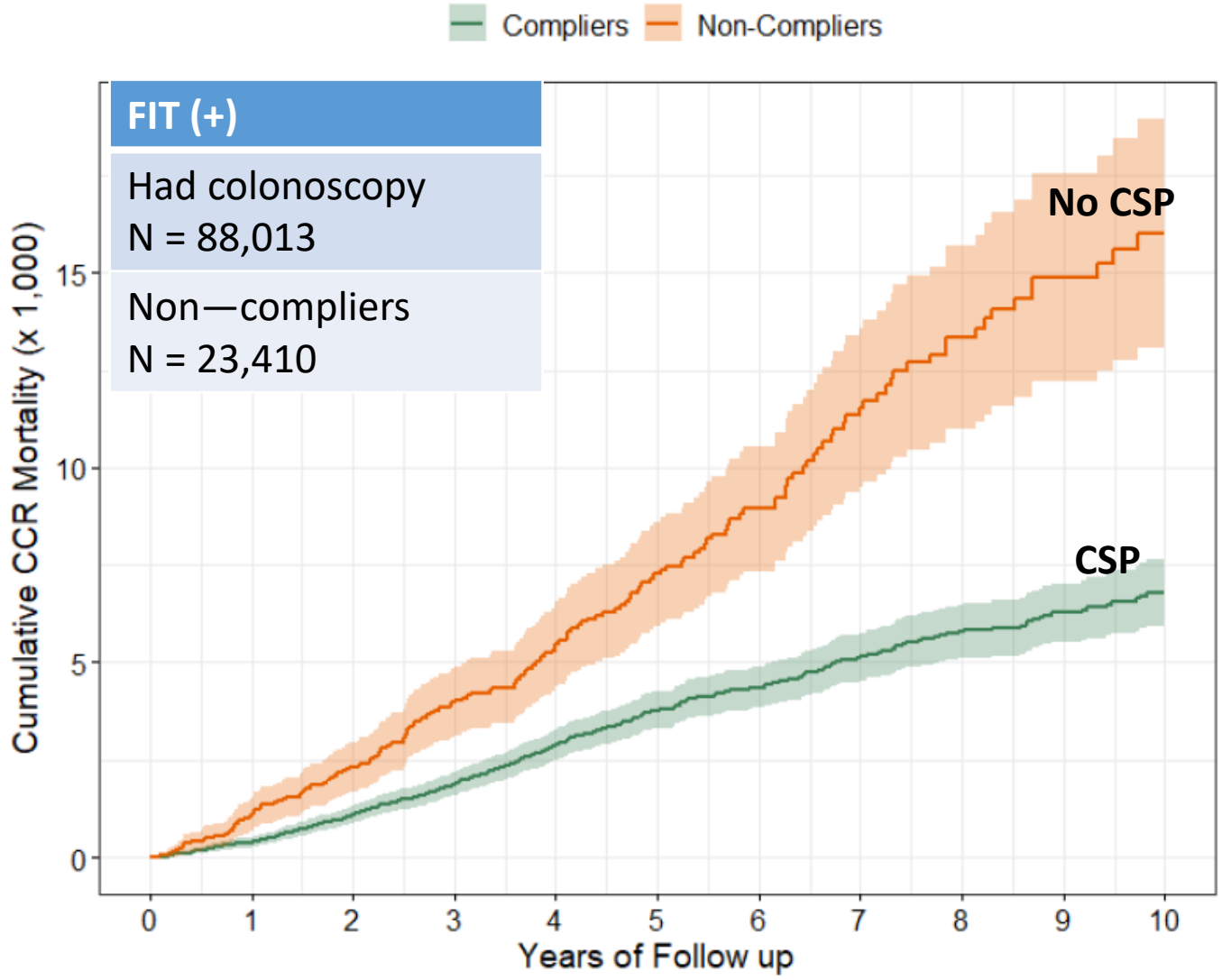
Programmatic Adherence for non-Invasive Tests



Key Metrics (red)

Zorzi et al; GUT 2021 Italy

Colonoscopy after FIT (+): Mortality



Colonoscopy after FIT (+): Adherence

- National Claims Data: 48%
- Safety net settings: as low as 18%
- Veterans Affairs: 62.1%
- Integrated Health systems 81%

N= 32,769
39 different health care orgs
f/u colonoscopy after (+) Stool test

Time since + FIT	Colonoscopy completion
Within 90 days	43.3%
Within 180 days	51.4%
Within 360 days	56.1%

Mohl et al; JAMA Network Open.2023:6:e2251384

Ciemins EL, et al. JAMA Netw Open 2024;7:e242693.
Coronado GD, et al. BMC Gastroenterol 2021;21:356. 8.
May FP, et al. Clin Gastroenterol Hepatol 2019;17:469–476.
Breen N, et al. Am J Prev Med 2019;56:e143–e152

Follow-up Colonoscopy after (+) Blood Test

Variable	Total (N = 228)	No FU-CY within 6 months after abnormal Shield (n = 117)	FU-CY within 6 months after abnormal Shield (n = 111)	*P* value
Age, mean (SD), *y*	63.0 (10.2)	64.8 (9.9)	61.6 (10.3)	.0177
Age-group, *y*				.0026
45–49	20 (8.7)	4 (3.4)	16 (14.4)	
50–64	115 (50.0)	56 (47.9)	59 (53.2)	
≥65	93 (40.4)	57 (48.7)	36 (32.4)	
Insurance				<.0001
Medicaid	14 (6.1)	7 (6.0)	7 (6.3)	
Medicare Advantage	94 (40.9)	65 (55.6)	29 (26.1)	
Private	120 (52.2)	45 (38.5)	75 (67.6)	

49% at 6 months

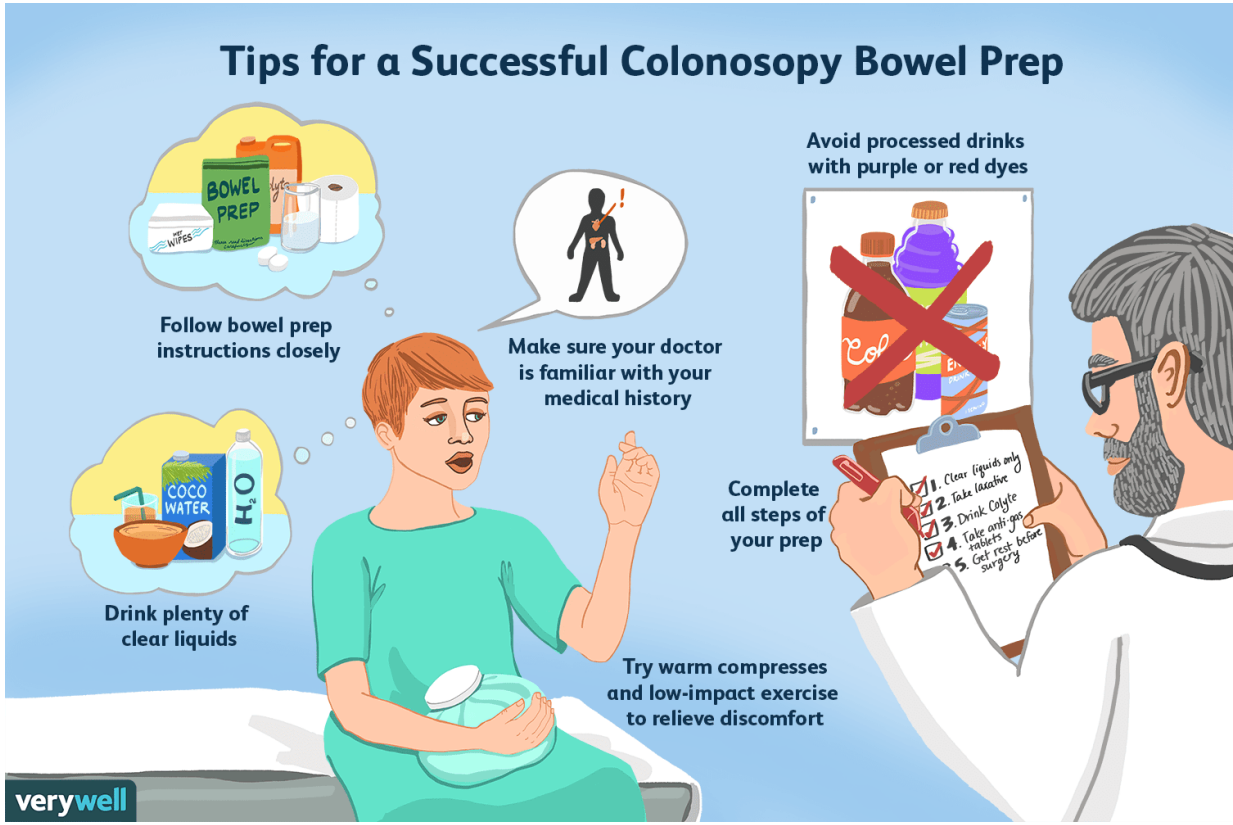
Zaki et al; Gastroenterology 2025;169:1301–1303

Incomplete Screening: Why?

- **Education**: understanding importance of (+) non-invasive test

Incomplete Screening: Why?

- Education: understanding importance of (+) non-invasive test
- **Bowel Prep**



Incomplete Screening: Why?

- Education: understanding importance of (+) non-invasive test
- Bowel Prep
- **Co-Pays** – now eliminated

Incomplete Screening: Why?

- Education: understanding importance of (+) non-invasive test
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- **Transportation, missing work**

Incomplete Screening: Why?

- Education: understanding importance of (+) non-invasive test
- Bowel Prep
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- Transportation, missing work
- **Child care/Elder care**

Incomplete Screening: Why?

- Education: understanding importance of (+) non-invasive test
- Bowel Prep
- Co-Pays – now eliminated
- Transportation
- Child care/Elder care
- **Scheduling issues**

Prioritize (+) non-invasive tests

TSA: Time Sensitive Appointment

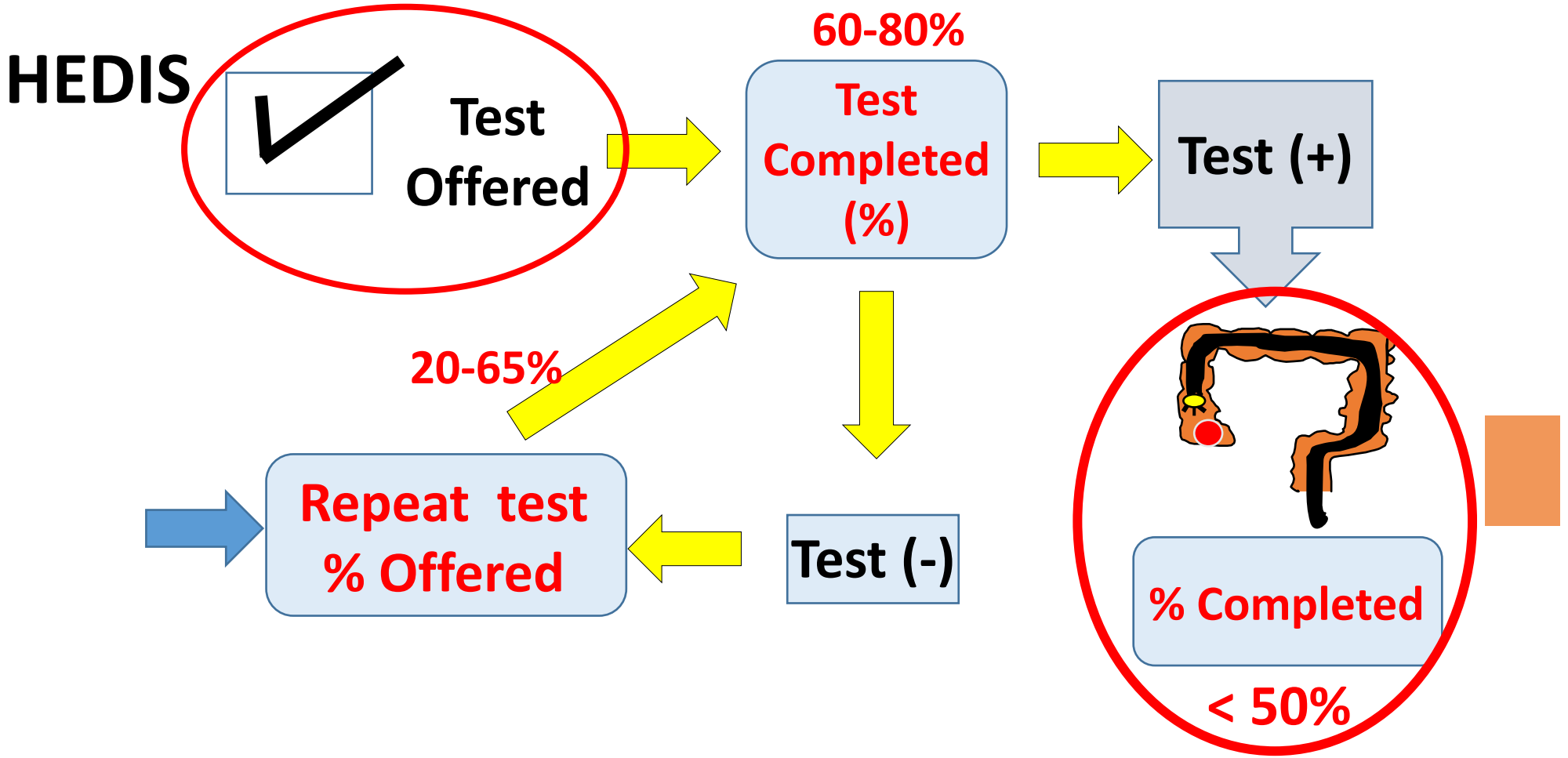
Navigation

- Follow-up of tests not completed
- Schedule colonoscopy for (+) non-invasive test
- Help overcome personal barriers
  - Transportation, Geography, missing work
  - Family care and trust issues

Navigation

- Nurses, medical assistants, peer counselors
- Multi-task: CRC screening + other health
- Downstream benefits of improved adherence:
  - CRC incidence and mortality reduction
  - Reduced long-term health care costs

HEDIS: Defines key quality metrics (Healthcare Effectiveness Data and Information Set)

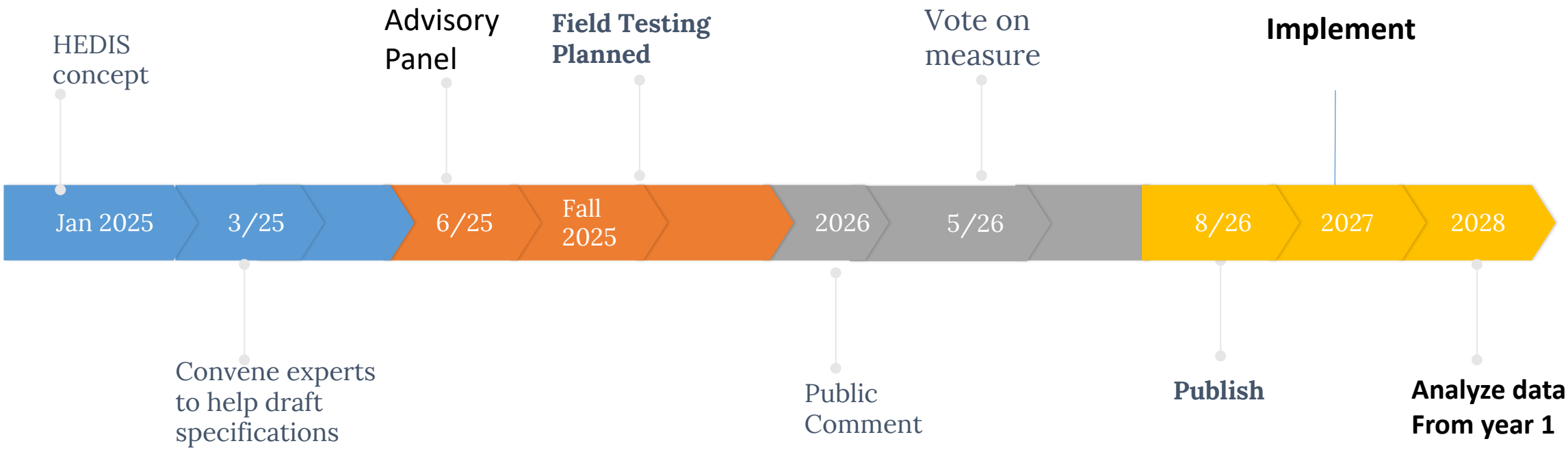


Measures must be measurable: Issues

- Non-invasive screening test used to identify higher-risk person who should have colonoscopy
  - Should the measure apply only to stool tests or ALL non-invasive tests?
- Timing: what is the appropriate maximal time interval from (+) test to colonoscopy?
- What is an appropriate benchmark for performance?
  - 100% not feasible for many reasons
- Are there special considerations?
  - Patient frailty, age
- Feasibility: can data be extracted ?
  - Date of (+) non-invasive test
  - Date of colonoscopy if completed
- Should there be a requirement for “adequate” colonoscopy completion?

HEDIS Timeline - Tentative

(Healthcare Effectiveness Data and Information Set)



Summary

- Non-invasive CRC screening programs can work, but depend on:
  - Completion of screening test
  - Appropriate follow-up of both positive and negative tests
- Failure to complete timely colonoscopy after positive tests is an important gap in the screening continuum
- Evidence-based methods to improve f/u of (+) non-invasive tests include:
  - Navigation
  - HEDIS incentives

CRC screening is effective….
if performed with high-quality

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Thank You

Complete CRC Screening Best Practices Learning Collaborative: Lessons Learned

Frank Colangelo, MD, FACP, MS-HQS, *Primary Care Internist, Allegheny Health Network/PPWPA*

AMGA Foundation

AMGA™

Disclosures

- I have no relevant disclosures

AMGA Mission

Policy

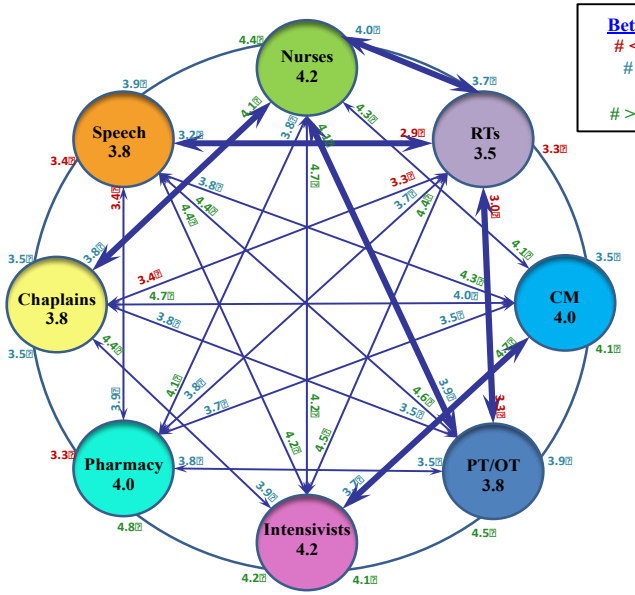
+

T2DM Obesity

Immunizations

HTN CRC

+



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Exact Sciences

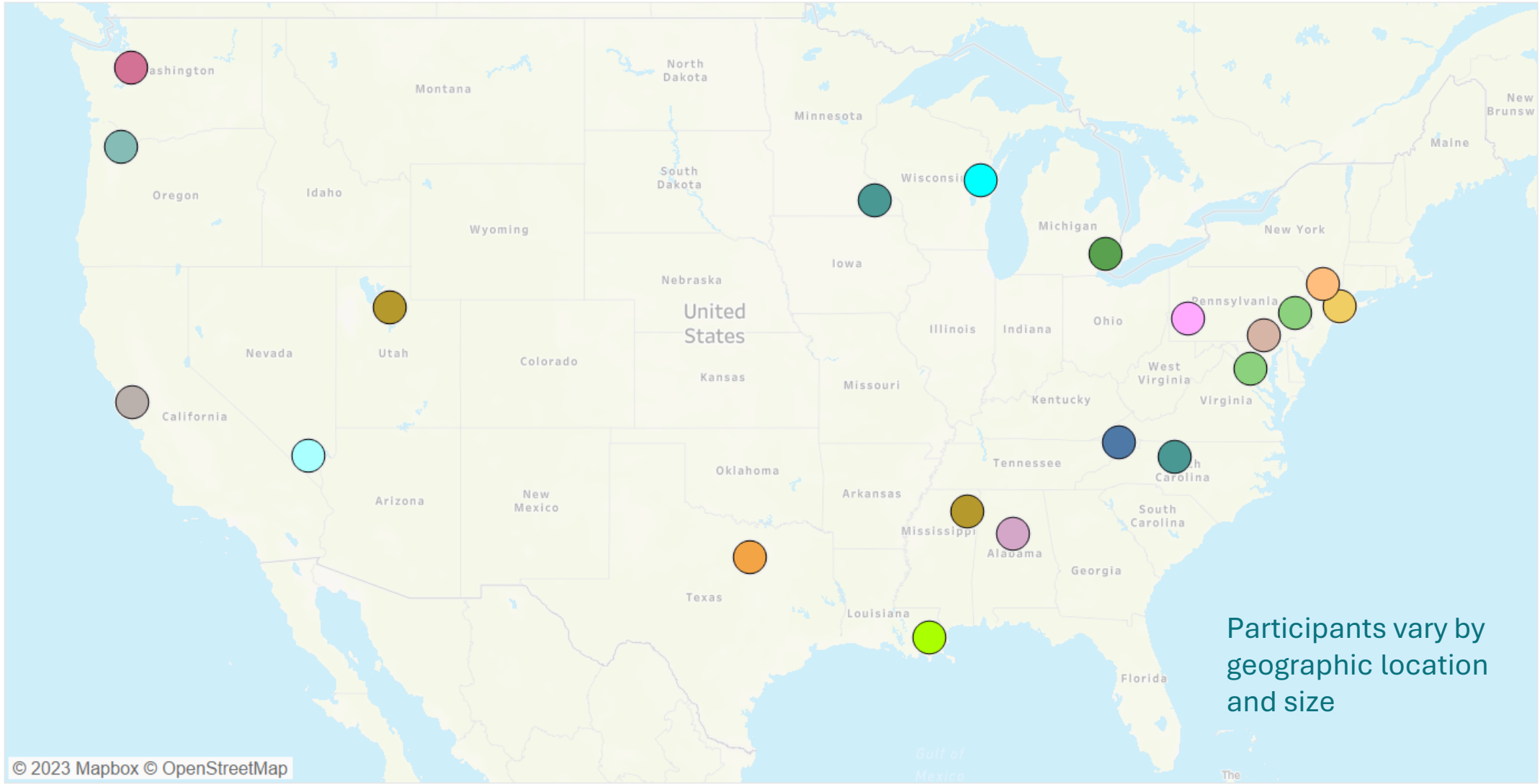
An Observation

AMGA FOUNDATION™

3. **Describe your data. What is your organization's current screening rate (age 45-75)? Do you know what your follow-up rates for colonoscopy are after abnormal non-colonoscopy screening?** *(100 word limit)*

Click here to enter text.

Participating Health Care Organizations



Participants vary by geographic location and size

Collaborative Timeline

HCO On-boarding & Orientation, Baseline data and QI reports due

Collaborative Implementation; first in-person meeting, regular webinars, virtual engagement activities, data/QI submissions, second networking in-person meeting, final virtual meeting

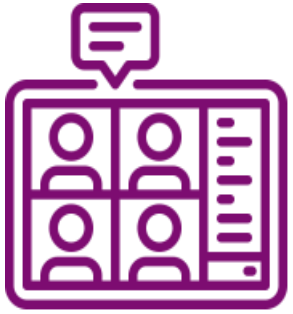
Final Analysis, Synthesis, Publication

Collaborative Activities

Clinical Outreach and Coaching

Quality Improvement

Measures and Benchmarking



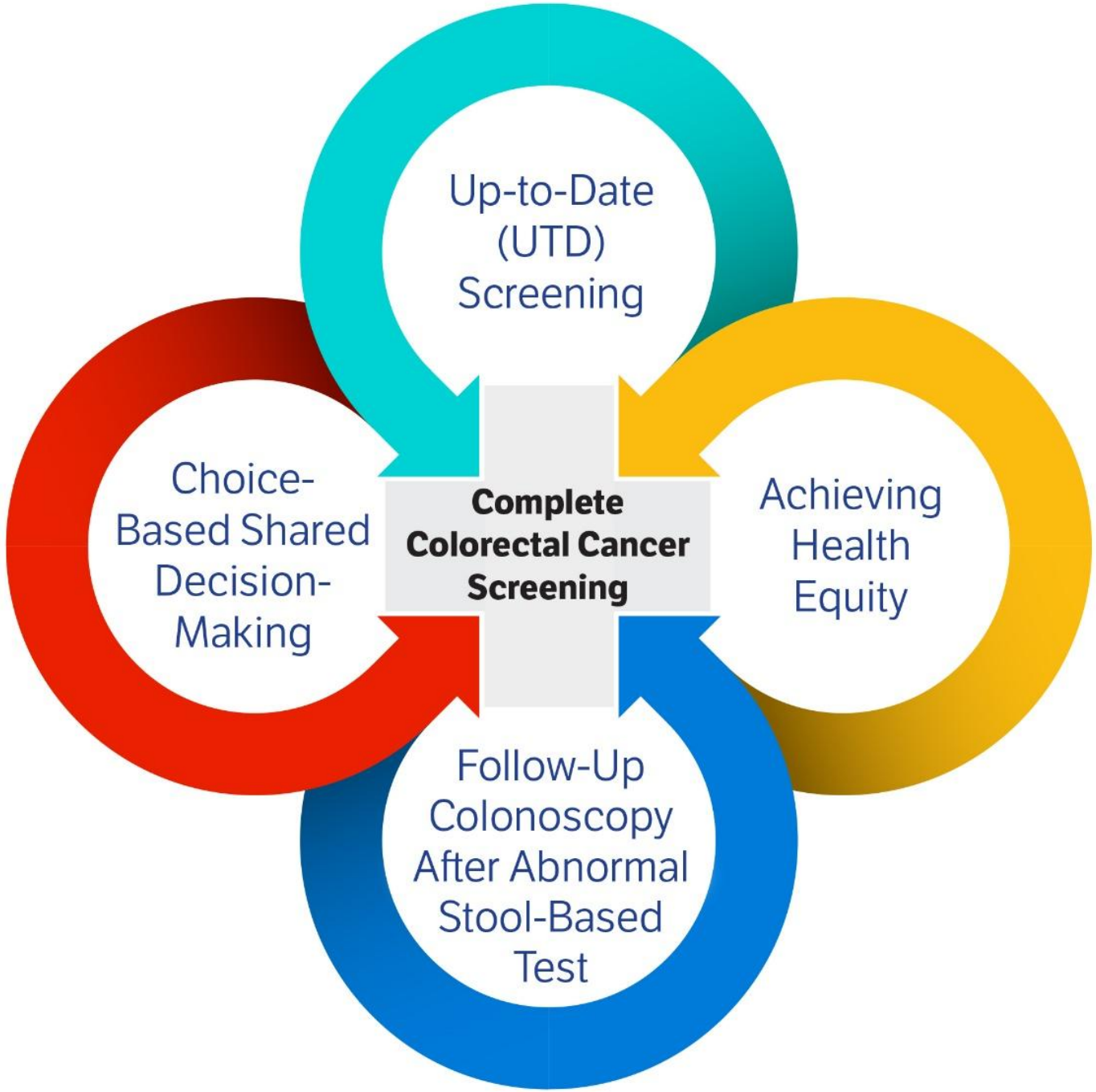
Webinars/Meetings

Virtual Engagement Activities

Resources and publications

Measures: Complete CRC Screening

- CRC screening among active patients (age 45–75)
  - Measure: Percent of patients with up to date (UTD) CRC Screening
  - Sociodemographic stratifications: Identifying and tracking health care disparities
- CRC screening follow-up among active patients (age 45–75)
  - Measure: Percent of patients with a follow-up colonoscopy (FU-CY) within 90 days of abnormal non-colonoscopy (non-CY) CRC screening test result

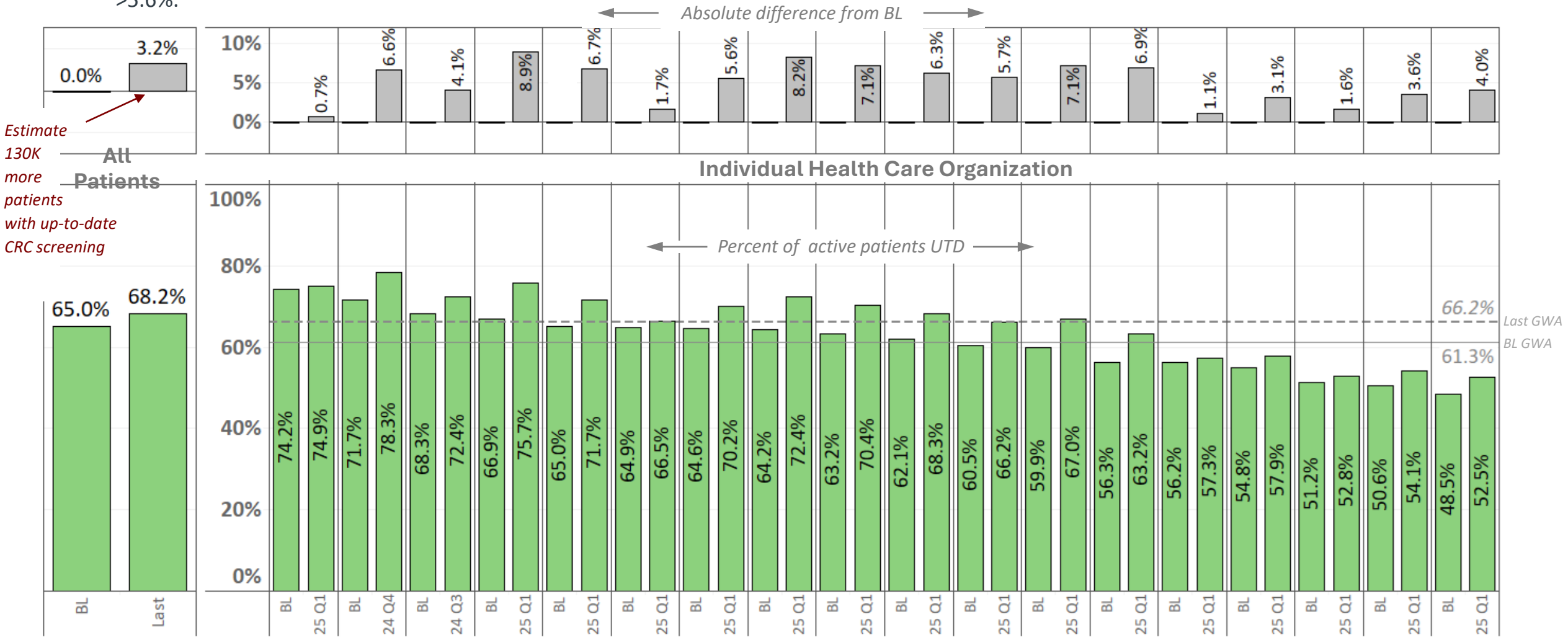

Up-to-Date (UTD) Screening
Achieving Health Equity
Follow-Up Colonoscopy After Abnormal Stool-Based Test
Choice-Based Shared Decision-Making
Complete Colorectal Cancer Screening

Up-to-Date Screening

- 20 HCOs participated with 18 successfully reporting data for 69 baseline quarters and 120 intervention quarters
- Collaborative reach: more than 4 million active patients across all 20 organizations
- As of the last data reported for 18 HCOs, 68.2% of active patients (or nearly 2.7 million)
  had up-to-date CRC screening, meeting the Healthy People 2030 goal as a collaborative!
- During the intervention period
  - 1.68 million screenings were performed
  - An estimated 1.3 million patients were screened for CRC
- Goals met by individual HCOs
  - 9 at or above the Healthy People 2030 goal of 68%,
  - 3 closed baseline care gap by >20%, 2 more are within <1% of their individual care gap closure goal
- All 18 HCOs made progress in closing the age gap (45-49 vs 45-75)
  - Average 7.3 percentage point decrease in gap from 25.7% to 18.3%

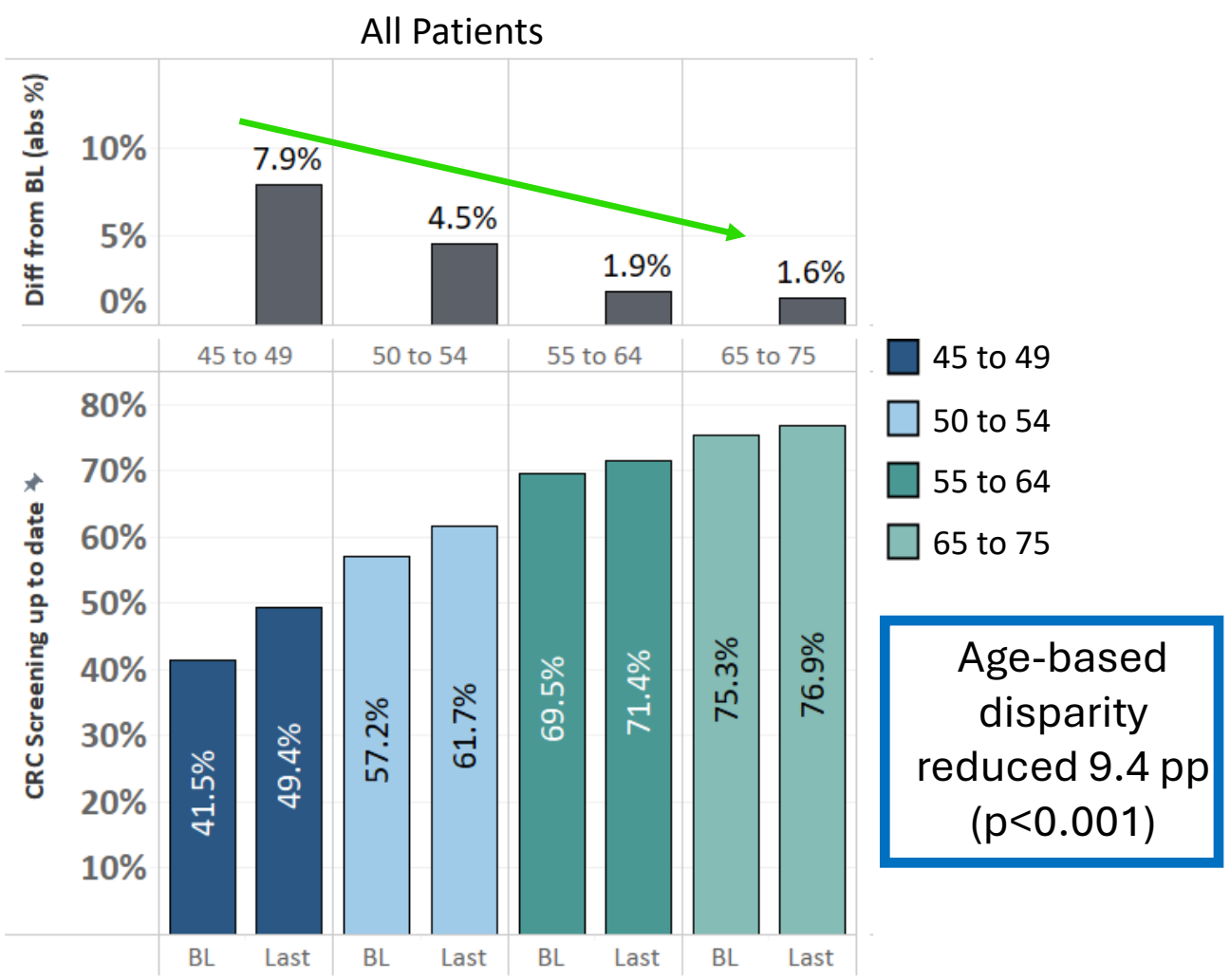
CRC screening UTD

- Across nearly 4 million patients at 18 HCOs, the rate improved by 3.2 percentage points (far left bars) and the average across all groups (GWA, grey lines) increased from 61.3% at baseline to 66.2% (nearly 5 percentage points)
- All 18 HCOs saw improvement from baseline, ranging from 0.7 to 8.9 percentage points. Half saw absolute improvements >5.6%.

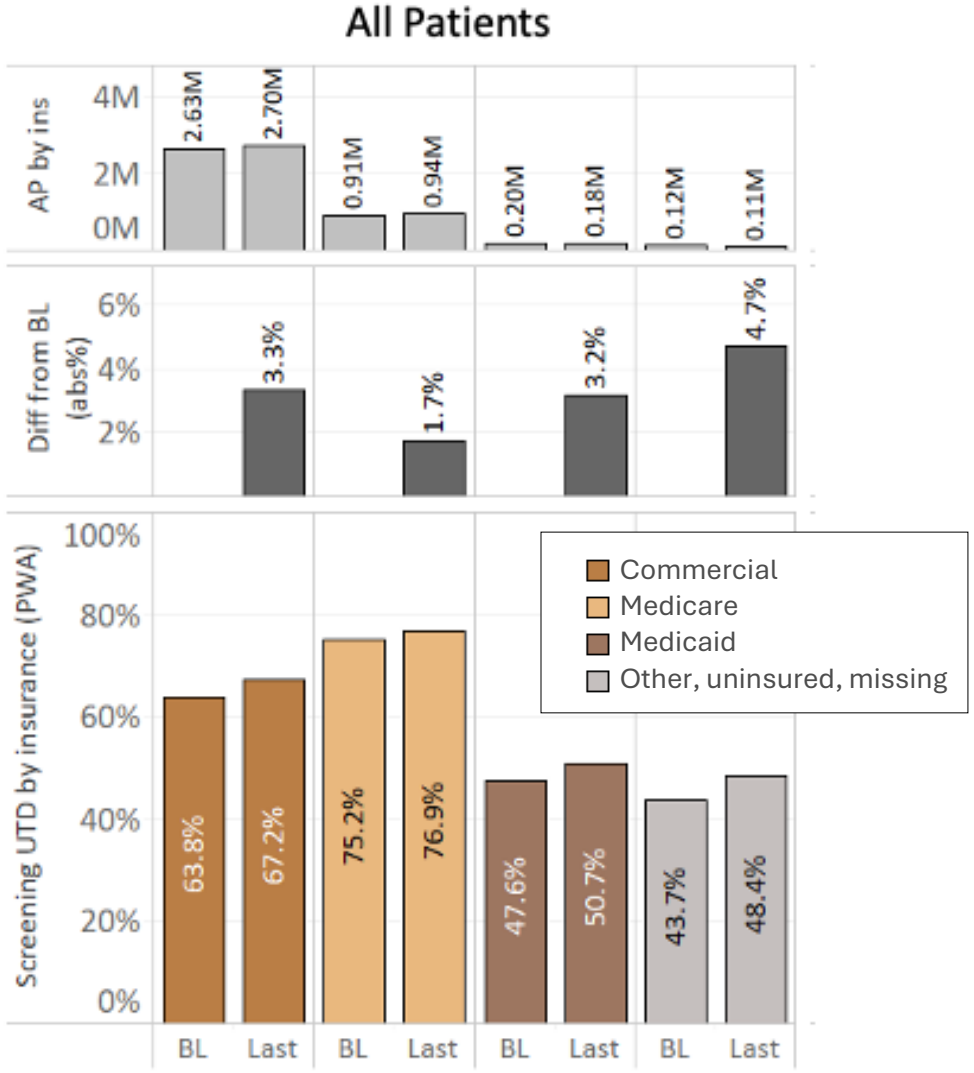


UTD Screening Rates

- On the bottom you see the baseline (BL) (Q2 2023) and last reported (Last) reported (Q1 2025) UTD rates for all active patients by age (PWA)
- On top, the dark gray bars show the absolute change from BL in UTD rate for each corresponding age group.



Age-based disparity reduced 9.4 pp (p<0.001)



JAMA Network Open

Original Investigation | Oncology

Rates of Follow-up Colonoscopy After a Positive Stool-Based Screening Test Result for Colorectal Cancer Among Health Care Organizations in the US, 2017-2020

Jeff T. Mohl, PhD; Elizabeth L. Ciemins, PhD, MPH, MA; Lesley-Ann Miller-Wilson, PhD, MS, MBA; Abbie Gillen, BS; Roger Luo, PhD; Francis Colangelo, MD

Abstract

IMPORTANCE Noninvasive stool-based screening tests (SBTs) are effective alternatives to colonoscopy. However, a positive SBT result requires timely follow-up colonoscopy (FU-CY) to complete the colorectal cancer screening paradigm.

OBJECTIVES To evaluate FU-CY rates after a positive SBT result and to assess the association of the early COVID-19 pandemic with FU-CY rates.

DESIGN, SETTING, AND PARTICIPANTS This mixed-methods cohort study included retrospective analysis of deidentified administrative claims and electronic health records data between June 1, 2015, and June 30, 2021, from the Optum Labs Data Warehouse and qualitative, semistructured interviews with clinicians from 5 health care organizations (HCOs). The study population included data from average-risk primary care patients aged 50 to 75 years with a positive SBT result between January 1, 2017, and June 30, 2020, at 39 HCOs.

MAIN OUTCOMES AND MEASURES The primary outcome was the FU-CY rate within 1 year of a positive SBT result according to patient age, sex, race, ethnicity, insurance type, Charlson Comorbidity Index (CCI), and prior SBT use.

RESULTS This cohort study included 32 769 individuals (16 929 [51.7%] female; mean [SD] age, 63.1 [7.1] years; 2092 [6.4%] of Black and 28 832 [88.0%] of White race; and 825 [2.5%] of Hispanic ethnicity). The FU-CY rates were 43.3% within 90 days of the positive SBT result, 51.4% within 180 days, and 56.1% within 360 days (n = 32 769). In interviews, clinicians were uniformly surprised by the low FU-CY rates. Rates varied by race, ethnicity, insurance type, presence of comorbidities, and SBT used. In the Cox proportional hazards regression model, the strongest positive association was

Key Points

Question What are the overall rates of follow-up colonoscopy (FU-CY) after a positive stool-based test result, and what factors are associated with FU-CY rates, including the early COVID-19 pandemic?

Findings In this cohort study of 32 769 individuals from 39 different health care organizations, the overall FU-CY rate within 1 year of a positive stool-based test result was 56%. Race, ethnicity, insurance type, type of test (fecal immunochemical tests or multitarget stool DNA), health care organization, and the COVID-19 pandemic were significantly associated with these rates.

Meaning Targeted interventions to improve overall FU-CY rates and to cover the backlog of colonoscopies from the peak COVID-19 months (March to June 2020) are necessary to achieve the full clinical benefits from stool-based colorectal cancer screening tests.

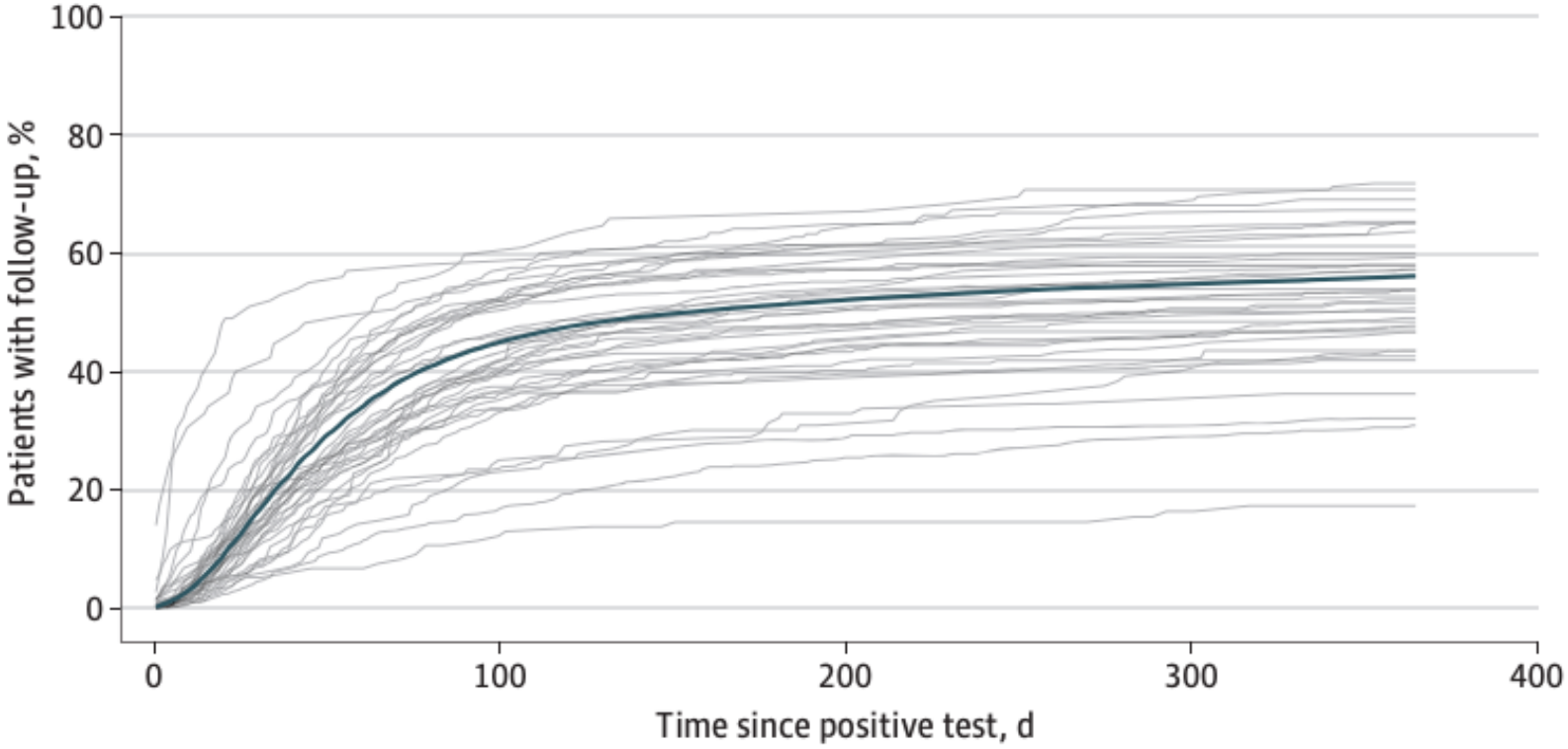
AMGA

Summary:

- FU rates of 51.4% within 6 months; 56.1% within 1 year.
- Black or Asian race, Medicare or Medicaid, FIT (vs. mt-sDNA) test, & higher mortality risk significantly associated with lower follow-up rates.
- Significant variability across health care organizations.
- Low provider awareness of FU-CY rates + lack of internal tracking = need for quality performance measure.

Mohl J, Ciemins EL, Miller-Wilson LA, Gillen A, Luo R, Colangelo F. JAMA Netw Open, 2023 Jan 3;6(1).

Figure 2. Time-to-Event Curves for Follow-up Colonoscopy



No. at risk (No. censored)	Day 0	Day 90	Day 180	Day 360
	32 769 (0)	18 560 (166)	15 159 (879)	12 284 (2331)

- 56.1% FU within 360d
- 51.4% FU within 180d
- 43.2% FU within 90d

Mohl J, Ciemins EL, Miller-Wilson LA, et al. JAMA Netw Open, 2023 Jan.

Timely Follow-Up Colonoscopy

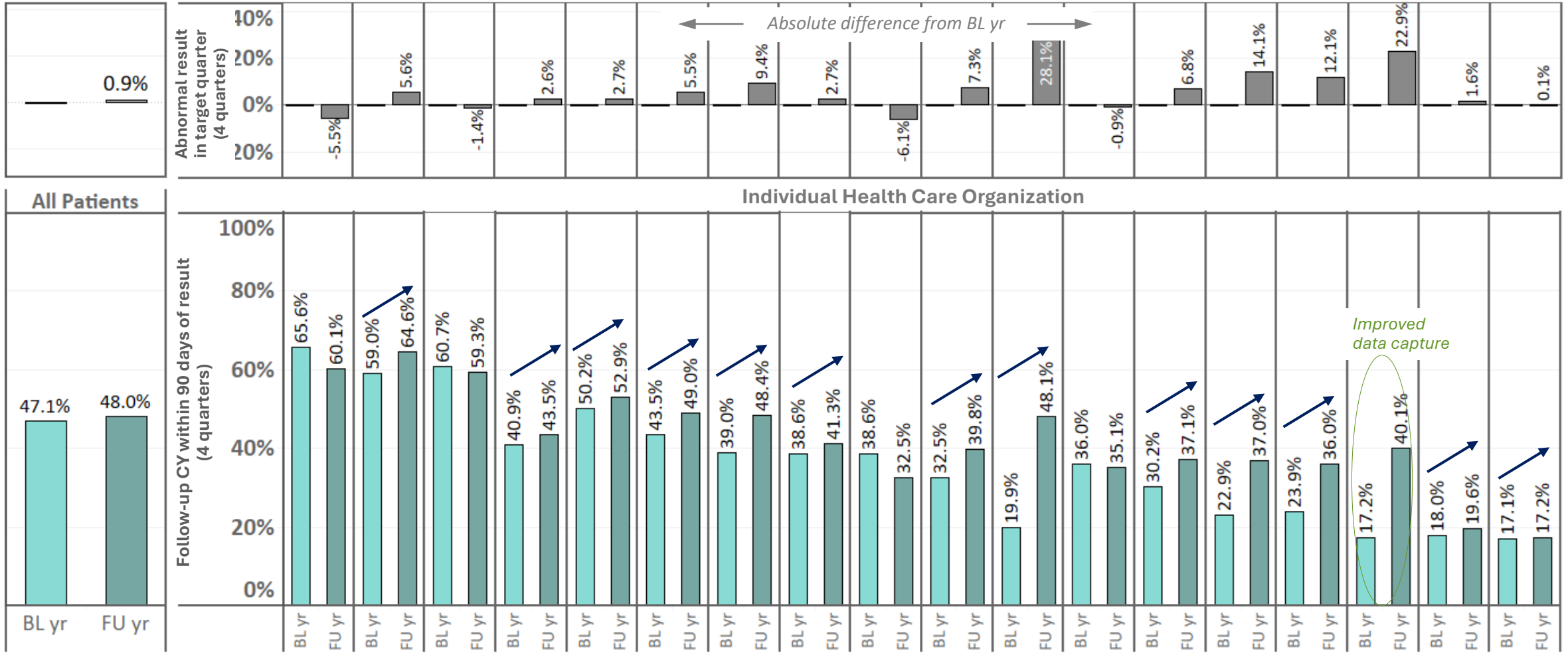
- Nearly 1.2 million stool-based CRC screening tests performed during the intervention period for an estimated 850,000 patients
- Among 55,000 patients with abnormal stool-based screening throughout the intervention period
  - 25,700 received follow-up colonoscopy within 90 days of result
- Ambitious goals set for quarterly data (30% gap closure and 72% global goal*)
  - Two HCOs closed their baseline care gap by more than 30%
- More than half of HCOs saw ≥7 percentage point improvement from the baseline YEAR† to the last reported YEAR†

* 72% for 90-day follow-up is approximately equivalent to 85% follow-up within 6-months.
† YEAR 90-day follow-up rates were calculated by aggregating denominators and numerators across 4 baseline reporting quarters and the last 4 reporting quarters for each HCO.

90-day Follow-Up among Active Patients

- In the top frame is the absolute difference in the follow-up rate from baseline year (Q3 2022–Q2 2023) to the latest intervention year (Q2 2024 – Q1 2025).
- Because colonoscopies are subject to claim lag, we expect that the BL yr follow-up rates will be inflated relative to the FU yr. As a result, these measures reflect a conservative estimate of the absolute change seen in a year.

HCO average increased by 6.7pp (p<0.005)

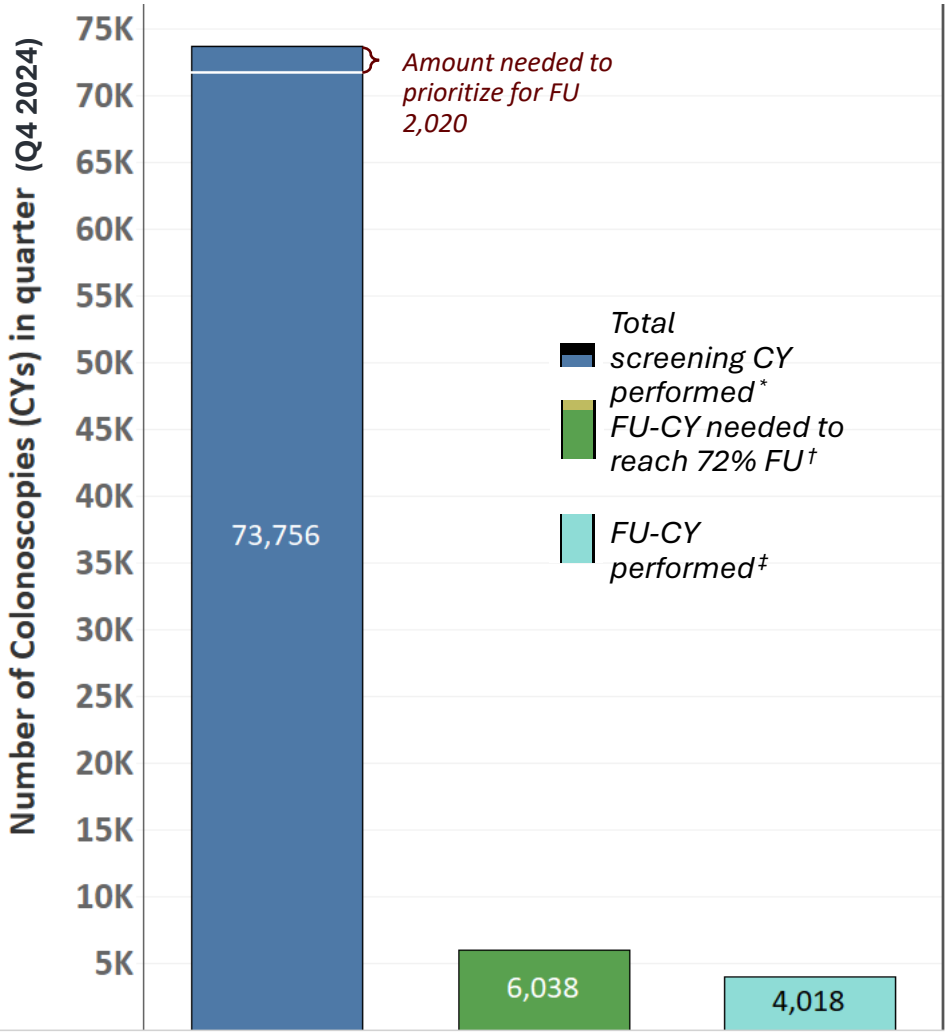


Sorted by BL FU-CY rate, descending.

Interventions for Follow-Up

Tracking	Access	Referral	Identification	Timing
Create team to track completion and FU	Research GI f/u colonoscopy slots	Send patients directly to GI	Dashboards to ID patients w/ positive test	Contact patient w/in 5 days; schedule Px w/in 4-6 weeks
ID current workflow, pathways and processes	Ensure closed loop referral workflow process	Indicate high-priority and note positive test	Indicate high-priority and note positive test	Discuss with Decision Support Committee
Empower GI to track patient outreach; share with PC		Notify GI when PCP notified of positive test patient	Review data; ID trends and gaps	Utilize ASAP protocol (within 2 days) (pat. called 3x, then mail)
Transparent reporting, by PCP			Reports and tools – ID positive deviants!	
Update problem list, health maintenance			Reports for GI dept.	
Integrate SBTs into Epic			Understand choices	

Follow-up: What would it take to reach the goal?



- In total, to reach the 72% with 90-day FU goal this quarter, organizations would have needed to perform **2,020 additional FU-CYs**.
- This could be achieved by:
  - increasing the total number of colonoscopies performed by 2.7% (from 73,756 to 75,776), or
  - shifting 2.7% of current screening colonoscopies to prioritize follow-up

Note: This contains data for 19 of 20 participant. Since this relies only on the most recent quarter of data, we include all HCOs that were able to report for Q4 2024.

* M2 numerator stratification (number of colonoscopy (CY) screening tests performed in reporting quarter).
† 0.72* M3 denominator (number of patients with abnormal non-CY test result in prior quarter). 72% is the goal is the 90-day equivalent to 85% with follow-up (FU) CY within 6 months.
‡ M3 numerator (number of patients with a FU-CY within 90 days of abnormal non-CY result).

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Thank You

Timely Colonoscopy Follow Up: Community Health Center Best Practices

Miranda Hart MD
Senior Medical Director of Integrated Primary Care
Erie Family Health Centers
Chicago, IL

12/11/2025

Disclosures: Erie Family Health Centers received a small grant from Exact Sciences to support CRC screening work. I have no additional personal disclosures to share.

Introduction to Erie Family Health Centers

Updated April 2025

Community-Based Healthcare for All

Health Center Program
HEALTH CENTER QUALITY LEADER
2025 Awardee

12/11/2025

Exemplerie

ERIE'S 2025-2027 STRATEGIC PLAN

We want to be the best at what we do, and do it for more people.

OUR MISSION

Motivated by the belief that healthcare is a human right, we provide high-quality, affordable care to support healthier people, families, and communities.

OUR VISION

All people living their healthiest lives.

OUR VALUES

Social Justice
Impact
Excellence
Relationships
Learning

Quality First and Service Excellence

Provide a consistent care experience for all patients that supports improved quality, efficiency, and joy in work

Joy in Work

Promote the Erie Advantage by nurturing a diverse workforce that is well-trained, highly engaged, and has a strong sense of belonging

Access for All

Serve more patients to expand Erie's mission

Erie Now and Forever

Support sustainability through patient-, employee-, and community-centric approaches

erie Family Health Centers®

We believe *healthcare is a human right.*

Erie provides care for people with insurance, without insurance, and regardless of immigration status.

We provide full-service, affordable primary care to children, teens, adults, seniors, and expectant parents.

We are a part of the community.

- We provide care at **13** locations in historically under resourced communities in Chicago, Evanston, and Waukegan, including in 5 Chicago Public Schools.
- We provide more than **375,000** visits annually for over **95,000** patients.

We have the highest quality standards.

Our community health centers are quality ranked:

- **In the top 10%** of community health centers nationally
- **#1 in quality** in Illinois

At Erie Family Health Centers

We serve…

95,000+

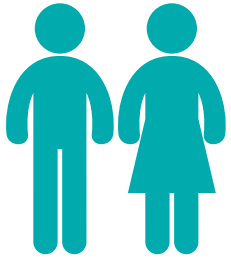
Patients regardless of ability to pay

90% With incomes under 200% of the FPL	49% non-English speaking	70% Latino/Latina
64% Medicaid	22% Uninsured	44% Under 18 years old

417,000+

patient visits annually

We employ…



820+

staff members

We train…

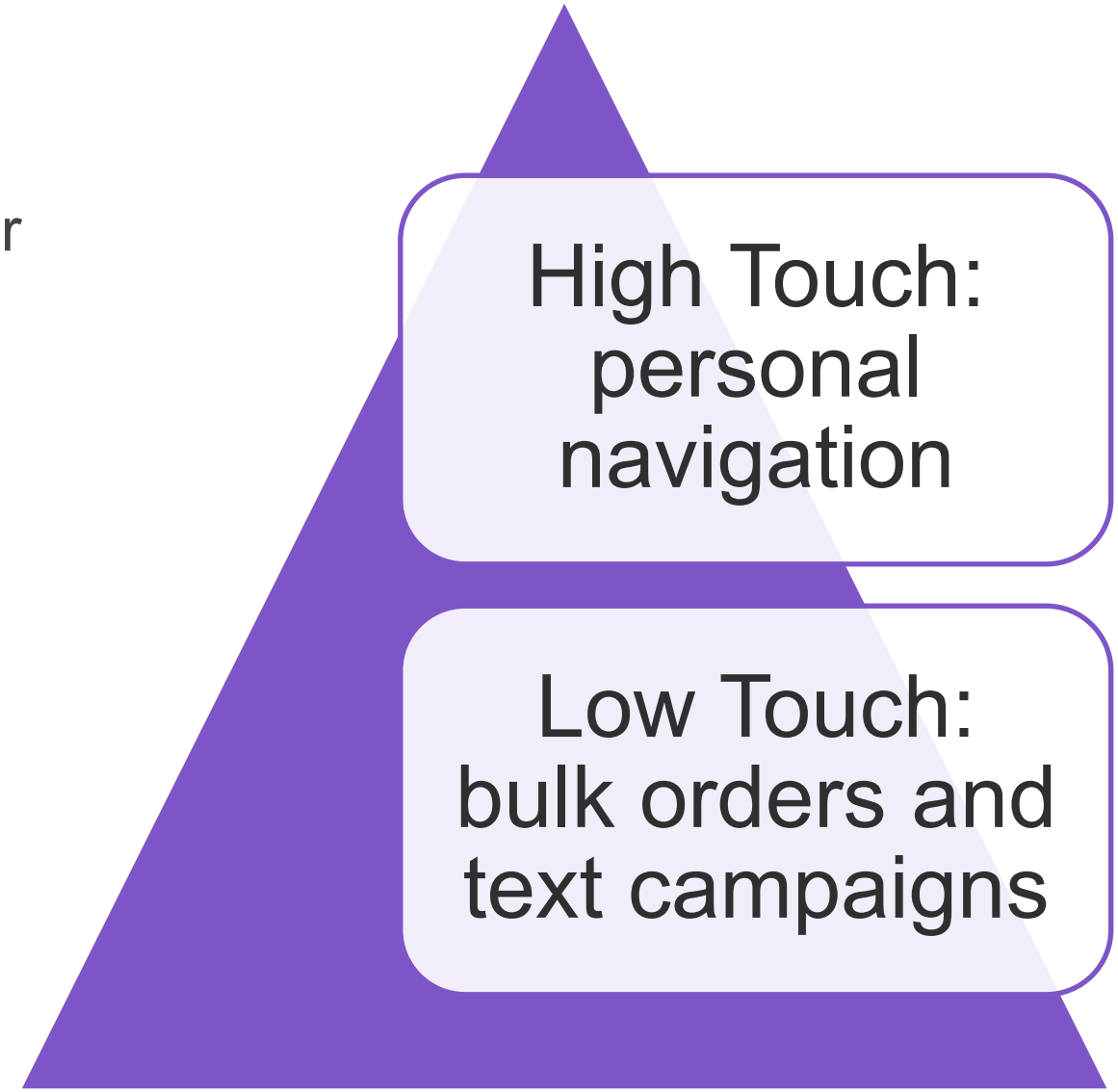
218+

providers and healthcare workers

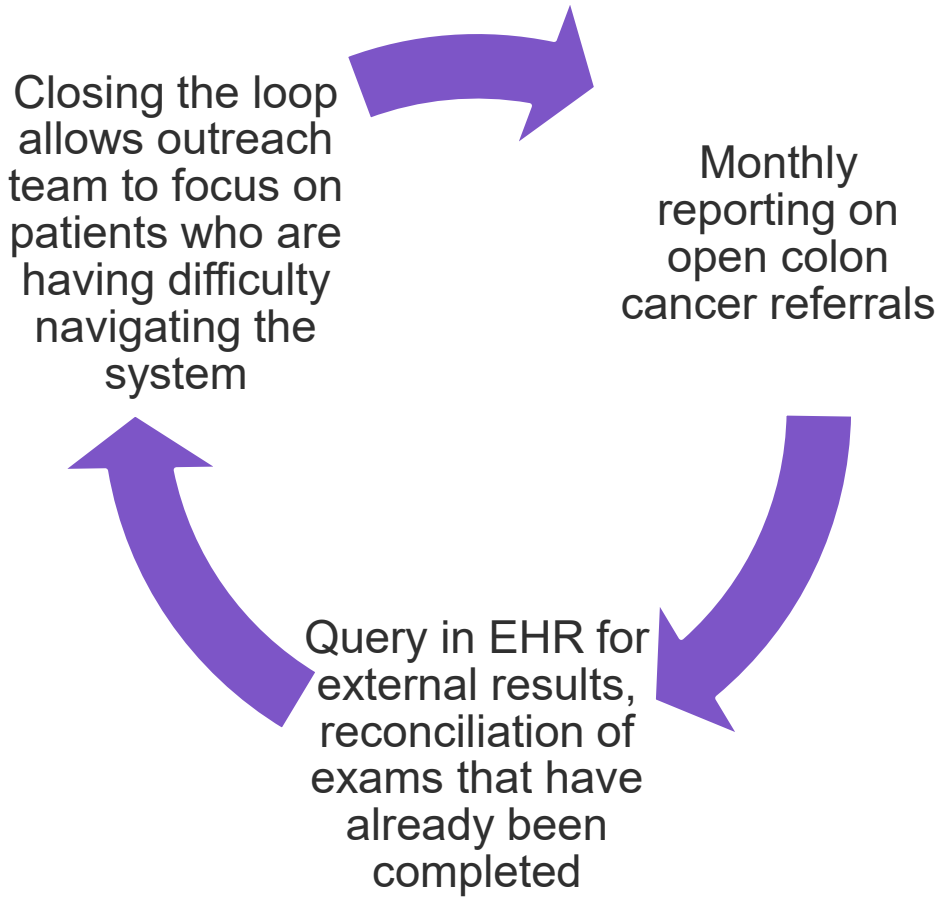
erie

Erie’s Population Health team

- Tiered support for patients
- Tiering tracks with career ladder for health outreach team members



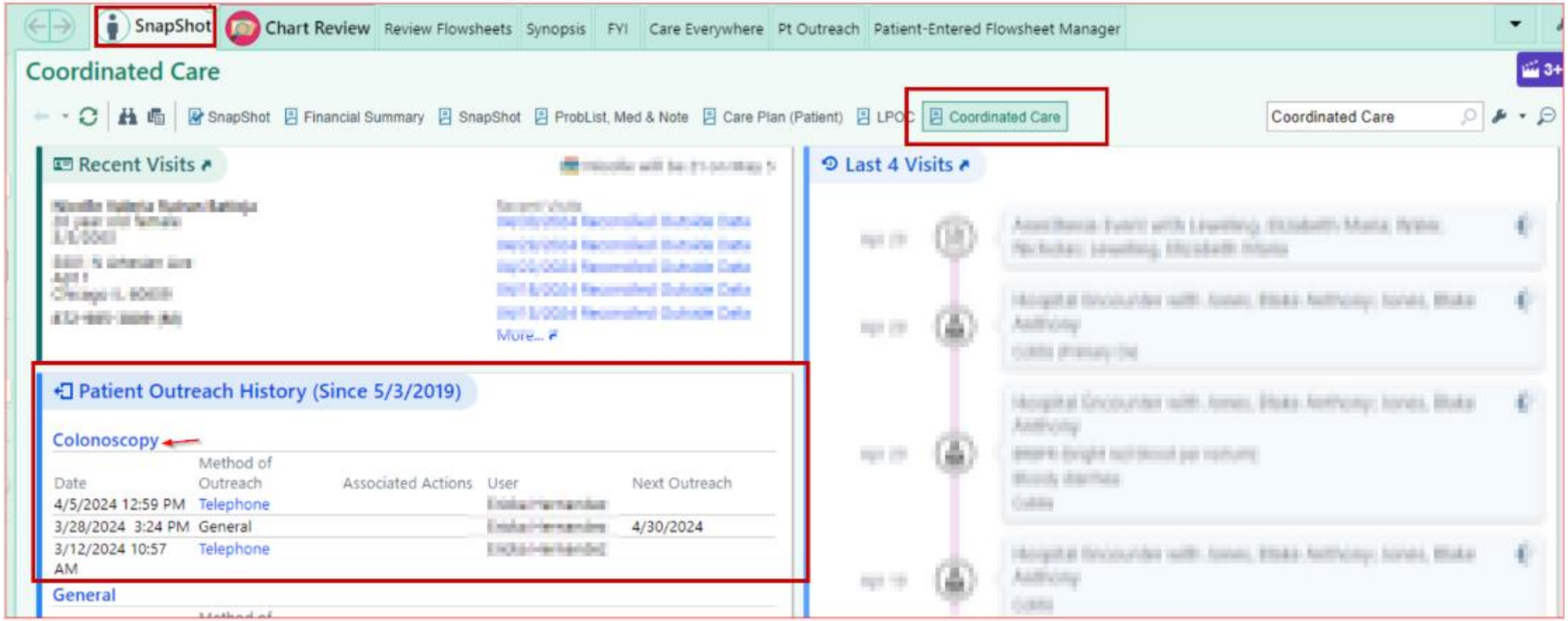
Closing the loop on open referrals



Navigation

Outreach to patients with outstanding referrals to assess and address barriers					
Challenges receiving and understanding the actual referral and how to schedule an appointment	Complex phone trees to schedule appointments	Transportation	Need for escort	Need to take time off work	Childcare

Documentation of Outreach



Working with Hospital Partners

- Buy-in from community partners to see our uninsured patients: we are doing the bulk of our screening through fecal testing and are only sending those who really need colonoscopy your way.
- Expedited referral pathways for patients with positive fecal tests.
- Direct colonoscopy referrals bypass busy GI clinics.

Working with Community Partners

- We can’t be everywhere or do everything!
- Uber Health provided transportation for patients to get to colonoscopy appointments
- Establishing connections with organizations such as Taller de José in Chicago – provides accompaniment and support to patients navigating health systems and other social services, and can accompany patients to colonoscopy

Navigation works

- Statistically significant increase in colonoscopy completion rate from 42% to 62.9%
- Decrease in time to colonoscopy from 107 days to 97.29 days on average (not statistically significant)

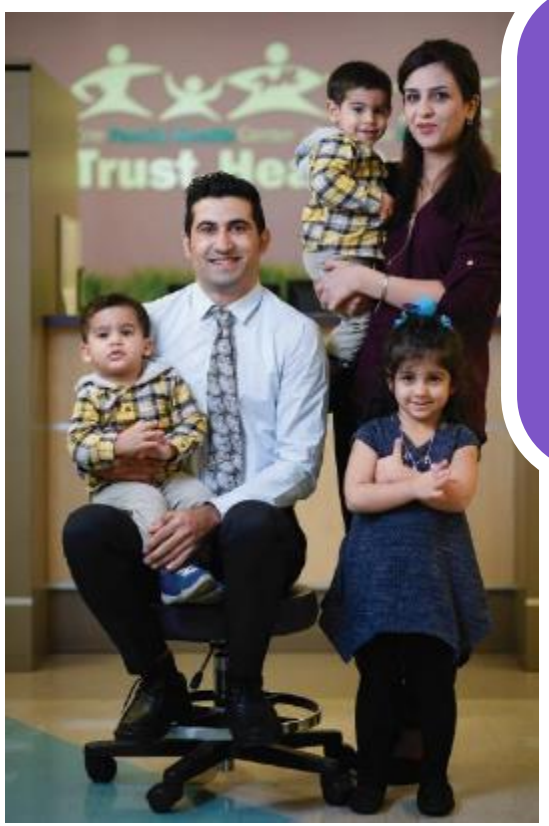
Joshua Freeman, DO[1], Miranda Hart, MD[2]. P4788 - The Impact of a Patient Navigation System on Colonoscopy Completion Rates, ACG 2025 Annual Scientific Meeting Abstracts. Phoenix, AZ: American College of Gastroenterology.

Achieving Success by Lowering Barriers to Screening

Measure Name	2023	2024	2025	Target	90th Percentile for UDS
Colorectal Cancer Screening	49%	62%	67%	51%	60%

ERIE'S QUALITY AWARDS

For more than 8 years, Erie has remained in the top 10% of health centers nationally for quality. In 2025, Erie is #1 for quality in Illinois and is one of only 5 out of 1,502 health centers nationally to achieve quality recognition in 8 of 9 quality areas!



Thank You!

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Thank You

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Questions