2022 NCCRT Annual Meeting

SCREENING AT 45: DATA, RESEARCH, AND IMPLEMENTATION

American Cancer Society | National Colorectal Cancer Roundtable | 80% In Every Community

Screening at 45: Data, Research, and Implementation

Jessica Star
MA, MPH
Associate Scientist II, Surveillance and Health Equity Science, ACS

Uri Ladabaum
MD, MS
Professor of Medicine
Stanford University School of Medicine

Keith L. Winfrey
MD, MPH, FACP
Chief Medical Officer, NOELA Community Health Center

Kaitlin Sylvester
MPA
Director, National Colorectal Cancer Roundtable

2021 National Health Interview Survey Data on Colorectal Cancer Screening in Ages 45-49

Thursday, November 17, 9:20 AM

American Cancer Society | National Colorectal Cancer Roundtable | 80% In Every Community

CRC Screening at 45: The National Health Interview Survey

National Colorectal Cancer Roundtable

November 2022

Jessica Star, MA, MPH

Surveillance and Health Equity Sciences

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NHIS: Recent Changes in Survey Design

- In person, household survey among non-institutionalized adults
- Self-reported CRC screening data
  - Colonoscopy
  - Sigmoidoscopy
  - FIT/gFOBT (hereafter FIT)
  - CT Colonography (added in 2010)
  - sDNA/Cologuard (added in 2018)
- 2019: Change in survey design, CRC screening questions, and rotation
- 2021: CRC screening data are collected, mix of in-person/ telephone

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National Health Interview Survey

Characteristics of people 45-49 years in the 2021 NHIS

- 61% are White, 18% are Hispanic, 11% are Black, 8% are Asian
- 45% completed a bachelors degree or further education
- 78% were above 200% of the federal poverty level
- 48% had a wellness visit in the past 12 months
- Approximately 19 Million (weighted national estimate)

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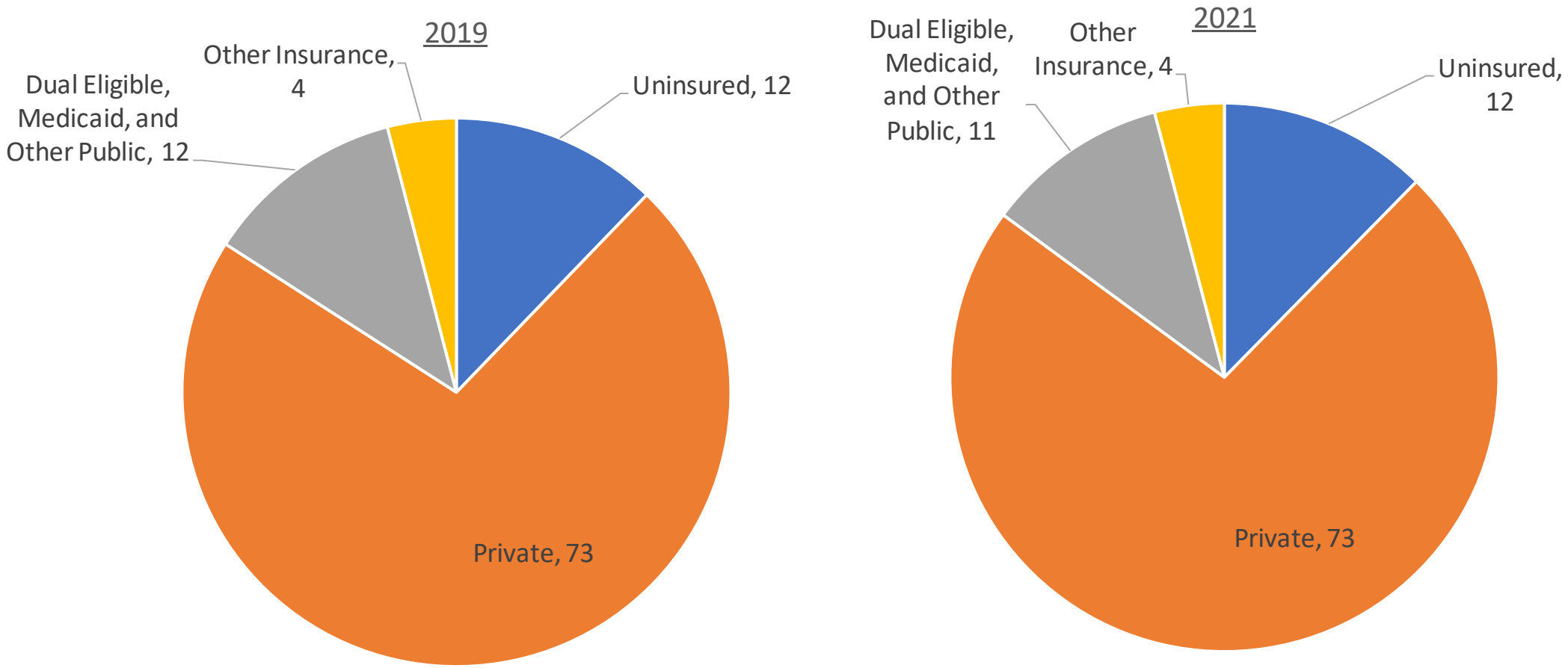
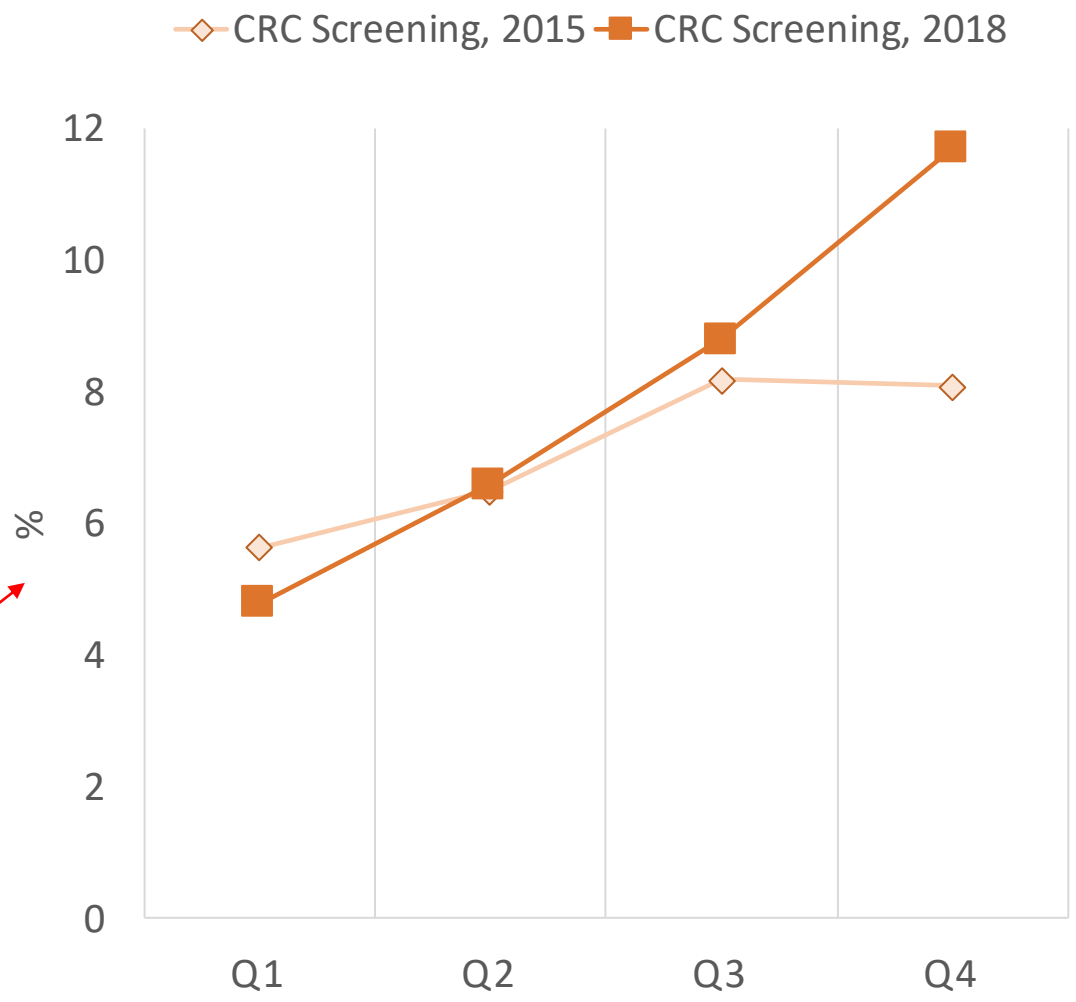
Characteristics (Cont.) – Insurance Status

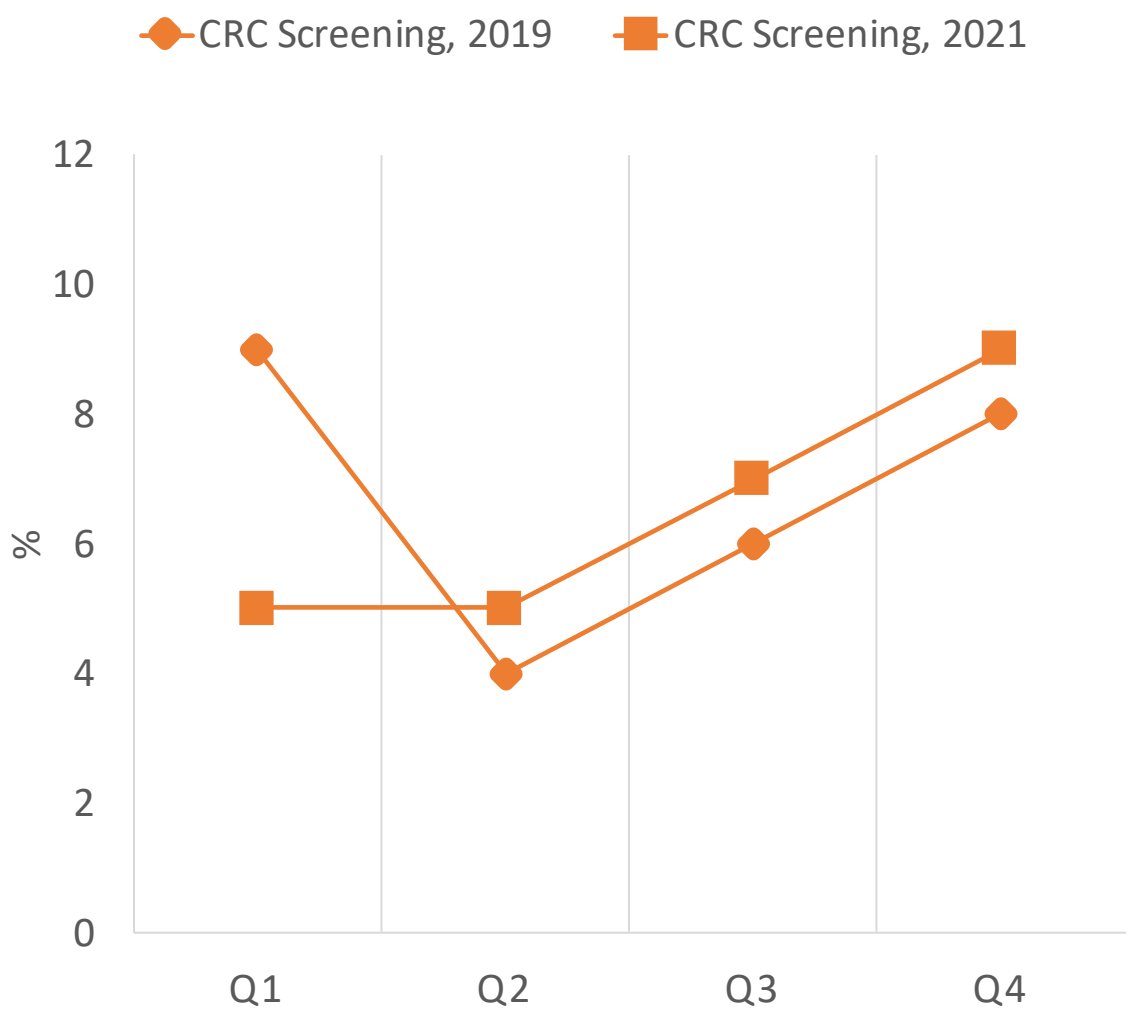


Sources: National Health Interview Survey 2019 and 2021

Changes in Past Year CRC Screening Prevalence– Age 45-49



Note the scale



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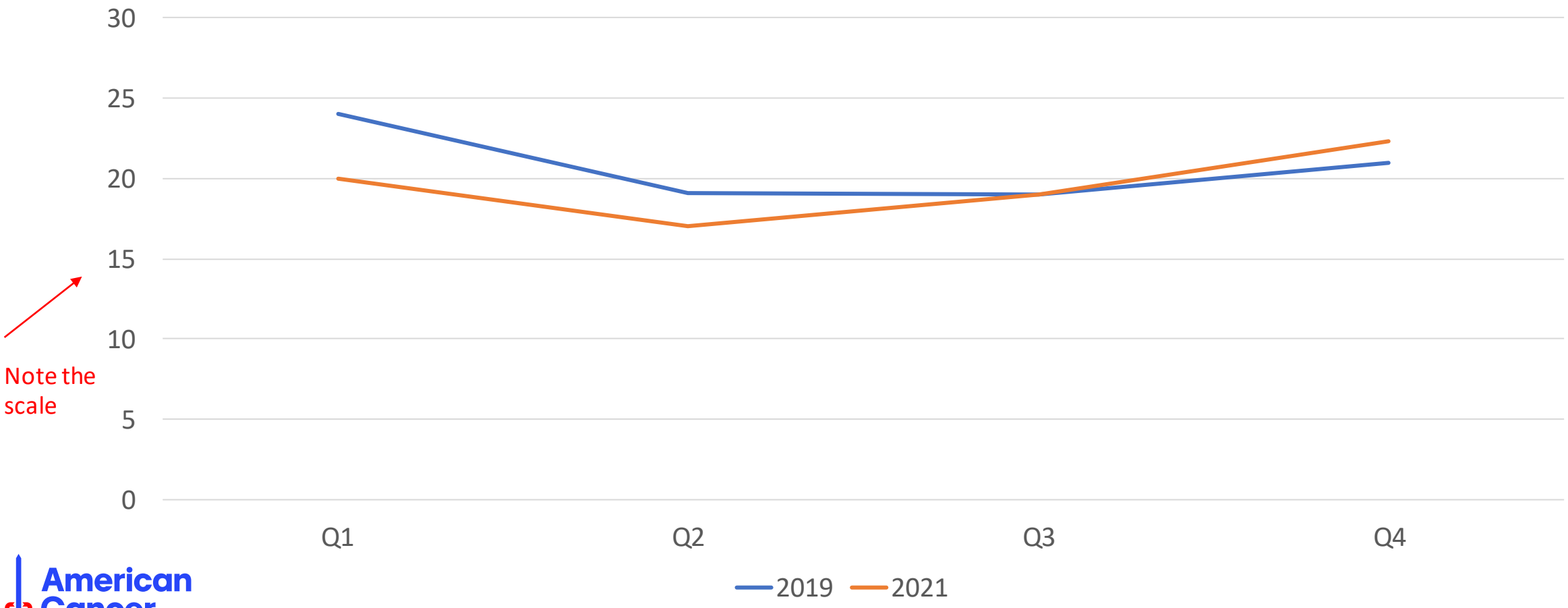
Fedewa SA, Siegel RL, Goding Sauer A, Bandi P, Jemal A. Colorectal cancer screening patterns after the American Cancer Society's recommendation to initiate screening at age 45 years. *Cancer*. 2020;126(6):1351-1353. doi:10.1002/cncr.32662

Changes in UTD CRC Screening Prevalence between 2019 and 2021– Aged 45-49



Note the scale

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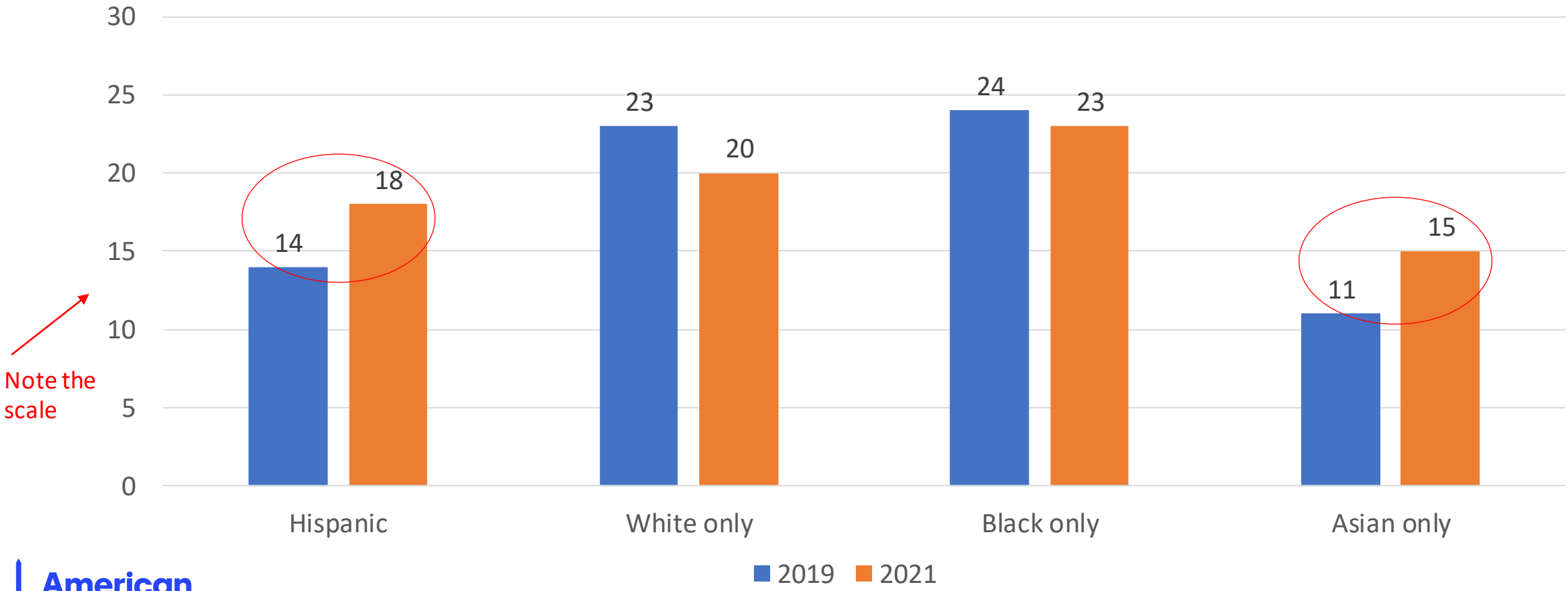
Changes in UTD CRC Screening Prevalence between 2019 and 2021 by Race – Aged 45-49



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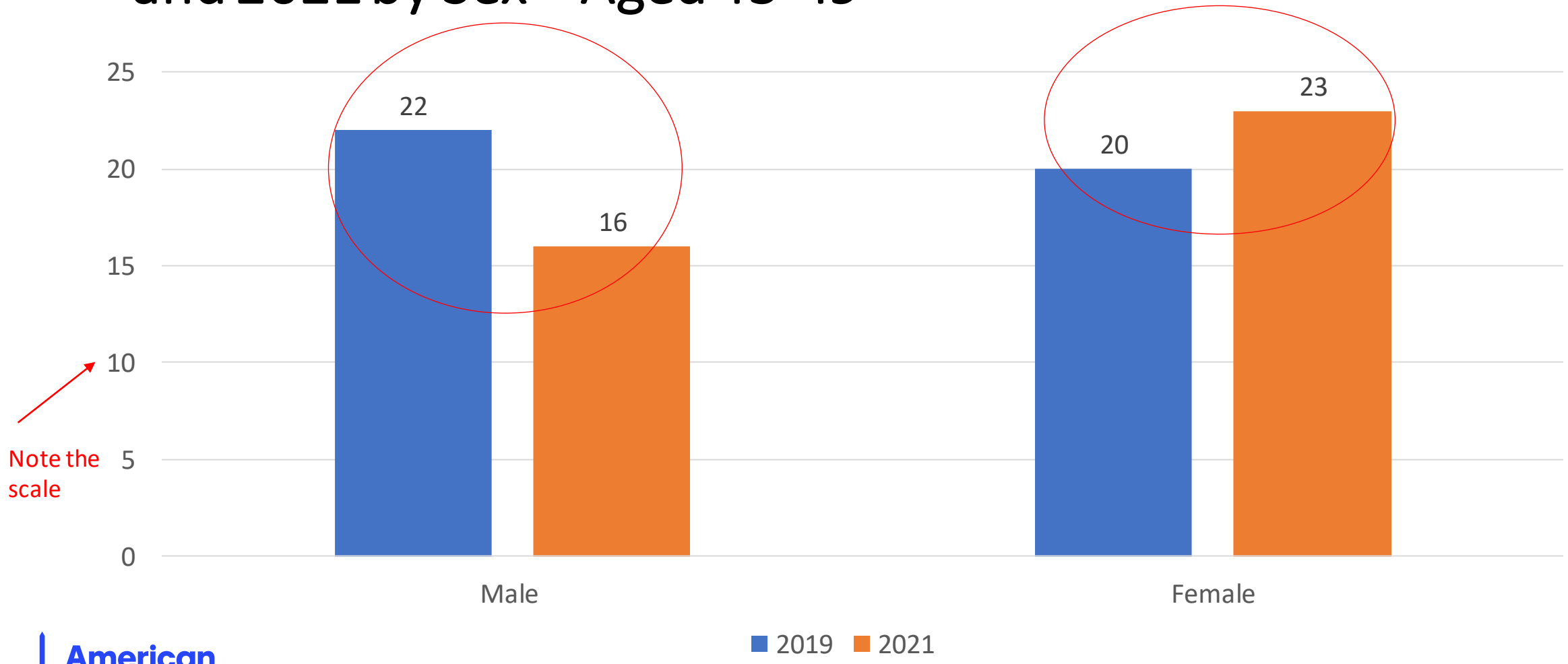
Changes in UTD CRC Screening Prevalence between 2019 and 2021 by Sex – Aged 45-49



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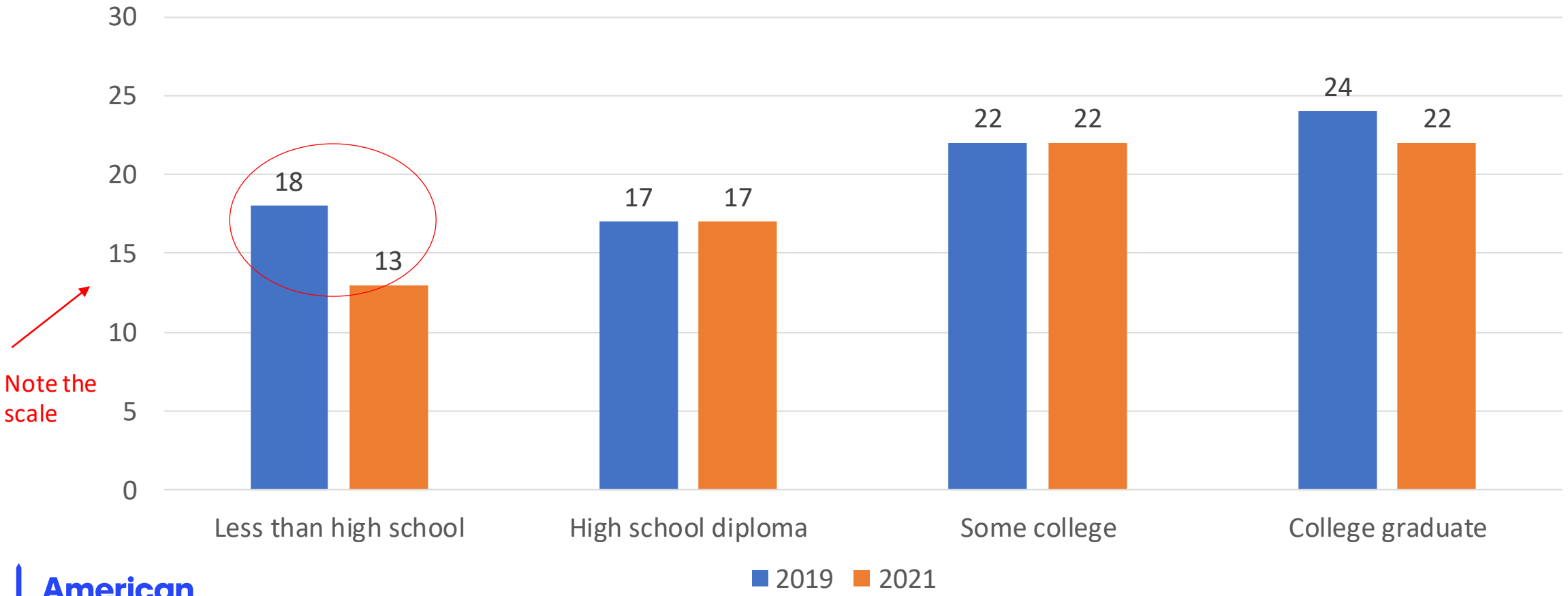
Changes in UTD CRC Screening Prevalence between 2019 and 2021 by Education – Aged 45-49



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Concluding Thoughts

- Screening in aged 45-49 still low at 20%
- Notable disparities in screening by race, sex, and education
- Benefits of home-based screening

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Thank You!

Acknowledgements

- Ahmedin Jemal
- Surveillance and Health Equity Sciences Team
- American Cancer Society

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Thank You!

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Screening at Ages 45-49: Emerging Evidence and Implications

Thursday, November 17, 9:20 AM

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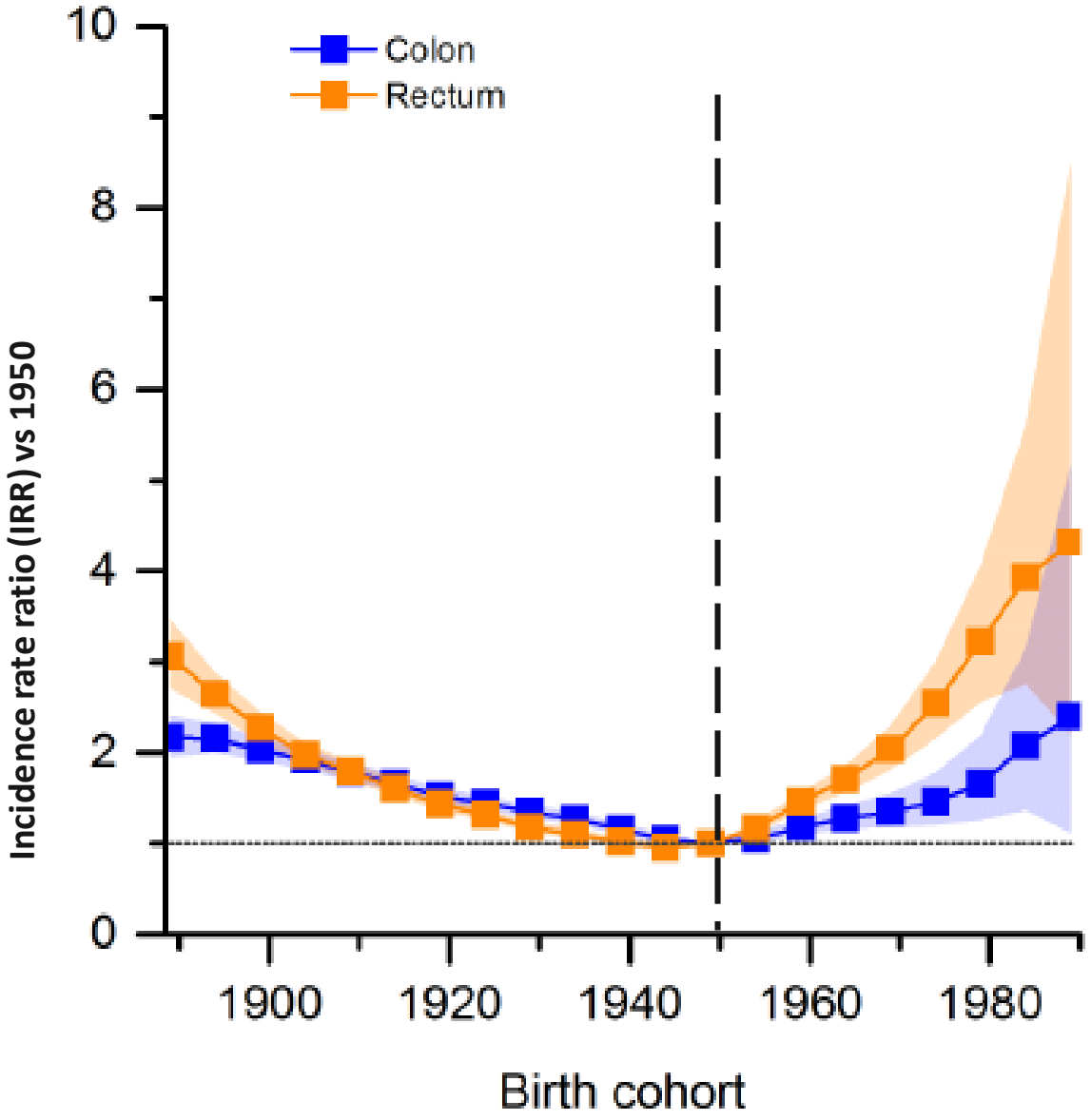
Screening at Ages 45-49: Emerging evidence and implications

NCCRT Annual Meeting 2022
November 17, 2022

Uri Ladabaum, M.D., M.S.
Professor of Medicine; Director, GI Cancer Prevention Program
Stanford University School of Medicine

Epidemiological trends:
CRC risk increasing at ages <50

Increasing CRC risk under age 50

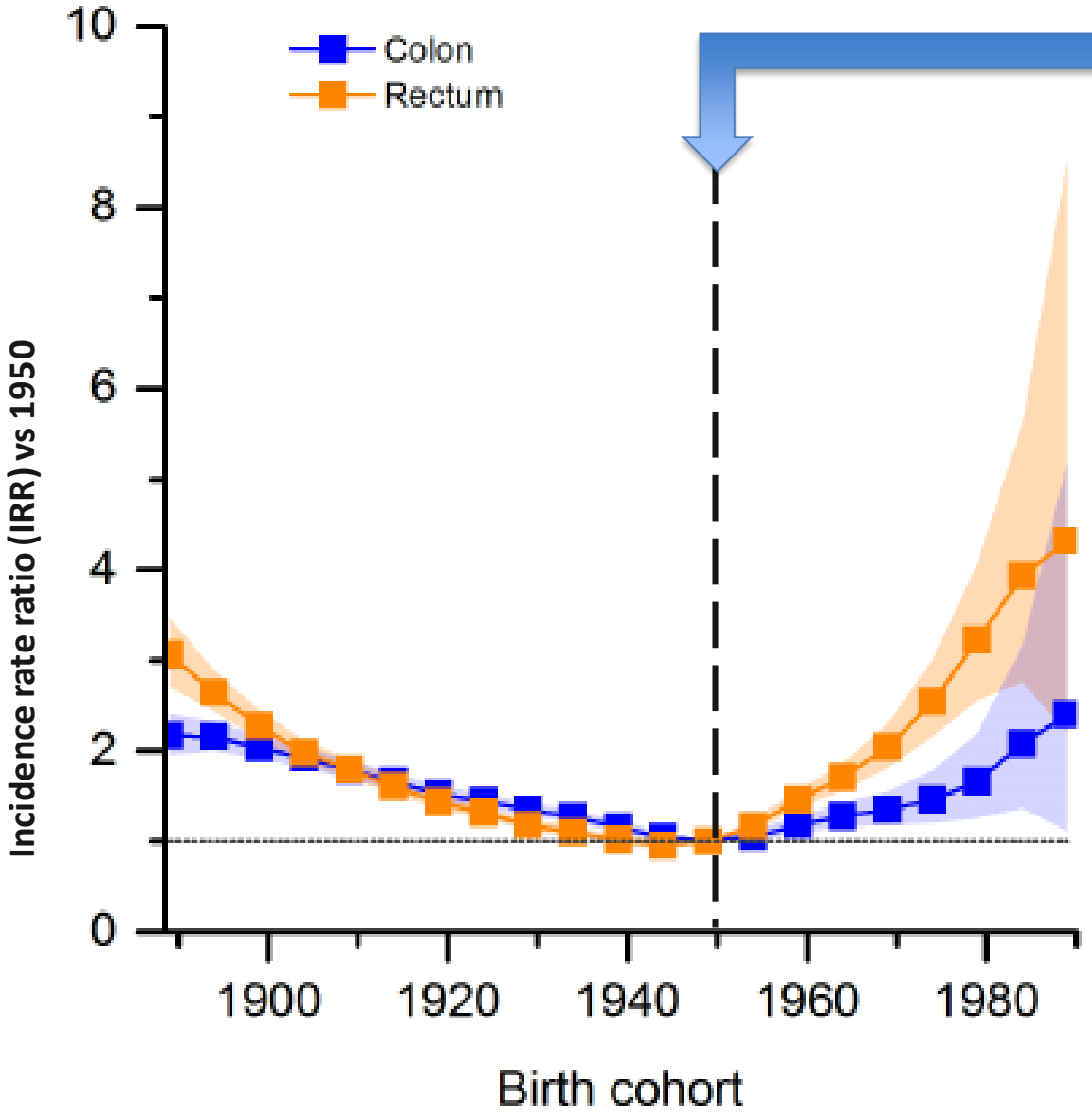


Rectum: IRR=4.3
(95% CI, 2.2-8.5)

Colon: IRR=2.4
(95% CI, 1.1-5.2)

Siegel et al., JNCI 2017;109(8)

Increasing CRC risk under age 50



50 year-olds in 2000

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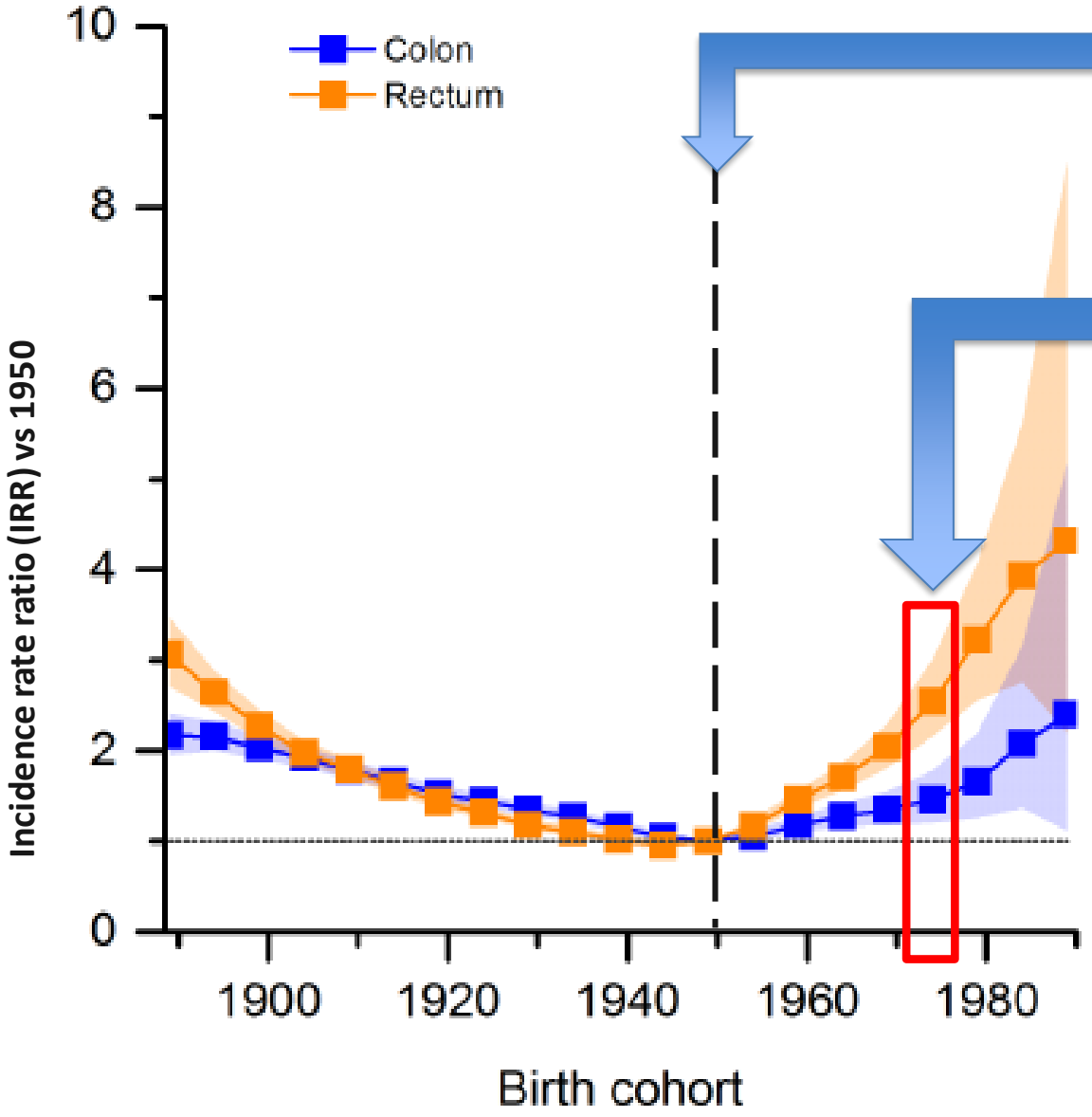


50 year-olds in 2000

45-49 year-olds TODAY in 2022

Rectum: IRR=4.3 (95% CI, 2.2-8.5)

Colon: IRR=2.4 (95% CI, 1.1-5.2)

Siegel et al., JNCI 2017;109(8)

Prompted change in guidelines

Colorectal Cancer Screening for Average-Risk Adults: 2018 Guideline Update From the American Cancer Society

ACG Clinical Guidelines: Colorectal Cancer Screening 2021

"The ACS recommends that adults aged 45 years and older with an average risk of CRC undergo regular screening…"

2. We suggest CRC screening in average-risk individuals between ages 45 and 49 years to reduce incidence of advanced adenoma, CRC, and mortality from CRC.

Conditional recommendation; very low-quality evidence

U.S. Preventive Services TASK FORCE

Population	Recommendation	Grade
Adults aged 50 to 75 years	The USPSTF recommends screening for colorectal cancer in all adults aged 50 to 75 years. See the "Practice Considerations" section and Table 1 for details about screening strategies.	A
Adults aged 45 to 49 years	The USPSTF recommends screening for colorectal cancer in adults aged 45 to 49 years. See the "Practice Considerations" section and Table 1 for details about screening strategies.	B
Adults aged 76 to 85 years	The USPSTF recommends that clinicians selectively offer screening for colorectal cancer in adults aged 76 to 85 years. Evidence indicates that the net benefit of screening all persons in this age group is small. In determining whether this service is appropriate in individual cases, patients and clinicians should consider	C

Gastroenterology 2022;162:285–299

CLINICAL PRACTICE GUIDELINES

Updates on Age to Start and Stop Colorectal Cancer Screening: Recommendations From the U.S. Multi-Society Task Force on Colorectal Cancer

This raised concerns

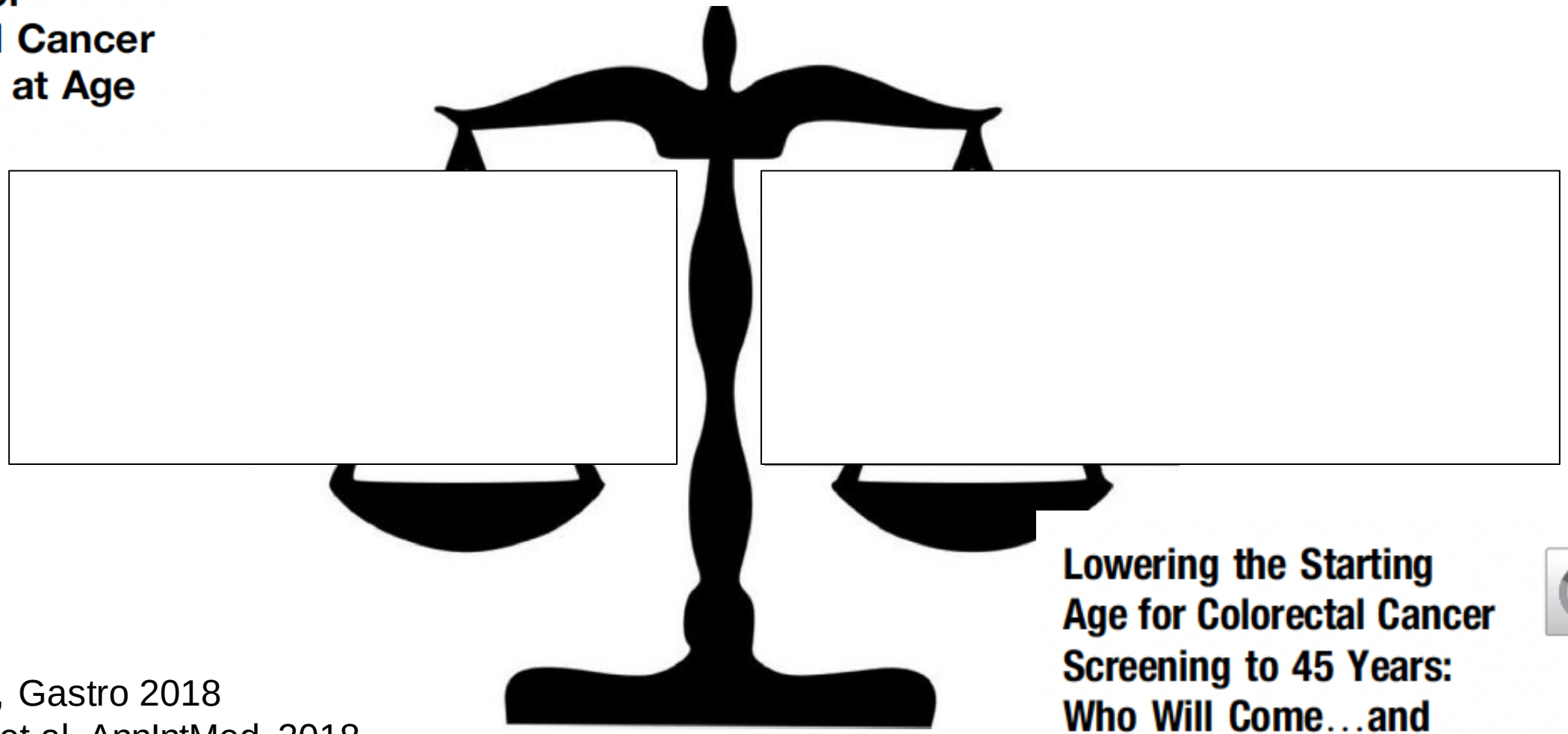
Potential Intended and Unintended Consequences of Recommending Initiation of Colorectal Cancer Screening at Age 45 Years

Annals of Internal Medicine

IDEAS AND OPINIONS

From Colorectal Cancer Screening Guidelines to Headlines: Beware!

Michael Bretthauer, MD, PhD; Mette Kalager, MD, PhD; and David S. Weinberg, MD, MSc



Lowering the Starting Age for Colorectal Cancer Screening to 45 Years: Who Will Come…and Should They?

Liang et al., Gastro 2018
Bretthauer et al, AnnIntMed 2018
Imperiale et al, CGH 2018

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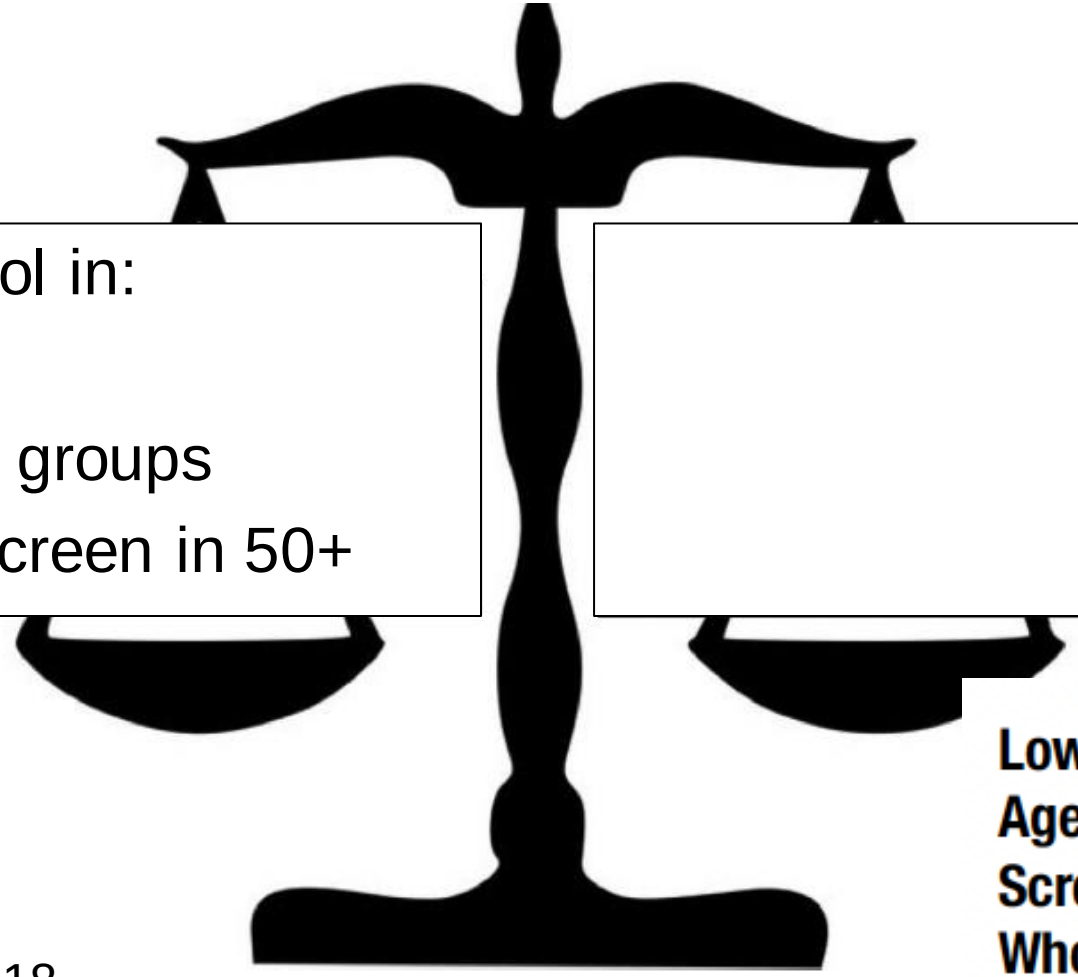

- CRC control in:
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  - High risk groups
- Increase screen in 50+

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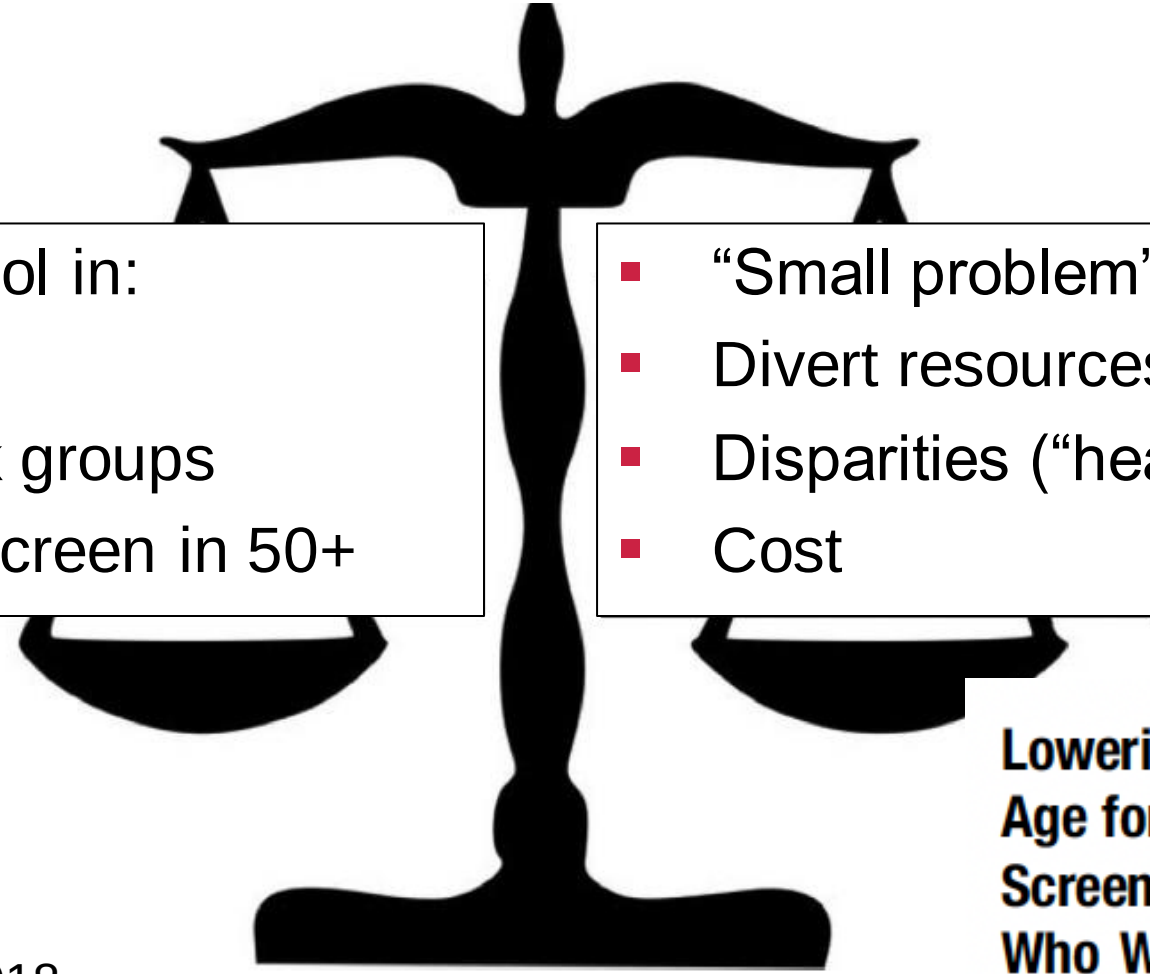

- CRC control in:
  - 45-49
  - High risk groups
- Increase screen in 50+

- "Small problem"
- Divert resources
- Disparities ("healthy screenee")
- Cost

Lowering the Starting Age for Colorectal Cancer Screening to 45 Years: Who Will Come…and Should They?

Liang et al., Gastro 2018
Bretthauer et al, AnnIntMed 2018
Imperiale et al, CGH 2018

So, what has happened so far?

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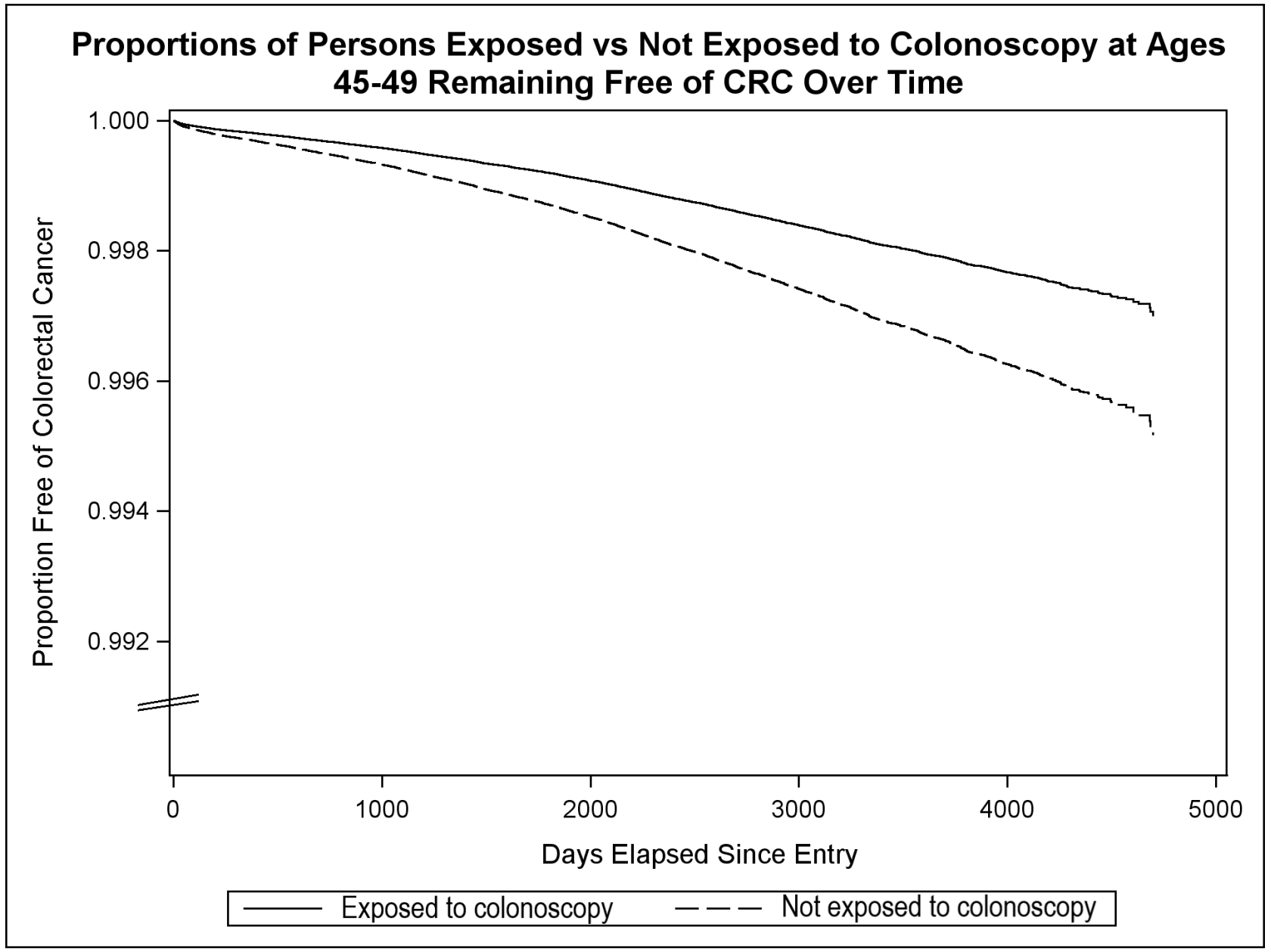
1. Evidence of screen benefit <50

Gastroenterology 2021;160:2018–2028

Colorectal Cancer Incidence After Colonoscopy at Ages 45–49 or 50–54 Years

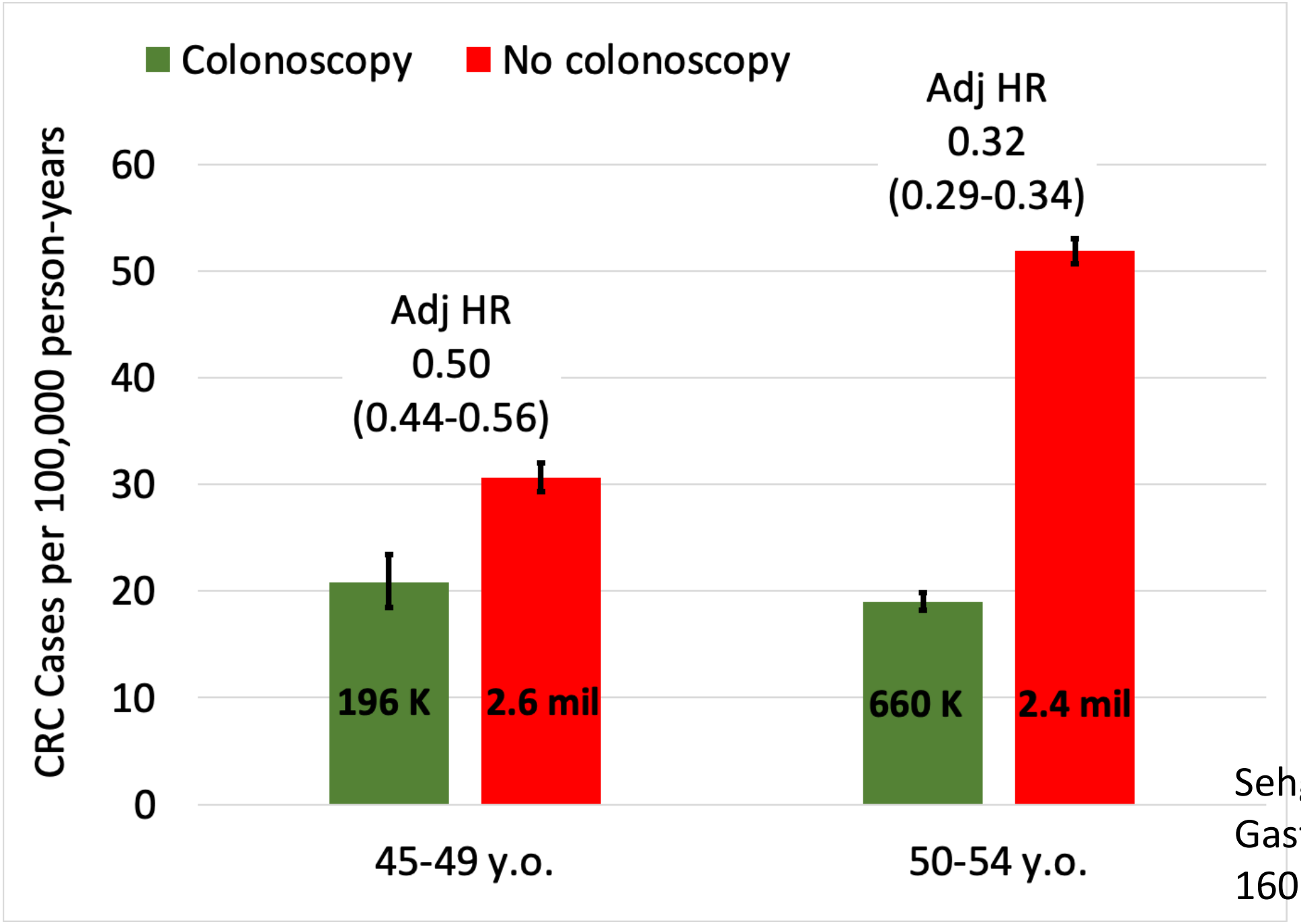
Maanek Sehgal,[1,*] **Uri Ladabaum**,[2,*] Alka Mithal,[3] Harminder Singh,[4] Manisha Desai,[5] and Gurkirpal Singh[2,3]

Large population-based study of exposure to colonoscopy

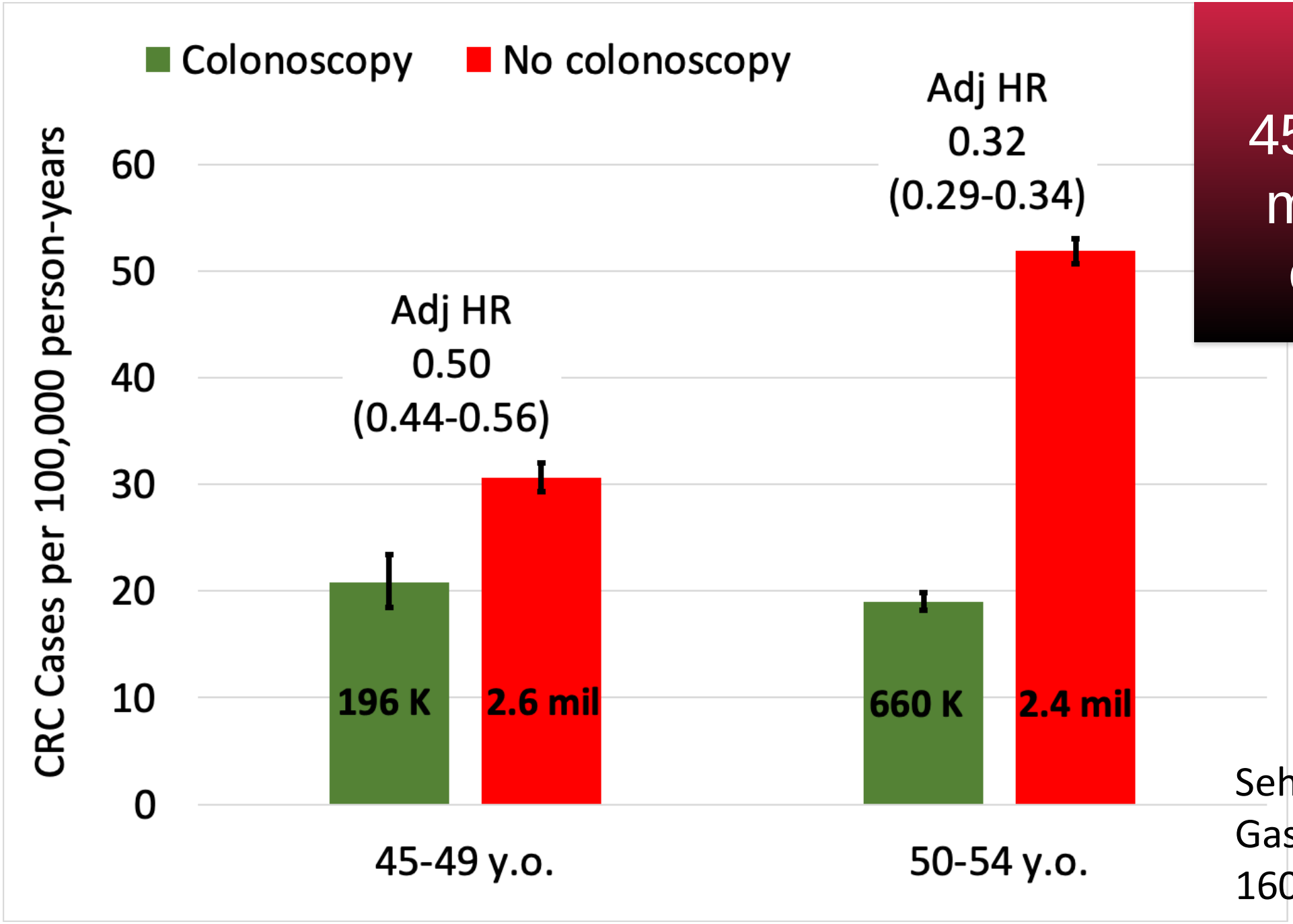


Exposure to colonoscopy associated with lower risk of CRC

Sehgal, Ladabaum et al, Gastroenterology 2021; 160:2018



Sehgal, Ladabaum et al, Gastroenterology 2021; 160:2018



Higher-risk 45-49 year-olds may have had colonoscopy

Sehgal, Ladabaum et al, Gastroenterology 2021; 160:2018

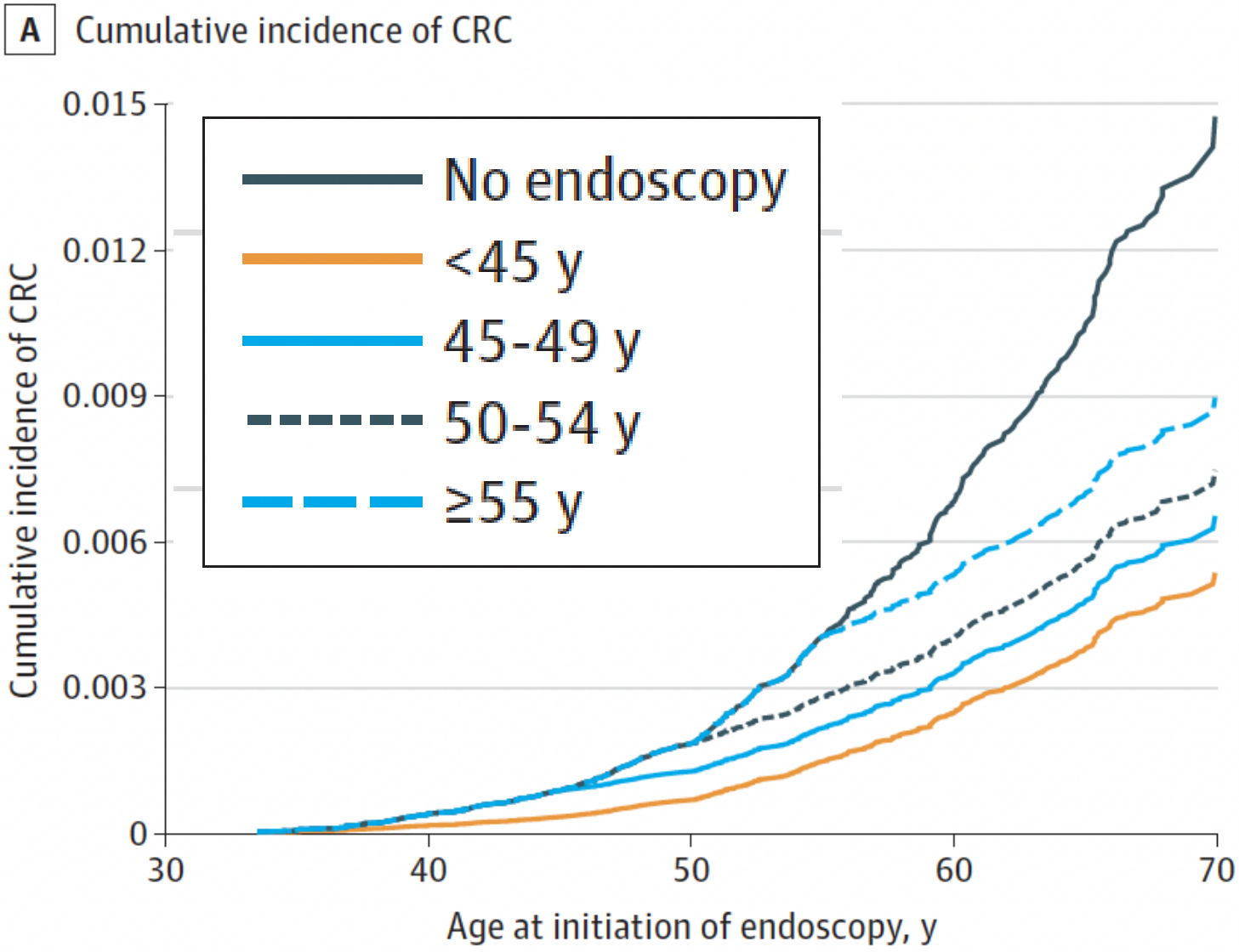
JAMA Oncology | Original Investigation

Age at Initiation of Lower Gastrointestinal Endoscopy and Colorectal Cancer Risk Among US Women

Wenjie Ma, MD, ScD; Molin Wang, PhD; Kai Wang, MD, PhD; Yin Cao, MPH, ScD; Ellen Hertzmark, PhD; Shuji Ogino, MD, PhD; Kimmie Ng, MD, MPH; Walter C. Willett, MD, DrPH; Edward L. Giovannucci, MD, ScD; Mingyang Song, MD, ScD; Andrew T. Chan, MD, MPH

JAMA Oncol. 2022;8(7):986-993. doi:10.1001/jamaoncol.2022.0883
Published online May 5, 2022.

Figure 2. Estimated Cumulative Incidence of Colorectal Cancer (CRC)



Lower endoscopy <50 associated with lower risk of CRC

Ma et al, JAMA Onc 2022; 8:986

So, what has happened so far?

1. Evidence of screen benefit <50
2. High yield at colonoscopy

Adenoma Detection Rate: 45-49 year-olds

Study	Years	# exams 45-49	45-49 years old CRN	50-59 years old CRN	% exams 45-49
Kolb 2021	2002-2020	N/A	17.8%	24.8%	N/A

- 17 studies 2002-2020
  - 51,811 average risk
  - 4 continents
- [Truly average risk? Calendar years? Geographic variation?]

Kolb et al, Gastroenterology 2021;161:1145

Adenoma Detection Rate: 45-49 year-olds

Study	Years	# exams 45-49	45-49 years old	50-54 years old	% exams 45-49
Liang 2022 GIQuIC	2010-2020	92,752	28.0%	33.0%	
Bilal 2022 GIQuIC	2014-2020	47,213	28.6%	31.8%	
Trivedi 2022 AMSURG → GIQuIC	2014-2021	79,934	32%	37.7%	

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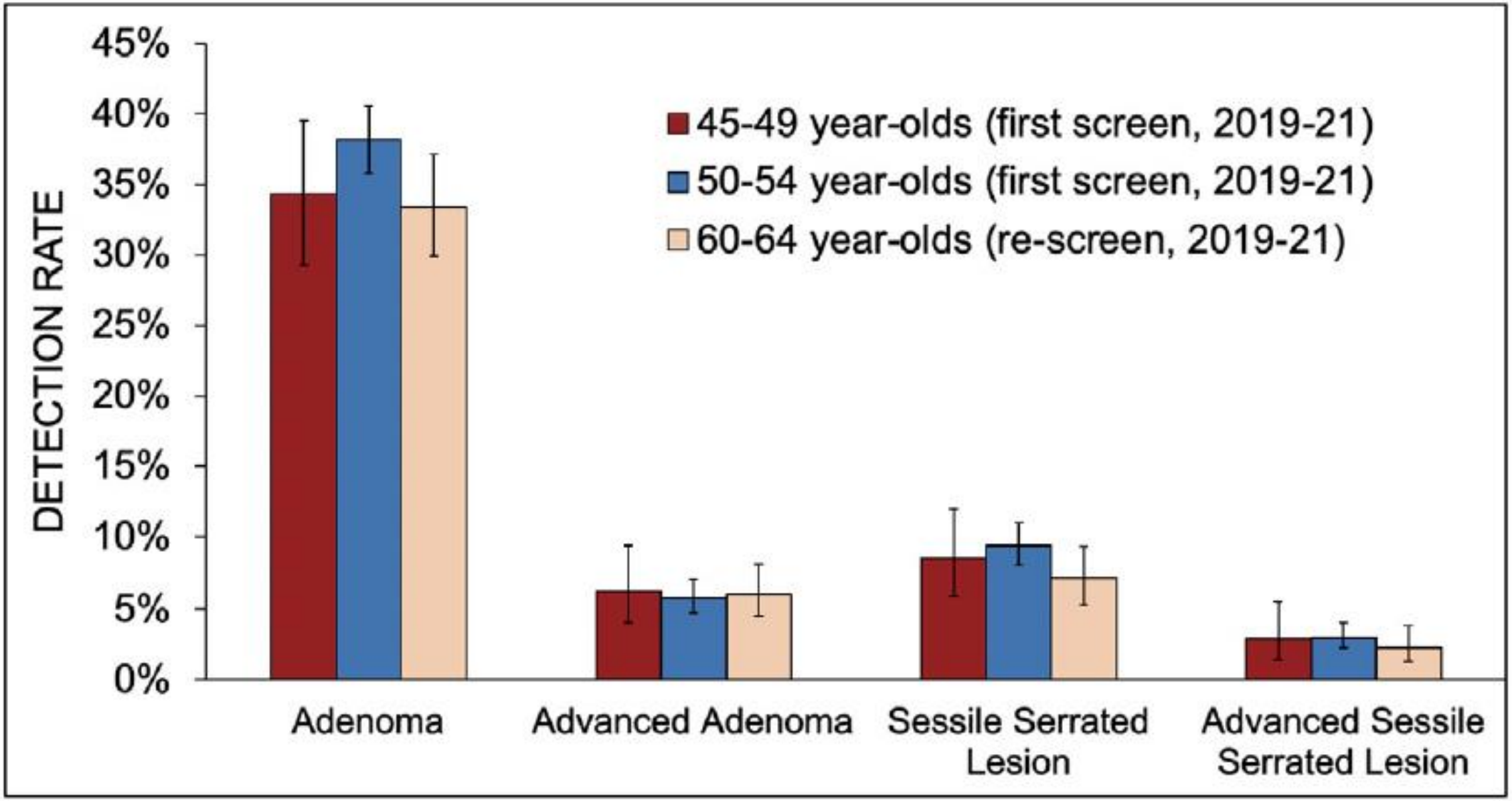
Karsenti 2019	2016	515	21.2% (19% avg risk)	25.2%	
Ladabaum 2022	2019-2021*	350	34.3%	38.2%	
Impariale 2021	2019*	816	31% NAA	N/A	

Adenoma and Sessile Serrated Lesion Detection Rates at Screening Colonoscopy for Ages 45–49 Years vs Older Ages Since the Introduction of New Colorectal Cancer Screening Guidelines

Uri Ladabaum,[1] John Shepard,[2] and Ajitha Mannalithara[1]

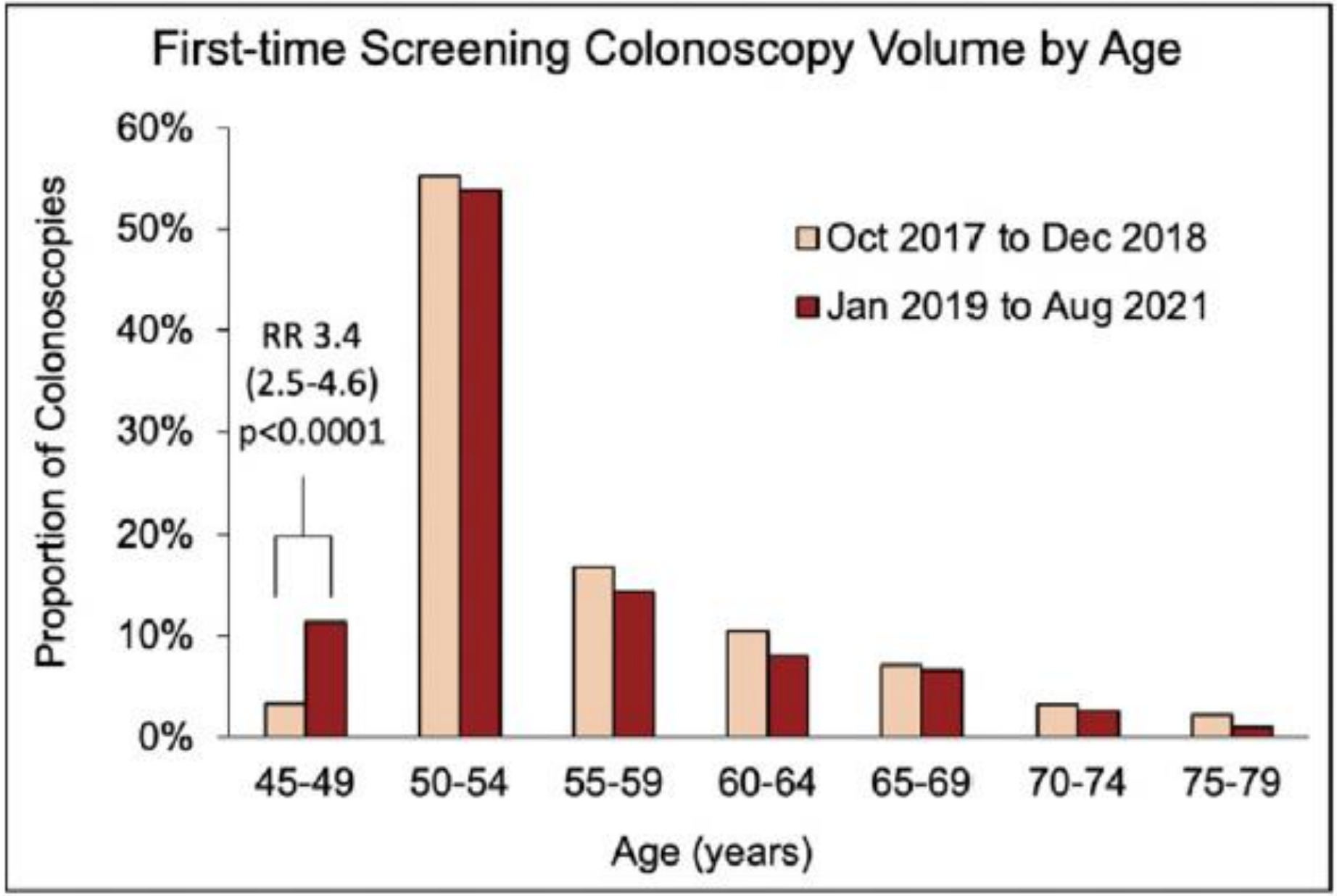
Ladabaum et al, ClinGastHep 2022, epub



Ladabaum et al, ClinGastHep 2022, epub

So, what has happened so far?

1. Evidence of screen benefit <50
2. High yield at colonoscopy
3. Demand not overwhelming so far



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Some modeling

Gastroenterology 2019;157:137–148

Cost-Effectiveness and National Effects of Initiating Colorectal Cancer Screening for Average-Risk Persons at Age 45 Years Instead of 50 Years

Uri Ladabaum,[1] Ajitha Mannalithara,[1] Reinier G. S. Meester,[1] Samir Gupta,[2] and Robert E. Schoen[3]

Ladabaum et al, Gastroenterology 2019;157:137

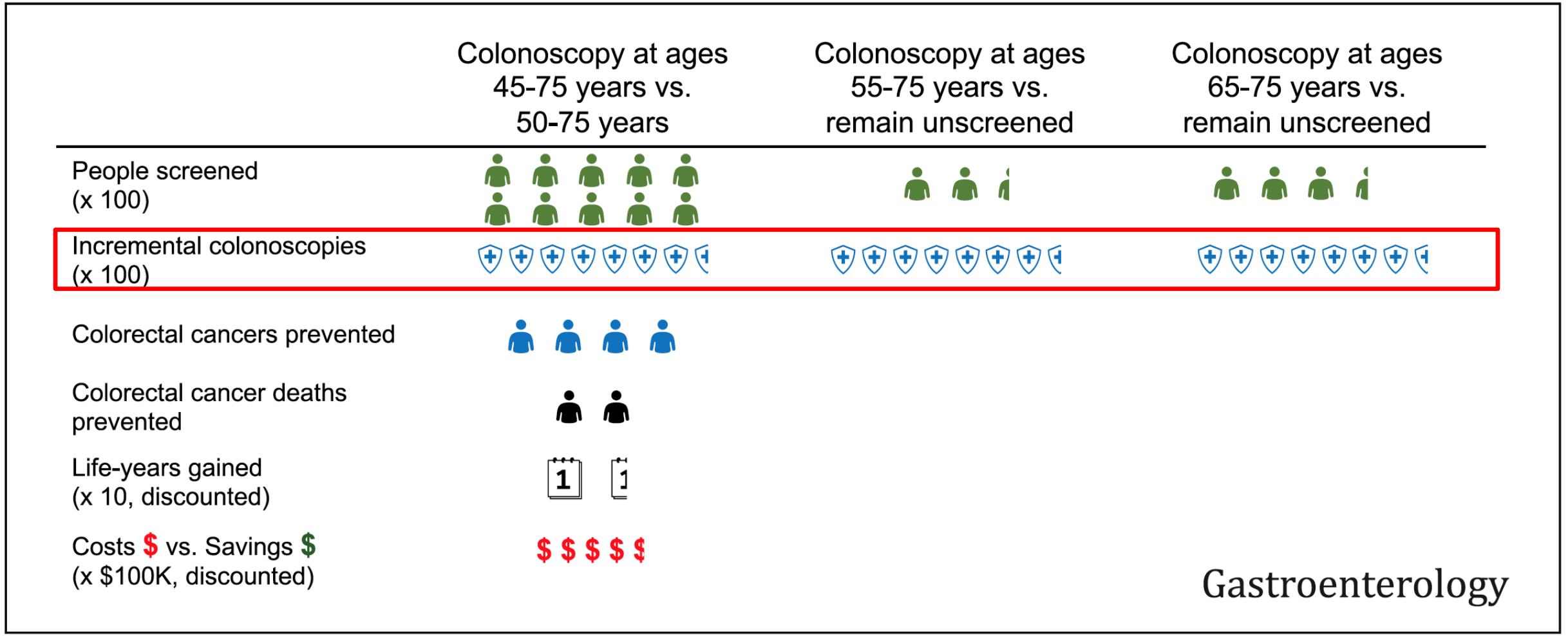
Potential trade-offs?

	Colonoscopy at ages 45-75 years vs. 50-75 years	Colonoscopy at ages 55-75 years vs. remain unscreened	Colonoscopy at ages 65-75 years vs. remain unscreened
People screened (x 100)			
Incremental colonoscopies (x 100)			
Colorectal cancers prevented			
Colorectal cancer deaths prevented			
Life-years gained (x 10, discounted)			
Costs $ vs. Savings $ (x $100K, discounted)	$ $ $ $ $		

Gastroenterology

Ladabaum et al, Gastroenterology 2019;157:137

Potential trade-offs?



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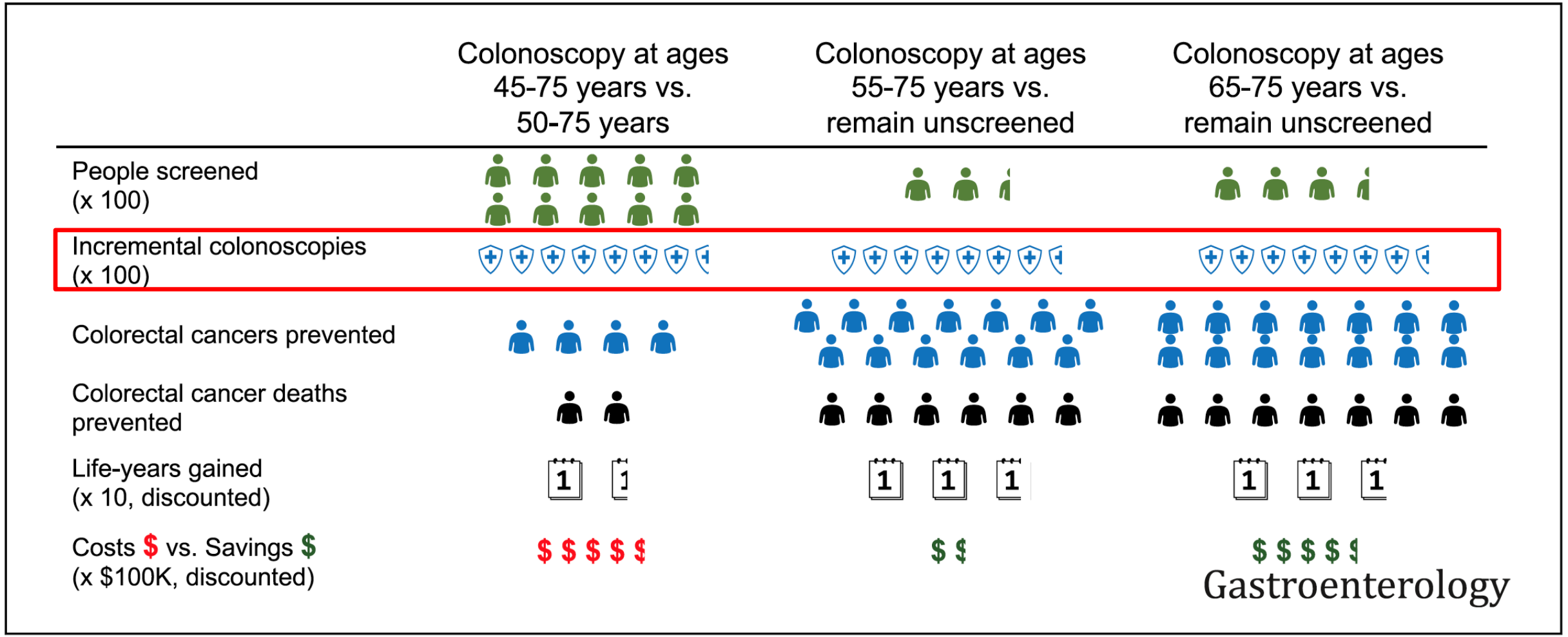

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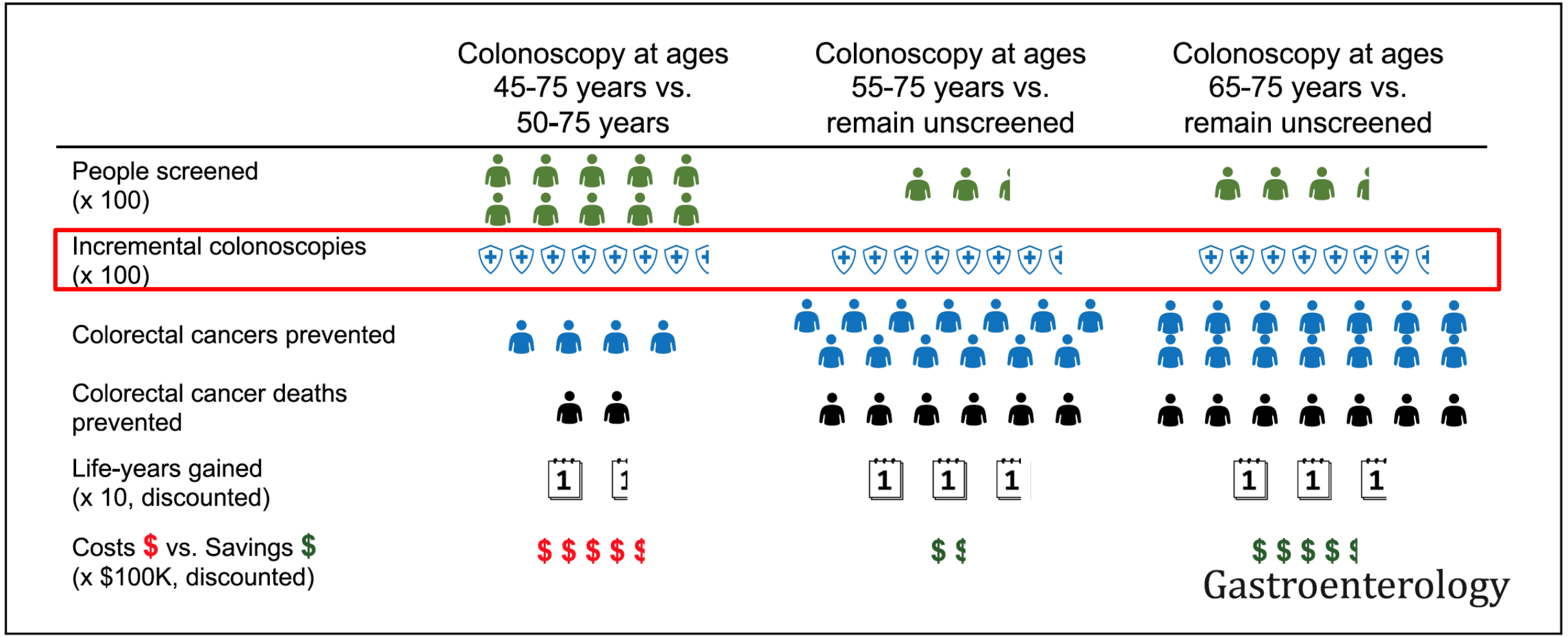


- *We have implicitly decided in U.S.: We can "do it all"*

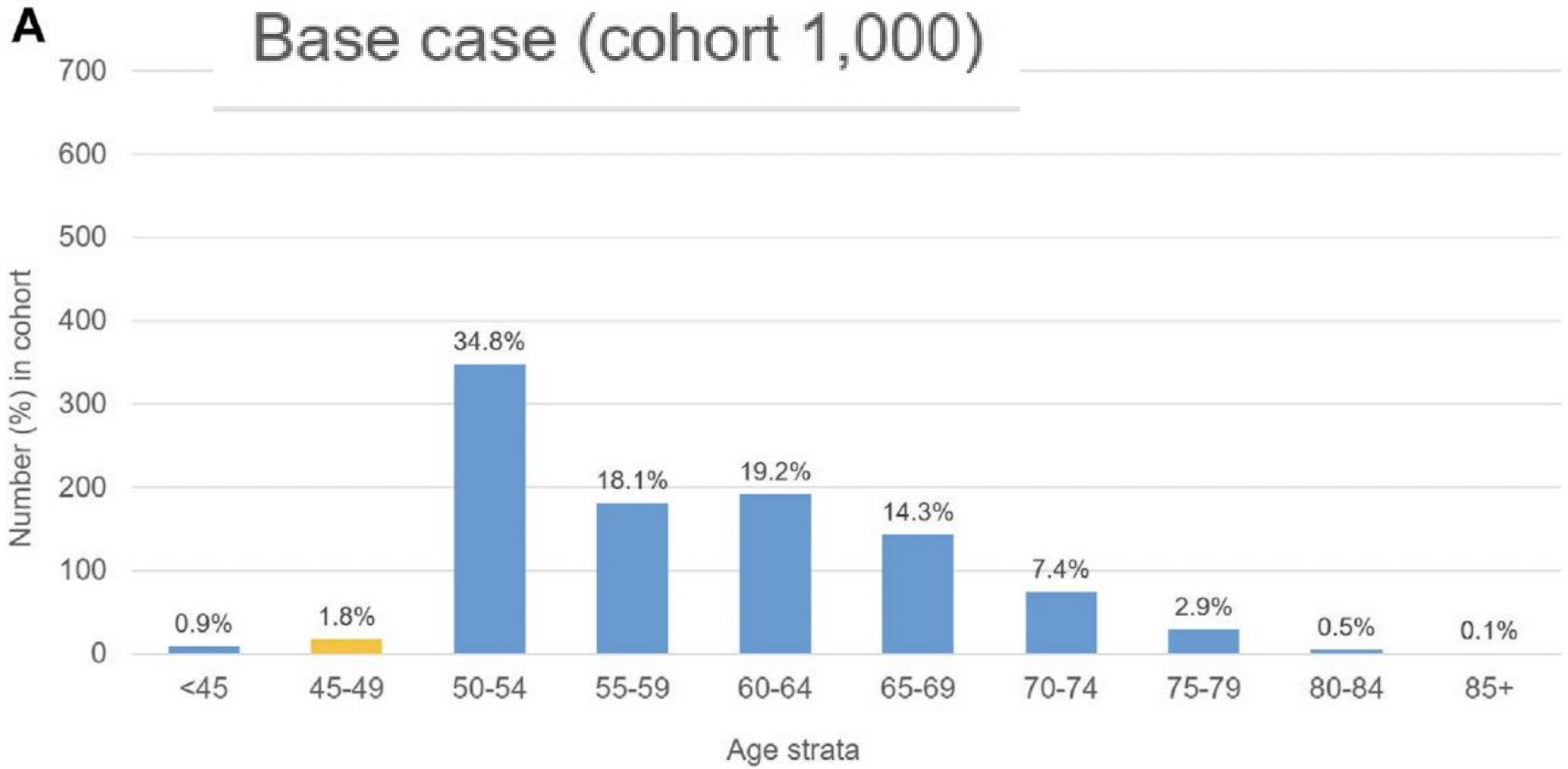
Ladabaum et al, Gastroenterology 2019;157:137

Gastroenterology 2022;162:984–986

Potential Effects of Lowering Colorectal Cancer Screening Age to 45 Years on Colonoscopy Demand, Case Mix, and Adenoma Detection Rate

Crockett and Ladabaum et al, Gastroenterology 2022;162:984

Strain resources? Affect ADR benchmark?



Crockett and Ladabaum et al, Gastroenterology 2022;162:984

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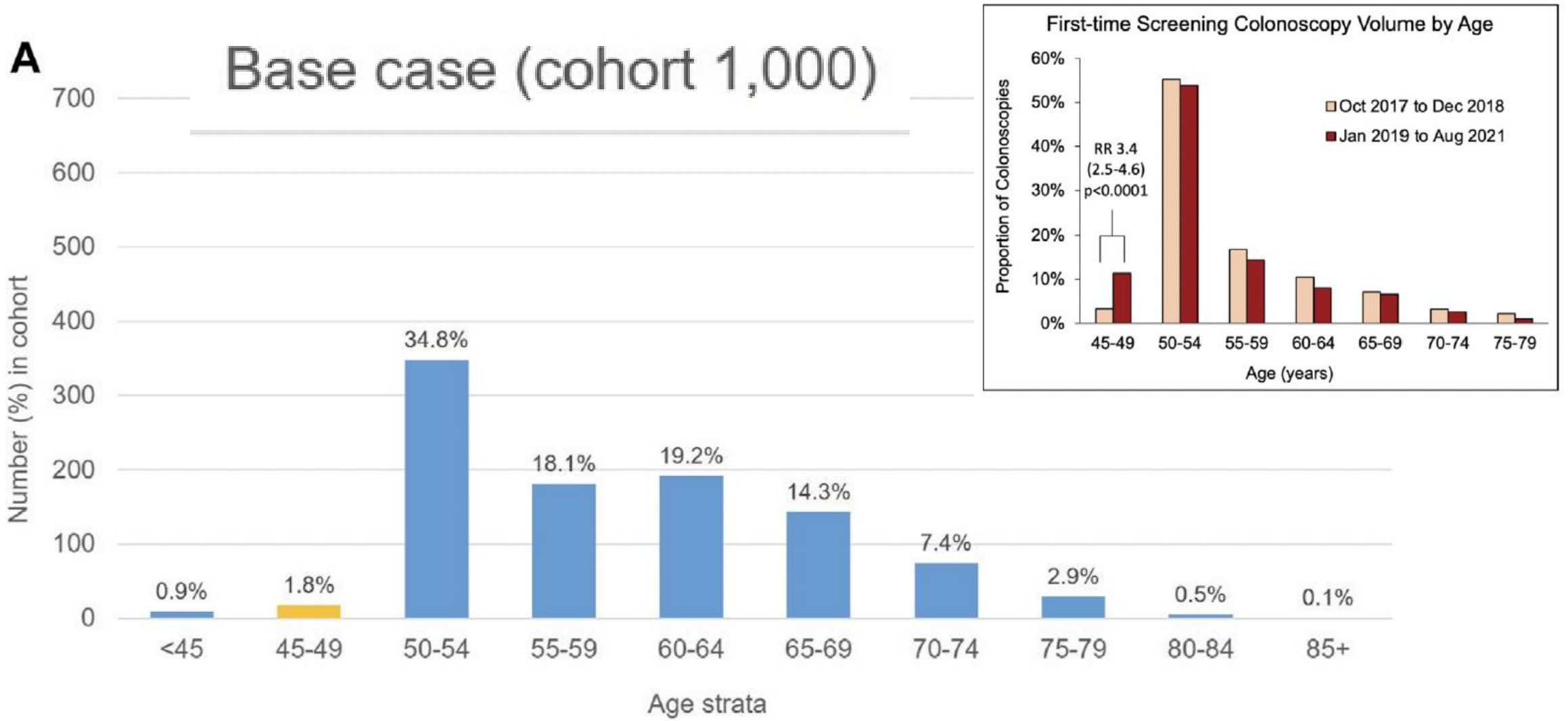

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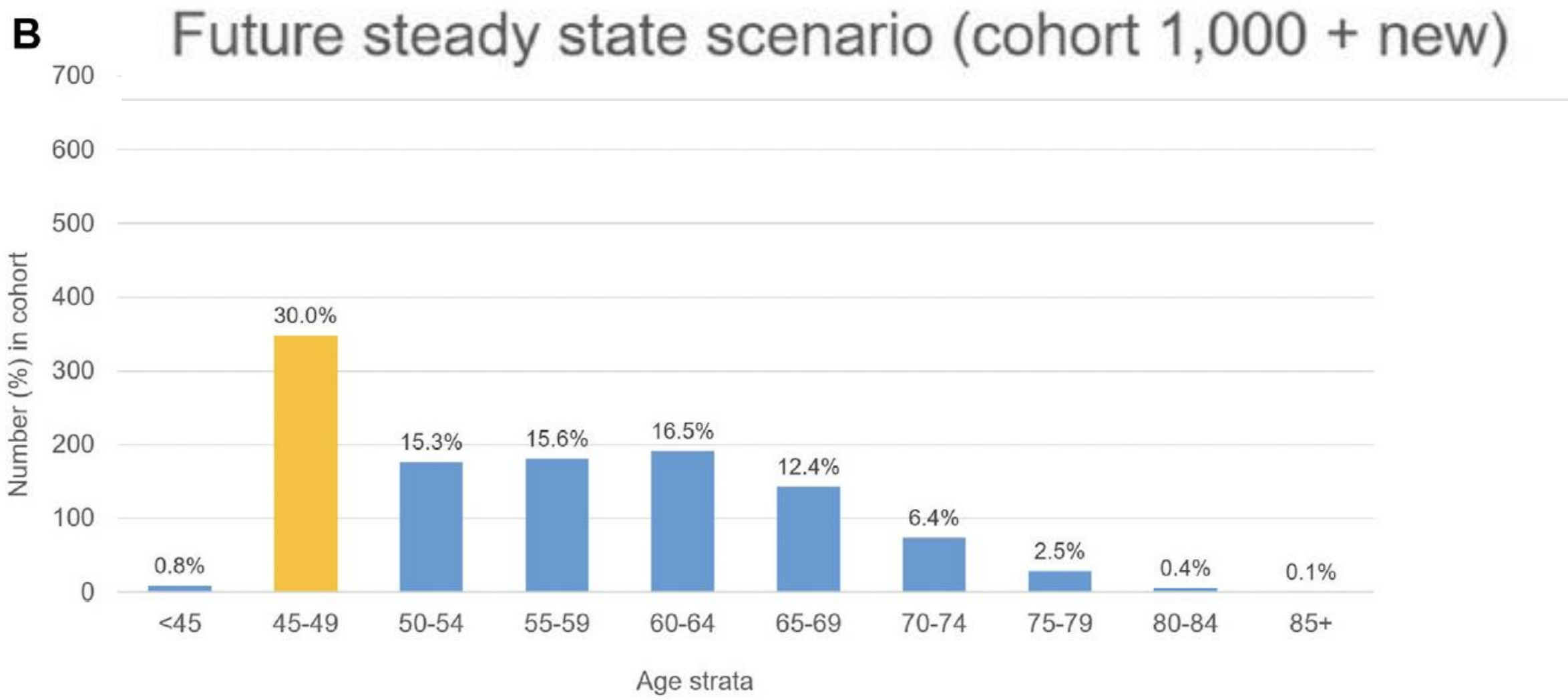

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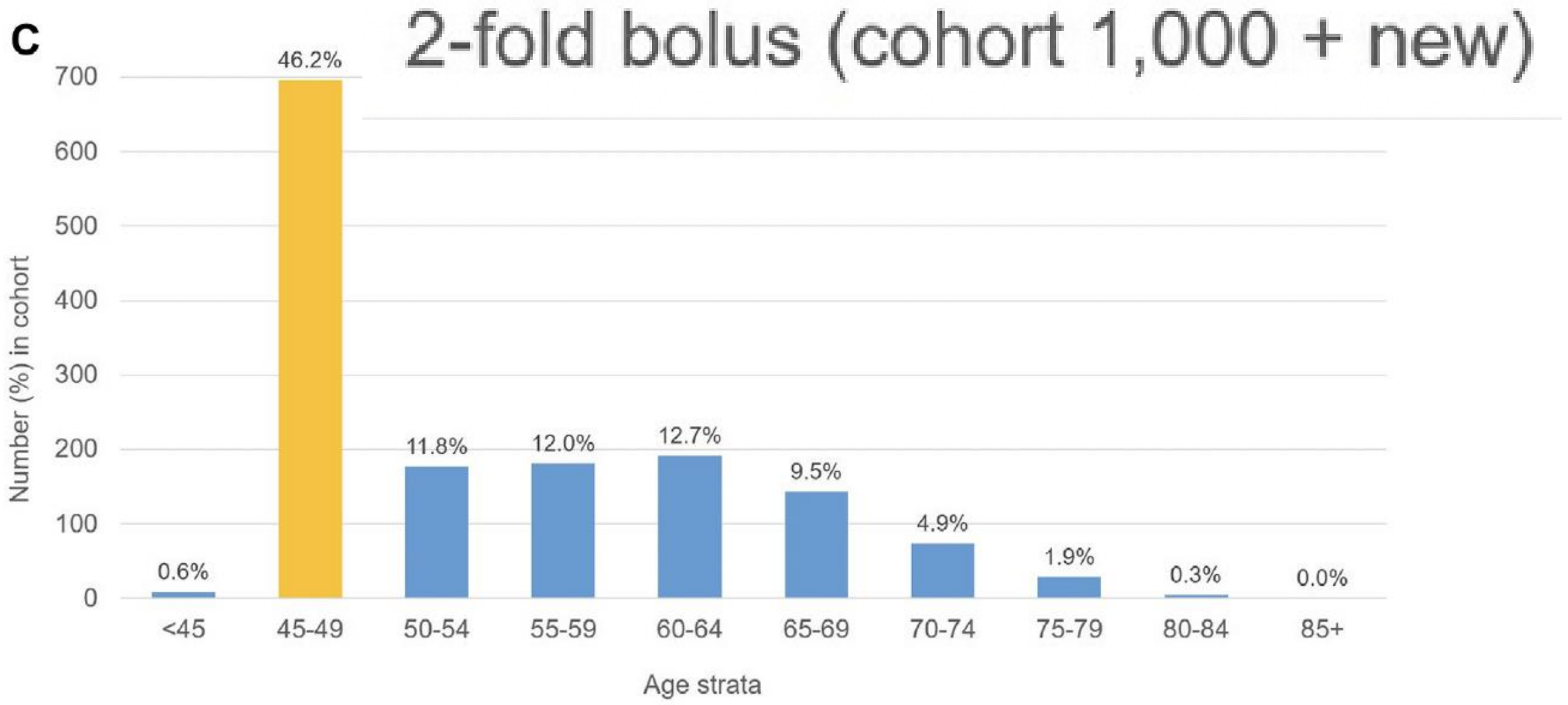


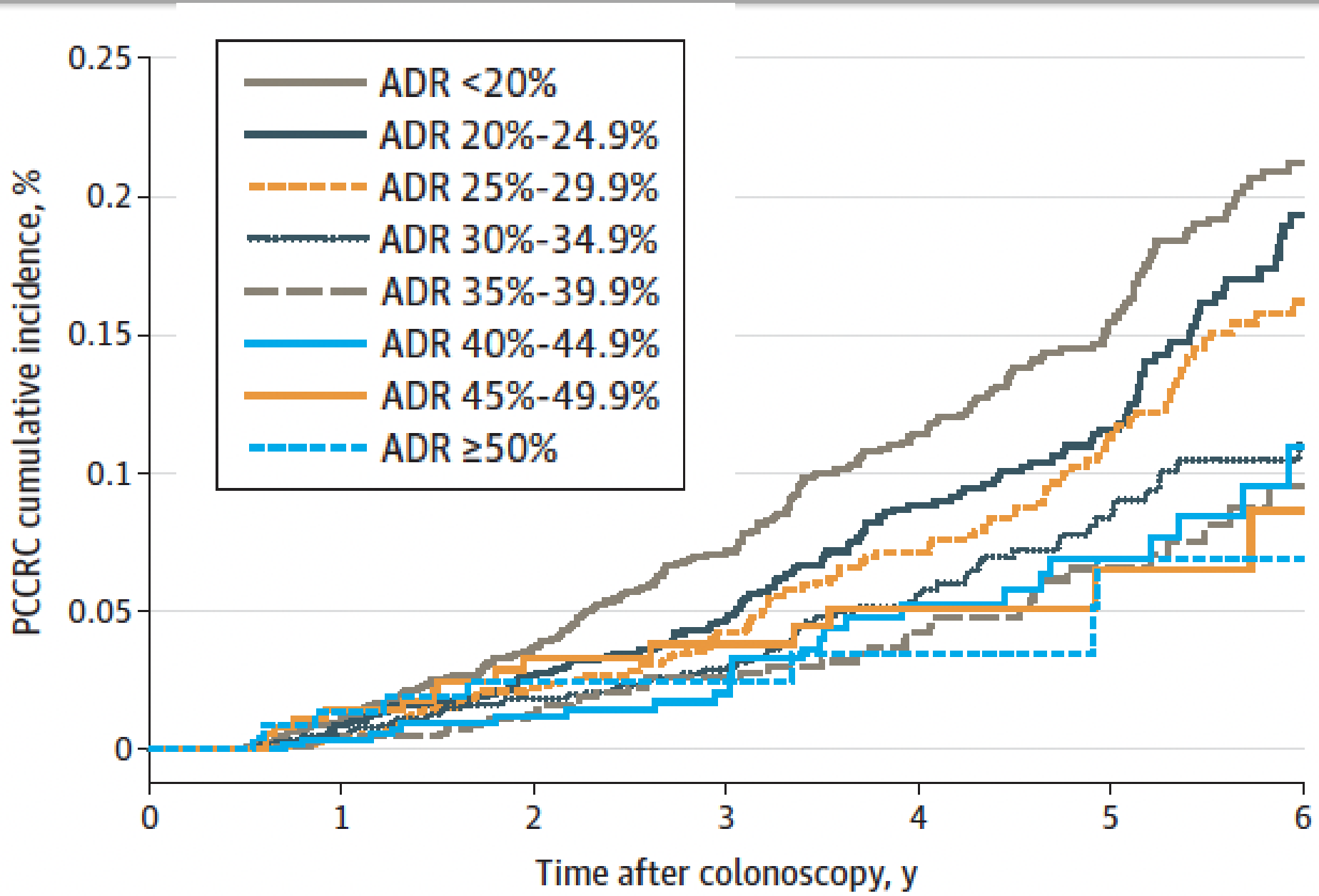
Crockett and Ladabaum et al, Gastroenterology 2022;162:984

Strain resources? Affect ADR benchmark?

- Future steady state: cohort size 1,000 → 1,159
- 2-fold bolus scenario: cohort size → 1,507
- Future steady state: ADR 35.8% → 33.7%
- Some “lower detectors” could fall below ADR benchmark of 25%
- “Lower detectors” already have reason to improve
- *[ADR benchmark could change – not lower…]*

Crockett and Ladabaum et al, Gastroenterology 2022;162:984

ADR and post-colonoscopy CRC



Schottinger et
JAMA
2022;327:2114

Key Takeaways

- Data accumulating in favor of screening 45-49
- High yield at colonoscopy 45-49
  - Slightly lower vs. 50-54 (similar advanced adenoma)
  - Comparable to second screen at 60-64
- Resources don't seem strained yet
- If ramp-up smooth, unlikely to shock system
  - Colonoscopy volume in flux? (FIT, blood tests?)
  - No lowering of ADR benchmark

Thank You!

American Cancer Society | National Colorectal Cancer Roundtable | 80% In Every Community

NCCRT Primary Care Strategy Meeting & Updated Steps Guide

Thursday, November 17, 9:20 AM

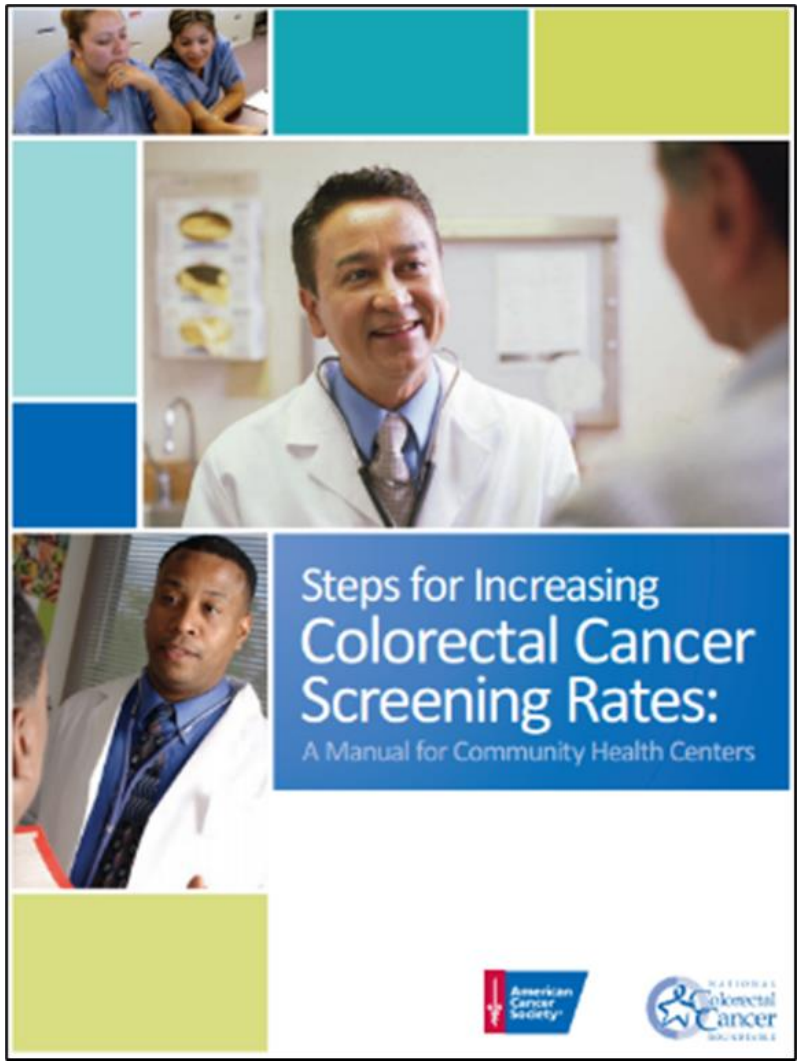
American Cancer Society | National Colorectal Cancer Roundtable | 80% In Every Community

The NCCRT Steps Guide – 2014 Edition

The **NCCRT Steps Guide** provides step-by-step instructions to help health centers implement processes to increase CRC screening.

The 2014 edition has been instrumental in helping numerous health centers achieve improvements in their CRC screening rates.

nccrt.org/resource-center



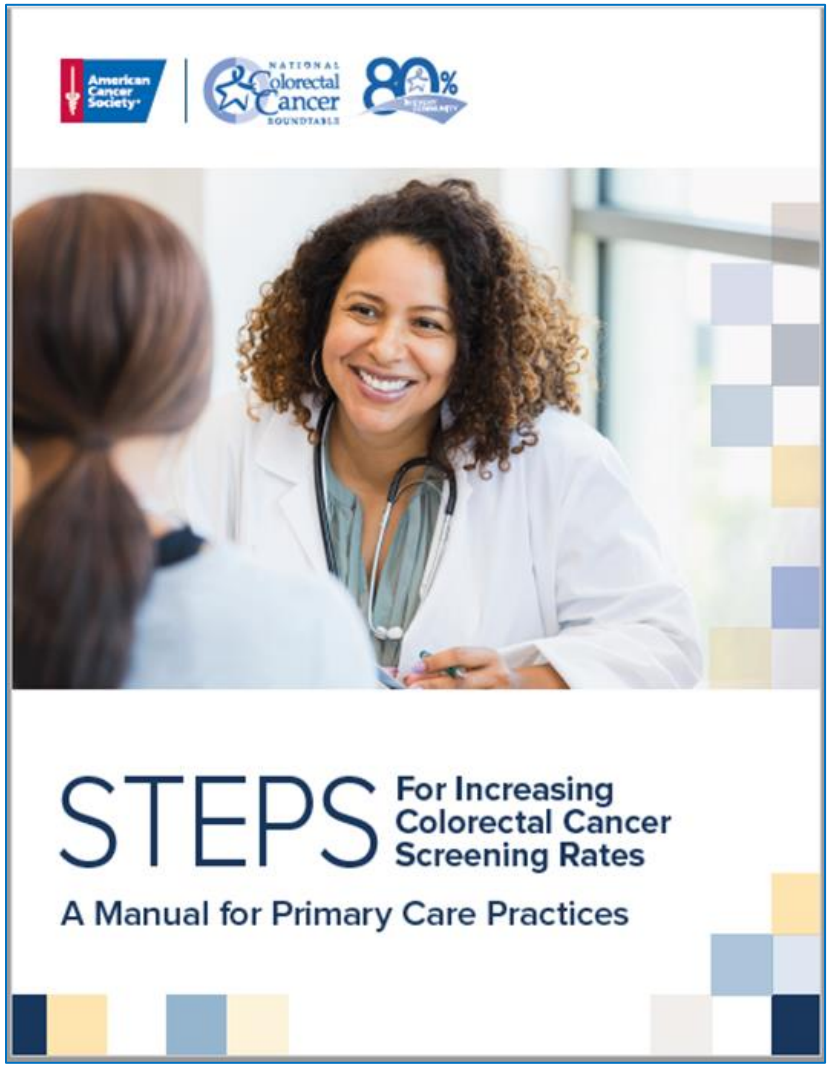
The NCCRT Steps Guide – 2022 Update

The newly updated Steps Guide includes:

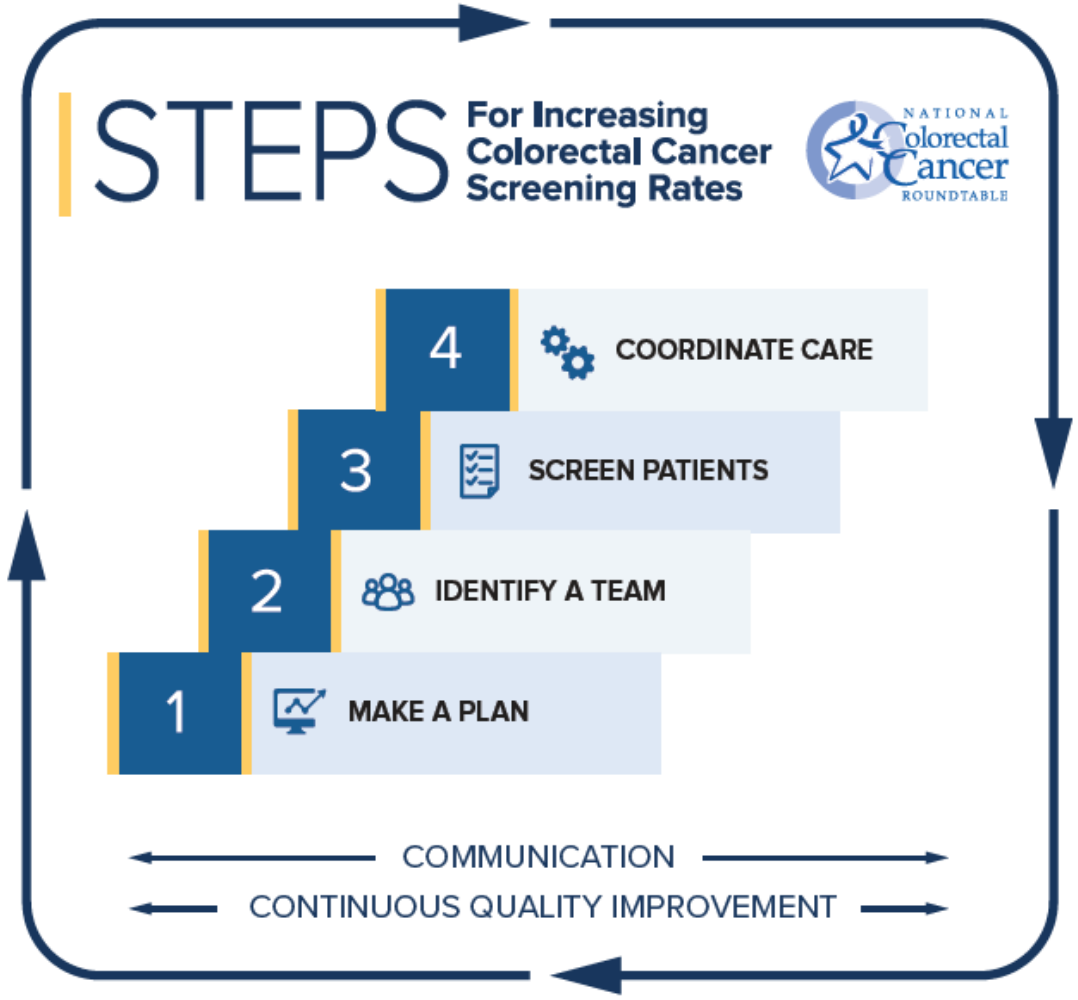
- Expansion to all primary care Latest science and best practices
- Current guidelines and test options
- Expert-endorsed strategies
- Samples, templates, and tools
- 10 case studies of exemplary practice sites – *coming soon!*

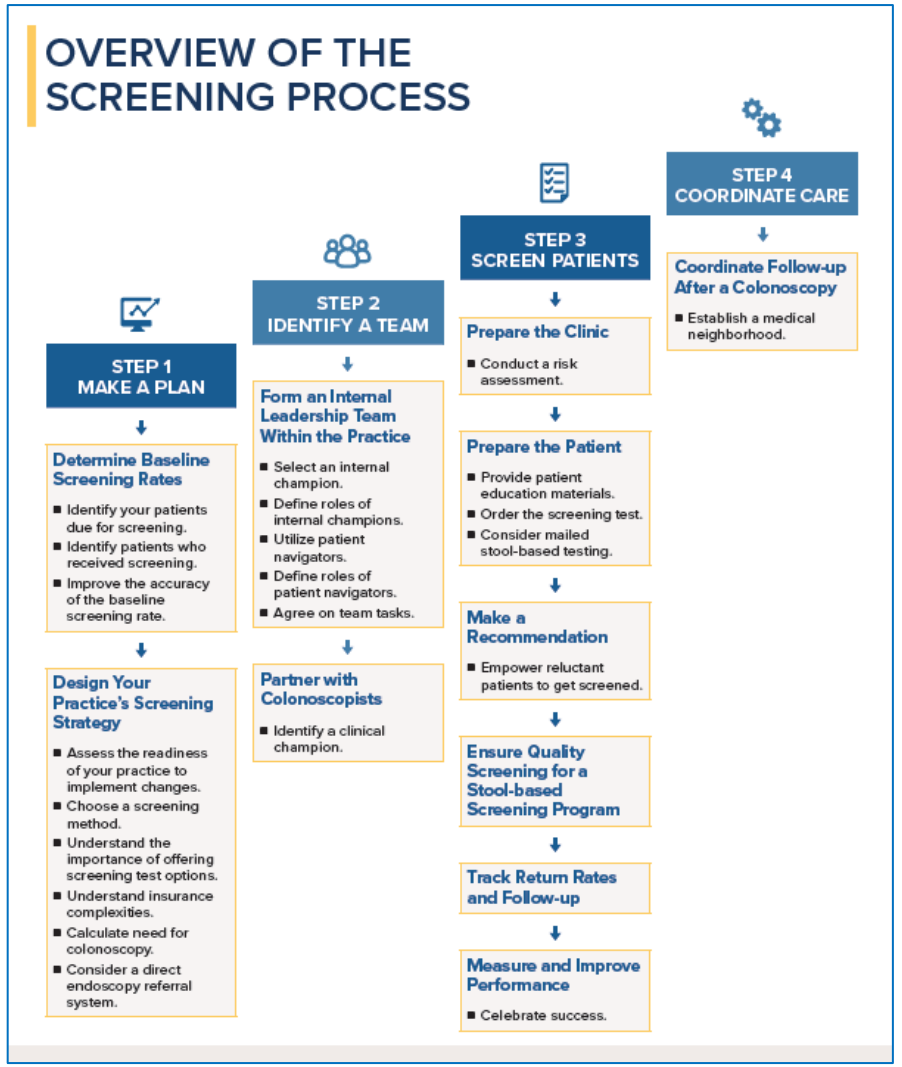
Released September 2022!

nccrt.org/resource-center



The NCCRT Steps Guide

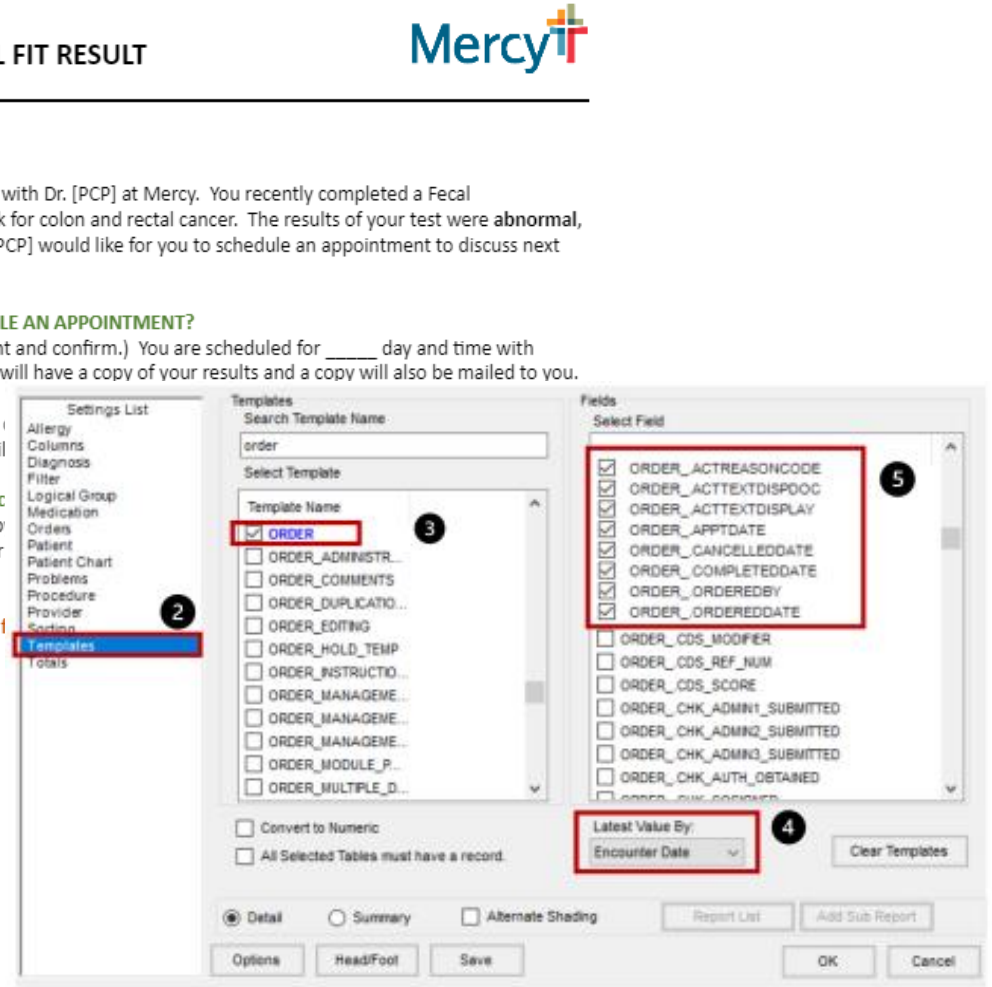




The NCCRT Steps Guide – 2022 Update

Appendices:

- Colonoscopy Needs Calculator
- Readiness Assessment Tools
- FIT/FOBT Sample Workflow Process
- Coding Guidance
- Updated EHR Workflow Documentation Screenshots
- Sample screening reminder and recall letters and call scripts
- And more…



SCRIPT FOR ABNORMAL FIT RESULT

Mercy

Hi [Patient Name],

This is [Caller's First Name]. I work with Dr. [PCP] at Mercy. You recently completed a Fecal Immunochemical Test (FIT) to check for colon and rectal cancer. The results of your test were **abnormal**, showing **blood in your stool**. Dr. [PCP] would like for you to schedule an appointment to discuss next steps.

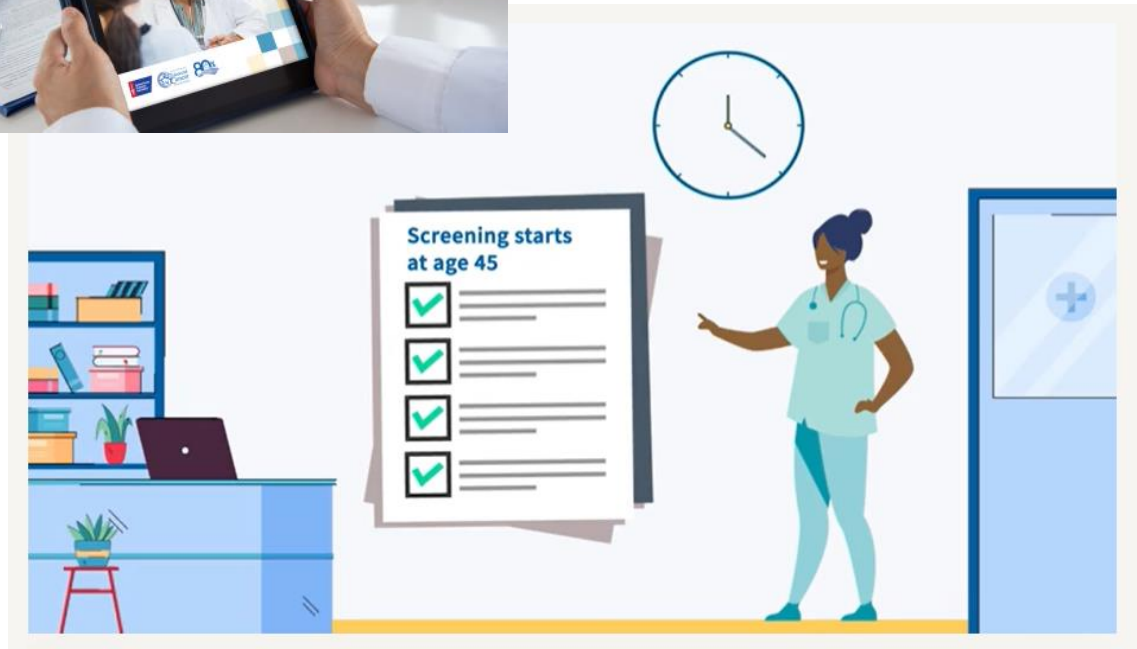
IS NOW A GOOD TIME TO SCHEDULE AN APPOINTMENT?

- "Yes" → (Book the appointment and confirm.) You are scheduled for _____ day and time with (doctor or APP name). He/she will have a copy of your results and a copy will also be mailed to you.
- "No" → I recommend that you … the next two weeks. He/she wil…
- "I'm no longer seeing Dr. [Merc…
  - "Yes" → Please share a cop… be mailed to you. Call their … results and next steps.
  - "No" → Do you need help f…

The NCCRT Steps Guide – 2022 Update

Promotion Tools:

- Sample social media posts
- Newsletter blurbs
- Shareable graphics and animations
- 45 sec promotional video



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Primary Care Strategy Meeting: *Catalyzing Primary Care to Increase Colorectal Cancer Screening*

Washington, D.C., August 12, 2022

Objectives:

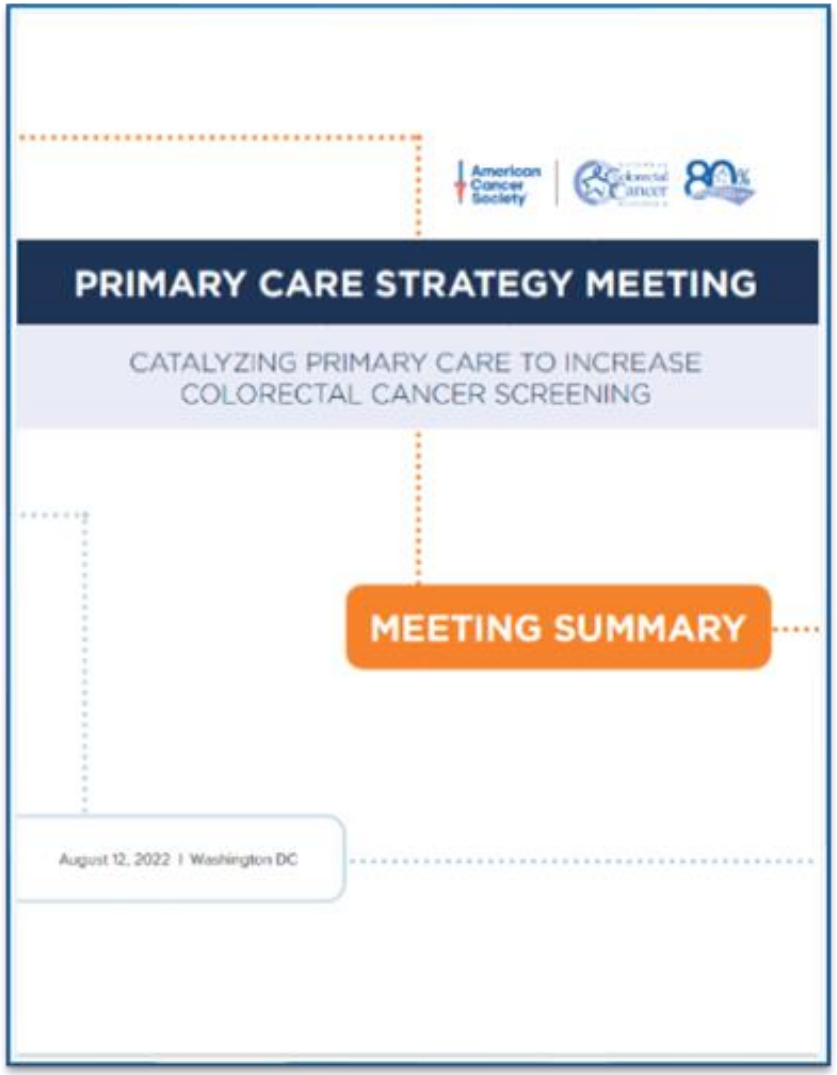
1. Enhance partner engagement
2. Recognize barriers & needs related to CRC screening in primary care clinics.
3. Explore where to expand or improve delivery approach/channels of training and resources to reach those in primary care
4. Understand how NCCRT can best support CRC screening in primary care settings.

Top Identified Barriers

1. Clinician knowledge, preconceived notions, implicit bias
2. Practice structure not set up for patient-centered CRC screening
3. Patient education and engagement (consider NCCRT role in this area)

Other Identified Barriers

- All clinical staff not engaged in CRC screening process
- System readiness for population screening
- Lack of patient navigation



Thank You!

American Cancer Society | National Colorectal Cancer Roundtable | 80% In Every Community

Preview of NCCRT Market Research on the Soon-to-Be and Newly Eligible for Colorectal Cancer Screening

Thursday, November 17, 9:20 AM

American Cancer Society | National Colorectal Cancer Roundtable | 80% in every community

Preview of NCCRT's Market Research to Encourage On-Time Colorectal Cancer Screening

Kaitlin Sylvester, MPA
Director, NCCRT – Programs & Partnerships

History of NCCRT Market Research

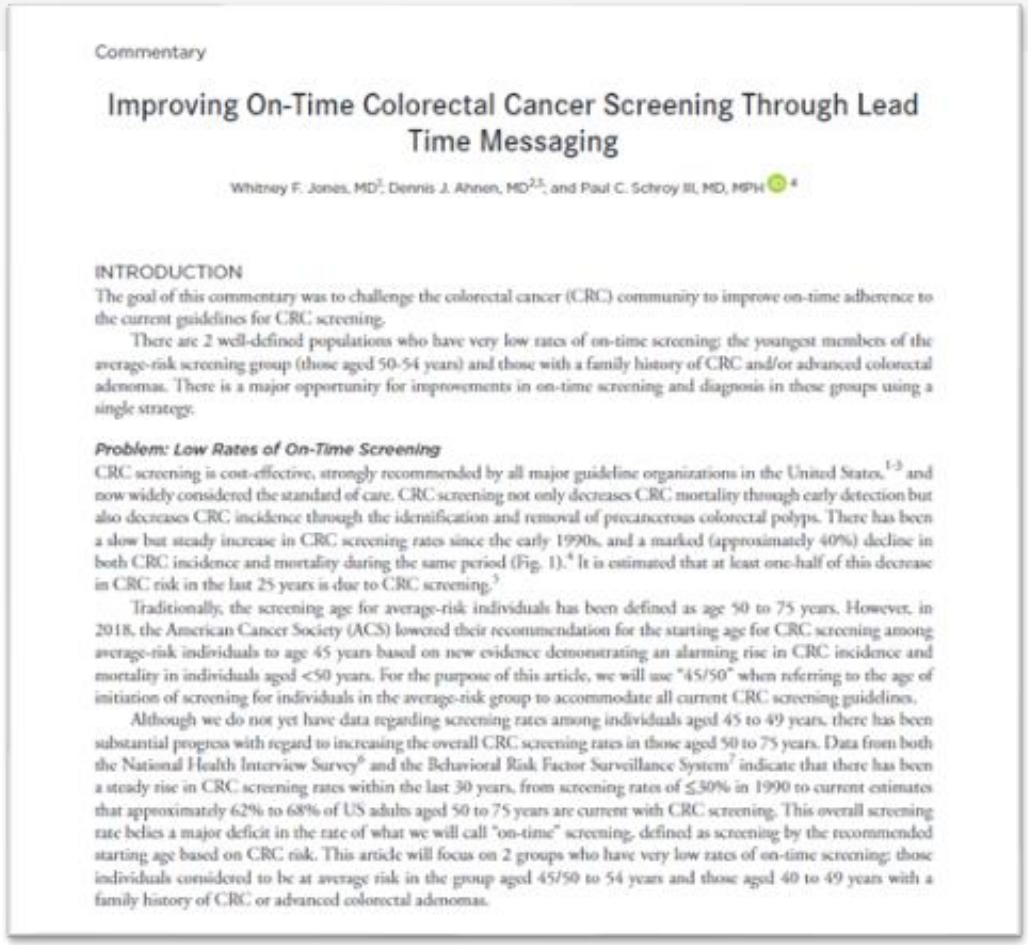
In 2014, NCCRT conducted its first market research project

- Released the *80% by 2018 NCCRT Communications Guidebook*
- *Asian Americans and Colorectal Cancer Companion Guide* and the *Hispanics/Latinos and Colorectal Cancer Companion Guide*.
- *The NCCRT Colorectal Cancer Screening Messaging Guidebook: Recommended Messaging to Reach the Unscreened* was released in 2019

In July 2022 NCCRT released the *2022 Messaging Guidebook for Black & African American People*

New Market Research & Upcoming Messaging Guidebook

- Propelled by the demand and popularity of our previous messaging guidebooks, communications companion guides, and other tools/webinars on early-age onset colorectal cancer.
- Research project was led by our chairs and members of Family History & Early-Age Onset CRC Strategic Priority Team following an in-person summit in 2017 and the release of the *Risk Assessment Toolkit.*
- Identified a need to understand best practices for messaging and educating about colorectal cancer screening at, soon after, and before recommended screening age.



Commentary

Improving On-Time Colorectal Cancer Screening Through Lead Time Messaging

Whitney F. Jones, MD[1]; Dennis J. Ahnen, MD[2,3]; and Paul C. Schroy III, MD, MPH[4]

INTRODUCTION

The goal of this commentary was to challenge the colorectal cancer (CRC) community to improve on-time adherence to the current guidelines for CRC screening.

There are 2 well-defined populations who have very low rates of on-time screening: the youngest members of the average-risk screening group (those aged 50-54 years) and those with a family history of CRC and/or advanced colorectal adenomas. There is a major opportunity for improvements in on-time screening and diagnosis in these groups using a single strategy.

Problem: Low Rates of On-Time Screening

CRC screening is cost-effective, strongly recommended by all major guideline organizations in the United States,[1-3] and now widely considered the standard of care. CRC screening not only decreases CRC mortality through early detection but also decreases CRC incidence through the identification and removal of precancerous colorectal polyps. There has been a slow but steady increase in CRC screening rates since the early 1990s, and a marked (approximately 40%) decline in both CRC incidence and mortality during the same period (Fig. 1).[4] It is estimated that at least one-half of this decrease in CRC risk in the last 25 years is due to CRC screening.[5]

Traditionally, the screening age for average-risk individuals has been defined as age 50 to 75 years. However, in 2018, the American Cancer Society (ACS) lowered their recommendation for the starting age for CRC screening among average-risk individuals to age 45 years based on new evidence demonstrating an alarming rise in CRC incidence and mortality in individuals aged <50 years. For the purpose of this article, we will use "45/50" when referring to the age of initiation of screening for individuals in the average-risk group to accommodate all current CRC screening guidelines.

Although we do not yet have data regarding screening rates among individuals aged 45 to 49 years, there has been substantial progress with regard to increasing the overall CRC screening rates in those aged 50 to 75 years. Data from both the National Health Interview Survey[6] and the Behavioral Risk Factor Surveillance System[7] indicate that there has been a steady rise in CRC screening rates within the last 30 years, from screening rates of ≤30% in 1990 to current estimates that approximately 62% to 68% of US adults aged 50 to 75 years are current with CRC screening. This overall screening rate belies a major deficit in the rate of what we will call "on-time" screening, defined as screening by the recommended starting age based on CRC risk. This article will focus on 2 groups who have very low rates of on-time screening: those individuals considered to be at average risk in the group aged 45/50 to 54 years and those aged 40 to 49 years with a family history of CRC or advanced colorectal adenomas.

How do you message to the "soon-to-be eligible" about CRC screening?

Looking Ahead for 2023

- We plan to host a webinar in 2023 detailing the entirety of this project
- Producing and releasing a new messaging guidebook
- Developing manuscripts based on our research
- Incorporate these materials into our digital platforms

Concurrent Session:

NCCRT Market Research in Practice: NCCRT member successes and a preview of the current research on lead-time messaging

Thursday, November 17th
3:30-5:00pm
Harborview II

Friday, November 18th
10:00-11:30am
Harborview II

Thank You!

American Cancer Society | National Colorectal Cancer Roundtable | 80% In Every Community

Q&A

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