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RESEARCH CONSORTIUM**
Promoting Equity in Retirement,
Disability, and Health



**Retirement and Disability
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UNIVERSITY OF WISCONSIN-MADISON

26th Annual Retirement and Disability Research Consortium Meeting August 7-9, 2024

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Pathways and Persistence of Labor Force Transitions during the COVID-19 Pandemic

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David Knapp (USC)

2024 RDRC Meeting

August 9, 2024

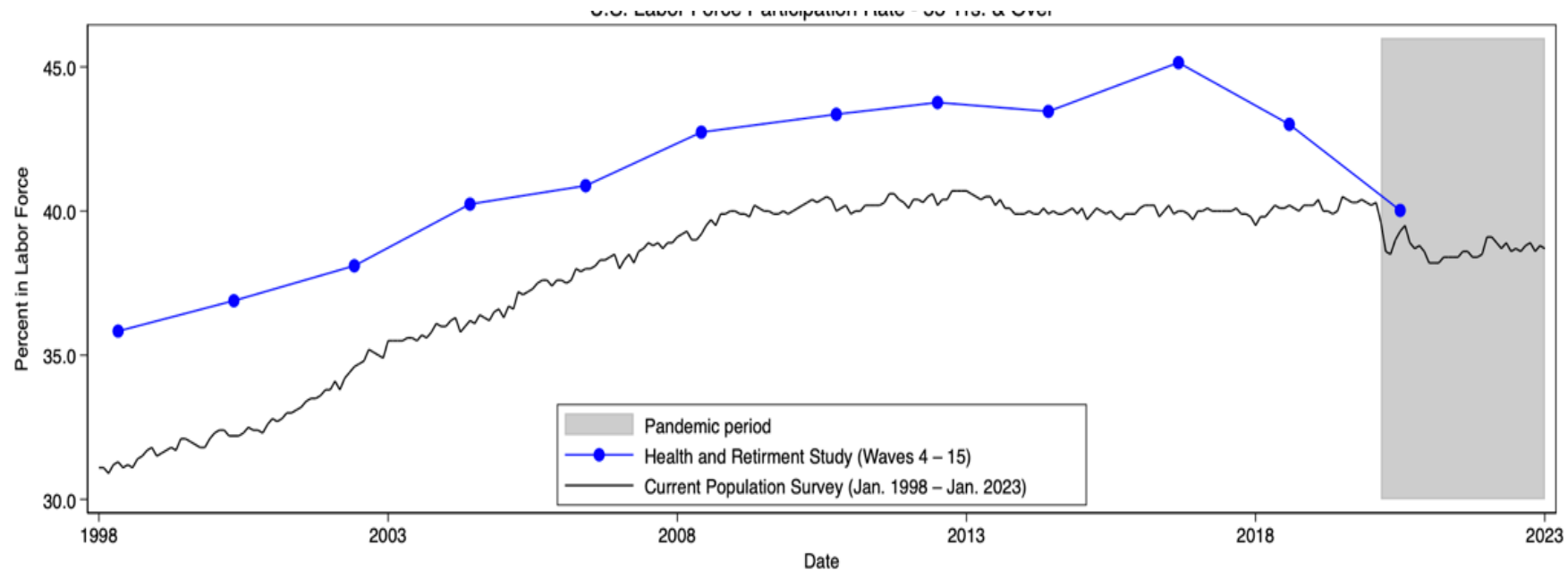
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Motivation

- Labor force participation of workers aged 55 and older declined sharply during the pandemic

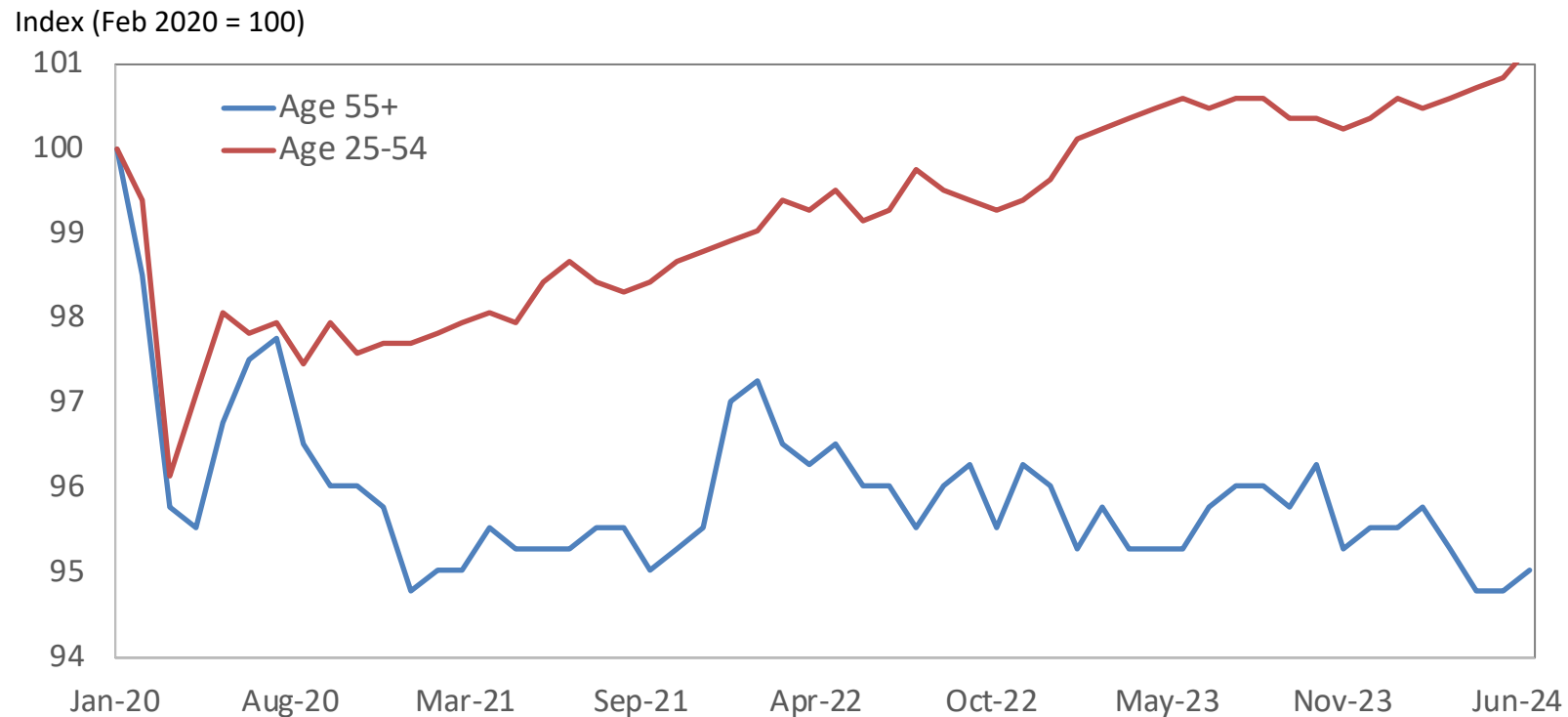
Figure: US Labor Force Participation Rate – 55 Years & Over



Motivation

- Labor force participation rates for workers aged 55 and older have not yet returned to pre-pandemic levels, in contrast to their younger counterparts

Figure: Labor Force Participation Rates by Age Groups



Motivation

- Among workers 55+, transitions out of the labor force during the pandemic were concentrated among:
 - Low earners
 - Women
 - Non-whites
 - Non-college-educated individuals

Research questions

- What are the pathways out of the labor force during the pandemic?
- Are pandemic exits likely to be permanent?
- Are there disparities for certain groups of job types?
- What are the implications of pandemic exits for economic security in retirement?

Data

- We use panel data from the Health and Retirement Study from 2000 to 2020

Methods

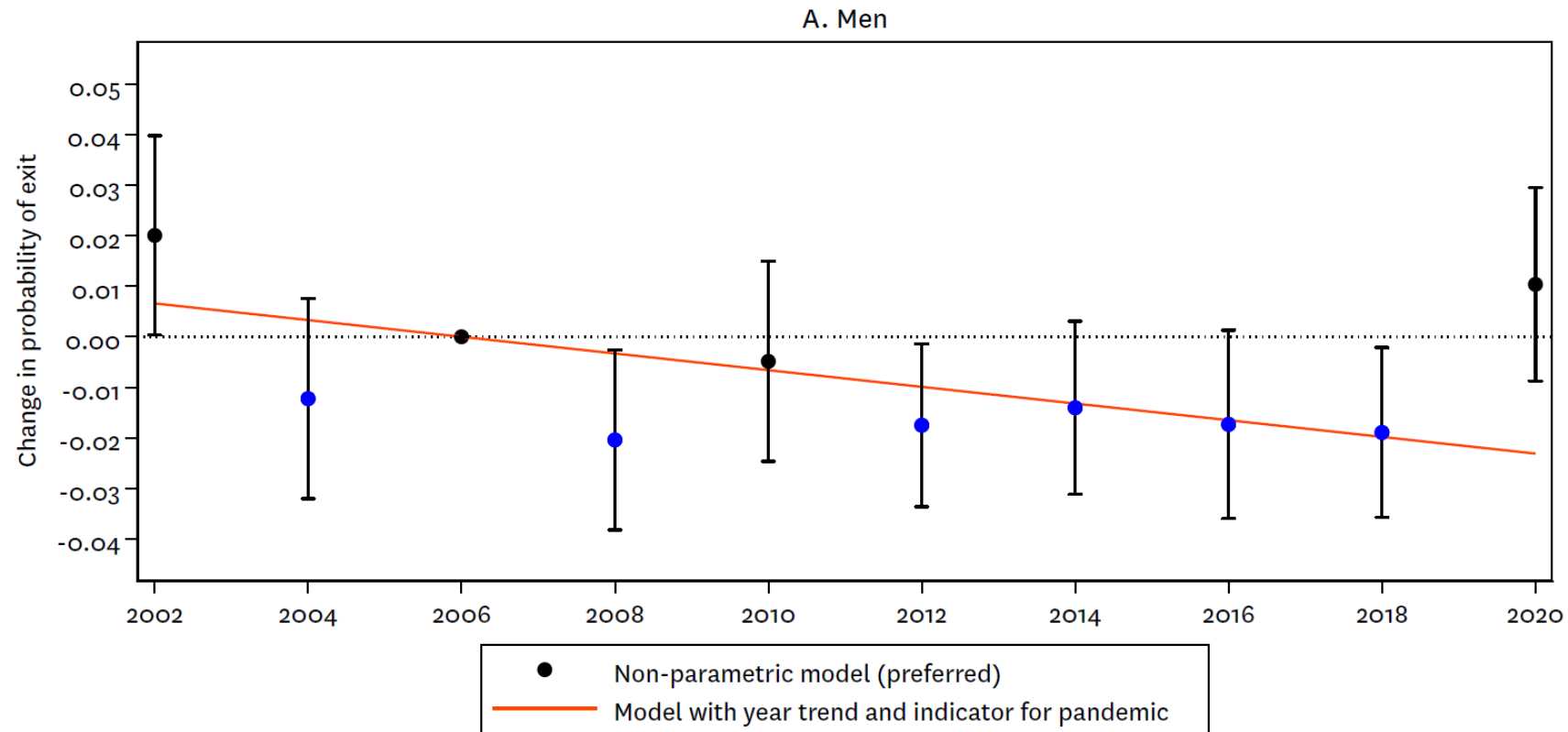
- We estimate separate models for men and women to analyze the determinants of :
 - All exits from the labor force
 - Exits into retirement only
 - Exits into disability only
 - Other exits from the labor force (not retirement or disability)
 - Transitions into temporary layoffs
- The explanatory factors considered include individual characteristics, job characteristics, and measures of Social Security retirement benefits eligibility

Pathways out of the labor force

Type of exit	Men	Women
Out of the labor force	+	ns
Disability	ns	ns
Retirement	ns	ns
Other (not disability or retirement)	+	+
Layoff	+	+

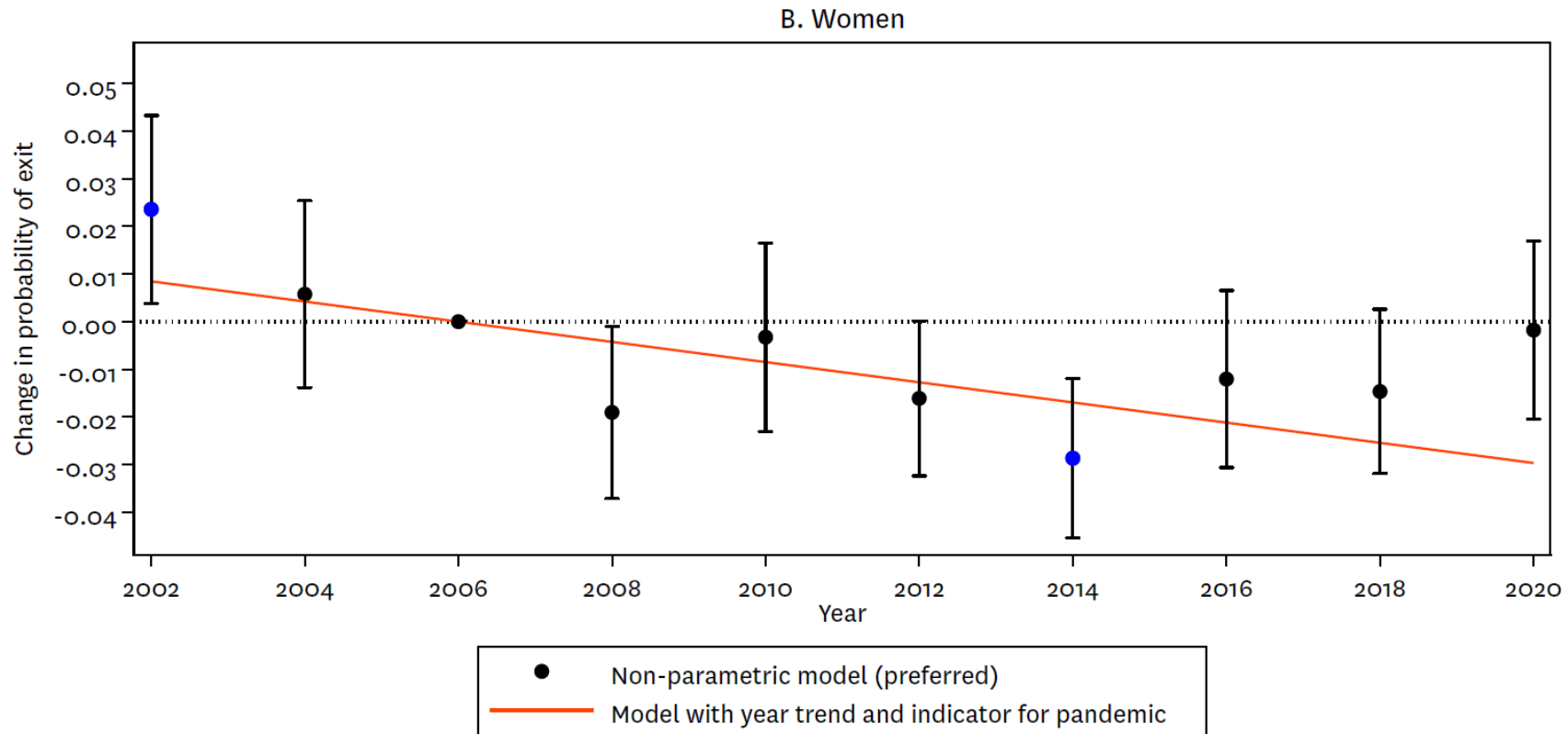
Pathways out of the labor force

Labor Force Exits – Men



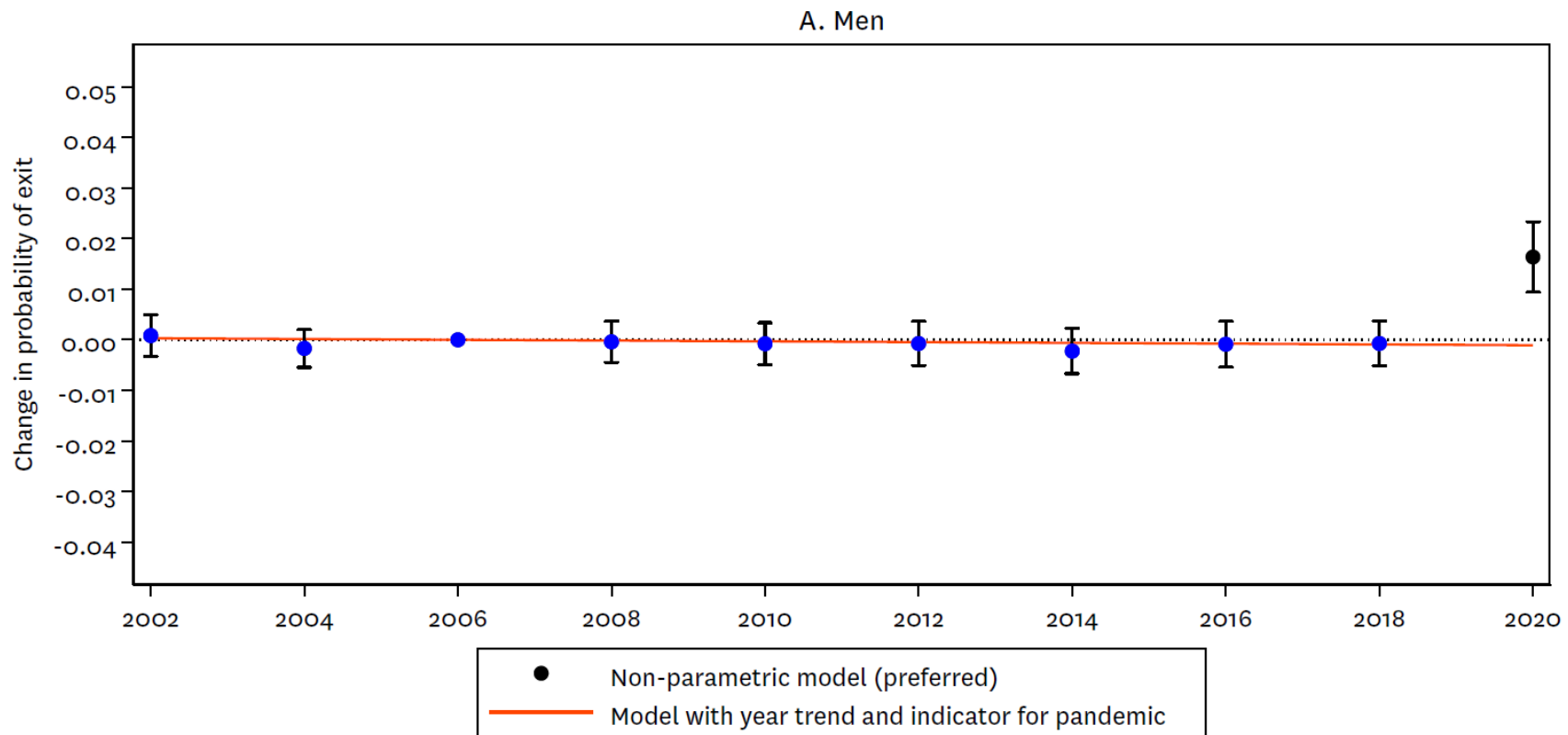
Pathways out of the labor force

Labor Force Exits – Women



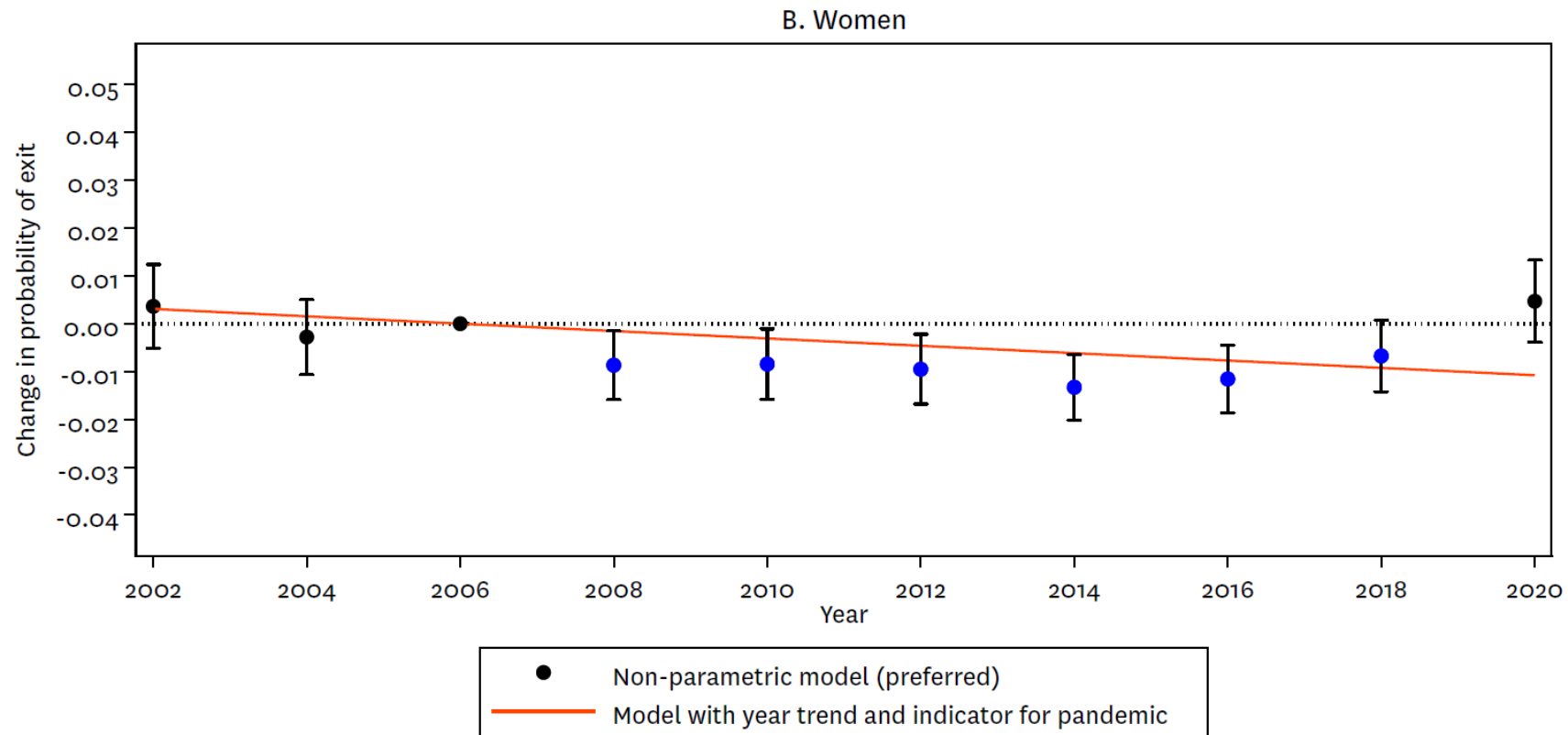
Pathways out of the labor force

Labor Force Exits for Reasons Other than Disability and Retirement – Men



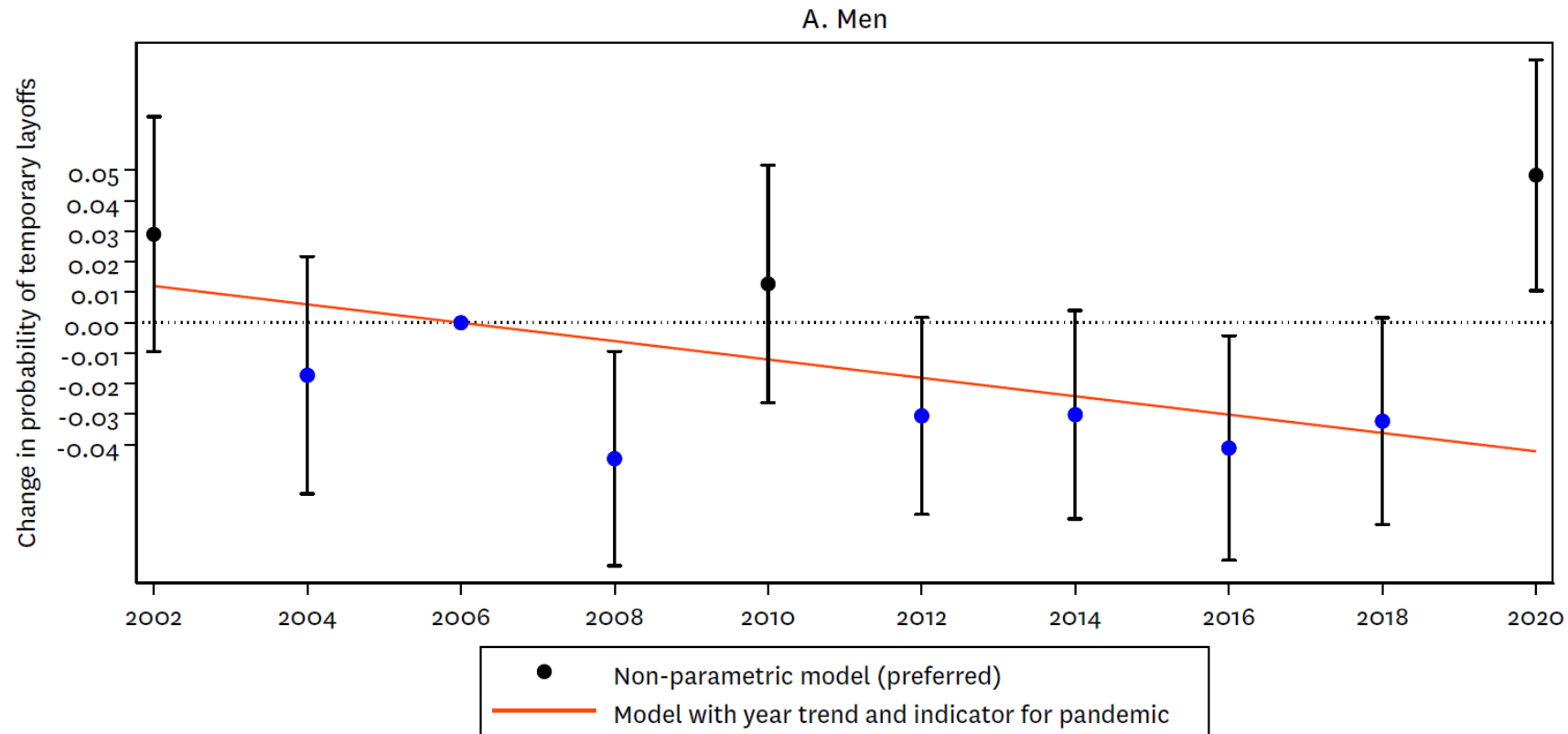
Pathways out of the labor force

Labor Force Exits for Reasons Other than Disability and Retirement – Women



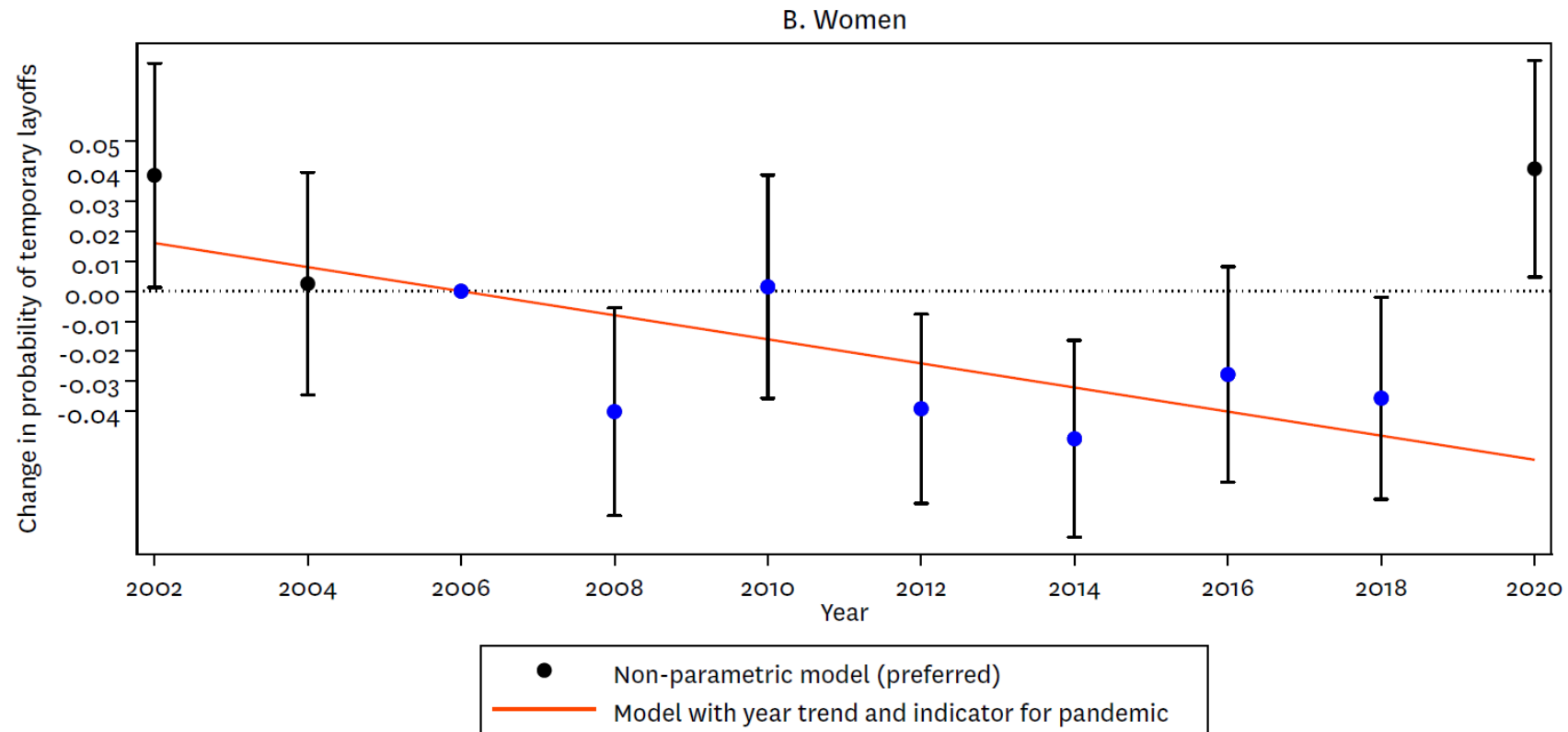
Pathways out of the labor force

Temporary Layoffs – Men



Pathways out of the labor force

Temporary Layoffs – Women



Determinants of Job Separations

- *In all interview waves*, labor force exits and temporary layoffs were more likely for:
 - Black men
 - Hispanic men and women
 - Those not previously employed full-time
 - Individuals with lower educational attainment

Determinants of Job Separations

- The following factors had differential impacts on **labor force exits** *during the pandemic*

Factors measured in t-1	Men	Women
Age	-	-
College	-	
Health condition limits work	+	
Employed		+
Partially retired		-
Firm size: 50+		+

Determinants of Job Separations

- The following factors had differential impacts on **temporary layoffs** during the pandemic

Factors measured in t-1	Men	Women
Age		+
Less than high school		-
Health condition limits work	+	
Partially retired		+
Job-provided health insurance	-	-
Health insurance through partner's job		-
Physically demanding job	+	
Job requires working with computers		-
Job tenure 2-10 years		+

Conclusions

- The COVID-19 pandemic significantly increased exits from the labor force for men but not for women
- We found no significant changes in the probabilities of exiting the labor force through retirement or disability
- The probability of exiting the labor force for reasons other than retirement and disability and that of becoming temporarily laid off increased for both men and women
- Characteristics suggestive of higher-quality and more flexible jobs decreased the probabilities of labor force exits and layoffs relative to previous waves, while worse health and having a physically demanding job increased them for men

Conclusions

- Racial and ethnic minorities and those with lower educational attainment were not more likely to separate from their job than in previous times
- Increased disparities may be present in labor force re-entry behaviors, which is the focus of the next step in our project

Thank you!

Comments welcome at
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Medium-Term Effects of COVID-19 on Disparities by Race and Income

Michael Stepner, University of Toronto

August 2024

with Raj Chetty, Harvard
John N. Friedman, Brown
Nathaniel Hendren, MIT



PRELIMINARY RESULTS, PLEASE DO NOT CITE

Any opinions and conclusions expressed herein are those of the authors and do not represent the views of the U.S. Census Bureau. The Census Bureau has ensured appropriate access and use of confidential data and has reviewed these results for disclosure avoidance protection (Project 7531153: CBDRB-FY22-CES014-024). The research reported herein was performed pursuant to grant RDR18000003 from the US Social Security Administration (SSA) funded as part of the Retirement and Disability Research Consortium.

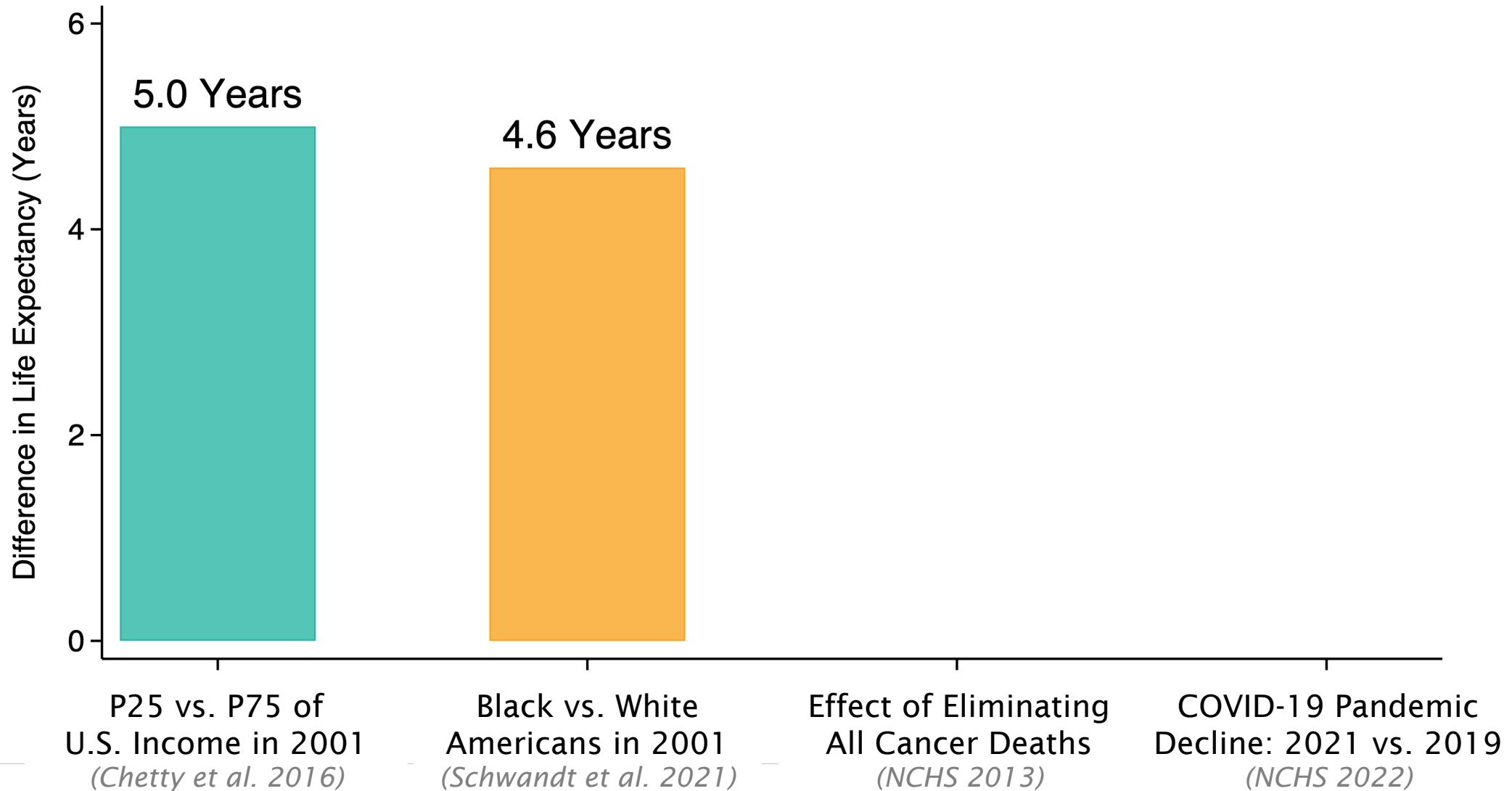


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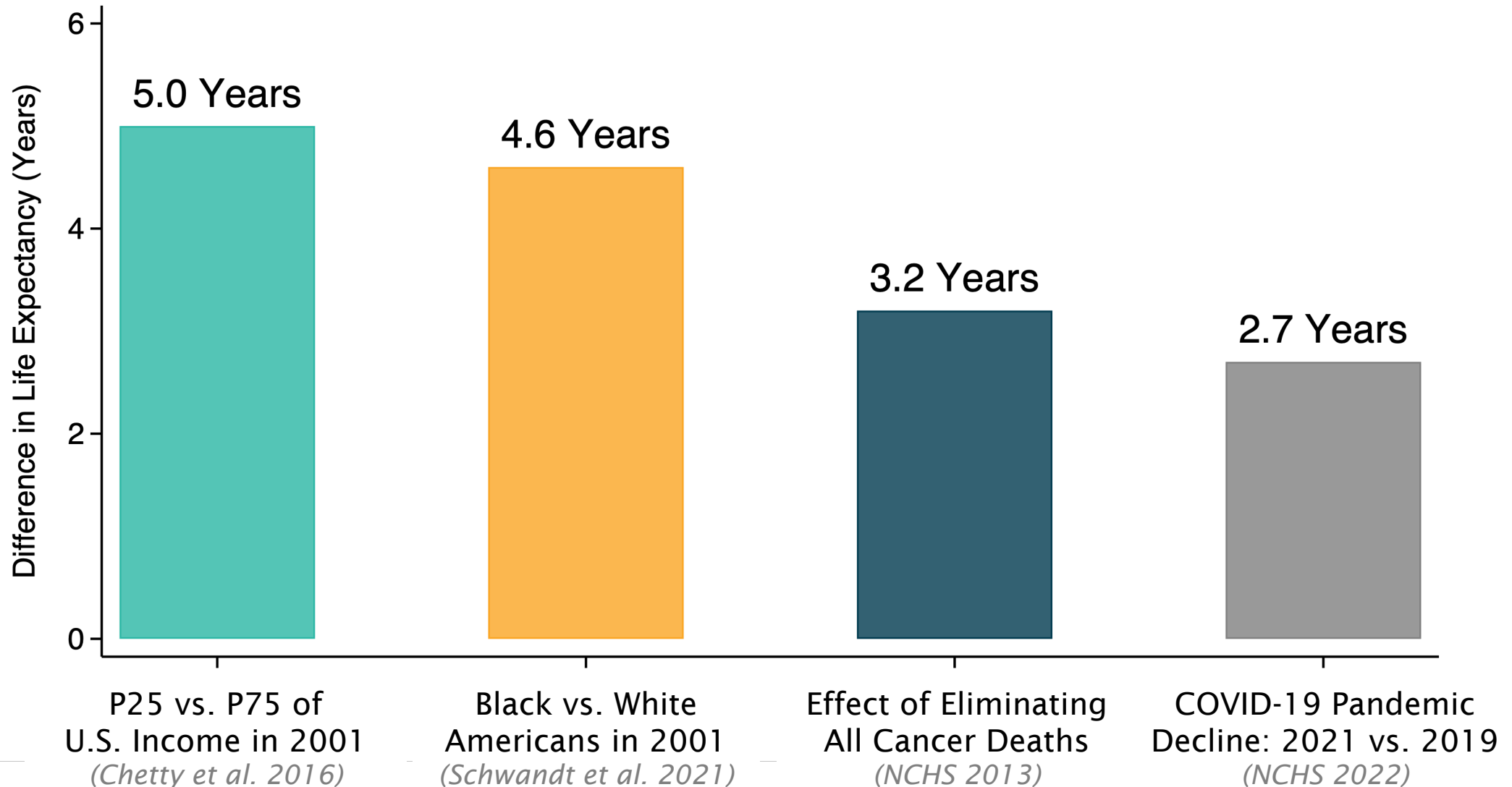
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Gaps in Life Expectancy by Income and Race



Gaps in Life Expectancy by Income and Race vs. Other Causes of Death



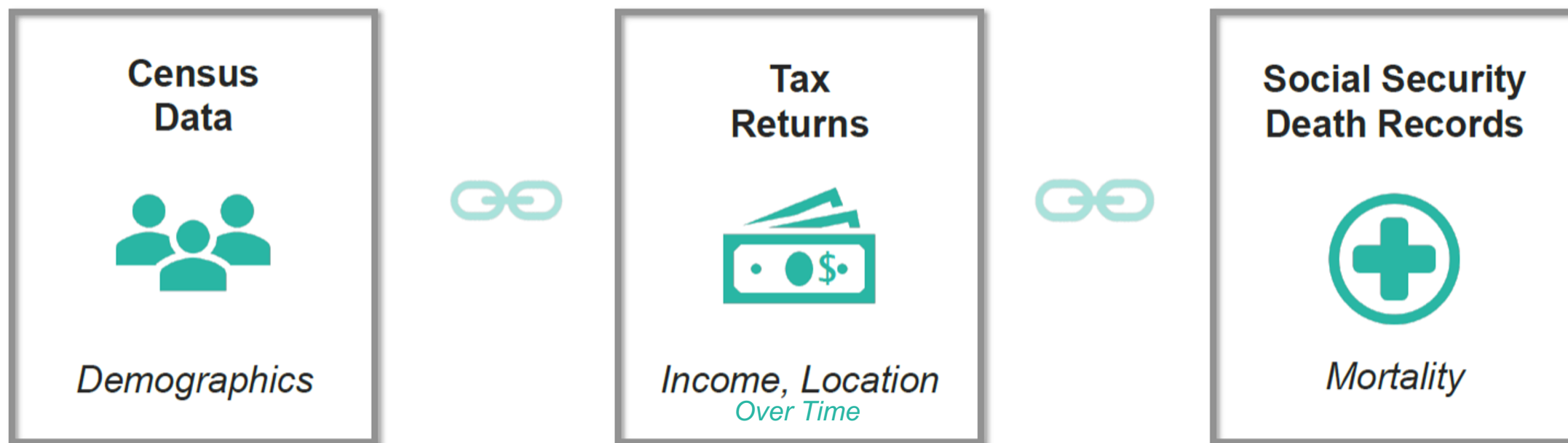
This Talk

1. Present new evidence on how these disparities in health have changed in the past two decades
 - **Growing** class gaps
 - **Shrinking** Black–White race gap
2. Examine how those disparities changed in 2020 at the onset of the COVID-19 pandemic
3. Describe our upcoming analysis of 2021-2023 data to measure the medium-term effects of COVID-19 on race and class disparities in health



Data and Methods

Data and Sample Definition



Anonymized data on all Americans aged 30-95 from 2001-2020
Approximately 150 million people, 2.5 billion person-year observations

Target Parameter: Period Life Expectancy at Age 30

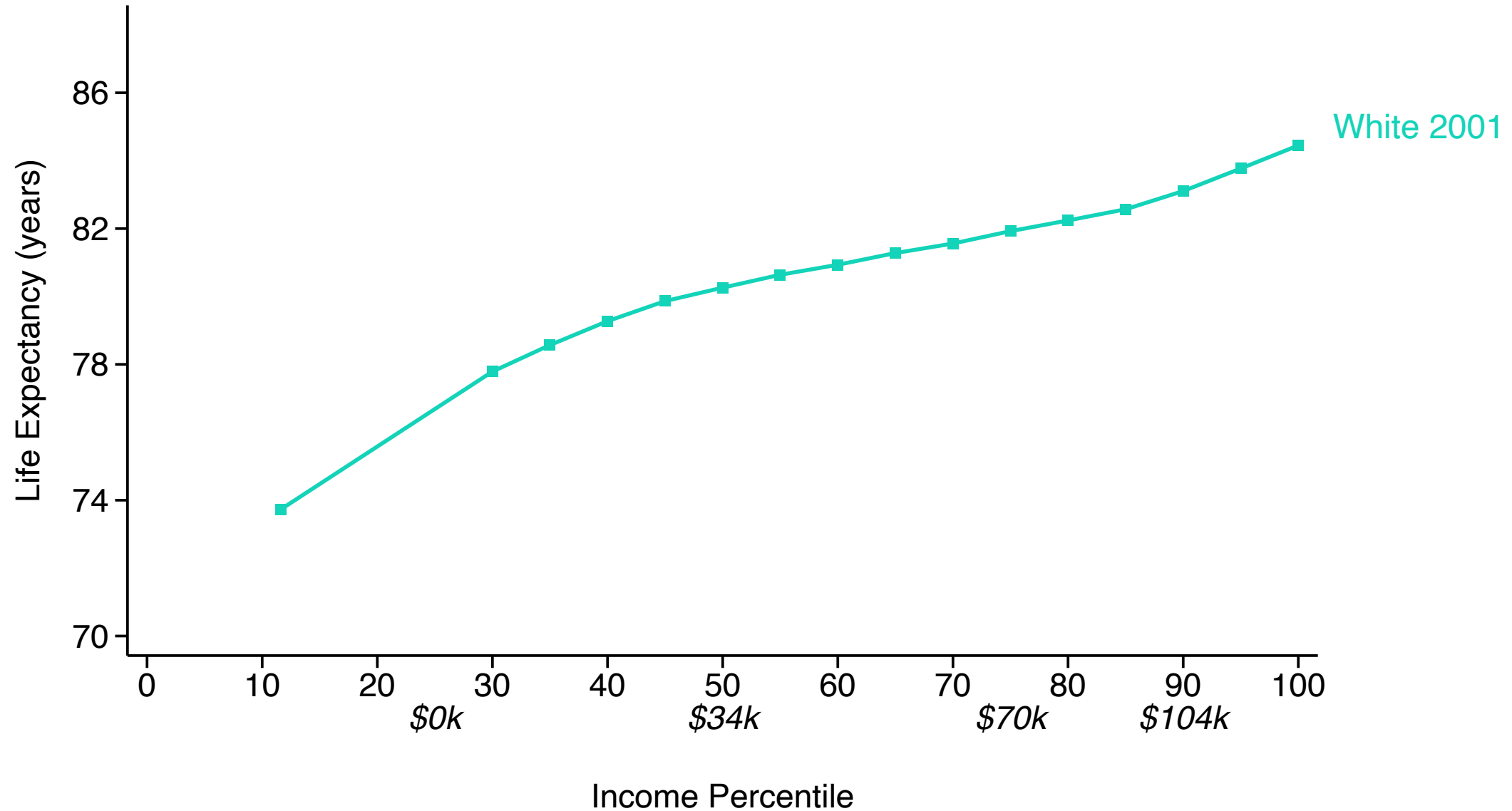
- Goal: summarize mortality rates in a given year for a population with a specific race, gender and income (ex: Black women at the 25th income percentile in 2019)
 - Aggregating mortality rates across ages in a single year.
- We aggregate using **period life expectancy**
 - Life expectancy for a hypothetical person who experiences the observed cross-sectional mortality rates in year Y for group G at ages 30, 31, 32, ...
 - Pool by gender using the unweighted average life expectancy of men + women



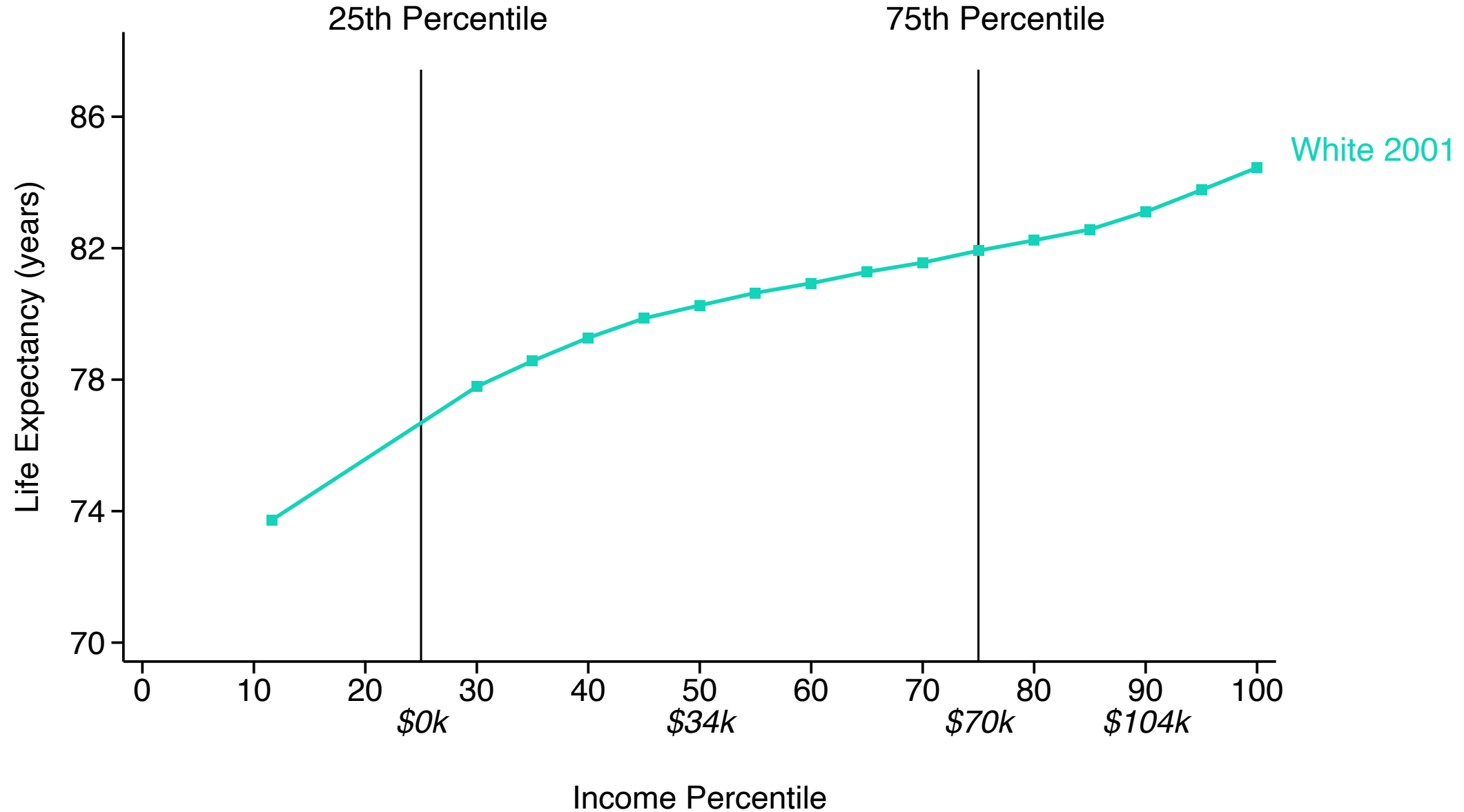
Trends in Life Expectancy by Race and Class

Pre-Pandemic, 2001 to 2019

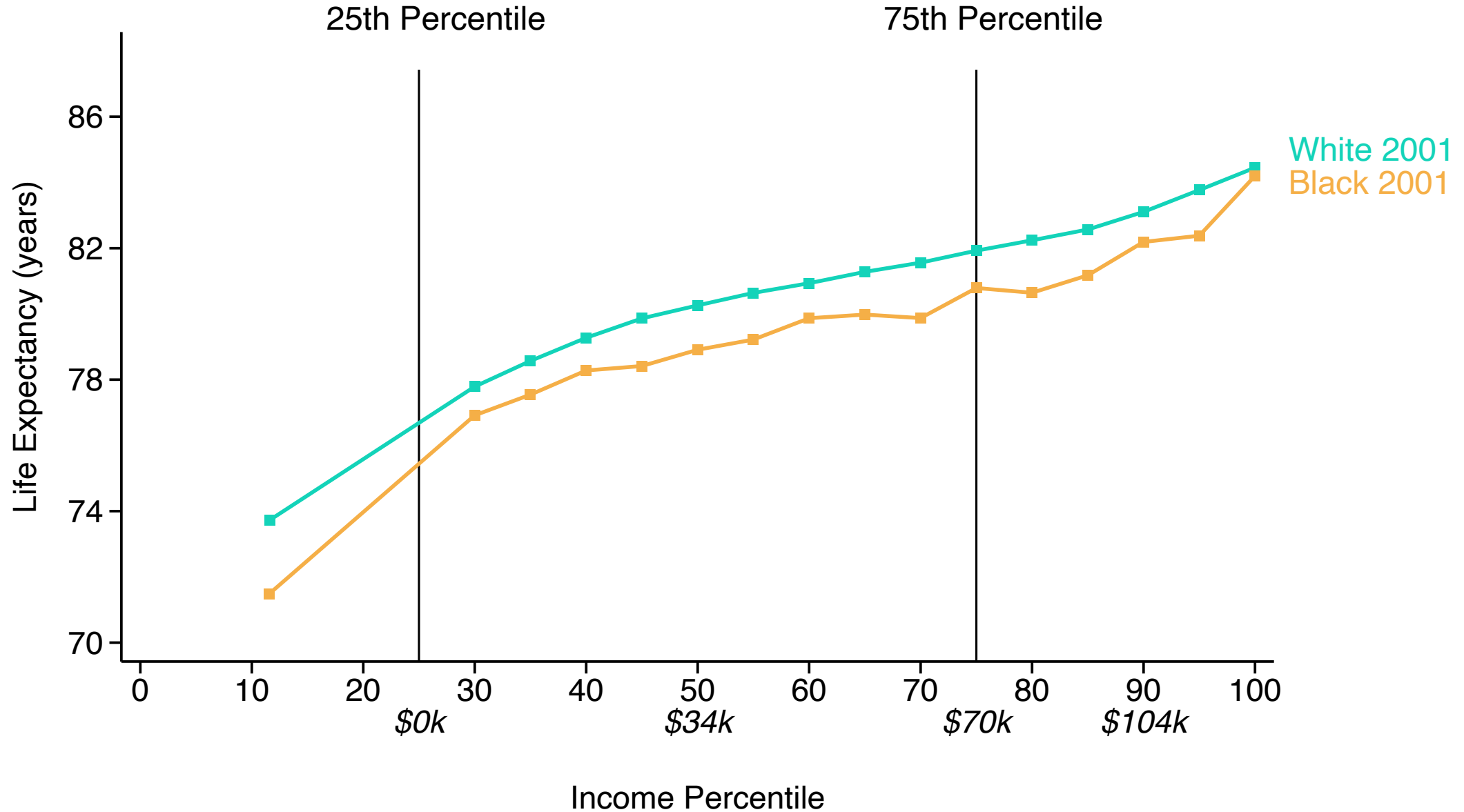
Life Expectancy at Age 30, by Race and Class



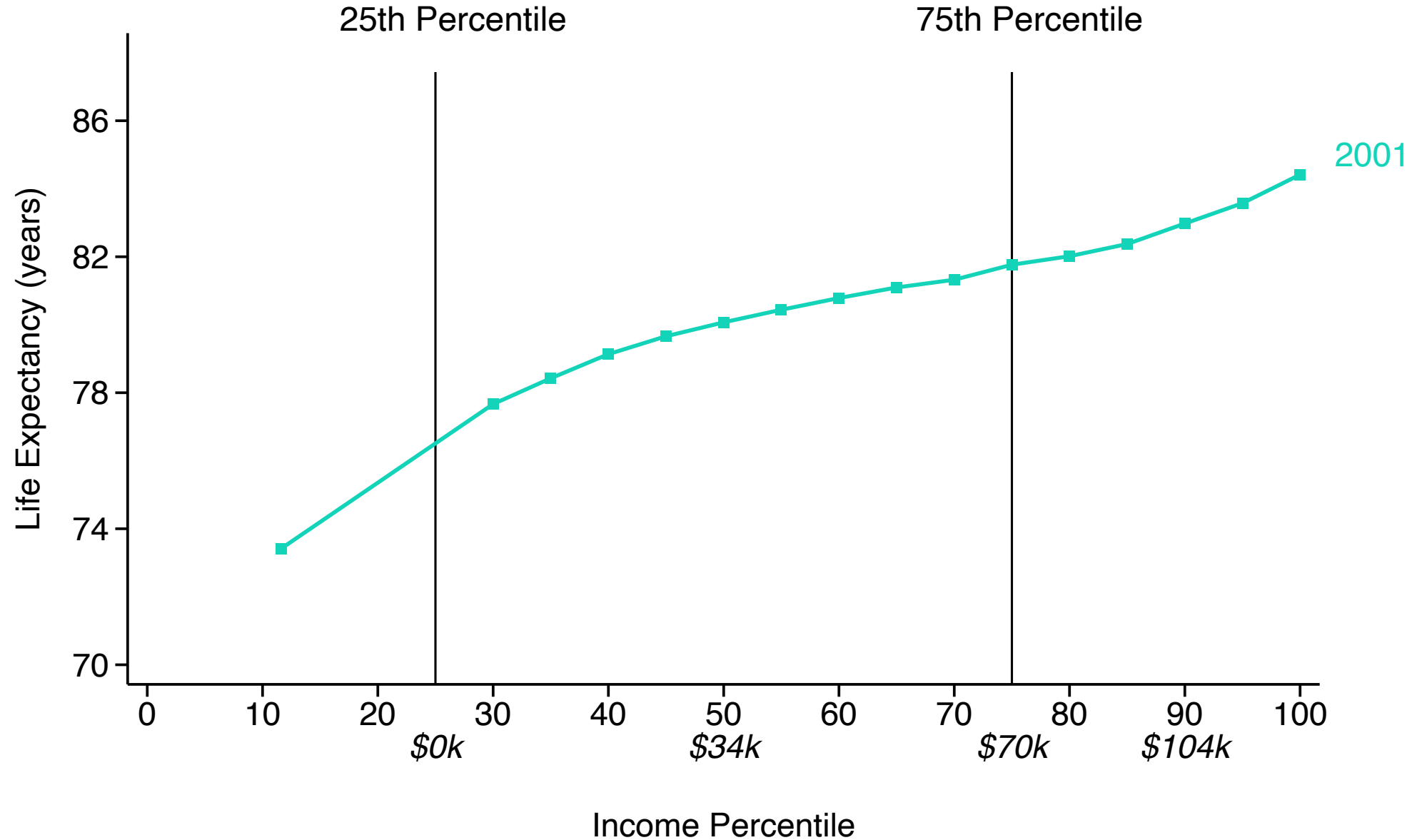
Life Expectancy at Age 30, by Race and Class



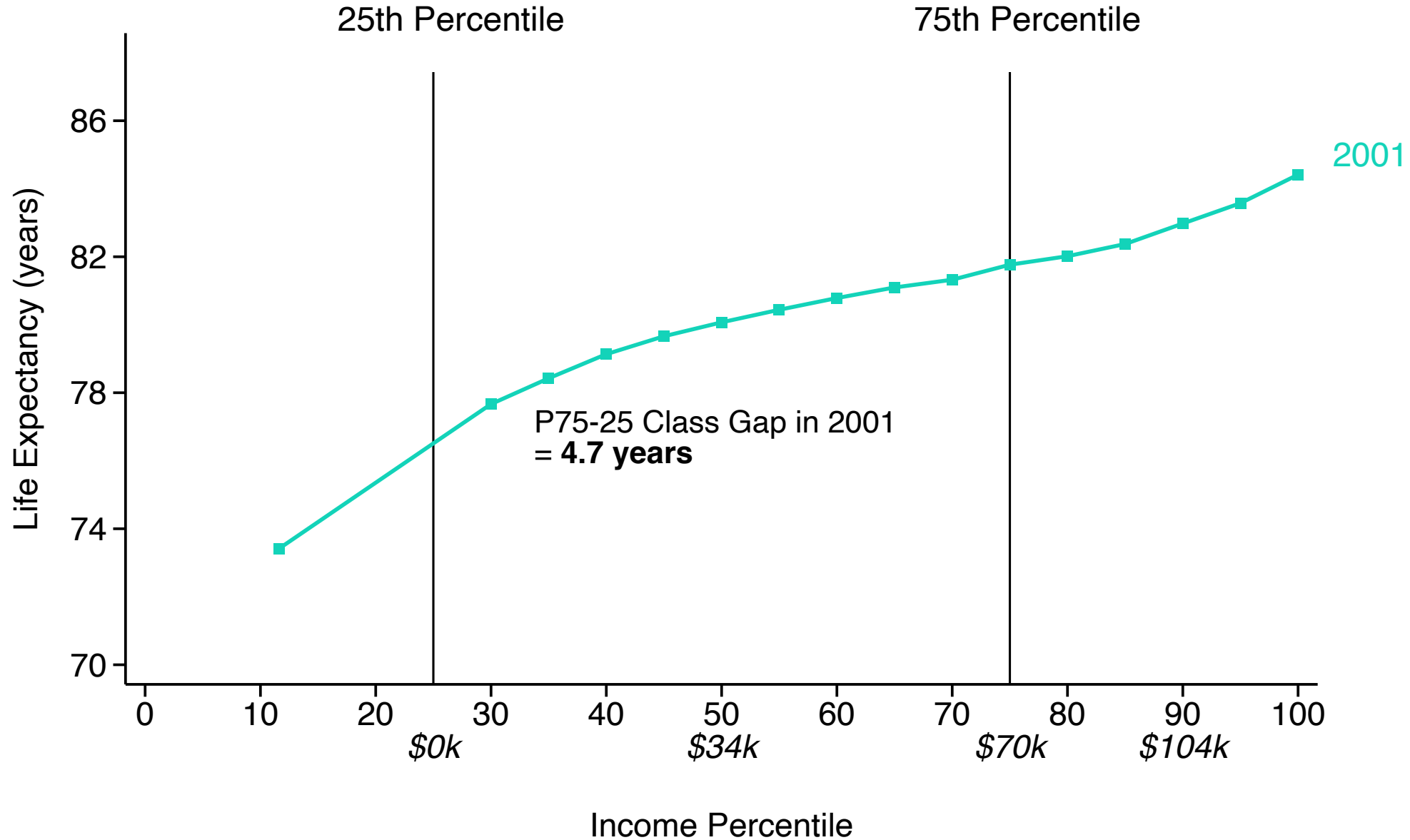
Life Expectancy at Age 30, by Race and Class



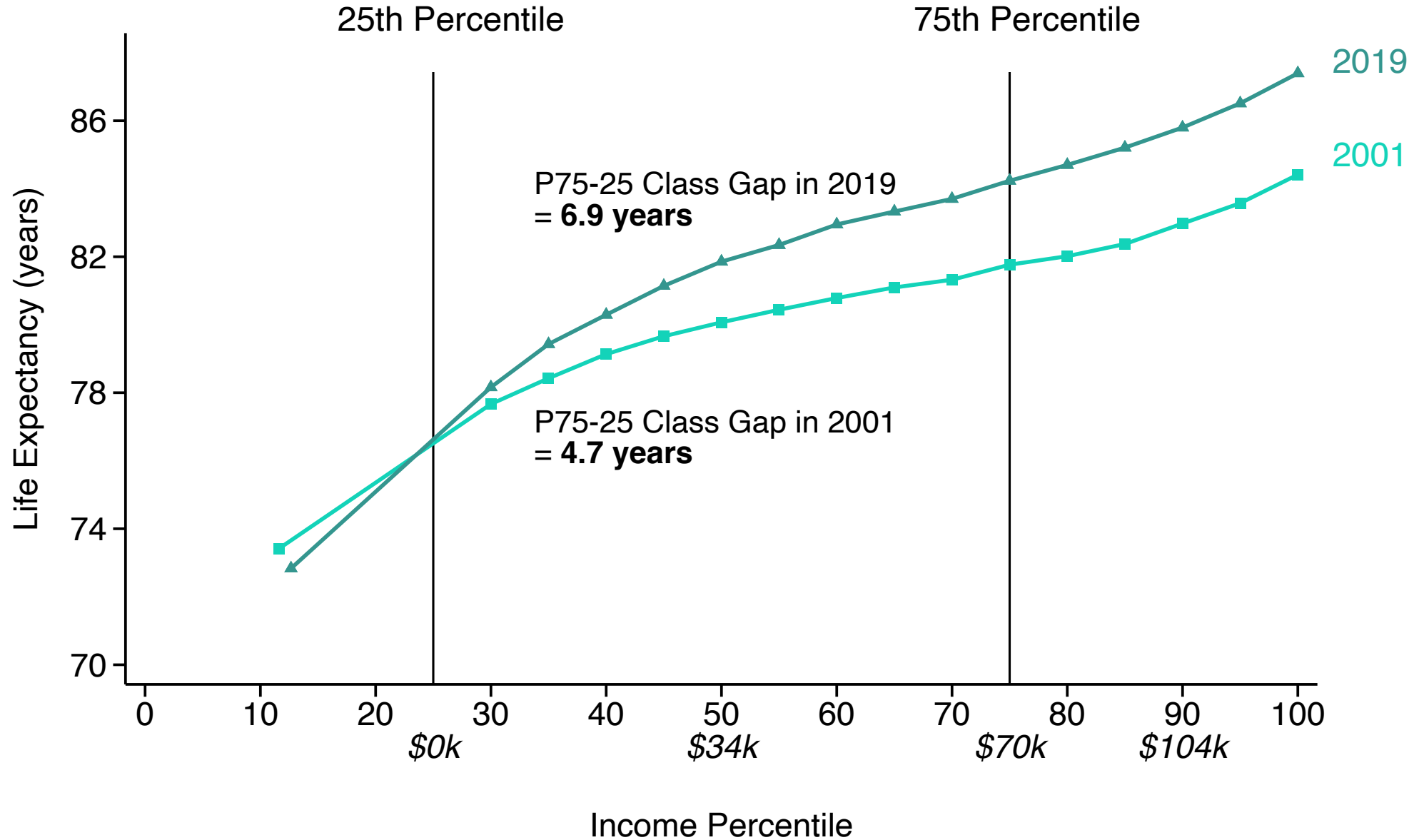
Life Expectancy at Age 30, by Class (Reweighting on Race)



Life Expectancy at Age 30, by Class (Reweighting on Race)

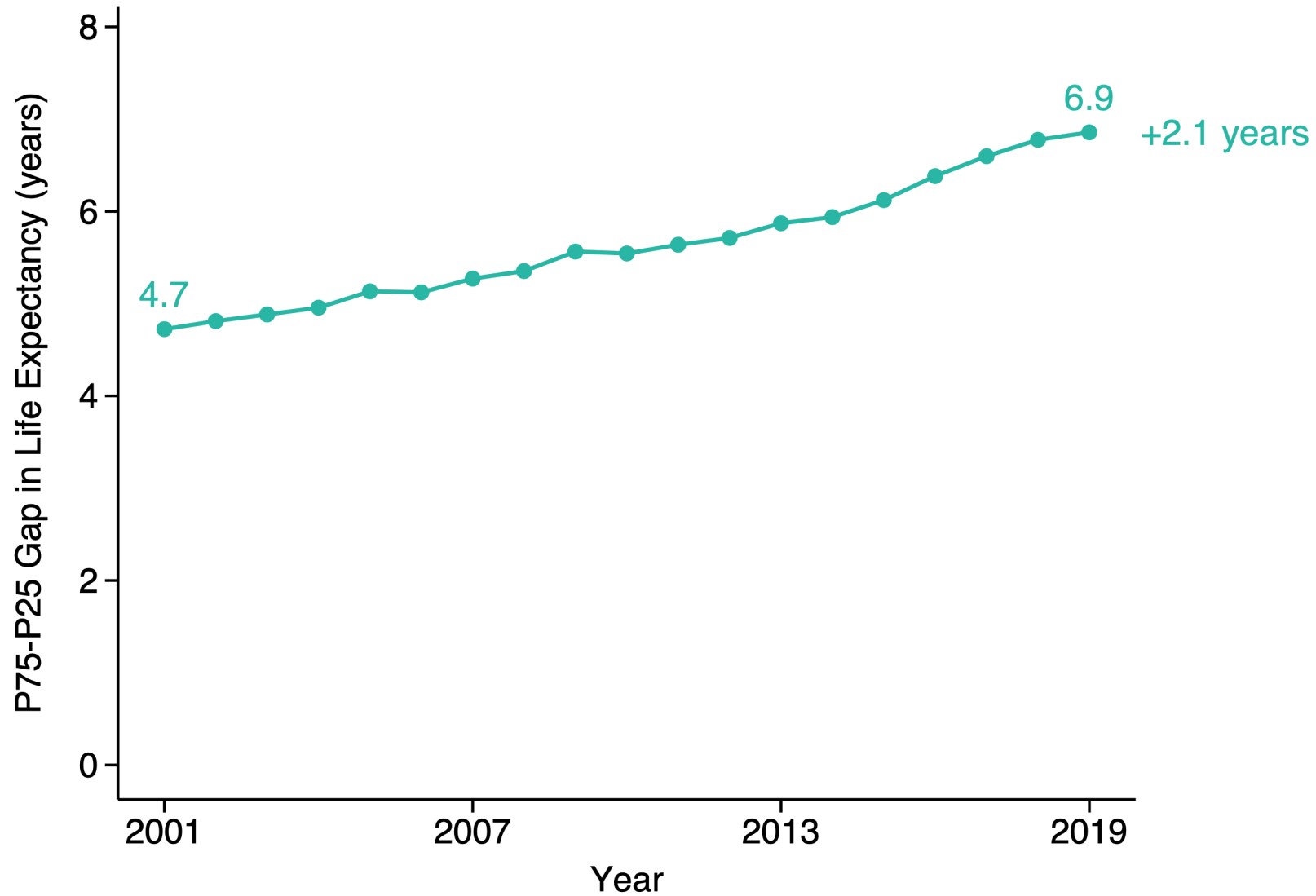


Life Expectancy at Age 30, by Class (Reweighting on Race)

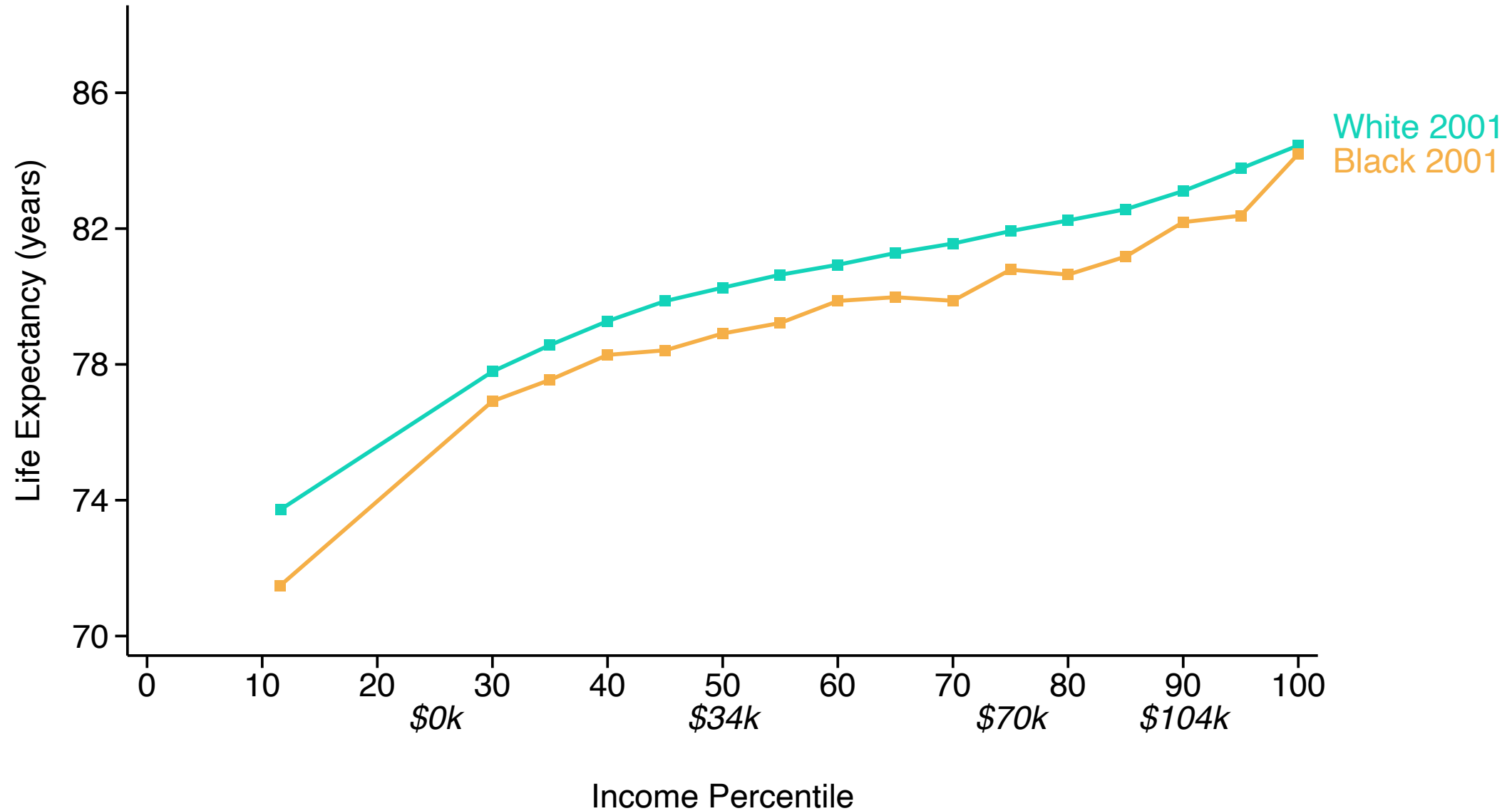


Evolution of Class Gap in Life Expectancy, 2001-2019

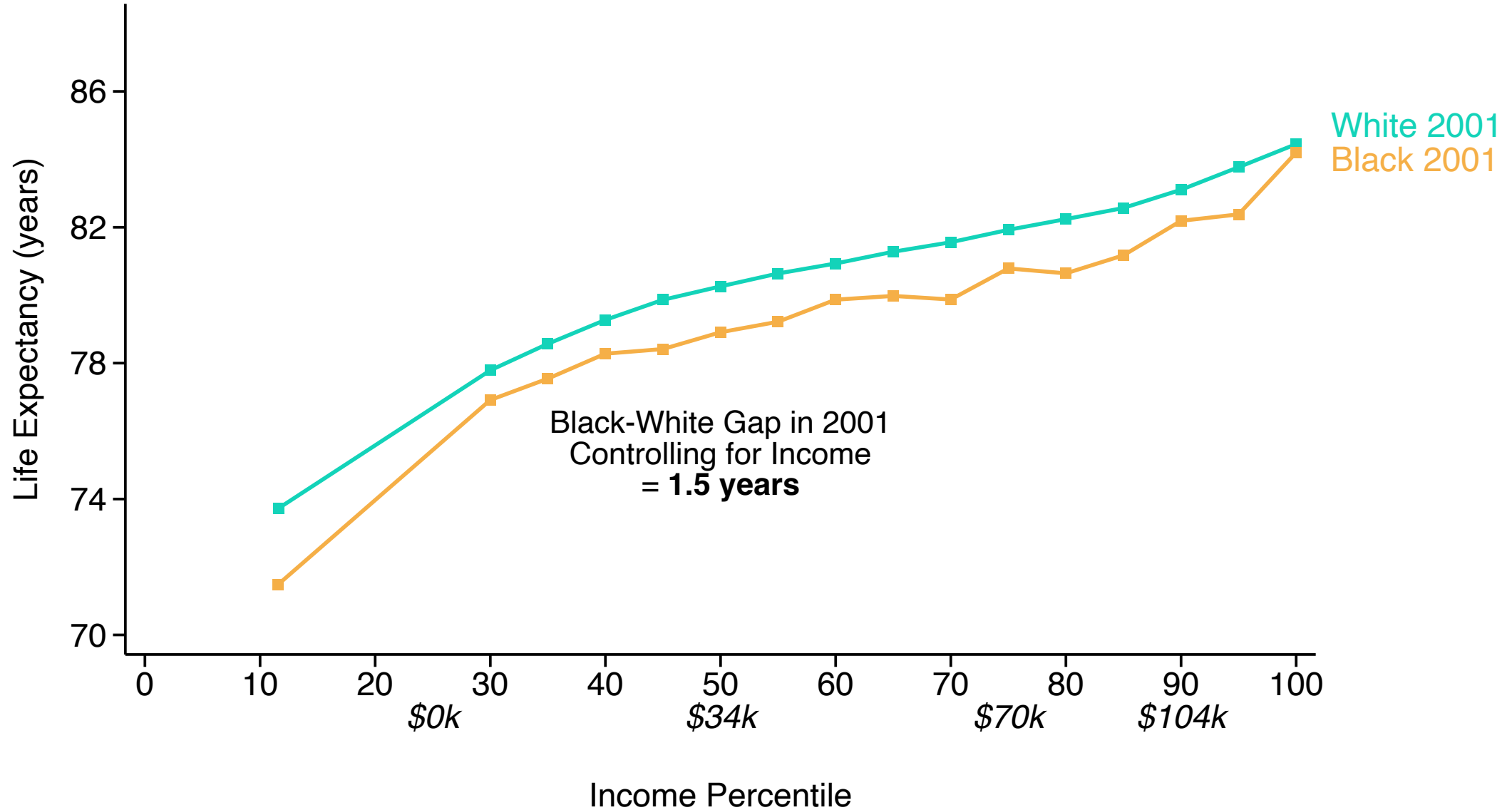
Race-Adjusted Gap in Life Expectancy: 25th vs. 75th Percentile of Household Income Distribution



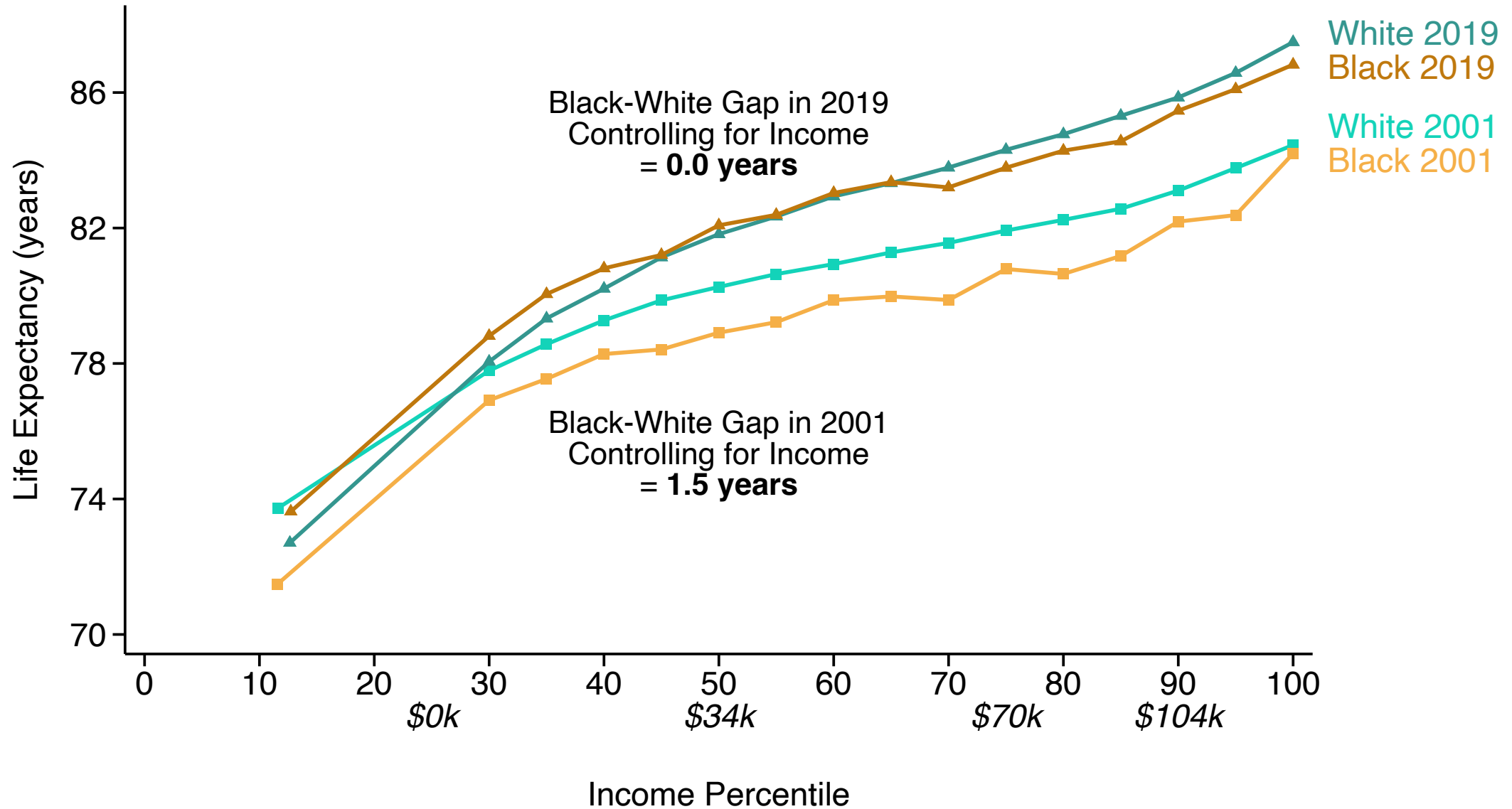
Life Expectancy at Age 30, by Race and Class



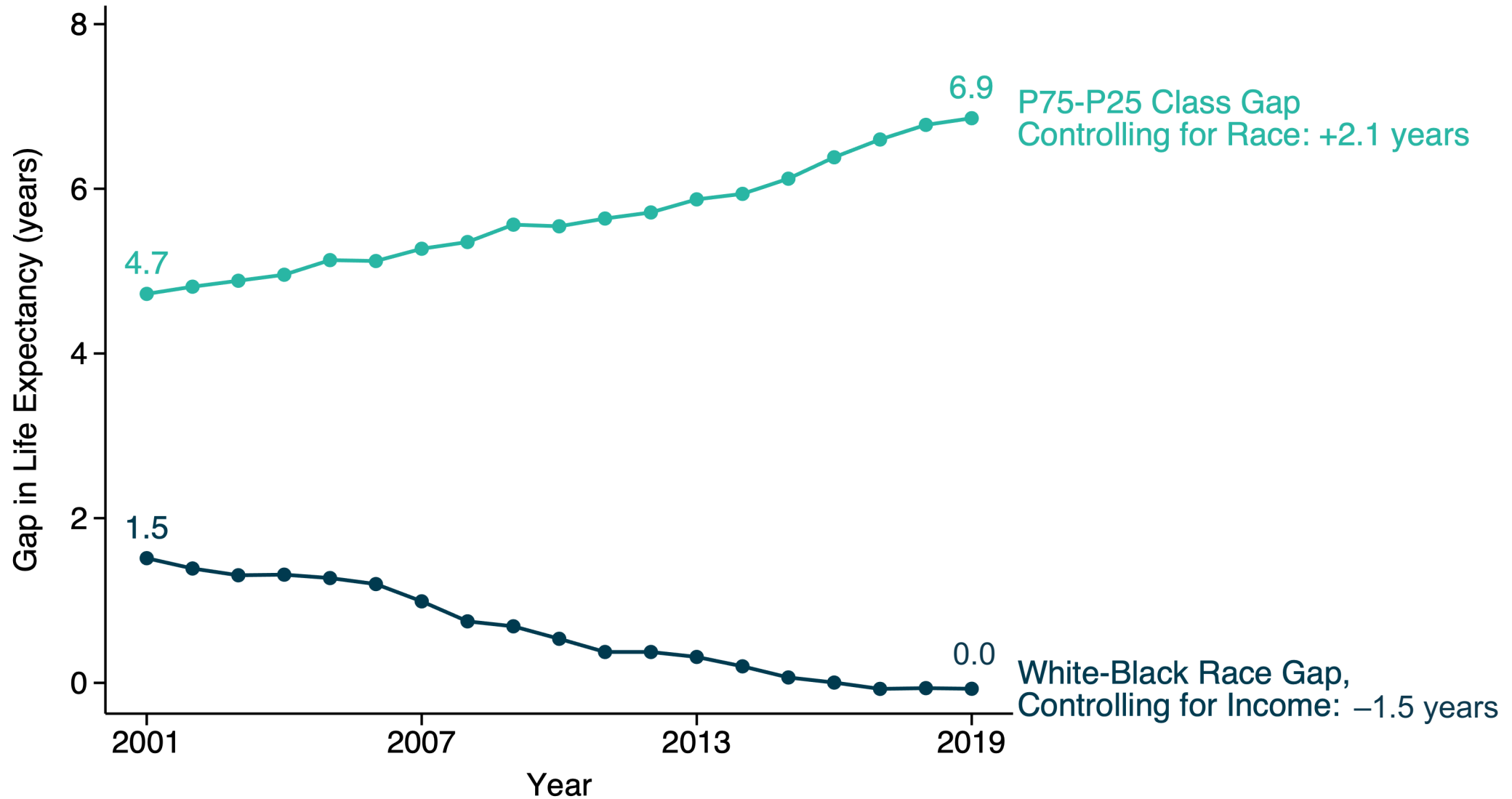
Life Expectancy at Age 30, by Race and Class



Life Expectancy at Age 30, by Race and Class



Growing Class Gaps, Shrinking Race Gaps in Life Expectancy, 2001-2019

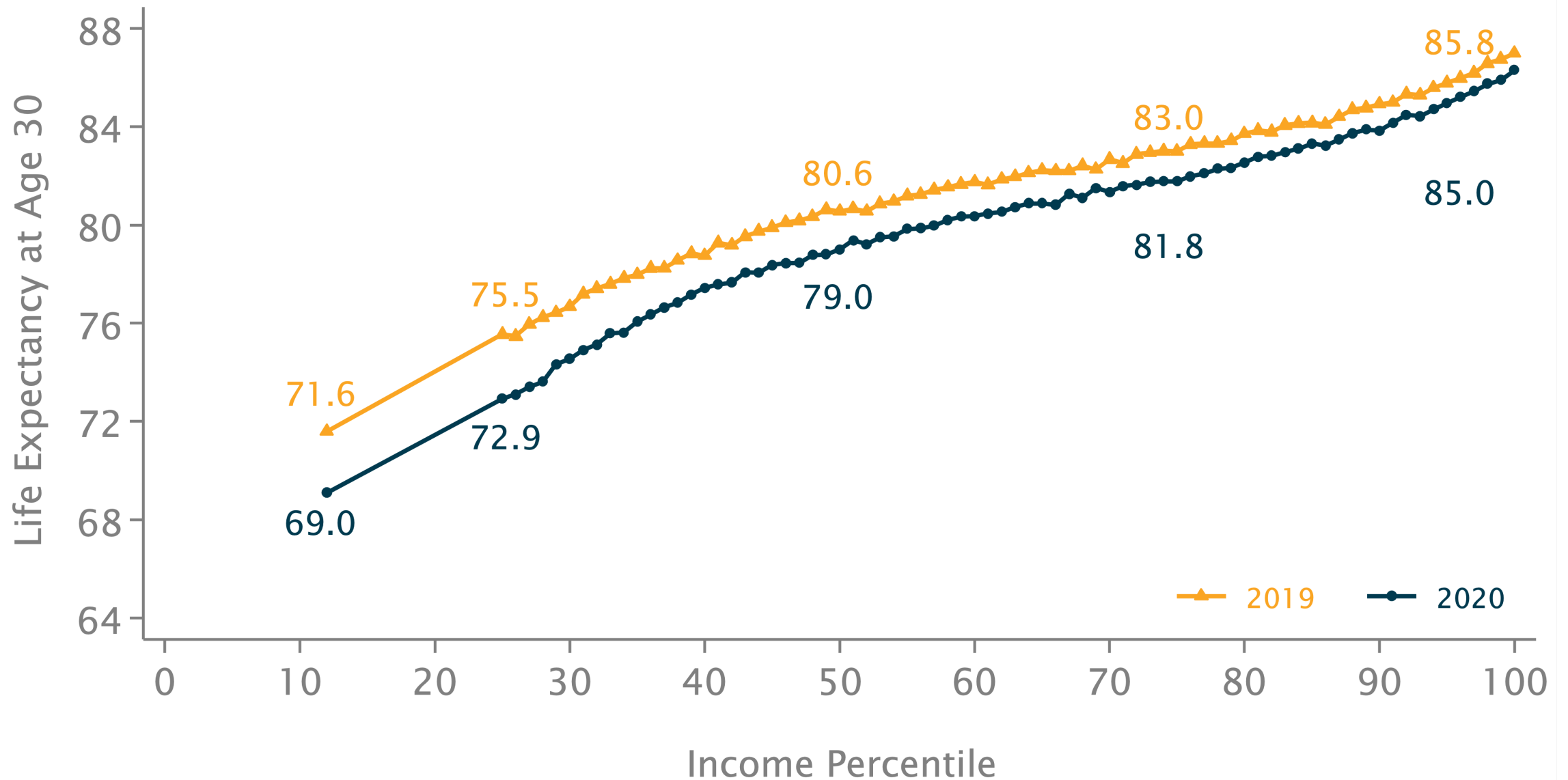


Trends in Life Expectancy by Race and Class

Pandemic Onset, 2019 to 2020

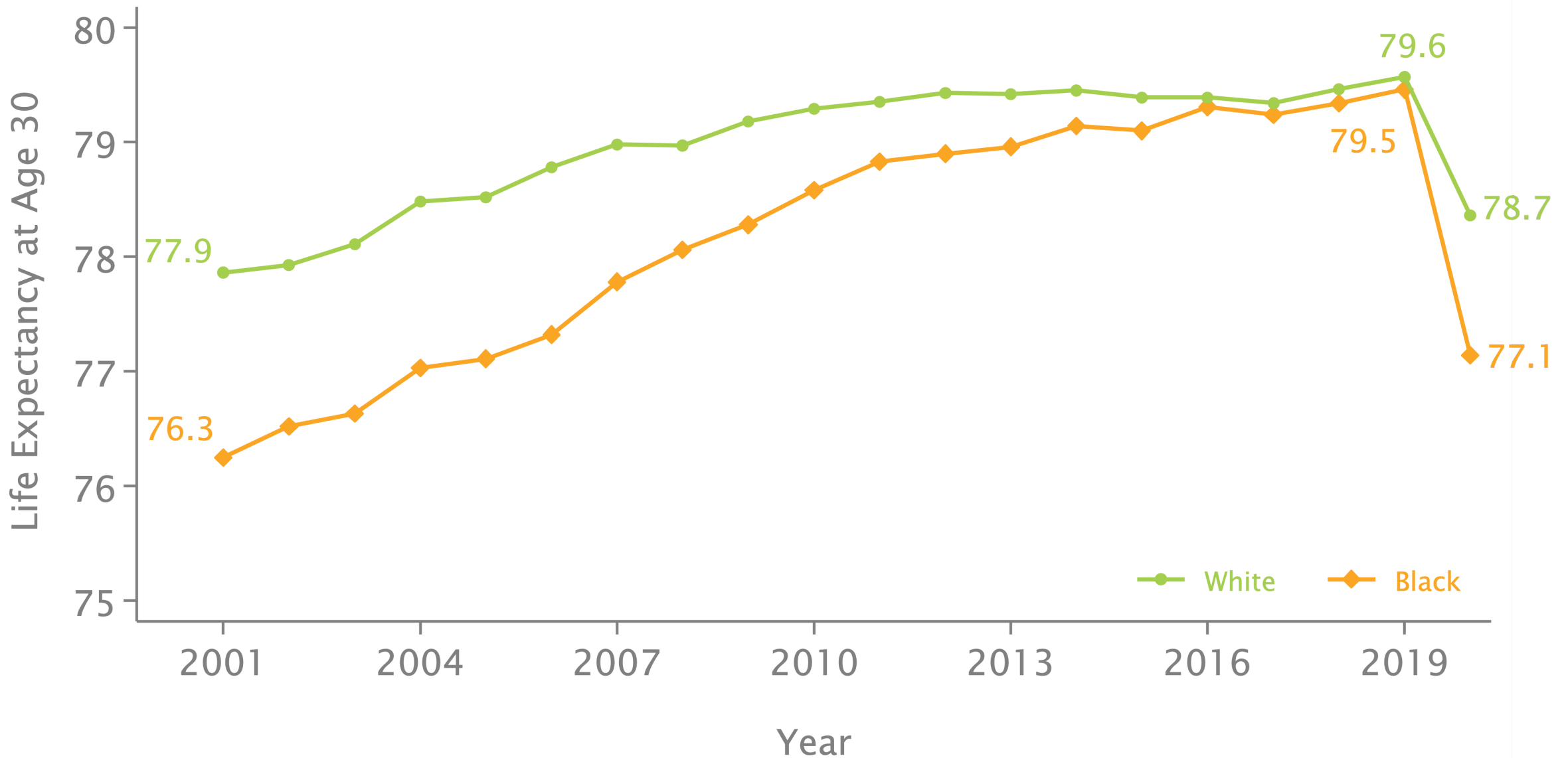
Impact of COVID is Small Compared to Class Gaps in Life Expectancy

Men, all races and ethnicities



Impact of COVID is Similar in Size to Racial Gaps in Life Expectancy

Income Distribution of Black Men Reweighted to Match the Income Distribution of White Men



Trends in Life Expectancy by Race and Class

Medium-Term Pandemic Effects

Analyzing the 2021-2022 data, we are examining:

- As the large waves of COVID-19 deaths subsided in 2022, how have disparities in health by race and income evolved?
 - Were the expanding gaps in 2020 driven entirely by COVID-19 infections, proving to be transient as COVID-19 infections and deaths declined?
 - Did the pandemic trigger persistent changes in health and mortality due to factors such as deferred care and COVID-related disability (long COVID)?
- Does the “new normal” look like 2019? And how does it vary across regions?





THE SCHOOL OF PUBLIC POLICY



RETIREMENT
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COVID-19 in Adults with Disabilities: Disparities in Prevalence, Health Care Access and Use and Employment Outcomes

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Nancy A. Miller

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PREPARED FOR THE 26TH ANNUAL MEETING OF THE RETIREMENT
AND DISABILITY RESEARCH CONSORTIUM, AUGUST 7-9, 2024

Introduction

- Approximately 25% of adults in the US experience a disability
- Minority and lower socioeconomic status (SES) individuals disproportionately experience disabilities
 - Prevalence is higher among the Black (25%) relative to White (20%) and Hispanic (16.7%) populations
 - Individuals with disabilities have attained less education, with 14.6% of individuals with disabilities versus 6.6% without disabilities not having a high school diploma
 - A higher percent of individuals with disabilities live in poverty than those without disabilities, 23.2% versus 11.1%

Introduction

- Individuals with disabilities receive fewer preventive and treatment services than those without disabilities
- Individuals with disabilities report higher unmet need for medical care
- Those with disabilities are more likely to report health care costs as a barrier to care

Individuals with disabilities and COVID-19

- Individuals with disabilities have been disproportionately impacted by COVID-19
 - Higher prevalence of COVID-19
 - More likely to experience hospitalization
 - More likely to report a negative health impact
- Research to date
 - Has largely focused on individuals with specific conditions
 - Has often drawn on convenience samples
- We are using nationally representative data from the National Health Interview Survey to assess health care and employment impacts of COVID-19

Literature review methods

- To begin our work, we conducted a review of the literature, focusing on studies related to the prevalence of COVID-19 among individuals with disabilities
- Searched social science data bases, hand searched journals and hand searched bibliographies of articles
- Inclusion criteria
 - Peer reviewed journal, 2020-May 2024
 - Included a prevalence or incidence number or a case rate for COVID-19 infection or Long COVID among individuals with a disability relative to a comparison group
 - Individuals with disabilities in the US

Literature review findings

➤ Nine peer reviewed articles

➤ Type of disability

- Four focused on individuals with intellectual and development disorders (IDD) (Formica et al., 2024; Karpur et al., 2022; Landes et al., 2020; Landes et al., 2021)
- One was specific to individuals with serious mental health disorders (Wang et al., 2021)
- One focused on individuals with functional limitations (Pendergast & Monnat, 2022)
- One study compared Medicare beneficiaries who were eligible through receipt of SSDI, relative to age eligible (Yan et al., 2022)
- Two drew on survey questions capturing a range of disabilities (e.g., vision, mobility) (Friedman 2022; Miller et al., 2023)

Literature review findings

- Nine peer reviewed articles
 - Data source
 - Two examined claims data (private insurance, Karpur et al., 2022; Medicare Yan et al., 2022)
 - One study used electronic health records (Wang et al., 2021)
 - Three studies used survey data
 - National Well-Being Survey (Pendergast & Monnat, 2022)
 - Census Bureau Household Pulse Survey (Friedman 2022)
 - 2021 Porter Novelli Public Services Fallstyles Survey (Miller et al., 2023)
 - Two studies focused on individuals with IDD in New York drew on provider and state Department of Health data (Formica et al., 2024; Landes et al., 2020) and a third drew from publicly available data from the Department of Disability Services and publicly available state data in California (Landes et al., 2021)

Literature review findings

- Nine peer reviewed articles
 - Six of nine studies found individuals with disabilities to be more likely to experience COVID-19
 - Case rate of 10,978/100,000 for Medicare beneficiaries initially eligible through receipt of SSDI versus 3,148/100,000 Medicare beneficiaries age eligible (Yan et al., 2022)
 - 19.3% of individuals with a self-reported disability reported a COVID-19 diagnosis relative to 16.7% of individuals without a disability in the Household Pulse Survey (Friedman 2022)
 - Formica et al. (2024) reported a case rate of 20,350/100,000 among individuals with IDD residing in a group home relative to 8,700/100,000 in the general population

Literature review findings

- Nine peer reviewed articles
 - Two of nine studies found individuals with disabilities to be less likely to experience COVID-19; but with considerable heterogeneity
 - Individuals with IDD receiving services in CA had a case rate of 831/100,000 relative to 2,085/100,000 in the general population (Landes et al., 2021)
 - Case rate of 19,031/100,000 for individuals with IDD residing in an intermediate care facility for people with developmental disabilities
 - One study found no difference related to the experience of COVID-19 among individuals with disabilities relative to those without (Miller et al., 2023)
 - Used a single measure of any disability (e.g., cognitive, vision)
 - Using specific types of disabilities may have demonstrated some differences

Next steps

- We are using data from the National Health Interview Survey
 - Nationally representative of US civilian, non-institutionalized population
 - Conducted annually since 1957
 - In 2022, the NHIS began collecting questions specific to COVID-19 and post-COVID condition
 - Whether a doctor or health professional has told them they have COVID-19
 - Whether they have taken a test for COVID-19
 - Severity of symptoms
 - In 2023, the NHIS added questions related to post-COVID condition and whether these symptoms reduce their ability to carry out day-to-day activities compared to the time prior to COVID-19

Next steps

- Using data from the National Health Interview Survey
 - Use questions related to disability to construct mutually exclusive measures (Altman & Bernstein, 2008)
 - Basic activity limitations only (i.e., sensory, physical, cognitive and mental health)
 - Complex activity limitations only (i.e., functional and work-related)
 - Both basic and complex
 - Will estimate prevalence for individuals with disabilities, using the above measures, relative to those without disabilities

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Long COVID and Employment

Gary V. Engelhardt
Syracuse University

August 9, 2024

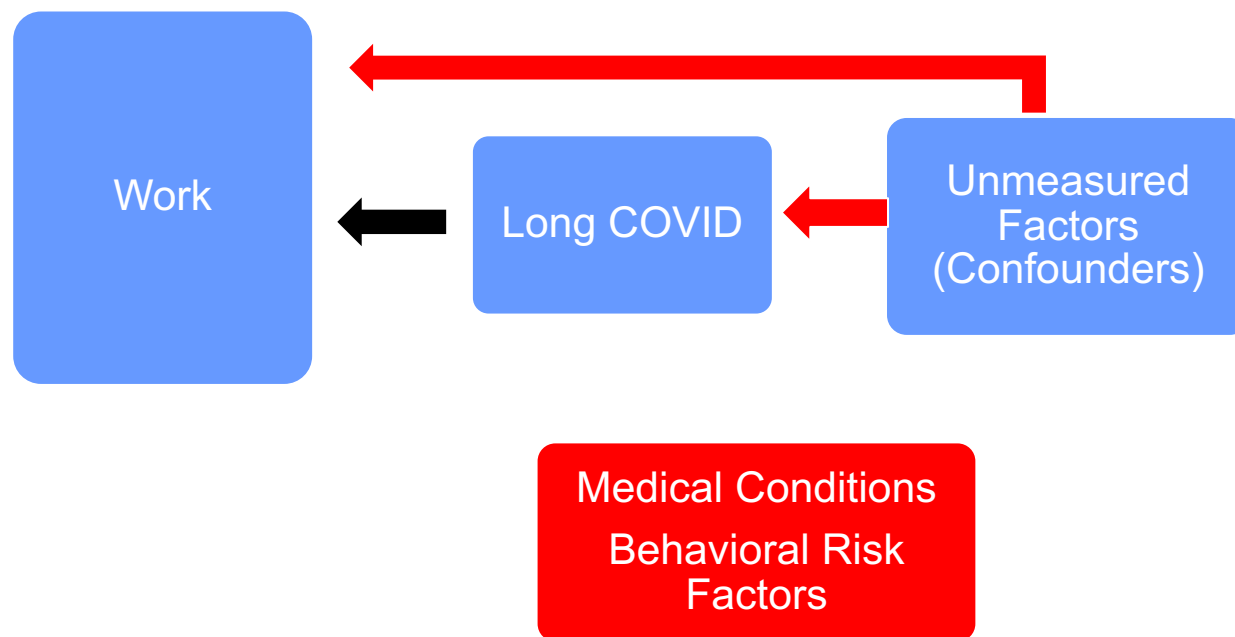
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- This research has not been peer-reviewed.

Long COVID

- One or more symptoms persisting 3 months or more after acute infection
- Census Household Pulse Survey
 - 15m Americans ages 50-75 reported having had long COVID
 - 5m currently suffer from long COVID
- Has the potential to substantively impact OASDI

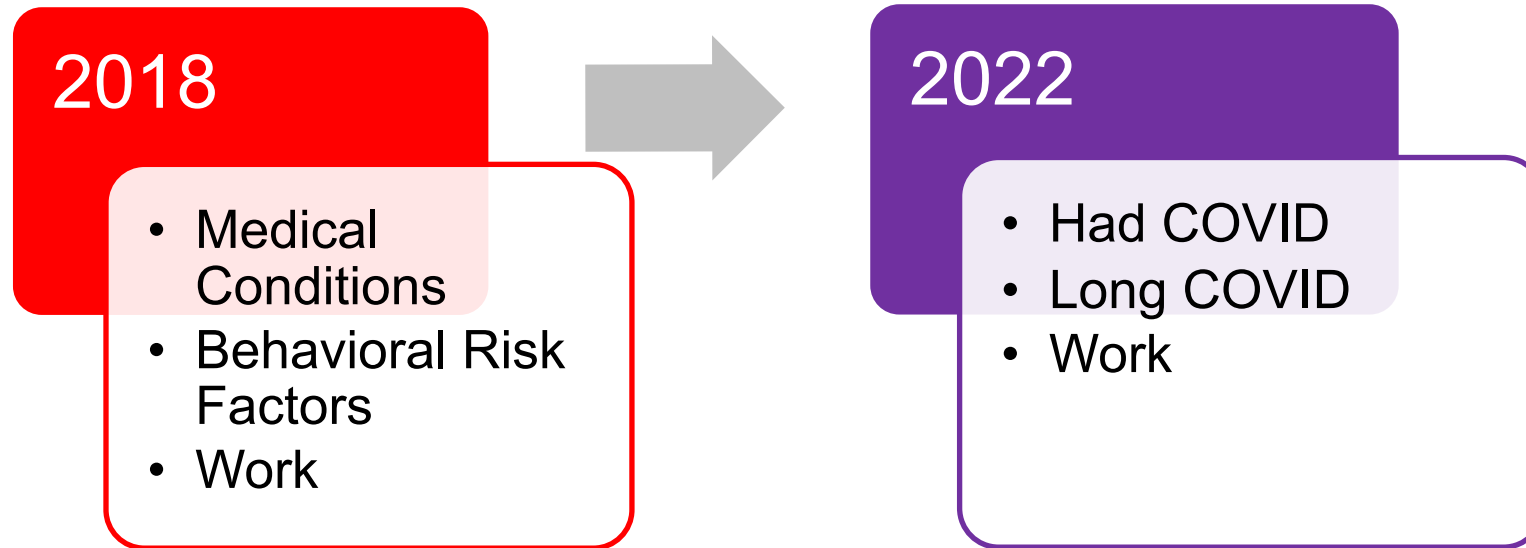
Fundamental Empirical Challenge



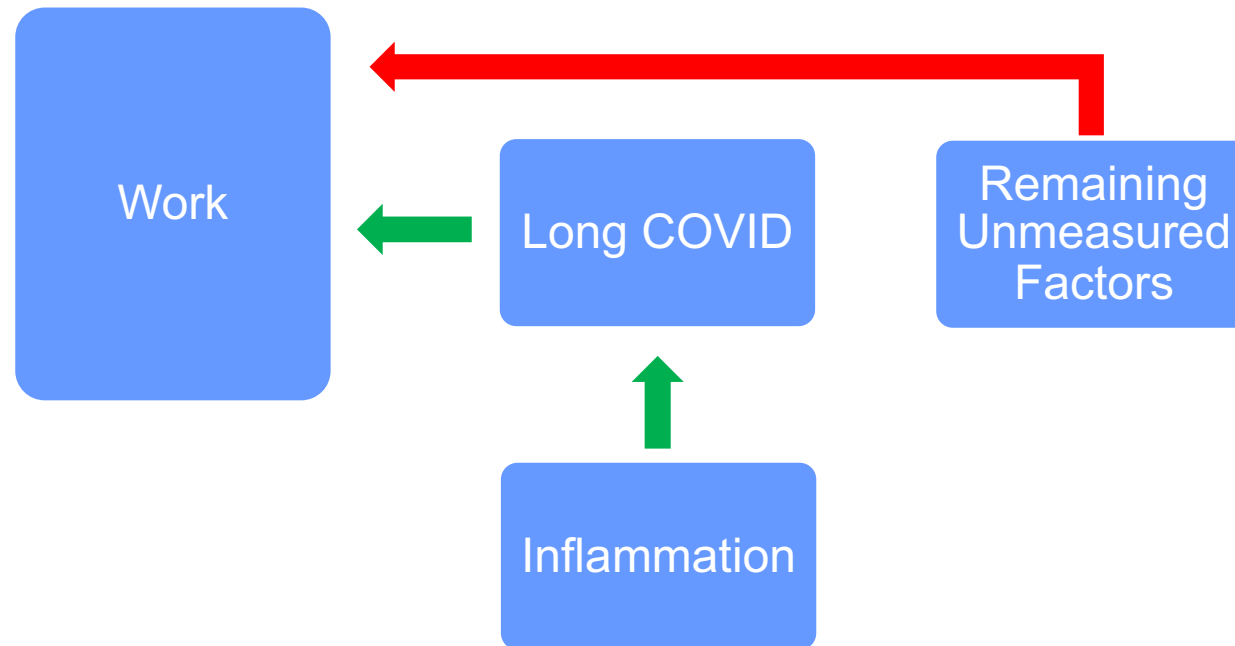
Data Description

- Use the Health and Retirement Study
- Sample of almost 6,000 individuals
 - 50-75 years old at the start of the pandemic
 - Survived the pandemic and interviewed in the 2022 wave
 - Resided in the U.S.
- About 50% were employed pre-pandemic (2018)

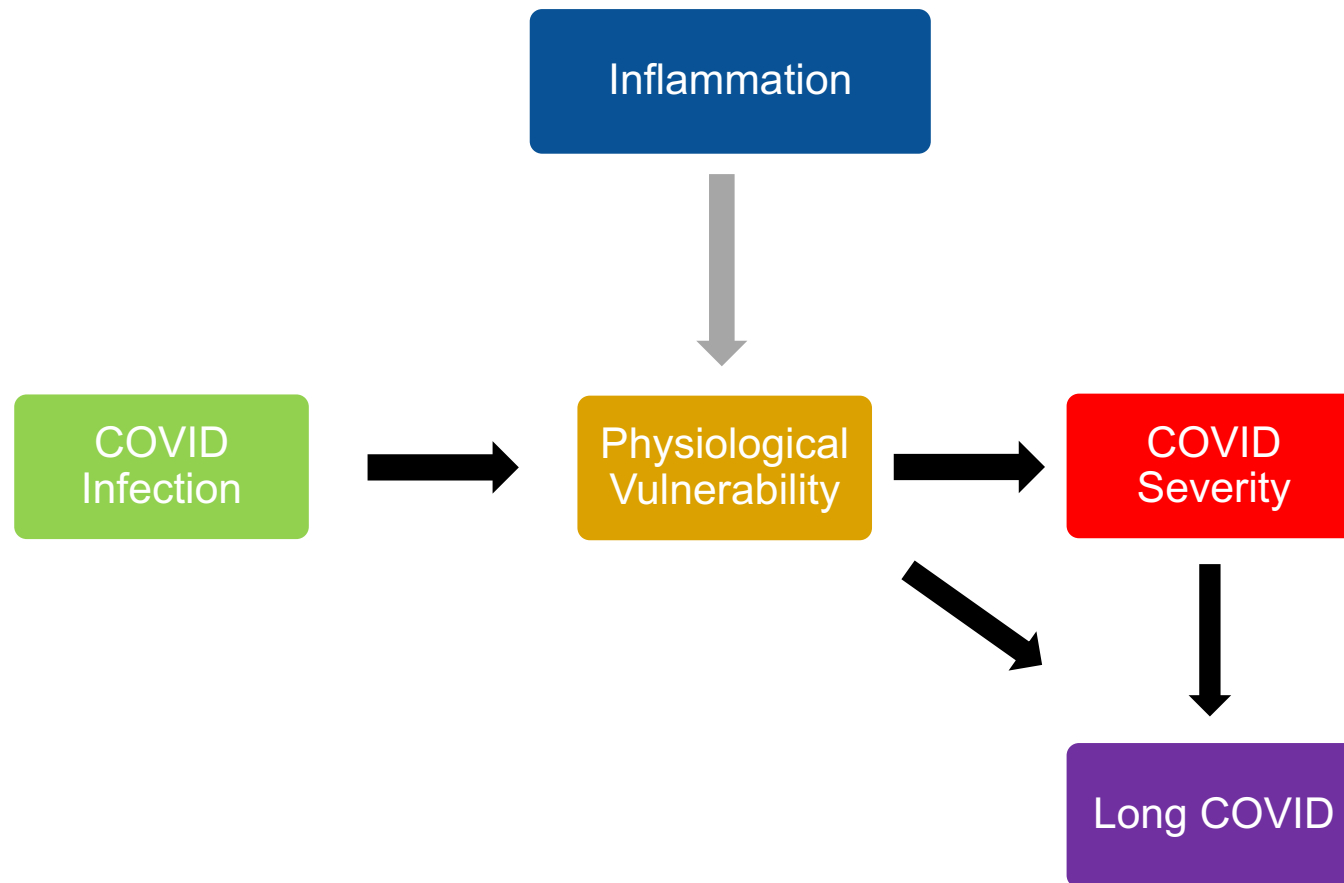
Data Description



Identifying the Impact of Long COVID



Identifying the Impact of Long COVID



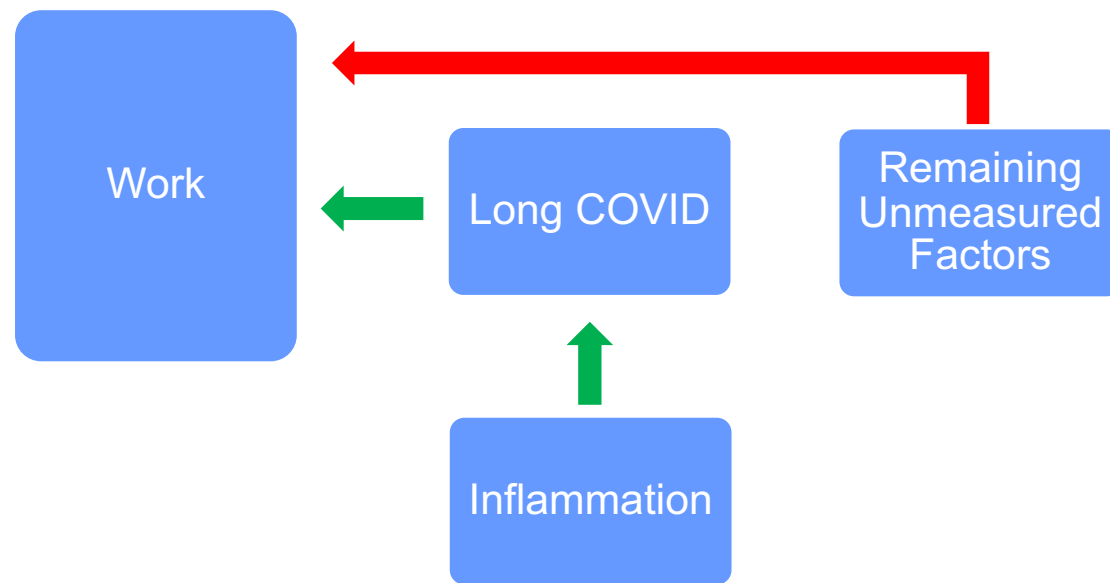
Measuring Inflammation

- Many proposed inflammatory mechanisms
 - Immune dysregulation
- C-Reactive Protein (CRP)
- Produced by the liver and found in the bloodstream
- Activates immune system to clear invaders/dying cells
- Standard clinical measure (biomarker) of inflammation

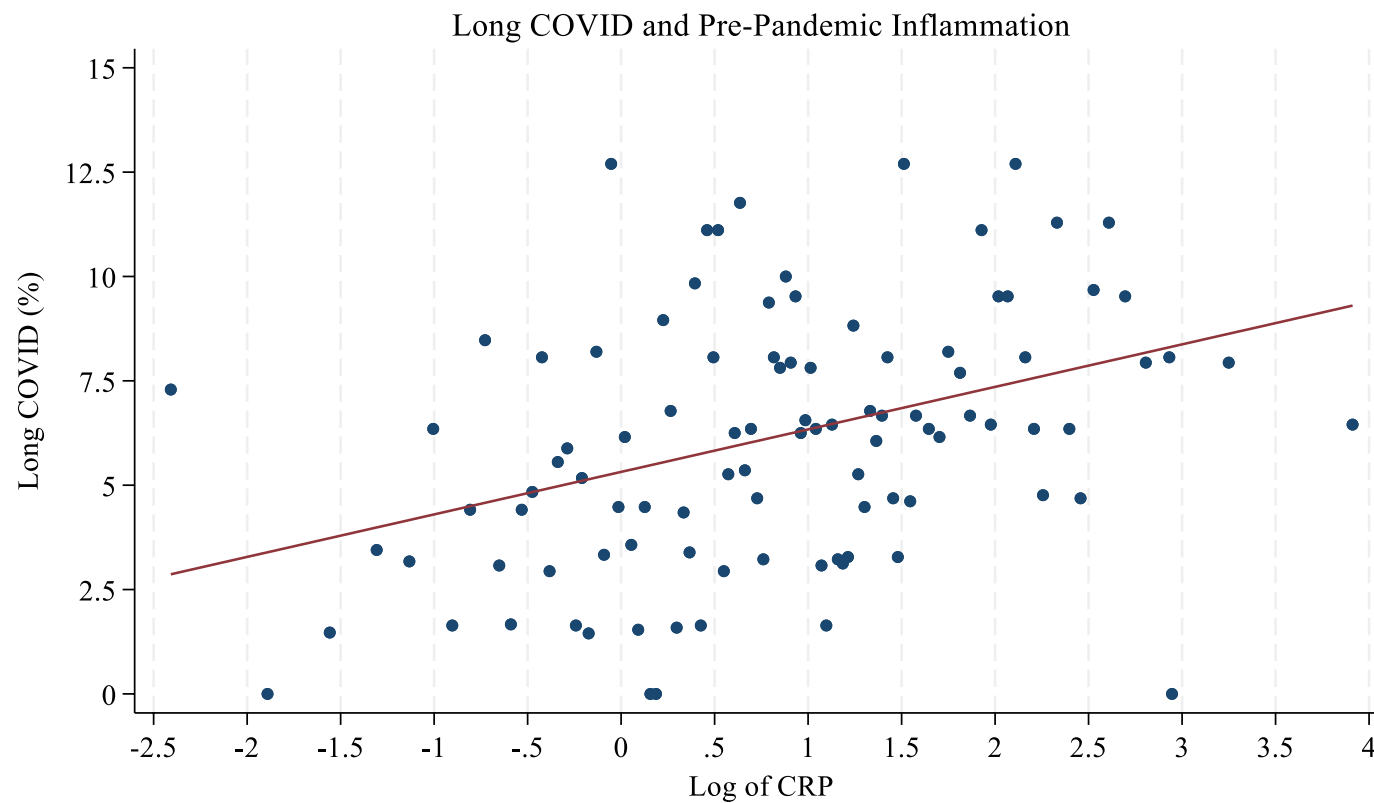
Measuring Inflammation



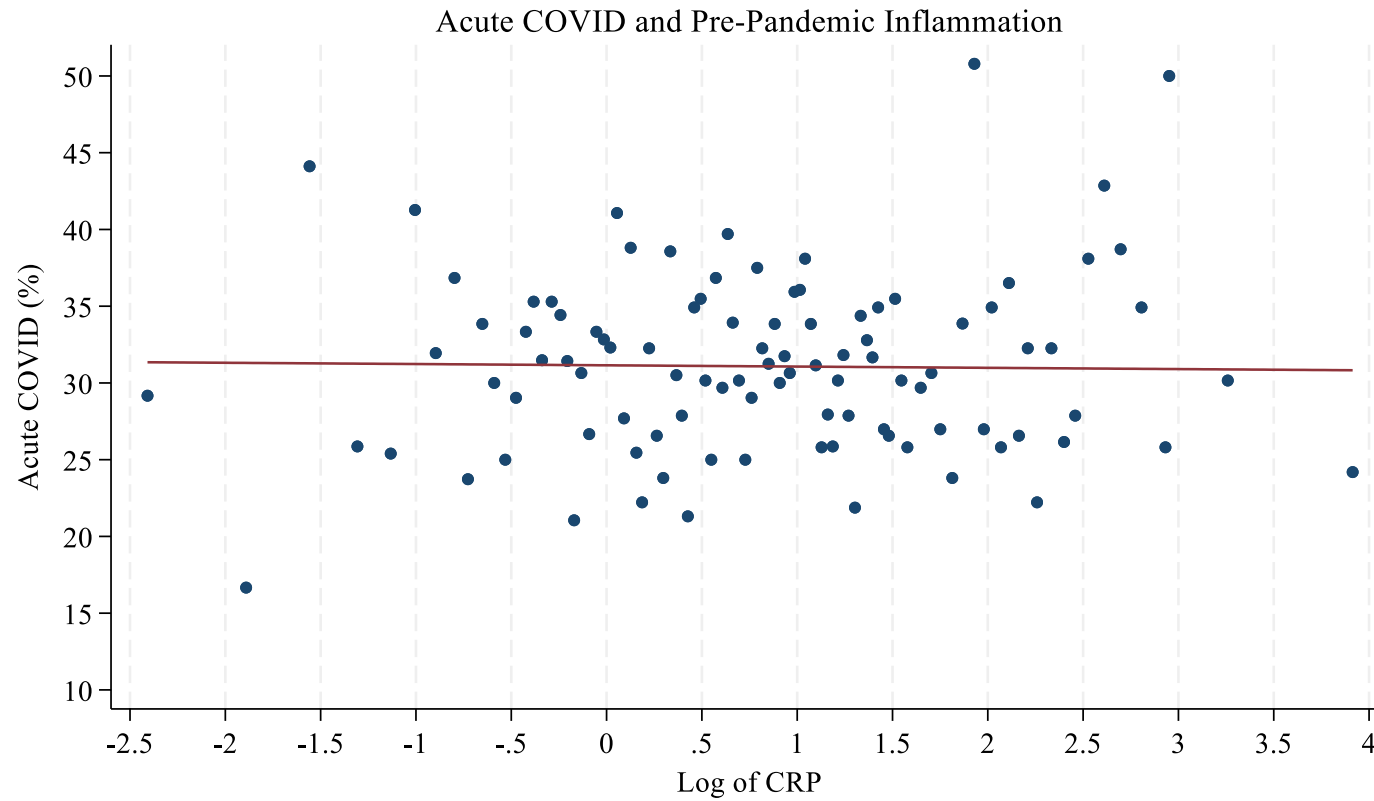
Identifying the Impact of Long COVID



Long COVID and Inflammation



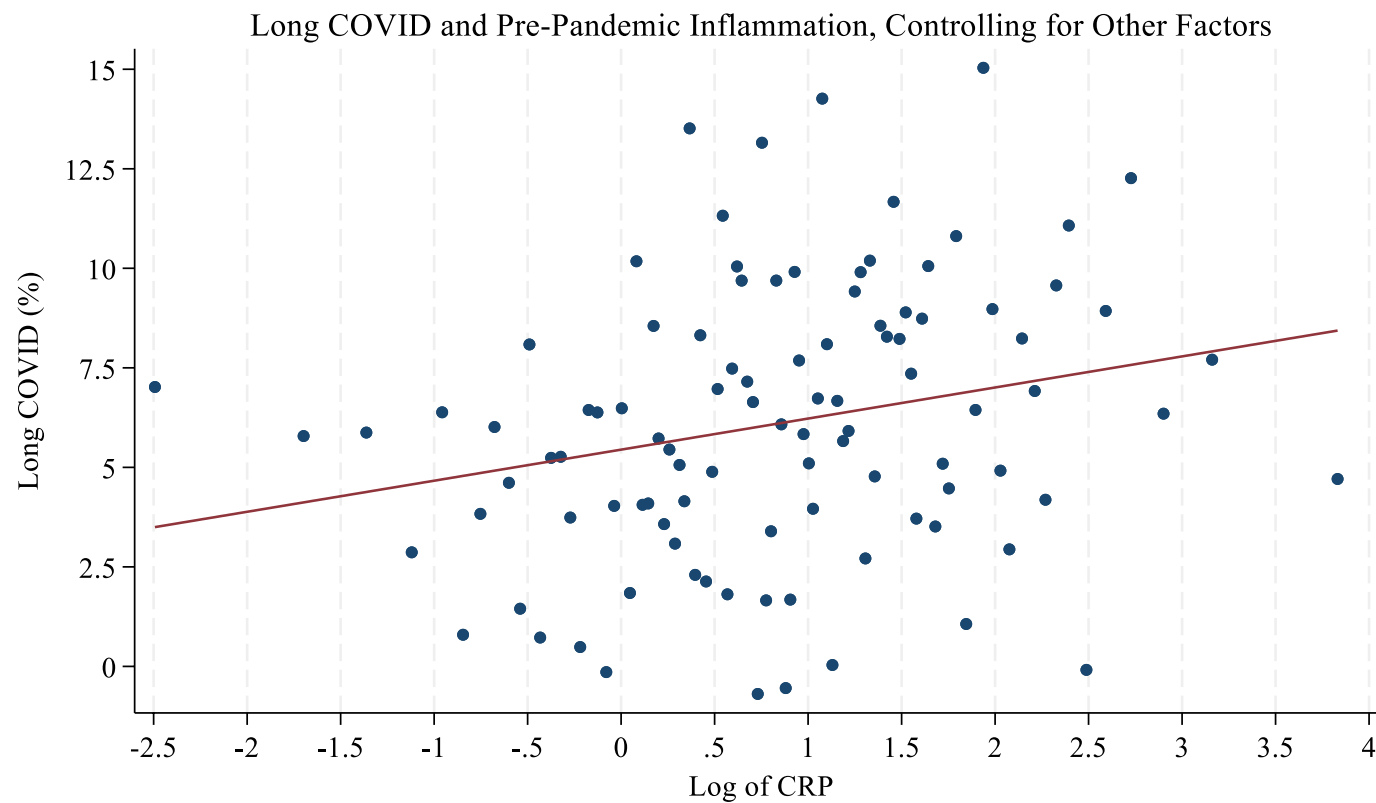
Acute COVID and Inflammation



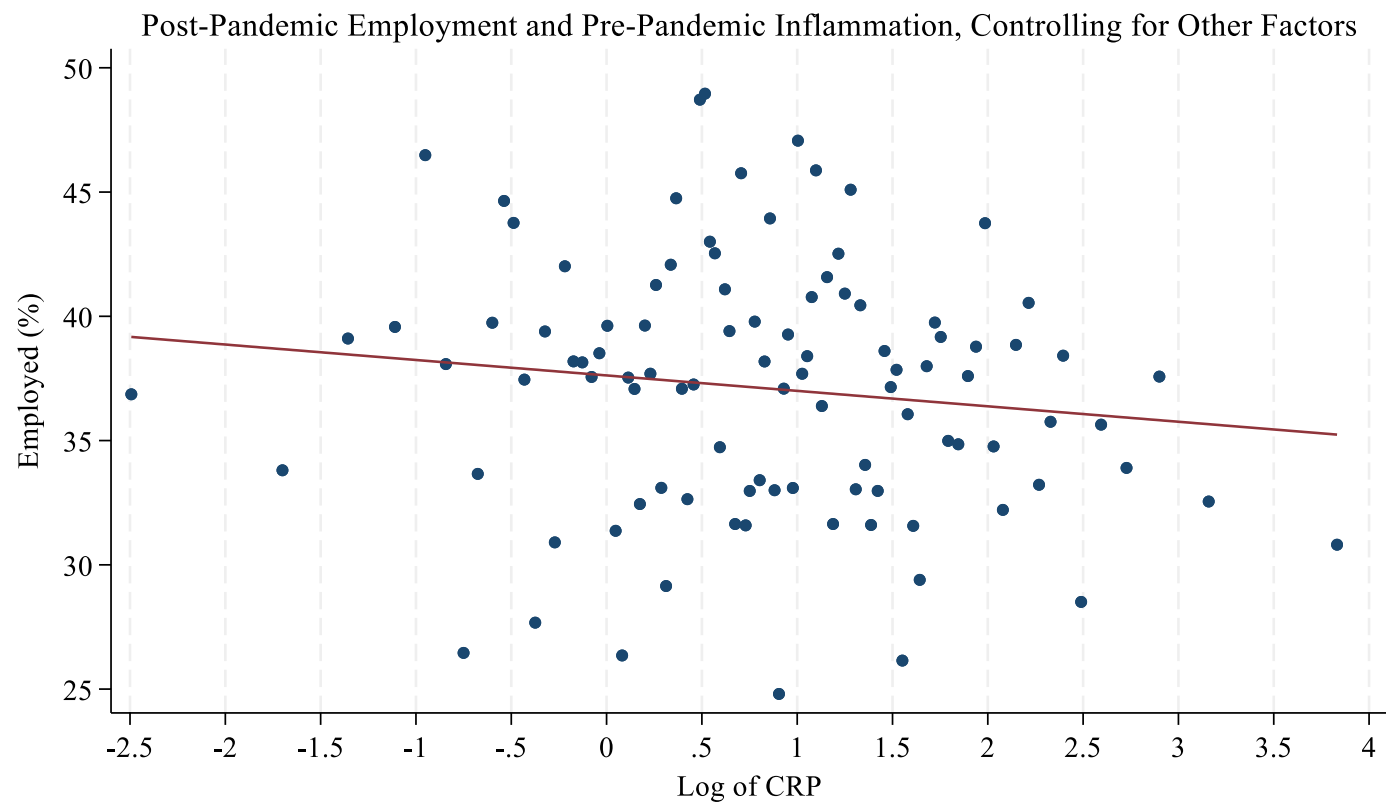
Accounting for Other Factors

- Demographics
 - Age, sex, race, ethnicity, education, marital status
- Region and timing of interview
- Medical conditions
 - Heart, diabetes, b.p., stroke, psych, arthritis, lung, cancer
- Behavioral risk factors
 - Obesity, smoking, sleep problems, depression
- Pre-pandemic employment
- Other biomarkers
- Transmissibility
 - Weighted average R_0 for variants in circulation by month and region, multiplied by pre-pandemic household size

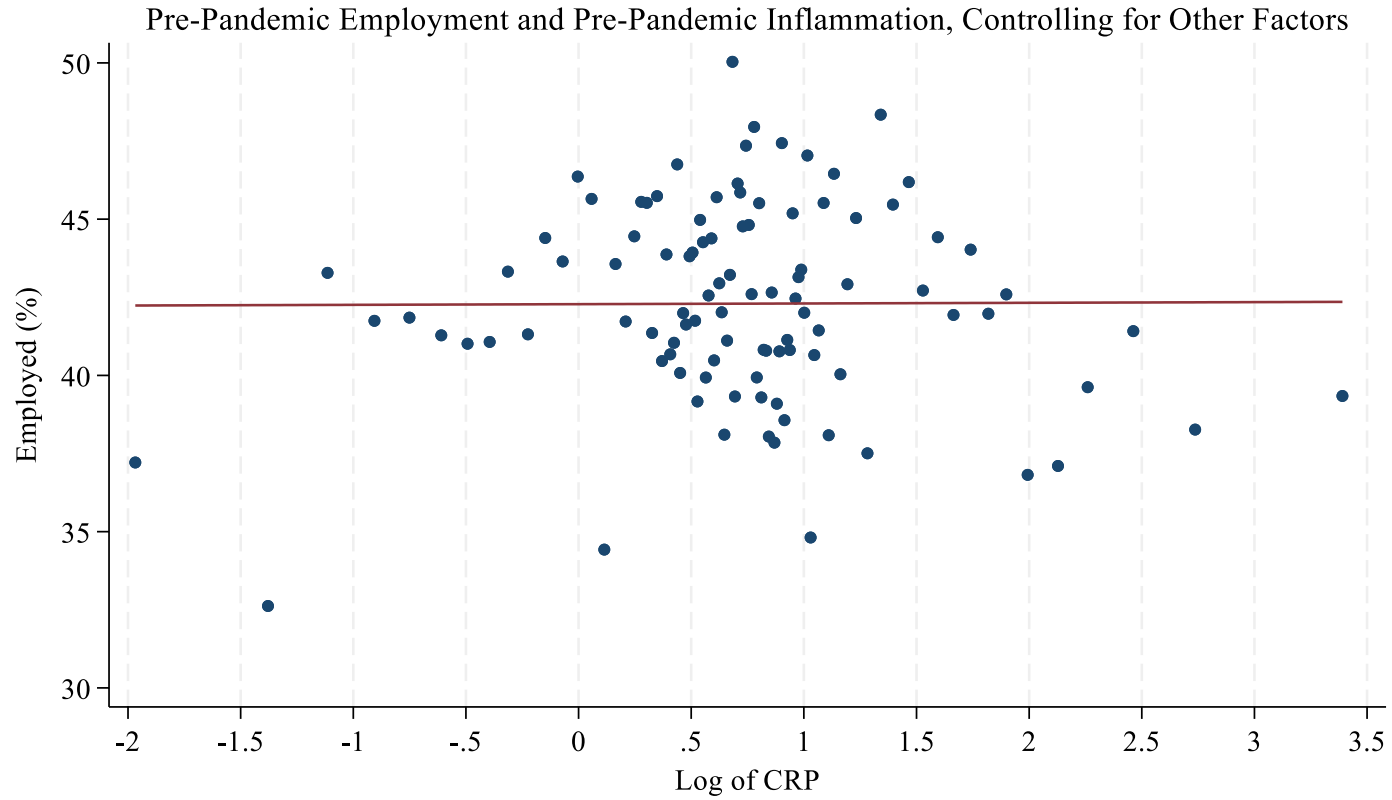
Long COVID and Inflammation



Post-Pandemic Employment and Inflammation



Pre-Pandemic Falsification Test



Conclusions

- Mid-to-late career individuals with long COVID were 9 pp less likely to be employed (in 2022-23)
- Smaller impacts than (sparse) existing estimates
- However, still substantive effects, given pre-pandemic employment rate of 50%
- Key, unanswered questions include
 - Persistence
 - Earnings
 - Gateway to labor force exit and OASDI claiming