

# Population Health: *Major Opportunities for an Evolving Field*

Marc N. Gourevitch, MD, MPH  
Department of Population Health  
NYU Grossman School of Medicine

Population Health Research Institute  
Case Western Reserve University

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## Disclosures

- NuTopia (consulting re PBS script)

## Research support

- NIDA
- Robert Wood Johnson Foundation
- PCORI / PCRF
- Robin Hood Foundation

# Overview

Population health: definitions and some context

Partnership

Opportunities and challenges ahead

## What Is Population Health?

Population health is a relatively new term that has not yet been precisely defined. Is it a concept of health or a field of study of health determinants?

We propose that the definition be "the health outcomes of a group of individuals, including the distribution of such outcomes within the group, and we argue that the field of population health includes health outcomes, patterns of health determinants, and policies and interventions that address these two.

We present a rationale for this definition and note its differentiation from public health, health promotion, and social epidemiology. We invite critiques and discussion that may lead to some consensus on this emerging concept. (*Am J Public Health*. 2003;93:380-383)

David Kindig, MD, PhD, and Greg Stoddart, PhD

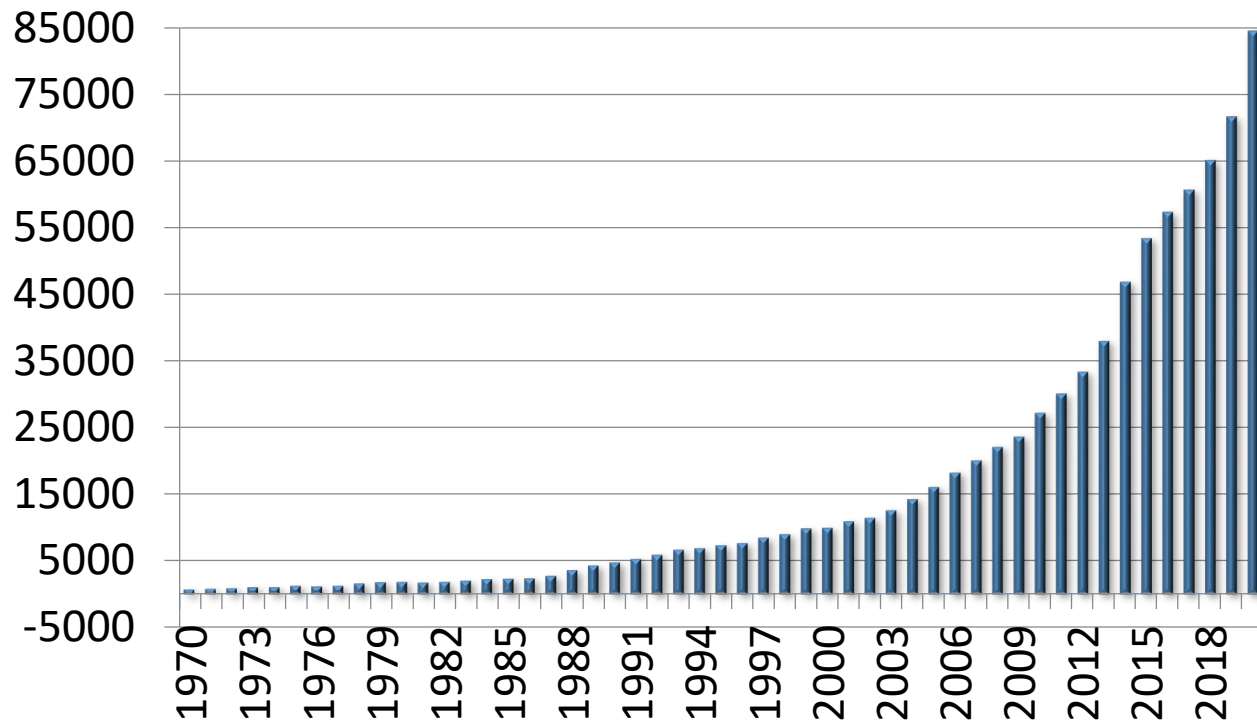
We propose that the definition be "the health outcomes of a group of individuals, including the distribution of such outcomes within the group."

grew out of the work of the Population Health Program of the Canadian Institute for Advanced Research. No concise definition of the term appears in this volume, although its authors state the concept's "linking thread [to be] the common focus on trying to understand the determinants of health of populations."<sup>1(p25)</sup>

eral meaning. Evans and Stoddart, while supporting an emphasis on "understanding of the determinants of population health," have also stated, however, that "different concepts [of health] are neither right or wrong, they simply have different purposes and applications. . . . [W]hatever the level of definition

(Provincial/Territorial Advisory Committee on Population Health) write that "population health refers to the health of a population as measured by status indicators and assessed by social, economic, physical environments, health practices, individual and coping skills, biology, early childhood environment, and health services. . . . As an approach, population health focuses on interrelated conditions and factors that influence the health of populations over the life course, identifies systematic variations in their patterns of occurrence, and applies the resulting knowledge to develop and implement policies and actions to improve the health and well being of those populations."<sup>5(p57)</sup> Kindig has suggested a similarly broad defi-

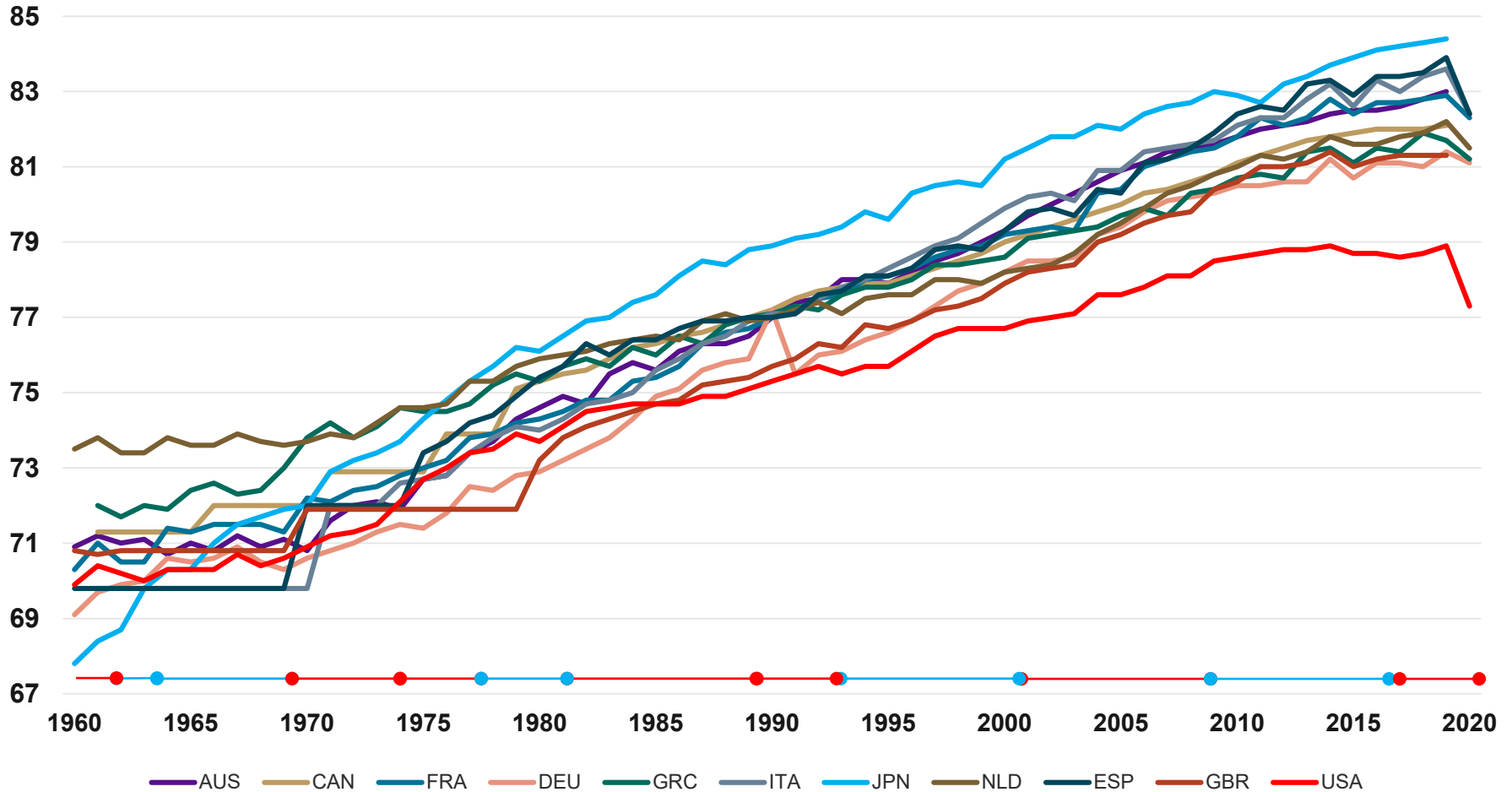
# “Population Health” in title or abstract



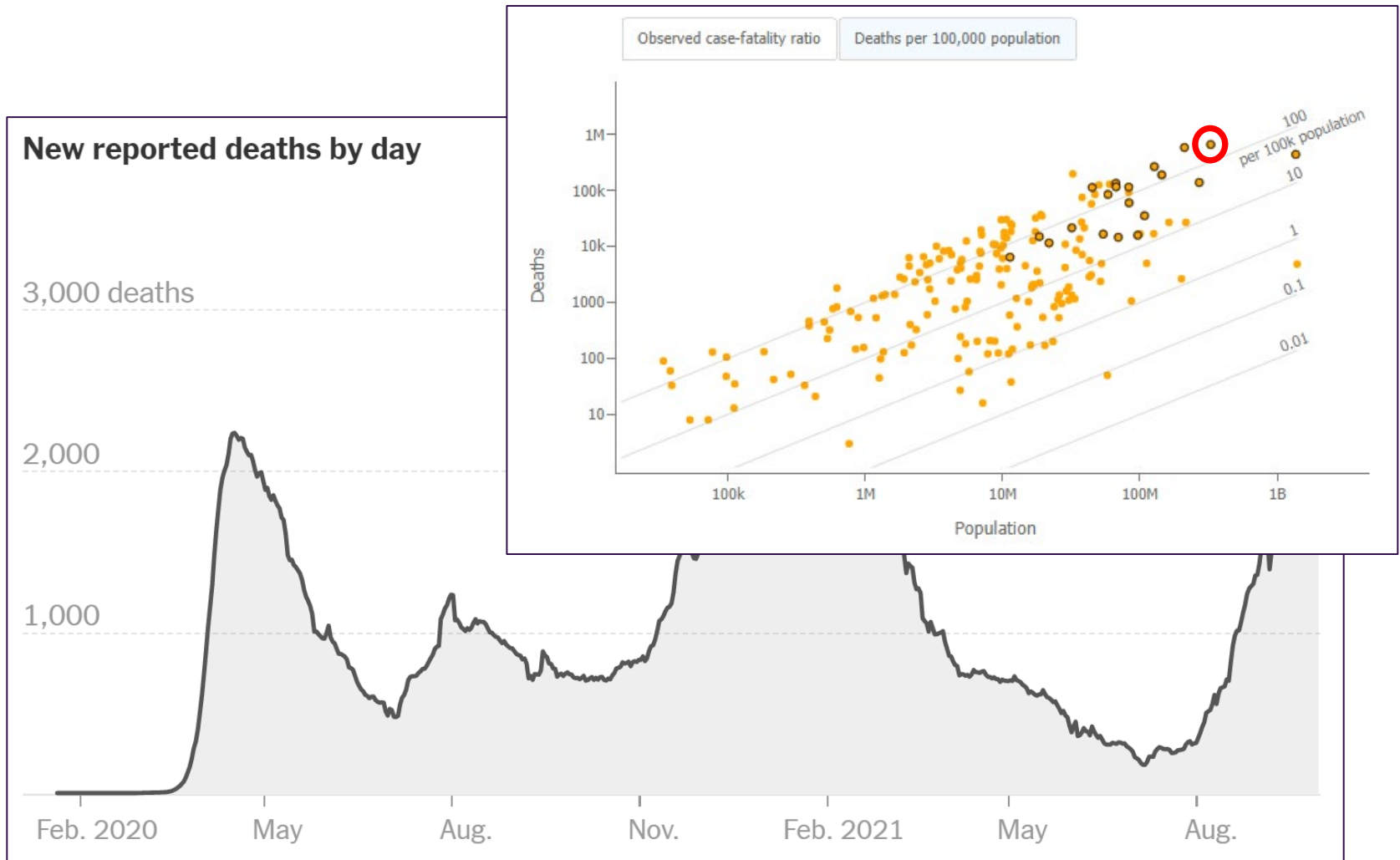
Source: *PubMed*

# Life Expectancy is Declining in the US

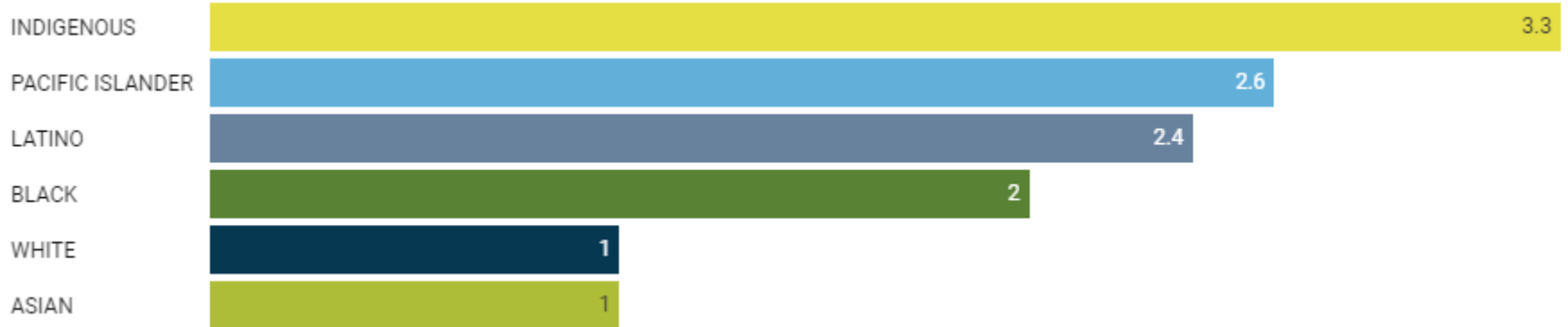
Life expectancy at birth, selected high-income countries, 1960-2020



# COVID-19 snapshot, October 2021



# Relative risk of mortality from COVID in US, age-adjusted



APM Research Lab (through 3/21)



# COVID snapshot: vaccination

## PEOPLE FULLY VACCINATED



# COVID snapshot: vaccination

% OF POPULATION FULLY VACCINATED

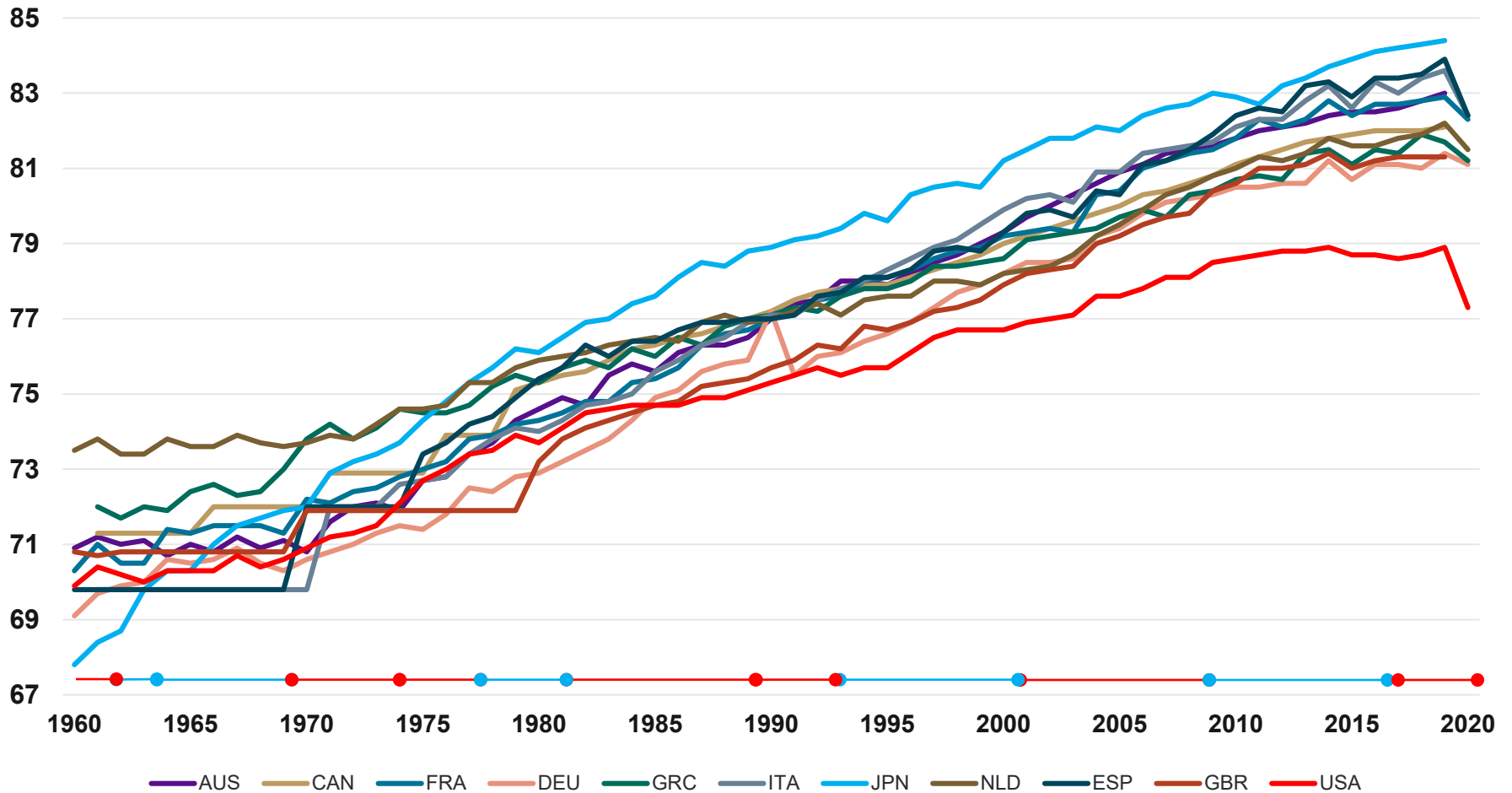


PEOPLE FULLY VACCINATED

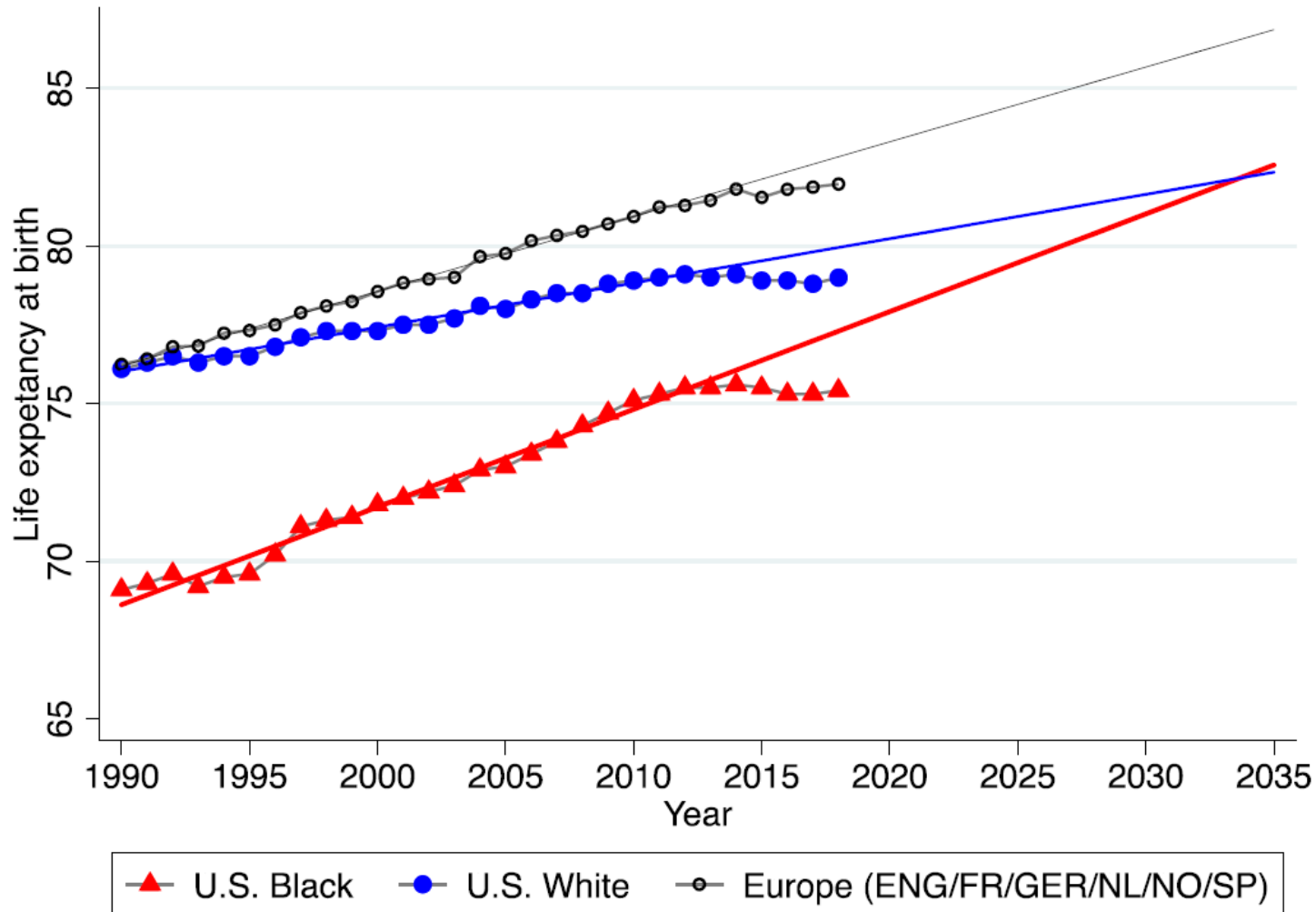


# Life Expectancy is Declining in the US

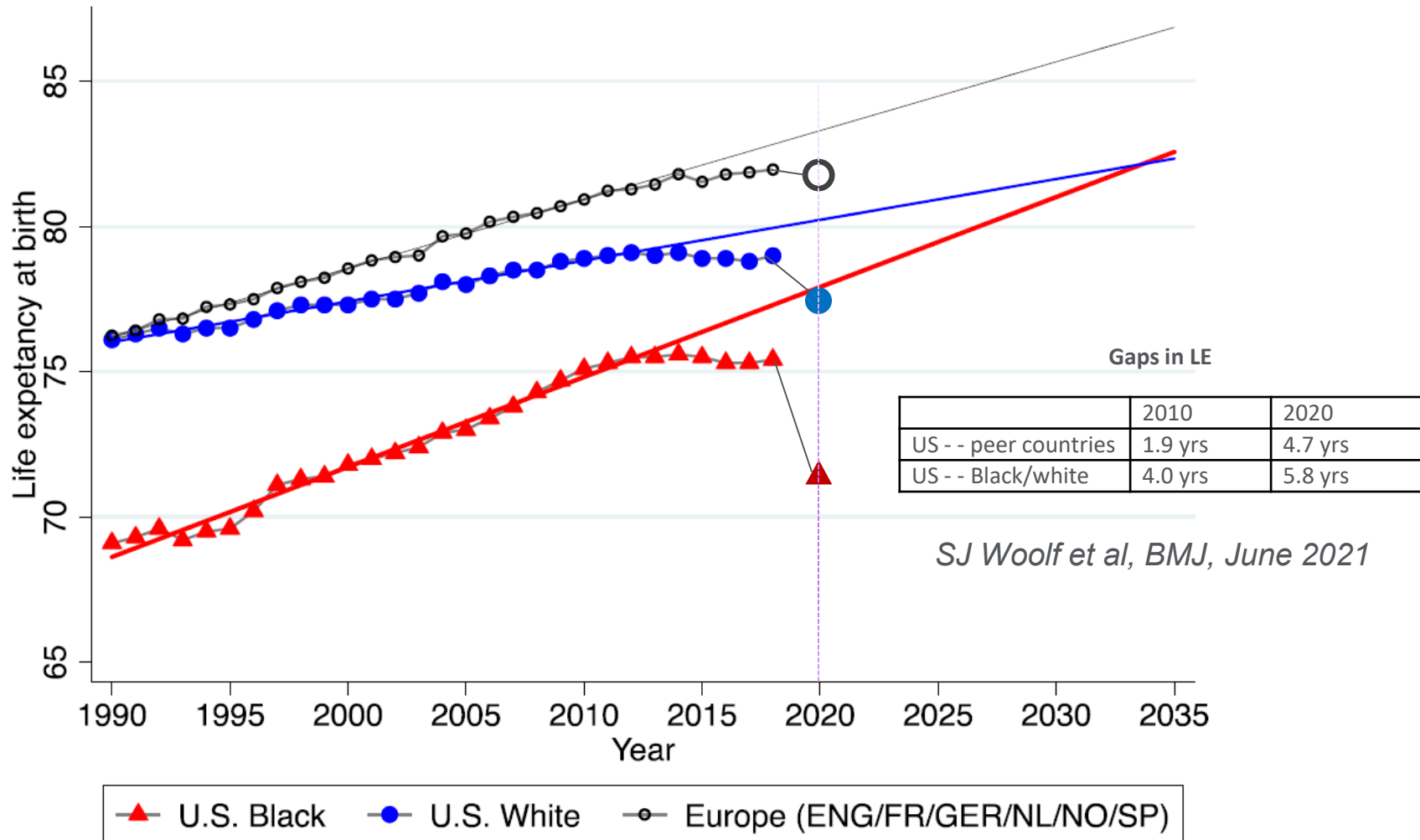
Life expectancy at birth, selected high-income countries, 1960-2020



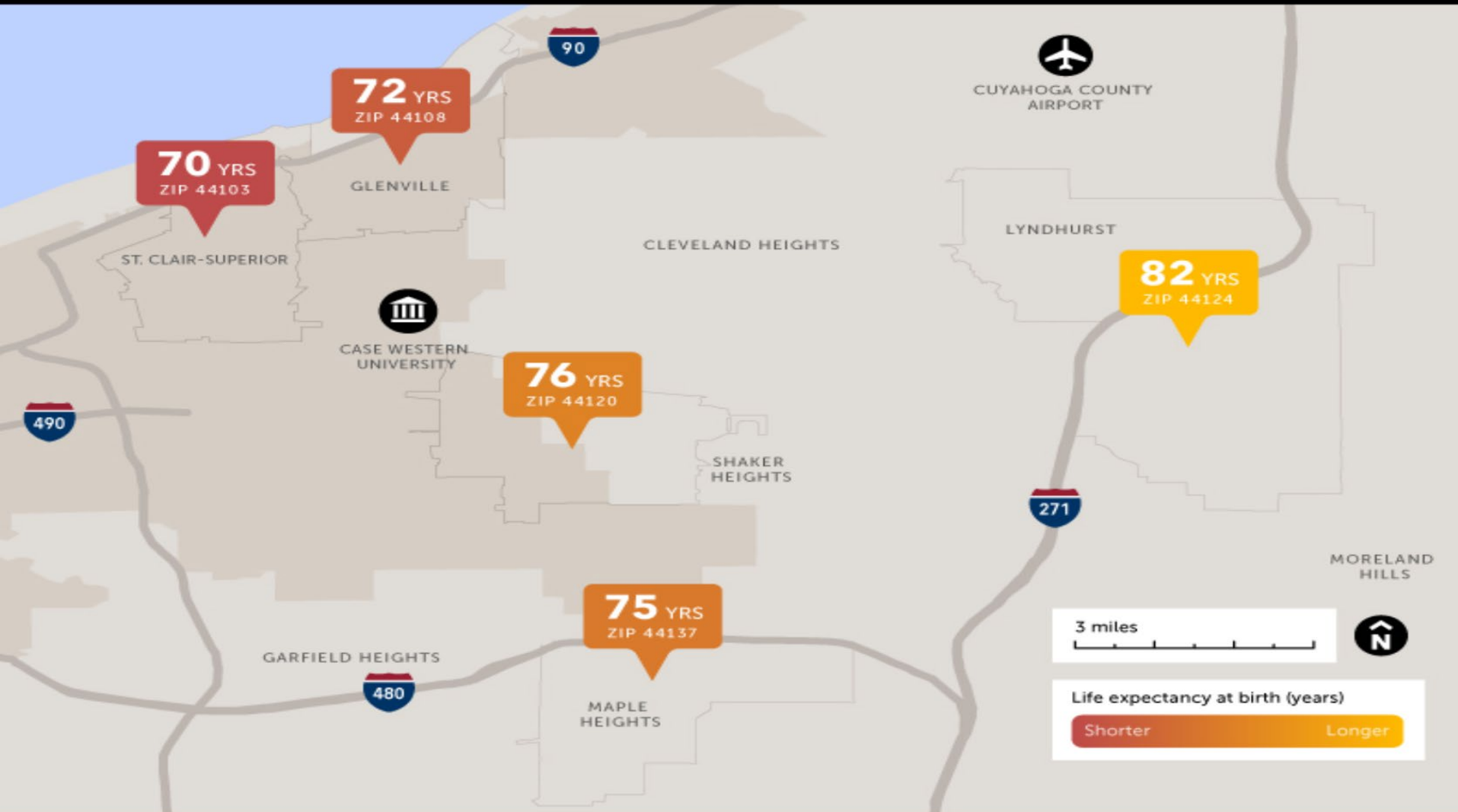
# Life expectancy for Black Americans, White Americans, and six European countries, extrapolated to 2035 fitting a linear trend through 1990-2012



# Impact of COVID-19 on life expectancy for Black Americans, White Americans, and European countries, 1900 - 2020

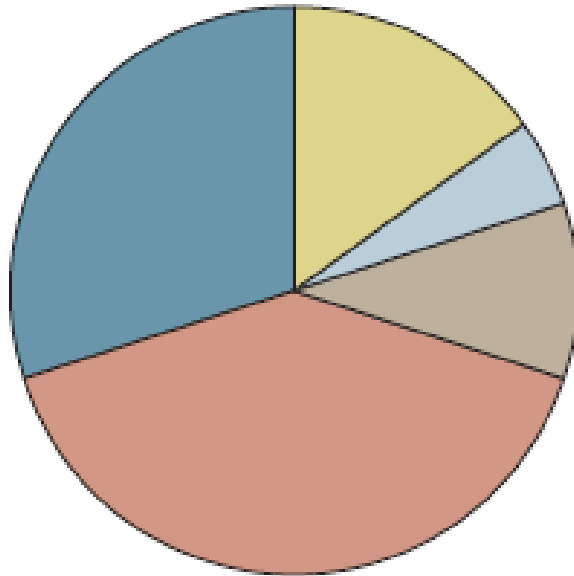


# Short Distances to Large Gaps in Health



# What produces health?

Proportional Contribution to Premature Death



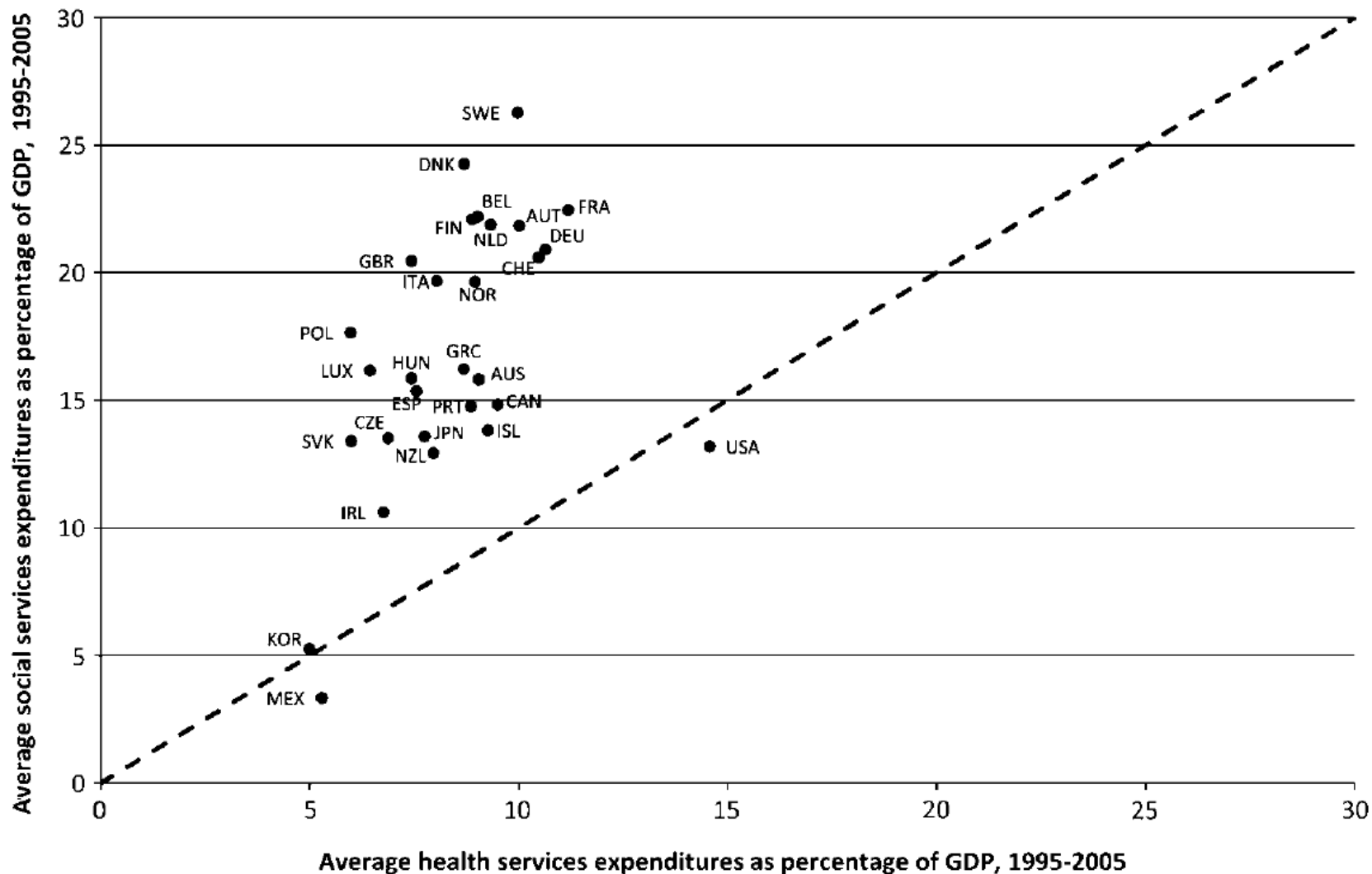
**Figure 1. Determinants of Health and Their Contribution to Premature Death.**

Adapted from McGinnis et al.<sup>10</sup>

- Social circumstances
- Environmental exposure
- Genetic predisposition
- Behavioral patterns
  
- Socioeconomic status
- Racism

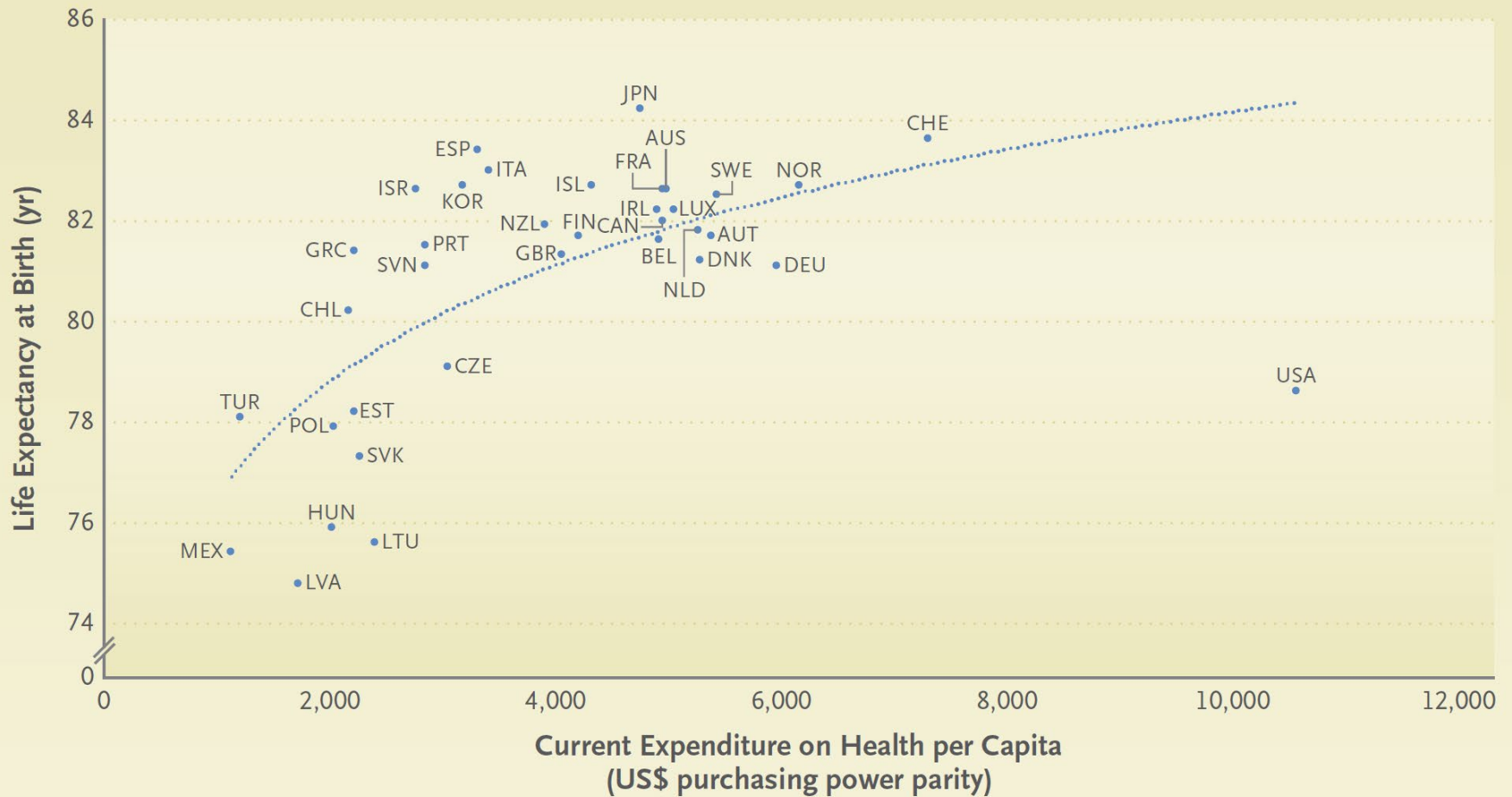
Adapted from Schroeder  
*NEJM* 2007

# Average social service expenditures vs. average health expenditures as % of GDP, OECD countries, 1995-2005





# Life Expectancy at Birth and Health Spending per Capita, 2019



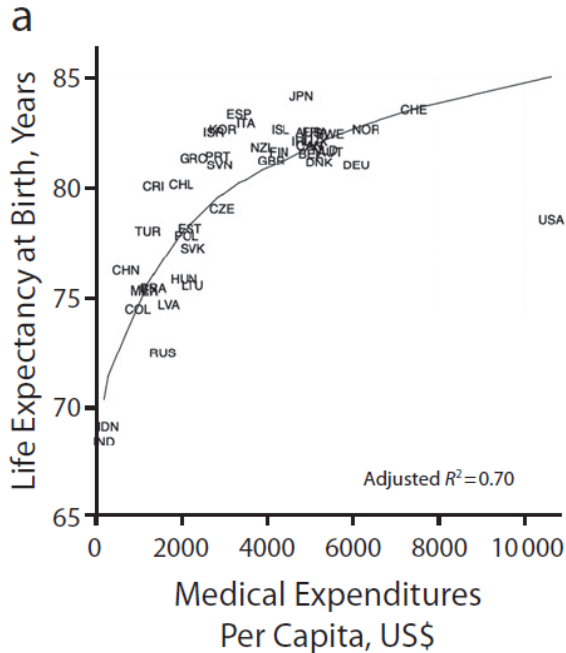
Data from Organization for Economic  
Co-operation and Development  
Health Statistics 2019.

Schneider E, NEJM 2020

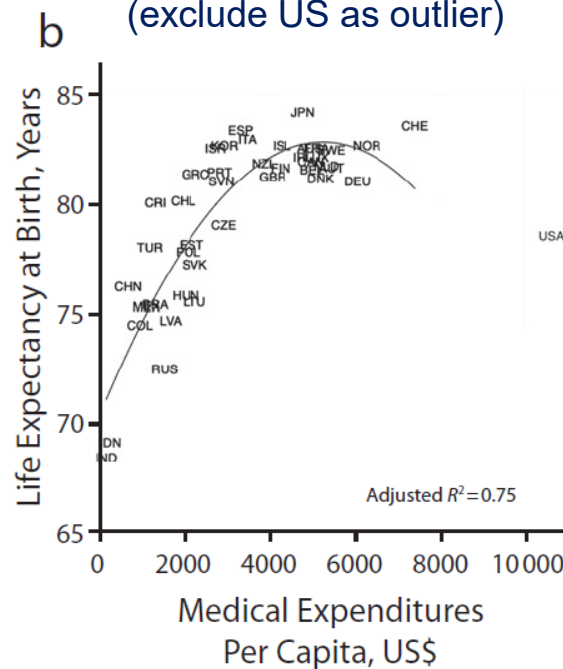


# Relationship between medical spending and life expectancy

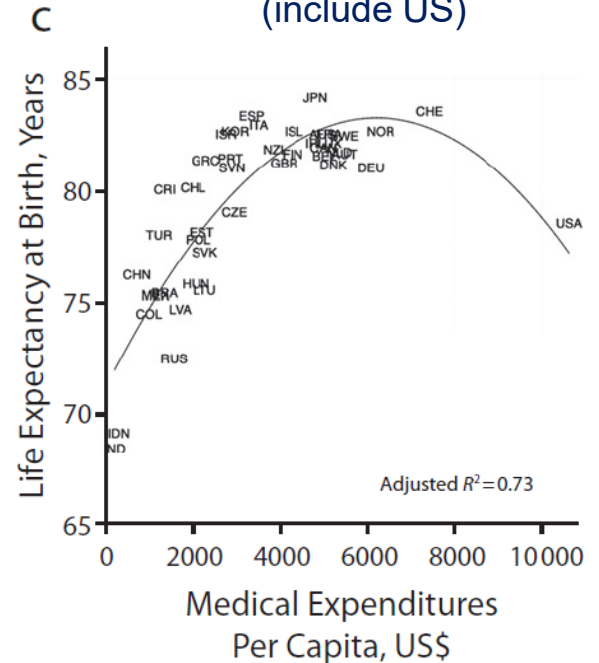
Assume log-linear relationship



No assumption, just curve form that best fits: (exclude US as outlier)



No assumption, just curve form that best fits: (include US)



OECD data, 2017

# Fundamental Causes of Health Inequities

- Association persists despite radical changes in risk factors and disease

## **SES** (Phelan & Link, 1995)

*Embodies an array of resources (money, knowledge, prestige, power, beneficial social connections) that protect health no matter what mechanisms are relevant at any given time*

## **Racism** (Phelan & Link, 2015)

*“racism, largely via inequalities in power, prestige, freedom, neighborhood context, and health care, also has a fundamental association with health independent of SES”*

# Racism and health

	<b>White non-H</b>	<b>Asian</b>	<b>Hispanic</b>	<b>Black non-H</b>
<b>Wealth</b> (median household assets, 2011)	\$110,500	\$89,339	\$7,683	\$6,314
<b>Poverty</b> (% <pov level, 2014)	10.1%	12.0%	23.6%	26.2%
<b>Unemployment</b> (2014)	5.3%	5.0%	7.4%	11.3%
<b>Incarceration</b> (male inmates/100,000, 2008)	610	185	836	3611
<b>Infant mortality</b> (per 1000 live births, 2013)	5.1	4.1	5.0	10.8

# Fundamental cause → exposure → outcome

Fundamental cause	Exposure	Risk (example)	General mechanism	Proximal mechanism	Health outcome
Racist drug policies	- Over-policing, incarceration	- Violent injury - Death			- Violent injury - Death
		- Social disruption - Sustained stress - Etc	- Chronic HPA axis activation	- Up-reg cortisol & inflammatory response - Reward dysreg	- CVD - SUD
Low SES	- Food insecurity - Marketing of SSB, hi-fat foods	- ↑ dietary risk	- Metabolic syndrome	Infusion of lipids, sugars	- CVD
Low SES	- Low wage employment	- Lack capital (\$400) for emergencies - Inability to afford Rx, attend med appts	- Lack of preventive care - Medication “nonadherence”	Undermining effective Tx (for CVD, SUD, etc)	- CVD - SUD
Racist zoning policies	- Redlining → chronic disinvestment	- Hollowed-out support for early childhood	- Poor readiness on K entry - High ACEs	Lifecourse impact through all of the above	- CVD - SUD

Or, replace outcome with:  
CA, LBW, maternal mortality, depression...

# Redlining: *Richmond, VA*

**A**

High demand areas with room for new residential growth. Lenders were “willing to make their maximum loans” in these “hot spots during good times or bad.

**B**

Completely developed neighborhoods. Not as desirable as the hot spots, but still good.

**C**

Older neighborhoods with declining values. In a transitional period of “expiring or missing deep grade populations” such as “Negroes” who infiltrate the neighborhood, breaking its homogeneity.

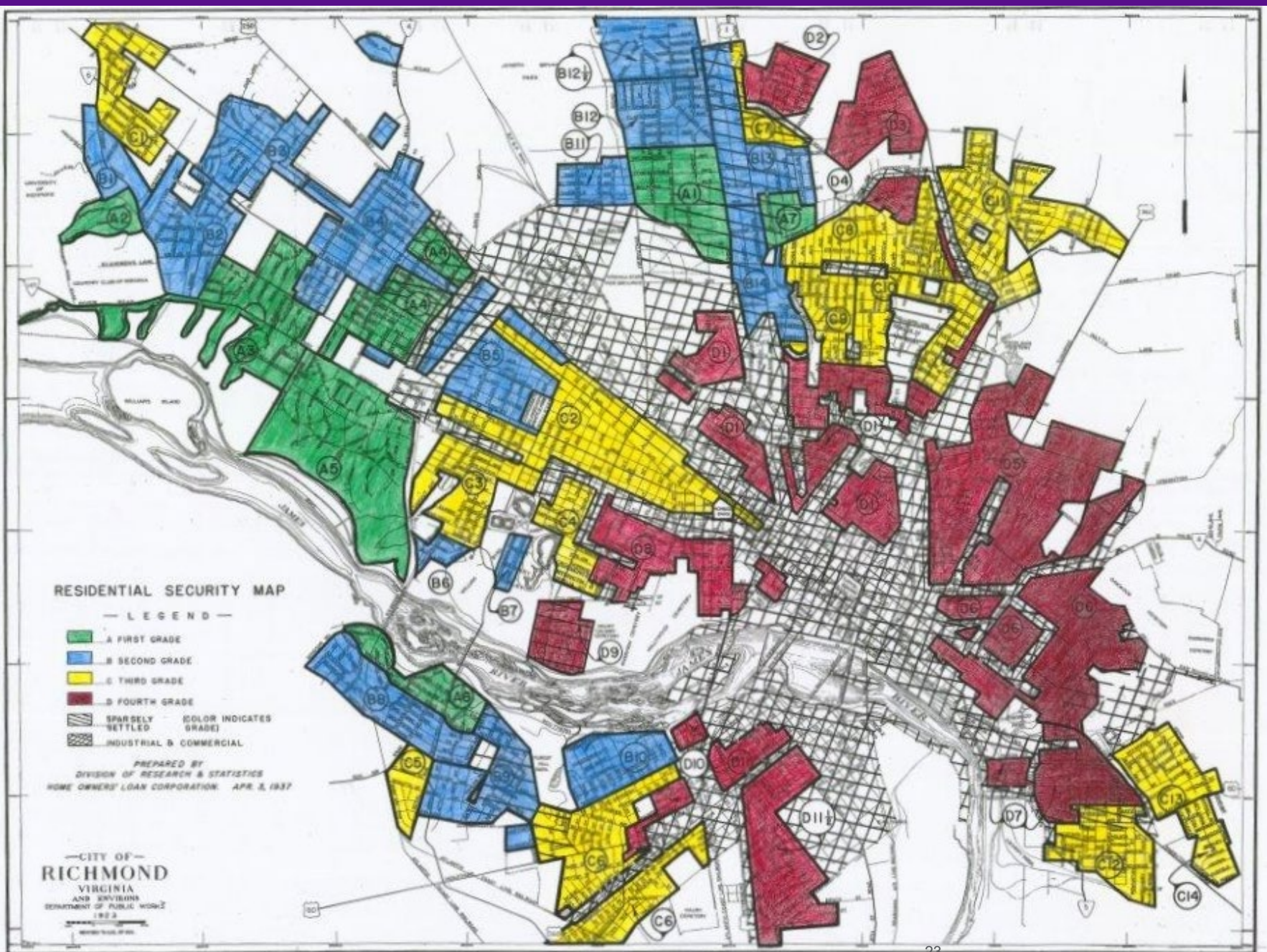
e. Infiltration of Negroes \_\_\_\_\_ ;

Negro Yes 90+ \_\_\_\_\_ %

**D**

Fully declined areas—poor property conditions, low homeownership rates, undesirable population. Denied investment by lenders—seen as extremely high risk. Applied to ALL African American areas in Richmond.

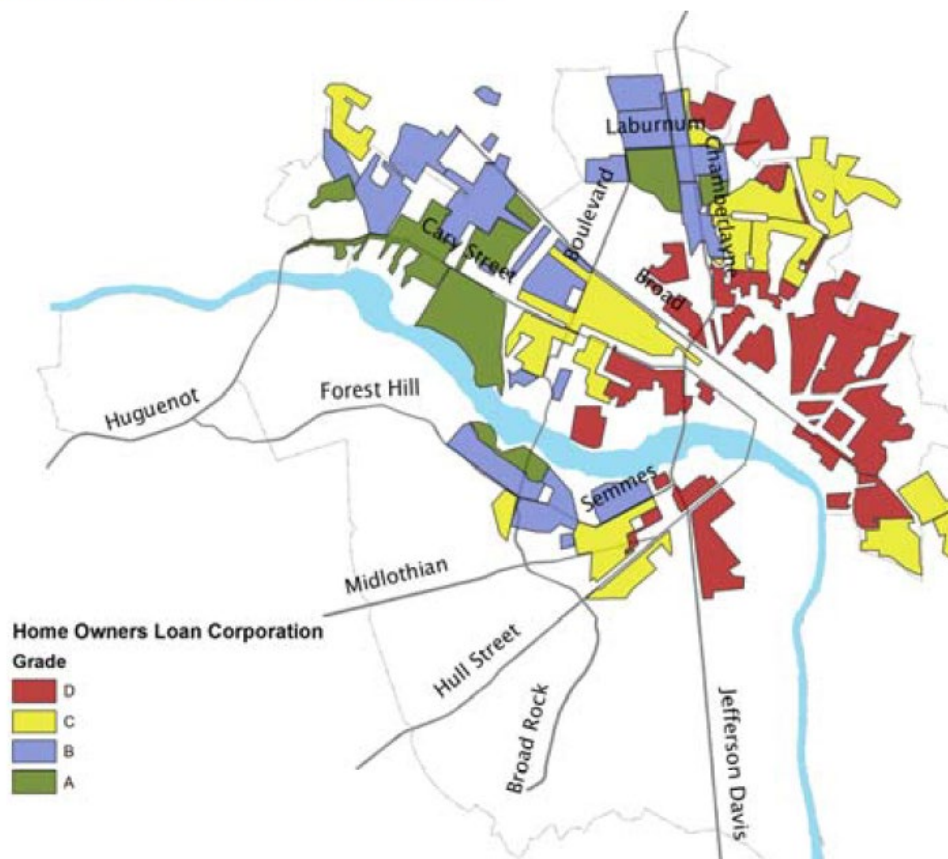




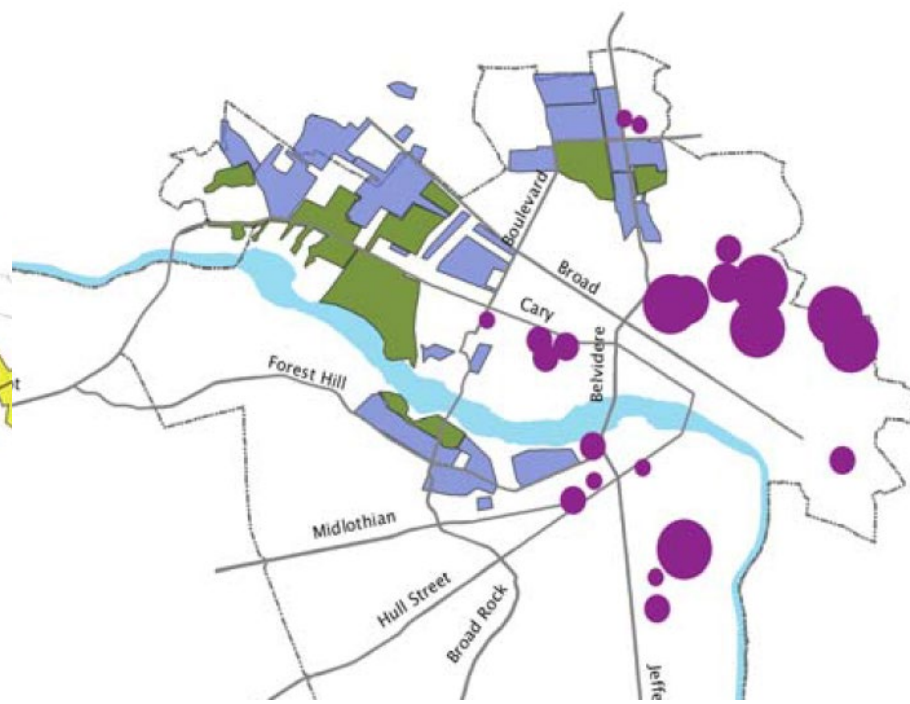


# Richmond, VA

Map 2: City of Richmond Home Owners Loan Corporation Boundaries, 1937<sup>11</sup>



Map 3: Current Concentration of Public Housing, Contrasted with the HOLC Areas (Graded A & B) That Received the Majority of Home Loans<sup>19</sup>  
2012

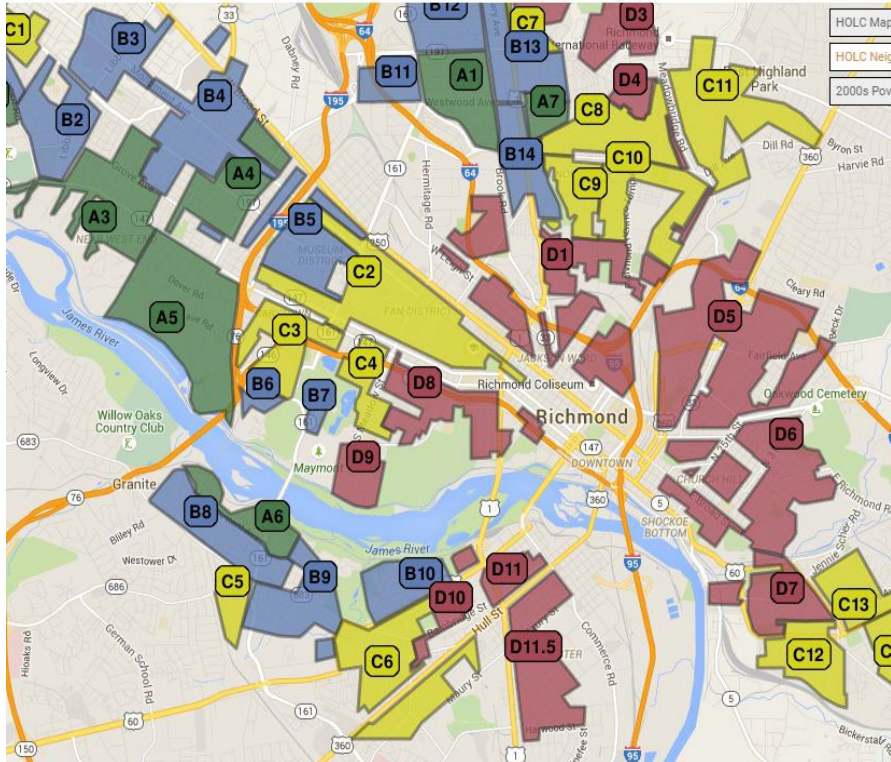


Source: <http://www.phonehome.org/Portals/0/Images/PDF/wherelyouliivemakesallthedifferenceoppmapreport.pdf>



# Richmond, VA

## HOLC map, 1937



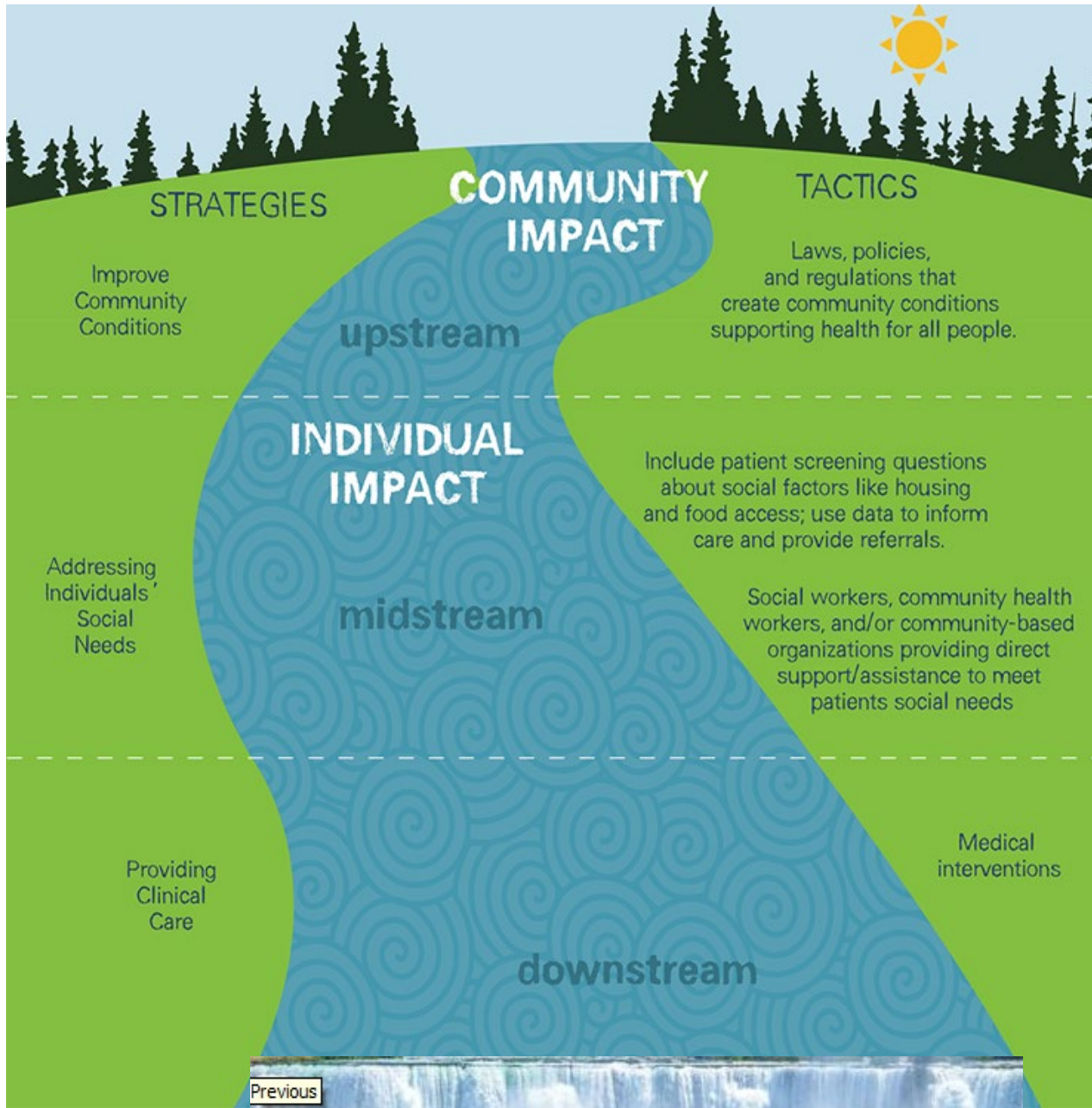
HOLC = Home Owners Loan Corp

- A** High demand areas with room for new residential growth. Lenders were "willing to make their maximum loans" in these "hot spots during good times or bad.
- B** Completely developed neighborhoods. Not as desirable as the hot spots, but still good.
- C** Older neighborhoods with poorly maintained homes. In a transitional period and becoming obsolete. Expiring or missing deed restrictions meant "lower grade populations" such as African Americans could infiltrate the neighborhood and disrupt the homogeneity.
- D** Fully declined areas—poor property conditions, low homeownership rates, undesirable population. Denied investment by lenders—seen as extremely high risk. Applied to ALL African American areas in Richmond.

## Life expect @ birth, 2002-11

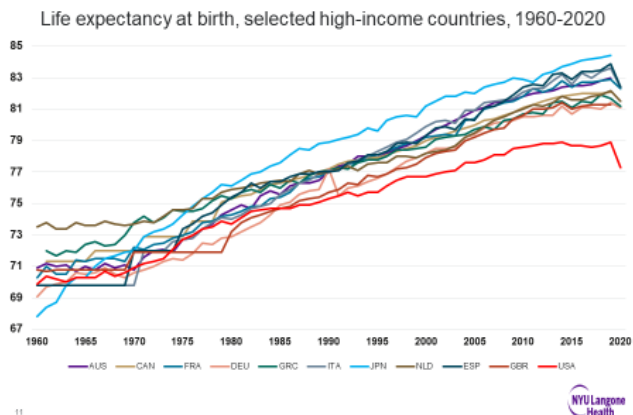


# Upstream ↔ Downstream



# So then, what's academic medicine got to do with it?

## Life Expectancy is Declining in the US

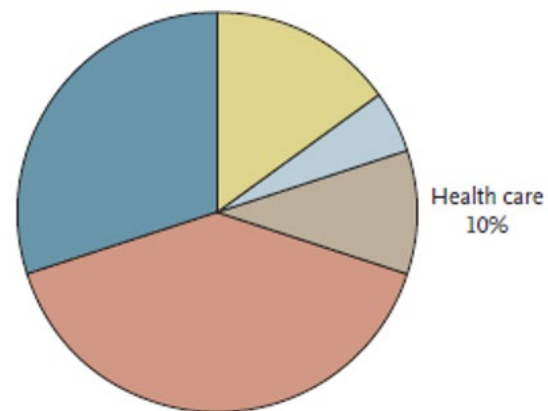


## Pathways

Fundamental cause	Exposure	Risk (example)	General mechanism	Proximal mechanism	Health outcome
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## Proportional Contribution to Premature Death



**Figure 1. Determinants of Health and Their Contribution to Premature Death.**

Adapted from McGinnis et al.<sup>10</sup>



## ***Audience reminder: academic medicine is after all...***

- Huge ecosystem thrumming with health-focused energy
- Deeply expert in clinical prevention, diagnosis, treatment, underlying science
- Should healthcare even be “addressing” social determinants?
  - Education; housing; the built environment?
  - “Seriously? When you’re still struggling to share information effectively between my two doctors, let alone to deliver care error-free?”
- Housing / education / built environment are their whole own sectors, with their own expertise, policy, finance, history, deep complexity
- In short: partnership, partnership, partnership

# Upstream action *requires* partnership

	Health care system	Public health agency	Human, social services or other sector
Upstream	Partner	Lead or partner	Lead or partner
Midstream	Partner	Lead or partner	Lead or partner
Downstream	Lead	Partner	Partner

# Upstream action requires partnership

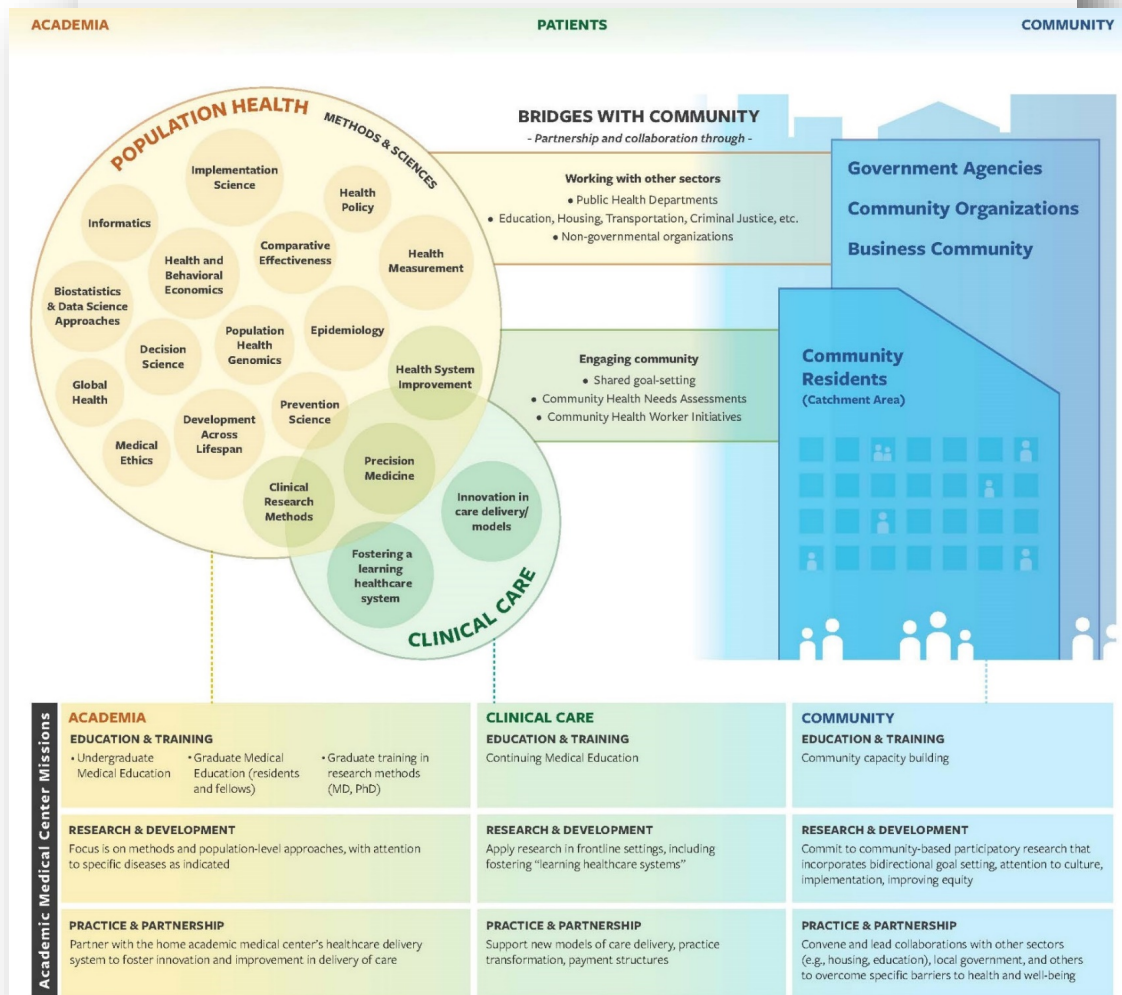
	Health care system	Public health agency	Human, social services or other sector
Upstream	<b>Partner</b> <i>Respite housing</i>	<b>Lead or partner</b> <i>Youth employment</i>	<b>Lead or partner</b> <i>Optimizing benefit access (DHS)</i>
Midstream	<b>Partner</b> <i>Peer navigators</i>	<b>Lead or partner</b> <i>Expand care in CJS; PDMPs</i>	<b>Lead or partner</b> <i>Blighted lot rehab (Planning Dept)</i>
Downstream	<b>Lead</b> <i>MAT @ all clinical sites</i>	<b>Partner</b> <i>SEP, fentanyl testing kits</i>	<b>Partner</b> <i>K-3 programming (DOE)</i>

# Population Health in Academic Medicine: towards an inflection point?



Original Investigation | Public Health

## The Emergence of Population Health in US Academic Medicine A Qualitative Assessment

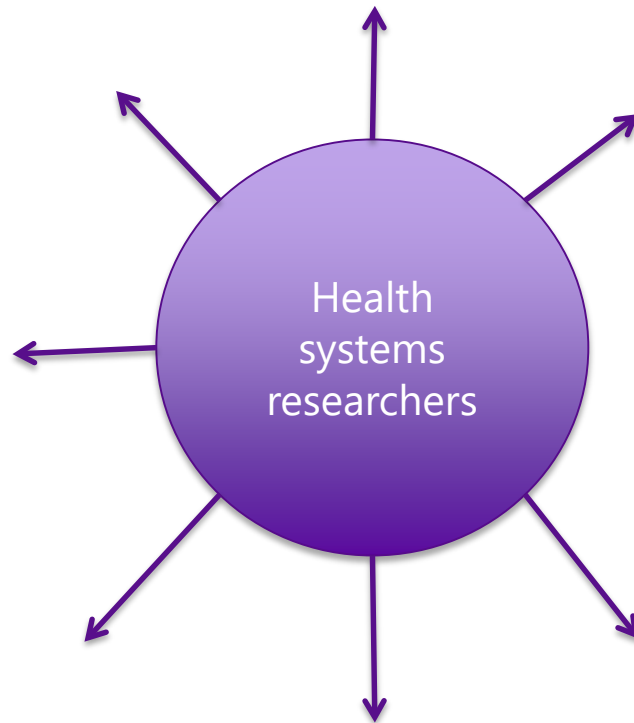


## Partnerships: of academic investigators with...

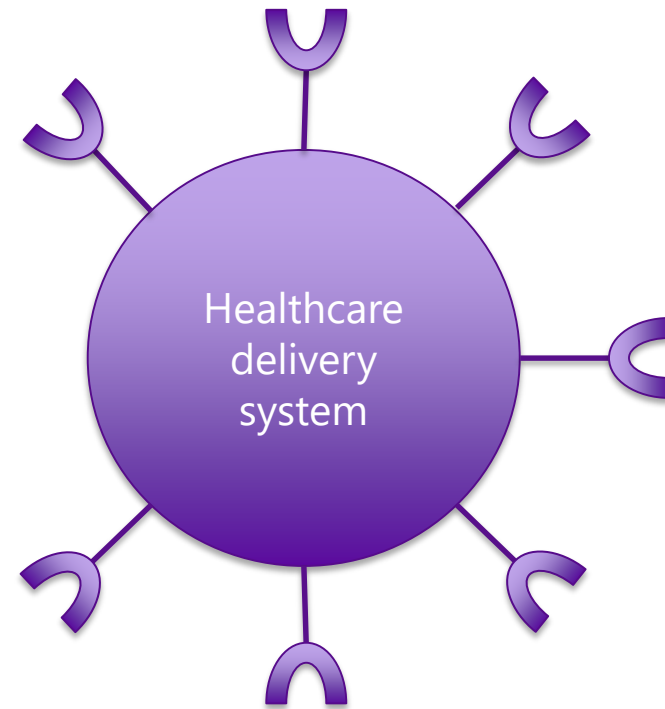
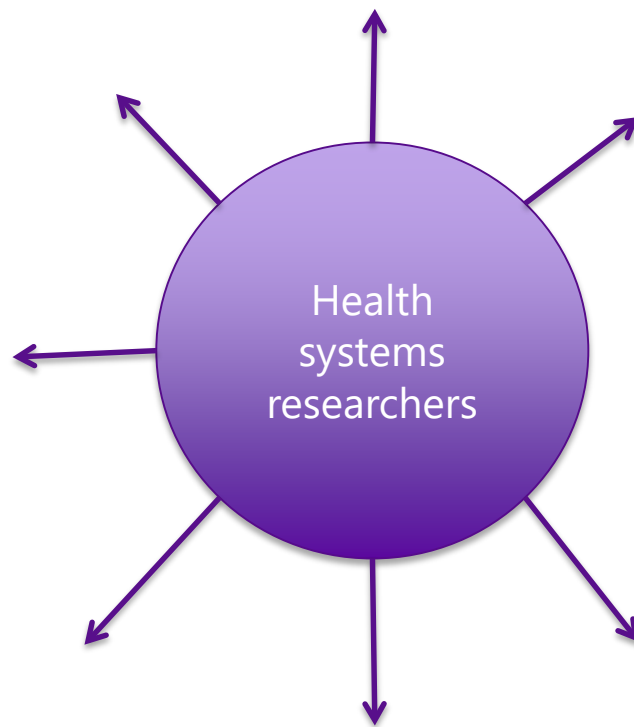
- Healthcare delivery system
- Area CBOs for community health improvement
- Cities and communities nationally



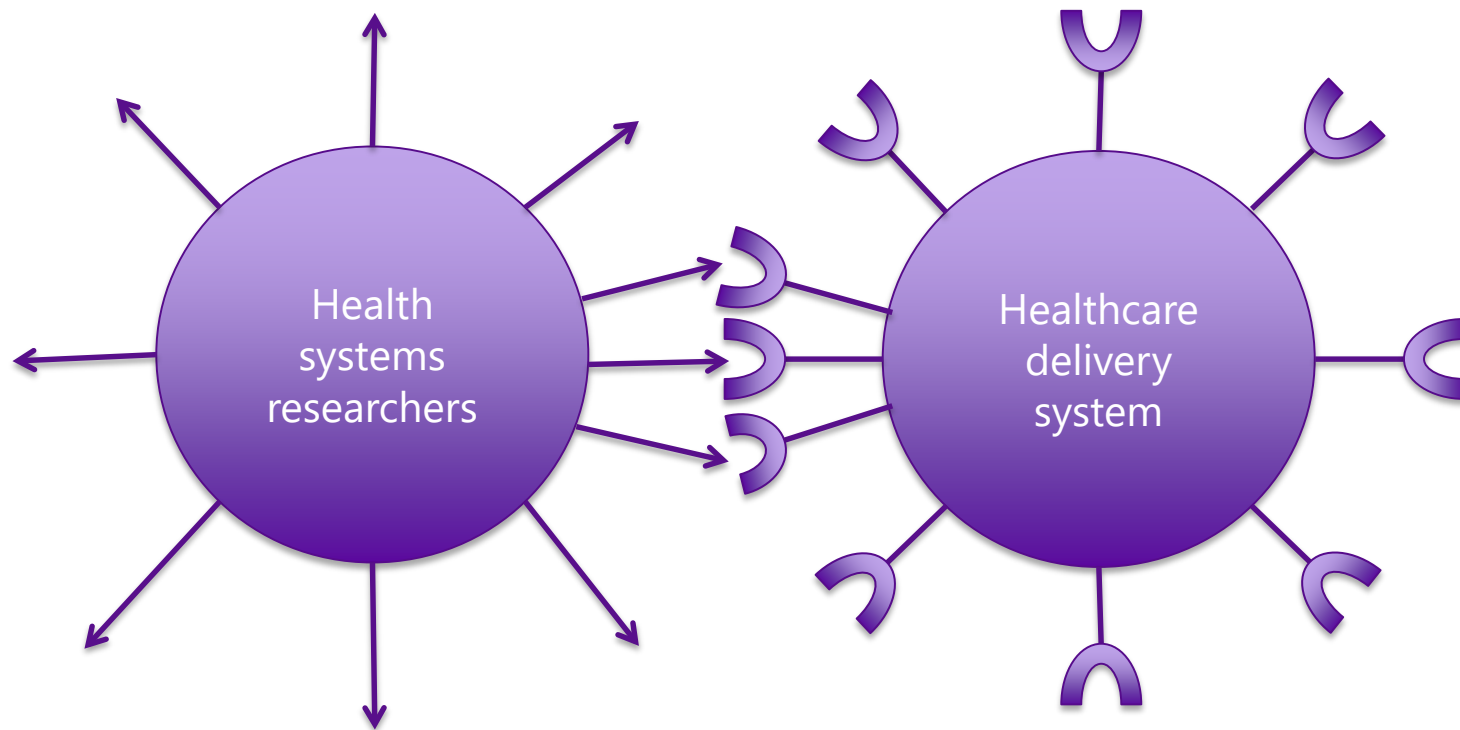
# Healthcare delivery system partnership



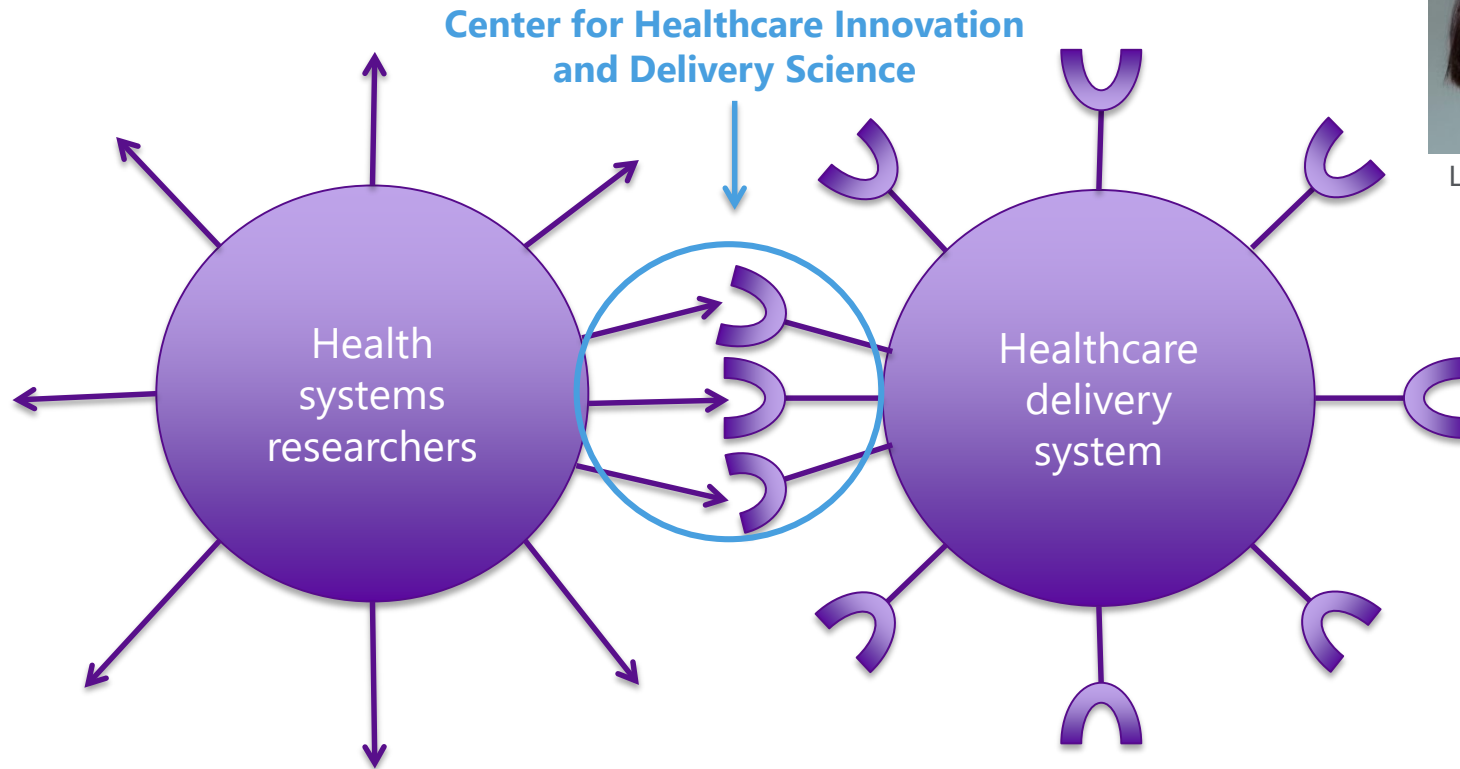
# Healthcare delivery system partnership



# Healthcare delivery system partnership



# Healthcare delivery system partnership

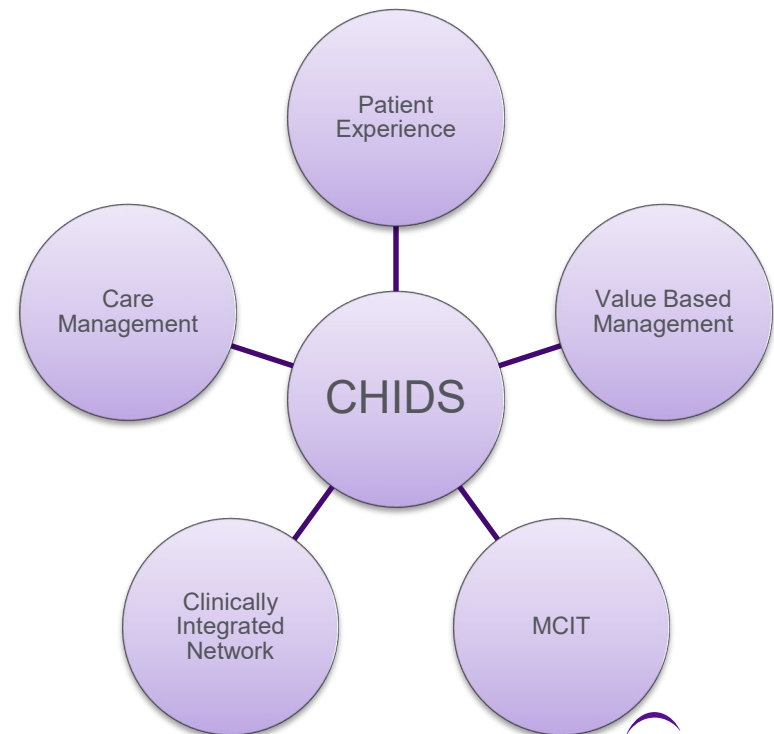
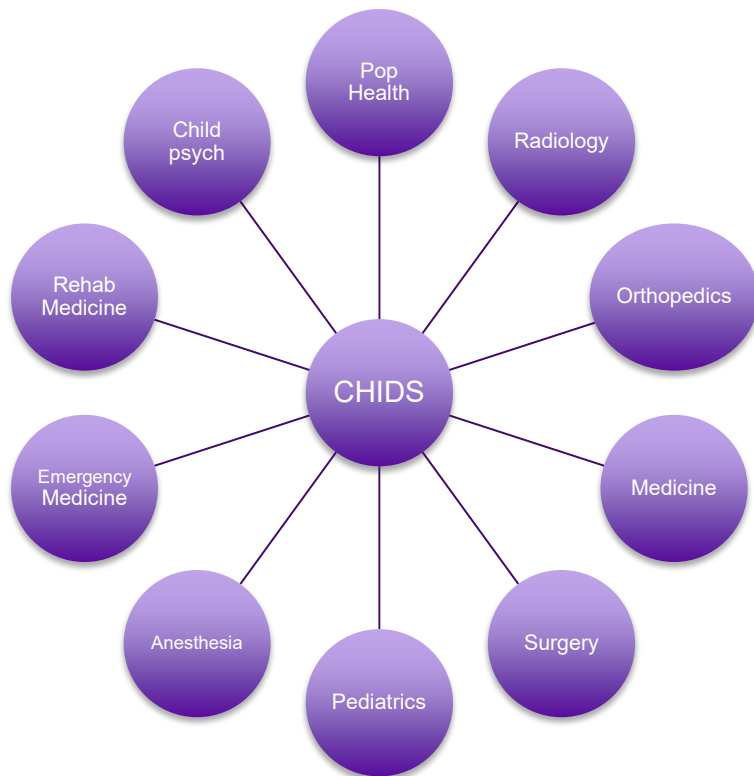


Leora Horwitz, MD

# CHIDS: Governance and collaborations

## Steering Committee

Chief Quality Officer	Chief Medical Officer	Chief Operating Officer	Chief Nursing Officer
Chief Information Officer	Clinical Aff & Strategy	Network integration	FQHCs
NYU-Brooklyn	NYU-Long Island	Dept Population Health	



# CHIDS impact

- Clinical/operational interventions
- Evaluation and support
- Culture and capacity
- Reputation
- Grant revenue

# Specific projects

- Predictive analytics unit
- Patient Imaging Quality and Safety Lab
- Pilot grants
- Rapid cycle RCT lab

# PIQS Lab: Optimizing CT Pulmonary Angiography

**Geneva score 0: PE unlikely. No D-Dimer ordered.**

Consider ordering a D-dimer prior to ordering a CTPA; this patient is considered PE Unlikely by the Geneva Score

More information about this alert  
Provide feedback about this alert

Remove the following orders?

Remove **Keep**

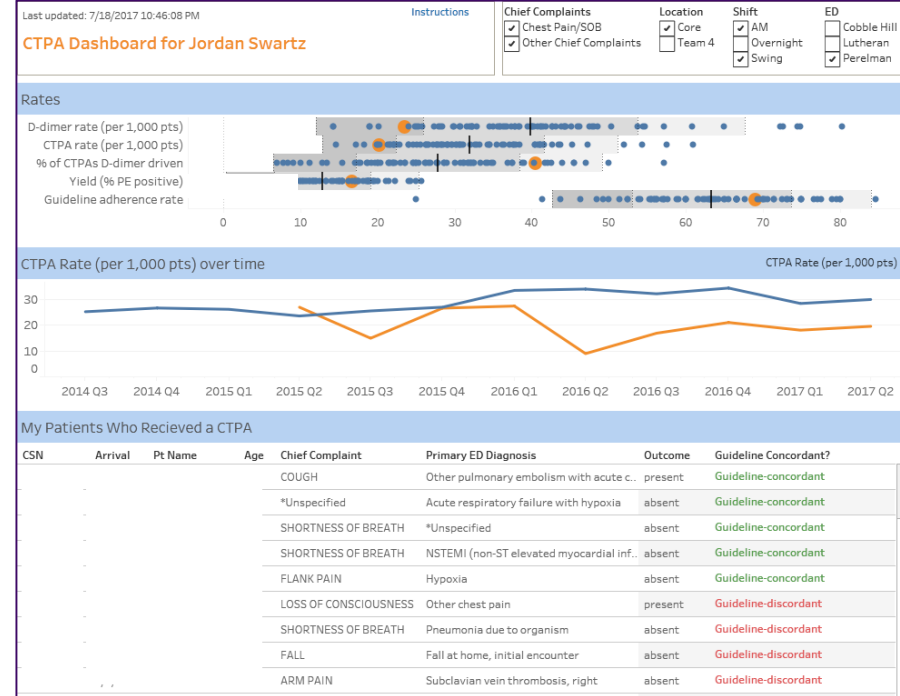
**CT CHEST PULMONARY EMBOLISM WITH IV CONTRAST STAT**, 1 time imaging First occurrence Today at 1230 Reason for Exam: Chest pain, acute, ?PE Ordering Provider's Contact Information: th Should Advanced Image Post -Processing (3D) be performed on this study? Per Radiologist Judgment Age > 65? No -Previous DVT/PE? No Surgery past month? No Active malignancy? No Leg pain/swelling? No Active DVT? No Hemoptysis? No Pulse >= 95? No Pulse >74 and <95? No D-Dimer abnormal? No D-Dimer normal? No D-Dimer in process? No D-Dimer ordered? No  
Score 1

Apply the following?

Order **Do Not Order** **Score 9 (D-DIMER ASSAY)**

Acknowledge Reason

Recent travel > 4 hours High clinical suspicion Prothrombotic state



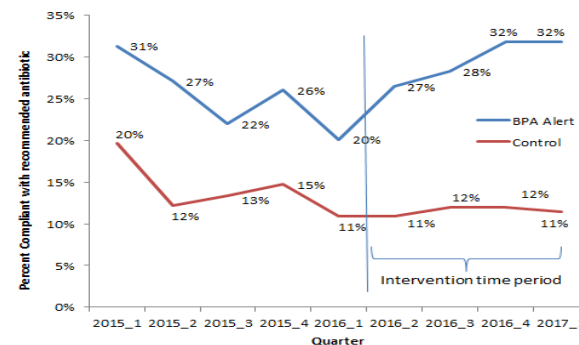
First 6 months: **95** avoided CTPAs  
 Guideline adherence **↑** from 68.4% to 76.4%

**\$185,000/year**



# Pilot grants

- Fully integrated into routine care: **4**
  - e.g., UTI prescribing, colon surgery pathway, behavioral health in pediatric specialty care, pain management dashboard
- Continuing in pilot/restricted form: **6**
- Pilot grant still running: **9**
- Abandoned: **3**



# Rapid cycle randomized trial lab

- Transform NYULH to a learning health system
  - Flu vaccination BPA, NYULH inpatient
  - Post-discharge calls, NYU Brooklyn inpatient
  - Community health workers, NYU Brooklyn ED
  - Preventive care phone calls, Florida outreach center, CIN
  - Mailers for preventive care, Clinically Integrated Network
  - Tobacco cessation BPA, NYULH outpatient
  - Messaging for PRO completion, Center for Musculoskeletal Care

# RCT: Smoking cessation counseling



## ⚠️ TOBACCO CESSATION INTERVENTION NEEDED

Evidence shows that a brief counseling session reduces tobacco use.

Evidence-based



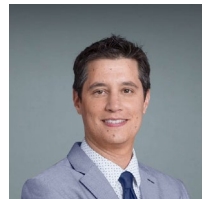
Adam Szerencsy, DO

VS.

## ⚠️ TOBACCO CESSATION INTERVENTION NEEDED

Tobacco cessation counseling is an NYULH priority clinical quality measure.

Institutional  
priority



Devin Mann, MD

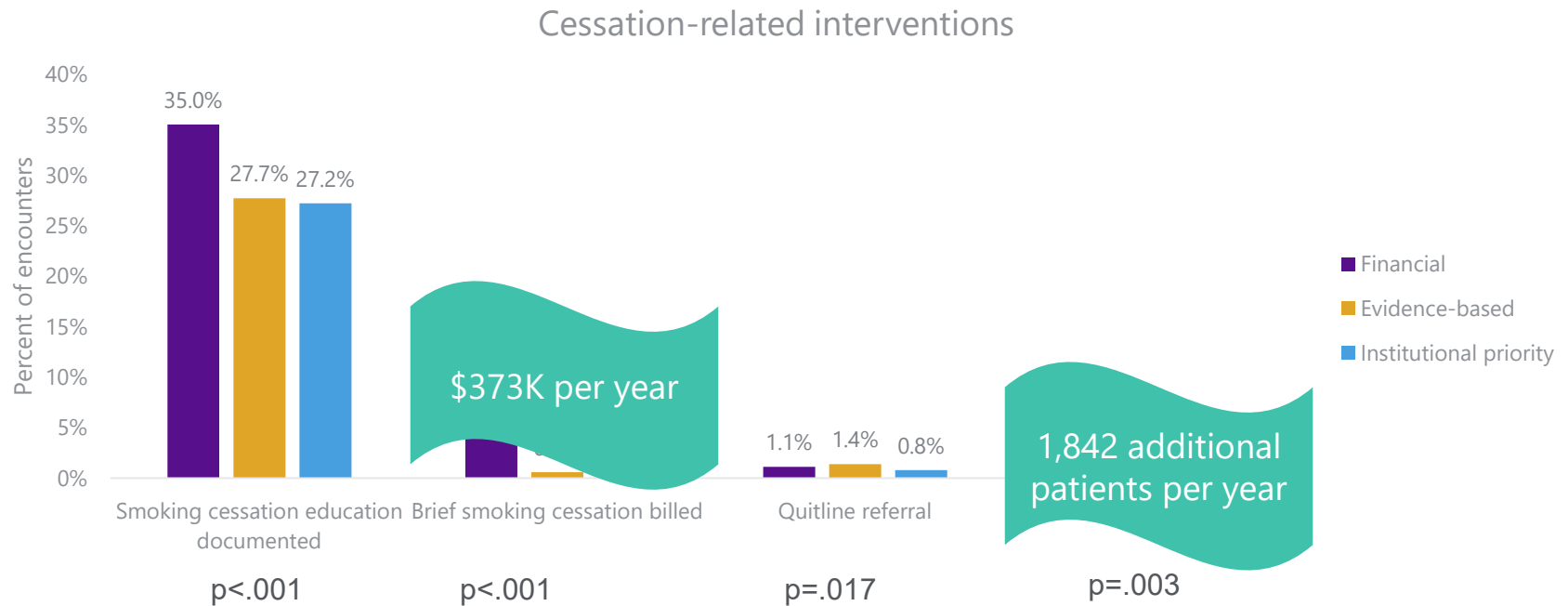
VS.

## ⚠️ TOBACCO CESSATION INTERVENTION NEEDED

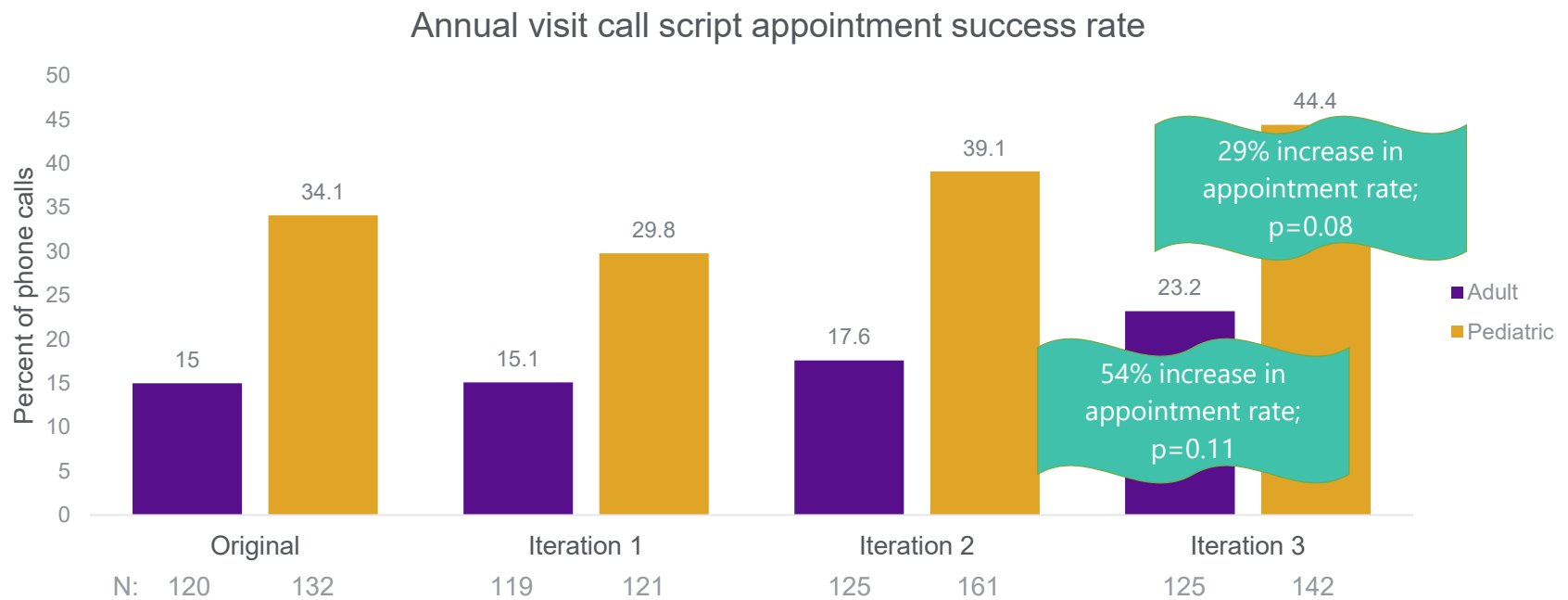
Tobacco cessation counseling is a billable service (3-10 minutes: CPT 99406/0.38 RVU).  
Charges are automatically filed using the SmartSet documentation.

Financial

# RCT: Smoking cessation counseling



# RCT: Preventive care outreach



# CHIDS impact to date

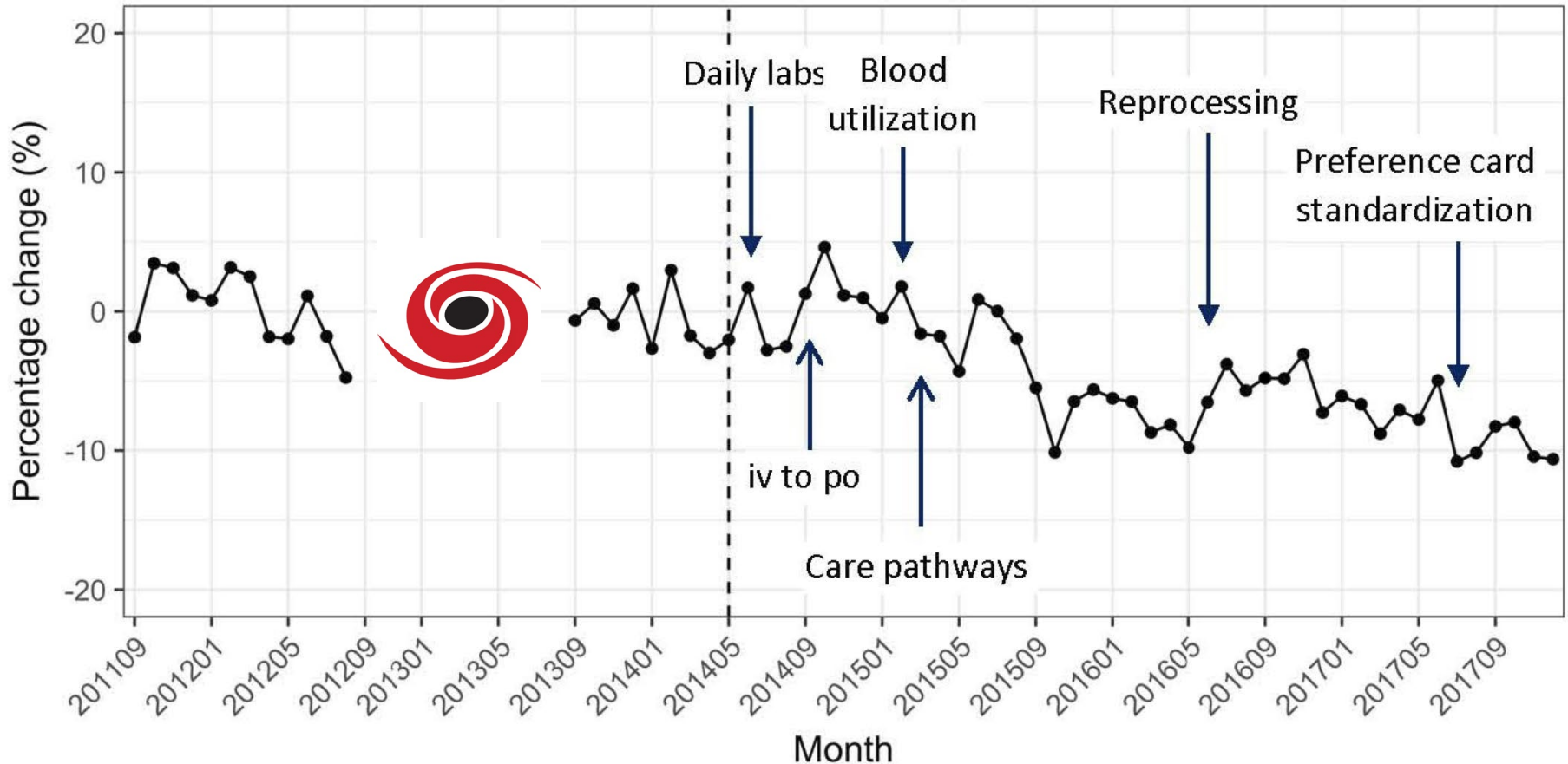
- Clinical/operational interventions
- **Evaluation and support**
- Culture and education
- Reputation
- Grant revenue

# Evaluation and support



- Value-based management
- CIN analytics
- Physician quality leadership
- Readmissions oversight committee
- Informatics research
- Digital design lab

# VBM evaluation support



**Figure 1** Percentage change in total variable direct costs relative to the preintervention period mean. Costs adjusted for DRG weight; all costs are denominated in September 2011 dollars.



# Healthcare delivery system partnership

ORIGINAL RESEARCH

## Bending the cost curve: time series analysis of a value transformation programme at an academic medical centre

BMJ Quality & Safety

Steven C Chatfield,<sup>1</sup> Frank M Volpicelli,<sup>2</sup> Nicole M Adler,<sup>2</sup> Kunhee Lucy Kim,<sup>3,4</sup> Simon A Jones,<sup>3,4</sup> Fritz Francois,<sup>1,5</sup> Paresh C Shah,<sup>1,6</sup> Robert A Press,<sup>1,7</sup> Leora I Horwitz<sup>2,3,4</sup>

The NEW ENGLAND JOURNAL of MEDICINE

SOUNDING BOARD

## Creating a Learning Health System through Rapid-Cycle, Randomized Testing

Leora I. Horwitz, M.D., M.H.S., Masha Kuznetsova, M.P.H., and Simon A. Jones, Ph.D.

RESEARCH

 OPEN ACCESS

 Check for updates

 FAST TRACK

## Factors associated with hospital admission and critical illness among 5279 people with coronavirus disease 2019 in New York City: prospective cohort study

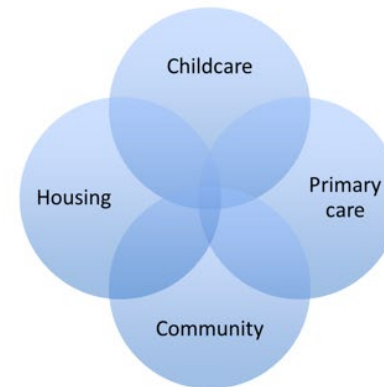
Christopher M Petrilli,<sup>1,2</sup> Simon A Jones,<sup>3,4</sup> Jie Yang,<sup>4</sup> Harish Rajagopalan,<sup>2</sup> Luke O'Donnell,<sup>1</sup> Yelena Chernyak,<sup>2</sup> Katie A Tobin,<sup>2</sup> Robert J Cerfolio,<sup>2,5</sup> Fritz Francois,<sup>2,6</sup> Leora I Horwitz<sup>1,3,4</sup>

# Partnership to advance local community health improvement

- Community Service Plan
  - DPH leads institution's CHNA & Community Health Improvement portfolio

## NYUHC 2019-2021 Community Service Plan: Lower East Side/Chinatown and Sunset Park

Family-centered, multi-sector approach to improving health



### Preventing Chronic Disease

- ↓ obesity risk
- ↓ tobacco use / SHS exposure

### Women, Infants & Children

- supporting parenting
- ↑ health literacy
- ↓ teen pregnancy/ STDs

# Partnership - with cities & communities re health/equity improvement

- **Problem**

- Cities can't manage what they can't measure
- Yet health data not analyzed to city level in US

- **Approach**

- City Health Dashboard (RWJF funding)
- 37 measures of health and determinants
- 750 largest US cities ( $\geq 50,000$  pop'n)
- [www.cityhealthdashboard.com](http://www.cityhealthdashboard.com)

*(check it out!)*



# Facilitating *city-level* access to geographically relevant data on health and SDH

## Select a Metric

### Health Outcomes

[Breast Cancer Deaths](#)

[COVID Local Risk Index](#)

[Cardiovascular Disease Deaths](#)

[Colorectal Cancer Deaths](#)

[Diabetes](#)

[Frequent Mental Distress](#)

[Frequent Physical Distress](#)

[High Blood Pressure](#)

[Life Expectancy](#)

[Low Birthweight](#)

[Obesity](#)

[Opioid Overdose Deaths](#)

[Premature Deaths \(All Causes\)](#)

### Social and Economic Factors

[Absenteeism](#)

[Broadband Connection](#)

[Children in Poverty](#)

[High School Completion](#)

[Housing Cost, Excessive](#)

[Income Inequality](#)

[Neighborhood Racial/Ethnic Segregation](#)

[Racial/Ethnic Diversity](#)

[Third-Grade Reading Proficiency](#)

[Unemployment](#)

- [Current, City-Level](#)

- [Annual, Neighborhood-Level](#)

[Violent Crime](#)

### Health Behavior

[Binge Drinking](#)

[Physical Inactivity](#)

[Smoking](#)

[Teen Births](#)

### Physical Environment

[Air Pollution - Particulate Matter](#)

[Housing with Potential Lead Risk](#)

[Lead Exposure Risk Index](#)

[Limited Access to Healthy Foods](#)

[Park Access](#)

[Walkability](#)

### Clinical Care

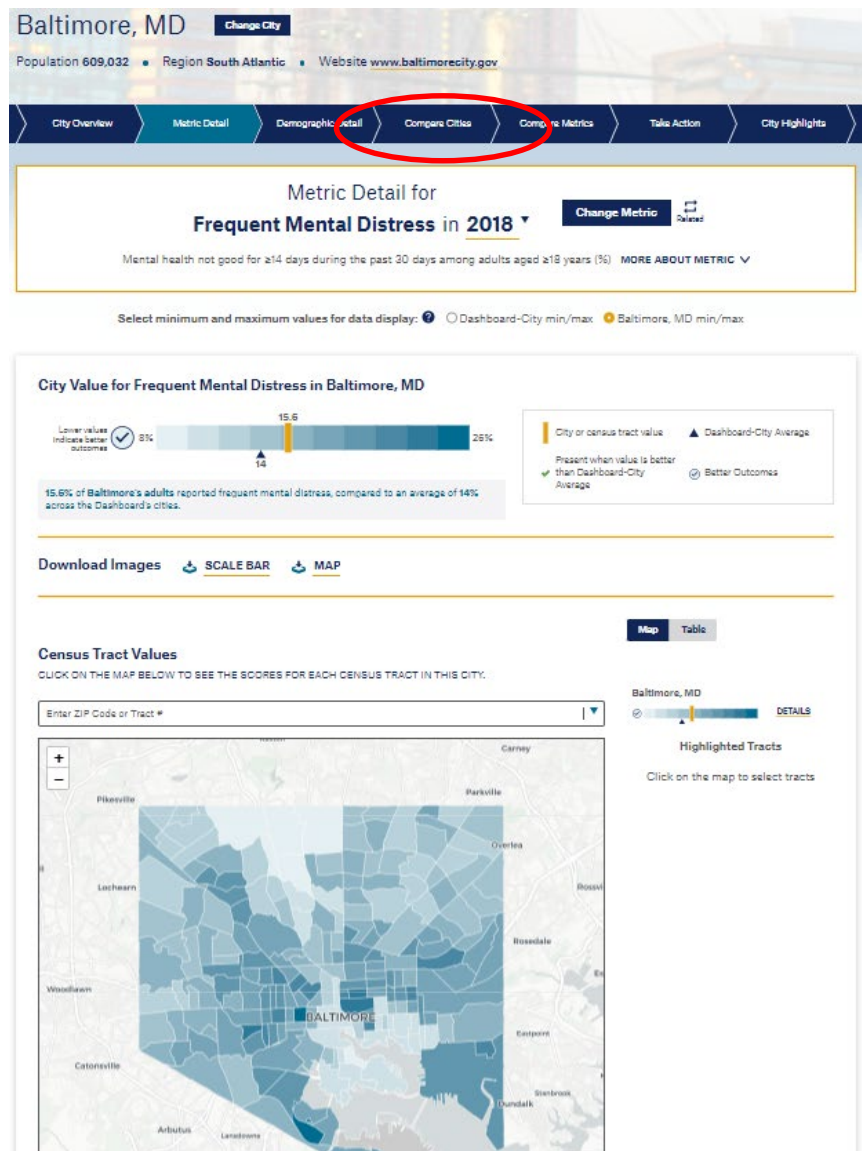
[Dental Care](#)

[Prenatal Care](#)

[Preventive Services, 65+](#)

[Uninsured](#)

# Facilitating *city-level* access to geographically relevant data on health and SDH



# Facilitating *city-level* access to geographically relevant data on health and SDH

Baltimore, MD [Change City](#)

Population 609,032 • Region South Atlantic • Website [www.baltimorecity.gov](http://www.baltimorecity.gov)

City Overview Metric Detail Demographic Detail Compare Cities **Compare Metrics** Take Action City Highlights

Compare Cities for  
**Frequent Mental Distress in 2018** [Change Metric](#) Related

Mental health not good for ≥14 days during the past 30 days among adults aged ≥18 years (%) [MORE ABOUT METRIC](#) ▾

Minimum and maximum values for data display: ⓘ Dashboard-City min/max

Select Comparison Cities  **Atlanta, GA**

OR

Filter to Find Comparison Cities ▾

---

**City Value for Frequent Mental Distress in Baltimore, MD**

Lower values indicate better outcomes ✓ 5% 15.6 36%

14

15.6% of Baltimore's adults reported frequent mental distress, compared to an average of 14% across the Dashboard's cities.

City or census tract value ▲ Dashboard-City Average

Present when value is better than Dashboard-City Average ✓ Better Outcomes

Remove

Atlanta, GA 5% 13.3 36%

14

# Facilitating *city-level* access to geographically relevant data on health and SDH

## Scatterplot View

This plot shows the census tract values of frequent mental distress plotted against census tract values of broadband connection in Baltimore, MD. Each point represents a census tract within Baltimore.

Caution is important when examining scatterplots: just because two items are correlated does not mean that one causes the other.





# Facilitating city-level access to comparable data

Baltimore, MD [Change City](#)

Population 609,032 • Region South Atlantic • Website [www.baltimorecity.gov](http://www.baltimorecity.gov)

City Overview | Metric Detail | Demographic Detail | Compare Cities | Compare Metrics | **Take Action** | City Highlights

Take Action for  
**Frequent Mental Distress in 2018** [Change Metric](#)

Mental health not good for ≥14 days during the past 30 days among adults aged ≥18 years (%) [MORE ABOUT METRIC](#)

Explore tools for driving change in Baltimore by selecting resources from the sets below.

**What You Can Do**

- [Find Policies & Programs](#) View

**How You Can Do It**

- [Find Partners](#) View
- [Explore Strategies](#) View
- [Find Funding](#) View
- [Measure Impact](#) View

Filter by: [Clear all](#)

Audience:  Policies or programs:  Evidence rating:

21-25 of 25 results

**Pricing Strategies for Alcohol Products** [🔗](#)

Source: HI-S  
Evidence Rating: Evidence Backed  
Target Audience: Local Government  
Impacts Metrics: High Blood Pressure - Binge Drinking - Cardiovascular Disease Deaths - Breast Cancer Deaths - Colorectal Cancer Deaths - Frequent Mental Distress - Unemployment - Annual, Neighborhood-Level - Violent Crime - Teen Births - Premature Deaths (All Causes) - Life Expectancy - Unemployment - Current, City-Level

**School-Based Health Centers** [🔗](#)

Source: The Community Guide  
Evidence Rating: Evidence Backed  
Target Audience: University or School - Community Organization  
Impacts Metrics: High School Completion - Income Inequality - Teen Births - Low Birthweight - Frequent Mental Distress - Dental Care - Prenatal Care - Neighborhood Racial/Ethnic Segregation - Racial/Ethnic Diversity - Premature Deaths (All Causes) - Life Expectancy

**School-Based Violence Prevention** [🔗](#)

Source: HI-S  
Evidence Rating: Evidence Backed  
Target Audience: Community Organization - University or School  
Impacts Metrics: Violent Crime - Frequent Physical Distress - Frequent Mental Distress - Binge Drinking - Opioid Overdose Deaths - Premature Deaths (All Causes) - Life Expectancy

**Tenant-Based Rental Assistance Programs** [🔗](#)

Source: The Community Guide

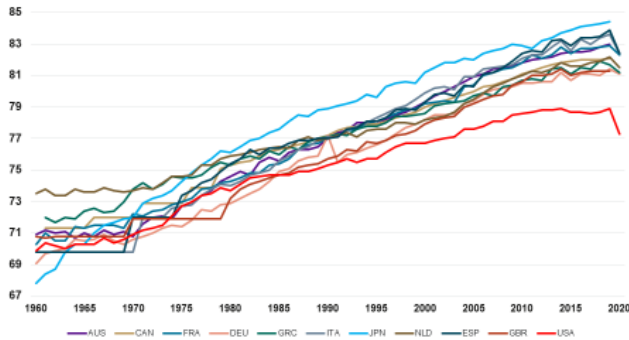
- Data visualization & rich resources
- Steadily growing national uptake
- Myriad research applications
- Catalyzing improvements in population health and health equity



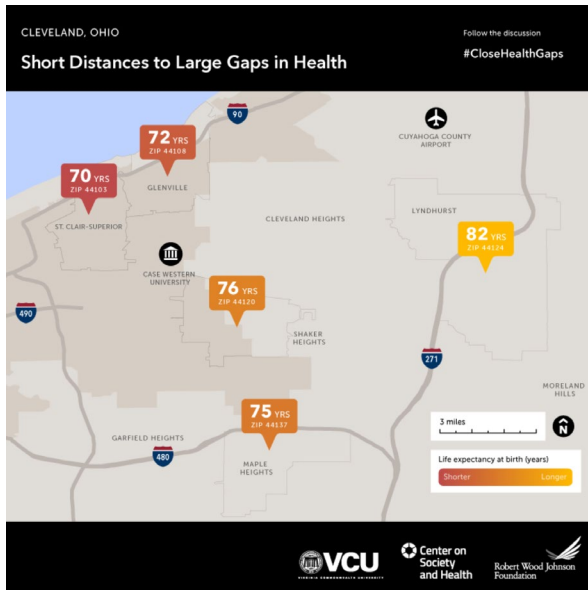
# Research: *what's really important?*

## Life Expectancy is Declining in the US

Life expectancy at birth, selected high-income countries, 1960-2020



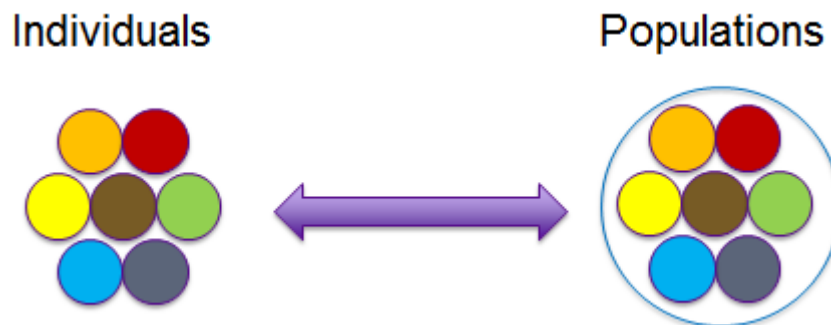
11



# Tensions

- Navigating evolving institutional landscapes
- Boundaries with other departments / entities
  - Methods/analytics
  - Community-partnered research
  - Preventive medicine, community health, family medicine, social medicine, etc.
- Promotion and tenure criteria
- ‘Basic science department’ categorization
- Diversity of funding sources
- Partnership- and trust-building takes time
- Maximizing policy impact (+/- alignment w/ institutional priorities)
- Maintaining mission focus while delivering on institutional goals

# Research: health systems and population health



- How to better align payment with improvements in population health? In health equity?
- Does screening for SDH improve meaningful outcomes? When/how?
- Closed loop referral systems: effectiveness?
- Summary measures of health: HALE, WALY, et al.
- Embedding RCTs into daily operations

# Research: what drives health, equity and improvement?

- How does stress get under the skin → →
  - Can the impact of stress on health be attenuated?
- Honing research questions to yield findings that contribute to shaping anti-racist policies (and to dismantling structurally racist ones)?
- Parsing cause & impact among tangled threats & costs (Milstein), leveraging deep data
- Policy evaluation: rigorous, timely, and equity-focused
- Communication, cognitive science and population health
  - What can we learn from the vast natural experiment in which we find ourselves?
  - Tackling disinformation as public health threat
- Food environment, climate, firearms, universal basic income, education, transportation, housing, deincarceration, e-culture, public safety, social/economic mobility...

## In closing

- Dynamic, evolving field!
  - Fundamentally discipline-bridging
  - Porous boundaries: tension and a strength
- Enormous challenges to address
- Stay grounded to local context and community
- Traction through partnerships
- Set sights high
  - What tough, important problems can you make a dent in together?

*Questions?*