

2019 LEGAL EPIDEMIOLOGY SYMPOSIUM

Looking Back and Looking Ahead

SEPTEMBER 13, 2019

 10 YEARS OF LEGAL EPIDEMIOLOGY

SESSION 3

Using Law to Address the Social Determinants of Health

- **Scott Burris**, Temple Law and CPHLR
- **Katie Moran-McCabe**, CPHLR
- **Jennifer Karas Montez**,
Syracuse University
- **Kelli Komro**, Emory University
- **Wendy Parmet**, Northeastern
University School of Law
- **Evan Anderson**, Penn Nursing
(Moderator)

Contextualizing the Gradient: Developing the Relational Element of the Social Determinants Analysis

Scott Burris, JD

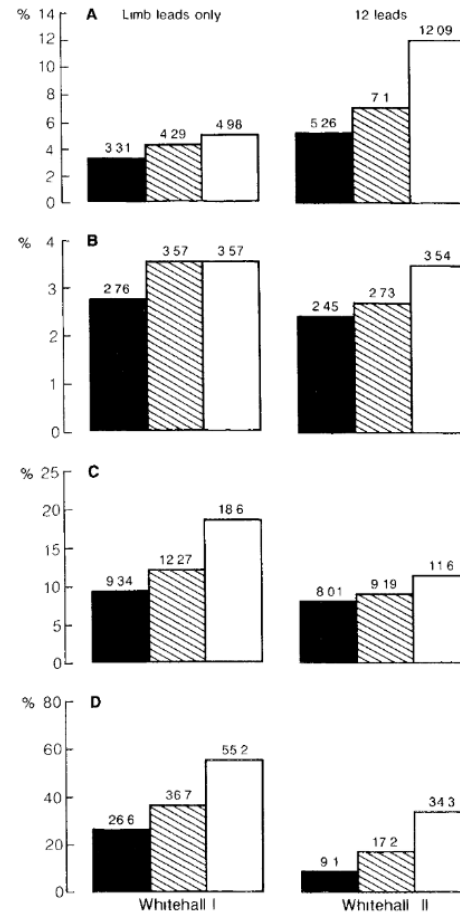
Center for Public Health Law Research
Temple University Beasley School of Law
Philadelphia, PA

September 13, 2019



The Original Gradient

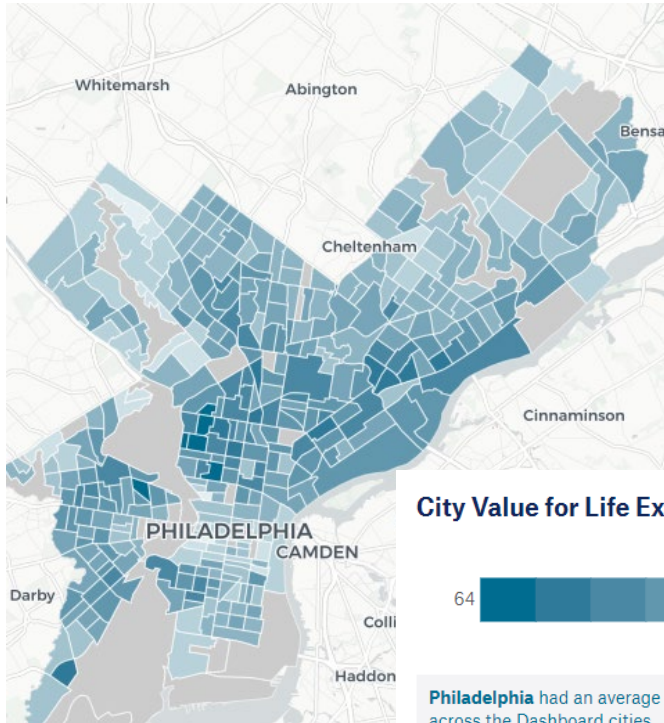
Marmot, M. G., Smith, G. D., Stansfeld, S., Patel, C., North, F., Head, J., . . . Feeney, A. (1991). Health inequalities among British civil servants: the Whitehall II study. *Lancet*, 337(8754), 1387-1393. doi: 0140-6736(91)93068-K [pii]



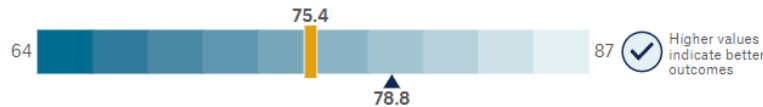
Prevalence of cardiorespiratory disease and smoking among men aged 40-54 in the Whitehall I (1967-69) and Whitehall II (1985-88) studies (age-adjusted percentages).

(A) Probable and possible ECG ischaemia, (B) angina pectoris, (C) chronic bronchitis, (D) current cigarette smokers. Administrators (■), professional/executive (▨), clerical/support (□).

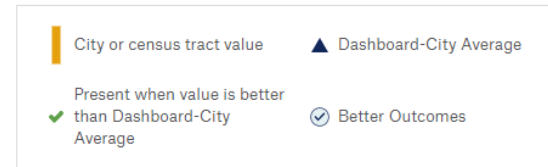
The Latest Meme: Zip Code as Fate



City Value for Life Expectancy in Philadelphia, PA



Philadelphia had an average life expectancy at birth of **75.4**, compared to an average of **78.8** across the Dashboard cities.



<https://www.cityhealthdashboard.com/pa/philadelphia/metric-detail?metric=837>

Social Structure Has a Gravitational Effect on Research and Theory, Too

Social Conditions as Fundamental Causes of Disease*

BRUCE G. LINK

Columbia University and New York State Psychiatric Institute

JO PHELAN

University of California, Los Angeles

Journal of Health and Social Behavior 1995, (Extra Issue):80–94

Addressing the “Risk Environment”
for Injection Drug Users: The Mysterious
Case of the Missing Cop

SCOTT BURRIS, KIM M. BLANKENSHIP,
MARTIN DONOGHOE, SUSAN SHERMAN,
JON S. VERNICK, PATRICIA CASE,
ZITA LAZZARINI, and STEPHEN KOESTER

The Milbank Quarterly, Vol. 82, No. 1, 2004 (pp. 125–56)

Research | allostatic load notebook

[printable version](#)

Allostatic Load and Allostasis

Summary prepared by Bruce McEwen and Teresa Seeman in collaboration with the Allostatic Load Working Group. Last revised August, 2009.

Chapter Contents

- a. [Introduction](#)
- b. [Where Stress Fits In](#)
- c. [Allostasis and Allostatic Load](#)
- d. [Allostatic Load Requires Understanding of Physiological Mechanisms](#)
- e. [Validation of Allostatic Load](#)
- f. [Further Refinement of Allostatic Load](#)
- g. [Recent Developments](#)
- h. [References](#)

Introduction

There are gradients of health when groups of people are classified according to their socioeconomic status, which reflect both income and level of education. The poor suffer earlier mortality and worse health, on the average, than the middle class, which, in turn, is not as healthy as those who are wealthier and/or better educated. Attempts to explain these gradients on the basis of access to health care or such behaviors as smoking have failed to explain the gradient (1,2). Instead there is a need to understand more comprehensively how various aspects of life impact collectively on health, involving such factors as living environment, work, relationships, community, knowledge and practice of health promoting or health damaging behaviors including diet and exercise. In order to do this we must move from groups to individuals and understand how behavior and biology interact.

Often, we use the word “stress” to refer to these biological factors, but this is an oversimplification because they are more than “stress” and include many aspects of lifestyle and daily experience and behavior, including the adjustments to the circadian light-dark cycle. Moreover, the widespread use of the term “stress” in popular culture has made this word a very ambiguous term to describe the ways in which the body copes with psychosocial, environmental and physical challenges. Thus we have been in search of a more comprehensive term for the role of biological mediators in adaptation and maladaptation of the individual to the circumstances of life.

Where Stress Fits In

Note Books

- [Social Environment Notebook](#)
- [Psychosocial Notebook](#)
- [Allostatic Load Notebook](#)
- [Developmental Chapter](#)

Chapters

[Allostatic Notebook](#)
[Table of Contents](#)

1. [Allostatic Load and Allostasis](#)
2. [Antibody Response to an Antigenic Challenge](#)
3. [Body Composition](#)
4. [Cardiovascular Measures of Allostatic Load](#)
5. [Catecholamines and Environmental Stress](#)
6. [Central Body Fat](#)
7. [Decrease in Cell-mediated Immunity - A Marker for Allostatic Load Effects on Immune Function](#)
8. [Dietary Factors and SES](#)
9. [Heart Rate Variability](#)
10. [Food](#)
11. [Memory Function and Hippocampal Formation Volume](#)
12. [Modes of Cardiac Control](#)
13. [Muscle Tension](#)
14. [Parasympathetic Function](#)
15. [Salivary Cortisol Measurement and Challenge Tests](#)

A Lucky Coincidence





There is Robust Theory and Evidence in Social Psychology

1. Inequality is identified and maintained through perceptual processes:

- Social Class Is Signaled and Accurately Perceived During the Early Stages of Social Perception

2. Ideologies of Merit Reinforce Economic Inequality

- Structural Class Divisions Create Economic Inequality Blindness
- Higher Social Class Is Accompanied by Ideological Beliefs of Economic, Personal, and Social Deservingness
- Ideologies of Merit and Inequality in Political Participation Exacerbate Economic Inequality

3. Economic Inequality also operates along Moral-Relational Paths

- Higher Social Class Curbs Compassion and Heightens Self-Interest in Ways That Exacerbate Inequality

Advances in
EXPERIMENTAL SOCIAL PSYCHOLOGY

VOLUME 57

Unpacking the Inequality Paradox: The Psychological Roots of Inequality and Social Class

Paul K. Piff^{*1}, Michael W. Kraus[†], Dacher Keltner[‡]

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[†]Yale University, School of Management, New Haven, CT, United States

[‡]University of California, Berkeley, CA, United States

¹Corresponding author: e-mail address: ppiff@uci.edu



A Practical Example: Inequality Reproduced Through Help

Table 11.1 Responses to the inaction of the disadvantaged groups

		Advantaged groups' response to disadvantaged groups' inaction	
		Disapproval	Approval
Is inaction interpreted as disagreement with the status quo?	<i>No</i>	Inaction is attributed to the laziness, indifference, incompetence, or ungratefulness of the disadvantaged group.	Inaction is attributed to the innate inferiority of the disadvantaged group and as indicating consent to their disadvantaged position
	<i>Yes</i>	Inaction is recognised as an attempt to challenge the status quo; measures to ensure the advantaged group's dominant position are taken.	Inaction is recognised as an attempt to challenge the status quo; the disadvantaged group's struggle for equality is seen as legitimate and probably supported

Täuber, S. (2017). A Conceptualisation of Help Avoidance as Motivated Inaction: Implications for Theory, Research and Society. In E. v. Leeuwen & H. Zagefka (Eds.), *Intergroup Helping* (pp. 223-246). Cham, Switzerland: Springer.

Going forward on Inequity

- Structural change is essential
- But interpersonal change is possible and essential and can change lives right here and now
- Social determinants work has room to grow...

Legal Levers for Health Equity in Housing

Katie Moran-McCabe, JD

Center for Public Health Law Research

Temple University Beasley School of Law

Philadelphia, PA

September 13, 2019



The Policies for Action Program of the Robert Wood Johnson Foundation supported the research reported in this presentation. The content is solely the responsibility of the authors and does not necessarily represent views of the Program or the Foundation.

What Has Our “Housing System” Produced in the Past Half Century?

A chronic affordability gap:

- There are only 37 affordable and available units for every 100 extremely low-income renter households
- More than 10 million households pay more than *half* of their incomes for housing

Persistently inequitable and unhealthy conditions:

- The average White person lives in a neighborhood that is almost 80% White, approximately 10% Latino, less than 10% Black, and less than 5% Asian
- 4 million households have children exposed to high levels of lead

What Do We Want the System to Produce?

Health Equity
in Housing
(HEIH)



A Legal Levers Model for HEIH



The Questions We Addressed

1. Are legal levers for HEIH actually doing what they purport to do?
2. If so, are they tending to produce HEIH?
3. How can we better design and deploy legal levers for HEIH?

Are legal levers for HEIH actually doing what they purport to do?

- Mostly “no” or “just don’t know.”
- Some “sort of” or “in some places.”

Health, Housing, and the Law

Abraham Gutman, Katie Moran-McCabe,** Scott Burris****

How can we better design and deploy legal levers for HEIH?

Changes to laws that are mostly harmful:

- Exclusionary zoning laws
 - Changes to allow for greater density
 - Use of inclusionary zoning

How can we better design and deploy legal levers for HEIH?

Tweaks to levers that seem to work (at least in some ways):

- Low Income Housing Tax Credit program
 - Use of Qualified Allocation Plan
- Housing Choice Voucher program
 - Small Area Fair Market Rents
 - Source of Income protections

How can we better design and deploy legal levers for HEIH?

Levers with potential, but needing evaluation:

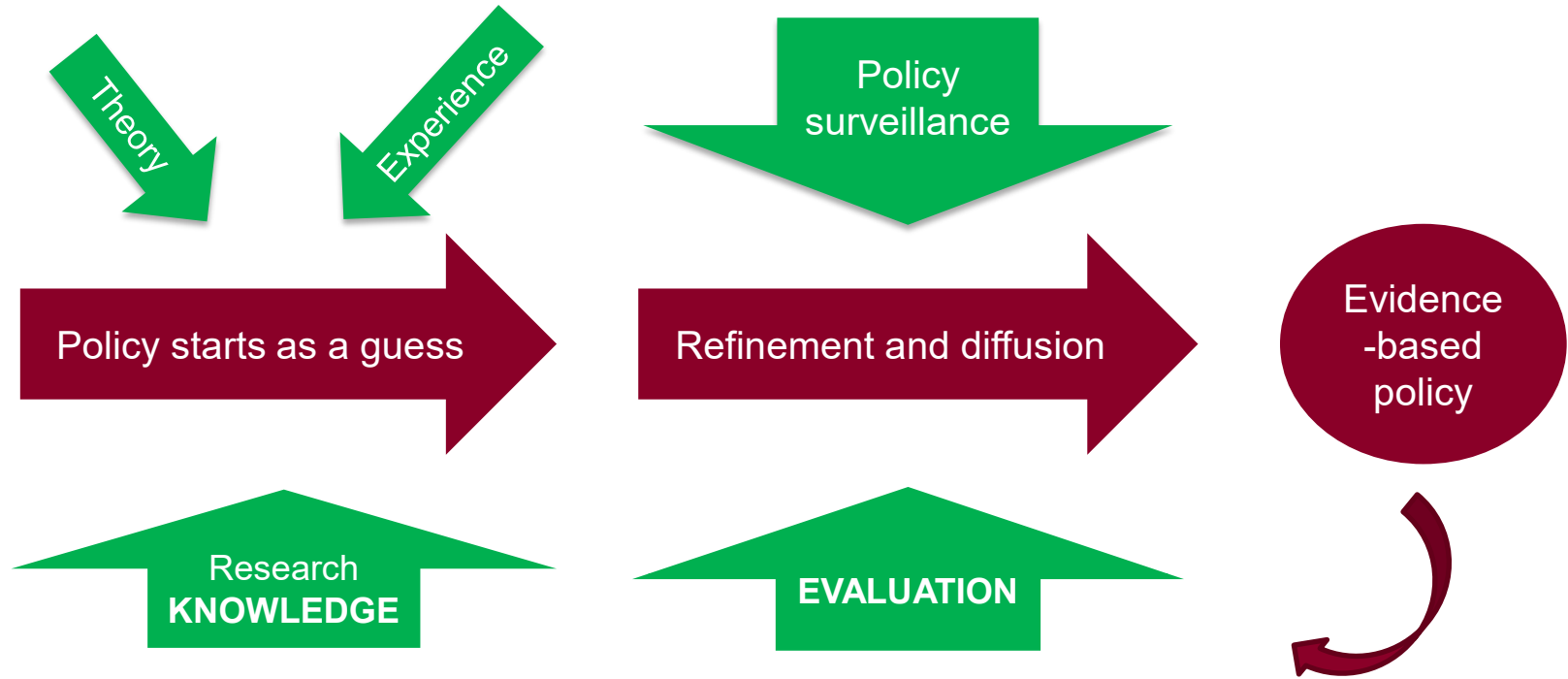
- Rent control
- Free legal representation for tenants in eviction hearings

Thoughts from a systems perspective → Levers working together



- LIHTC housing unfettered by QAP and zoning barriers guided by AFFH metro-wide plan
- The goal is to balance the levers to achieve “the perfect sound” – equity

Systematic Experimental Approach to Identifying and Spreading Good Levers Faster



Thank You!

Contact Information:

Email: kathleen.mccabe@temple.edu

Call: 215-204-5786

Visit: <http://publichealthlawresearch.org/> and <http://LawAtlas.org>

Twitter: @LawAtlas

Youtube: YouTube.com/LawAtlasorgTemple

Policy Polarization & Death in America

Jennifer Karas Montez, PhD

Professor of Sociology

Gerald B. Cramer Faculty Scholar in Aging Studies

Co-Director of the Policy, Place, and Population Health Lab

Syracuse University

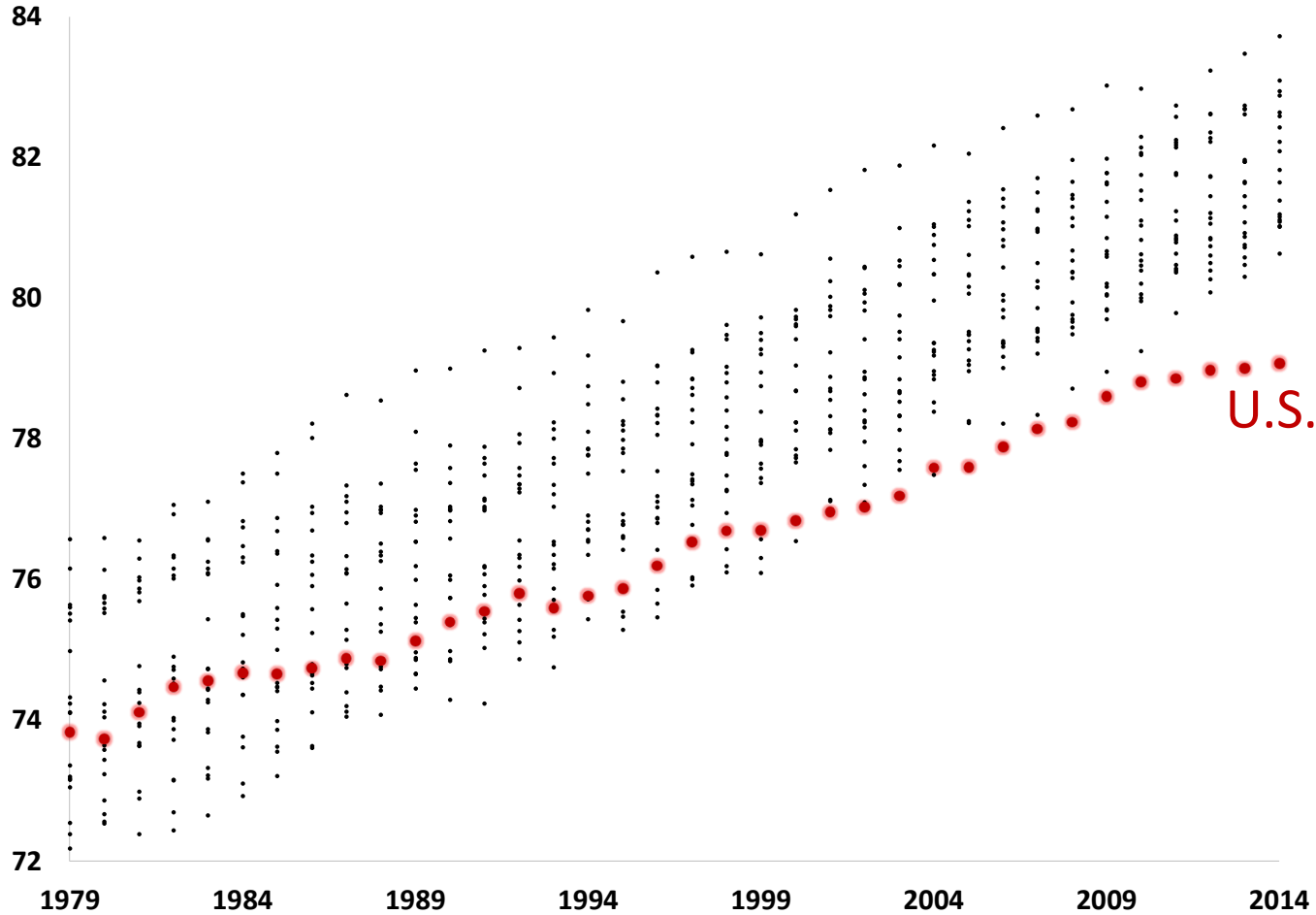
10th Anniversary Symposium of the Center for Public Health Law Research, Temple University

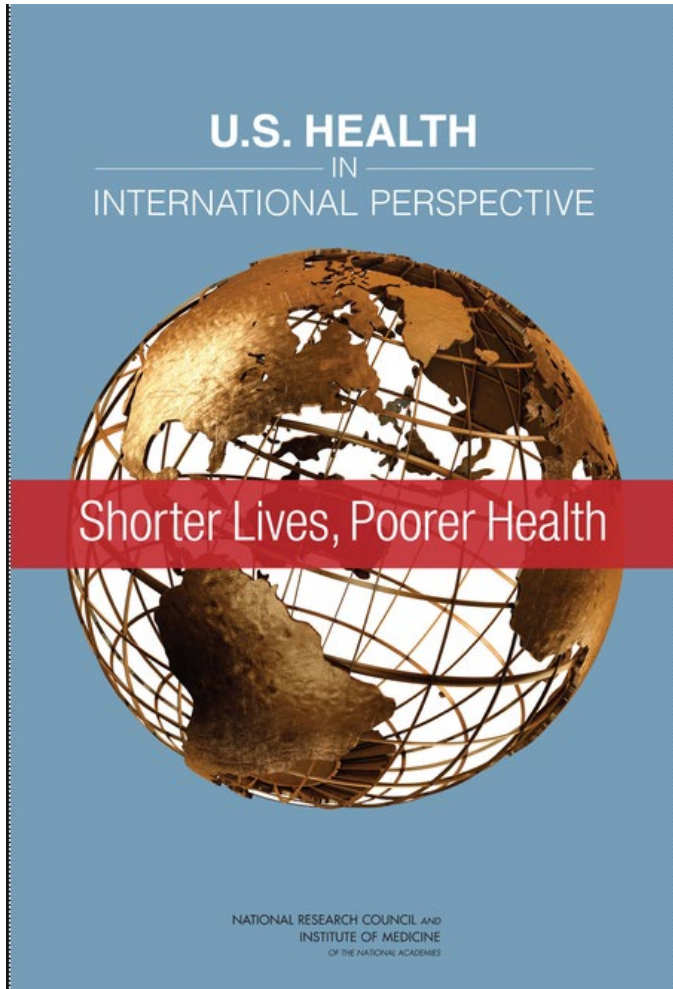
September 13, 2019

Life Expectancy in 22 High Income Countries



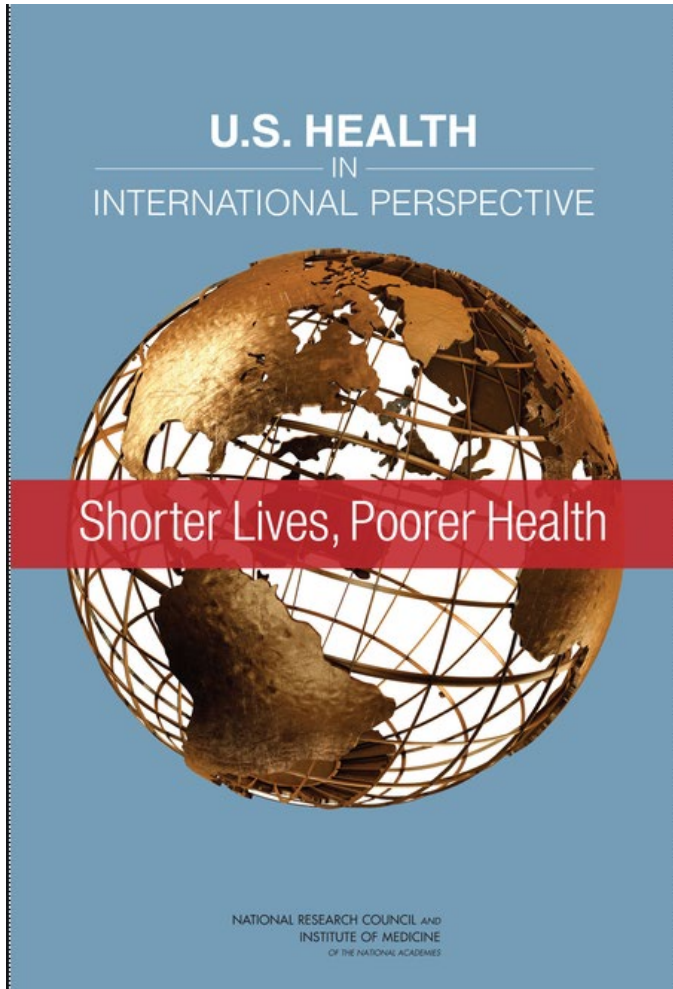
Life Expectancy in 22 High Income Countries





- Policies & social values
- Physical & social environments
- Social & economic factors
- Public health & medical care systems
- Individual behaviors





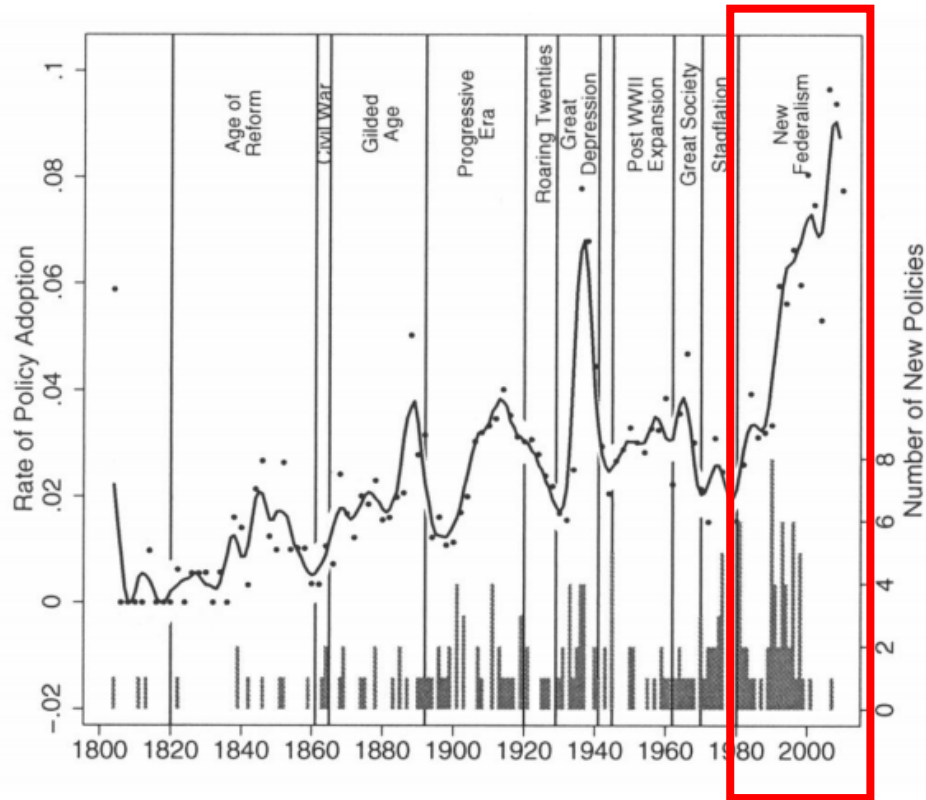
- Policies & social values
- Physical & social environments
- Social & economic factors
- Public health & medical care systems
- Individual behaviors

Policies and political choices are...
“*the causes of the causes of the causes* of geographical inequalities in health.”

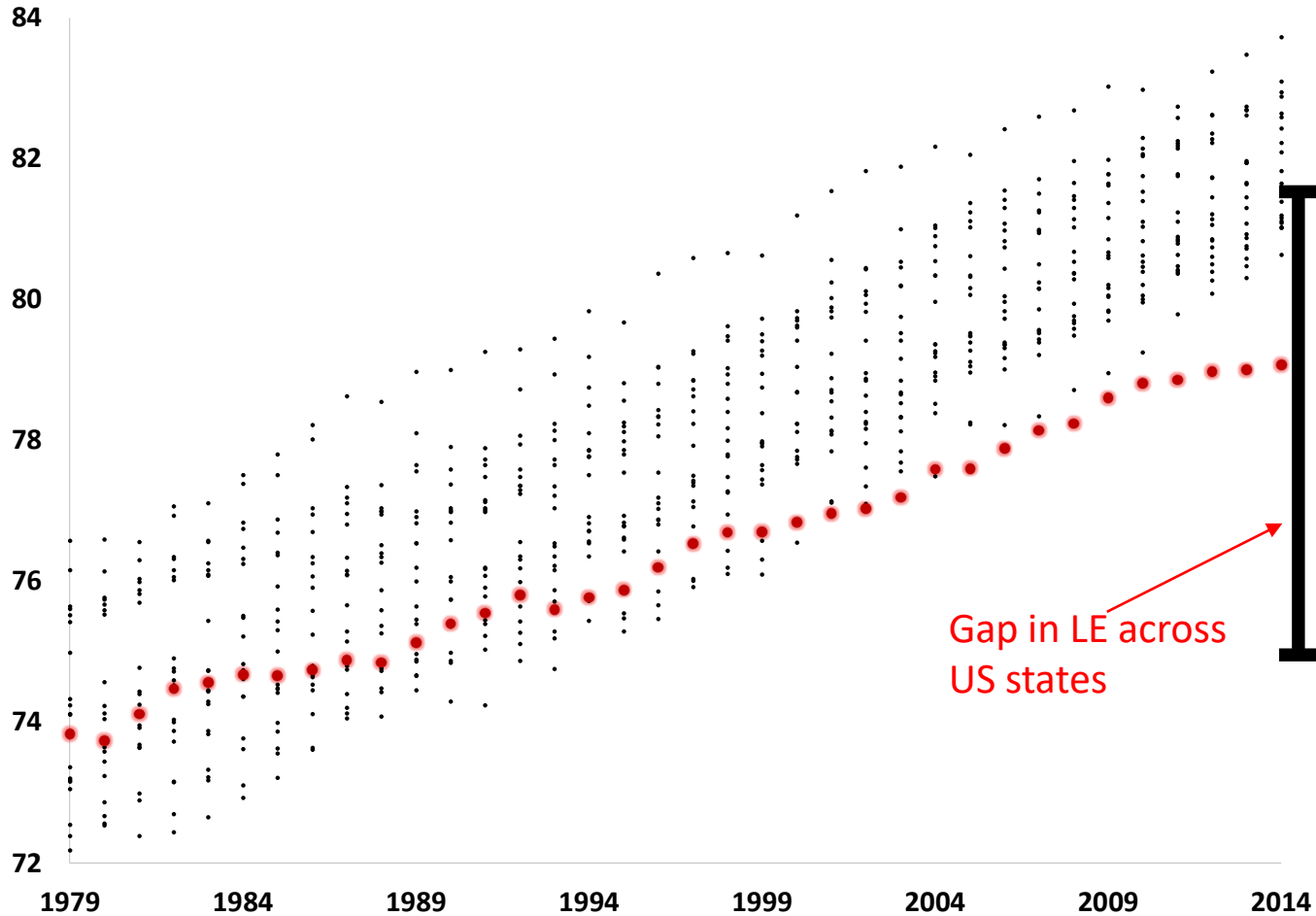
If we ignore them, we are “in danger of missing the **bigger picture.**”

(Bambra et al 2019)

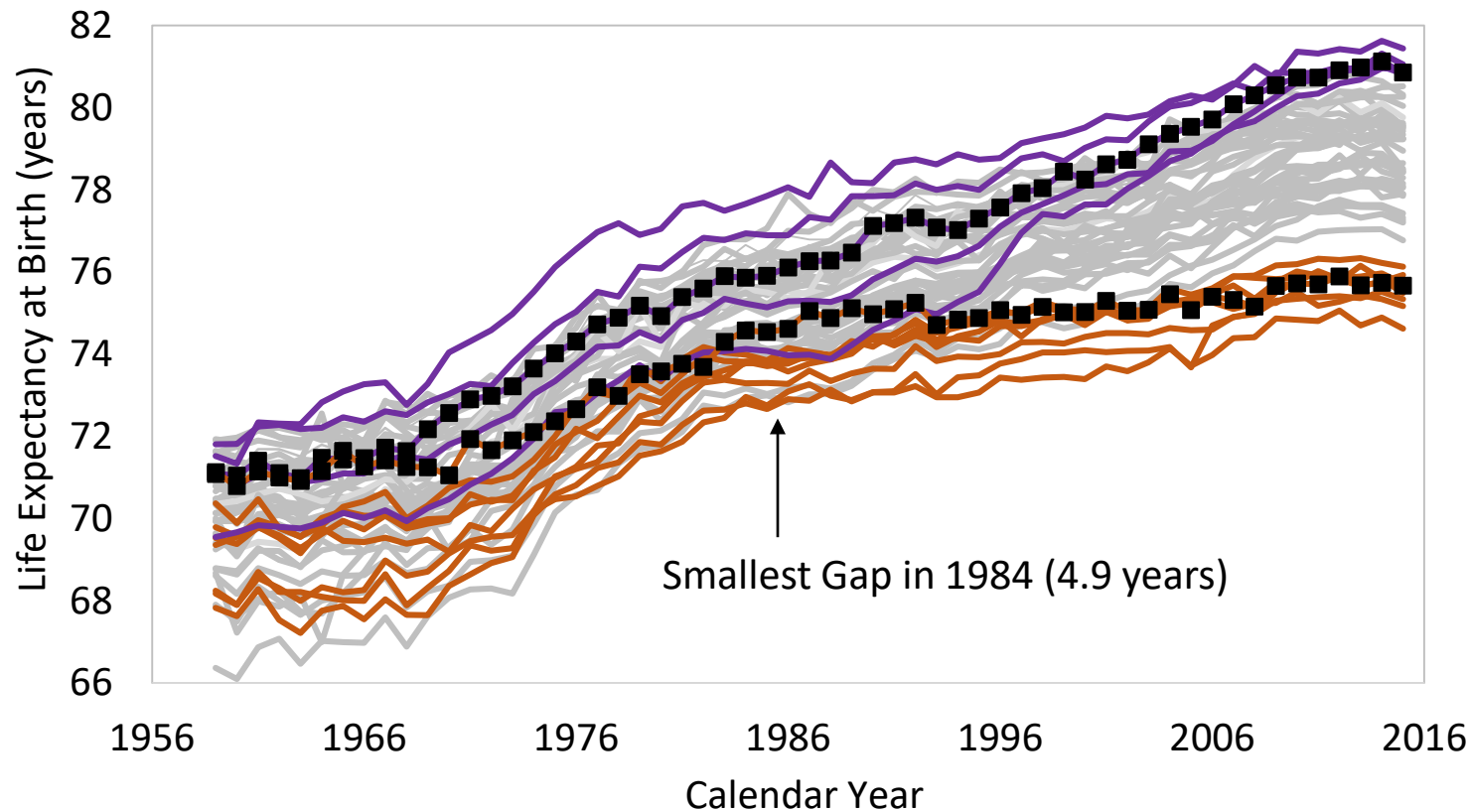
“the policy regime under which an individual lives is increasingly determined by her state of residence.” (Grumbach 2018)



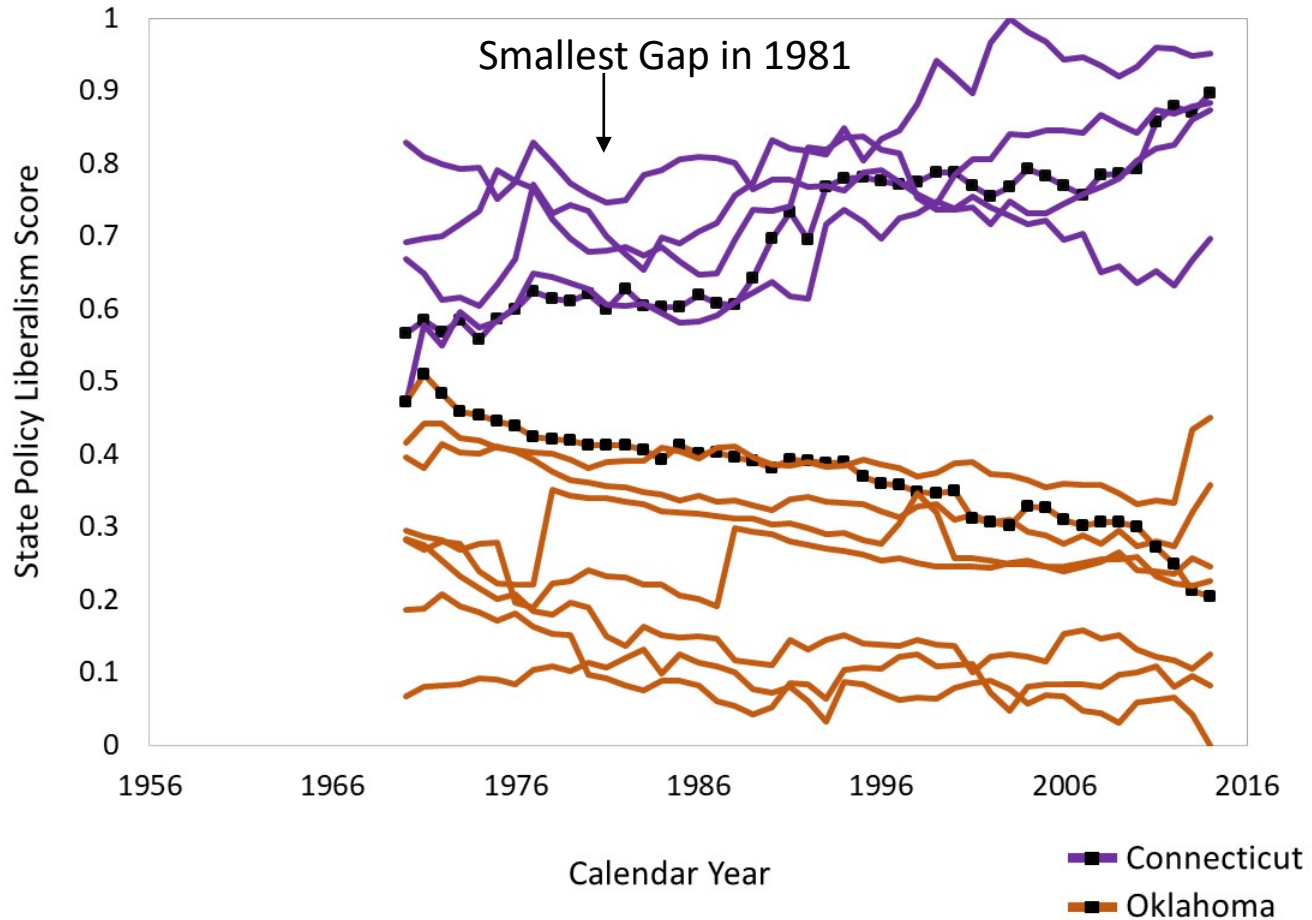
Life Expectancy in 22 High Income Countries

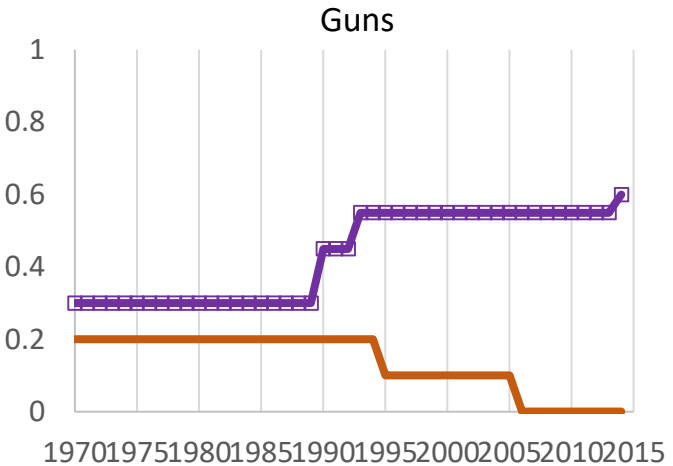
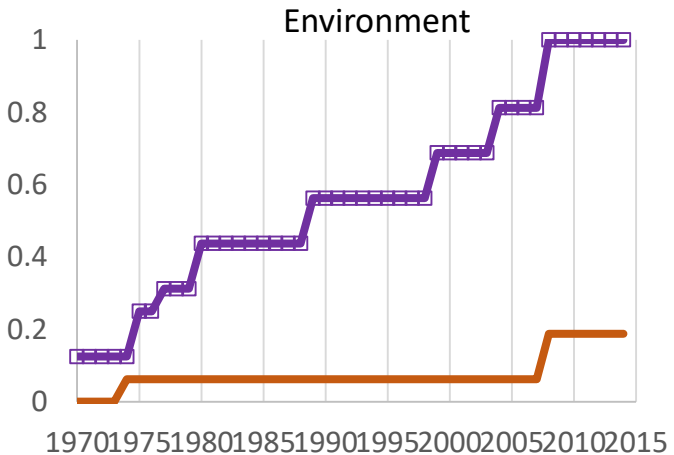
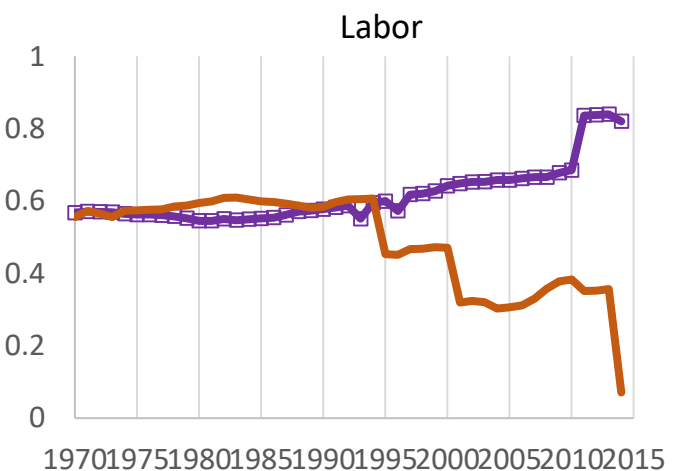
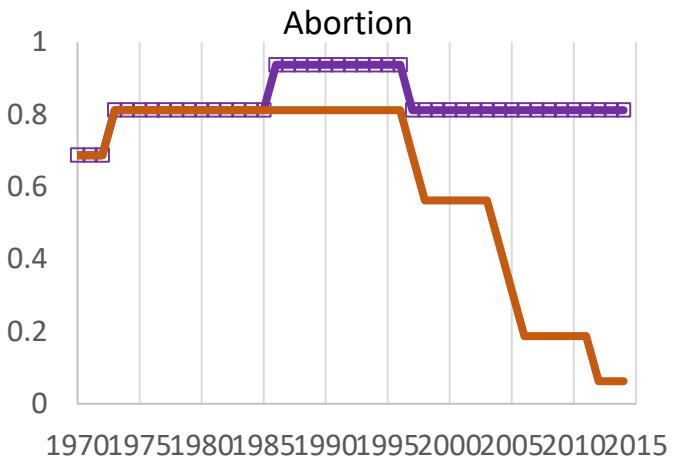


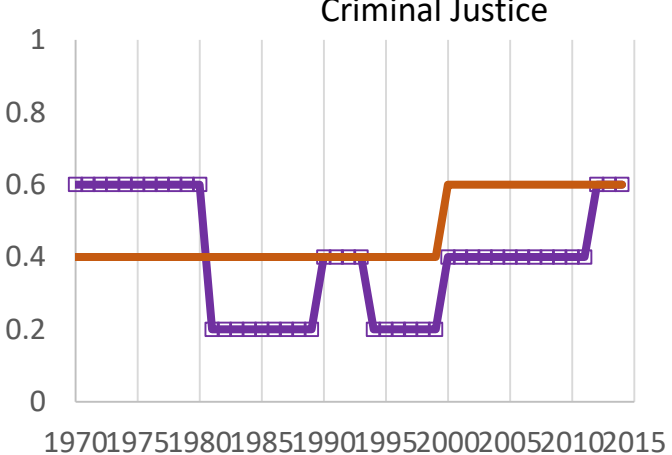
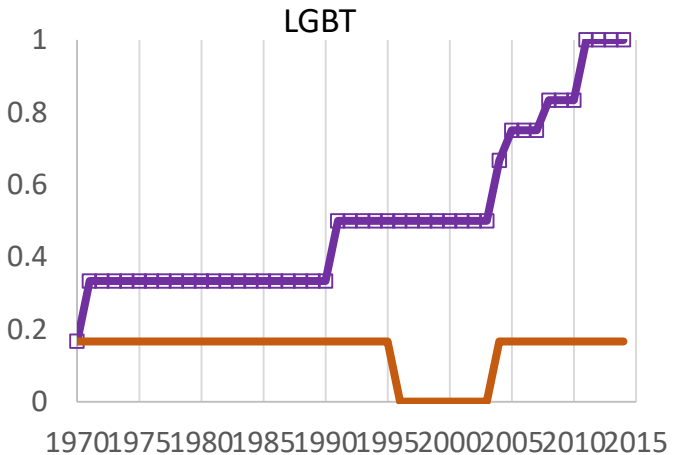
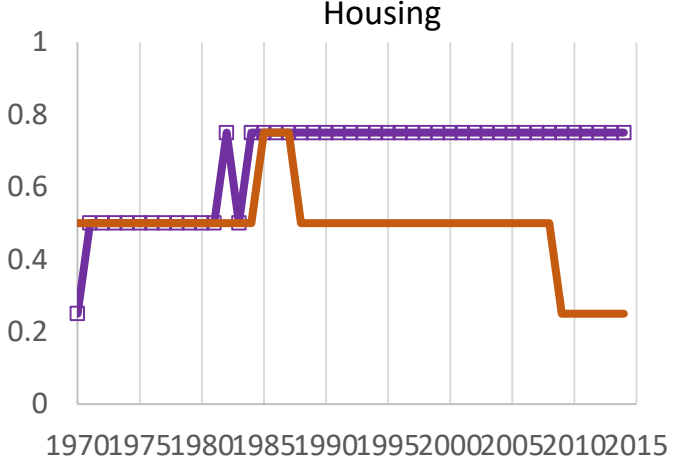
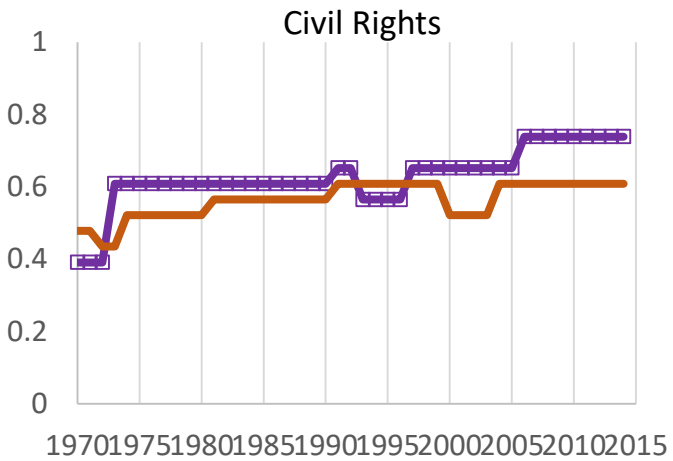
Life Expectancy by US State



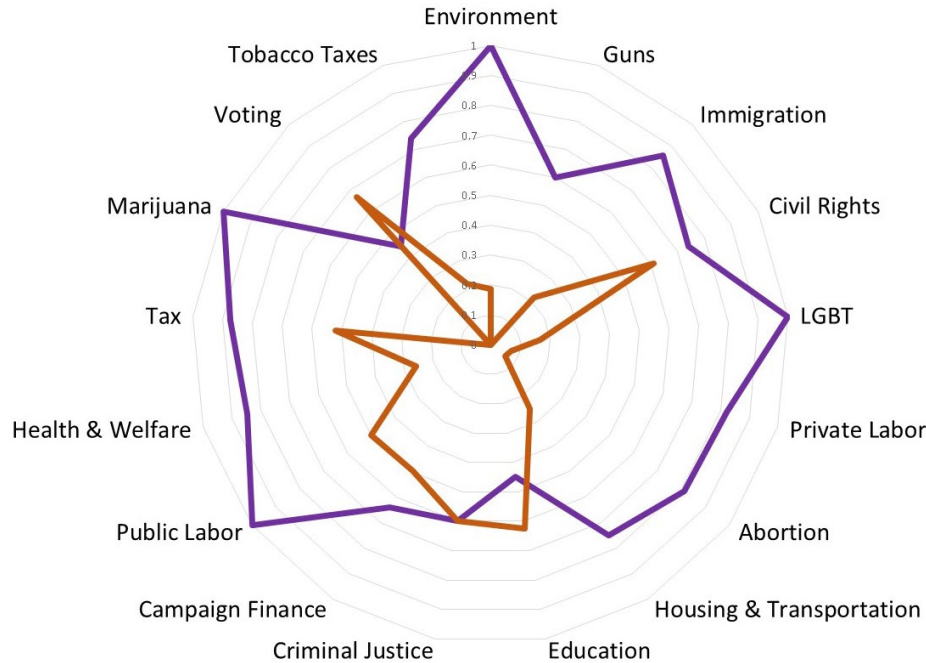
Overall Policy Liberalism by US State







How much would US life expectancy change if all states enacted the policies of CT or OK?



Connecticut Policies

Women: +2.0 years

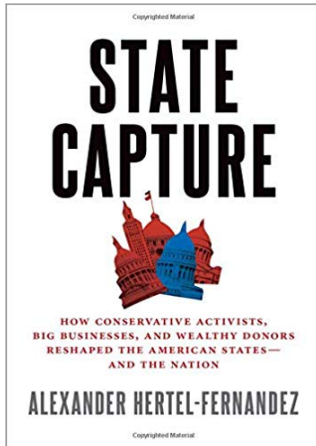
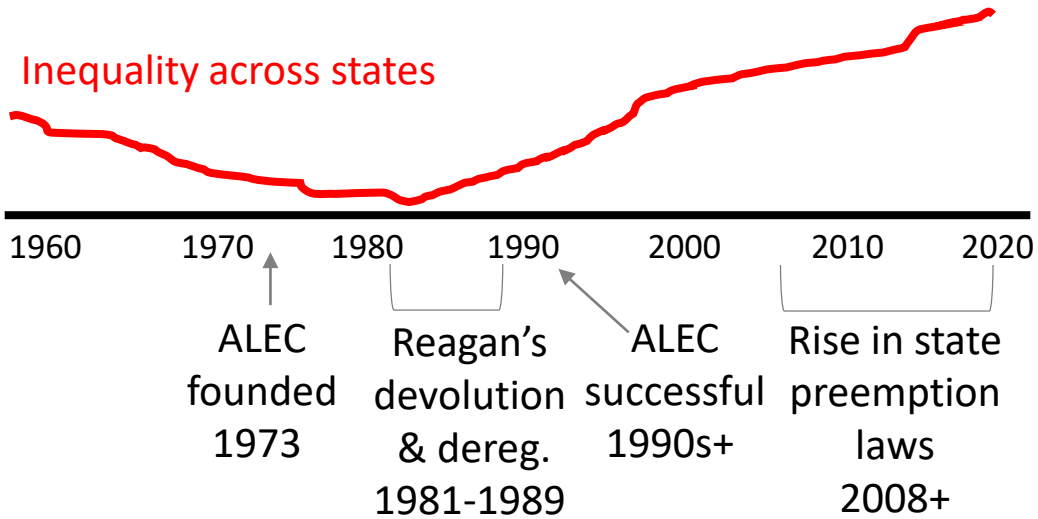
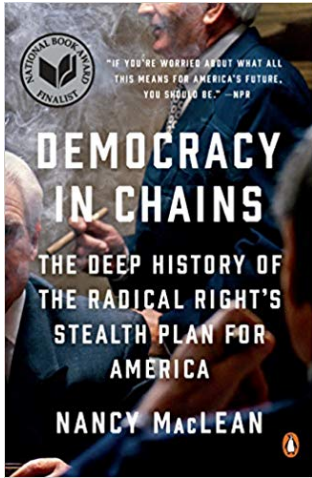
Men: +1.6 years

Oklahoma Policies

Women: -1.2 years

Men: -0.9 years

How did we get into this mess? And how do we get out?



- Researchers & funders must focus on state policy context
- Greater awareness among public & decision makers about
 - Effect of state policies on health
 - ALEC's role and their members
- More funding and professionalization for state reps
- Campaign finance limits?
- Coordinated, multi-level, cross-sector, national response

Thank you

Acknowledgements

This work was supported by grant R01AG055481 (Educational Attainment, Geography, and US Adult Mortality Risk) from the National Institute on Aging; Robert Wood Johnson Foundation Policies for Action Program; and Carnegie Foundation of New York.

Disclaimer

All views expressed in this presentation are exclusively those of the presenter.

References

Bambra et al 2019 "Scaling up: the politics of health and place." *Social Science & Medicine* 232:36-42.

Boehmke & Skinner. 2012. "State Policy Innovativeness Revisited." *State Politics & Policy Quarterly* 12(3):303-329

Grumbach. 2018. "From backwaters to major policymakers: policy polarization in the states, 1970-2014." *Perspectives on Politics* 16(2):416-435.

Improving Social Determinants of Health with Public Policy: An Interdisciplinary Research Approach

KA Komro, PhD, MD Livingston, PhD, S Markowitz, PhD & AC Wagenaar, PhD
Emory University Rollins School of Public Health & Dept of Economics

S Burris, JD, L Cloud, JD & H Grunwald, PhD
Temple University Beasley School of Law



EMORY
UNIVERSITY

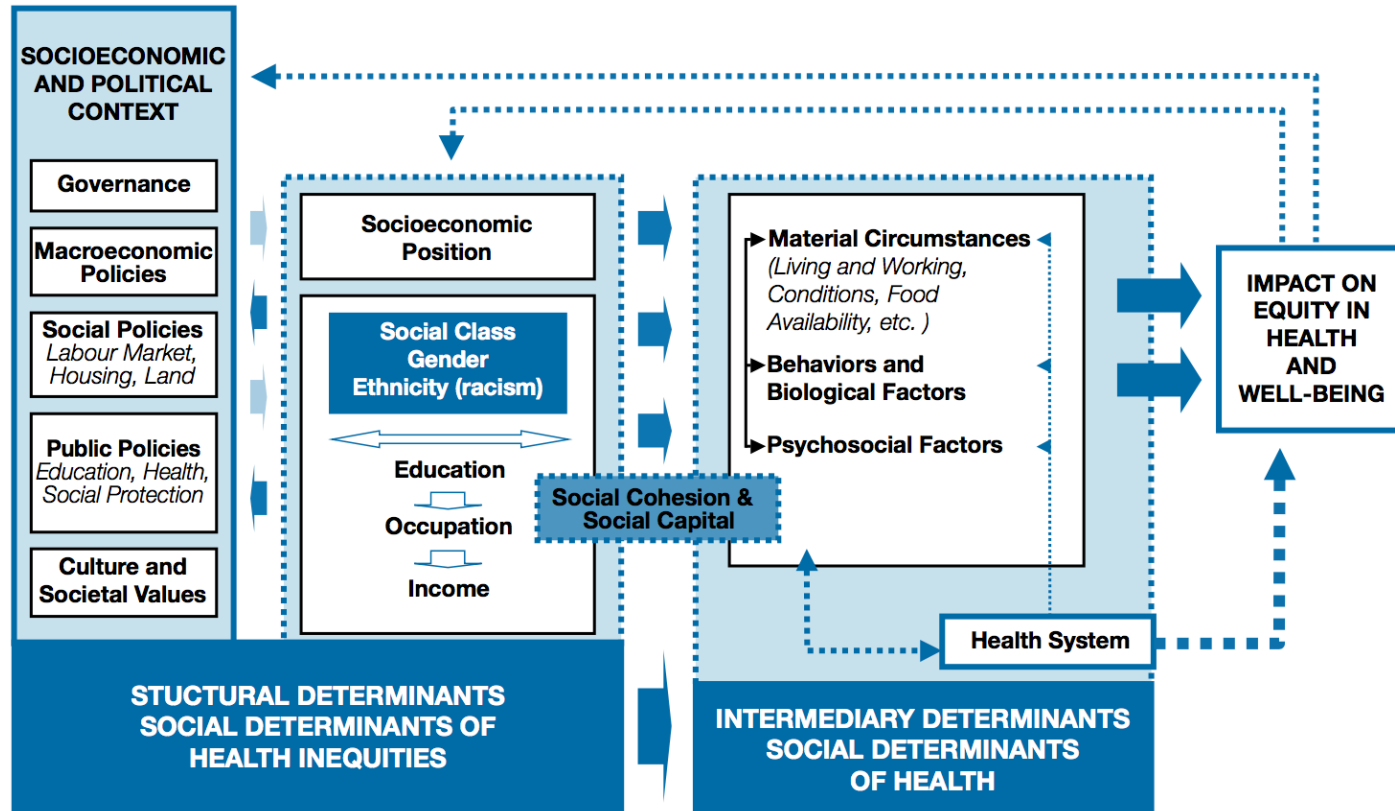
ROLLINS
SCHOOL OF
PUBLIC
HEALTH

Understanding How Law Affects Health

Scientific Contributions from Multiple Disciplines

- Law
- Social & Behavioral Sciences
- Epidemiology
- Economics
- Statistics

Figure A. Final form of the CSDH conceptual framework



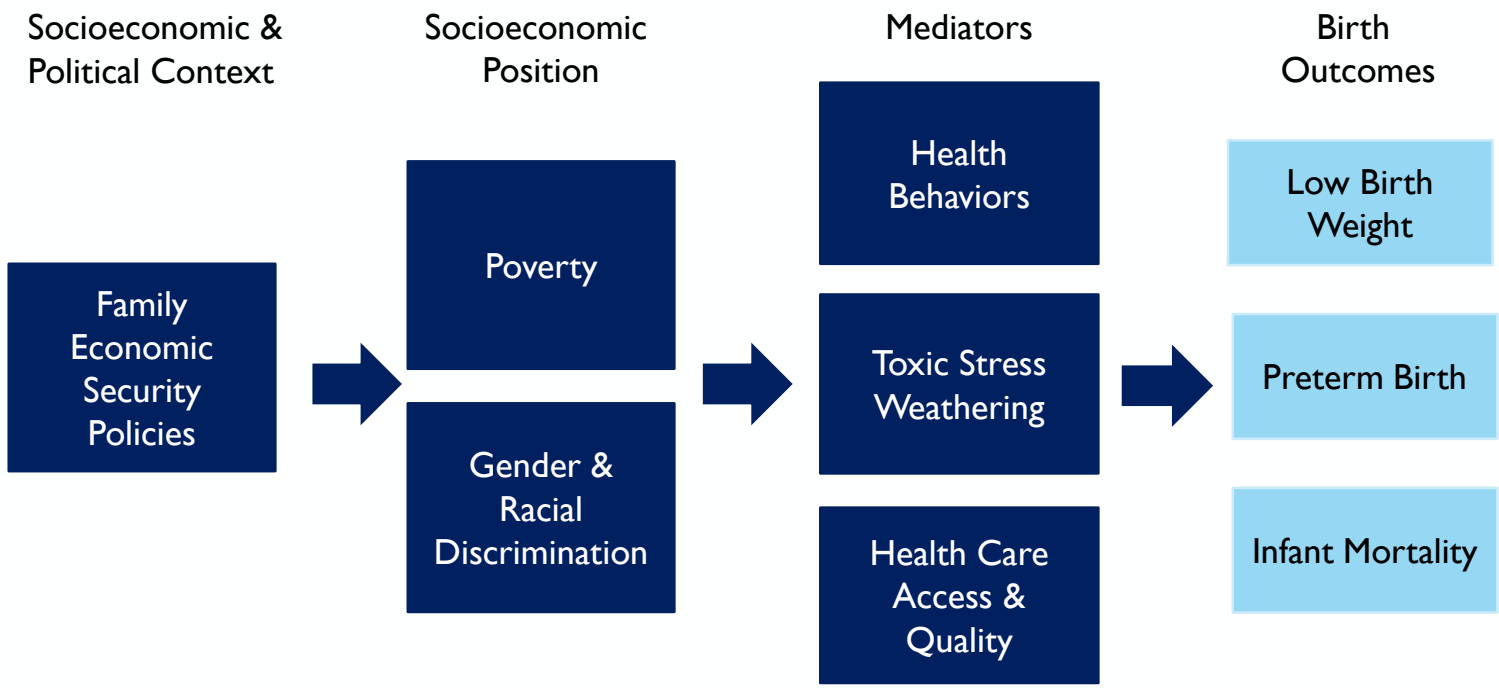
Family Economic Security Policy: Effects on Infant and Child Health Disparities

1. Minimum Wage Laws
2. Earned Income Tax Credit (EITC)
3. Unemployment Insurance
4. Temporary Assistance for Needy Families (TANF)

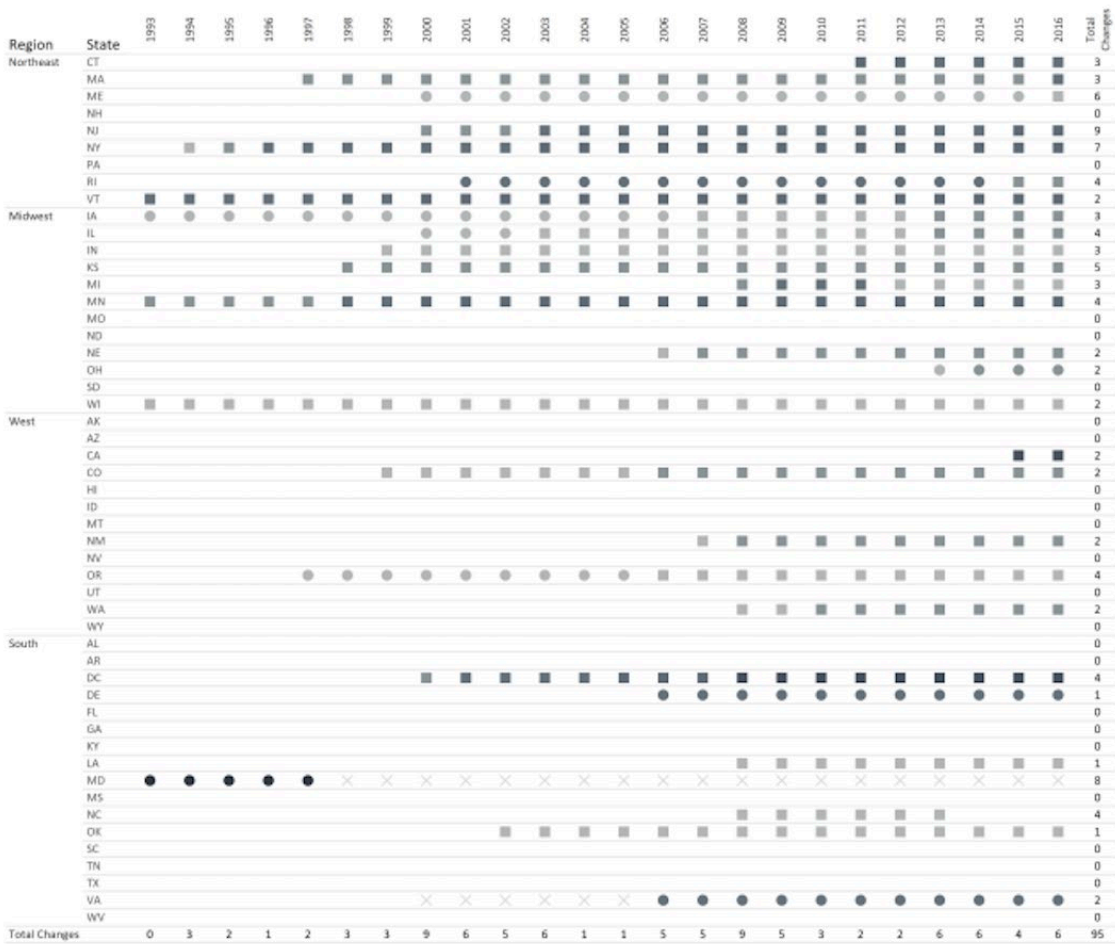
R01 funded by the National Institute on Minority Health and Health Disparities, 2015-2020

*Initial policy surveillance and pilot studies funded by the Robert Wood Johnson Foundation
Public Health Law Research program, 2012-2015*

Social Determinants of Birth Outcomes Conceptual Framework



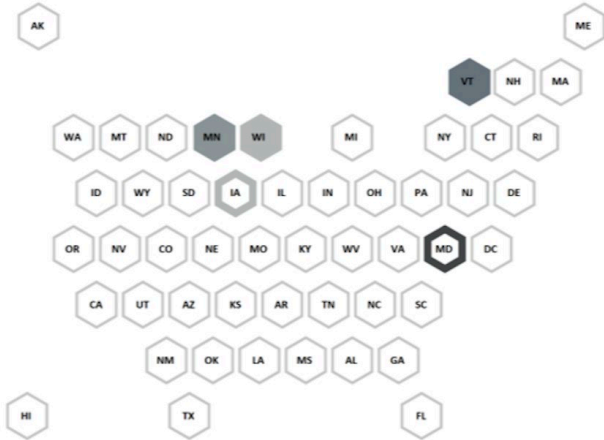
State earned income tax credits and health: Policy diffusion from 1980 to 2016



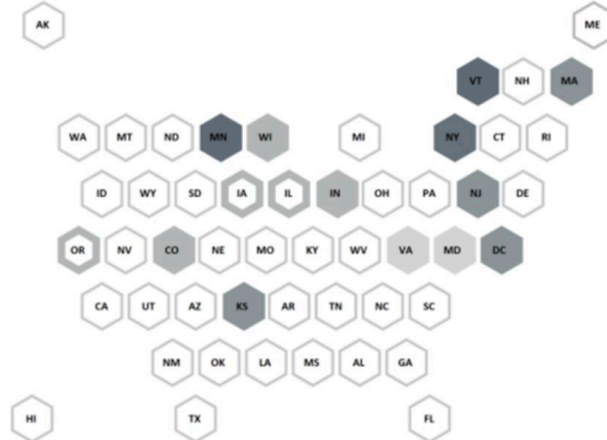
Legend

- No State EITC
- Non-refundable State EITC, less than 10%
- Non-refundable State EITC, 10% or greater and less than 20%
- Non-refundable State EITC, 20% or greater and less than 30%
- Non-refundable State EITC, 30% or greater and less than 40%
- Non-refundable State EITC, 40% or greater and less than 50%
- Non-refundable State EITC, 50% or greater and less than 60%
- Refundable State EITC, less than 10%
- Refundable State EITC, 10% or greater and less than 20%
- Refundable State EITC, 20% or greater and less than 30%
- Refundable State EITC, 30% or greater and less than 40%
- Refundable State EITC, 40% or greater and less than 50%
- Other

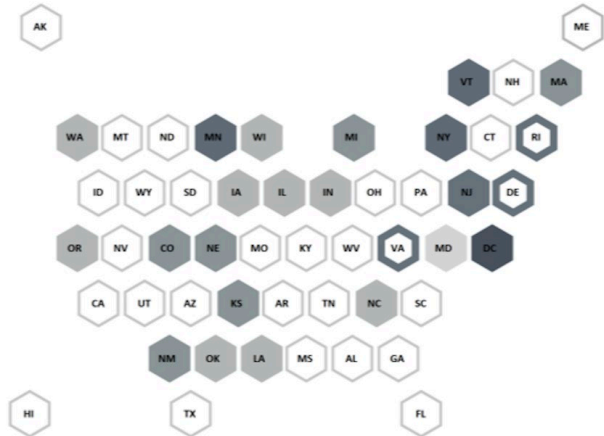
1993



2000



2008



2016



Legend

- No State EITC
- Non-refundable State EITC, less than 10%
- Non-refundable State EITC, 10% or greater and less than 20%
- Non-refundable State EITC, 20% or greater and less than 30%
- Non-refundable State EITC, 30% or greater and less than 40%
- Non-refundable State EITC, 40% or greater and less than 50%
- Other
- Refundable State EITC, less than 10%
- Refundable State EITC, 10% or greater and less than 20%
- Refundable State EITC, 20% or greater and less than 30%
- Refundable State EITC, 30% or greater and less than 40%
- Refundable State EITC, 40% or greater and less than 50%



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Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed



Effects of state-level Earned Income Tax Credit laws in the U.S. on maternal health behaviors and infant health outcomes



Sara Markowitz^a, Kelli A. Komro^{b,*}, Melvin D. Livingston^c, Otto Lenhart^d,
Alexander C. Wagenaar^b

Contribution

1. Strong quasi-experimental and longitudinal design
 - state-level EITCs
 - multiple policy changes over 20 years
2. Presence and generosity of state EITCs
 - infant health outcomes
 - possible mechanisms via maternal health behaviors

State EITC

- In 1994, 5 states had an EITC → In 2013, 26 states had an EITC
- State-specific EITC ranges from 3.5% to 40% of the federal amount, varies by number of children and refundability

EITC summary measure

least generous  most generous

States with <u>no EITC</u>	States with an EITC, <u>nonrefundable</u> payments, and payments <u>less than 10%</u> of the federal amount	States with an EITC, <u>refundable</u> payments, and payments <u>less than 10%</u> of the federal amount	States with an EITC, <u>nonrefundable</u> payments, and payments <u>10% or more</u> of the federal amount	States with an EITC, <u>refundable</u> payments, and payments <u>10% or more</u> of the federal amount
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Birth Outcome Results

	Dependent Variables		
	Birth Weight in Grams	Birth Weight <2500g	Gestation Weeks
Low EITC No Refund	9.44	-0.003	0.05
Low EITC With Refund	16.85	-0.005	0.03
High EITC No Refund	12.68	-0.003	0.17
High EITC With Refund	27.31	-0.008	0.08

More generous EITCs associated with reductions in *probability of LBW*

- 0.3 to 0.8 percentage-point reductions
- 4% to 11% reductions
- **4,300 to 11,850 fewer babies born LBW every year among women with high school education or less**

Quantile Regression Results

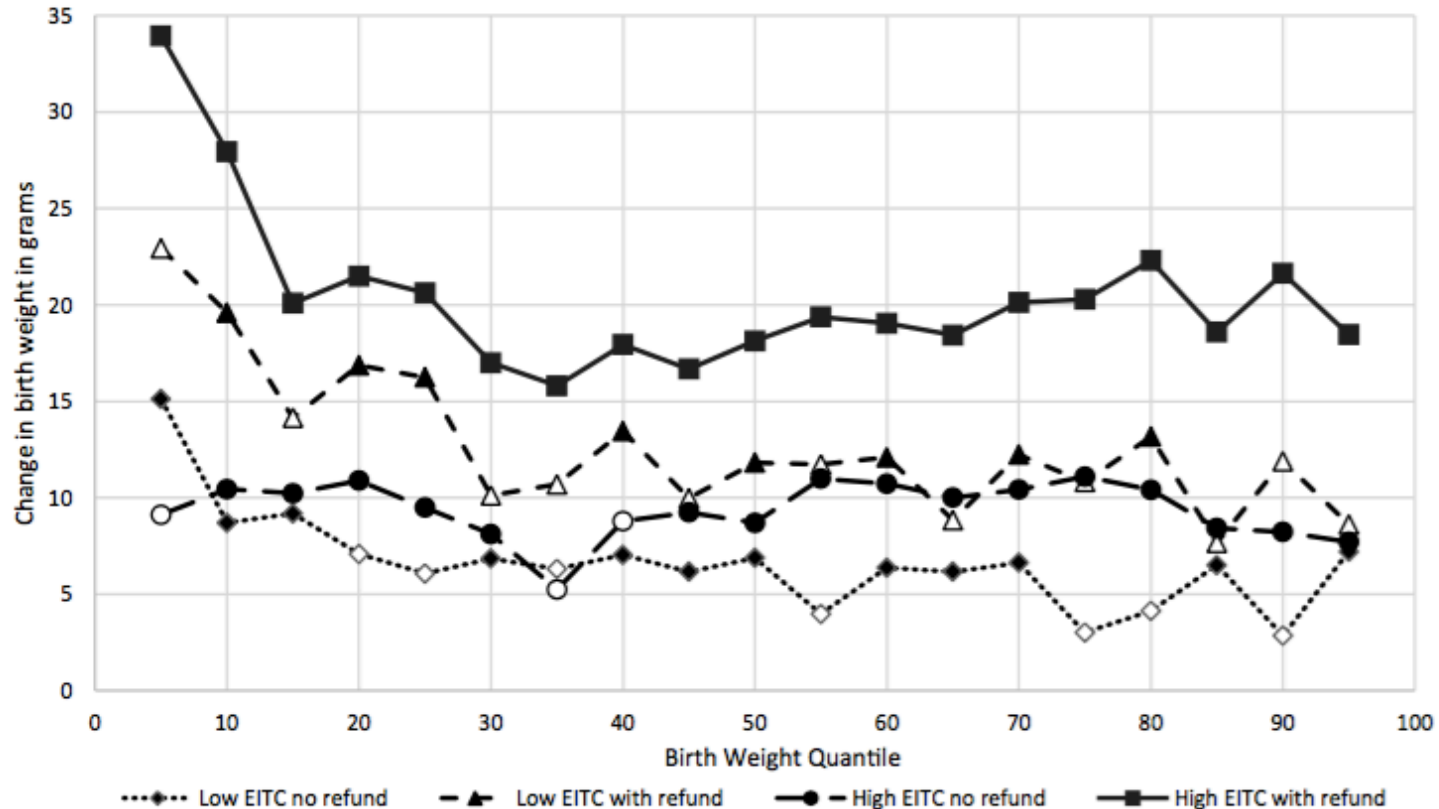


Fig. 2. Effects of EITC Generosity on Birth Weight Using Unconditional Quantile Regression at 5th through 95th Quantiles.

Note: N = 30,780,950. Solid marker indicates point estimate is statistically significant at the 5% level.



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SSM - Population Health

journal homepage: www.elsevier.com/locate/ssmph



Short Report

Effects of changes in earned income tax credit: Time-series analyses of Washington DC[☆]



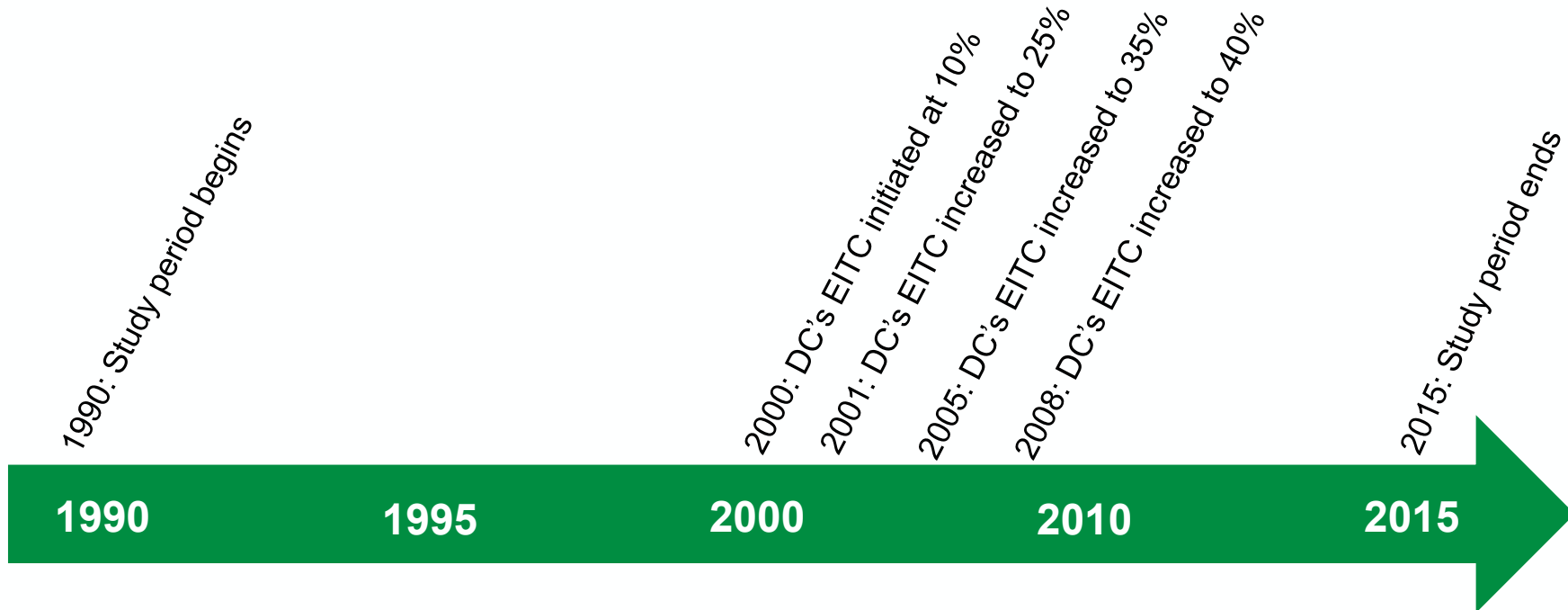
Alexander C. Wagenaar^{a,*}, Melvin D. Livingston^a, Sara Markowitz^b, Kelli A. Komro^a

^a Department of Behavioral Sciences and Health Education, Rollins School of Public Health, Emory University, 1518 Clifton Road, NE, GCR 556, Atlanta, GA 30322, USA

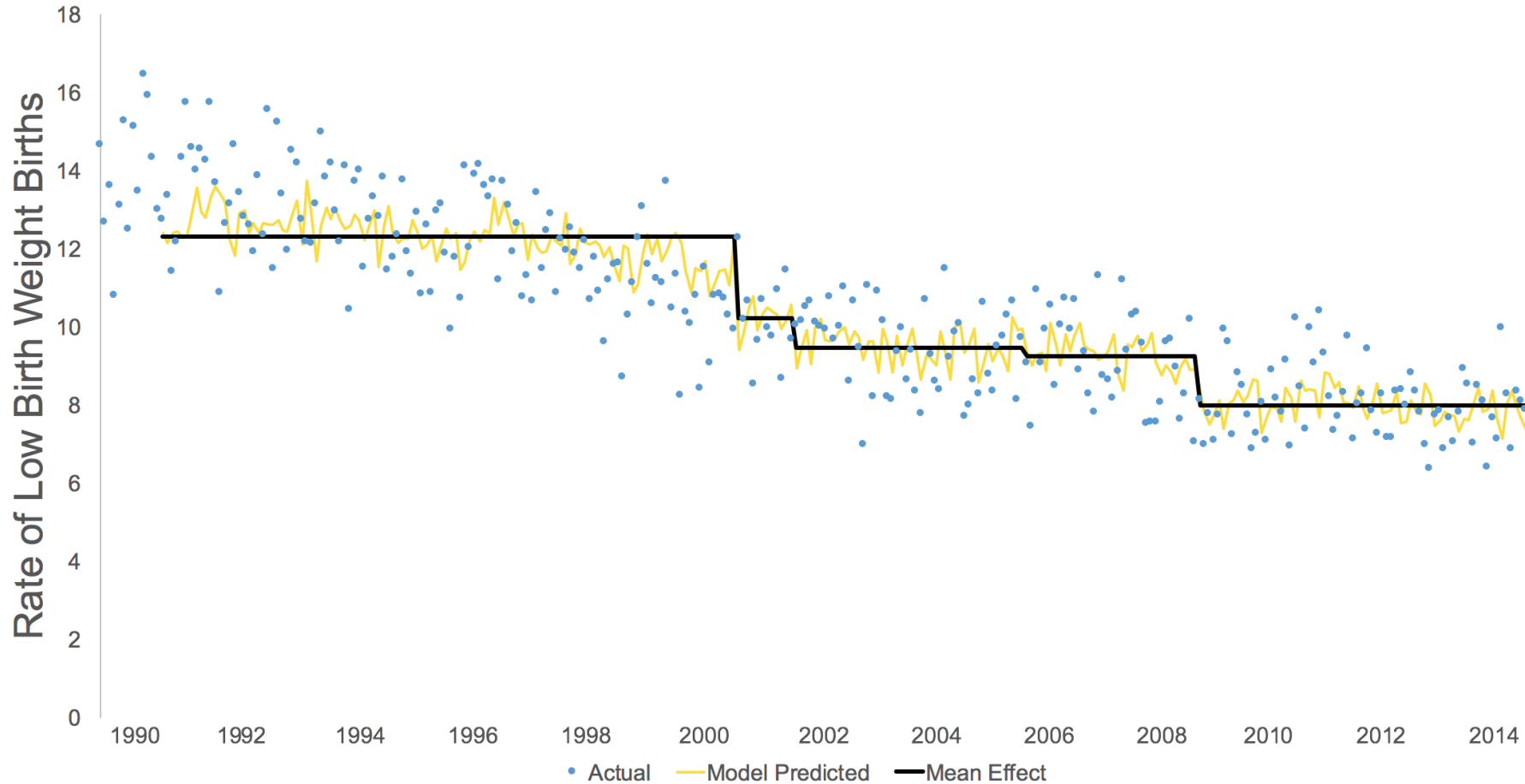
^b Department of Economics, Emory University, Atlanta, GA, USA

EITC in DC

- Four distinct policy changes over 8 year period
- Percentage of the federal EITC, fully refundable



Effects of EITC on Low Birth Weight



Bottom Line: Effects in DC

- 40% tax credit → 40% decrease in low birth weight births from baseline
- Prevents an estimated 349 low-weight births per year in DC

Health Equity
Volume 3.1, 2019
DOI: 10.1089/heq.2018.0061

Health Equity

Mary Ann Liebert, Inc.  publishers

ORIGINAL ARTICLE

Open Access

Effects of State-Level Earned Income Tax Credit Laws on Birth Outcomes by Race and Ethnicity

Kelli A. Komro,^{1,2,*} Sara Markowitz,³ Melvin D. Livingston,¹ and Alexander C. Wagenaar¹

Health Inequities

- Health inequities in birth outcomes by mother's income, education level and race
 - Percent low birth weight births (2016)
 - Hispanic women: 7% to 9.5%
 - non-Hispanic white women: 7%
 - non-Hispanic black women: nearly 14%
- Caused by a complex set of social factors across the life course
 - income inequality
 - education achievement gaps
 - residential segregation
 - toxic environment exposures

Results

- Larger beneficial effect among black mothers compared with white mothers for the probability of low birth weight and gestation weeks
- No significant differences in birth outcomes between Hispanic and white mothers



Bigger State Earned Income Tax Credits Lead to Healthier Babies



Some 1,047 babies in Georgia a year can be saved from low birth weight if lawmakers pass a Georgia Work Credit, according to Emory University researchers. A new study finds that state tax credits to support low-income working families are linked to better health outcomes for babies.

The research builds on a robust body of evidence that already highlights many health and economic benefits from the federal Earned Income Tax Credit (EITC).

Georgia lawmakers came close to passing a state tax credit to help working families earlier this year, and this move remains on the table for 2018. [Lawmakers can still support working families and boost the health of babies statewide.](#)

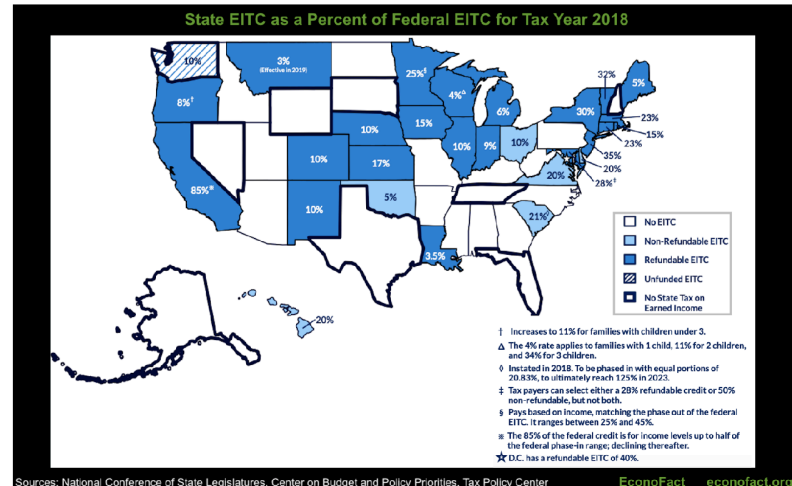
EITC
Funders Network

GRANT
MAKERS
IN
HEALTH

EARNED INCOME TAX CREDIT

The Potential of State Earned Income Tax Credits

By Kelli Komro and Sara Markowitz · March 14, 2019
Emory University



We're Just Getting Started

- Minimum wage and birth outcomes
- Minimum wage and EITC interactive effects
- Minimum wage and EITC optimum legal constructions
- TANF effects on maternal, infant and child outcomes
- Exploring differential effects by race/ethnicity
- Additional health outcomes
- Additional policies affecting social determinants
- Continued monitoring and coding of legal changes

Thank You! Kelli

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Immigration Law

