

Legal Epidemiology & Health Equity

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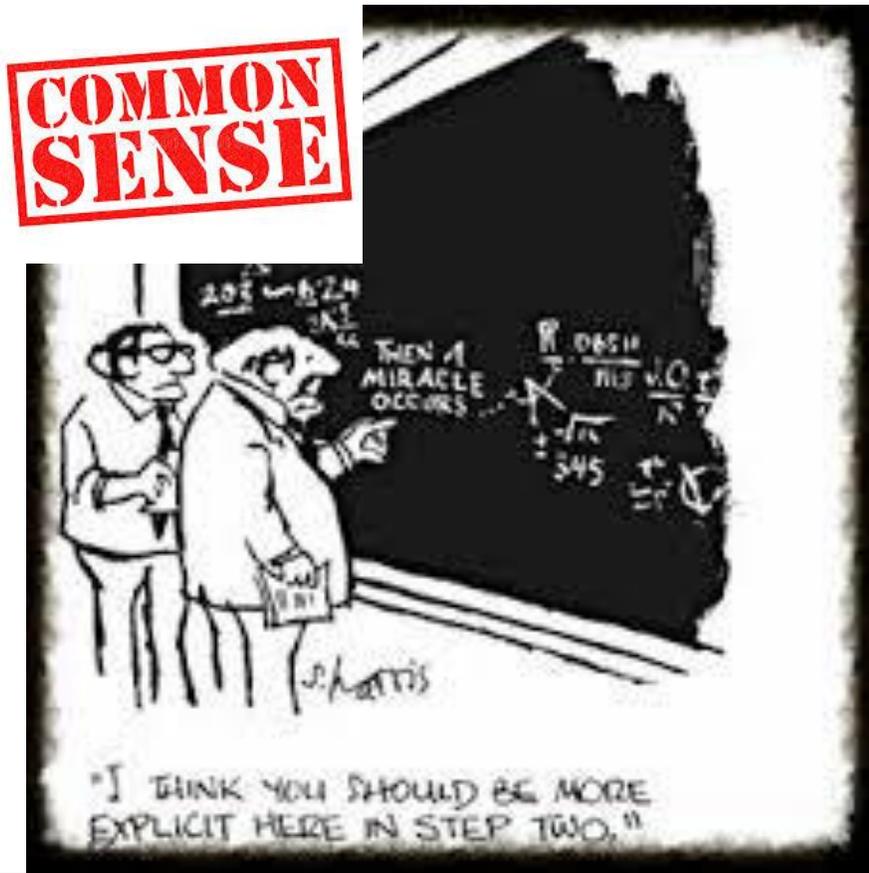
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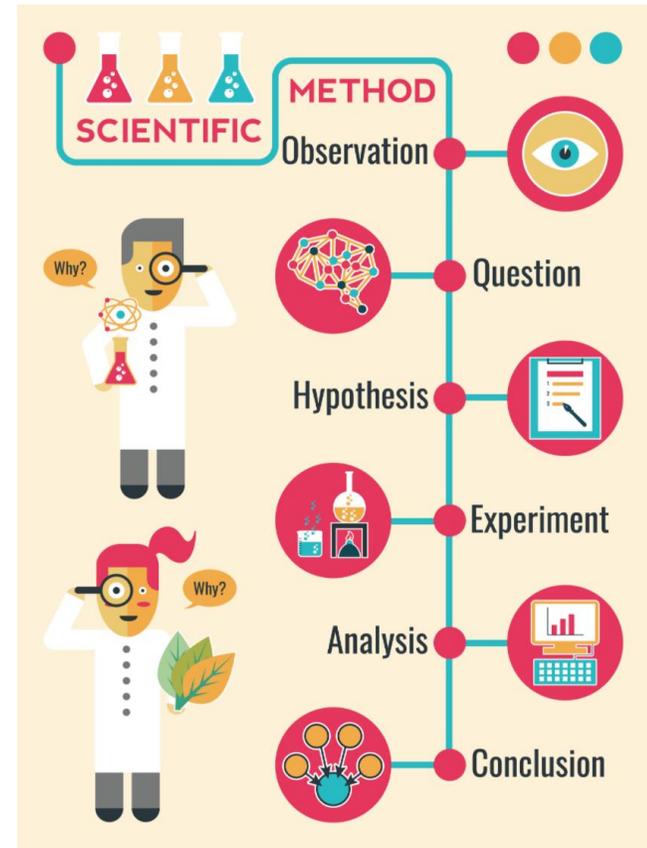
Objectives

- Define Legal Epidemiology
- Discuss principles and methods
- Research spotlight: state mental health insurance laws and treatment utilization

Evaluating Impact



VS.



Legal epidemiology is the scientific study and deployment of law as a factor in the cause, distribution, and prevention of disease and injury in a population



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Legal Epidemiology: The Science of Law

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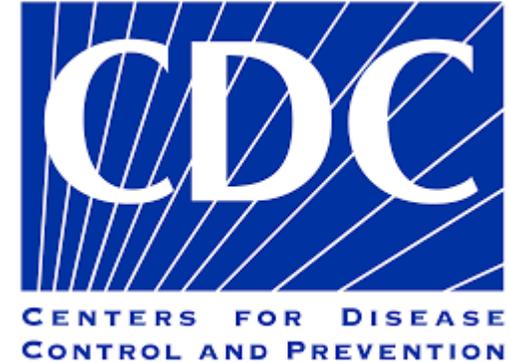
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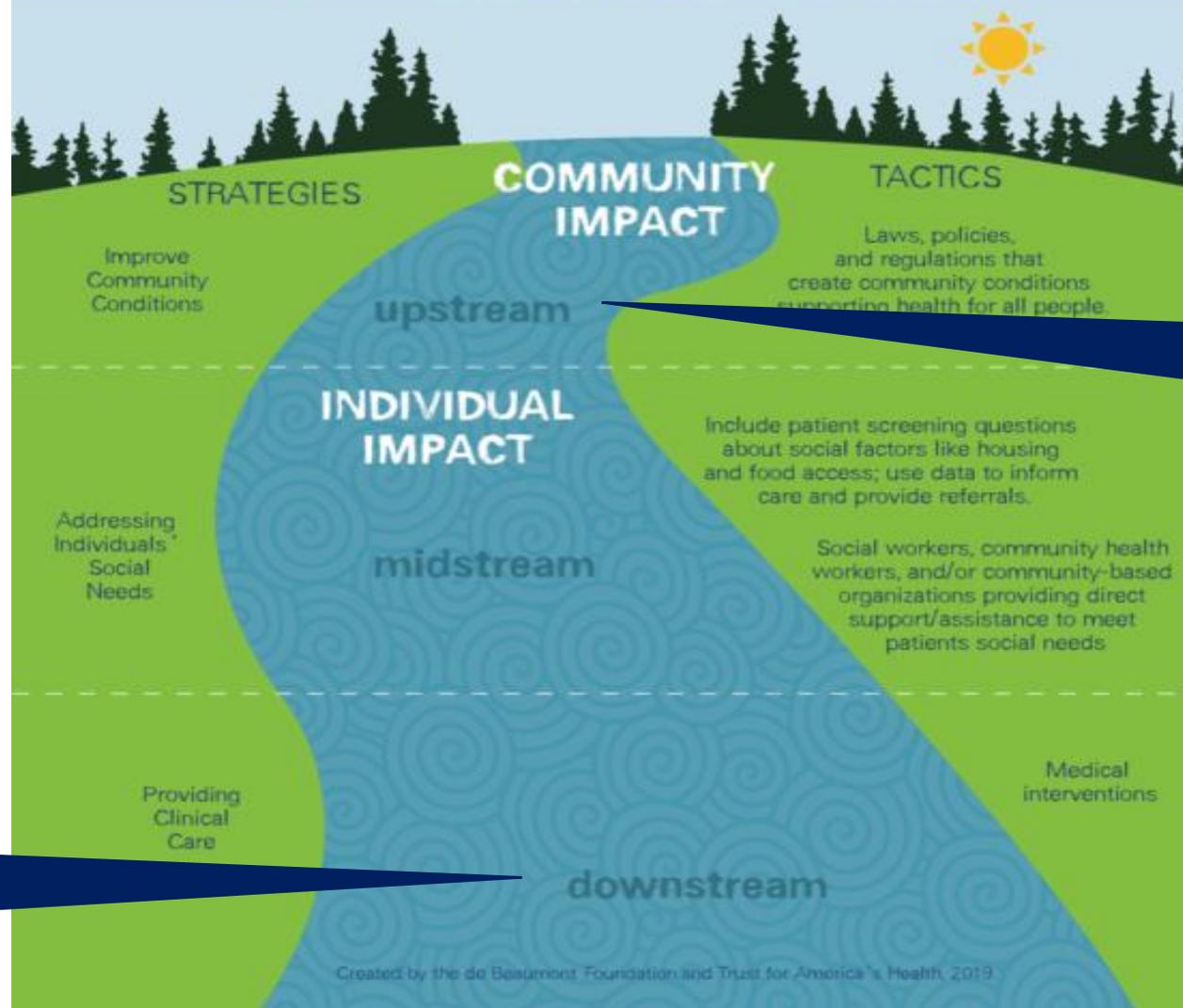


**Center for Public Health
Law Research**

Legal Epidemiology

1. **Policy Surveillance** – development of legal data sets
2. **Policy Evaluation** – connecting legal data and outcomes to measure impact
3. **End users**
 - **Advocates, policymakers:** visualize legal landscape and jurisdictional variation
 - **Researchers:** use legal data to evaluate impact on health outcomes

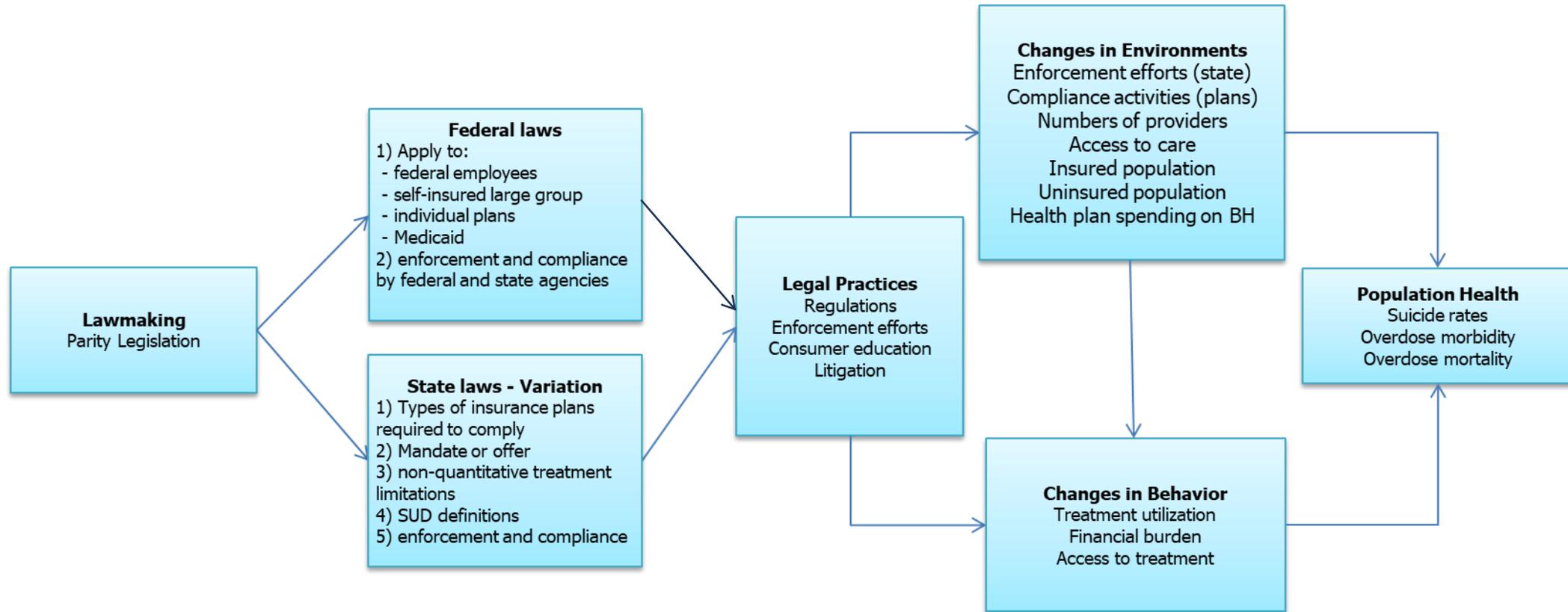
SOCIAL DETERMINANTS AND SOCIAL NEEDS: MOVING BEYOND MIDSTREAM



Population-level interventions (often focused on changing systems & environments)

Individual-level interventions (often focused on changing behaviors)

Causal Diagram



Burris S, Mays GP, Douglas Scutchfield F, Ibrahim JK. Moving from intersection to integration: public health law research and public health systems and services research. *Milbank Q.* 2012;90(2):375-408.

Policy Surveillance

Developing the legal data set needed to conduct a legal epi evaluation study

Steps & Principles:

1. Scoping & Background – subject matter experts
2. Coding Instrument Development
3. Protocol Development – search terms
4. Legal Coding – Duplicate, Blind, Quality Controls

Quality Controls
Blind Duplication
Consensus

Policy Surveillance

Full Parity, Minimum Mandated Benefit and Mandated Offering State Laws (Includes Archive Material)

State	Title/Law Citation/Effective Date	Insurance Policies Affected by law; Exemptions	Illnesses Covered	Type of Benefit	Co-pays and Co-insurance
Alabama	Contract providing for mental health services to entitle insured to reimbursement for outpatient and inpatient services; ST § 27-1-18; Eff. 1975	Group	Mental illness	Mandated Offering	Not Specified
	Mental illness coverage and health benefit plans; ST § 27-54-1; ST § 27-54-2; ST § 27-54-3; ST § 27-54-4; ST § 27-54-5; Eff. Jan. 1, 2001	Group	Mental Illness	Mental Health Parity	Must be equal



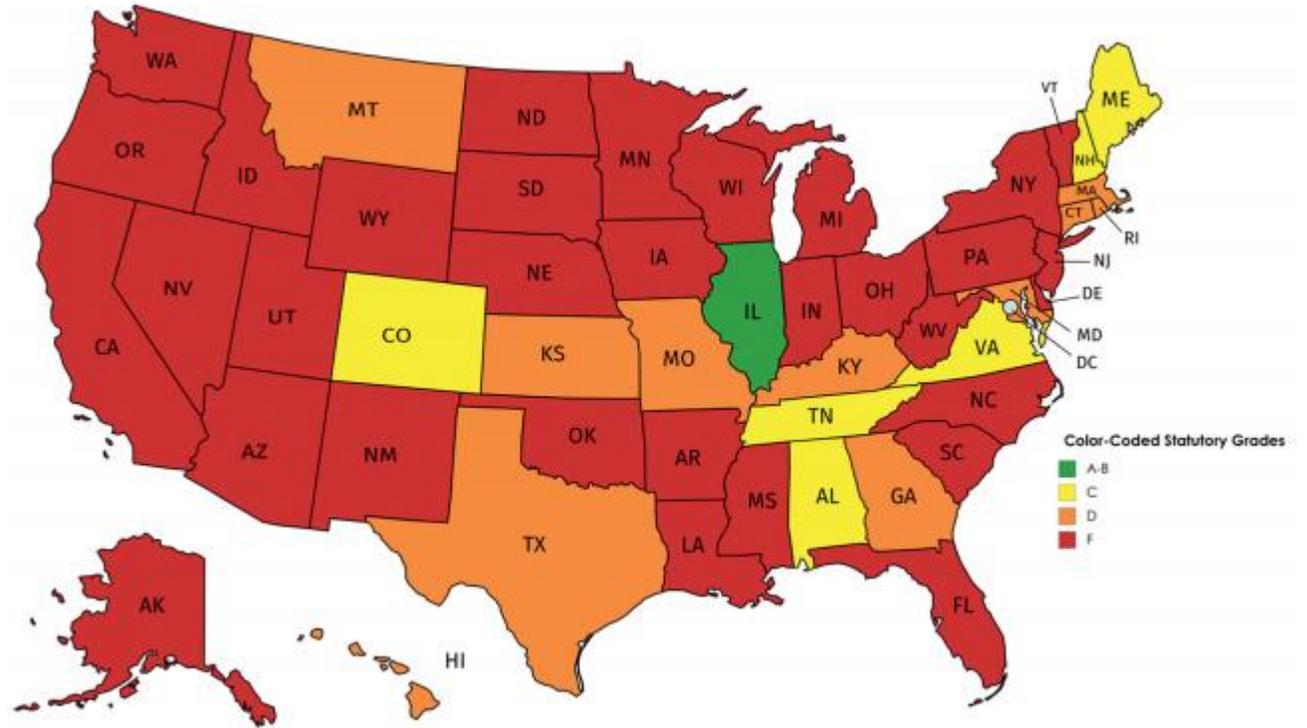
State	FIPS Code	Begin Date	End Date	PARITY	MAND	DEF-MI	DEF-DSM	ENF-AGEN	COMP-HP	STRENGTHEN	ENF-COMP
AK	2	1/1/1997	6/30/2006	0	0	0	0	0	0	0	0
AK	2	7/1/2006	3/22/2010	2	0	0	0	0	0	2	0
AK	2	3/23/2010	4/22/2014	0	0	0	0	0	0	0	0
AK	2	4/23/2014	1/2/2020	2	0	0	0	0	0	2	0
AL	1	1/1/1997	12/31/2000	0	0	0	0	0	0	0	0
AL	1	1/1/2001	12/19/2019	2	0	1	1	0	1	5	1
AR	5	1/1/1997	4/1/1997	1	1	0	0	0	0	2	0
AR	5	4/2/1997	7/30/2009	2	1	1	1	1	0	6	1
AR	5	7/31/2009	3/24/2020	2	0	1	1	1	0	5	1
AZ	4	1/1/1997	12/31/1997	0	0	0	0	0	0	0	0
AZ	4	1/1/1998	11/15/2019	1	0	0	0	0	0	1	0
CA	6	1/1/1997	6/30/2000	0	0	0	0	0	0	0	0
CA	6	7/1/2000	12/31/2017	2	1	1	0	0	0	4	0
CA	6	1/1/2018	1/10/2020	2	1	1	0	0	0	4	0
CO	8	1/1/1997	12/31/1997	0	1	0	0	0	0	1	0
CO	8	1/1/1998	8/7/2001	2	1	1	0	0	0	4	0
CO	8	8/8/2001	5/15/2019	2	1	1	0	1	0	5	1
CO	8	5/16/2019	12/19/2019	2	1	1	1	1	0	6	1
CT	9	1/1/1997	6/30/1997	0	1	0	0	1	0	2	1
CT	9	7/1/1997	12/31/1999	2	1	1	0	1	0	5	1
CT	9	1/1/2000	1/31/2020	2	1	1	1	1	0	6	1
DC	11	1/1/1997	10/20/2000	0	1	0	0	1	0	2	1

CASE STUDY



Evaluating State Mental Health and Addiction Parity Statutes: A Technical Report

23 state laws fail to provide comprehensive insurance coverage for behavioral health conditions



Creation of a Longitudinal Legal Data Set to Support Legal Epidemiology Studies of Mental Health Insurance Legislation

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PMID: 34320828 DOI: 10.1176/appi.ps.202100019

Abstract

Objective: This article describes policy surveillance methodology used to track changes in the comprehensiveness of state mental health insurance laws over 23 years, resulting in a data set that supports legal epidemiology studies measuring effects of these laws on mental health outcomes.

Methods: Structured policy surveillance methods, including a coding protocol, blind coding of laws in 10% of states, and consensus meetings, were used to track changes in state laws from 1997 through 2019-2020. The legal database Westlaw was used to identify relevant statutes. The legal coding instrument included six questions across four themes: parity, mandated coverage, definitions of mental health conditions, and enforcement-compliance. Points (range 0-7) were assigned to reflect the laws' comprehensiveness and aid interpretation of changes over time.

Results: The search resulted in 147 coding time periods across 51 jurisdictions (50 states, District of Columbia). Inter-coder consensus rates increased from 89% to 100% in the final round of blinded duplicate coding. Since 1997, average comprehensiveness scores increased from 1.31 to 3.82. In 1997, 41% of jurisdictions had a parity law, 28% mandated coverage, 31% defined mental health conditions, and 8% required state agency enforcement. In 2019-2020, 94% of jurisdictions had a parity law, 63% mandated coverage, 75% defined mental health conditions, and 29% required state enforcement efforts.

Conclusions: Comprehensiveness of state mental health insurance laws increased from 1997 through 2019-2020. The State Mental Health Insurance Laws Dataset will enable evaluation research on effects of comprehensive legislation and cumulative impact.

Keywords: Insurance; Law and psychiatry; Politics; Public policy issues.

Impact of Mental Health Insurance Legislation on Mental Health Treatment in a Longitudinal Sample of Adolescents

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[Free PMC article](#)

Abstract

Background: Mental health insurance laws are intended to improve access to needed treatments and prevent discrimination in coverage for mental health conditions and other medical conditions.

Objectives: The aim was to estimate the impact of these policies on mental health treatment utilization in a nationally representative longitudinal sample of youth followed through adulthood.

Methods: We used data from the 1997 National Longitudinal Survey of Youth and the Mental Health Insurance Laws data set. We specified a zero-inflated negative binomial regression model to estimate the relationship between mental health treatment utilization and law exposure while controlling for other explanatory variables.

Results: We found that the number of mental health treatment visits declined as cumulative exposure to mental health insurance legislation increased; a 10 unit (or 10.3%) increase in the law exposure strength resulted in a 4% decline in the number of mental health visits. We also found that state mental health insurance laws are associated with reducing mental health treatments and disparities within at-risk subgroups.

Conclusions: Prolonged exposure to comprehensive mental health laws across a person's childhood and adolescence may reduce the demand for mental health visitations in adulthood, hence, reducing the burden on the payors and consumers. Further, as the exposure to the mental health law strengthened, the gap between at-risk subgroups was narrowed or eliminated at the highest policy exposure levels.

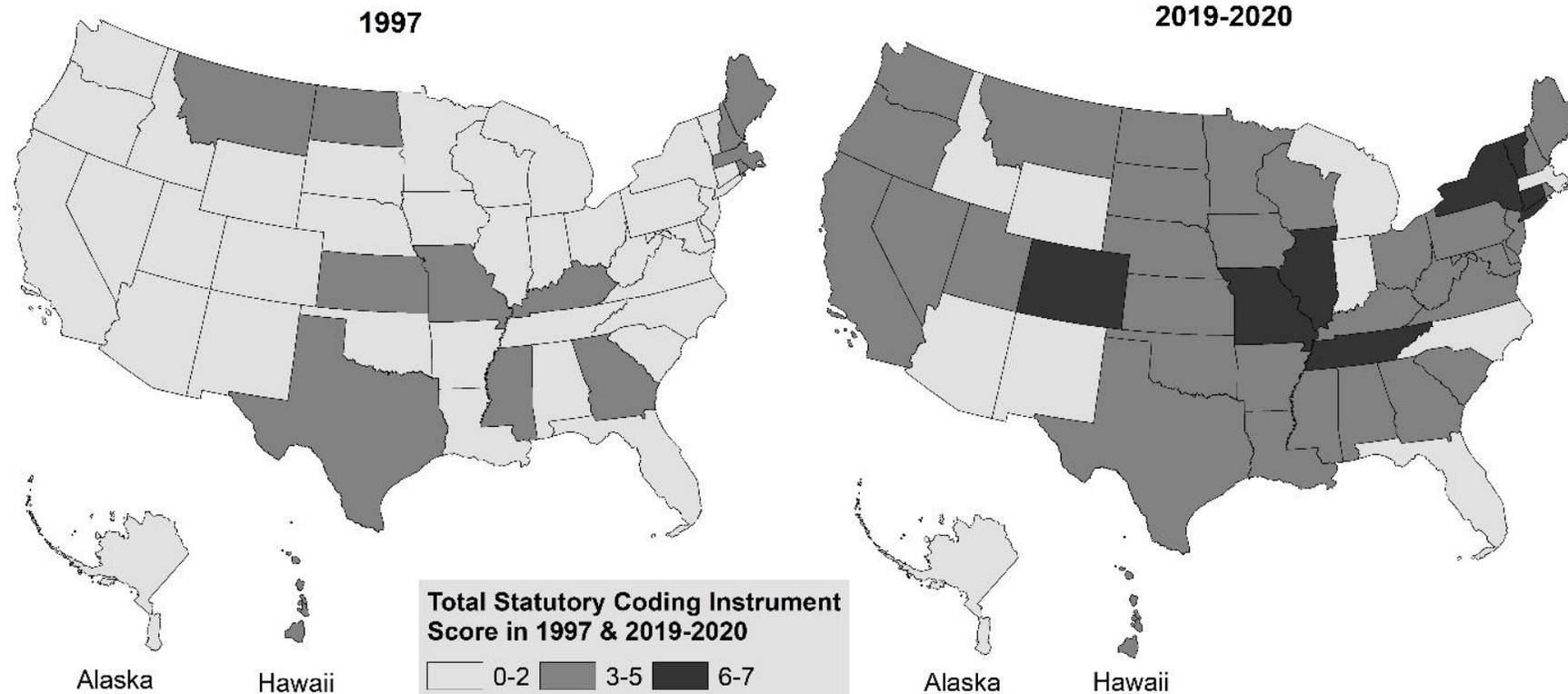
Statutory Coding Instrument

Table 1. Mental Health Parity Statutory Coding Instrument (SCI)	
SCI Question	SCI Answer Options
1. Does a state statute require that coverage provided for treatment of mental health conditions must be on the same terms and conditions as it is for other medical coverage?	Full parity Partial parity No parity
2. Does a state statute mandate health insurance/benefit plans to provide coverage for treatment of mental health conditions?	Yes No
3. Does a relevant state statute define mental illness or mental health conditions?	Yes No
4. Does a state statute define mental illness or mental health conditions as including all of the disorders listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM) or International Classification of Diseases (ICD)?	Yes No
5. Does a state statute require the state insurance department or other relevant state agency to enforce or implement the Federal Parity Law or state parity law?	Yes No
6. Does a state statute require health insurance/benefit plans to submit reports to the state insurance department or other relevant state agency demonstrating how they comply with the Federal Parity Law and/or any state parity law?	Yes No

Methods

- State mental health insurance statutes enacted on and after January 1, 1997 in all 50 states and the District of Columbia
- Coding was conducted from October 28, 2019 through March 24, 2020
- Legal database Westlaw
- Search terms: mental & (parity or insurance)
- Researchers used the historical notes for each law searched to identify materially different versions of the statutes over time

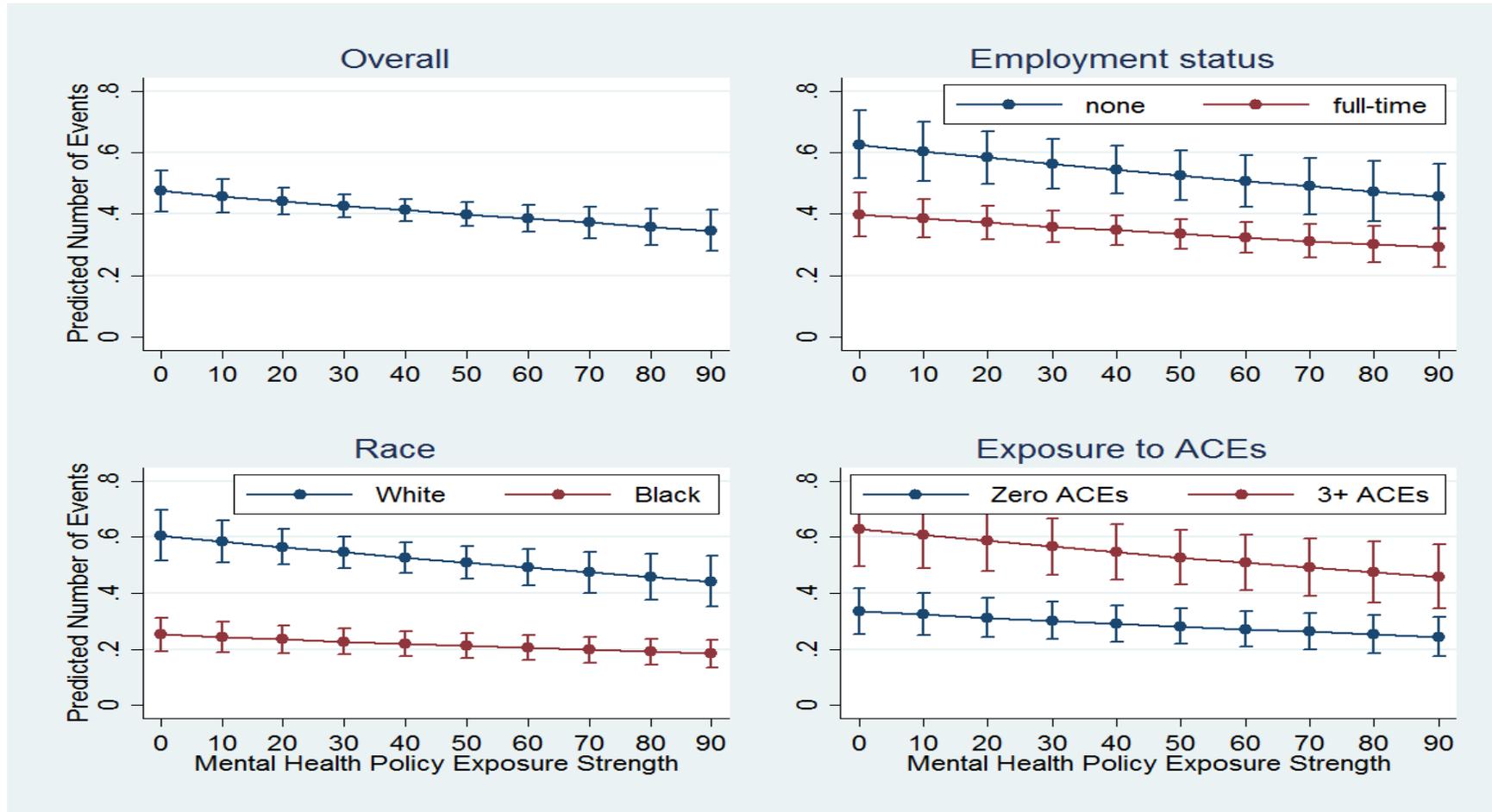
Legal Data Set



Evaluation

- Outcome Data: *National Longitudinal Survey of Youth 1997*
- Survey respondents interviewed as children (1997) and adults (2009-2011)
- Research Question: Does cumulative exposure to state mental health insurance laws affect utilization of mental health treatment services in adulthood?
- Analysis: Zero-inflated negative binomial regression model

Findings



Next Steps

- Substance use disorder (SUD) insurance laws
- Outcomes:
 - Spillover effects – commercial insurance vs Medicaid
 - Access to care – National Survey of Children’s Health
 - Difference-in-Difference – effects of changes in laws within single jurisdictions
 - Enforcement/compliance

Questions/Discussion