## Carrie E. Fry, MEd PhD

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#### **EDUCATION**

Harvard University Graduate School of Arts and Sciences (Cambridge MA), Ph.D. in Health Policy, May 2020. Dissertation: "Evaluating State-Driven Changes to the Medicaid Program: Unintended, Intended, and Methodological Implications"

Concentration: Evaluative Science & Statistics

This dissertation examined the effects of Medicaid expansion on jail-based recidivism, estimated changes in enrollment due to the termination of retroactive eligibility in Medicaid, and compared two quasi-experimental study designs oft-used in health services research.

Dissertation Committee: Richard Frank (chair), Benjamin Sommers, Laura Hatfield

**Horowitz Foundation** Dissertation Fellowship, September 2019-May 2020. **National Institute of Mental Health** Training Grant, August 2016-June 2020.

**Vanderbilt University**, George Peabody College (Nashville TN), M.Ed. Community Development & Action, May 2013

Concentration: Community Health and Policy

**Vanderbilt University**, George Peabody College (Nashville TN), B.S. Child Development, May 2011

### ACADEMIC APPOINTMENTS

Assistant Professor, Department of Health Policy, Vanderbilt University, July 2020-present

Scholar, Center for Health Services Research, Vanderbilt University, August 2020-present

## PRIOR EMPLOYMENT

GREYLOCK-MCKINNON ASSOCIATES, BOSTON MA

Doctoral Fellow, 2018-2020

T.H. CHAN HARVARD SCHOOL OF PUBLIC HEALTH, BOSTON MA

**Research Assistant,** Dept. of Health Policy and Management, 2017-2019

HARVARD MEDICAL SCHOOL, BOSTON MA

Research Assistant, Dept. of Health Care Policy, 2016-2020

VANDERBILT UNIVERSITY, NASHVILLE TN

Research Analyst, Dept. of Health Policy, 2014-2016

Carrie E. Fry, Vanderbilt Updated: June 27, 2024 1

## TENNESSEE PRIMARY CARE ASSOCIATION, NASHVILLE TN

Navigator Program Lead, 2013-2014

#### PROFESSIONAL ORGANIZATIONS

AcademyHealth
American Statistical Association
Association of Public Policy and Management
Association of Health Economists

2015 – present
2018 – present
2016, 2019 – present
2019 – present

## PROFESSIONAL ACTIVITIES

#### INTRAMURAL

Reviewer, Mini grant program, Office of Health Equity, Vanderbilt School of Medicine, 2022

Member, MPH Curriculum Committee, Vanderbilt School of Medicine, 2021 - present

Member, PhD Admissions Committee, Department of Health Policy, 2020 - present

Reviewer, MPH Practicum Colloquium Abstract Committee, Vanderbilt School of Medicine, 2020 – present

## **EXTRAMURAL**

Co-editor, special issue of Health Services Research on Social Care in the U.S., 2024 Discussant, American Society of Health Economists, 2023
Member, Early Career Advisory Group, Psychiatric Services, 2023 - present Member, Editorial Board, Health Services Research, 2023 - present Discussant, Association of Public Policy and Management, 2021, 2022
Abstract Reviewer, AcademyHealth Behavioral Health Interest Group, 2021
Captain, Standard Errors, Health Policy Co-Ed Softball Team, 2018-2020
At-large Representative, Graduate Student Council, Harvard University, 2017-2018
Program Representative, Graduate Student Council, Harvard University, 2016-2017

#### SPECIAL AWARDS OR RECOGNITION

Exceptional reviewer recognition, Annals of Internal Medicine, 2022

James F. Burgess Methods Article of the Year Award, Health Services Research, 2022

Joan P. Curhan Citizenship Award, Interfaculty Initiative in Health Policy, Harvard University, 2020

Donald J. Cressey Award (Best proposal in Criminal and Penology Practices), Horowitz Foundation, 2019

Distinction in Teaching Award, Harvard Faculty of Arts & Science, 2019

Distinction in Teaching Award, Harvard Faculty of Arts & Science, 2018

Top 40 Outstanding Senior, Vanderbilt University, 2011

## **TEACHING ACTIVITIES**

## LECTURES/SEMINARS/COURSES

Lecture, "Do Methodological Birds of a Feather Flock Together?" Vanderbilt, University Dept. of Health Policy, Fall 2022

Lecture, "Value in Behavioral Health", Vanderbilt University School of Medicine, 2022-2023

Lecture, "Mental Health Policy", Vanderbilt University School of Medicine, 2021

Lecture, "US Health Policy", Vanderbilt University School of Medicine, 2021

Instructor, Health Policy II, Vanderbilt University Dept. of Health Policy, 2021-present

Facilitator, Essentials of the Profession I, Harvard Medical School, 2019-2020

Teaching Assistant, Quantitative Methods for Program Evaluation, Harvard T.H. Chan School of Public Health, 2019

Course Assistant, Methods and Applications in Health Services Research, Harvard T.H. Chan School of Public Health, 2018-2019

Teaching Assistant, Core Seminar in Health Policy, Harvard University, 2018-2019

Teaching Assistant, Federal Public Policy and Population Health, Harvard T.H. Chan School of Public Health, 2018

## RESEARCH SUPERVISION

## **ACTIVE**

Sharon Fernandez	2023 - present	MD/PhD student, Dept. of Health Policy
Tatum Watson	2023 - present	PhD student, Department of Health Policy
Hannah Crook	2022 – present	PhD student, Department of Health Policy

	Robert Besaw	2022 - present	PhD student, Department of Health Policy
	Khrysta Baig	2022 - present	PhD student, Department of Health Policy
	Jason Sell	2022 - present	PhD student, Department of Health Policy
	Dennis Lee	2020 - present	PhD student, Department of Health Policy
	Nathaniel Tran	2020 - present	PhD student, Department of Health Policy
	Lexie Lipham	2021 - present	MPH student, Vanderbilt University
PA	ST		
	Astrid Yu	2022	Master student, Vanderbilt University
	Astrid Yu Dalton Abel	<ul><li>2022</li><li>2021</li></ul>	Master student, Vanderbilt University Master student, Vanderbilt University
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	Dalton Abel	2021	Master student, Vanderbilt University
	Dalton Abel Malik Robinson	2021 2021	Master student, Vanderbilt University Undergraduate, University of Missouri
	Dalton Abel Malik Robinson Annmarie Mede	2021 2021 2021 - 2023	Master student, Vanderbilt University Undergraduate, University of Missouri Medical student, Vanderbilt University

### RESEARCH PROGRAM

## Opioid Use Disorder and Residential Treatment in Medicaid

National Institute of Drug Abuse K01 Principal Investigator 06/15/2023 - 05/31/2028 \$852,185

State and federal policymakers have expanded access to residential treatment for substance use disorder (SUD) in the Medicaid program, broadening access to the full continuum of care, increasing the capacity in the greater SUD treatment system, and potentially spurring patients to seek care for an SUD. This project will examine the relationship between increasing coverage for residential treatment services among Medicaid beneficiaries with opioid use disorder and explore the implications of co-morbid SUDs.

A Multidisciplinary, Mixed Methods Analysis of the Implementation and Efficacy of School-Based Health Centers (SBHCs) and Mechanisms through which SBHCs Improve Child Mental Health and Education Outcomes

National Institute of Mental Health R01

03/01/2023 - 12/31/2026

Co-Investigator

\$1,515,687

Principal Investigator: Carolyn Heinrich (Vanderbilt University)

School-based health centers (SBHCs) increasingly serve as the "medical home" for vulnerable children, providing access to care for of all students nationally in public schools. Yet there are significant gaps in our understanding of SBHCs' effectiveness and

the extent to which they are reaching underserved subgroups of children. This project will fill these critical gaps in research and generate new, generalizable knowledge on program and policy levers that SBHCs can deploy to increase their effectiveness and reduce inequities in children's health and education outcomes in Tennessee.

## Connecting Low-Income Adults to Primary Care after Inpatient or ED Discharge

Vanderbilt University School of Medicine Provost's Office 07/01/2022 – 12/31/2024 Principal Investigator \$163,818

Healthcare systems and insurers have tried to reduce costs by improving the care and coordination provided to patients with high healthcare spending. Often termed, "hot spotting", these interventions seek to lower costs by reducing care provided in fragmented, high-cost settings by addressing the social determinants of health and improving patients' access to lower-cost, ambulatory settings. This study will evaluate the effect of direct referrals to primary care on health care utilization and outcome measures and elucidate the mechanisms through which primary care reduces use of the ED and inpatient admissions.

## A Pragmatic Evaluation of the Effects of Mixed Income Redevelopment on Low-Income Families: Evidence from Envision Cayce

Metro Nashville Development and Housing Agency Co-Investigator 10/01/2021 - 09/30/2022

Principal Investigator: Kevin Griffith

\$75,000

Exclusionary zoning practices and disinvestment in predominantly non-white, low-income neighborhoods have exacerbated neighborhood and housing-related outcomes, including mental health, physical and psychological safety, belonging, and educational achievement. Mixed income housing is one option that policymakers have employed to deconcentrate poverty and reduce the harms associated with housing segregation and under-funded public housing developments. This project will elucidate the mechanisms through which a mixed income redevelopment in Nashville, TN affects residents' lives, as well as the limitations and unintended consequences of this mixed-income housing redevelopment integration.

# Unintended Consequences of Medicaid Work Requirements: Substance Use Disorder Exemptions and Provider Supply

Brandeis/Harvard NIDA Center Principal Investigator 03/01/2019 - 12/31/2019

\$5,000

## PUBLICATIONS AND PRESENTATIONS

### REFEREED ARTICLES

1. Patrick SW, **Fry CE**, Jones TF, Buntin MB. Implementation of Prescription Drug Monitoring Programs associated with reductions in opioid-related death rates. 2016. *Health Affairs*. 35(7):1324-1332. [Epub 22 June 2016].

- 2. **Fry CE**, Nikpay SS, Leslie E, Buntin MB. Evaluating community-based health improvement programs. 2018. *Health Affairs*. 38(1): 22-29.
- 3. Sommers BD, **Fry CE**, Blendon RJ, Epstein AM. New approaches to Medicaid Expansion: Work requirements, Health Savings Accounts, and health care access. 2018. *Health Affairs*. 37(7): 1099-1108. [Epub 20 June 2018].
- 4. **Fry CE**, Sommers BD. Effect of Medicaid Expansion on health insurance coverage and access to care among adults with depression. 2018. *Psychiatric Services*. 69(11): 1146-1152. [Epub 28 August 2018]
- 5. Whitmore CC, White MN, Buntin MB, **Fry CE**, Calamari K, Patrick SW. State laws and policies to reduce opioid-related harm: A qualitative assessment of PDMPs and naloxone programs in ten US States. 2018. *Preventive Medicine Reports*. [Epub 30 December 2018]
- 6. Frank RG, **Fry CE**. The impact of medicaid expansion on access to naloxone. 2019. *Addiction*. 114, 1567–1574. [Epub 14 Apr 2019]
- 7. **Fry CE**, Tindle HA, Young C, Rogus EI, Frist WH, Buntin MB. Development of a tobacco control "prescription" in a Southern U.S. city. 2019. *Progress in Community Partnerships*. 13(3): 237-245.
  - Selected for journal's Beyond the Manuscript podcast
- 8. **Fry CE**, McGuire TG, Frank RG. The spillover effects of Medicaid expansion to the criminal justice system: Evidence from six urban counties. July 2020. *RSF: The Russell Sage Foundation Journal of the Social Sciences*. 6(4): 244-263.
- 9. **Fry CE**. Medicaid waivers and access to behavioral health services: What is known and what can be done. 2021. *Psychiatric Services*. 72(11): 1350-1353. [Epub 02 June 2021].
- 10. McDowell M, **Fry CE**, Nisavic M, Grossman M, Masaki C, Sorg E, Bird S, Smith F, Beach SR. Evaluating the association between COVID-19 and psychiatric presentations, suicidal ideation in an emergency department. *PLOS ONE*. 16(6): e0253805. [Epub 30 June 2021]
- 11. **Fry CE**, Hatfield LA. Birds of a methodological feather flock together: Comparing controlled pre-post designs. *Health Services Research*. 2021. 56(5): 942-952. [Epub 01 July 2021].
  - James F. Burgess Methods Article of the Year in HSR
- 12. Grossman M, Fry CE, Sorg E, MacLean RL, ... Beach S. Trends in suicidal ideation in an emergency department during COVID-19. 2021. *Journal of Psychosomatic Research*. 150: 110619. [Epub 15 Sept 2021]
- 13. Ripperger M, Lotspeich SC, Wilimitis D, Fry CE, ... Walsh CG. Ensemble learning to predict opioid-related overdose using statewide prescription drug monitoring program

- and hospital discharge data in the state of Tennessee. 2022. *JAMIA*. 29(1): 22-32. [Epub 19 Oct 2021].
- 14. Haber NA, Clarke-Deelder E, Feller E, ... Fry CE, ... Stuart EA. Problems with evidence assessment in COVID-19 health policy impact evaluation: a systematic review of study design and evidence strength. 2022. *BMJ Open.* 12(1):e053820. [Epub 11 Jan 2022].
- 15. Graves JA, **Fry CE**, Hatfield LA, McWilliams JM. Difference-in-differences for categorical outcomes. 2022. *Health Services Research*. 57(3): 681-692. [Epub 25 Feb 2022].
- 16. Cole E, Allen L, Austin A, ... Fry CE, ... Donohue JM. Outpatient follow-up and use of medications for opioid use disorder after residential treatment among Medicaid enrollees in 10 states. 2022. *Journal of Drug and Alcohol Dependence*. 241(1).
- 17. Allen L, MODRN, Cole E, ... Fry CE, ... Donohue JM. Use of residential opioid use disorder treatment among Medicaid enrollees in nine states. 2023. *Journal of Substance Use and Addiction Treatment*. 149.
- 18. Ramakrishnan A, **Fry CE**. The equity implications of the Affordable Care Act among people with past-year interactions with the U.S. criminal legal system. 2023. *Psychiatric Services*. [Epub 2 Aug 2023]

## OTHER PUBLICATIONS (CHAPTERS, COMMENTARIES, WHITE PAPERS, ABSTRACTS)

- 1. Buntin MB, **Fry CE**, Jain S. Medical schools and health policy: Adapting to the changing healthcare landscape. *NEJM Catalyst*. January 25, 2017.
- 2. Frank RG, **Fry CE**. Financing Treatment for Opioid Use Disorder: A Reflection on History. In Alan R Weil & Rachel Dolan (Eds.), *Confronting Our Nation's Opioid Crisis: A Report of the Aspen Health Strategy Group*. 2017: 71-90.
- 3. Frank RG, Fry CE. Medicaid Expands Access to Life-Saving Naloxone. *To the Point*. The Commonwealth Fund. New York, NY. July 5, 2017.
- 4. **Fry CE**, Sommers BD. Gains in Coverage and Access to Care from Louisiana's Medicaid Expansion Could be Reversed Under Congress' ACA Repeal-and-Replace Bills, *To the Point*. The Commonwealth Fund. July 6, 2017
- 5. Sandoe E, **Fry CE**, Frank RG. Policy Levers that States Can Use to Improve Opioid Addiction Treatment and Address the Opioid Epidemic. *Health Affairs Blog*. October 2, 2018.
- 6. **Fry CE**. Breaking down barriers to substance use disorder treatment. *Psychiatric Services*. November 1, 2023.

### **PRESENTATIONS**

**INVITED:** 

**Fry CE,** Hatfield LA. Birds of a feather flock together: Comparing difference-in-differences and comparative interrupted time series.

- Health Policy and Insurance Research seminar; Department of Population Medicine, Harvard Medical School & Harvard Pilgrim Health Care Institute (October 2022)
- Medicaid Research Center seminar; Department of Health Policy and Management, School of Public Health, University of Pittsburgh (November 2022)

**Fry CE.** *The State of Tennessee's Health.* 

- Student AMA Chapter, Vanderbilt School of Medicine. October 2021.
- Student AMA Chapter, Vanderbilt School of Medicine. October 2022.

**Fry CE**. Barriers to Accessing Care for People with Behavioral Health Conditions. Lefkowitz Hour, Shade Tree Clinic, Vanderbilt School of Medicine, April 2022.

Fry CE, Hatfield LA. *Do Birds of a Methodological Feather Flock Together?* Advanced Quantitative Methods Seminar; Department of Health Policy, Law, and Management, Boston University School of Public Health (September 2020)

**Fry CE, McGuire** TG, Frank RG. Context Matters: Medicaid Expansion's Spillover to Jail-Based Recidivism.

- Tulane University School of Public Health and Tropical Medicine, Department of Health Policy and Management (Jan. 2020; New Orleans, LA)
- Vanderbilt University School of Medicine, Department of Health Policy (Jan. 2020; Nashville, TN)
- Oregon Health and Science University, Center for Health Systems Effectiveness (Feb. 2020; Portland, OR)
- Columbia University, School of Social Work (Mar. 2020; New York, NY)

**Fry CE,** McGuire TG, Frank RG. *The Spillover Effects of Medicaid Expansion to the Criminal Justice System: Evidence from Six Urban Counties.* Presented at Russell Sage Foundation (May 2019; New York, NY).

## **ACADEMIC CONFERENCES:**

**Fry CE**, Rak S, Hatfield LA. *A wrinkle in time: Time aggregation in difference-in-differences*. Presented at International Conference for Health Policy Statistics (January 2023; Scottsdale, AZ)

**Fry CE**, Hatfield LA. *Birds of a feather flock together: Comparing controlled pre-post designs*. Presented at WNAR 2021 (Western North America Region of International Biometric Society; June 2021; virtual)

**Fry CE,** Hatfield LA. *Do Birds of a Methodological Feather Flock Together?* Presented at International Conference for Health Policy Statistics (January 2020; San Diego, CA)

**Fry CE,** McGuire TG, Frank RG. The Spillover Effects of Medicaid Expansion to the Criminal Justice System: Evidence from Six Urban Counties. Presented at:

- Academy Health Annual Research Meeting (June 2019; Washington DC)
- ASHEcon Annual Conference (June 2019; Washington DC)

**Fry CE**, Sommers BD, Blendon RJ, Epstein AE. *New Approaches to Medicaid Expansion:* Work Requirements, Health Savings Accounts, and Health Care Access. Presented at: Academy Health Annual Research Meeting; June 2018; Seattle, WA.

**Fry CE**, Patrick SW, Jones TF, Buntin MB. *Prescription Drug Monitoring Programs and Opioid-Overdose Deaths*. Presented at Association for Public Policy and Management Annual Meeting; November 2016; Washington, DC.

## **POSTER PRESENTATIONS:**

**Fry CE**, Ramakrishnan A. *The long-term implications of the Affordable Care Act on people involved in the criminal legal system*. Poster presented at: Academy Health Annual Research Meeting; June 2022; Washington, DC.

Fry CE, Hatfield LA. *Do Birds of a Methodological Feather Flock Together?* Poster presented at: Academy Health Annual Research Meeting (June 2020; Conference moved online and poster withdrawn due to COVID-19)

**Fry CE,** Sommers BD. Health Reform & Adults with Depression: Changes in Coverage and Access to Care After Medicaid Expansion. Poster presented at: Academy Health Annual Research Meeting; June 2018; Seattle, WA.

**Fry CE,** Nikpay SS, Leslie E, Buntin MB. *Evaluation of Community Health Initiatives*, 2002-2012. Poster presented at: Academy Health Annual Research Meeting; June 2017; New Orleans, LA.

**Fry CE**, Buntin MB. *Framing the Community Health Conversation*. Poster presented at: Academy Health Annual Research Meeting; June 2015; Minneapolis, MN.

## **REVIEWER SERVICE**

Preventing Chronic Disease, Health Affairs, American Journal of Evaluation, Journal of Comparative-Effectiveness Research, Health Services Research, Journal of Research on Educational Effectiveness, Annals of Internal Medicine, INQUIRY, American Journal of Managed Care, Psychiatric Services, JAMA Network Open, Journal for the Healthcare of the Poor and Underserved, JAMA Psychiatry, Substance Abuse and Treatment, JAMA Health Forum, Journal of Behavioral Health Services & Research, American Journal of Preventive Medicine, Journal of Rural Health, International Journal of Drug Policy

## **MEDIA APPEARANCES**

## Internet/Blog/Podcast

NBC News, Quoted, "Millions set to lose Medicaid coverage as pandemic-era rule expires" March 31, 2023. (<u>link</u>)

Morning Consult, Quoted, "If the Affordable Care Act falls, people battling drug addiction will be hit especially hard, experts say" October 21, 2020. (link)

Progress in Community Health Partnerships, Beyond the Manuscript, October 2019. (link)