

Transit and Treatment: Effectiveness of Transit Systems to Improve Substance Use and Mental Health In Connecticut

**University of Connecticut (Jeffrey Cohen and Shane Murphy), UConn Health (Carla Rash),
and Capitol Region Council of Governments (Steven Huleatt)**

Research-In-Progress Presentation
January 24, 2024



Jeffrey Cohen, PhD

- Economist; UCONN Professor
- Expert in transit and real estate
- Past empirical research includes substance use treatment costs; other public health issues

UCONN

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Steven Huleatt, MPH

Steven Huleatt currently serves the Capitol Region Council of Governments (CRCOG) as the Public Health Emergency Preparedness (PHEP) Grant Manager and as the Metropolitan Medical Response System (MMRS) Project Manager in Hartford, CT. He is also an Adjunct Instructor in the University of Connecticut's Department of Public Health Sciences. Prior to joining the CRCOG, Mr. Huleatt was a local public health director for 25 years.

Transit and Treatment Research Questions

- Problem: Access to care is an equity issue (in demographically diverse areas)
- Can new transit enhance treatment access (and improve equity)?
- Do SUD treatment facilities' proximity to a new transit line:
 - Increase patient volumes?
 - Reduce unbillable clinician time (missed appointments) ?
 - In turn, push providers down their unit cost curves?
 - If integrated (e.g. MH & SUD services), are there cost savings?
- Can the 3 sectors coalesce and act upon the research findings?

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RESEARCH ARTICLE



Transit and treatment: Aligning systems to address substance use in Connecticut

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Abstract

Objective: Test hypotheses that proximity to new transit improves substance use disorder treatment provider cost efficiency (i.e., economies of scale and scope).

Data Sources and Study Setting: Connecticut substance uses disorder treatment providers/programs. A 2015 rapid transit line opening with 10 stations, near some providers/programs. Providers' annual operating costs from publicly available federal tax

- Transit and Treatment Advisory Panel
 - Monthly Virtual Meetings, May 2020 through December 2023
 - Representatives from:
 - CT Department of Mental Health and Addiction Services
 - CT Department of Public Health
 - CT Department of Transportation
 - Capitol Region Council of Governments
 - University of Connecticut, UConn-Health, Yale University
 - 5 local treatment providers

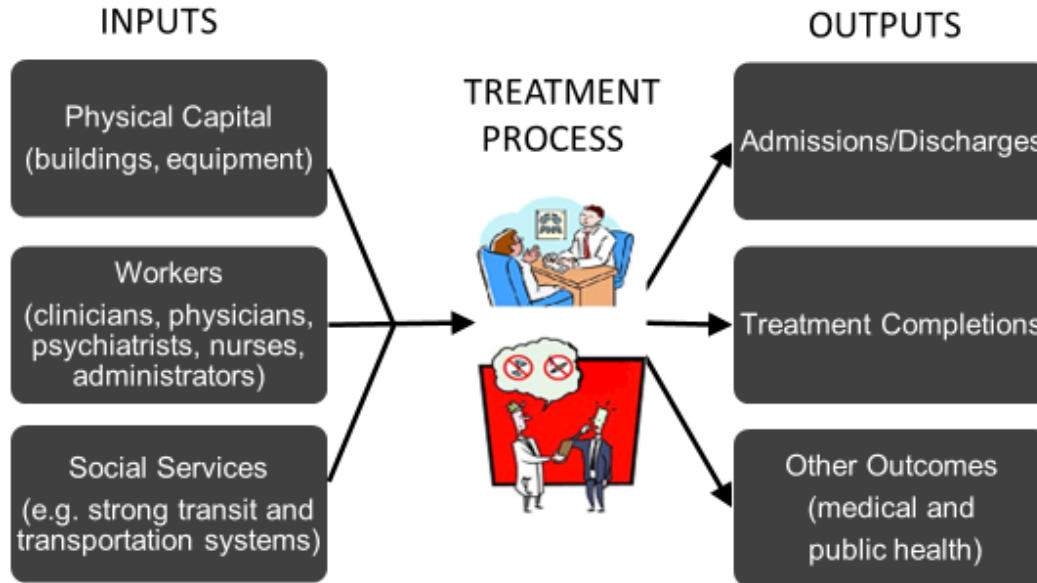
- Community-Based Scholarship: NIH Proposal (ComPASS) in February 2023:
 - **Transit and Housing: Eliminating Treatment Outcomes Disparities for Addictions (THE TOD for Addictions)** (not funded)
- Led by CT DMHAS, UCONN, UConn-Health, and Yale: Proposed a “Transit Toolkit” to Address:
 - Structural Factors: Disparities in homelessness, substance use disorder treatment access, and behavioral health needs, between racial/ethnic minorities and the remainder of the population, are the key structural factors in Connecticut (CT).
 - Health Outcomes: Substance Use Disorder mortality is one outcome we will consider. Maintaining employment, staying in treatment/completion, and stable housing, are among the National Outcome Measures (NOMs) (SAMHSA (2019)) that we will also study.
 - Health Disparity Population(s) of Interest: Racial and ethnic minorities, ages 18 and above.
 - Geographical Region: Hartford and New Haven, CT.

- Conference Presentations and Media Citations, Including:
 - Canadian Broadcast Corporation interview (April 2023)
 - International Health Economics Association Congress, South Africa (July 2021)
 - Community Transportation Association of America (invited 2021, cancelled due to Covid-19 pandemic)
 - Memphis/Shelby County, Tennessee Homeless Consortium (2022)
 - NACCHO Conference (July 2024 - submitted, awaiting response)
 - Regular S4A-RWJF webinars (grantee meetings, ResProg, Think Tank, 2020-24)

- Broad Range of Research Activities, Some of Which Not Described Above
 - Traditional Regression-Based Quantitative Analysis
 - Community-Based Research – Systems Alignment Efforts
 - Parallel Research Efforts that Evolved During Our Project Timeframe

Transit and Treatment Research Approach

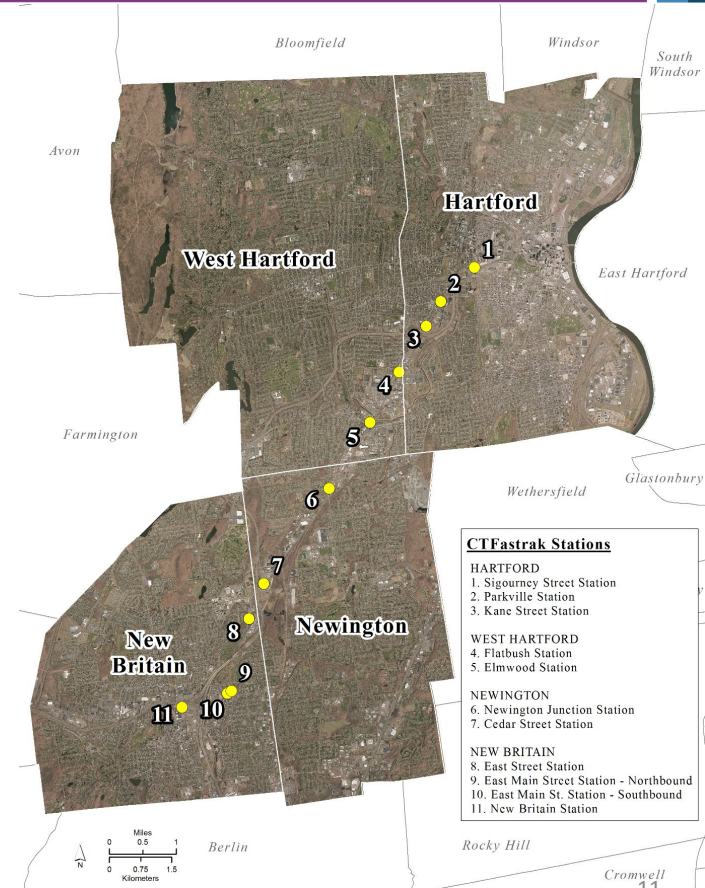
Figure 1: The Substance Use Disorder Treatment Production Process



- Potential Solution: Study Cost Structure for Substance Use Treatment When There is a Transit System Expansion
- Role of 3 Sectors: Social Services – Inputs; Medical Treatment Process; Medical and Public Health Outcomes
- Work With All 3 Sectors on an Advisory Panel to Implement System Alignment

Difference-In-Differences; Advisory Panel

- Program/Provider Data from CT DMHAS (client counts, completions, demographics)
- 175 providers reported data to DMHAS for 1596 programs (2012-2018) in the entire state of CT
- Data for 20 different program types
- About 32,000-39,000 client interactions each year
- Annual financial data (operating costs) from IRS
- 2015 **CTfastrak** bus rapid transit station openings in Hartford County, CT
- 17% of programs within one mile of a station
- Advisory panel meetings: discuss/implement system alignment (CT DMHAS, CT DPH, CT DOT, 5 providers, regional planning agency, UConn/UConn Health/Yale)



- Lower Provider Operating Costs Near New Transit After Opening
- Less Costly to Treat Multiple Services at Same Provider After Opening
- More Clients Treated At Providers Near Transit After Opening
- No Significant Effect of New Transit Proximity on Treatment Outcomes
- Advisory Panel group has been brainstorming on potential follow-up ideas

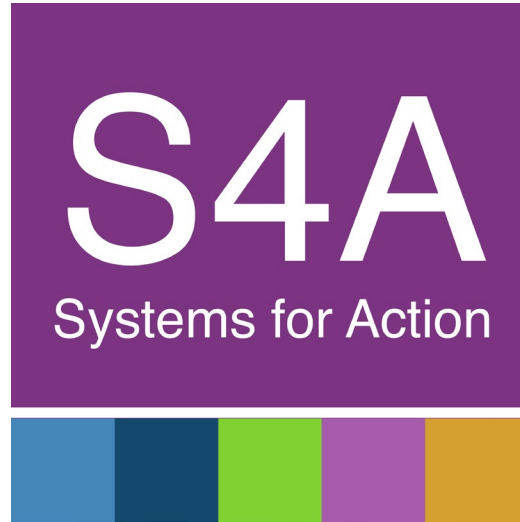
- Alternative First Responders Project, City of Hartford (Led by Dr. Carla Rash):
 - Clinicians respond instead of law enforcement
 - Being honored by the City of Hartford (today)
- CT DMHAS and CT DOT: “Transit HOP” (Dr. Kimberly Karanda):
 - Bringing Services to Individuals Frequenting Urban Transit Stations in New Haven

- Future Collaborations Between State Agencies, UConn, and Providers:
 - Explore Approaches to Expand Upon Ongoing Efforts to Consider Other Transit Stations in the state?
- This May Lead to Improved Medical Care to Underserved Individuals
- Potential to Alleviate Public Health Issues of Addiction (e.g., Opioid Crisis)

- Incorporate Affordable Housing:
 - Explore Partnering with CT Department of Housing?
 - Consider Brining In Connecticut Housing Finance Authority?
- Consider Causes of Treatment Outcomes: Spending Impact on Outcomes
- Drill Down to Analyze the Demographics and the Effects on Individual Patients

- Our Team Extends Appreciation to:
 - Systems for Action and the Robert Wood Johnson Foundation
 - Our Advisory Panel Members from All Agencies, Universities, and Organizations
 - CT DMHAS for Sharing Much of the Data Needed for this Project

Questions?



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If you would like to receive a **certificate of completion** for today's ResProg webinar, please complete the survey at the end of the session.

One will be emailed to you.

Open Call for Proposals



\$2.5 Million is Available to Measure Systems Alignment Solutions

Research studies must propose collaborative, cross-sector approaches to dismantle forms of structural racism and inequities that are embedded within our systems.



[Letter of Intent:](#)
Due by February 7

Virtual Office Hours:
[Wednesday, January 31](#)
[Monday, February 5](#)

February 14, 2023 | 12pm ET

Multisector Task-Sharing to Improve Mental Health in Harlem, NY

The City University of New York

February 28, 2023 | 12pm ET

Integrating Health and Social Services through a Novel Independent Practice Association

Stanford Medical

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