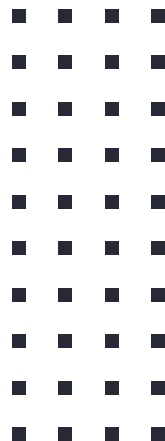




SUMR @ PENN 2021

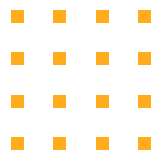
Combining Statewide Data-Linkages on Opioid Overdose



Presentation by: Sona Fokum

Mentoring by: Dr. Jake Morgan and
Dr. Zachary Meisel

August 17th, 2021



Project Overview

CHERISH Research

Center for Health Economics of Treatment Interventions for Substance Use Disorder, HCV, and HIV)

- a multi-institutional Center of Excellence funded by the National Institute on Drug Abuse (NIDA)

Goal: build an online resource to organize and unify state-level information for opioid overdose data and policies

Aim: to detail tips for success and potential challenges to establishing linked-records databases at the state level to address the opioid crisis.

How: assemble a group of experts and stakeholders and to understand how data linkages have been handled across the country.



**Weill Cornell
Medicine**



EXCEPTIONAL CARE. WITHOUT EXCEPTION.

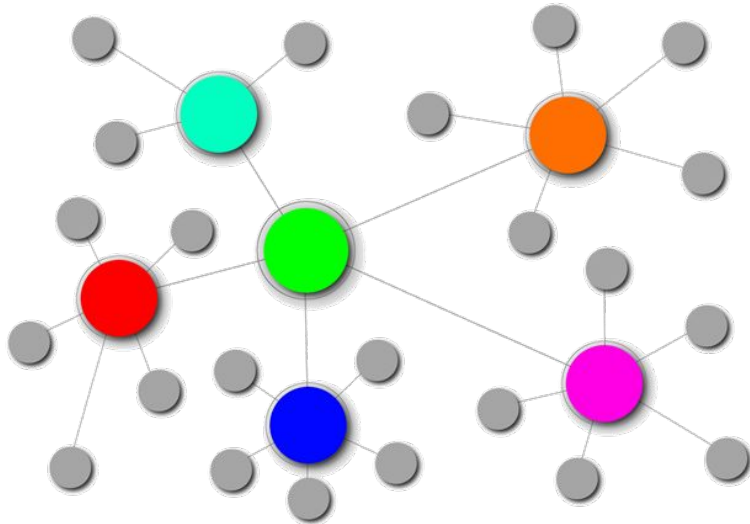


LEONARD DAVIS INSTITUTE of HEALTH ECONOMICS



What is Data Linkage?

- a method of bringing information from different sources together about the same person or entity to create a new, richer dataset



- highlights key gaps or challenges for existing data-collection and analysis efforts
- outlines potential steps that could be taken to overcome these challenges

Significance

- Combining the many public health interventions reduces opioid overdose
- Many stakeholders and departments have limited resources/information
- There is a need for a database or model states can follow

THE OPIOID EPIDEMIC BY THE NUMBERS



70,630

people died from drug overdose in 2019²



10.1 million

people misused prescription opioids in the past year¹



1.6 million

people had an opioid use disorder in the past year¹



2 million

people used methamphetamine in the past year¹



745,000

people used heroin in the past year¹



50,000

people used heroin for the first time¹



1.6 million

people misused prescription pain relievers for the first time¹



14,480

deaths attributed to overdosing on heroin (in 12-month period ending June 2020)³



48,006

deaths attributed to overdosing on synthetic opioids other than methadone (in 12-month period ending June 2020)³



SOURCES

1. 2019 National Survey on Drug Use and Health, 2020.
2. NCHS Data Brief No. 394, December 2020.
3. NCHS, National Vital Statistics System. Provisional drug overdose death counts.

Literature Review

An Assessment of Fatal and Nonfatal Opioid Overdoses in Massachusetts (2011 – 2015)

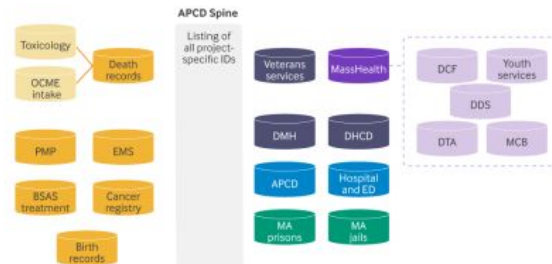
*The Commonwealth of Massachusetts
Executive Office of Health and Human
Services*

Using Data to Guide Action in Response to the Public Health Crisis of Opioid Overdoses

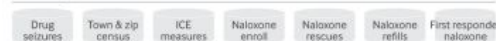
*Monica Bharel, MD, MPH, Dana Bernson,
MPH, Abigail Averbach, MSc*

Public Health Data Warehouse Structure

This is a visual representation of the data warehouse. Each dataset sits in a separate data container and information is brought together for analysis using project-specific IDs, a complete listing of which serves as the "spine" of the data warehouse. This method ensures data privacy for individuals.



Community level data:



Data Sources

- Public Health
- Public Safety
- Criminal Justice
- Medical Claims & Hospital
- MassHealth (Medicaid)
- Other State Agencies
- Aggregate
- Service Indicator Flags

Acronyms


- APCD: All-Payer Claims Database
- BSAS: Bureau of Substance Addiction Services
- DCF: Department of Children & Families
- DDS: Department of Developmental Services
- DHCD: Dept. of Housing & Community Development
- DMH: Dept. of Mental Health
- DTA: Department of Transitional Assistance
- ED: Emergency Department
- EMS: Emergency Medical Services
- ICE: Index of Concentration at the Extremes
- MCB: MA Commission for the Blind
- OCME: Office of the Chief Medical Examiner
- PMP: Prescription Monitoring Program

Source: Massachusetts Department of Public Health
NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society



Methods



- Propose the idea during meetings with CHERISH Team
 - Through search of Google Scholar, PubMed, and public health and health department websites
 - Developed a list of first contacts
 - Hosted information interviews with stakeholders
- 

Initial State Research

B34						
	A	B	C	D	E	
1	State	Department/Center	Contact	Notes	Source of information (published paper, project, etc.)	Addi
2	Alabama	Alabama Department of Public Health	Phone: (334) 206-5226	The Alabama Department of Pu	https://www.alabamapublichealth.gov/pharmacy/ddpi.html	not c
3	Alaska	Alaska Mental Health Trust	complete this DataTel: 907-269	The national opioid epidemic	https://alaskamentalhealthtrust.org/wp-content/uploads/2019/C	not c
4	Arizona	Arizona Department of Health Service	Cara M. Christ, MD, Director Ar	We also continue to monitor da	https://directorsblog.health.azdhs.gov/update-on-the-opioid-fro	not c
5	Arkansas	Arkansas Opioid Response Dashboar	Arkansas Drug Director Kirk Lan	The Arkansas Opioid Response l	https://afmc-analytics.maps.arcgis.com/apps/MapSeries/index.h	not c
6	California	UCLA	Vandana Joshi: VJoshi@mednet	collaboration may not feasible for this grant due to budget core data is from Los Angeles county m have		
7	Colorado	Colorado Department of Public Health	odprevention@state.co.us	The Drug Overdose Dashboard	https://cohealthviz.dphe.state.co.us/t/PSDVIP-MHPPUBLIC/views	not c
8	Conneticut	Yale School of Medicine	William C. Becker, Robert Heim	Abstract: Objective: Describe m	Merging statewide data in a public/university collaboration to add	not c
9	Delaware	Delaware Health and Social Services	Karyl Thomas Rattay, MD, MS, L	As drug overdose deaths cor	https://www.dhss.delaware.gov/dhss/dph/files/dedrugoverdose	not c
10	Florida	Florida's State Opioid Response Proje	Juliet Gerstenfeld Juliet.Gerster	Florida's State Opioid Response	https://www.myflfamilies.com/service-programs/samh/opioidST	not c
11	Georgia	Georgia Department of Public Health	Opioid Misuse response unit ga	The Opioid and Substance Misu	https://dph.georgia.gov/stopopioidaddiction/georgias-opioid-res	not c
12	Hawaii	Department of Health State of Hawaii	Hawaii Department of Health A	The annual report covering Fisc	https://health.hawaii.gov/opppd/files/2020/12/2021-ADAD-Leg	not c
13	Idaho					not c
14	Illinois	Illinois Department of Public Health	Jennifer Epstein, Director of Str	Opioid data dashboard	https://idph.illinois.gov/OpioidDataDashboard/	not c
15	Indiana					not c
16	Iowa	Iowa Department of Public Health	Randy Mayer, Chief Bureau of H	This report summarizes the dev	https://idph.iowa.gov/Portals/1/userfiles/40/Vulnerability%20Inc	not c
+		Sheet1		Explore		

The Heterogeneous Mix

Academic Articles



Methodology | Open Access | Published: 04 January 2021

Merging statewide data in a public/university collaboration to address opioid use disorder and overdose

[William C. Becker](#) , [Robert Heimer](#), [Catherine M. Dormitzer](#), [Molly Doernberg](#), [Gail D'Onofrio](#), [E. Grau](#), [Kathryn Hawk](#), [Hsiu-Ju Lin](#), [Alex M. Secora](#) & [David A. Fiellin](#)

[Addiction Science & Clinical Practice](#) **16**, Article number: 1 (2021) | [Cite this article](#)

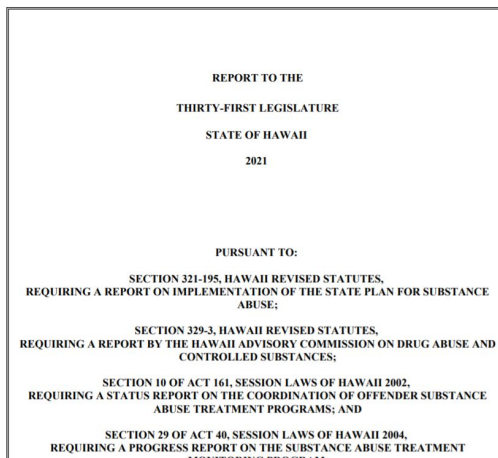
900 Accesses | 4 Altmetric | [Metrics](#)

Abstract

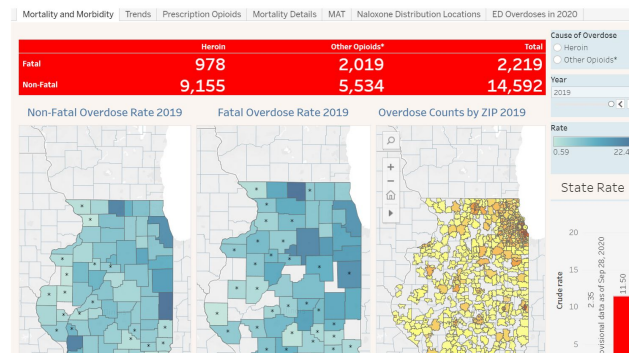
Objective

Describe methods to compile a unified database from disparate state agency dataset person-level data on controlled substance prescribing, overdose, and treatment for opioid use disorder in Connecticut

Reports



Dashboards



Stakeholder Interviews

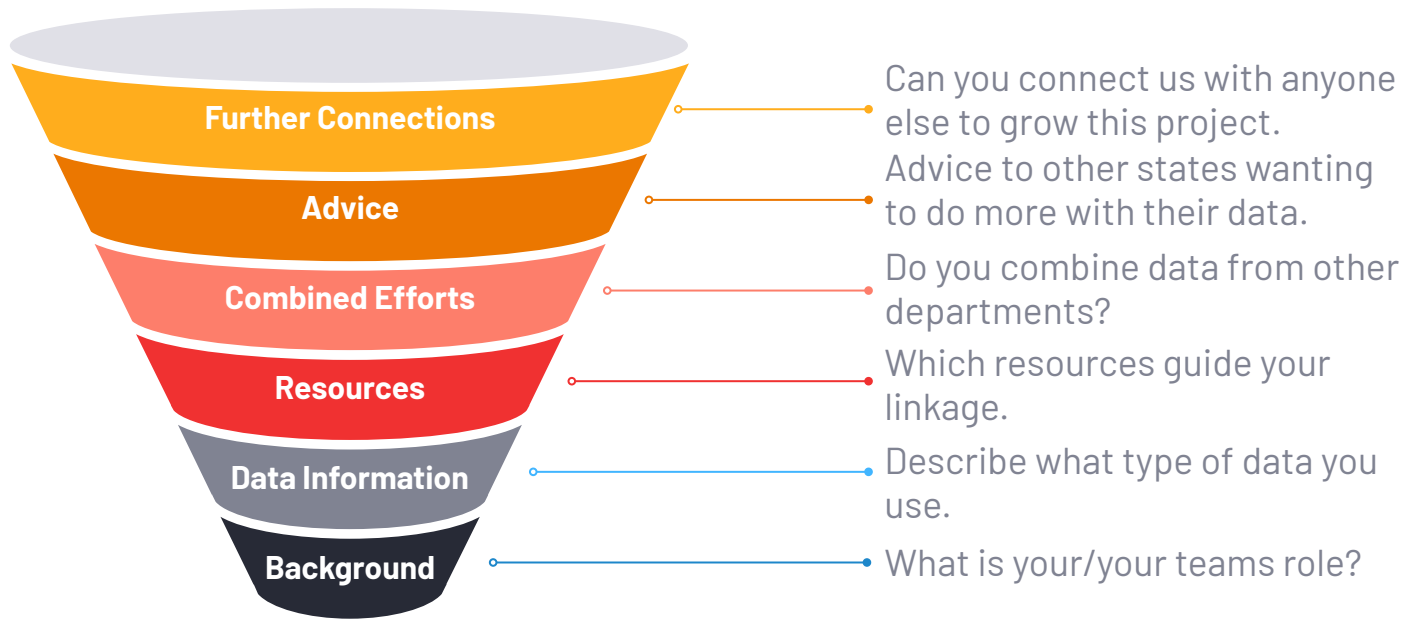
First Group of Contacts:

Kentucky	Maryland
Tennessee	Illinois
Utah	Delaware
Maine	Pennsylvania
New York	Connecticut
Ohio	

Methodology of First Contacts:

- Personal contacts
- Wide range
- Intimate for organizational purposes

Interview Questions





Main Points from Interviews

- Experts in data-linkage range from interns to Chief of Directors
- There are varying opinions on whether legislature should be involved in the dissemination of these linked-record databases
- Some interested in public presentation of data and further combination from different departments
- Many would find a model and a collaborative group helpful

Lessons Learned

- There is great value in personal relationships and networking
- Patience and diligence are key for a thorough search
- How to conduct and Information interview with experts and stakeholders in this field



What's Next?

- Continue interviews with stakeholders
- Build more secondary and tertiary connections with new states
- Find more information about legislative mandates within different states and whether data experts find it helpful or harmful
- Organize collaborative meeting/conference with the stakeholders from multiple states across the nation

Acknowledgements:



Dr. Jake Morgan



Dr. Zachary Meisel



Thank you!

Questions or Comments?