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HEALing Communities Study

# Equity in Access: Naloxone, MOUD and COVID-19 Services

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Dr. Dawn Goddard-Eckrich, Associate Research Scientist – Columbia University, School of Social Work.



# Dawn A. Goddard-Eckrich

## Leadership

Dr. Dawn Goddard-Eckrich is the Associate Director of SIG.

## Bio

Dr. Dawn Goddard-Eckrich is an Associate Director of the Social Intervention Group and Associate Research Scientist with over 17 years experience leading the successful implementation of five NIH funded studies of behavioral interventions: [Eban](#), [WORTH](#), [WINGS](#), [PACT](#), and [E-WORTH](#). Her experience includes developing and implementing programs and interventions to address the health disparities affecting underserved populations in NIDA funded clinical trials. Dr. Goddard-Eckrich has extensive experience in primary data collection, including expertise in recruitment and retention of marginalized populations, project management, mixed methods research, fidelity measures and development of various study protocols.

Dr. Goddard-Eckrich is also the Director of the Community Collaborative Research Network (CCRN), which is a collaborative partnership comprised of representatives from community-based organizations, health service agencies, government organizations, and SIG. The CCRN's focus includes research, training, education and advocacy primarily among justice-involved individuals and communities disproportionately affected by legal involvement in NYC.



## Dawn A. Goddard-Eckrich

Associate Director, SIG; Associate Research Scientist, School of Social Work

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# Overview of the HEALing Communities Study (HCS)



# HEALing Communities Study:

Funded in April 2019, HCS is the NIH's largest study funded for community-based research (\$350 million)

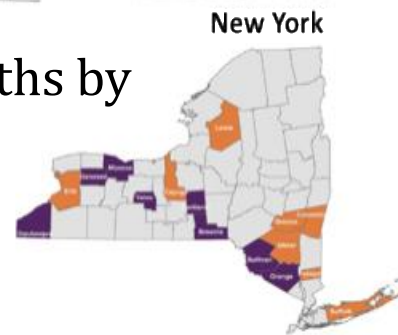
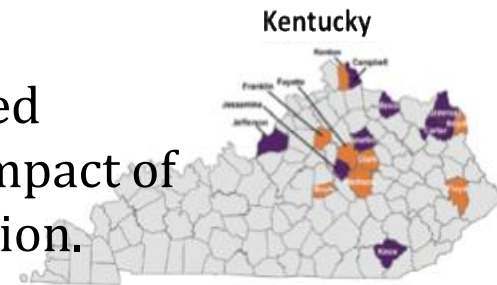
Multisite parallel-arm cluster randomized waitlist-controlled trial evaluating the impact of Communities That Heal (CTH) intervention.

Implemented in 4 states, 67 communities

**Goal:** Reduce Opioid-Related Overdose Deaths by 40% in 3 years

## Secondary outcomes:

- Increase naloxone distribution
- Increase access/utilization of MOUD
- Decrease high risk opioid prescribing
- Increase number of People with OUD who receive MOU
- Increase length of time in treatment
- HIV and HCV





# Partnerships: Universities

- Columbia University
  - School of Social Work
  - Psychiatry/New York State Psychiatric Institute
  - Mailman School of Public Health
  - Data Science Institute
  - Columbia University Information Technology (CUIT)
- Albert Einstein College of Medicine/Montefiore Medical Center
- City University of New York
- Weill Cornell Medical College
- New York University School of Medicine
- University of Miami
- Yale University

## HCS Communities

	Overall	KY	MA	NY	OH
Total HCS community population	<b>10,144,261</b>	1,823,027	875,086	2,357,192	5,088,956
Opioid overdose death rate (per 100,000)	<b>33.4</b>	38.2	40.6	28.3	27.5
Number of communities by rural vs urban	<b>29 rural 38 urban</b>	7 rural 9 urban	5 rural 11 urban	8 rural 8 urban	9 rural 10 urban
Medicaid expansion?	--	Yes	Yes	Yes	Yes

**20% Black & Latinx**

# Community Engagement through Coalitions

- Community coalitions in each county are charged with deploying EBPs to reduce overdose deaths
- Membership consists of policymakers, health and substance use providers, people with lived experience or family members who lost loved ones to overdose, county governmental officials, law enforcement and criminal justice, prevention providers, business leaders (25-40 people total)
- Coalitions are supported by the community's local government (Health or Mental Health Commissioners), other local politicians and policy makers
- Coalitions required to use a data-driven approach to select and implement EBPs

# Communities that HEAL Intervention (CTH)

- At minimum, coalitions are required to focus on four EBPs (but can choose more):
  - Expand overdose education and distribution of Naloxone (an injectable or oral drug that reverses overdose)
  - Improve access to Medication for Opioid Use Disorders (MOUD)
  - Safer Opioid Prescribing for acute pain across all healthcare systems
  - Reduce stigma against Naloxone use, people who use drugs, and those who receive drug treatment and their families



# Community-based Participatory Research (CBPR)

- **Sharing power between the researchers and community:** fosters co-learning and co-designing plans and solutions
- **Data-driven implementation:** Up-to-date data to inform the definition and landscape of the problem and the solution. Improve data systems and rapid access to local data and state data on overdose deaths
- **Sustainability:** includes a plan for long-term sustainability prior to the completion of the research

# Engagement Across Multiple Sectors

## Health Care

- EMS                      Health Departments
- Emergency Depts.      Pharmacists
- Hospitals                Primary/Specialty Care

## Criminal Justice

- Pre-trial programs, Drug Courts
- Correctional facilities, Police Departments
- Probation/parole, Halfway Houses

## Behavioral Health

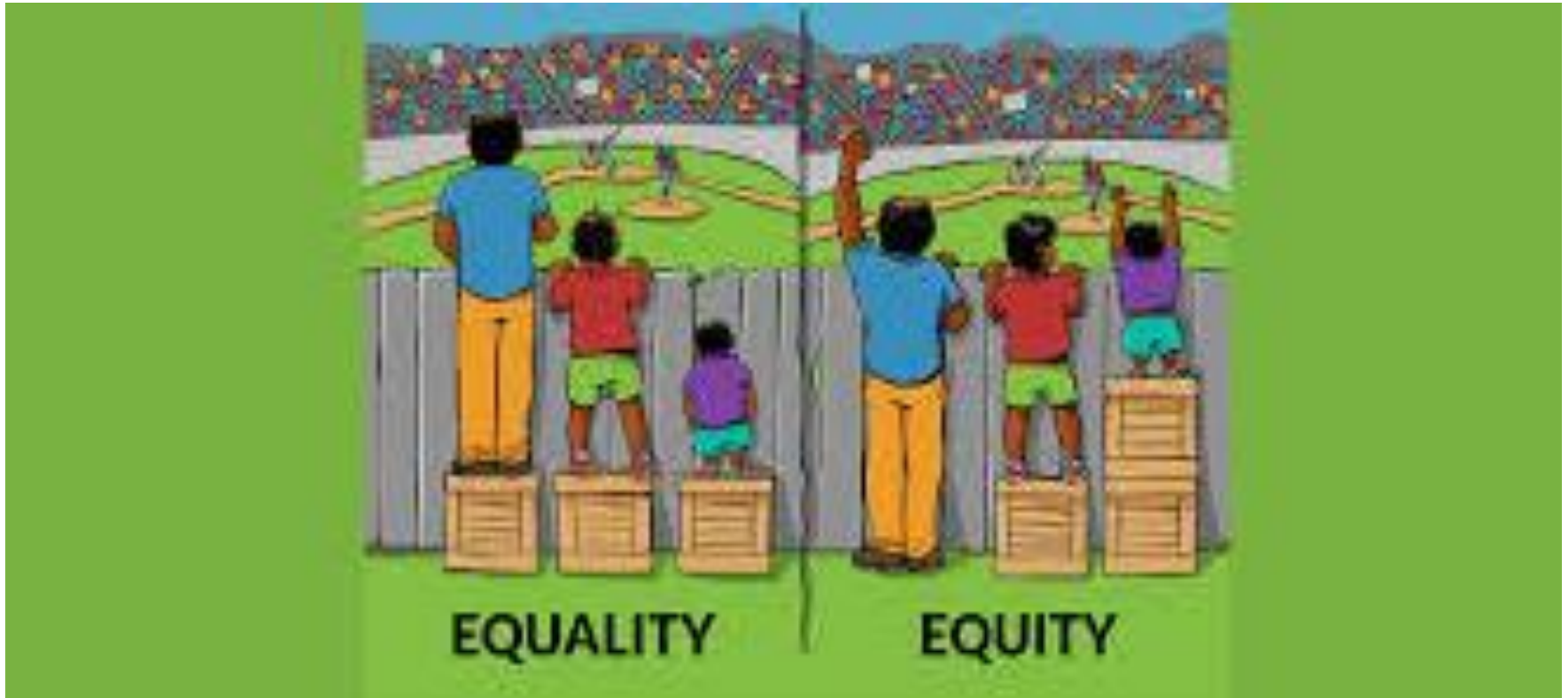
- SUD Treatment
- Social Services
- Mental Health Treatment

Winhusen, T., Walley, A., Fanucchi, L.C., Hunt, T.... Chandler, R., 2020.

# Communication Campaign

- **Objectives:**
  - Increase demand for and access to naloxone
  - Increase prescriptions and access to MOUD
  - Reduce stigma against people who use drugs, Naloxone, MOUD, recovery, and encourage family and friends to support MOUD treatment
    - Messaging included: Opioid use disorder is a medical disease, people with OUD deserve the best medical treatment, and anyone can develop OUD
- **Target Audience:**
  - People with lived experience and their loved ones
  - Key opinion leaders
  - Healthcare and other providers
  - HCS communities

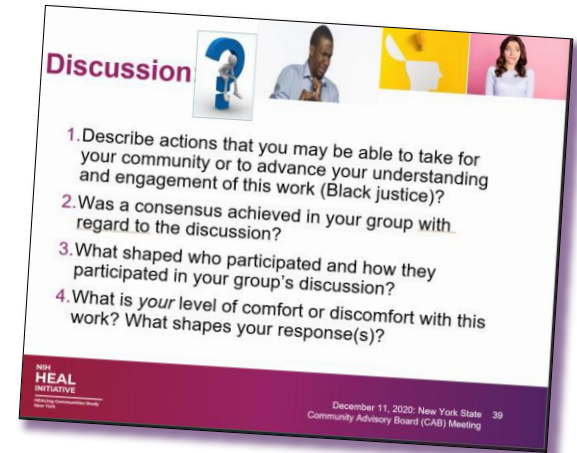
# Addressing Equity?



- The term “**equity**” refers to fairness and justice and is distinguished from equality: Whereas equality means providing the same to all, equity means recognizing that we do not all start from the same place and must acknowledge and make adjustments to imbalances.
- The process is ongoing, requiring us to identify and overcome intentional and unintentional barriers arising from bias or systemic structures.

# Confronting Inequity to Achieve Equity: Black Justice & Equity Workgroup

- Providing data, esp. data that “tell a story” about inequities
- Serve as a resource: Training and activities that promote knowledge, skills, and self-awareness
  - Also tries to redress structural and institutional forms of racism (e.g., white supremacy culture and practices)
  - Within coalitions
  - Within research team
- Promoting/supporting for greater representation of BIPOC among coalitions, CAB, and research team



# Background

- **The COVID-19 pandemic exacerbated existing racial and ethnic disparities in opioid overdose death rates.** Recent data suggests that black and other minority populations are disproportionately vulnerable to opioid overdose and COVID-19 mortality particularly in urban localities.

# Death and Non-fatal Overdose by Race/Ethnicity 2017-2019

Year	Race	Opioid Deaths /100,000	% chg from prior year	Drug Deaths /100,000	% chg from prior year	Nonfatal Drug OD/100,000	% chg from prior year	Nonfatal Opioid OD/100,000	% chg from prior year
2017		33.7		35.1					
2018	<b>Hispanic</b>	31.0	-8%	35.0	0%	341.9		163.6	
2019		31.0	0%	35.5	1%	305.6	-11%	125.8	-23%
2017	<b>Non-Hispanic Black</b>	20.8		25.6					
2018		21.4	3%	30.2	18%	388.4		114.1	
2019		22.2	3%	30.5	1%	437.8	13%	125.0	10%
2017	<b>Non-Hispanic Other</b>	14.2		16.1					
2018		10.3	-28%	14.9	-7%	322.7		115.6	
2019		10.3	0%	13.1	-13%	281.6	-13%	103.5	-10%
2017	<b>Non-Hispanic White</b>	39.5		45.4					
2018		31.9	-19%	36.4	-20%	334.8		145.3	
2019		26.0	-18%	30.5	-16%	314.8	-6%	130.4	-10%



# Death and Non-fatal Overdose by Sex 2017-2019

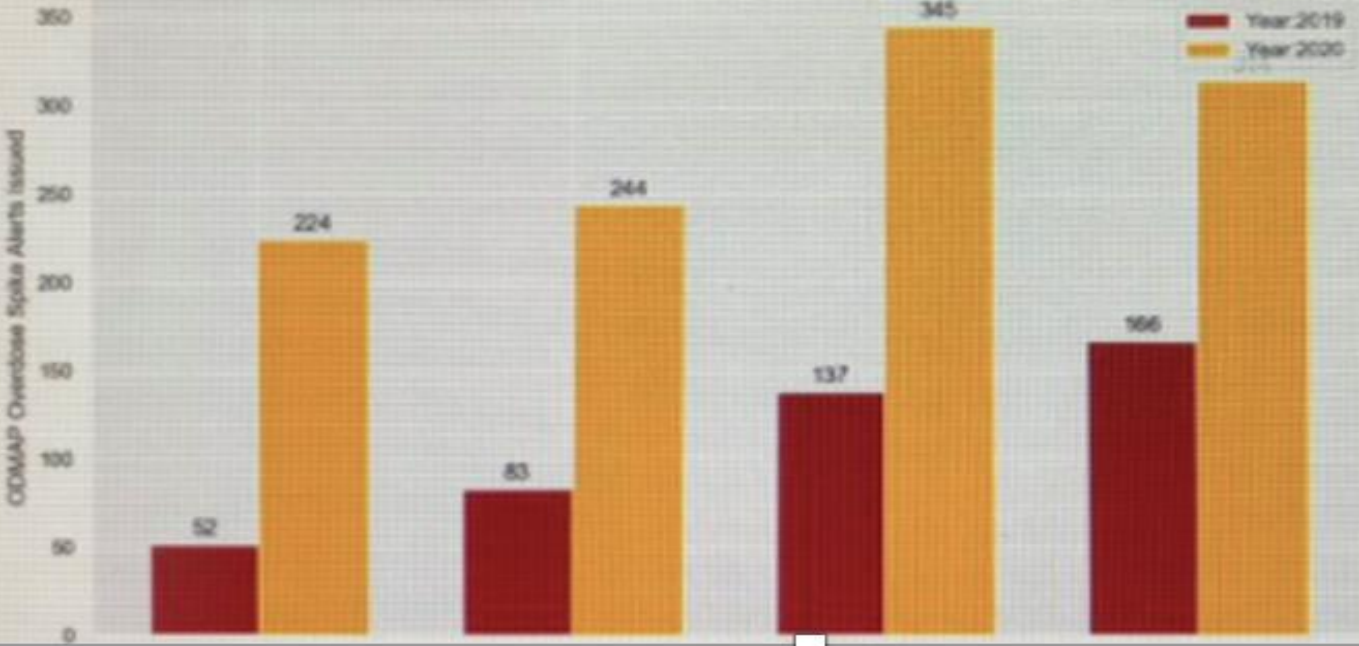
Year	Sex	Opioid Deaths /100,000	% chg from prior year	Drug Deaths /100,000	% chg from prior year	Nonfatal Drug OD /100,000	% chg from prior year	Nonfatal Opioid OD /100,000	% chg from prior year
2017		19.9		23.5					
2018	Female	17.0	-14%	20.5	-12%	315.0		98.6	
2019		13.9	-18%	17.9	-13%	315.2	0%	95.1	-4%
2017		51.4		58.1					
2018	Male	42.4	-18%	48.9	-16%	392.1		196.2	
2019		37.1	-12%	42.9	-12%	367.2	-6%	171.9	-12%

Overdose reports rising in 2020 (yellow) post COVID-19. Need to examine and address stress, stigma, limited peer support, access to medications and health care, and housing.

# COVID-19 AND OVERDOSE ANALYSIS: ODMAP

Figure 1: National ODMAP Submissions January-April 2019 and 2020 Comparison

Nationwide Spike Alerts Issued 2019vs2020, Post COVID-19 Onset



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# Pharmacy data relating to disparities for MOUD and Narcan



# Types of Pharmacy Data

	Type of Data
<b>Location of Pharmacies</b>	<ul style="list-style-type: none"><li>• Location (zip code)</li><li>• Rural vs. urban</li></ul>
<b>Buprenorphine Access</b>	<ul style="list-style-type: none"><li>• Location (zip code)</li><li>• Rural vs. urban</li></ul>
<b>Covid-19 testing and Vaccine</b>	<ul style="list-style-type: none"><li>• Location (zip code)</li><li>• Rural vs. urban</li><li>• Types of vaccine</li><li>• Waiting period</li><li>• Insurance</li><li>• Hours</li></ul>
<b>Methadone &amp; Harm Reduction availability</b>	<ul style="list-style-type: none"><li>• Stigma and barriers</li><li>• Location (zip code)</li><li>• Pharmacy based methadone uptake</li><li>• Drug take back boxes</li></ul>
<b>Narcan Distribution (tracking)</b>	<ul style="list-style-type: none"><li>• Characteristics</li><li>• Locations of people who pick up kits?</li><li>• Can we track kits used?</li></ul>

# Data Tracking



- Tracking rates of use of different prescription opioids, harm reduction, covid vaccine and testing by race/ethnicity;
- Tracking rates of initiation and retention in different types of MOUD treatment (buprenorphine, methadone, naltrexone) by race/ethnicity;
- Tracking data of community residents;
  - including people who experienced fatal/non-fatal overdoses by race/ethnicity.
- Data is helpful to come up with plans of action that are tailored to the different populations with OUD in the communities.

- Recent research suggests **that pharmacies in low income neighborhoods are less likely to carry** Naloxone (Abbas et al., 2020), and buprenorphine (Marotta et al., 2020). Moreover, racial and ethnic barriers to accessing COVID-19 testing may result in delayed treatment.
- Scaling up pharmacies to co-locate healthcare for those with OUD and other SUD in socioeconomically marginalized and racially and ethnically diverse neighborhoods **may attenuate disparities in opioid overdose and COVID-19 mortality in New York State.**



## 4216.0 - Drivers of disparities in naloxone availability among pharmacies in New York City: A community and pharmacy-level analysis with implications for public health policy

### Abstract

**Background:** Significant socioeconomic and racial disparities persist in the availability of naloxone in urban communities in the United States yet few studies investigate social determinants that are associated with naloxone availability. To address these gaps, this study investigated the association between community-level factors of poverty, lack of insurance coverage, greater concentrations of minority populations, and pharmacy-level factors of providing buprenorphine, and private space for consulting with patients and naloxone provision in New York City.

**Methods:** Individual level-pharmacy data for this study comes from questionnaires administered to 662 pharmacies in New York City. Community-level data consists of publicly available data provided by the New York City Department of Health aggregated using 34 United Hospital Fund boundaries. Random effects logistic regression models investigated associations between community and individual pharmacy-level factors and the odds that pharmacies would report having naloxone in stock to reverse the potential deadly effects of overdose.

**Results:** Out of all the pharmacies surveyed, 78.70% (n=521) reported carrying some form of naloxone in stock of which 69.49% (460) carried intranasal naloxone, and 7.35% carried auto injection naloxone. Greater neighborhood poverty was associated with lower odds of pharmacies carrying naloxone compared to pharmacies in neighborhoods with less poverty (AOR=.85, 95% C.I=.78, .94, p<.001). At the individual level, pharmacies that provided a private window to obtain naloxone (AOR=2.39, 95% CI=1.40, 4.10), a private room for consultation with pharmacists (AOR, 5.63, 95% CI=2.82, 11.25, p<.001) and who provided buprenorphine (AOR=2.55, 1.49, 4.38, p<.05) were more likely to carry naloxone.

**Conclusions:** Finding from this study suggest that community-level economic marginalization may contribute to disparities in access to naloxone in urban environments in the United States. Moreover, findings from this study support interventions to the built environment of pharmacies to respect patient privacy and reduce stigma to patients who access naloxone through pharmacies.

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# HCS Pharmacy Study 2021





# HCS Pharmacy Study

- **Pharmacy Study**: Equity in Access to **Narcan/Naloxone, Buprenorphine, Naltrexone** in pharmacies in HCS communities by key neighborhood-level **SDH indicators (race/ethnicity, poverty, rural/urban)**, since COVID-19 restrictions in HCS communities went in place
- **COVID-19 Study**: Equity in Access to **COVID-19 testing and medications (e.g. remdesivir)** in Pharmacies in HCS communities by neighborhood level SDH indicators

# Purpose:

- This study will **inform policy** and a larger study that would **advance scientific knowledge of health disparities and integrated service delivery** that incorporates pharmacies providing Narcan/Naloxone, Buprenorphine, Naltrexone and COVID-19 testing **to opioid users.**
- Engage more **ethnic minorities**
- Location: 16 HCS communities.

# Aims 1-5:

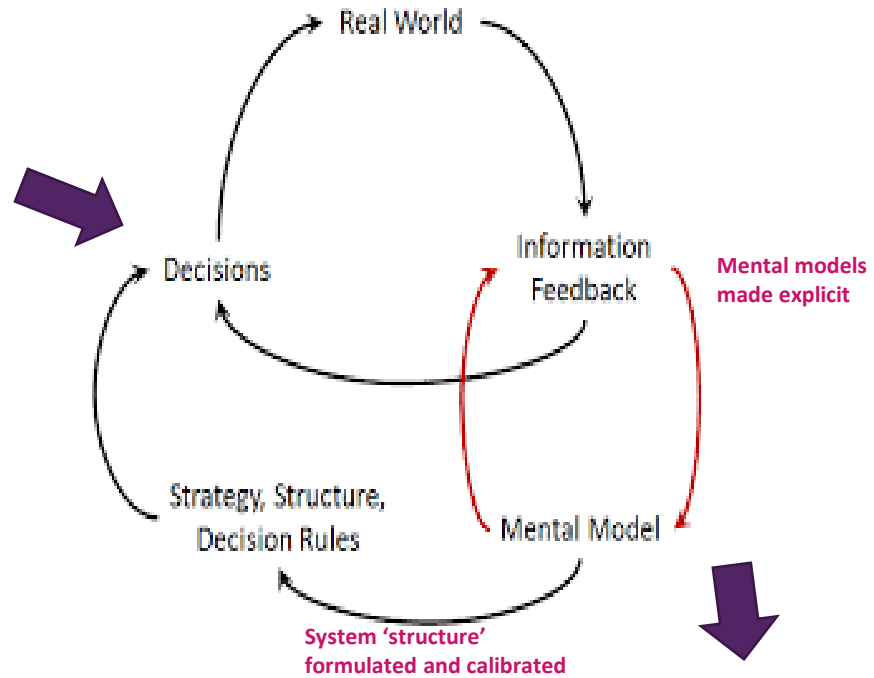
1. Identify key facilitators, barriers to availability and overlap in MOUD services) and COVID-19 services in pharmacies, as well as access to and distribution.
2. Examine how this overlap differs between pharmacies in minority vs. non minority HCS communities by identifying and mapping differences in availability and distribution of COVID-19 testing and medication, as well as access to naloxone, and MOUD.
3. To identify possible supply and shortages by neighborhood level.
4. To evaluate the attitudes towards co-locating access, distribution of Narcan/Naloxone, MOUD, harm reduction and COVID-19 services through in-depth interviews with pharmacists in HCS communities.
5. Group Model Building (GMB).

# System Dynamics Modeling is Participatory

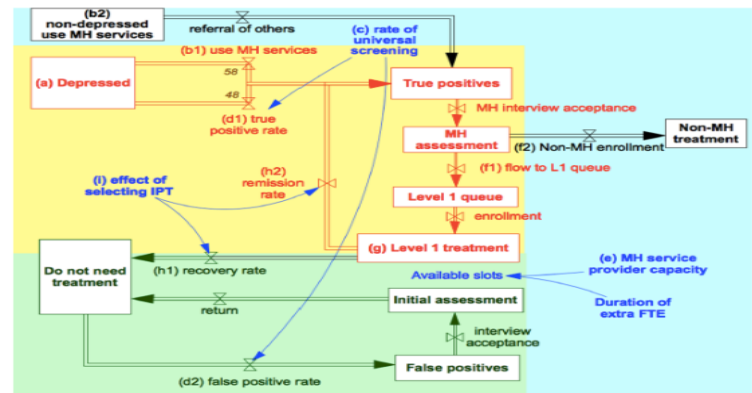
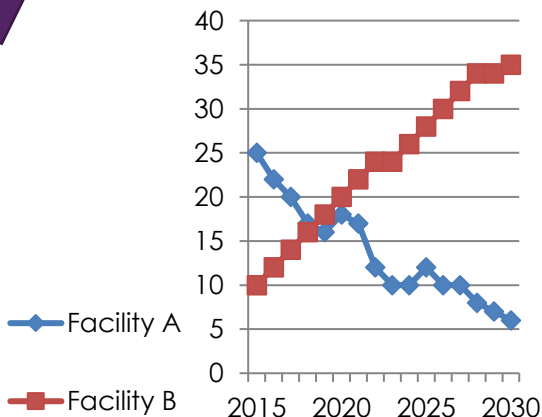
- We will apply best-practices in system dynamics model building and validation to engage the study team and other key stakeholders in an iterative, multi-stepped process: (1) problem identification/scoping, (2) system conceptualization, (3) model formulation, (4) simulation, and (5) feedback and evaluation (**Weeks, Lounsbury, Li, et al. 2020**).

# System Dynamics Modeling is Participatory

stakeholder engagement



Model 'behavior' compared to empirical evidence



# Implications: Policy and Practice

- These findings have implications for public health policy that ensures equitable access and care for all, especially for marginalized communities. Pharmacies are a natural source for deploying harm reduction interventions because they are an essential part of neighborhood health and are granted by policies the ability to provide multiple health services for people with opioid use disorders.
- Barrier of health insurance from buprenorphine provision in New York and nationally.
- Pharmacies residing in neighborhoods with concentrated populations of people without insurance may disincentivize pharmacy stocking of buprenorphine resulting in neighborhoods with less availability of buprenorphine.
- The impact of providing incentives for pharmacies to stock buprenorphine in neighborhoods with high rates of uninsured.
- The impact of insurance enrollment campaigns on increasing pharmacies' willingness to stock naloxone.

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# HCS Data Equity Initiative



# Objective

- Insert here



# References

- Abbas, B., Marotta, P., Goddard-Eckrich, D., Huang, D., Schnaidt, J., El-Bassel, N., & Gilbert, L. (2019, November). Drivers of disparities in naloxone availability among pharmacies in New York City: A community and pharmacy-level analysis with implications for public health policy. In *APHA's 2019 Annual Meeting and Expo (Nov. 2-Nov. 6)*. American Public Health Association.
- Abbas, B., Marotta, P. L., Goddard-Eckrich, D., Huang, D., Schnaidt, J., El-Bassel, N., & Gilbert, L. (2021). Socio-ecological and pharmacy-level factors associated with naloxone stocking at standing-order naloxone pharmacies in New York City. *Drug and Alcohol Dependence*, 218, 108388.
- Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2018 updated September 2019. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment. El-Bassel, N., Jackson, R. D., Samet, J., & Walsh, S. L. (2020). Introduction to the special issue on the HEALing Communities Study. *Drug and Alcohol Dependence*, 217, 108327.
- Marotta, P. L., Abbas, B. T., Stringer, K., Huang, D., Schnaidt, J., Goddard-Eckrich, D., ... & Gilbert, L. (2021). Socio-ecological and pharmacy-level factors associated with buprenorphine stocking at pharmacies in New York City. *International Journal of Drug Policy*, 97, 103321.
- Tofighi, B., Lekas, H. M., Williams, S. Z., Martino, D., Blau, C., & Lewis, C. F. (2021). Rural and small metro area naloxone-dispensing pharmacists' attitudes, experiences, and support for a frontline public health pharmacy role to increase naloxone uptake in New York State, 2019. *Journal of Substance Abuse Treatment*, 108372.
- Weeks, M. R., Lounsbury, D. W., Li, J., Hirsch, G., Berman, M., Green, H. D., ... & Jackson, S. (2020). Simulating system dynamics of the HIV care continuum to achieve treatment as prevention. *PloS one*, 15(3), e0230568.

# Questions?

