



13-15 October 2024 | Maison de la Mutualité, Paris

## Piloting a Collaborative Care Model to Improve Substance Use Disorder Care for People with HIV

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## Background

- HIV and SUD: a deadly syndemic
  - SUD is a risk factor for HIV acquisition. Living with HIV is a risk factor for SUD acquisition
  - Combination of social stigma and structural barriers
  - SUD affects nearly half of PLWH
  - Alcohol (30%), Cannabis (31%), Amphetamines (13%), Cocaine (11%), and Opioids (6%)
- Synergistic negative effects
  - Comorbid SUD: Reduced engagement in HIV care, lower ART adherence, less viral suppression, frequent drug use before sex, high rate of condomless sex
  - Positive feedback loop → increased transmission in comorbid SUD, increased burden of both diseases

Duko et al.  
Hartzler et al.  
Firkey et al.  
Sacamano et al.



## Underdiagnosed and Undertreated

- HIV care often the only opportunity to screen for and treat comorbid SUD
  - In US, of 1.2 million PLWH, only 66% received any HIV medical care in 2019, with only 50% retention in care
  - Highest risk for SUD = highest risk of loss to followup
  - Only half of HIV care and treatment sites screen for SUD and refer to SUD treatment
- Up to 75% PLWH meeting SUD may not receive treatment
  - Contributing factors in US: underlying fragmentation of care, limited mental health care opportunities, private insurance model → few available treatment centers → low access to treatment

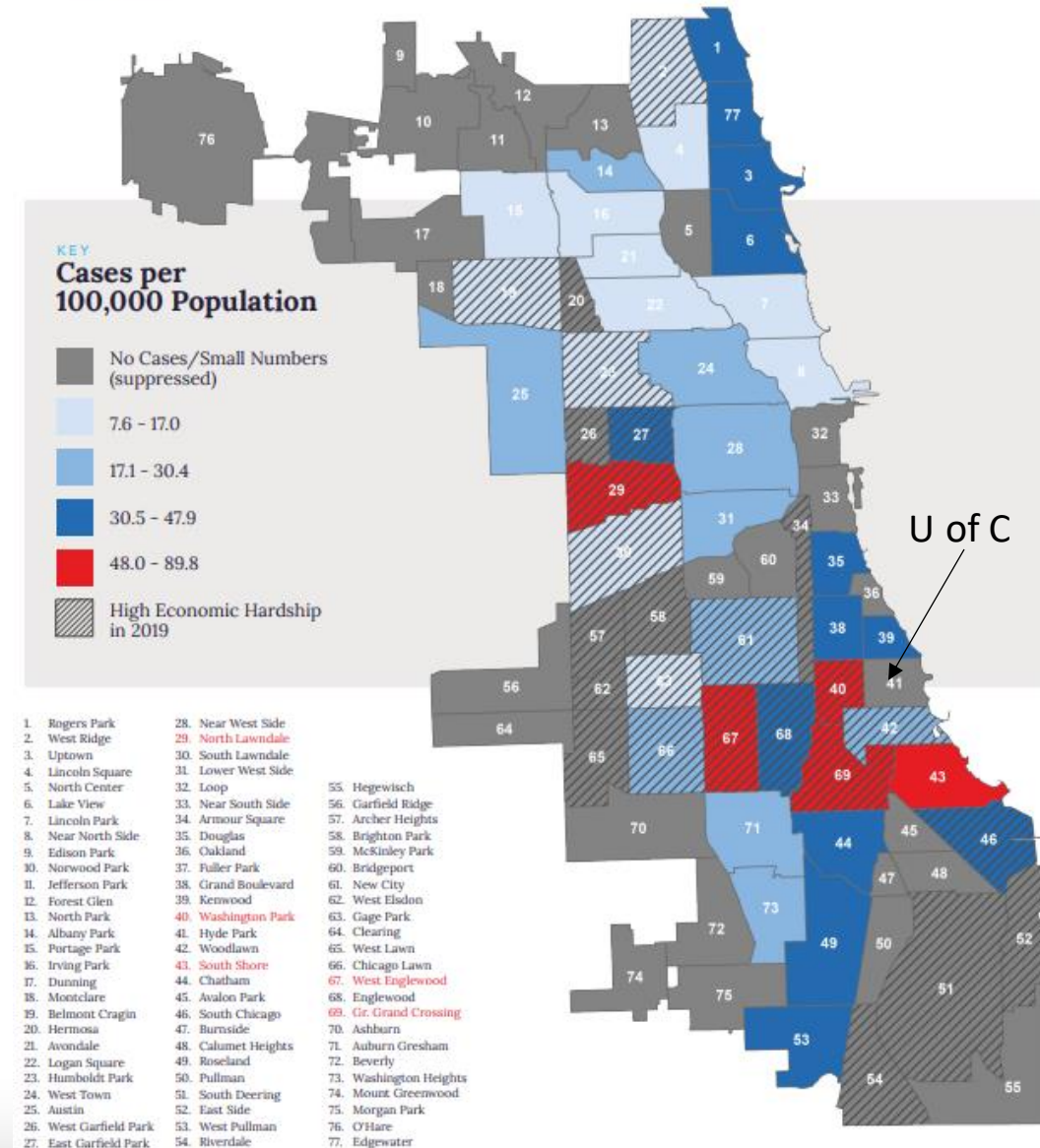
Wohlfeiler et al.  
Judd et al.  
Korthuis et al.



## Our Context: Chicago's South Side

- An epicenter of US HIV epidemic
- Lead site: UCM Ryan White Adult HIV Care Program
- Patients: 87% Black, 6% Latine, 70% have public payor
- Staff: 15 physicians, 8 fellows, 1 NP, 1 LPN, 2 Pharmacists, 2 SW
- Socioeconomic status, race, HIV status, SUD prevalence all interconnected

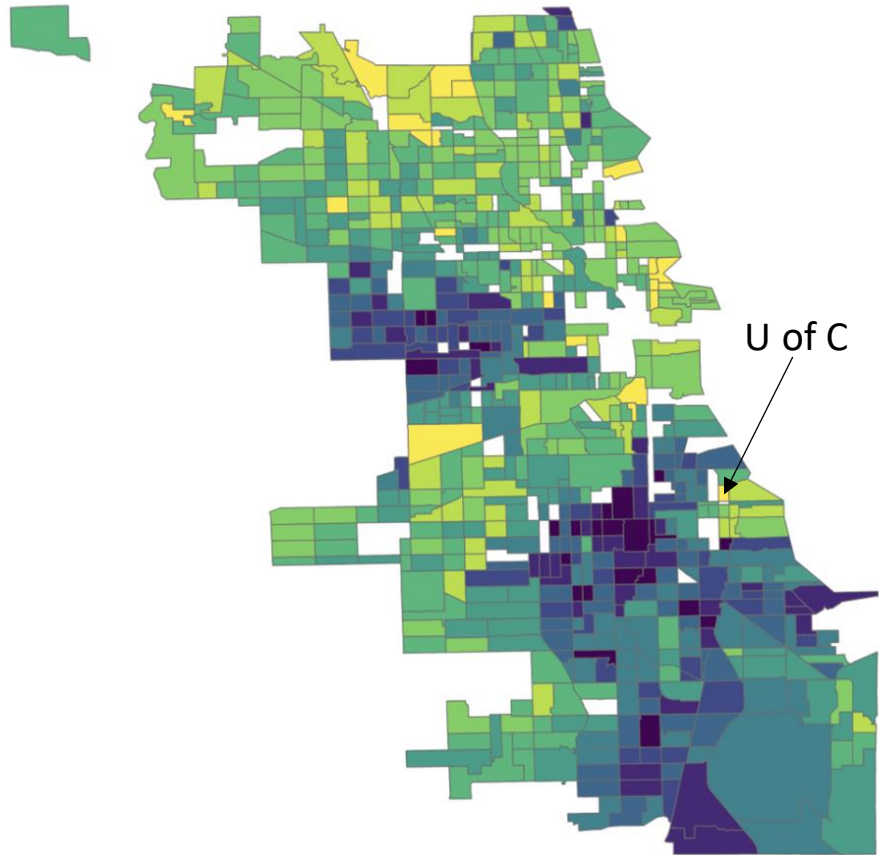
Rate of HIV Infection Diagnoses by Community Area  
Chicago, 2021



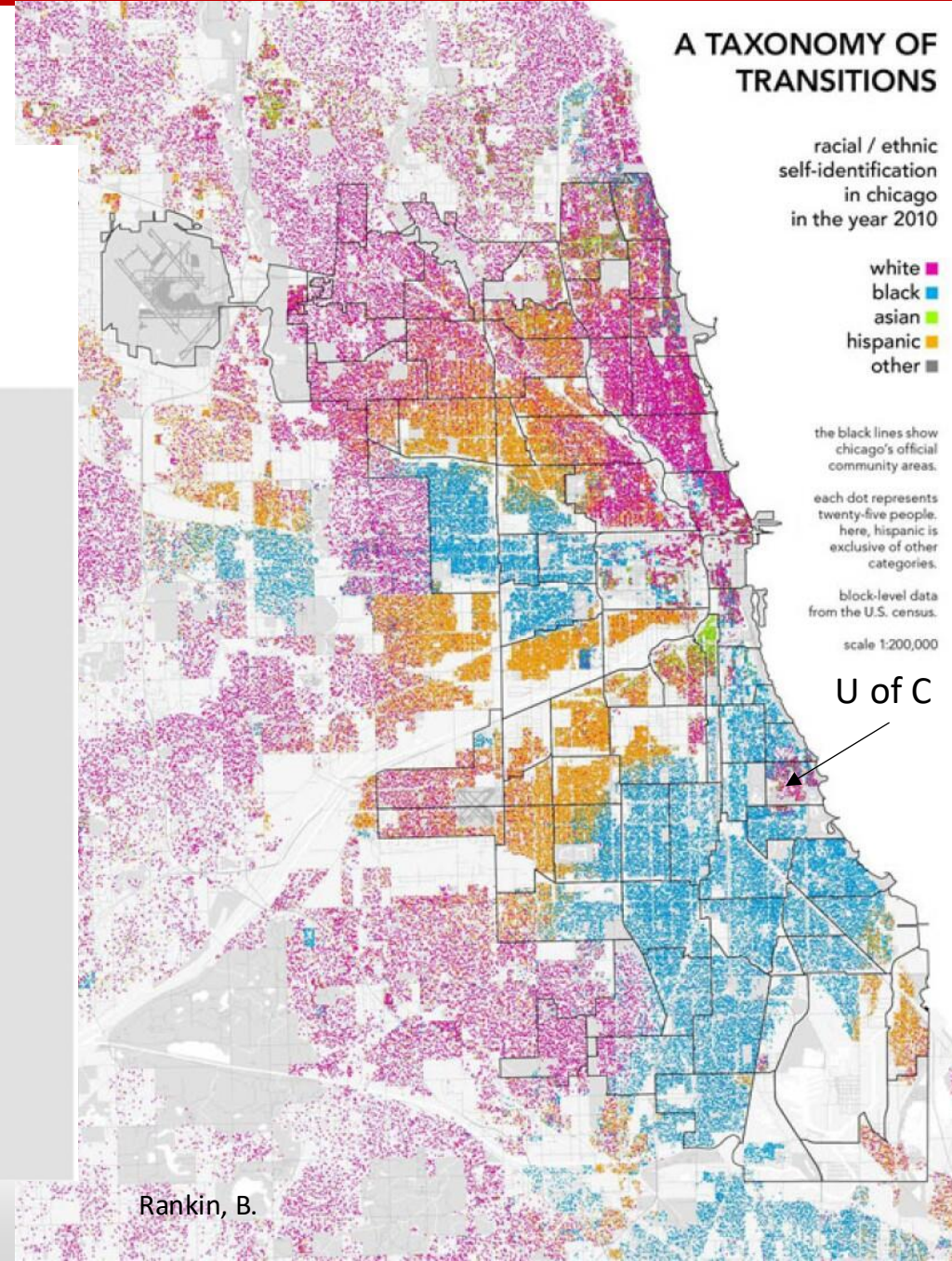
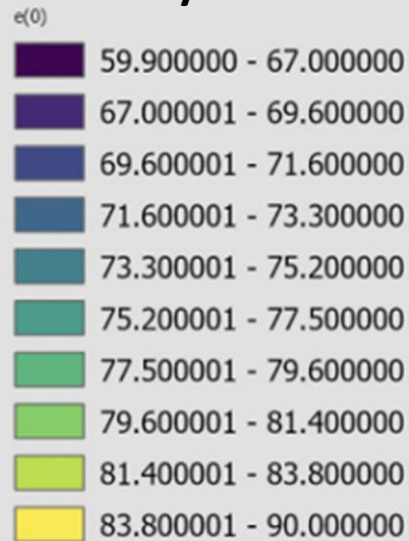
Data Source: CDPH, Enhanced HIV/AIDS Reporting System (as of 09/26/2022), City of Chicago GIS Shapefiles, and U.S. Census.

This map represents 90% (75/830) of total new HIV infection diagnoses. The economic hardship index utilizes multiple indicators to measure economic conditions of Chicago Community Areas. High hardship index scores indicate worse economic conditions.

# Chicago's Life Expectancy



## Chicago Life Expectancy by Census Tract May 2023



## Methods

- Developed anonymous survey regarding SUD treatment among HIV clinicians
- Relied on self-assessment of abilities
- Assessed baseline comfort/ability to provide 1. counseling and 2. medical therapy for AUD, OUD, stimulant use disorder, and cannabis use disorder
- Assessed whether HIV clinicians felt would benefit from a dedicated SUD clinician

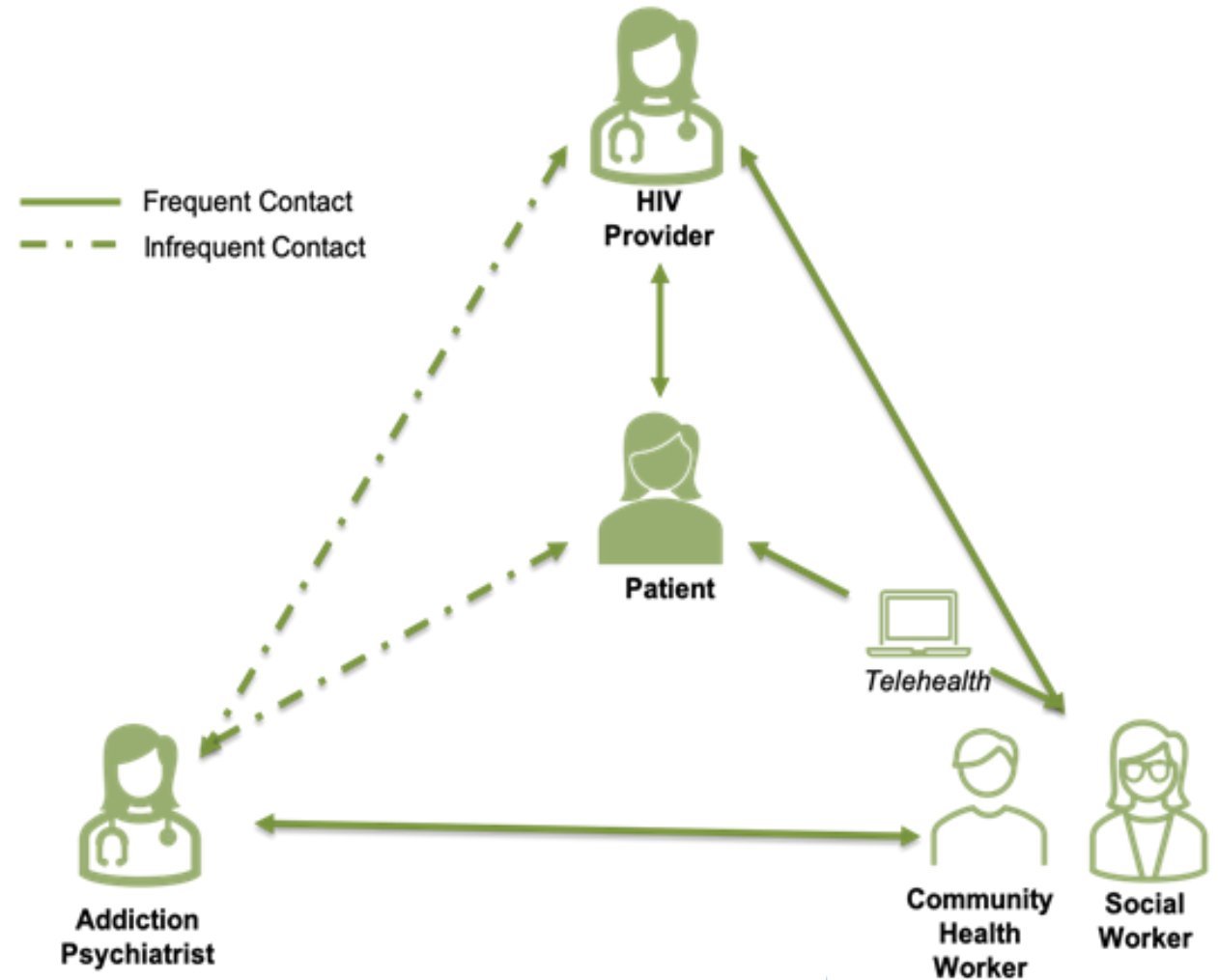
## Survey Results and Next Steps

- 78% (7/9) ill-equipped to provide SUD counseling
- 89% (8/9) unable to prescribe SUD treatments
- 89% (8/9) marked would benefit from co-management with a dedicated SUD provider
- 89% (8/9) marked they had patients in their panel who used opioids, but 67% (6/9) were unaware of OUD resources (fentanyl testing strips, naloxone) present at UCM clinic, and only 11% (1/9) had disseminated these resources
- Clear need determined. Enter the Collaborate Care Model

# The Collaborative Care Model (CoCM)

- Context: the 2017 SUMMIT RCT – CoCM for SUD in Primary Care
- Application of CoCM to PLWH
- Key players: Patient, Social Worker, Community Health Worker, Addiction Psychiatrist, Addiction Psychologist, and HIV Clinician
- Key principles: population-based care, measurement-based treatment to target, and team-based care

Collaborative Care Model for Substance Use Disorder





## Innovations to CoCM

- First study to implement and evaluate CoCM for SUD in an HIV population
  - Existing standard of care requires access to external SUD treatment facilities  
→ often insurmountable barrier
- Cognitive based therapy for SUD *in concert with* MAUD/MOUD
- Social needs assessment to address material and psychological needs
- Community health worker-led intervention
  - Trained layperson, shares similar background and identity with patient population
  - CHW from, and resides on Chicago's South Side

# Implementation Outcomes

- Primary outcome: effectiveness
  - Measured by receipt or use of any evidence-based SUD treatment
  - Defined by receipt of psychotherapy, MAUD, or MOUD
- Secondary outcome: changes in 30-day recall of substance use (Timeline Follow-Back) and changes in social needs (serial needs assessments)
- Reach: measuring number of patients enrolled vs referred to CoCM
- Adoption: number of HIV clinicians who referred a patient to CoCM for SUD divided by number of HIV clinicians with eligible patients

## Recommendations

- Importance of meeting patients where they are
  - Dedicated, longitudinal followup
  - Comprehensive care, frequent followups with opportunities to update assessments and individualized treatment plans
- CoCM is a promising strategy to incorporate SUD into an HIV clinic, particularly in contexts where healthcare is fragmented and access to mental health services are limited
- Consider CoCM in diverse contexts—including dedicated SUD clinics—to decrease patients' barriers to care and advance health equity

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