

# Mental Health and HIV Research at the National Institute of Mental Health (NIMH) Division of AIDS Research

Teri Senn, Ph.D.  
National Institute of Mental Health  
Division of AIDS Research



National Institute  
of Mental Health

# Main takeaways

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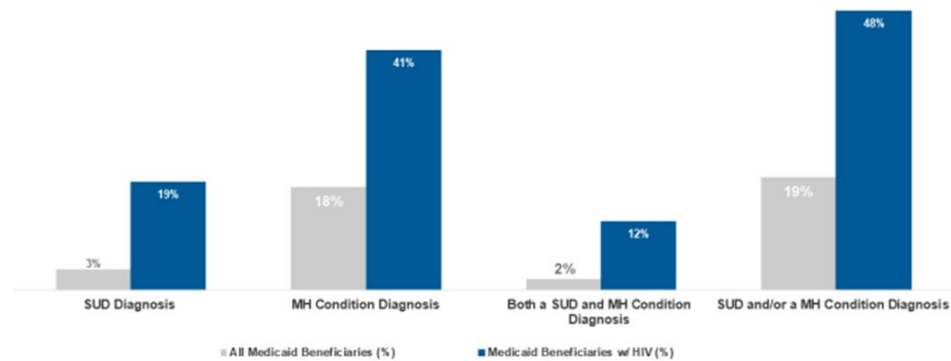
- Addressing mental health is an important priority
- There are effective, evidence-based interventions for mental health
- There are patient and provider challenges in delivering and receiving mental health services
- NIMH is funding research to address these challenges



# Importance of addressing mental health

- There is a high prevalence of mental health and substance use disorders among PLWH.

Diagnosis of Substance Use Disorders (SUD) & Mental Health (MH) Conditions Among Medicaid Beneficiaries, by HIV Status, 2013



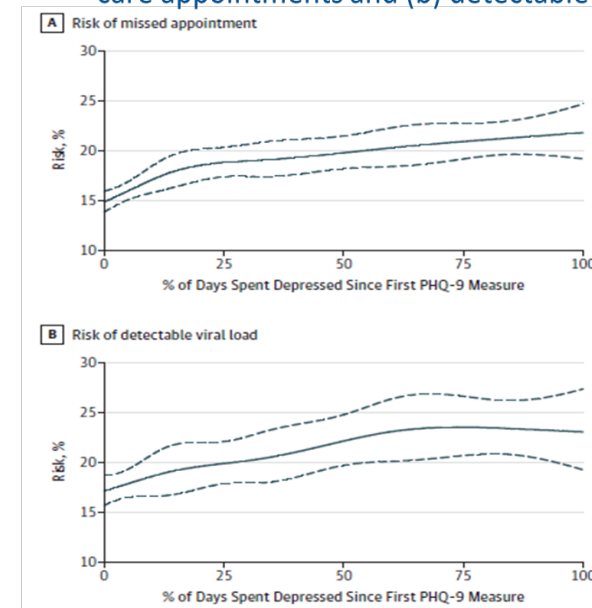
Source: Kaiser Family Foundation analysis of Medicaid Statistical Information System (MSIS) data, 2013.



Kaiser Family Foundation. (2019). Medicaid and HIV. <https://www.kff.org/hiv/aids/fact-sheet/medicaid-and-hiv/>

- Mental health and substance use disorders are associated with poorer HIV care continuum outcomes.

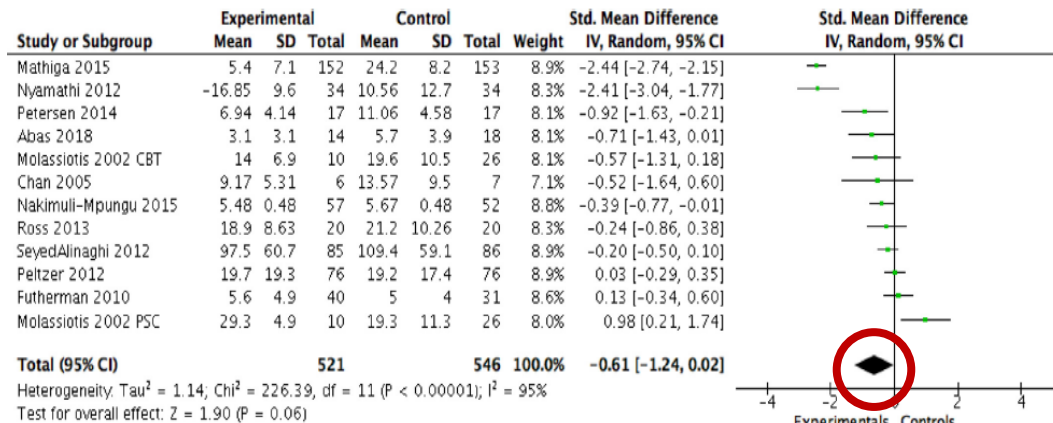
Association between percentage of days depressed and risk of (a) missed HIV care appointments and (b) detectable viral load



Pence et al., 2018. Association of increased chronicity of depression with HIV appointment attendance, treatment failure, and mortality among HIV-infected adults in the United States.

# Established findings around mental health treatment

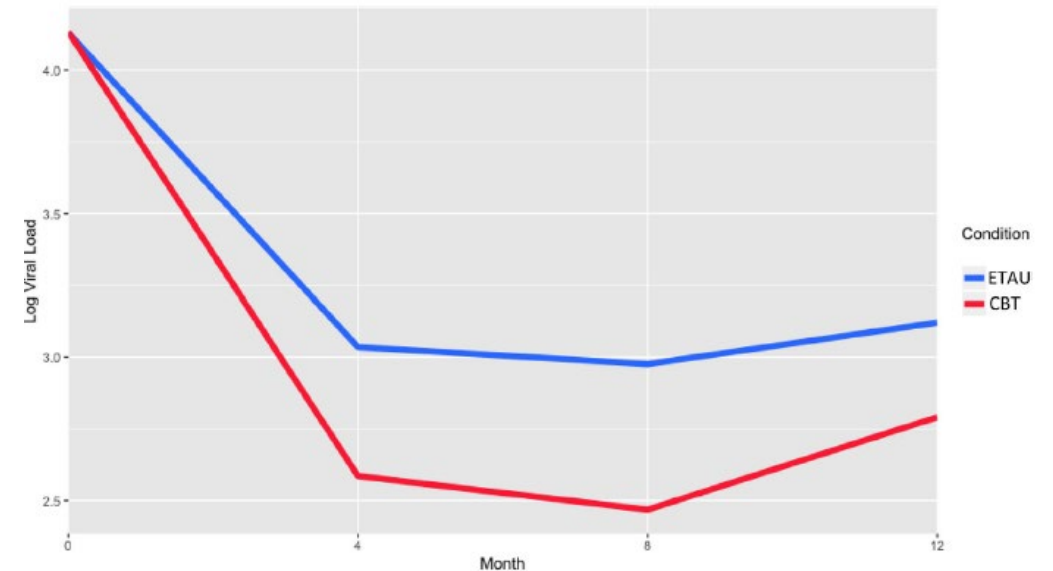
- Evidence-based mental health interventions improve mental health for people living with HIV.



Asrat, Schneider, Ambaw, & Lund. 2020.. Effectiveness of psychological treatments for depressive symptoms among people living with HIV/AIDS in low- and middle-income countries: A systematic review and meta-analysis. *J Affect Disord.*

- Evidence-based mental health interventions may improve HIV-related outcomes.

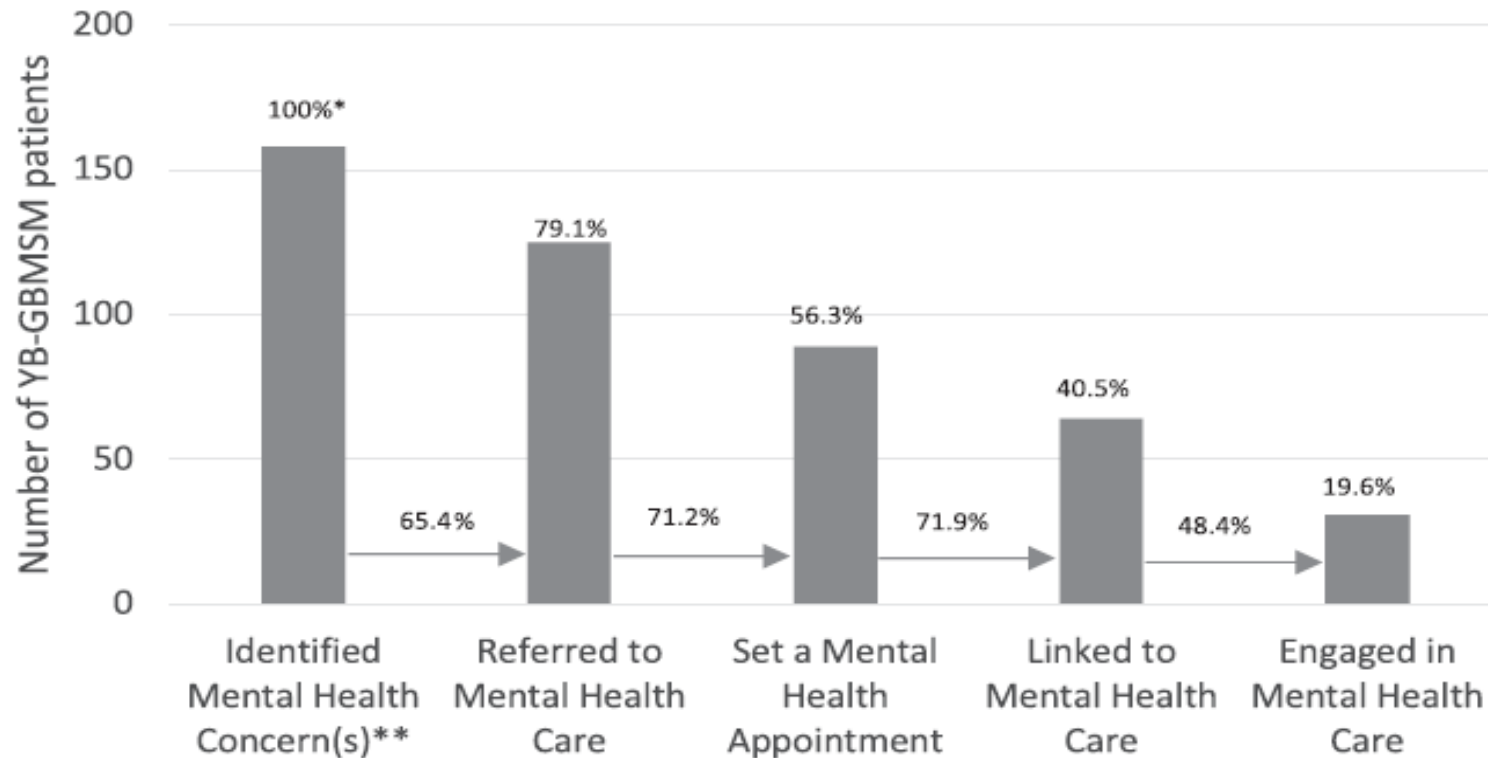
Log HIV viral load by intervention condition



Safren et al., 2021. Treating depression and improving adherence in HIV care with task-shared cognitive behavioural therapy in Khayelitsha, South Africa: a randomized controlled trial. *JIAS.*

# Remaining Challenges

- Among people living with HIV with mental health symptoms, few are engaged in mental health care.



Hussen et al., (2021). Mental health service utilization among young Black gay, bisexual, and other men who have sex with men in HIV care: A retrospective cohort study. *AIDS Patient Care STDs*.

# Funded applications: Implementation strategies

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- Different implementation strategies are being tested to address patient and provider barriers to mental health services.



TELEHEALTH



COLLABORATIVE  
CARE



TASK SHIFTING



TRANSDIAGNOSTIC  
INTERVENTIONS

# Opportunity: Research to address barriers to mental health services

Participating Organization(s)	National Institutes of Health (NIH)
Components of Participating Organizations	National Institute of Mental Health (NIMH) National Institute on Drug Abuse (NIDA)
Funding Opportunity Title	Implementation Research in HRSA Ryan White Sites: Screening and Treatment for Mental and Substance Use Disorders to Further the National "Ending the HIV Epidemic" (EHE) Goals (R01 Clinical Trial Optional)

## **NIMH and NIDA invited applications to:**

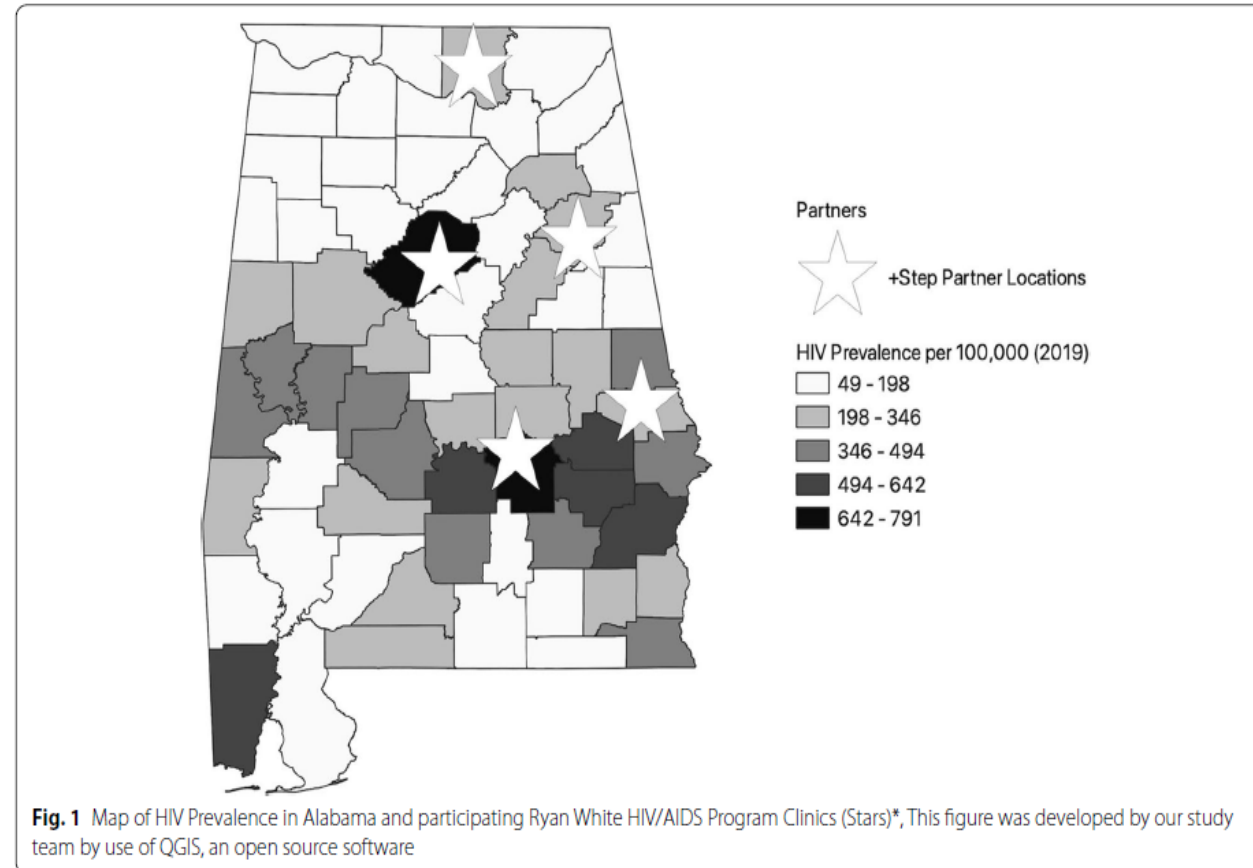
- **enhance screening and treatment for mental and substance use disorders**
  - **in HRSA Ryan White HIV/AIDS Program funded sites**
  - **through implementation research**
  - **to advance the goals of the National "End the Epidemic" (EHE) initiative.**
- 
- **R34 projects (pilot studies/trials): RFA-MH-20-521**
  - **R01 projects (large studies/trials): RFA-MH-20-520**

# Highlight: HIV+ service delivery and telemedicine through effective PROs (PI: Ellen Eaton)



## TELEHEALTH

- This grant will implement standardized screening and telemedicine delivery of treatment services for mental health and substance use disorders in several Ryan White sites.



Ellen Eaton

Eaton, E. HIV+ service delivery and telemedicine through Effective PROs. R01MH124633-01.

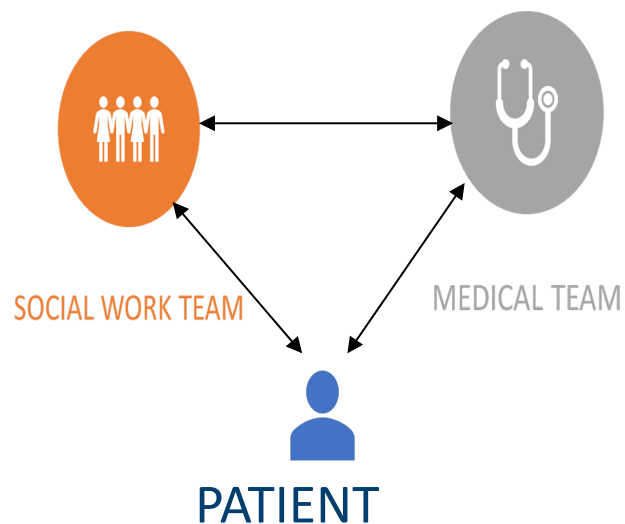


# Highlight: Collaborative care management for integrated mental health and substance use treatment in low-barrier HIV care (PI: Julia Dombrowski)

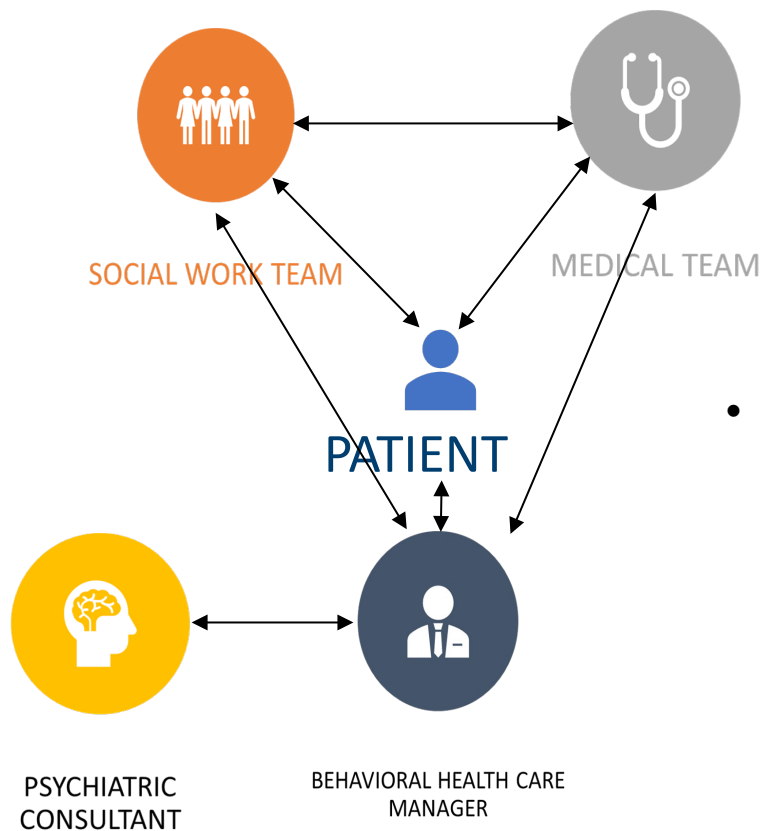


COLLABORATIVE CARE

## INITIAL CARE MODEL



## COLLABORATIVE CARE MODEL



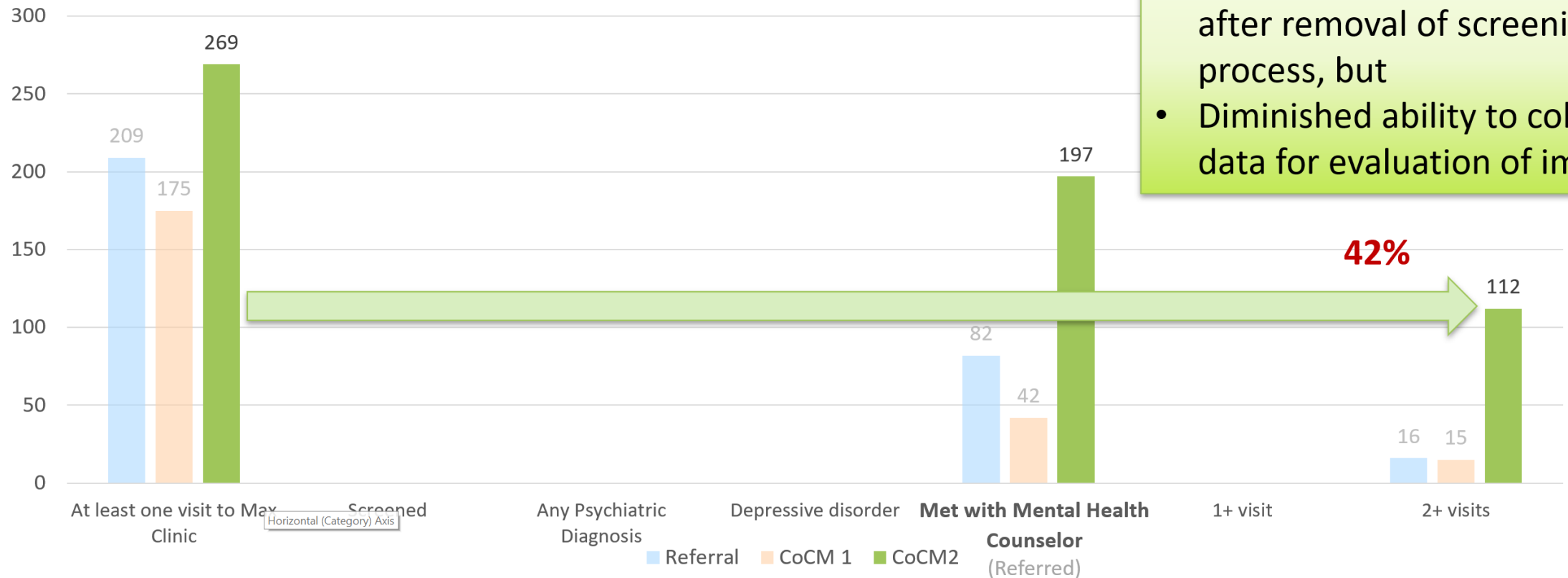
Julia Dombrowski

- The collaborative care model adds a behavioral health care manager and psychiatric consultant.

# Highlight: Collaborative care management for integrated mental health and substance use treatment in low-barrier HIV care: Phase 2

Licensed Mental Health Counselor, 100% FTE; no screening or inclusion/exclusion criteria

Mental Health Treatment Cascade, CoCM Phase 2 (19 months)



- Improved reach & uptake after removal of screening process, but
- Diminished ability to collect data for evaluation of impact

Altwies EE, et al. (2023). Substance use and mental health comorbidities and receipt of specialty care among patients enrolled in a low-barrier HIV clinic. *AIDS Behav.*

Halliday S, et al. Under Review (CoCM Phase 1)

Max Clinic program data, unpublished (CoCM Phase 2)

Funded by R34MH124625-02 and King County Ending the HIV Epidemic Funds

# Highlight: Breaking systems barriers for trans women of color living with HIV (PI: Erin Wilson & Sean Arayasirikul)



TELEHEALTH



TASK SHIFTING



Erin Wilson



Sean Arayasirikul

	Baseline		12-month follow-up	
	N	M (SD)	N	M (SD)
<b>Mental health</b>				
<b>*PHQ-4</b>	42	5.5 (3.0)	38	3.9 (3.8)
<b>*Overall mental health</b>	42	2.8 (1.1)	38	3.6 (1.0)
<b>Substance use</b>				
<b>*AUDIT-C</b>	42	2.3 (3.0)	38	1.1 (1.8)
<b>DAST-10</b>	42	3.1 (3.3)	38	1.7 (2.3)

Descriptive statistics of HIV, mental health, and substance use measures at baseline and 12-month follow-up period among trans women living with HIV in San Francisco.

\*Indicates a statistically significant result ( $p < 0.05$ )

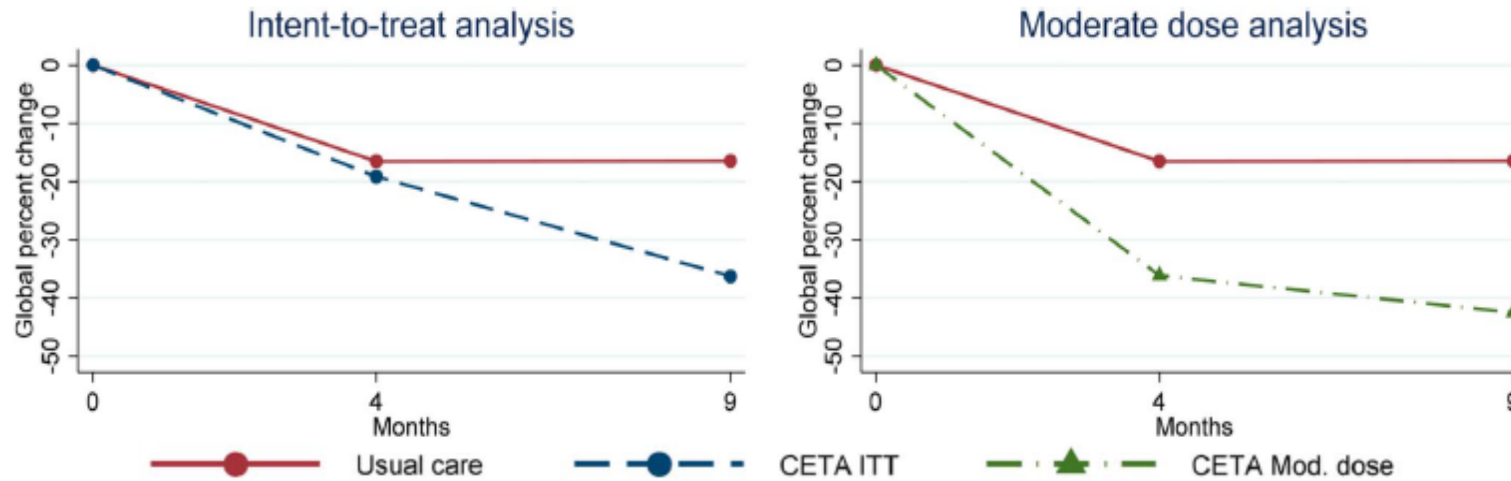
- **This mHealth, peer navigation intervention for transgender women improved mental health and substance use-related outcomes.**

Wilson, Erin. Breaking systems barriers for trans women living with HIV. Personal communication.

# Highlight: Tailored response to psychiatric comorbidity to improve HIV care engagement in the United States (PI: Brian Pence)



TRANSDIAGNOSTIC INTERVENTIONS



Brian Pence

	Usual Care	CETA: ITT	CETA: Moderate Dose
<b>HIV care attendance over 12 mo</b>			
HRSA HAB measure	73.3% (30)	73.3% (30)	76.9% (13)
<b>Kept visit proportion</b>	70.3% (30)	74.4% (28)	84.4% (13)
<b>Viral suppression</b>			
4 mo	66.7% (27)	61.9% (21)	54.5% (11)
9 mo	65.4% (26)	70.8% (24)	70.0% (10)

- This transdiagnostic intervention resulted in improvements in mental health and HIV care attendance; the impact on viral suppression was mixed.

Pence et al. 2024. Provocative findings from a transdiagnostic counseling intervention to improve psychiatric comorbidity and HIV care engagement among people with HIV: A pilot randomized clinical trial. *J Acquir Immune Defic Syndr.*

# Highlight: Adapting DBT for persons living with HIV using an artificial intelligence-powered conversational agent (PI: Elissa Kozlov)



TELEHEALTH

The screenshot shows a chatbot interface for 'CareAngel'. The chatbot asks: 'Hi, this is Angel, your virtual assistant, reaching out for your daily check in. How are you feeling right now?'. The user replies: 'not great.'. The chatbot then asks: 'I'm sorry to hear that you're not great. What emotion is causing you the most distress right now. Here's a list of common negative emotions to choose from: Anger, fear, sadness, shame, guilt, disgust, envy, jealousy. Which one of these emotions are you experiencing the most right now?'. The user replies: 'I'm feeling really angry.'. The chatbot then asks: 'How intense is your anger at this moment from 0 to 10, 10 being the most intense anger imaginable.'. The user replies: 'around a 7'. The chatbot then asks: 'Okay. That sounds uncomfortable. Let's try and get that intensity down. Would you be willing to work on giving up the anger you're currently feeling?'. The user replies: 'Yea I'll try, but I think I deserve to be angry.'.

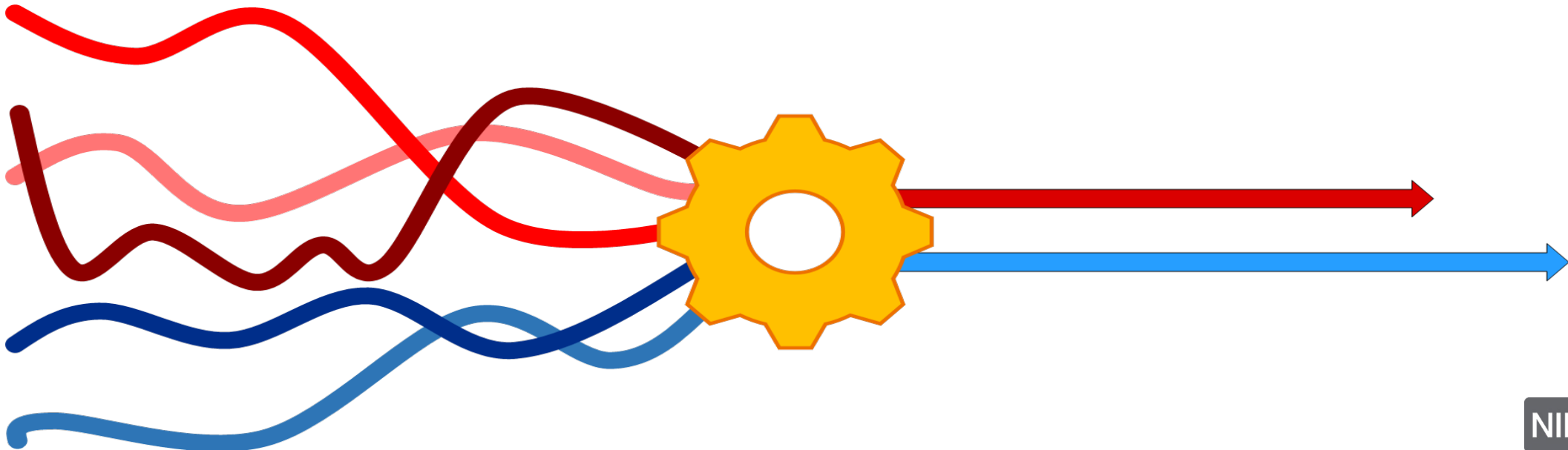


Elissa Kozlov

- This grant will use an AI chatbot to deliver evidence based mental health treatment.

# Streamlining mental health interventions for youth living with HIV in Low- and Middle-Income Countries

- Challenge: most mental health interventions involve numerous sessions
- Opportunity: mental health interventions can be streamlined so that they require fewer resources to deliver while still leading to clinically meaningful improvements in mental health and HIV outcomes
- Applications for this funding opportunity were due in August



# Main takeaways

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