#### University of Massachusetts Medical School

#### eScholarship@UMMS

Network of the National Library of Medicine New England Region (NNLM NER) Repository Network of the National Library of Medicine New England Region

2021-01-28

#### Substance Use Disorder Treatment in the Time of COVID

Christopher W. Shanahan MD, MPH, FACP Boston University School of Medicine

Et al.

#### Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/ner

Part of the Library and Information Science Commons, Public Health Commons, and the Substance Abuse and Addiction Commons

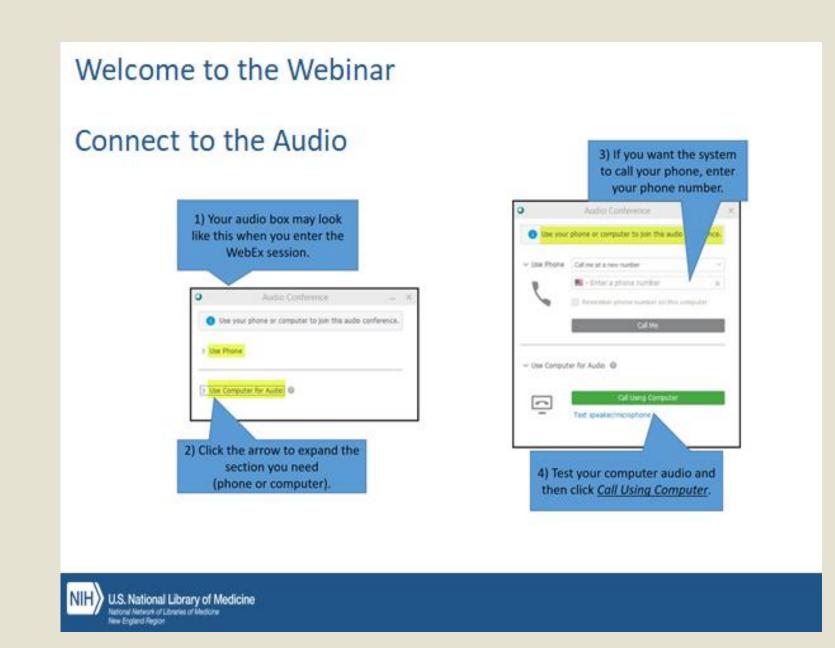
#### **Repository Citation**

Shanahan CW, Halpin SM. (2021). Substance Use Disorder Treatment in the Time of COVID. Network of the National Library of Medicine New England Region (NNLM NER) Repository. https://doi.org/10.13028/ zba8-f315. Retrieved from https://escholarship.umassmed.edu/ner/89



This work is licensed under a Creative Commons Attribution 4.0 License.

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Network of the National Library of Medicine New England Region (NNLM NER) Repository by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.





## Substance Use Disorder Treatment in the Time of COVID

To view the captions click on the URL in the chat box.

This webinar is being recorded.



#### **About this Webinar**

- All participants have been muted when entering the webinar
- Closed captioning is available, click on the captioning link in the chat box.
- This webinar is being recorded. You will receive an email with a link to the webinar recording and presentation materials in about a week.
- You will have an opportunity to ask questions during the last 15 minutes. Jot down your questions as the webinar is in progress and use the Chat Box for questions at the end.

#### Information About CE Credits

- Medical Librarians and some Nurses are eligible for 1 CE credit for attending this webinar. Nurses check <u>This Link</u> to make sure your state accepts the CEs for attending this webinar
- Completing an evaluation at the end of the webinar is required for you to receive CE credit. The evaluation should open automatically as you leave the webinar.
- Use the Enrollment Code provided at the end of the webinar to claim your CE credit.



# Hello!

#### Your Webinar Host - Susan Halpin, M.Ed.

*Education & Outreach Coordinator Network of the National Library of Medicine New England Region,* 

University of Massachusetts Medical School Worcester, Massachusetts Susan.Halpin@umassmed.edu





#### About the National Library of Medicine (NLM) <u>https://www.nlm.nih.gov/</u>

Physical library is Bethesda, MD part of the NIH campus.

Largest biomedical library in the world.

One of the federal government's largest providers of digital content.

The library is open to everyone.

#### NLM's Mission To advance the progress of medicine and improve public health by providing everyone equal access to biomedical & health information resources and data.





### **NNLM Outreach**

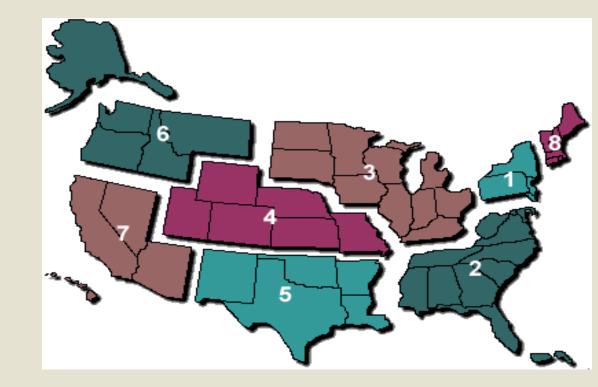
#### NLM Carries Out its Mission Through the Network of the National Libraries of Medicine (NNLM) <u>https://nnlm.gov/</u>

Nationwide network of health sciences libraries, public libraries & information centers

Each region has a partnership with a regional medical library

#### **Outreach provided through:**

- Free access to online resources
- Free Training
- Grant funding



77,000 people received training from NNLM last year!



#### NLM Resources for Substance Use Disorder



NIH National Library of Med		Se		٩
PRODUCTS AND SERVICES -	RESOURCES FOR YOU 🔻	EXPLORE NLM 🔻	GRANTS AND FUND	ING 🔻
	COVID-19 is an emerging, rap Get the latest public health information from Get the latest research information from NIH	CDC: https://www.coronavirus.gov		
Environmental Health Envi	ronmental Health, Toxicology, &	Chemical Information		
C TOXICOLOGY		TOXNE	T Transition Page Email Updates	Social M
Overdose, Treatment	Treatment , Prescribing, Pregnancy	y, Neonatal, Reco	very,	
Opioid Addiction and	Treatment , Prescribing, Pregnancy	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic • Understanding Addiction • Opioid Overdose	Treatment , Prescribing, Pregnancy	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic • Understanding Addiction • Opioid Overdose • Opioid Drugs	Treatment , Prescribing, Pregnancy	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic • Understanding Addiction • Opioid Overdose • Opioid Drugs • Treating Opioid Addiction	Treatment , Prescribing, Pregnancy	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic • Understanding Addiction • Opioid Overdose • Opioid Drugs	Treatment , Prescribing, Pregnancy cs	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic Understanding Addiction Opioid Overdose Opioid Drugs Treating Opioid Addiction Opioid Prescribing	Treatment , Prescribing, Pregnancy cs	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic Understanding Addiction Opioid Overdose Opioid Drugs Treating Opioid Addiction Opioid Prescribing Pregnancy, Opioid Use, and Neonatal	Treatment , Prescribing, Pregnancy cs	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic Understanding Addiction Opioid Overdose Opioid Overdose Opioid Drugs Treating Opioid Addiction Opioid Prescribing Pregnancy, Opioid Use, and Neonatal Recovery	Treatment , Prescribing, Pregnancy s	y, Neonatal, Reco	very,	
Opioid Addiction and Overdose, Treatment Data/Trends/Statistic Understanding Addiction Opioid Overdose Opioid Drugs Treating Opioid Addiction Opioid Prescribing Pregnancy, Opioid Use, and Neonatal Recovery Data, Trends, & Statistics	Treatment , Prescribing, Pregnancy s	y, Neonatal, Reco	very,	

https://www.nlm.nih.gov/enviro/opiate-addiction-and-humanhealth.html



### NNLM Substance Use Disorder Initiative Resource Page

ıbst	ance Use	Disorders				
	ance Use Disorders Initiative age and population	SUD Resources: General D Training & Education	Libraries Edu	cators Cc	ommunity-based Organizations	Public Health
Raise th partners	e awareness of National Li hips with SUD related orga ition of a resource list base	anizations. ed on audience for targeted	nce Use Disorders re d populations.	sources and t	the resources of partner orga	-
		for notwork mombars with	information on top	cs identified	by the committee as having t	the most nationa

### https://nnlm.gov/national/guides/sud



### **Our Presenter**



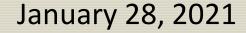
#### **Christopher Shanahan, MD, MPH, FACP**

#### **Medical Director**

Massachusetts Consultation Service for the Treatment of Addiction and Pain (MCSTAP)

Massachusetts Behavioral Health Partnership (MBHP)

# **Changes in Substance** Use Disorder **Treatment in the Time** of COVID



#### Christopher W. Shanahan, MD, MPH, FACP

Assistant Professor of Medicine Boston University School of Medicine Boston Medical Center

Medical Director, Massachusetts Consultation Service for the Treatment of Addiction and Pain (MCSTAP)

Certified: Internal Medicine (ABIM) & Addiction Medicine (ABAM)

**No Conflict of Interest** 





mcstap@beaconhealthoptions.com / www.mcstap.com Christopher.Shanahan@bmc.org; Amy.Rosenstein@beaconhealthoptions.com; John.Straus@beaconhealthoptions.com



**MCSTAP Mission:** To support primary care teams in increasing their capacity for, & comfort in, using evidence-based practices in screening for, diagnosing, treating, & managing the care of all patients with chronic pain &/or SUD



RE

The MCSTAP team Ten (10) Physician Consultants (PCs) from different health systems across Massachusetts

# Highly qualified with:

- Expertise treating CP/SUD
- Experience teaching & mentoring providers
- Deep commitment to helping others work for better outcomes for patients with CP/SUD



## Learning Objectives

### Audience members who attend this will be able to:

- Understand the bidirectional relationship of SARS-Cov-2 pandemic & the epidemic U.S. Substance Use on identification & treatment of physical, mental health, & Substance Use Disorders (SUD) (e.g. opioid crisis)
- Describe components & impact of Social Determinants of Health (SDOH) on care of individuals with SUD & impact on the risk for & clinical outcomes of SARS-CoV-2 infection
- Employ Intersectionality to identify/analyze key areas of need & potential for high impact & then develop/implement evidencebased & innovative solutions



### Outline

- Impact of Substance Use Disorder
- Frontline Adaptation & Innovation
- Conceptual Tools to Analyze Impact of Co-Epidemic on SUD Treatment
- COVID SUD Intersectionality
- Summary
- Q & A



# The Broad Impact of Substance Use Disorder

### **Clinical Impact**

- Injury (trauma, infection, etc.)
- Overdose (O.D.)
- Death
- Diversion,
- Mental illness (Anxiety, Depression, PTSD, etc.)

### **Social Impact**

- Disrupted relationships in multiple domains:
  - Interpersonal [family, friends, etc.]
  - Work problems
  - Criminality / Justice Involvement
  - Stigma
  - etc.

### **Economic Impact**

Underemployment / Unemployment / Unemployability



Schulte MT, Hser YI. Substance Use and Associated Health Conditions throughout the Lifespan. *Public Health Rev.* 2014;35(2) Regier DA, et.al.. JAMA. 1990 Nov 21;264(19):2511-8. PMID: 2232018.

### **Frontline Adaptation & Innovation**

# SUD X SARS-CoV-2

### Patient-Centered Approach (Harm Reduction Perspective)

- More flexible approach to MOUD prescribing & diversion
- Urine Drug Testing: New Guidance
- Telehealth visits
- Remote (non-face-to-face) prescribing for new patients
- OTP Take-home policies (Methadone)
- Increased awareness of need to address SDOH as part of associated SUD treatment activities

### **Practice Innovations**

- Telehealth / Virtual Visiting (More administrative flexibility)
- More selective & targeted monitoring
  - E.g. urine drug testing, # days filled, # of Refills, etc.
  - Remote testing services considered if indicated



# Regulation Changes for Telehealth SUD X SARS-CoV-2

#### **Ryan Haight Online Pharmacy Consumer Protection Act of 2008:**

Rules for telemedicine Rx of controlled medications.

#### **Drug Enforcement Agency (DEA):**

BOSTON

UNIVERSITY

GENERAL INTERNAL

 Public health emergency enabled DEA to permit all DEA-registered clinicians to prescribe schedule II - V controlled substances (e.g. buprenorphine) to treat OUD in patients prior to first in-person clinic visit.

#### US Dept. Health and Human Services (DHHS):

Waived HIPAA penalties for "good faith use of telehealth."

#### 42 CFR, part 2:

Behavioral Health not applicable in medical emergencies as deemed by the clinician

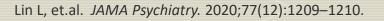
#### SAMSHA:

BU School of Medicine

- OTPs may Rx buprenorphine via telehealth & liberalized the # of days of take-home meds to reduce in-person visits.
- CMS:

BOSTON

Temporarily allowing Medicare to cover additional telehealth services.



RE

### **Guidance Documents**

### SUD X SARS-CoV-2

#### American Society of Addiction Medicine (ASAM) COVID-19 Task Force:

- •Recommendations Caring For Patients During The Covid-19 Pandemic:
  - Adjusting Drug Testing Protocols

### **Centers for Disease Control (CDC):**

- •Guideline for Prescribing Opioids for Chronic Pain United States, 2016
- •Quality Improvement and Care Coordination: Implementing the CDC
- Guideline for Prescribing Opioids for Chronic Pain

### California Health Care Foundation:

- •Guidelines for Medication for Addiction Treatment for Opioid Use Disorder within the Emergency Department
- VA/DOD:

Clinical Practice Guidelines



### **Other Resource Pages**

### SUD X SARS-CoV-2

#### **Brandeis Opioid Resource Connector: Communities informing communities**

https://opioid-resource-connector.org/frontpage/

#### Primary Care: On the Front Lines of the Opioid Epidemic

https://ldi.upenn.edu/sites/default/files/pdf/Primary Care - On the Front Line of the Opioid Epidemic. Issue Brief August 2016\_0.pdf

#### Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings

https://www.ncbi.nlm.nih.gov/books/NBK402352/

#### Managing Pain Safely: Tapering Toolkit for Providers

<u>http://www.partnershiphp.org/Providers/HealthServices/Documents/ManagingPainSafely/T</u> <u>APERINGTOOLKIT\_FINAL.pdf</u>

**CMS opioid prescribing tool - Medicare** 



Lin L, et.al. JAMA Psychiatry. 2020;77(12):1209–1210.

### Substance Use Disorders & COVID-19 Susceptibility

#### Analysis of 73 million patients (SUD: 10.3%; COVID-19: 12,030)

- Persons with SUDs at Trisk of contracting/suffering worse consequences from COVID-19 (esp. African Americans)
- Of those with COVID-19, 15.6% had SUD vs. 10.3% did not.
- Risk of COVID-19 highest in persons w/ new SUD Dx in the past year
- In persons w/ recent SUDs Dx vs Not more likely to have COVID-19:
   OUD: 10.2 X; Tobacco UD 8.2 X; Alcohol UD 7.8 X; Cocaine UD 6.5 X; Cannabis UD 5.3 X
- Persons w/ lifetime SUD 1.5 X more likely to have COVID-19
- Persons w/ SUDs more likely to have COVID-19 vs. those w/o:
   OUD: 2.4 X; CUS 1.6 X; AUD 1.4 X; TUD (smoking or vaping) 1.3 X
- Patients w/ lifetime SUD Dx's more severe clinical outcomes from COVID-19
   e.g. hospitalization (41% vs 30%) & death (9.6% vs 6.6%).
- Of persons w/ lifetime SUD <u>&</u> COVID-19, the death rate of African Americans was 13 % vs 8.6 % for Caucasians



21

Wang, Q.Q., Kaelber, D.C., Xu, R. et al. Mol Psychiatry 26, 30–39 (2021) Understanding the complexity & Intersectionality of Substance Use Disorder Care During a Pandemic: Key Concepts

22

### Social Determinants of Health

Social determinants of health (SDOH) have a major impact on people's health, well-being, & quality of life. Examples include:

- Safe housing, transportation, and neighborhoods
- Access to nutritious foods & physical activity opportunities
- Racism, discrimination, & violence
- Education, job opportunities, and income
- Polluted air & water
- Language & literacy skills

BOSTON

GENERAL INTERNAL

BU School of Medicine



RE

REDICAL

# Social Ecological Model (SEM)

### Individual factors

Biological factors

### Network factors

- Social
- Drug

### **Community factors**

- Treatment
- Harm Reduction
- Other

### Structural

BASTEN!

• Evolving Drug Policy

BOSTON

UNIVERSITY

- Decarceration
- Social/Physical distancing
- Other

BU School of Medicine

Social Ecological Model of Factor Impacting the Health of Individuals with Opioid Use Disorder from COVID-19

#### COVID-19 PANDEMIC

#### STRUCTURAL: MOUD Policy change; Structural racism; Decarceration; Economic recovery; Social distancing & enforcement

#### COMMUNITY:

Decreased access to treatment and harm reduction services; Loss of employment; Stressed health care systems; High risk settings

> **NETWORK:** Disruptions in social networks; Changes in drug supply

#### INDIVIDUAL: Opioid-related immunosuppression; Tobacco use, lung disease and other comorbidities; Overlapping withdrawal/ COVID-19 symptoms; Stress from quarantine

Cowan, E., Khan, M.R., Shastry, S. *et al.* Conceptualizing the effects of the COVID-19 pandemic on people with opioid use disorder: an application of the social ecological model. *Addict Sci Clin Pract* **16**, 4 (2021)

RE

### Intersectionality

An analytical framework for understanding how aspects of a person's social & political identities combine to create different modes of discrimination & privilege<sup>1,2</sup>

The interconnected nature of social categorizations (race, class, & gender) as they apply to a given individual or group, regarded as creating overlapping & interdependent systems of discrimination or disadvantage<sup>3</sup>

**Domains:** gender, sex, race, class, sexuality, religion, disability, physical appearance, & height

1. Abigail A, "How Much is Being Attractive Worth?". Smithsonian Magazine. Retrieved 6/22/2020.

Grayken Center for Addiction

BOSTON



Yonce K "Attractiveness privilege : the unearned advantages of physical attractiveness". (Jan 2014)
 Oxford English Dictionary (2015)

### Personal Healthcare Systems (SUD Treatment)

Screening: Evidence-based tools (e.g. TAPS, COMM, ORT, etc.)
Diagnosis: DSM-5 (11 Criteria)
Assessment: ASSIST, AUDIT, DAST, ASAM Levels of Care, etc.
Harm Reduction (Patient-Centered Care)

### **Treatment:**

BU School of Medicine

26

RE

BOSTON

- "Detox" > Stabilization > Treatment (Inpatient, Outpatient)
- Medication for Use Disorders (e.g. MOUD)
- Cognitive Behavioral Therapy (CBT)
- Peer Counseling, Recovery Coach, Self-help
- eHealth (Telehealth)

### **Relapse Prevention**

BOSTON

UNIVERSITY

GENERAL INTERNAL

- Self-Care
- HALT (Hungry, Angry, Lonely, & Tired)
- Mindfulness Meditation
- Know Your Triggers
- Join a Support Group

- Grounding Techniques
- Deep Breathing
- Make An Emergency Contact List
- Play The Tape Through
- Get Help

### **Public Health Systems**

### Assessment

- Assess, Surveil, & Track Population Health
- Investigate, diagnose & address health hazards & root causes

### **Policy Development**

- Effective communication
- Support communities
- Create, champion, & implement Policies / Plans / Laws
- Use legal & regulatory action

### Assurance

- Enable equitable Access
- Develop a diverse & skilled workforce
- Improve & Innovate (Evaluation, Research, QI)
- Build/maintain organizational public health infrastructure



- Framework protects & promotes health of *all people in all communities*.
- To achieve equity, actively promote policies, systems, & community conditions that enable optimal health for all & seek to remove systemic & structural barriers resulting in health inequities.
- Barriers: poverty, racism, gender discrimination, ableism, etc.
- All people should have a fair & just opportunity to achieve optimal health & well-being.

The Public Health National Center for Innovations (PHNCI) 2020

RE



СС	<b>OVID-SUD</b> Intersectio	Model Structure		
	Impact of SAR-	SUD Popu	lation	
l Model	Social Ecological Model (SEM) Factors	SDOH	Personal Health Systems	Public Health Systems
gica	Individual	Α	E	l
Ecologi	Network	В	Domains	of Impact
Social E	Community	С	<ul> <li>Domains</li> <li>Key / Relevant Iss</li> <li>Current Solutions</li> </ul>	ues
So	Structural	D	Knowledge / Com	munication Needs



# SOCIAL DETERMINATES OF HEALTH (SDOH)

### Individual <mark>x SDOH</mark>

#### Key / Relevant Issues <sup>1,2</sup>

# Biological or behavioral characteristics a/w individual's risk of infection & associated morbidity & mortality (physical & mental health)

- Biological: Substance use related co-morbidity (e.g. lung disease) & immunosuppression. OUD > higher risk of SARS-CoV-2 diagnosis, hospitalization, & death
- Behavioral: Persons with SUD/OUD have ↑exposure risk to SARS-CoV-2 d/t living conditions (e.g. Shelters, Unstable Housing, Shared Living spaces), Serious Mental Health conditions (e.g., bipolar, anxiety, & antisocial personality disorder)<sup>2</sup> as well as treatment environments (e.g. OTP), active use environments (Dealer, use sites, O.D. naloxone rescues)

#### Current Solutions / Approaches

- Quarantine, Social Distancing, Temporary shelter, Masks, Vaccination, etc.
- Point-of-Use Drug testing

#### Knowledge / Communication Needs

- Comparison data on efficacy of current & potential transmission mitigation st
- Enhanced systems to assess & address both biological & behavioral risk
- Strategies to mitigate exposure for at risk individuals



RE



1. Cowan E, et.al., Addict Sci Clin Pract. 2021, PMCID: 7789072 2. Schulte MT, Hser YI., Public Health Rev. 2014;35(2)

10	Impact of SAR-CoV-2 on SUD Population				
cal Model	SEM Factors	SDOH	Personal Health Systems	Public Health Systems	
Ecological	Individual	Α	F	к	
	Network	В	G	L	
Social	Community	С	H	м	
	Structural	D	I	N	

### Network X SDOH

#### Key / Relevant Issues: Networks can be both protective and risk factors

- Social Networks: (+) vs (-) family, friends, employment, other users (in & out of recovery / dealers, clinicians, etc.
- Weakened relationships: Lead to ↓ social contact leading to △ SARS-CoV-2 exposure, MOUD, SUD, Mental health, & Harm reduction services (↑ depression, anxiety, psychosis, etc.)
- Drug Networks: Substance supply Δ's >> to Δ's in substance type, potency, contaminants, experience, etc.
- Network disruptions: Trigger adaptation/cessation of network-based interactions >> new/changed risk & benefits (e.g. type, frequency, form of administration, drug use setting; 1 contact with family decreases access to /use of substances.

#### Current Solutions / Approaches

- Telehealth Services / Remote monitoring of Physical & Health care services, Virtual Self-help groups (AA)
- Increased case management
- Increased case management
- Point-of-Use (PoU) Drug testing

#### Knowledge / Communication Needs

- Evidence-based/best practices: Telehealth / Remote monitoring / POU testing
- Network level illicit drug supply & O.D. monitoring and reporting



Wendt DC, , et.al., J Subst Abuse Treat. 2021 Feb;121:108165. PMCID: PMC7546255.

	Impact of SAR-CoV-2 on SUD Population					
Social Ecological Model	SEM Factors	SDOH	Personal Health Systems	Public Health Systems		
ologi	Individual	Α	F	к		
I Ecc	Network	В	G	L		
Socia	Community	С	H	М		
	Structural	D	I	N		

### Community X SDOH

# Key / Relevant Issues

- Relationships of networks within defined boundaries (Service specific needs of at-risk populations e.g. housing/homelessness, treatment services, justice-involved/incarcerated)
- Significant barriers to community d/t SDOH (no access/capacity for virtual service d/t lack of technology or internet.
- Pandemic related economic collapse high rates of job loss in at-risk populations

### **Current Solutions / Approaches**

- Telehealth / Privacy
- PPE for Safe street outreach
- Community / Coalition Programs
- Local Law enforcement, Fire fighters, & EMS

### Knowledge / Communication Needs

- Telehealth/Remote monitoring evidence-based/best practices
- Community level illicit drug supply & O.D. monitoring & reporting
- Model programs



/	Impact of SAR-CoV-2 on SUD Population					
	Social Ecological Model	SEM Factors	SDOH	Personal Health Systems	Public Health Systems	
	logic In	Individual	Α	F	К	
	I Eco	Network	В	G	L	
	Socia	Community	С	Н	М	
	-0)	Structural	D	I	N	

# Structural X SDOH

#### Key / Relevant Issues

- Core community response: Laws, policies, societal values, & economics distributed nonequitably (due to racial, class, etc. bias.) Implemented correctly can improve/exacerbate equitable delivery of services & opportunities
- Drug / Healthcare Policy: Changes to MOUD & Billing regulations (e.g. X-waiver, urine drug testing, face-to-face visits requirements/ Billing requirements) > increased flexibility
- Decarceration: Prison release of high-risk person 1 risk of OD & Death within 30 days
  - 2 yrs. post-release: Mortality rate: 777 deaths/100K person-yrs.
  - Adjusted Risk of Death (RoD) of former inmates 3.5 X > other state residents [95% CI] (3.2-3.8).
  - RoD was 12.7 X [95% CI] (9.2-17.4) other state residents within 2 wks. post-release
  - Relative RoD from drug O.D. (129 X, [95% CI, 89-186])
  - Top causes of death: Drug O.D., Cardiovascular disease, Homicide, & Suicide.

Current Solutions / Approaches

- $\Delta$ 's to MOUD regulation >  $\uparrow$  access/flexibility vs  $\uparrow$  risk of O.D. or diversion
- Delivery of MOUD in prisons, Drug Courts, Bridge clinics, etc.

#### Knowledge / Communication Needs

Evidence-based/best practices



Hawks L, Et.al. JAMA Intern Med. 2020 Aug 1;180(8):1041-1042. PMID: 32343355.

Binswanger, IA, et.al., January 11, 2007, NEJM 2007; 356:157-165 Cowan E, et.al., Addict Sci Clin Pract. 2021, PMCID: 7789072

	Impact of SAR-CoV-2 on SUD Population					
cal Model	SEM Factors	SDOH	Personal Health Systems	Public Health Systems		
Ecological	Individual	Α	F	к		
	Network	В	G	L		
Social	Community	С	н	М		
•	Structural	D	I	N		

RE

MEDICAL

BU School of Medicine

# **PERSONAL HEALTH SYSTEMS**

### INDIVIDUAL X PERSONAL HEALTH SYSTEMS

#### Key / Relevant Issues

- Effective & accessible healthcare focused on at-risk populations (SUD) reinforces messaging, monitoring, & management of individuals at high risk for SUD & SARS-CoV-2 transmission to mitigate SARS-CoV-2 transmission
- degree & numbers of persons engaged in MOUD compared to before the pandemic has led to 1 rates of new HIV infection among OUD patients lost to follow-up b/o access constraints related to the pandemic

#### Current Solutions / Approaches

Telehealth encounters

**BOSTON** UNIVERSITY

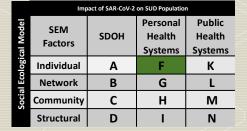
BU School of Medicine

Treatment of SUD (MOUD, Counseling, etc.)

#### **Knowledge / Communication Needs**

GENERAL INTERNAL

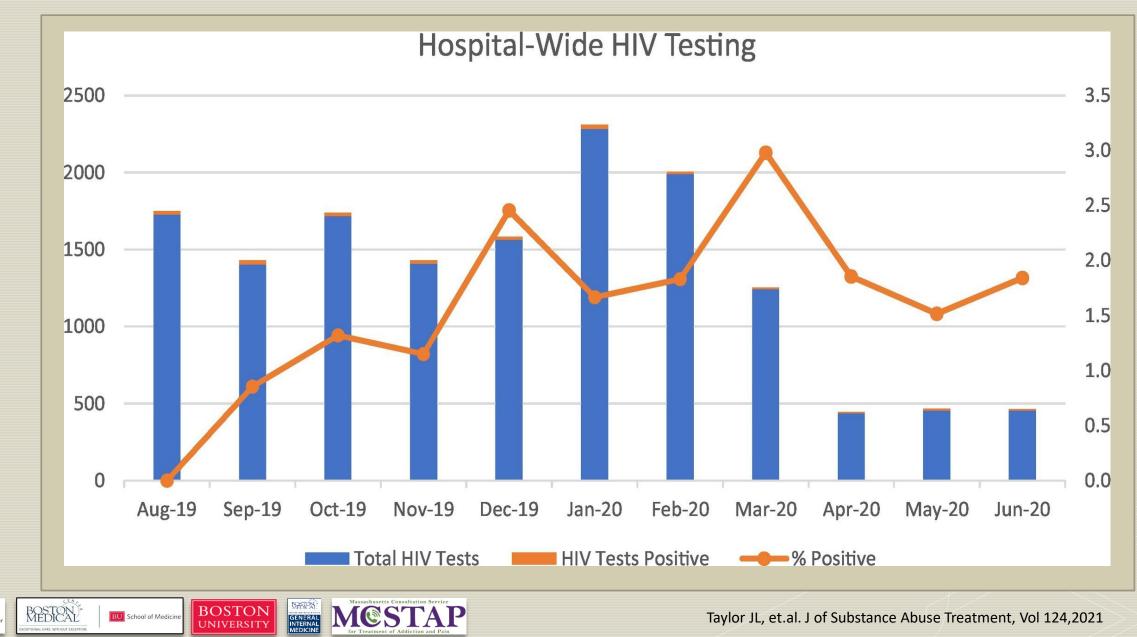
- Telehealth Evidence-based / Best practices
- Mechanism to <sup>↑</sup> SUD treatment of At-risk individuals



RE

BOSTON MEDICAL

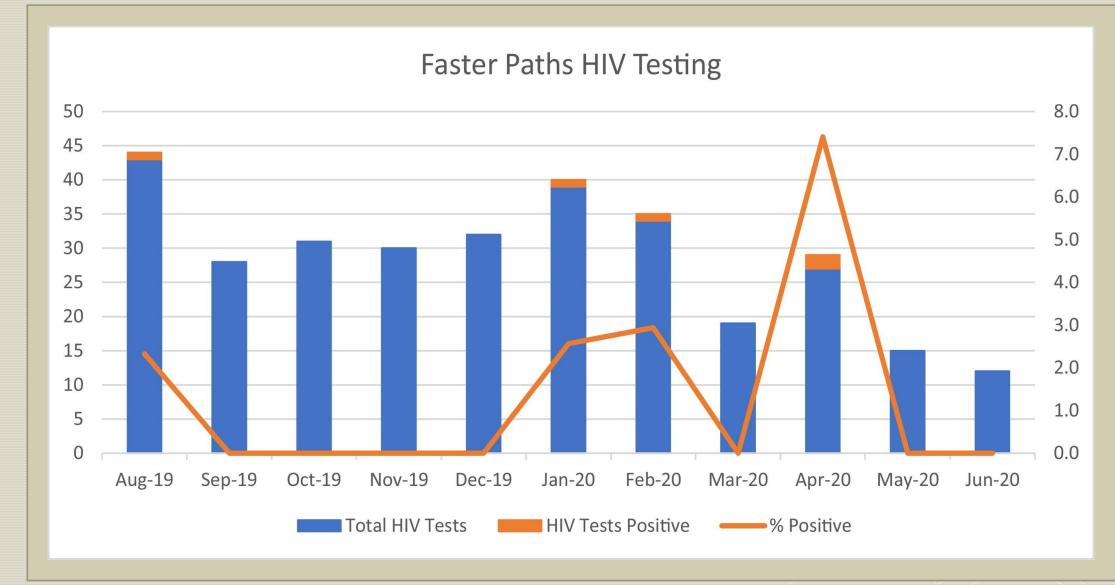
#### IMPACT OF SARS-CoV-2 ON HIV TRANSMISSION IN PATIENTS WITH SUD



RE

Grayken Center for Addiction

#### IMPACT OF SARS-CoV-2 ON HIV TRANSMISSION IN PATIENTS WITH SUD





- Lack of connections to care networks b/o knowledge, socio-behavioral or insurance can both increase or decrease risks to medical & SUD treatment services
- Lack of access to care for personal health impacts knowledge, behaviors & access to treatment for persons with SUD

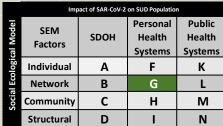
### Current Solutions / Approaches

Outreach / Healthcare messaging

### Knowledge / Communication Needs

 Evidence-based / Best Practices for leveraging all networks to provide timely & accurate knowledge sharing & messaging to increase access & demand for needed services & resources





39

### **COVID-SUD** Intersectionality

## Key / Relevant Issues

- Community resources can provide safe, evidence-based/best practices for treatment & harm reduction services, housing, employment, & medical care to atrisk populations (decarerated, homeless, women, etc.)
- Disrupted community resources are a major risk to creating/maintaining critical medical, mental, public health surveillance systems & harm reduction services.

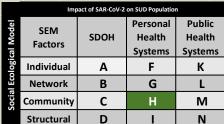
### Current Solutions / Approaches

- Telemedicine / Street outreach / Testing
- PPE sourcing & distribution

## **Knowledge / Communication Needs**

Evidence-based / Best Practices for to leverage community resources to provide timely & accurate knowledge sharing & messaging to increase Impact of SAR-CoV-2 on SUD Popul access & demand for needed services & resources Personal SEM SDOH Health Factors





- Racial & socioeconomic bias is a basic mechanism that ensure that Structural Barriers to health care, SUD treatment & Social support impact at-risk SUD populations disproportionally.
- Absence or presence of these barriers in the setting of the Pandemic has a major overall impact on clinical outcomes for treatment of SUD & SARS-CoV-2 infection

#### Current Solutions / Approaches

 Laws and regulation designed to reduce/eliminate healthcare & health disparities

#### Knowledge / Communication Needs

 Evidence-based / Best Practices for to address, mitigate/eliminate leverage community resources to provide timely & accurate knowledge sharing & impediments services & resources mediated by structural inequity

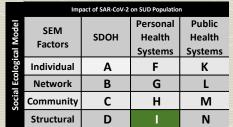




BOSTON MEDICAL

BU School of Medicine





**COVID-SUD** Intersectionality

# **PUBLIC HEALTH SYSTEMS**

RE

#### **COVID-SUD Intersectionality**

## Key / Relevant Issues

 Public health messaging is the mechanism that many/most individuals in community will obtain accurate and up-to-date information about the personal health of individuals in terms of SUD treatment & SARS-CoV-2 prevention & treatment

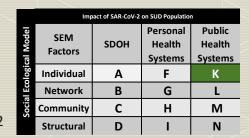
### Current Solutions / Approaches

 Medical & Behavioral messaging focused on prevention & accessing testing & treatment

## Knowledge / Communication Needs

- Evidence-based / Best Practices to address, mitigate/eliminate leverage public health resources to provide
  - Timely & accurate knowledge sharing
  - How to eliminate obstacles to implementing & accessing services/ resources that are mediated by structural inequity





BOSTON UNIVERSITY

BU School of Medicine

- Networks can enhance/worsen Clinical, SUD, & SARS-CoV-2 related outcomes depending public health systems capacity to influence exacerbating/ameliorating factors.
- Network-level approaches can address sub-group/population level risk;
   Potential for cost-effective outreach

## **Current Solutions / Approaches**

Public health messaging and knowledge transfer

## Knowledge / Communication Needs

- Evidence-based / best practices to address, mitigate/eliminate leverage public health resources to provide
- How to eliminate obstacles to implementing & accessing services/resources that are mediated by structural inequity
- Timely & accurate knowledge sharing

GENERAL INTERNAL M©STAP



	Impact of SAR-CoV-2 on SUD Population				
Social Ecological Model	SEM Factors	SDOH	Personal Health Systems	Public Health Systems	
	Individual	Α	F	к	
	Network	В	G	L	
	Community	С	н	М	
	Structural	D	I	Ν	

RE

MEDICAL

#### **COVID-SUD Intersectionality**

#### Community X Public health Systems

#### Key / Relevant Issues

- Community level interventions employing Public Health perspectives & community-targeted methods can help ensure engagement, knowledge of & access to healthcare, mental health, SUD treatment & support services.
- Community focused efforts, while labor & time intensive approaches, they can ultimately produce successful/sustainable outcomes
- While the pandemic & substance use crises drive motivation to use these approaches but can also inhibit the execution/implementation

#### Current Solutions / Approaches

- Community engage community organizing and planning
- Public health messaging & knowledge transfer
- Community / coalition programs
- Local Law enforcement, Fire fighters, & EMS

M©STAP

#### **Knowledge / Communication Needs**

GENERAL

 Evidence-based / best public health practices to leverage to timely, accurate, & collaborative knowledge sharing

Cowan E, et.al., Addict Sci Clin Pract. 2021, PMCID: 7789072

Social Ecological Model	Impact of SAR-CoV-2 on SUD Population					
	SEM Factors	SDOH	Personal Health Systems	Public Health Systems		
	Individual	Α	F	К		
	Network	В	G	L		
	Community	С	Н	М		
	Structural	D	I	Ν		

RE

BOSTON

BU School of Medicine

- Structural obstacles from racial & socioeconomic inequities impact access/delivery of health care, SUD treatment & Social support for at-risk SUD population.
- Absence or presence of these barriers during the pandemic has a substantial impact on clinical outcomes for treatment of both SUD & SARS-CoV-2 infection

#### **Current Solutions / Approaches**

BOSTON

BU School of Medicine

- Population-wide monitoring of clinical & public health outcomes a/w structural bias
- Laws and regulation designed to reduce/eliminate healthcare & health disparities

#### Knowledge / Communication Needs

Evidence-based / best practices to address, mitigate, eliminate structural barriers

Cowan E, et.al., Addict Sci Clin Pract. 2021, PMCID: 7789072

- Optimize leveraging of public health resources mitigate/eliminate structural obstacles
- Improve timely & accurate knowledge sharing & implementation services & resources

	Impact of SAR-CoV-2 on SUD Population					
Social Ecological Model	SEM Factors	SDOH	Personal Health Systems	Public Health Systems		
	Individual	Α	F	к		
	Network	В	G	L		
	Community	С	Н	м		
	Structural	D	I	N		

RE

BOSTON

## COVID-SUD Intersectionality PANDEMIC RELATED FACTORS

### Stage of Pandemic determines risk in each model strata:

- $\downarrow$  Risk of SARS-CoV-2 infection >  $\downarrow$  risk of morbidity & mortality
- $\uparrow$  Infection control >  $\uparrow$  social isolation/ risk of solo drug use /  $\downarrow$  SUD treatment/ MOUD
- Ongoing network disruptions can worsen other key intersectional domains

### Current Solutions / Approaches

- Use of virtual/traditional personal & public health communications systems to transfer knowledge & enhance access to medical, mental health, & SUD services
- Transmission of knowledge & data to public-health focused community organizations
- Standard Medical research methods

### Knowledge / Communication Needs

- Improved, evidence-based / best Practices for communication to ensure timely / accurate knowledge sharing, mitigation of barriers to services & resources
- Evidence-based / best practices to leverage community & network resources
- Pragmatic study design / implementation, guideline development
- Enhanced pandemic & population monitoring



## Summary

- The coincident SARS-CoV-2 pandemic & the substance use epidemic is complicated, bidirectional, & intersectional
- A patient-centered approach has been employed to guide both frontline as well as regulatory innovation
- The Social Ecological Model (SEM), applied as an organizing framework, can help characterize the interactions & impact on populations affected by the co-epidemics of SARS-CoV-2 & substance use
- Medical, psychiatric, substance use, & public health systems are activated & are rapidly evolving in response to the ongoing co-epidemic
- Challenges remain to address the needs of the science, medical, mental & public health sectors in order to innovate & implement solutions





48

RE

BU School of Medicine



## **Contact Info**

## Dr. Christopher Shanahan

## **Christopher.Shanahan@bmc.org**



## **Evaluation Information**

Link to Evaluation: https://bit.ly/3qanKC7

Enrollment Code (Needed to Claim CE Credit) - SubDisCV



## How to Claim CE Credit



**U.S. National Library of Medicine** 

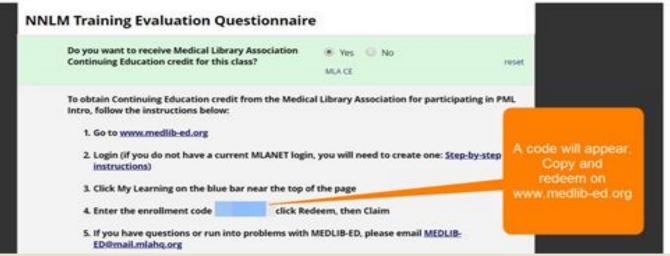
National Network of Libraries of Medicine Training Office

#### 801-587-3518 - Voice https://nnlm.gov/nto

## How to Claim CE Credit with a MLA

#### **Enrollment Code**

At the end of the class, we shared a URL to the class evalution. After you complete the evaluation, you will be asked if you want CE credit. If you say Yes, an enrollment code will display on the page along with a direct link to MEDLIB-ED, the Medical Library Association's (MLA) clearinghouse for CE classes and credit. Follow the link to MEDLIB-ED, log in (or register if this is your first time), and claim your credit. Complete instructions are below. You don't have to be a member of MLA to create an account and claim credit.



https://nnlm.gov/sites/default/files/nto/Claim\_MLA\_CE\_handout.pdf