Substance Use Disorder Treatment in the Time of COVID

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

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

Creative Commons License
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.
Welcome to the Webinar

Connect to the Audio

1) Your audio box may look like this when you enter the WebEx session.

2) Click the arrow to expand the section you need (phone or computer).

3) If you want the system to call your phone, enter your phone number.

4) Test your computer audio and then click *Call Using Computer*.
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 This Link 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)

https://www.nlm.nih.gov/

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)

https://nnlm.gov/

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

https://medlineplus.gov/

NNLM Substance Use Disorder Initiative Resource Page

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

January 28, 2021

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
Massachusetts Consultation Service

MCSTAP
for Treatment of Addiction and Pain

For a FREE MCSTAP consultation
**1-833-PAIN-SUD** (1-833-724-6783)
Monday through Friday, 9 a.m. to 5 p.m.

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
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 evidence-based & 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
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

Ryan Haight Online Pharmacy Consumer Protection Act of 2008:
- Rules for telemedicine Rx of controlled medications.

Drug Enforcement Agency (DEA):
- 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:
- OTPs may Rx buprenorphine via telehealth & liberalized the # of days of take-home meds to reduce in-person visits.

CMS:
- Temporarily allowing Medicare to cover additional telehealth services.

Guidance Documents

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**

**Brandeis Opioid Resource Connector: Communities informing communities**
https://opioid-resource-connector.org/frontpage/

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

**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**
http://www.partnershipphp.org/Providers/HealthServices/Documents/ManagingPainSafely/TAPERINGTOOLKIT_FINAL.pdf

**CMS opioid prescribing tool - Medicare**

Substance Use Disorders & COVID-19 Susceptibility

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

- Persons with SUDs at ↑ risk 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 & COVID-19, the death rate of African Americans was 13 % vs 8.6 % for Caucasians
Understanding the complexity & Intersectionality of Substance Use Disorder Care During a Pandemic: Key Concepts
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
Social Ecological Model (SEM)

**Individual factors**
- Biological factors

**Network factors**
- Social
- Drug

**Community factors**
- Treatment
- Harm Reduction
- Other

**Structural**
- Evolving Drug Policy
- Decarceration
- Social/Physical distancing
- Other

Intersectionality

An analytical framework for understanding how aspects of a person's social & political identities combine to create different modes of discrimination & privilege\textsuperscript{1,2}

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\textsuperscript{3}

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

2. Yonce K "Attractiveness privilege : the unearned advantages of physical attractiveness". (Jan 2014)
**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:**
- “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**

- 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
### COVID-SUD Intersectionality

#### Impact of SAR-CoV-2 on SUD Population

<table>
<thead>
<tr>
<th>Social Ecological Model (SEM) Factors</th>
<th>SDOH</th>
<th>Personal Health Systems</th>
<th>Public Health Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>A</td>
<td>E</td>
<td>I</td>
</tr>
<tr>
<td>Network</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Domains of Impact
- Key / Relevant Issues
- Current Solutions / Approaches
- Knowledge / Communication Needs

COVID-SUD Intersectionality

**Social Determinates of Health (SDOH)***
COVID-SUD Intersectionality

Key / Relevant Issues \(^1,2\)

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)\(^2\) 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 strategies
- Enhanced systems to assess & address both biological & behavioral risk
- Strategies to mitigate exposure for at risk individuals

2. Schulte MT, Hser YI., Public Health Rev. 2014;35(2)
COVID-SUD Intersectionality

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 Δ 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; ↑ 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
- 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

COVID-SUD Intersectionality

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

COVID-SUD Intersectionality

Key / Relevant Issues

▪ Core community response: Laws, policies, societal values, & economics distributed non-equitably (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 ↑ 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

▪ Δ’s to MOUD regulation > ↑ access/flexibility vs ↑ risk of O.D. or diversion

▪ Delivery of MOUD in prisons, Drug Courts, Bridge clinics, etc.

Knowledge / Communication Needs

▪ Evidence-based/best practices

Impact of SAR-CoV-2 on SUD Population

SEM Factors | SDOH | Personal Health Systems | Public Health Systems
---|---|---|---
Individual | A | F | K
Network | B | G | L
Community | C | H | M
Structural | D | I | N

COVID-SUD Intersectionality

PERSONAL HEALTH SYSTEMS
**COVID-SUD Intersectionality**

**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 ↑ 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
- Treatment of SUD (MOUD, Counseling, etc.)

**Knowledge / Communication Needs**

- Telehealth Evidence-based / Best practices
- Mechanism to ↑ SUD treatment of At-risk individuals
IMPACT OF SARS-COV-2 ON HIV TRANSMISSION IN PATIENTS WITH SUD

Taylor JL, et.al. J of Substance Abuse Treatment, Vol 124, 2021
Impacts of SARS-CoV-2 on HIV Transmission in Patients with SUD

Taylor JL, et. al. J of Substance Abuse Treatment, Vol 124, 2021
COVID-SUD Intersectionality

Key / Relevant Issues

- 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

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 at-risk populations (decarcerated, 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 access & demand for needed services & resources

---

COVID-SUD Intersectionality

**Key / Relevant Issues**

- 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.

---

COVID-SUD Intersectionality

PUBLIC HEALTH SYSTEMS
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

**COVID-SUD Intersectionality**

**Key / Relevant Issues**

- 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
COVID-SUD Intersectionality

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

Knowledge / Communication Needs

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

COVID-SUD Intersectionality

Key / Relevant Issues

- 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

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

COVID-SUD Intersectionality

PANDEMIC RELATED FACTORS

Stage of Pandemic determines risk in each model strata:

- ↓ Risk of SARS-CoV-2 infection > ↓ risk of morbidity & mortality
- ↑ Infection control > ↑ social isolation/ risk of solo drug use / ↓ 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
Contact Info

Dr. Christopher Shanahan

Christopher.Shanahan@bmc.org
Evaluation
Information

Link to Evaluation:

Enrollment Code (Needed to Claim CE Credit) – SubDisCV
How to Claim CE Credit