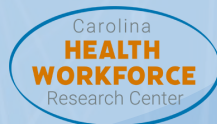


Roundtable Discussion on Behavioral Health in Rural Communities

Brianna Lombardi, PhD, MSW

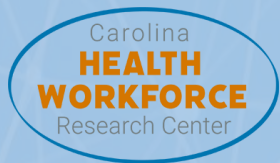
Deputy Director, Carolina Health Workforce Research Center
Assistant Professor, Department of Family Medicine, School of Medicine
Research Assistant Professor, School of Social Work
University of North Carolina at Chapel Hill



THE CECIL G. SHEPS CENTER FOR
HEALTH SERVICES RESEARCH

Overview

- Behavioral health needs in the US have never been higher
- Thinking about levers to impact “access” to behavioral health services for rural communities
- Focus on:
 1. Integrated behavioral health services
 - Primary Care Services
 - Schools/School-based health centers
 2. Tele-behavioral health
 - Increasingly larger role, especially for rural areas
 3. Treating Opioid Use Disorders
 - Medications for Opioid Use Disorders
 - Peer Recovery Models
 - Harm Reduction Models

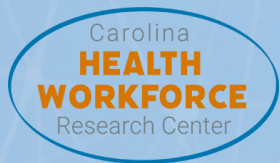


THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Why should we care about behavioral health?



- Behavioral health challenges impact every family and community--- directly and indirectly



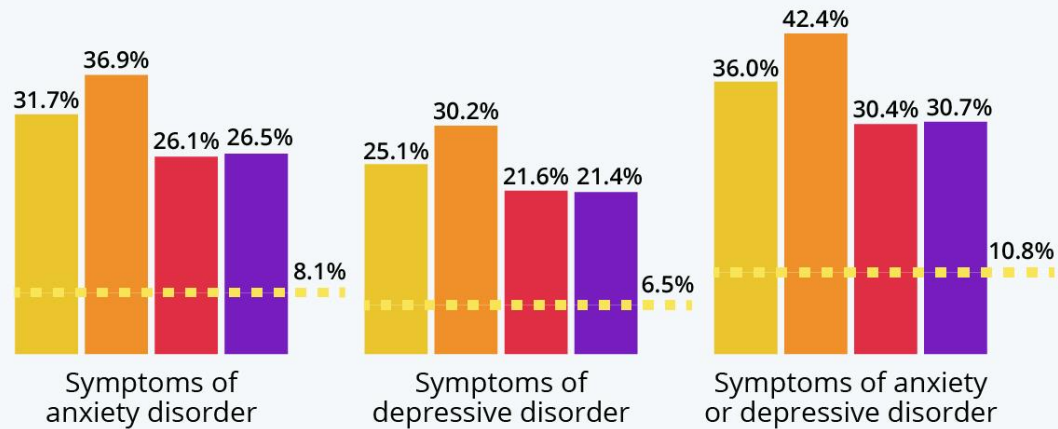
THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Behavioral Health Need is High

Pandemic Causes Spike in Anxiety & Depression

% of U.S. adults showing symptoms of anxiety and/or depressive disorder*

--- 2019 ■ Jun 2020 ■ Dec 2020 ■ Jun 2021 ■ Dec 2021



* Based on self-reported frequency of anxiety and depression symptoms. Derived from responses to Patient Health Questionnaire (PHQ-2) and the Generalized Anxiety Disorder (GAD-2) scale.

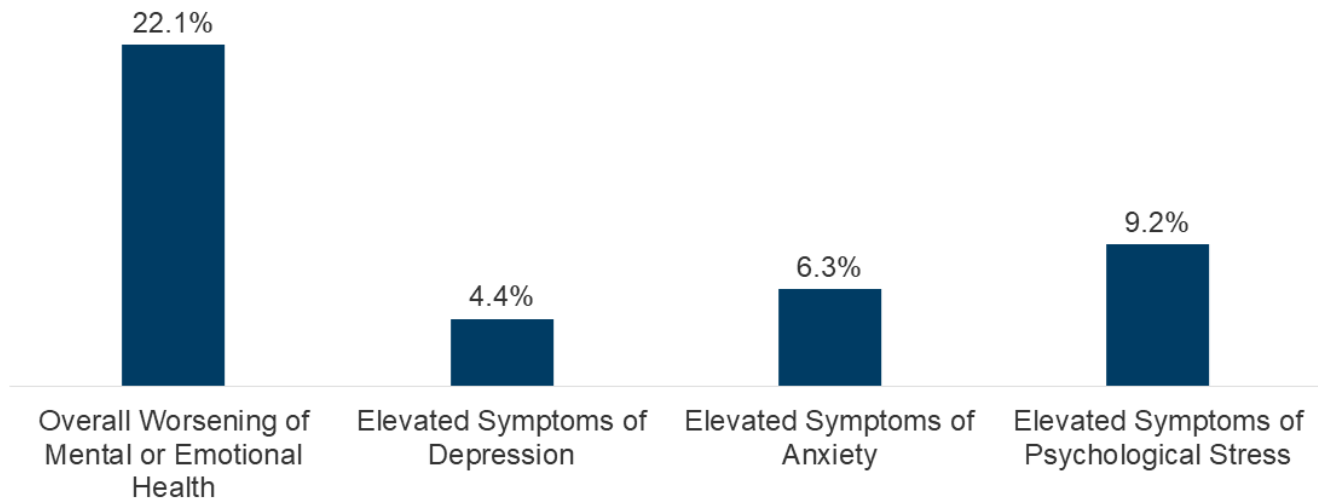
Sources: CDC, NCHS, U.S. Census Bureau



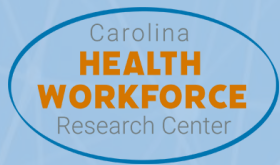
Behavioral Health Need is High

Figure 3

Share of Parents Reporting Worsening Mental Health For Their Children Ages 5-12, October-November 2020



SOURCE: Verlenden JV, Pampati S, Rasberry CN, et al. Association of Children's Mode of School Instruction with Child and Parent Experiences and Well-Being During the COVID-19 Pandemic — COVID Experiences Survey, United States, October 8–November 13, 2020. MMWR Morb Mortal Wkly Rep 2021;70:369–376. DOI: <http://dx.doi.org/10.15585/mmwr.mm7011a1>



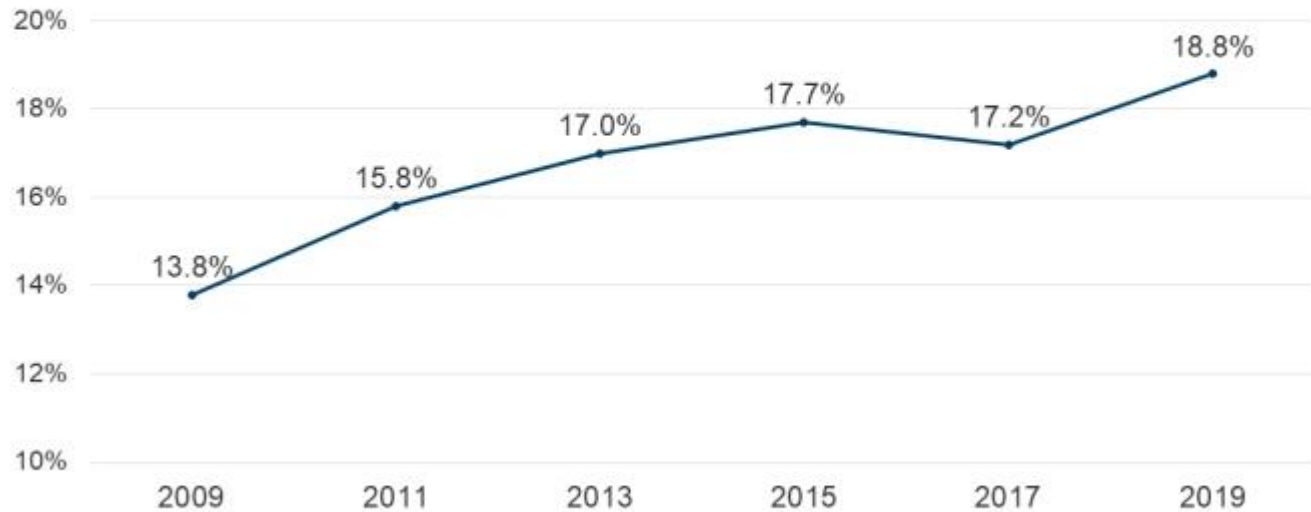
THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH



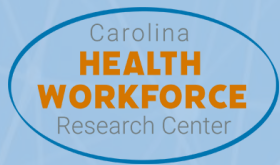
But behavioral health problems were growing even prior to the pandemic

Figure 2

Percent of High School Students Who Seriously Considered Attempting Suicide in the Past Year, 2009-2019



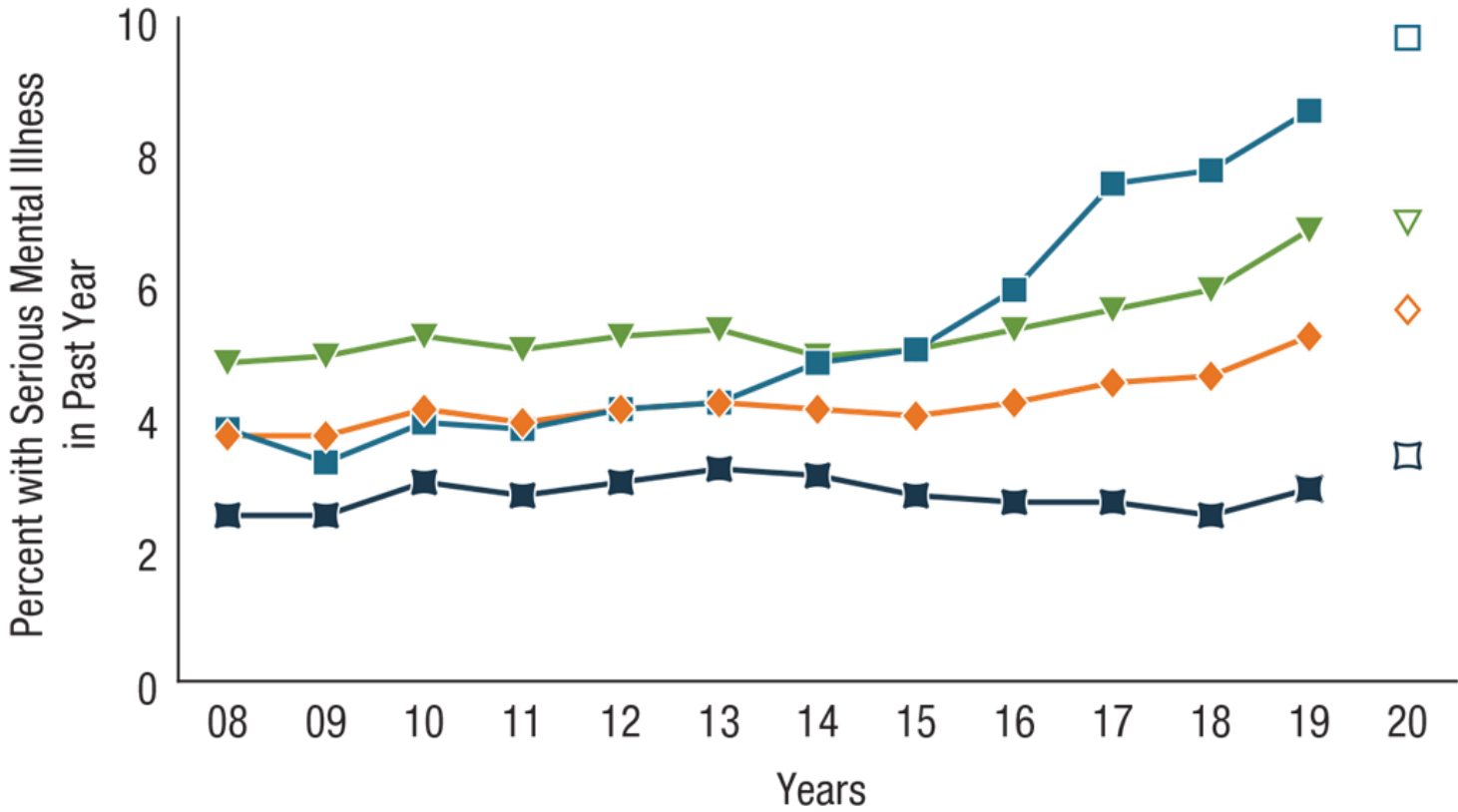
SOURCE: Youth Risk Behavior Survey, 2009-2019.



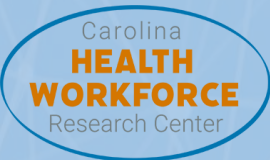
THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH



Serious Mental Illness in the Past Year: Among Adults Aged 18 or Older; 2008-2020



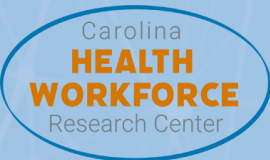
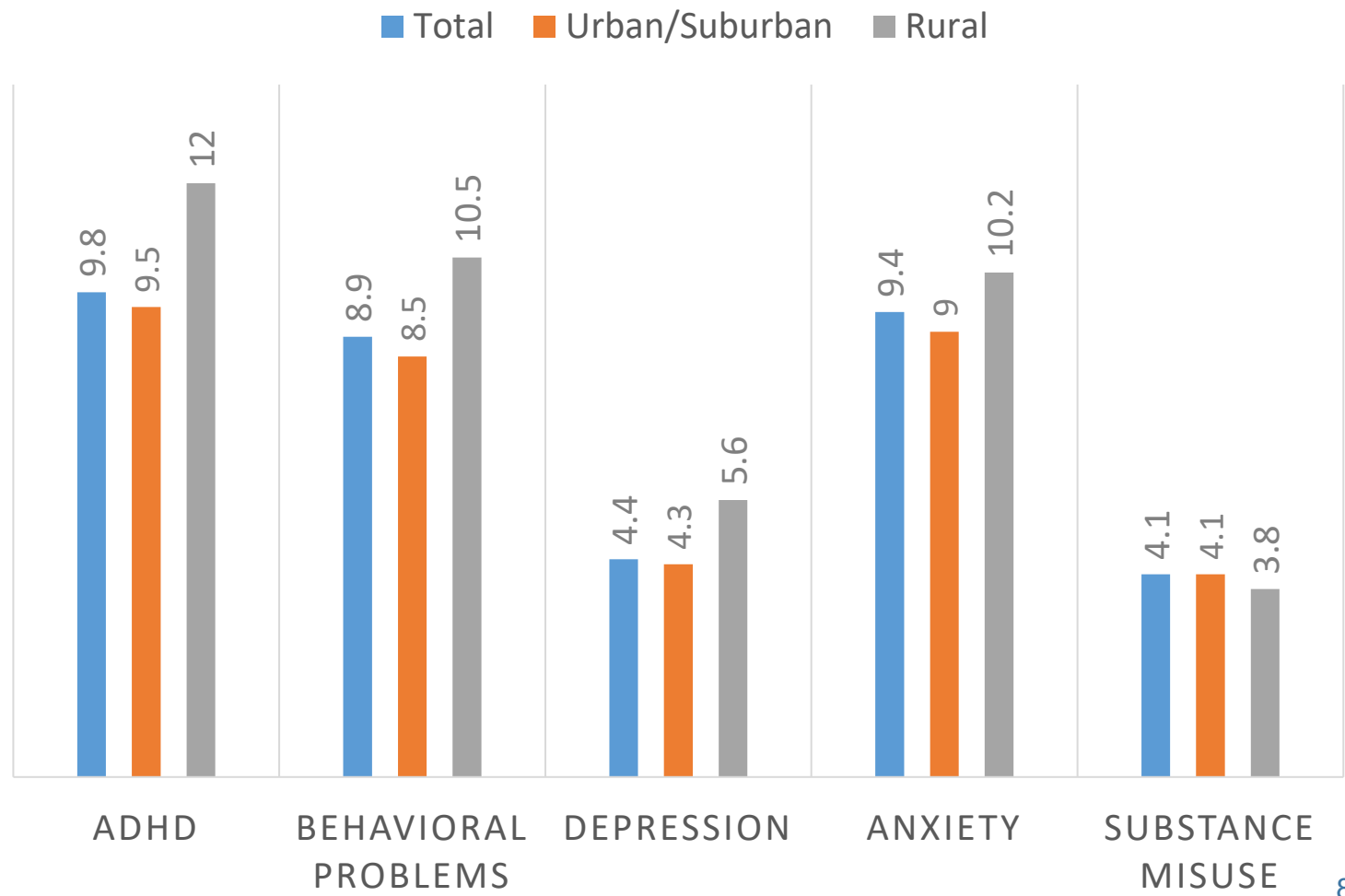
Age Category: —◇— 18 or Older —□— 18 to 25 —▽— 26 to 49 —◻— 50 or Older



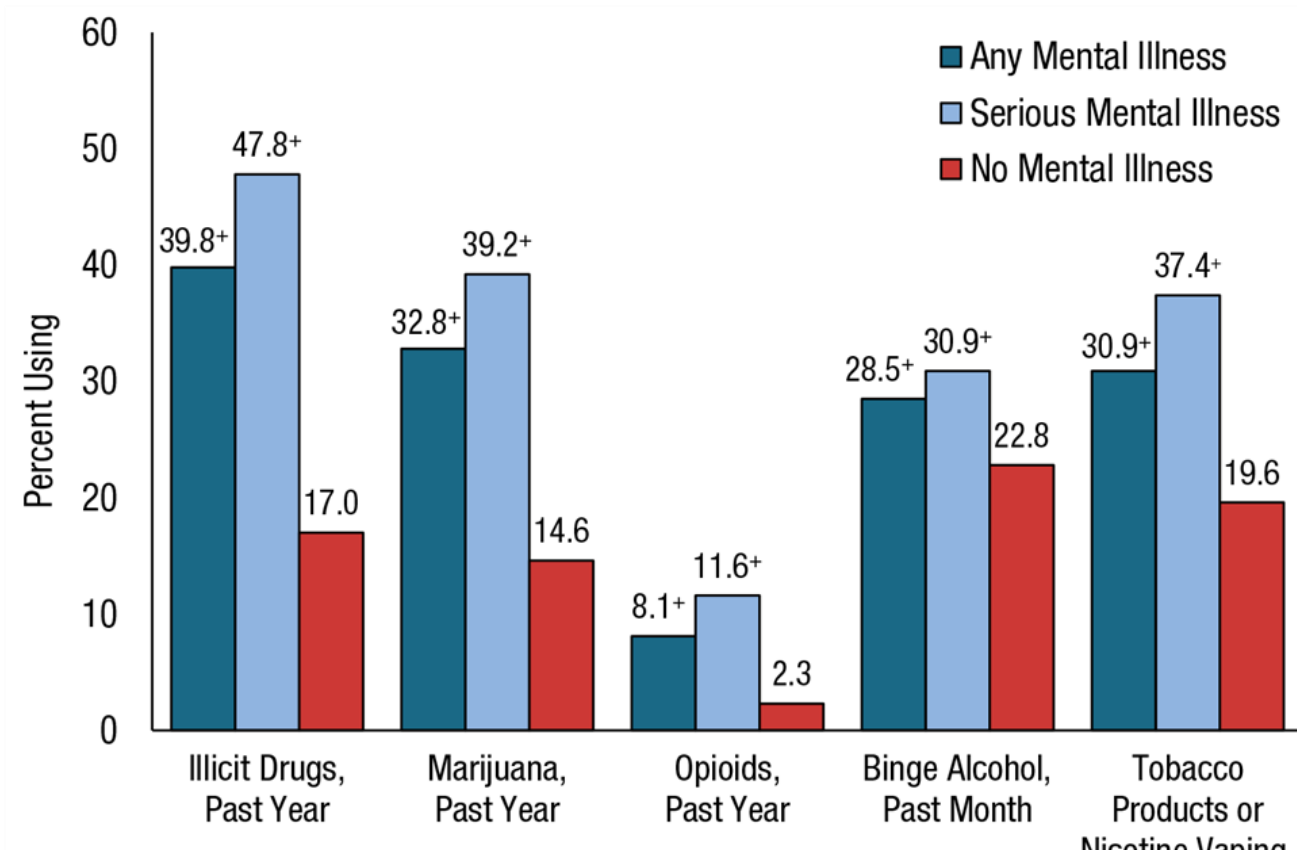
Results from the 2016-2019 National Survey of Children's Health (NSCH); 2018 National Survey on Drug Use and Health

Youth Behavioral Health by Rural/Urban Status

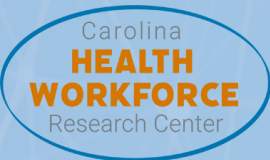
YOUTH MENTAL HEALTH BY URBAN/RURAL



Mental Health and Substance Misuse Commonly Co-Occurs

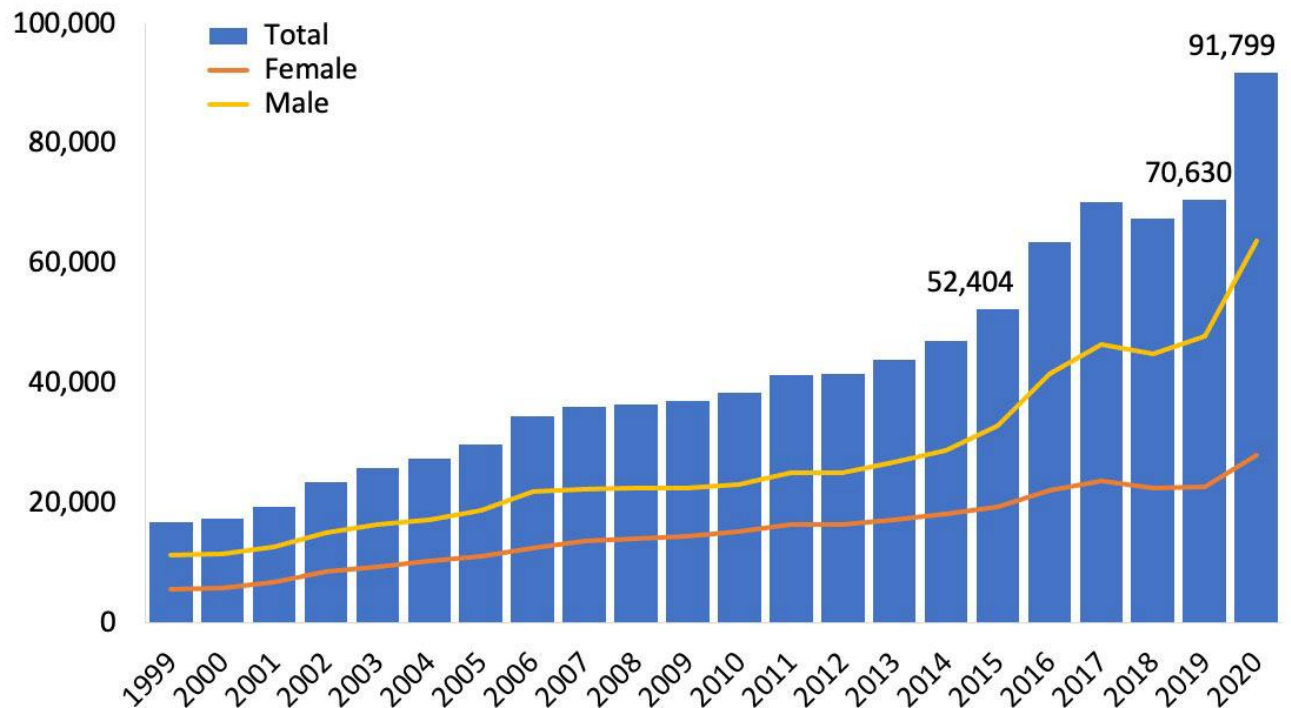


Substance Use: Among Adults Aged 18 or Older; by Mental Illness Status, 2020



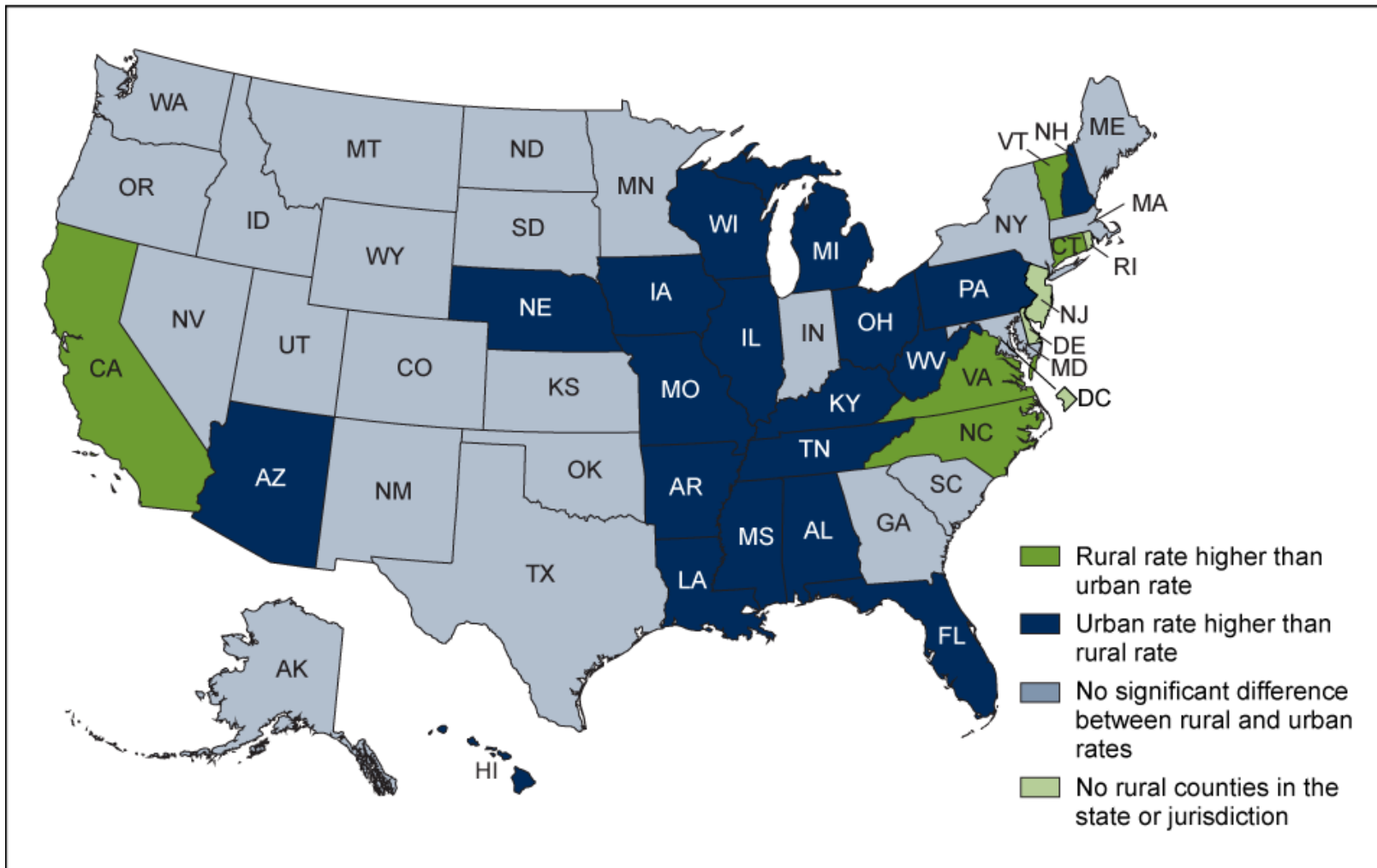
Rate of Overdose Deaths Continues to Rise

**Figure 1. National Drug-Involved Overdose Deaths*
Number Among All Ages, by Gender, 1999-2020**



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database, released 12/2021.

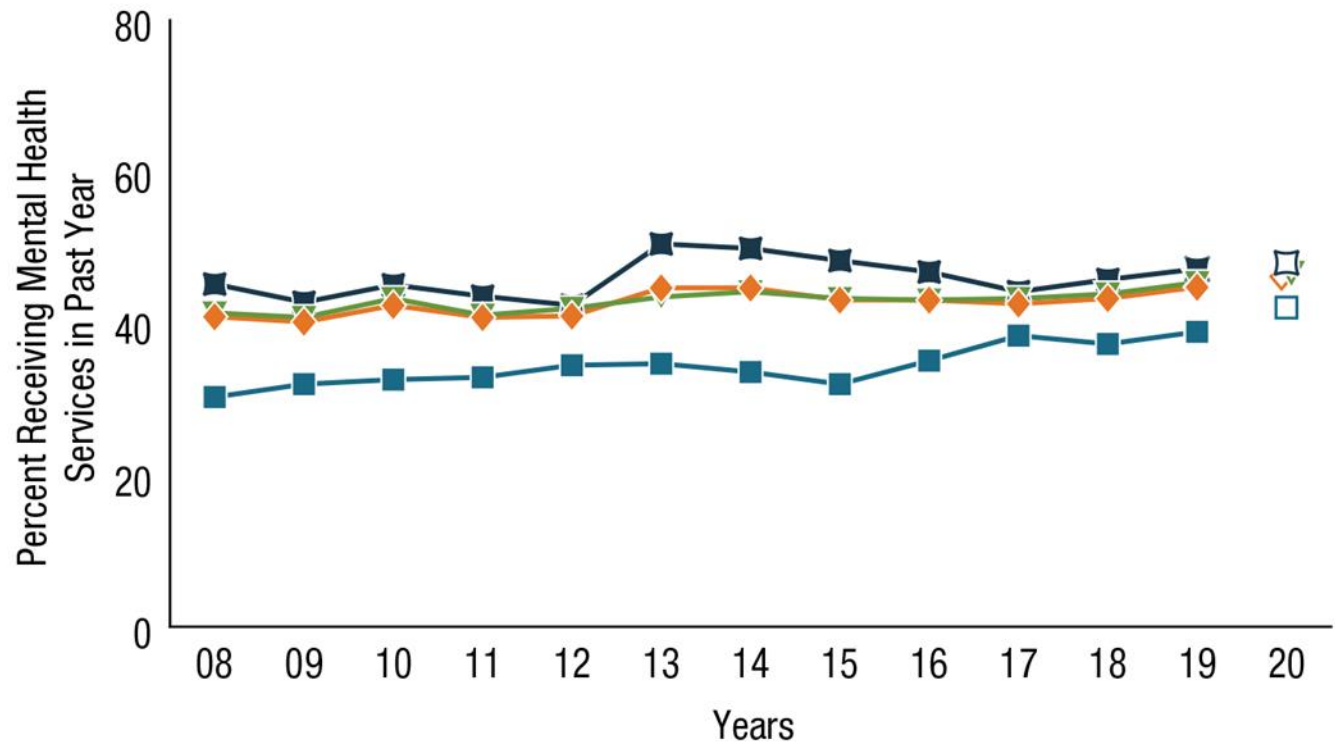
Figure 2. Urban–rural differences in age-adjusted rates of drug overdose deaths, by jurisdiction of residence: 2019



NOTES: Drug overdose deaths were identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Age-adjusted death rates were calculated using the direct method and the 2000 U.S. standard population. Decedent’s county of residence was classified as urban or rural based on the 2013 NCHS Urban–Rural Classification Scheme for Counties. Access data table for Figure 2 at: <https://www.cdc.gov/nchs/data/databriefs/db403-tables-508.pdf#2>.

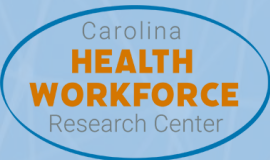
SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

Mental Health Services Received in the Past Year: Among Adults Aged 18 or Older with Any Mental Illness in the Past Year; 2008-2020

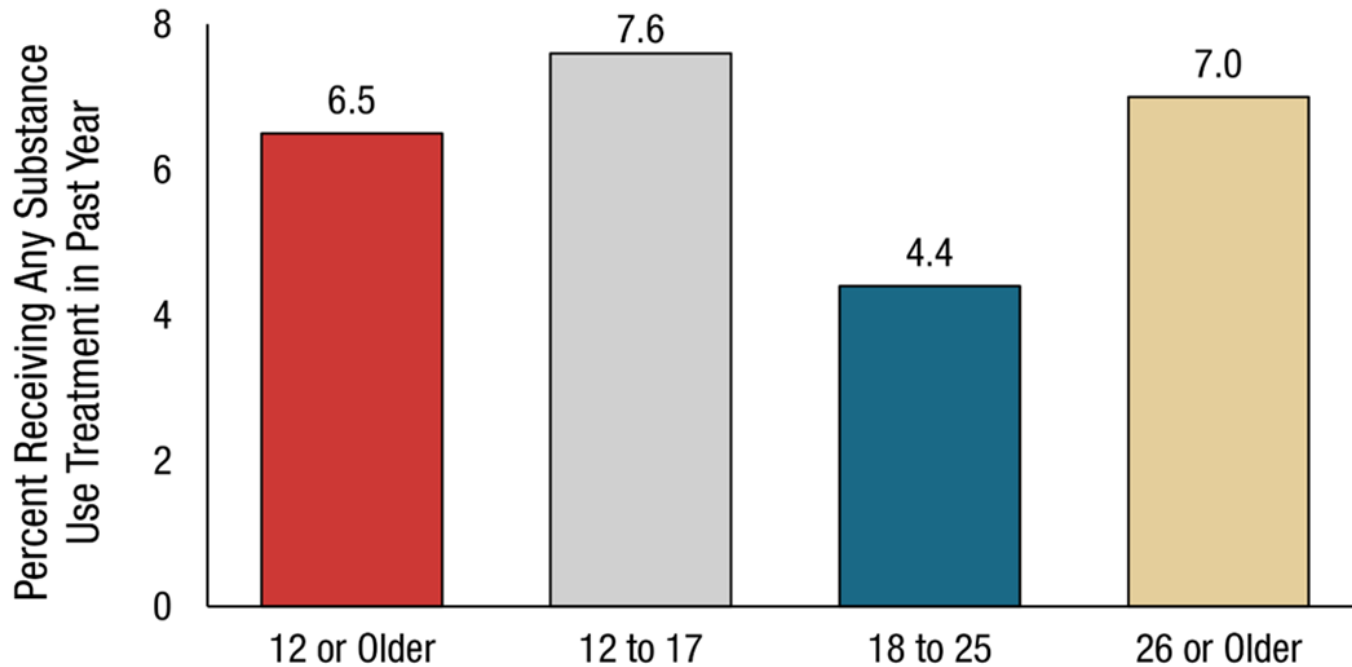


Age Category: —◇— 18 or Older —□— 18 to 25 —▽— 26 to 49 —◻— 50 or Older

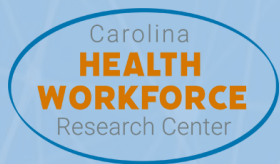
Age	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
18 or Older	40.9	40.2	42.4	40.8	41.0	44.7	44.7	43.1	43.1	42.6	43.3	44.8	46.2
18 to 25	30.3	32.0	32.6	32.9	34.5	34.7	33.6	32.0	35.1	38.4	37.3	38.9	42.1
26 to 49	41.4	40.8	43.3	41.1	42.0	43.5	44.2	43.3	43.1	43.3	43.9	45.4	46.6
50 or Older	45.2	42.8	45.1	43.6	42.4	50.5	49.9	48.3	46.8	44.2	45.8	47.2	48.0



Received Any Substance Use Treatment in the Past Year: Among People Aged 12 or Older Who Had a Substance Use Disorder in the Past Year; 2020

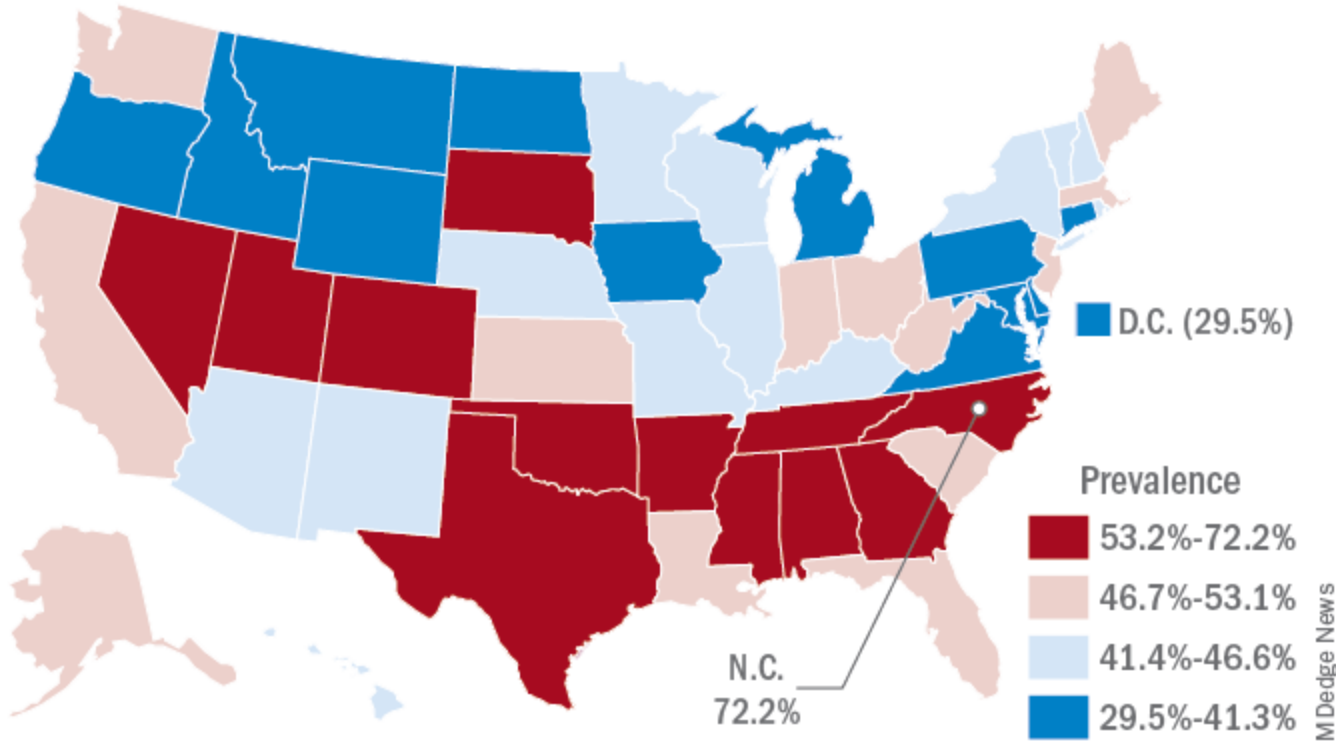


Results from the 2020 National Survey on Drug Use and Health

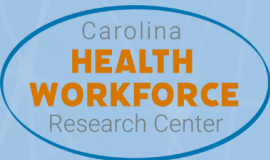


THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

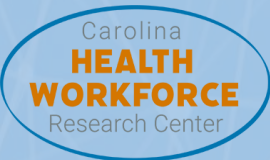
Children with mental health disorders who did not receive care



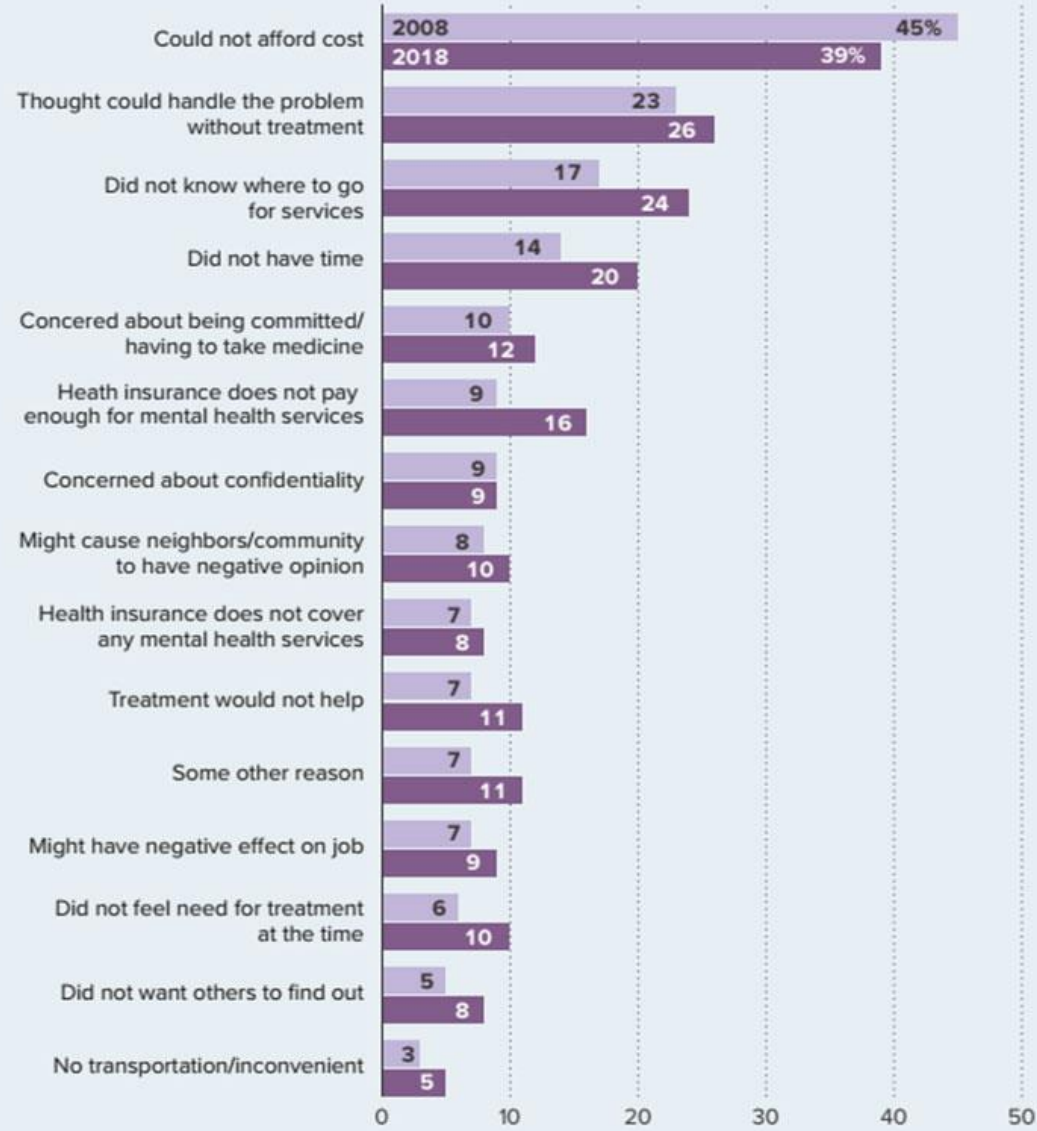
Note: Based on data from the 2016 National Survey of Children's Health.
 Source: JAMA Pediatr. 2019 Feb 11. doi: 10.1001/jamapediatrics.2018.5399



Results from the 2008 and 2016 National Survey on Drug Use and Health

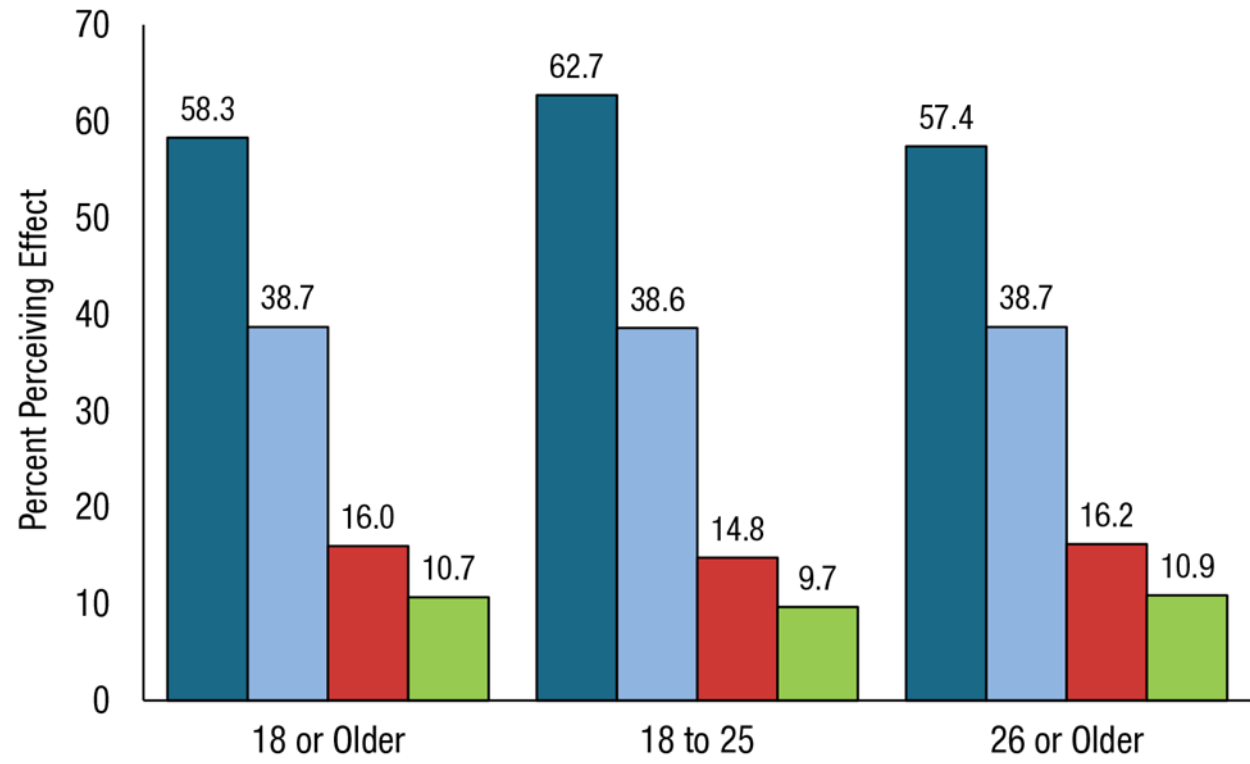


Reasons for Not Receiving Mental Health Services in the Past Year, 2008 vs. 2018

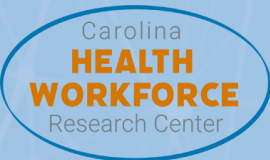


Source: 2008 and 2018 National Survey on Drug Use and Health. Note: Response categories are not mutually exclusive; respondents could indicate multiple reasons for not receiving mental health services.

COVID-19 Effect on Mental Health Services: Among Adults Aged 18 or Older Who Received Services; Quarter 4, 2020



- Appointments moved from in-person to telehealth
- Delays or cancellations in appointments
- Delays in getting prescriptions
- Unable to access needed care resulting in moderate to severe impact on health

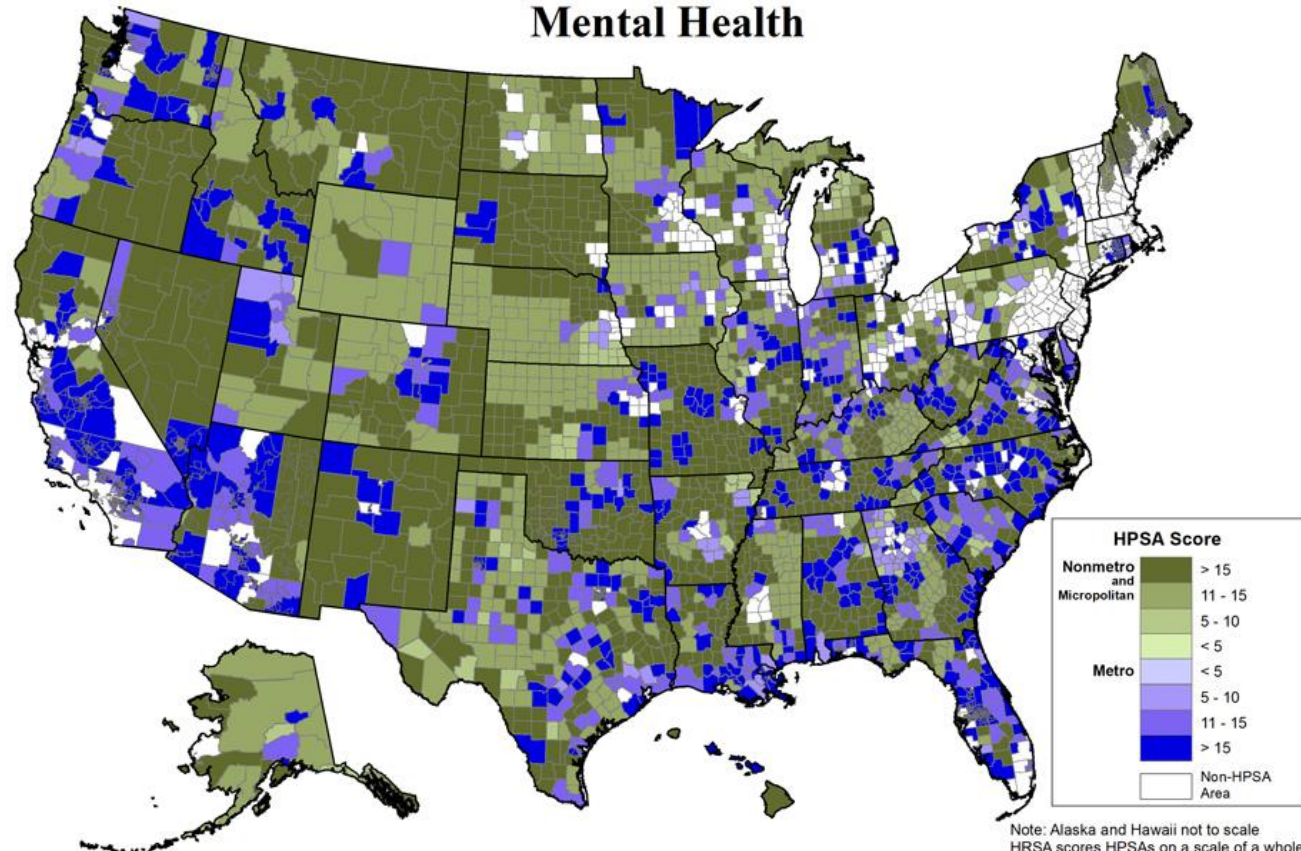


What does access mean for behavioral health services?

Dimension of Access	What does this look like?	Levers
Availability <i>Demand compared to supply</i>	Overall shortage of behavioral health providers	<ul style="list-style-type: none"> • Educational training grants • Loan repayment programs
Accessibility <i>Geographic relationship between the services & the people in need</i>	Maldistribution of behavioral health providers	<ul style="list-style-type: none"> • Tele-behavioral health • Integrated behavioral health in CHCs and schools
Accommodation <i>Ease of navigating behavioral health services</i>	Difficulty knowing how to get into services (24% do not know where to receive care)	<ul style="list-style-type: none"> • Care coordination • Service referral lines • Tele-behavioral health
Acceptability <i>Perception of behavioral health services</i>	Stigma and bias continue to impact behavioral health service use	<ul style="list-style-type: none"> • Integrating health services into trusted health delivery and school settings • Peer support and services
Affordability <i>Cost of care</i>	Cost of care is the strongest predictor of the likelihood of receiving behavioral health treatment	<ul style="list-style-type: none"> • Payment policy • MH insurance parity

Behavioral health workforce shortages in rural communities are endemic

Health Professional Shortage Areas Mental Health

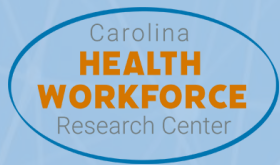


Note: Alaska and Hawaii not to scale
HRSA scores HPSAs on a scale of a whole number (0-25 for mental health), with higher scores indicating greater need

Source(s): data.HRSA.gov, U.S. Department of Health and Human Services, January 2022

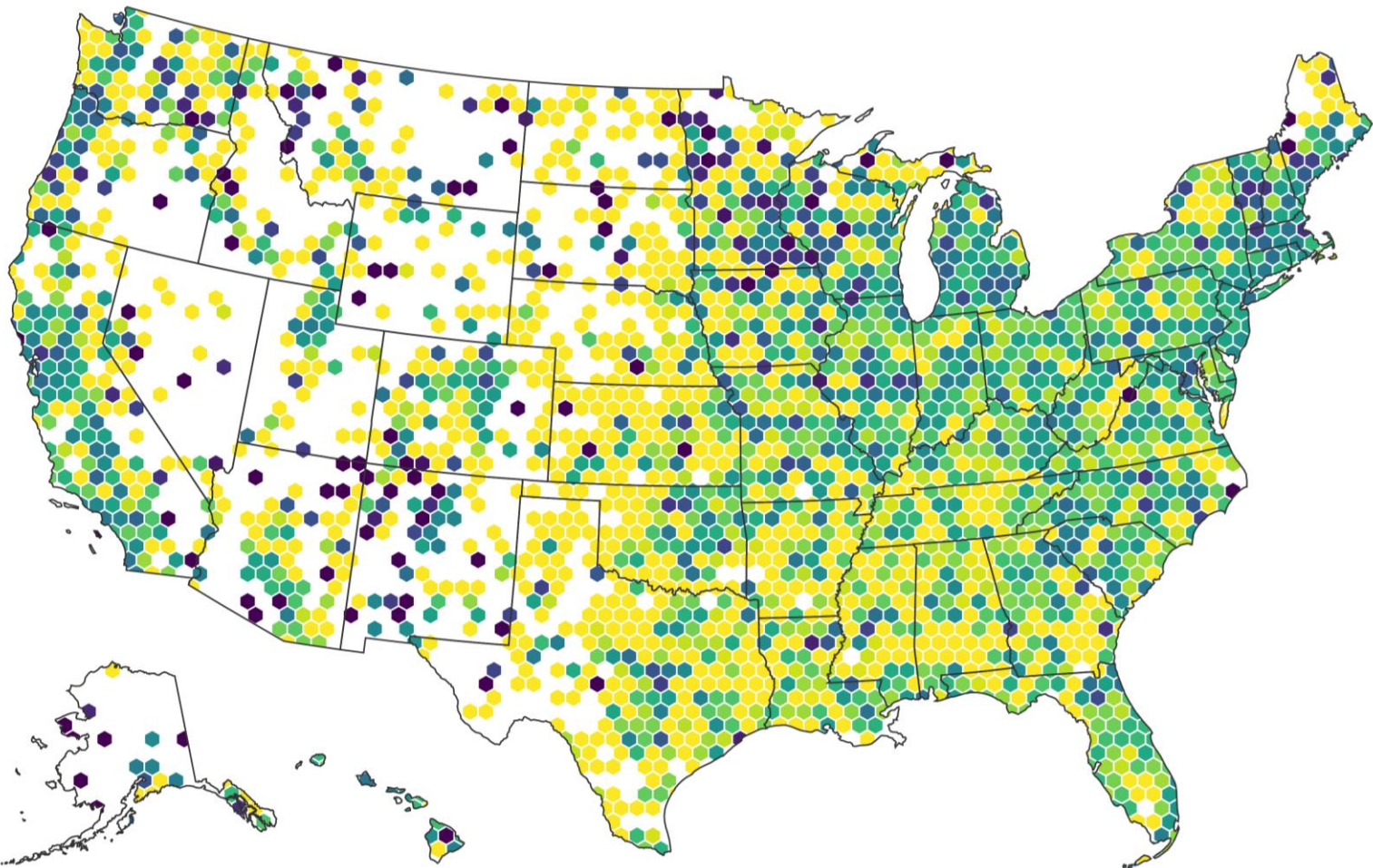
Integrated Behavioral Health

- Movement away from siloed care
- Co-locating behavioral health services into primary health care providers
 - Creating a team with close communication as needed and integrated treatment plan
- Universal screening and assessment for behavioral health, close connection to provide brief interventions or refer and coordinate with specialty mental health services



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Integrated Behavioral Health may be maldistributed in rural communities



Richman, E. L., Lombardi, B. M., & Zerden, L. D. (2020). Mapping colocation: Using national provider identified data to assess primary care and behavioral health colocation. *Families, Systems, & Health, 38*(1), 16.

Percent of PCPs Co-located with a Behavioral Health Professional



○ = No PCPs located in area

How do we support integrated behavioral health?



Workforce training and education programs in integrated behavioral health



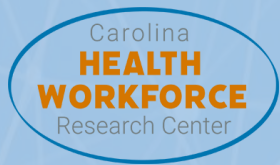
Behavioral health screening in pediatric health settings (e.g., Mandated part of care in Massachusetts)



Supporting Community Health Centers, which have the infrastructure to support integrated behavioral health

School-Based Mental Health

- Schools play a critical role in improving child mental health and well-being
 - Standardized screening & coordination to services
 - Embed behavioral health providers
 - Train teachers and administrators
- Aligning state educational system with state mental health systems
- Partner with Community Health Centers to deliver school-based mental health services

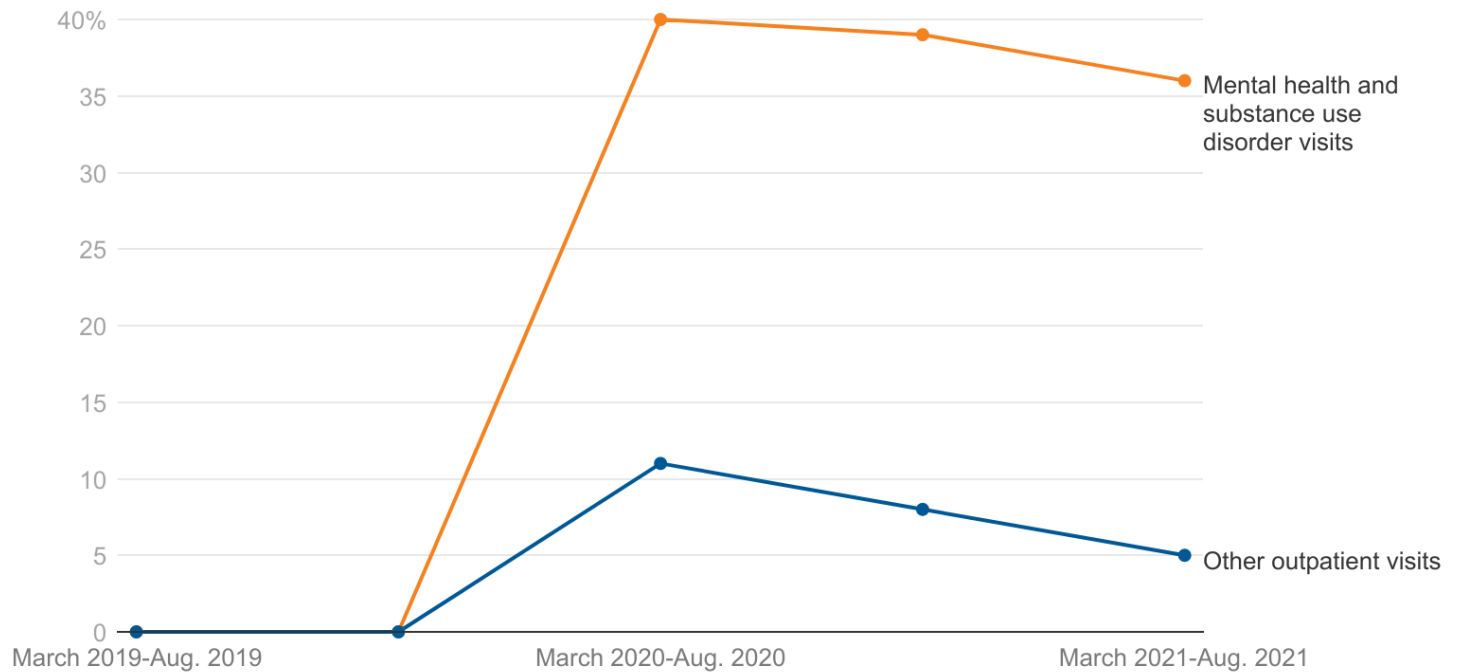


THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

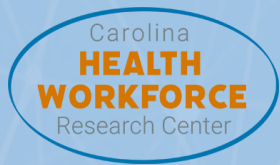
Tele-behavioral health

Figure 1

Share of outpatient visits delivered by telehealth, 2019-2021



SOURCE: KFF and Epic Research analysis of Cosmos data



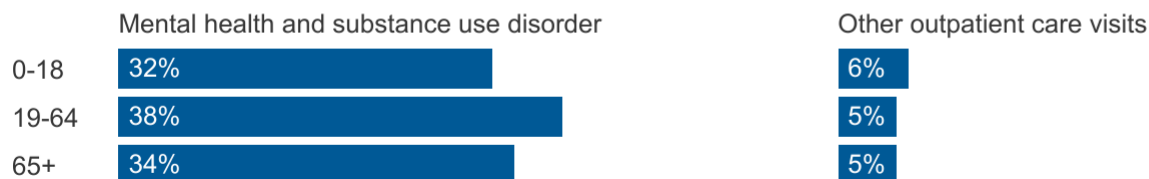
THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

More than half of behavioral health services delivered in rural settings were via tele-behavioral health

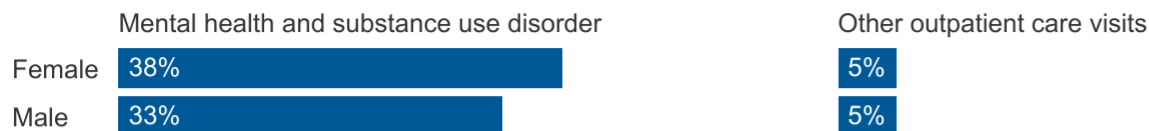
Figure 3

Share of outpatient visits delivered by telehealth, by patient characteristics, March-August 2021

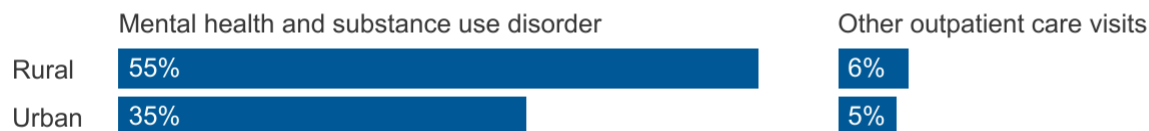
Age Group



Male vs. Female



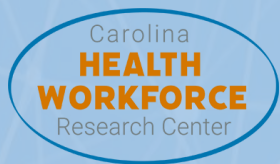
Urban vs. Rural



SOURCE: KFF and Epic Research analysis of Cosmos data

Tele-behavioral health in rural settings

- Repercussions of video-only requirements
 - Lack of broadband internet
- In-person visit requirements of CMS will resume after the public health emergency ends
 - Need to build connections between behavioral health providers and health providers
- Lack of reimbursement and payment parity will be an issue for behavioral health services
 - Current state legislation to require parity for private payors is a patchwork



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Treating Opioid Use Disorders

Medications for Opioid Use Disorders

Peer Recovery Models

Harm Reduction Models

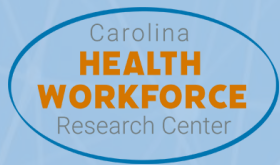
Carolina
**HEALTH
WORKFORCE**
Research Center

 **UNC**

THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Medications for Opioid Use Disorders

- Also called, Medication Assisted Treatment (MAT), is an effective treatment for Opioid Use Disorders
- Methadone and Buprenorphine are the most common MOUDs
 - Methadone distributed in Opioid Treatment Programs (OTPs) which are highly restricted
 - Buprenorphine can be distributed in office-based clinics like a family medicine doctor or in emergency rooms making it easier to access this treatment



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

MOUD is an effective treatment for preventing overdose deaths

For the few who receive medication for opioid use disorder (**MOUD**) or residential treatment after detox, mortality was reduced over the next 12 months

RETROSPECTIVE POPULATION COHORT, MASSACHUSETTS PUBLIC HEALTH DATA WAREHOUSE (2012-2014)

30,681 patients
admitted to a facility for medically managed opioid withdrawal (detox)



Most patients received no further treatment in the month after discharge from detox

No Treatment
(65%)



Residential
(17%)



MOUD
(15%)



MOUD + Residential
(3%)



All-cause mortality rate with relative risk reductions

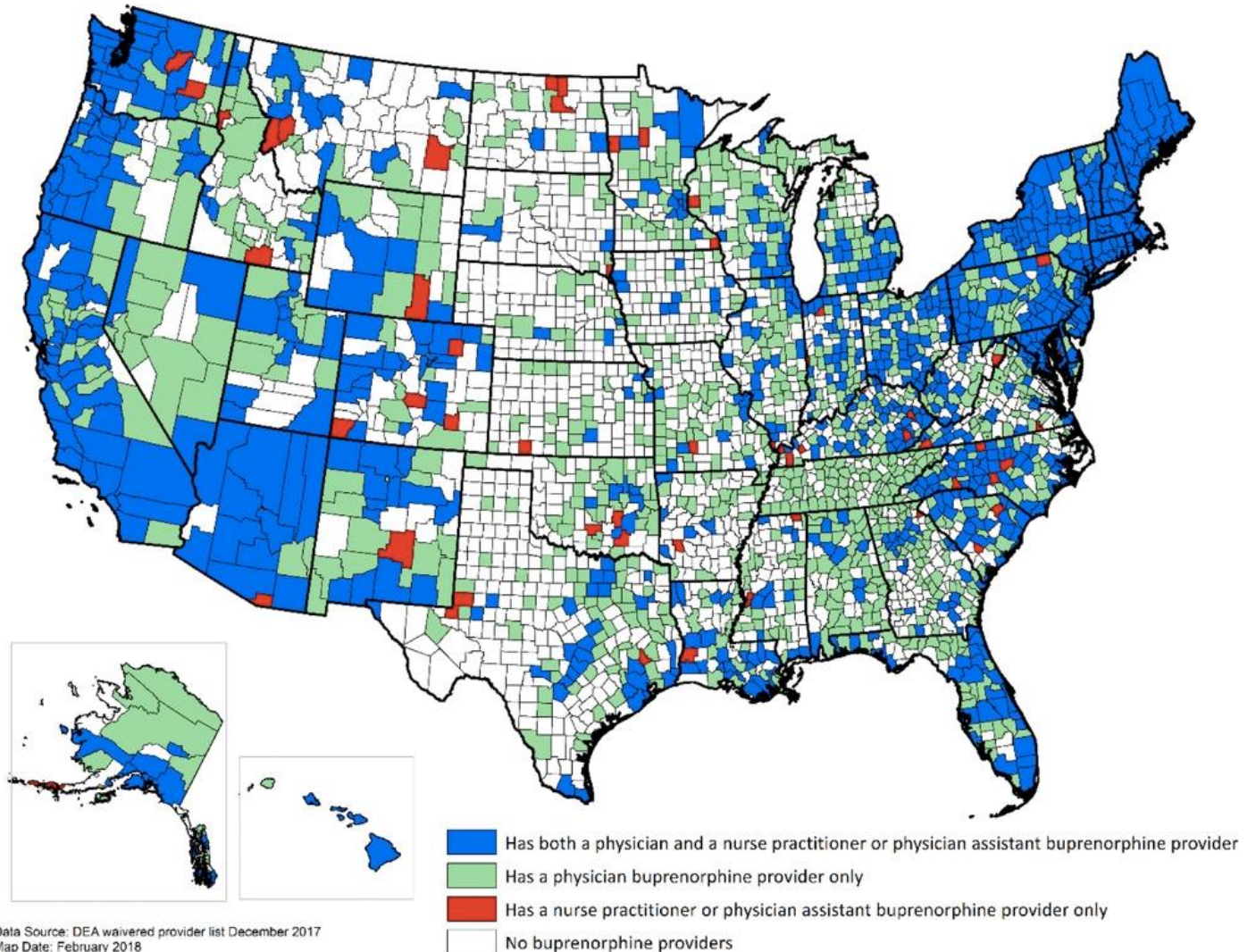
2 of 100 people who received no treatment were dead at 1 year

↓ 37%

↓ 66%

↓ 89%

But buprenorphine waived providers are maldistributed



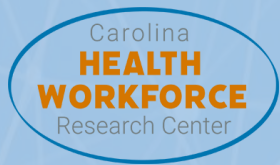
Carolina
**HEALTH
WORKFORCE**
Research Center

UNC

THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

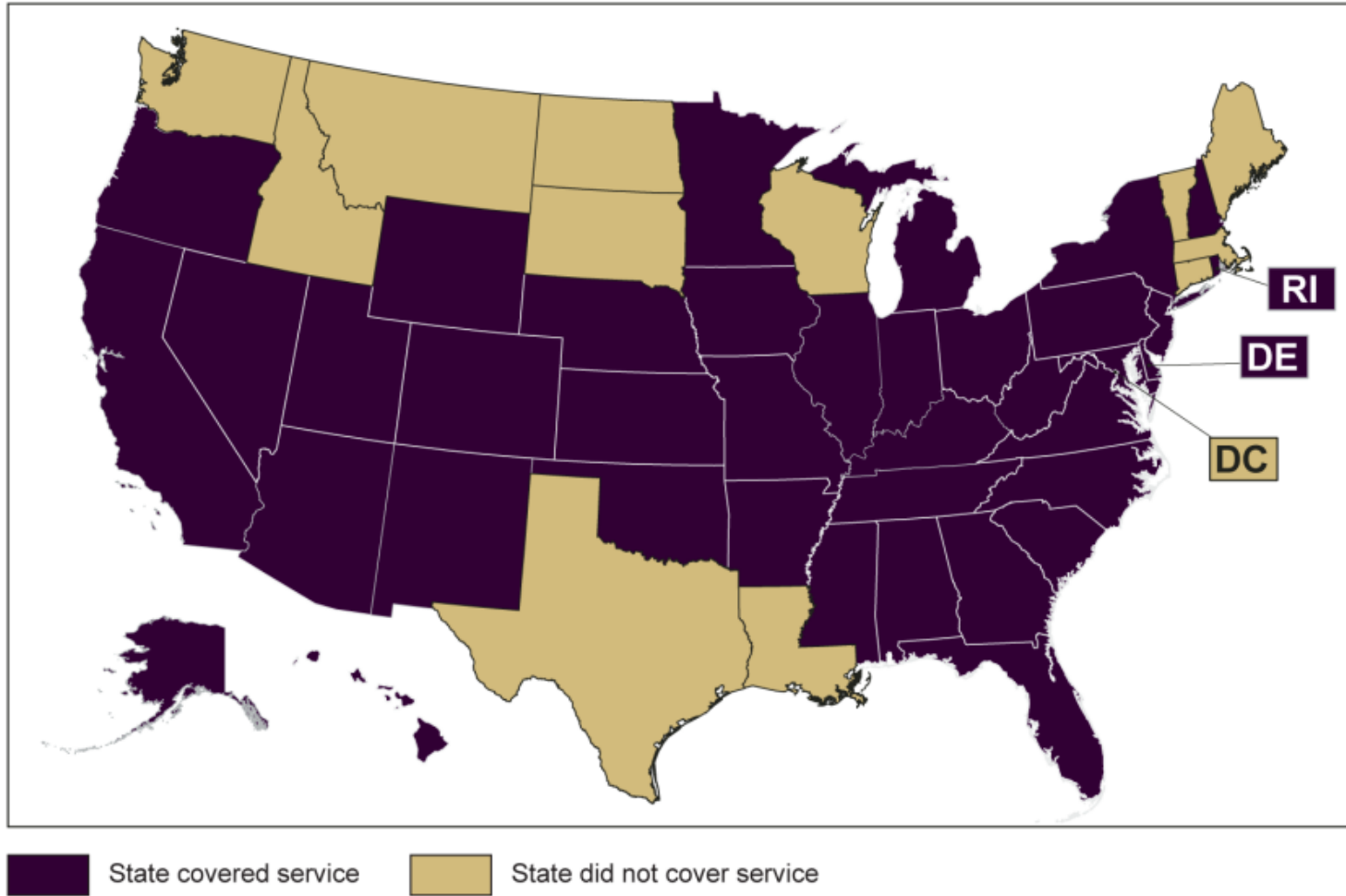
Supporting MOUD

- Increase the number of providers who can deliver MOUD
 - Training and education grants
 - Loan repayment
 - Within already existing health structures like emergency departments and health centers
- During the pandemic MOUD was able to be delivered via tele-health which increased access—unclear next steps on availability of this service for virtual care
- Increasing training and knowledge to the community on MOUD



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

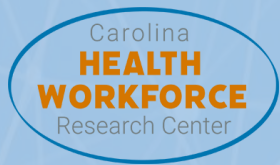
Peer Recovery Models are widely supported by State Medicaid Programs



Sources: GAO analysis of Medicaid and CHIP Payment and Access Commission data; Map Resources (map). | GAO-20-616

Supporting Peer Recovery Models

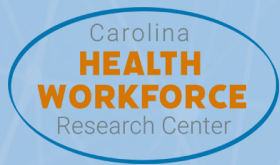
- Must be delivered by a certified peer provider
- Costs, length of training, testing, and continuing education requirements prohibit the expansion of this model
- Partnering with agencies to provide scholarships and/or pay for the certification process, ease requirements to support entry into this position
- Train health systems to deploy this model



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Harm Reduction Models

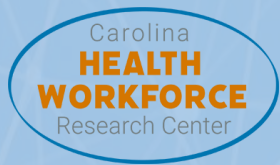
- Harm reduction is a proactive and evidence-based approach to reduce the negative personal and public health impacts of behavior associated with alcohol and other substance use at both the individual and community levels.
- Harm reduction organizations incorporate a spectrum of strategies that meet people “where they are” on their own terms, and may serve as a pathway to additional prevention, treatment, and recovery services.



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Example of Harm Reduction Program Success

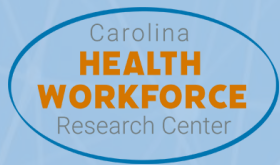
- One example of harm reduction is naloxone (commonly known as Narcan)
- Naloxone is a medicine that rapidly reverses an opioid overdose
- State naloxone laws allow the prescribing and dispensing of naloxone to substance users or to lay administrators (including nonmedical first responders, potential overdose bystanders, and family and friends of opioid users)
- Good Samaritan laws offer immunity from legal prosecution to those who seek emergency help for someone overdosing



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Supporting Harm Reduction Programs

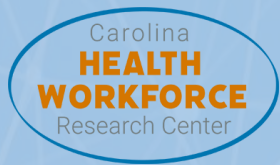
- Stigma and bias continue to prevent use of harm reduction strategies
 - Federal movement on funding harm reduction specifically
- Training and education on harm reduction strategies are needed
- We can look to the success of naloxone distribution to leverage support for newer models
 - e.g., Syringe Access Programs
 - Screen and connect to physical health care services for secondary health issues



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH

Thank you!

- Please email with questions
BRIANNA_LOMBARDI@med.unc.edu
- go.unc.edu/Workforce



THE CECIL G. SHEPS
CENTER FOR
HEALTH SERVICES
RESEARCH