

# RCORP Wilson County Project Summary

Prepared for DrugFree WilCo  
by the MTSU Data Science Institute

Sara Shirley

Jeffrey Stark



Center for Health  
and Human Services



Public Health



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# Purpose



To provide an overview of the 4.5-year HRSA RCORP grants implemented in Wilson County, TN and an overview of opioid-related statistics.



Includes successes, outcomes, economic impact and next steps for consideration by local leaders and officials.



# Overview

- Who We Are - MTSU RCORP Team, RCORP Wilson County Consortium
- The HRSA RCORP Grants
- Opioid Related Statistics
- Opioid and Substance Use Disorder - Stigma
- Availability of Services – Performance Improvement Monitoring System (PIMS)
- Successes
- Economic Impact
- Continuing Needs and Next Steps
- Acknowledgements



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# Who We Are - MTSU RCORP Team, RCORP Wilson County Consortium



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MTSU Project Team -  
Center for Health and  
Human Services  
(CHHS), Lead Partner

- MTSU CHHS is a primarily grant-funded center and recipient of the Health Resources and Services Administration (HRSA) Rural Communities Opioid Response Program (RCORP) grant funding that supports activities to address opioids in Wilson County, Tennessee.
- During 2020-2024 CHHS received \$1.2 million in grant funding through HRSA's RCORP to support this work in Wilson County.
- Since its founding in 1993 by the Adams Chair of Excellence in Healthcare Services, CHHS has received more than \$25 million in external dollars to support public health research and outreach in areas of importance to Tennesseans.

# CHHS: Vision and Mission

- **Vision**

- The Center for Health and Human Services seeks to **shape a healthier future and advance the health and well-being of Tennesseans**. We do this through innovation and collaboration on **evidence-based research and projects** addressing Tennessee's most pressing public health priorities.

- **Mission**

- The CHHS at MTSU facilitates, through strategic partnerships, **collaborative public health research and outreach projects** throughout Tennessee **to address health disparities and promote healthy communities**.

MTSU CHHS is pleased to have provided an opportunity to support a healthier Wilson County through a \$1.2 million grant-funded partnership during the years 2020-2024 awarded by the Health Resources and Services Administration (HRSA).

# CHHS Funding, Staff, SUD/OUUD Projects



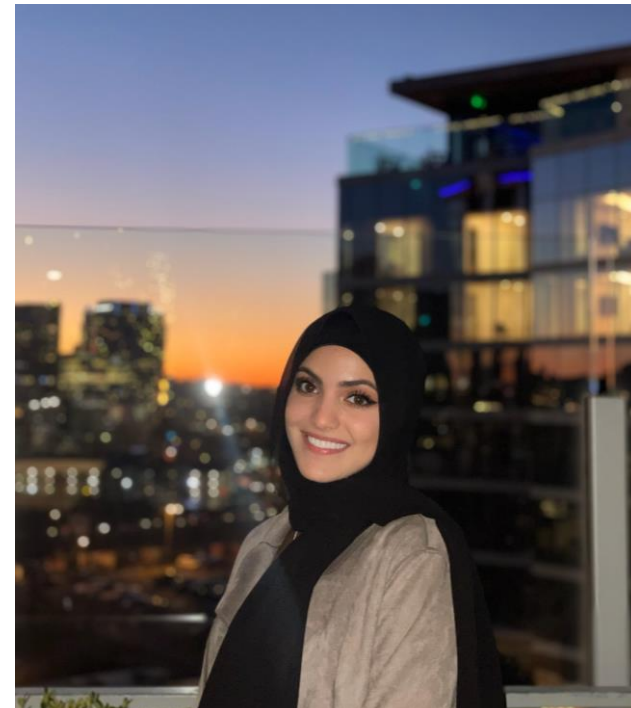
Since 2015, CHHS has operated independently from the Adams Chair and received over \$18 million dollars to support public health research and outreach throughout Tennessee and an 11-state area.



CHHS received its first federal grant in 2018 with six federally funded projects as of August 2024 along with more than \$13 million in state and local opioid abatement funds in 2023 and 2024.



Currently CHHS has 6 full-time staff and 21 individuals paid for work on CHHS projects. CHHS is actively working on nine substance use disorder (SUD)/ opioid use disorder (OUD) projects several of which have statewide impact.



## MTSU RCORP TEAM

- Lead PI & Project Director: **Cynthia Chafin, PhD, MCHES<sup>®</sup>**, Director, Center for Health and Human services
- Co-PI and Project Director: **Kahler Stone, DrPH, MPH**, Associate Professor, Dept. of Health and Human Performance, Public Health Program
- Local Coordinator: **Michael Ayalon**, Master of Public Service, Program Coordinator, Center for Health and Human Services
- Data Analyst: **Keith Gamble**, Director, Data Science Institute, Professor Economics and Finance
- Project Assistant: **Chipper Smith, MPH & Maimoonah Dabshee, MPH**





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Project Partners  
forming **MTSU  
RCORP  
Consortium**  
(formal MOUs in  
place)

- DrugFree WilCo: Drug use prevention coalition of Wilson County
- MTSU Center of Health and Human Services: To shape a healthier future and advance the health and well-being of Tennesseans – Lead Agency for RCORP Wilson County grants
- Cedar Recovery: Largest addiction treatment center in Wilson County
- Mid-Cumberland Transportation: public transit system serving Wilson County and PIC Center needs and Uber.

# Other Project Partners

- MT Public Health
  - Basic and applied research, community and university service, and educational and community partnerships
- MTSU Data Science Institute
  - Using complex data to create actionable insights



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# The Health Resources and Services Administration (HRSA) Rural Communities Opioid Response Program (RCORP) Grants



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# Rural Communities Opioid Response Program (RCORP) Grant Funding

- The Rural Communities Opioid Response Program (RCORP) is a [multi-year initiative](#) by the Health Resources and Services Administration (HRSA)
- It is aimed at reducing the morbidity and mortality of substance use disorder (SUD), including opioid use disorder (OUD), in [high-risk rural communities](#)



# Two Grants, One Goal:

Reducing fatalities due to overdose and the associated economic burden related to misuse.

## Planning Grant (18 months, 9/1/2020 – 2/28/2022)

- Understand the needs of those in Wilson County specific to opioid use disorder
- Focus Group studies
- Needs Assessment and Gap Analysis

## Implementation Grant (3 years, 9/1/21 – 8/31/24)

- Put ideas into action
- Educate and inform
- Reduce stigma
- Save lives

These projects are supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance [awards totaling \\$200,000 and \\$1,000,000](#) with 100% funded by HRSA/HHS and \$0 amount funded by nongovernment sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA/HHS, or the U.S. Government.” For more information, please visit [hrsa.gov](https://www.hrsa.gov)

# Project Overview – RCORP Wilson County

The Rural Communities Opioid Response Program (RCORP) has provided funds for work in Wilson County, to include development of a step-by-step plan to address opioid use and misuse across the county, with the intent of reducing fatalities due to overdose and the associated economic burden related to misuse.

The RCORP Wilson County project involves a broad array of stakeholders from the Wilson County community, including DrugFree WilCo as one of four consortium partners, each with MOUs and MOAs to carry out the work of the project.

# Four Project Core Areas



# Prevention Core Activities

Provide culturally and linguistically appropriate education to improve family members', caregivers' and the public's understanding of evidence-based prevention, treatment, and recovery strategies for SUD/OD and to reduce stigma associated with the disease.

Increase access to Naloxone within the rural service area and provide training on an overdoes prevention and Naloxone administration to ensure that individuals likely to respond to an overdose can take the appropriate steps to reverse an overdose.



# Prevention Core Activities

(continued)

Implement Year-Round Drug  
Take-Back Programs

Increase and support the use of  
school- and community-based  
prevention programs that are  
evidence-based to prevent misuse  
of opioids and other substances.

Identify and screen individuals at  
risk for SUD/ODU, and to provide  
or make referrals to prevention,  
harm reduction, early intervention,  
treatment, and other support  
services to minimize the potential  
for the development of SUD/ODU.

# Treatment Core Activities

Screen and provide or refer to treatment for patients with SUD/ODU who have infectious complications, including HIV, viral hepatitis, and endocarditis, particularly among PWID.

Recruit, train, and mentor interdisciplinary teams of SUD/ODU clinical and social service providers who are trained, certified, and willing to provide MAT, including both evidence-based behavioral therapy and the U.S., FDA-approved pharmacotherapy.

# Treatment Core Activities

(continued)

Increase the number of providers, other health and social service professionals, and appropriate paraprofessionals who are able to identify and treat SUD/ODU by providing professional development opportunities and recruitment and retention incentives such as, but not limited to, the NHSC.

Reduce barriers to treatment, including by supporting integrated treatment and recovery, such as integration efforts between entities such as primary care service providers, behavioral health service providers, the criminal justice system, dentistry, and social services. As appropriate, provide support to pregnant women, children, and other at-risk populations using approaches that minimize stigma and other barriers to care.

# Treatment Core Activities

(continued)

Train and strengthen collaboration with and between law enforcement and first responders to enhance their capability of responding and/or providing emergency treatment to those with SUD/OUD, particularly vulnerable populations within the service area that suffer from health access and outcome disparities.

Train providers, administrative staff, and other relevant stakeholders to optimize reimbursement for treatment encounters through proper coding and billing across insurance types to ensure long-term financial sustainability of services.

# Treatment Core Activities

(continued)

Enable individuals, families, and caregivers to find, access, and navigate evidence-based, affordable treatments for SUD/ODU, as well as home- and community-based services and social supports.

# Recovery Core Activities

Enhance discharge coordination for people leaving inpatient treatment facilities and/or the criminal justice system who require linkages to home and community-based services and social supports. These services and organizations may include case management, housing, employment, food assistance, transportation, medical and behavioral health services, faith-based organizations, and sober/transitional living facilities.

# Recovery Core Activities

(continued)

Enable individuals, families, and caregivers to find, access, and navigate evidence-based and/or best practices for affordable treatment and recovery support services for SUD/ODU, including home and community-based services and social supports such as transportation, housing, childcare, legal aid, employment assistance and case management..

Develop recovery communities, recovery coaches, and recovery community organizations to expand the of and access to recovery support services.

# Other Activities

Creation of Overdose  
Map

Tracking and collection  
of aggregate data and  
other information from  
consortium members to  
fulfill reporting  
requirements.



# Other Activities: Grant Funded

Processes for achieving programmatic sustainability beyond the period of performance, including the deliverables, responsible individuals and/or consortium members and timelines associated with these processes.

Processes for achieving financial sustainability beyond the period of performance.

# Other Activities: Grant Funded

Processes for  
improving health  
access and outcomes  
within the target rural  
service area.

# Summary of Implemented and Funded Activities

Public Education &  
Stigma Reduction

Naloxone Access

Drug Take-Back  
Programs

Community-Based  
Prevention

SUD Screening and  
Referral

Strengthen  
Collaboration to  
Improve Emergency  
Treatment

# Summary of Implemented and Funded Activities

Optimize  
Reimbursement

Improve Access to  
Treatment  
Supports

Improve  
Discharge (Re-  
entry) Programs  
and Services

Expand Peer  
Workforce

Expand  
Availability of  
Recovery Support  
Services

# Opioid Related Statistics



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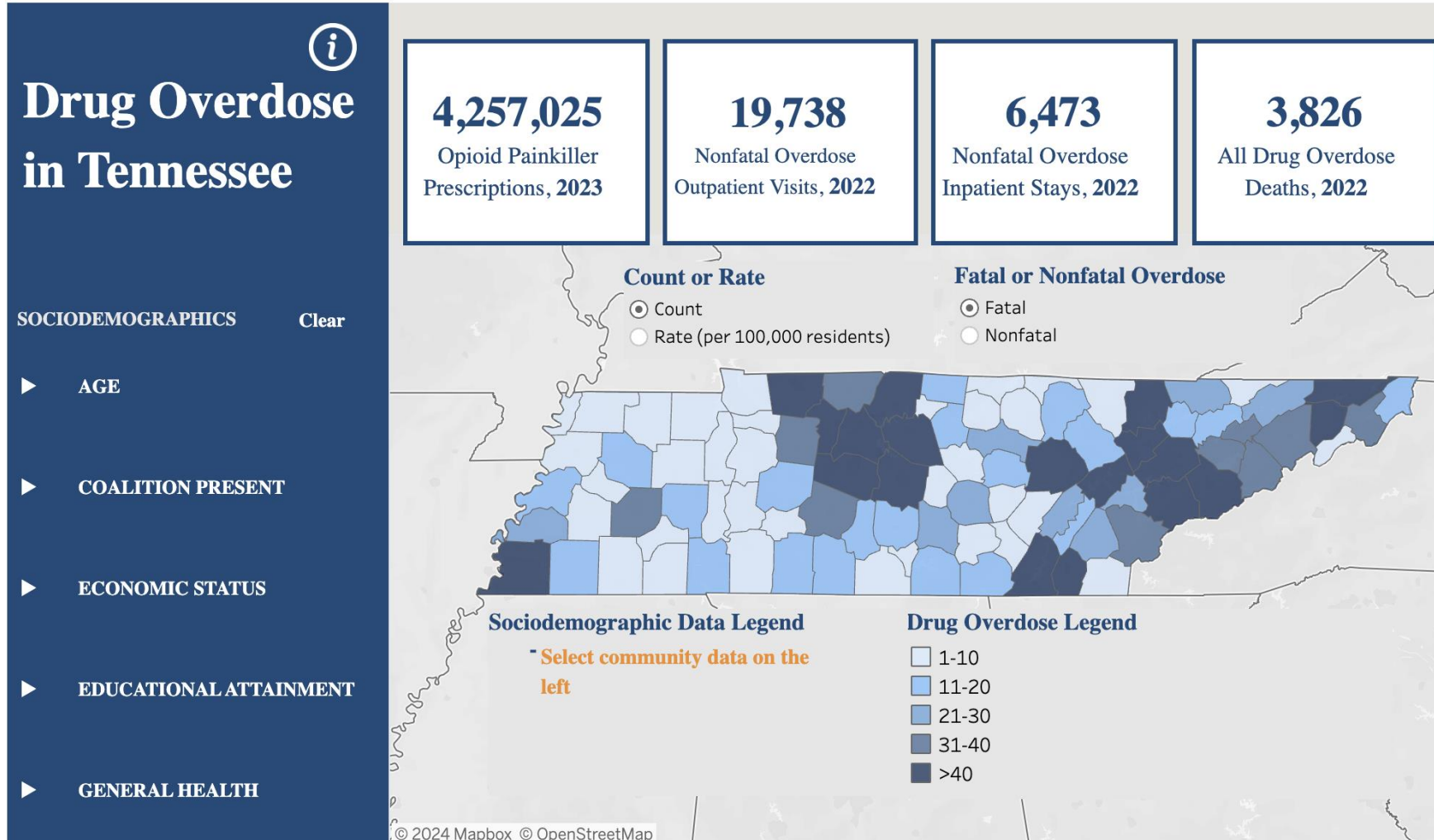
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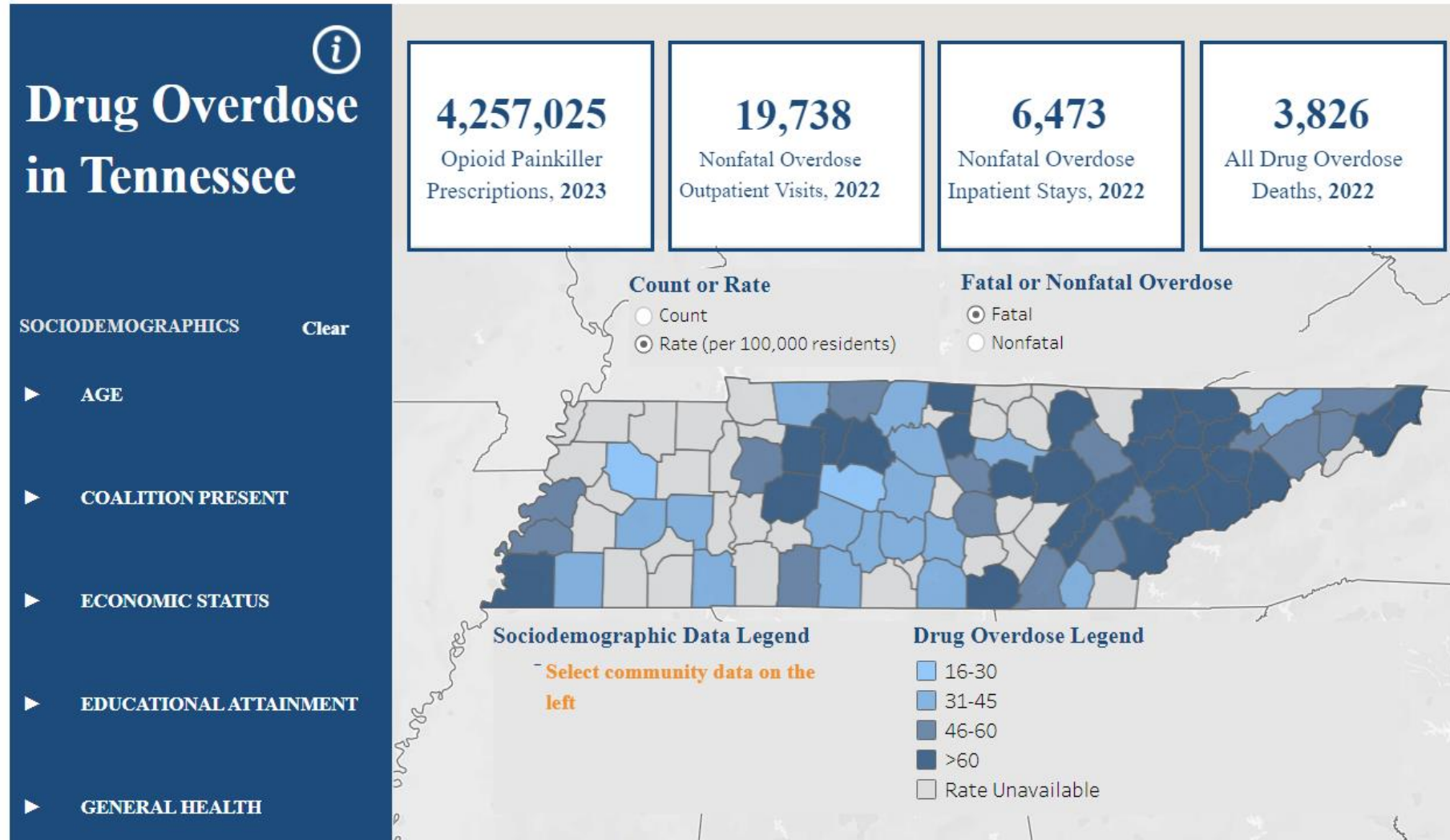


# Background Statistics: Tennessee

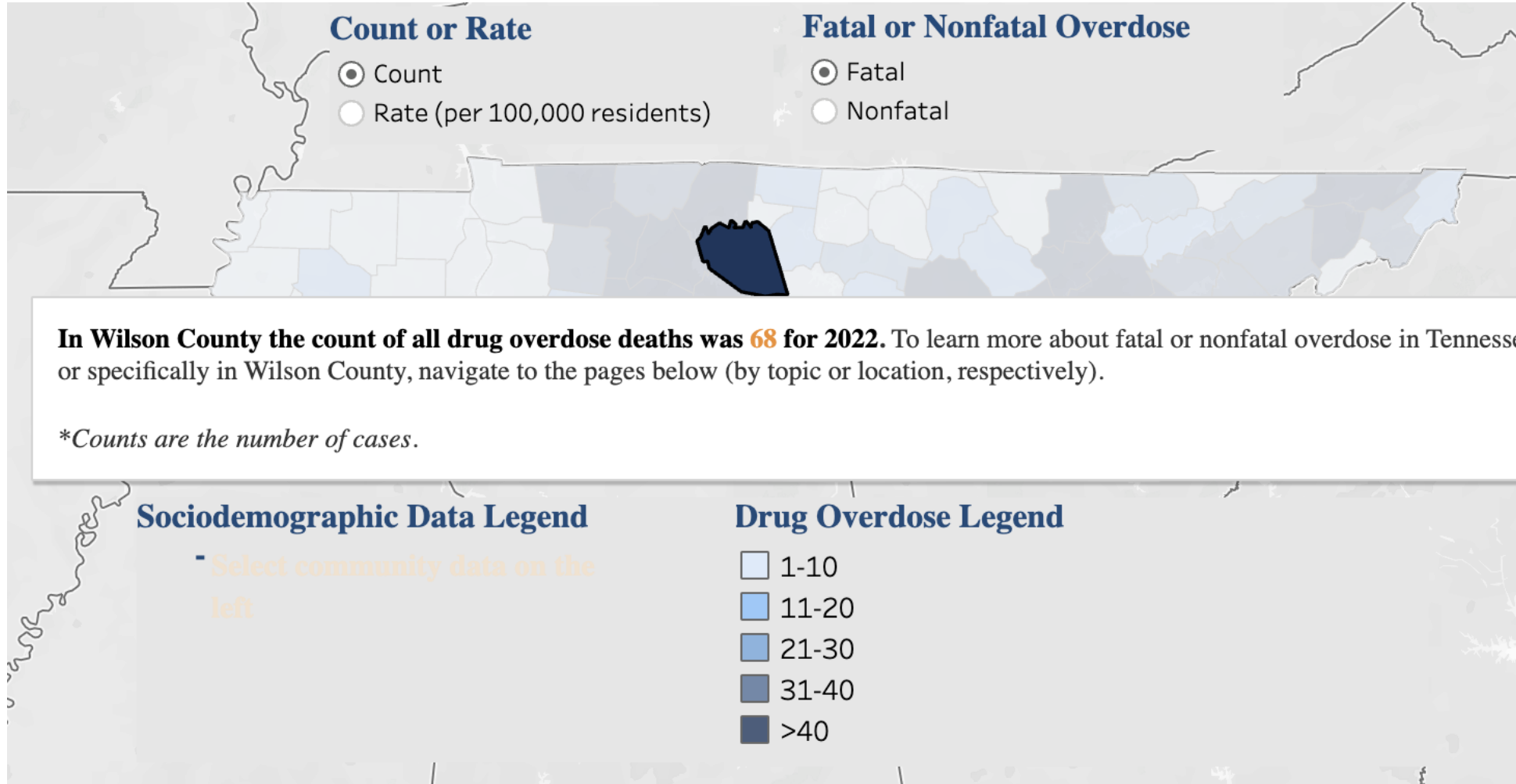


# Background Statistics: Tennessee

(continued)

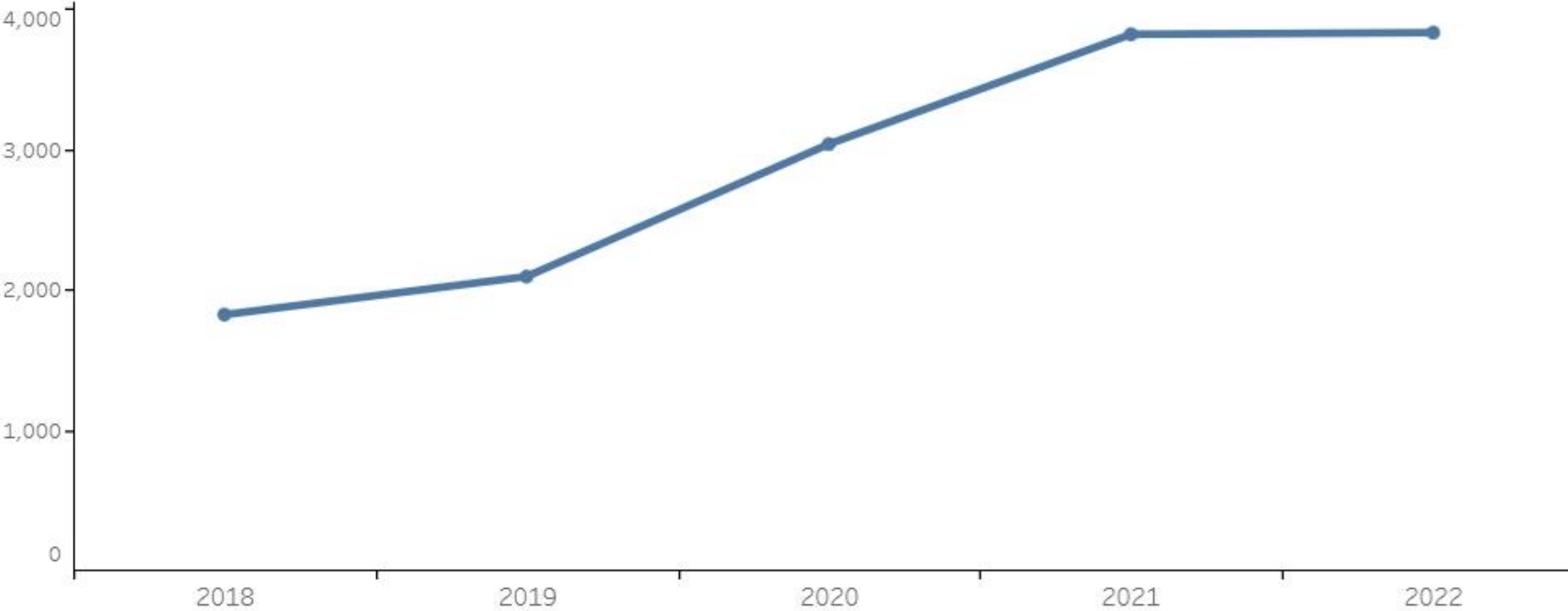


# Background Statistics: Wilson County





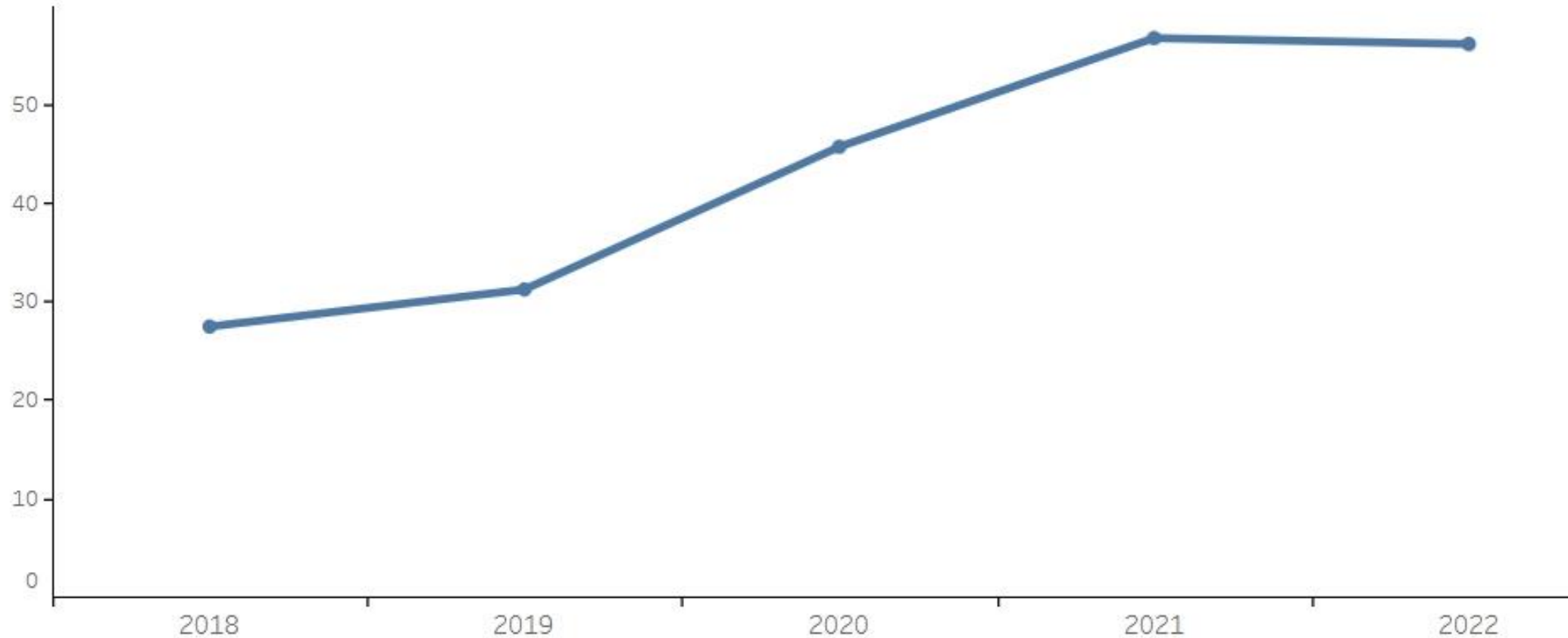
**All Drug Overdose Deaths - Count in Tennessee, 2018-2022**



In Tennessee statewide, the count of all overdose deaths was 3,826 in 2022.

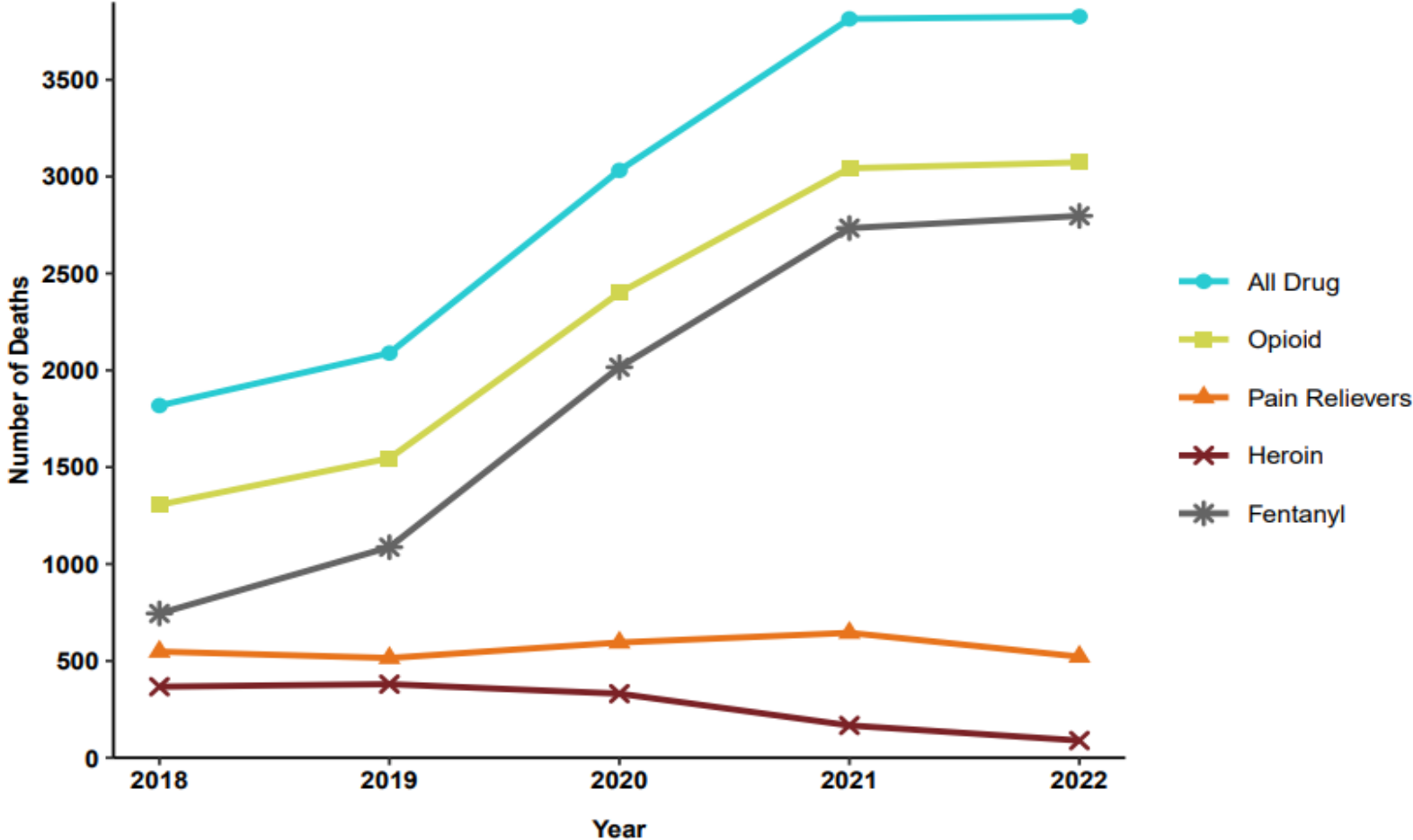
Source: <https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html>

### All Drug Overdose Deaths - Rate in Tennessee, 2018-2022



In Tennessee statewide, the rate of all overdose deaths was 56 per 100,000 residents in 2022.

# Number of Overdose Deaths by Drug Type among TN Residents, 2018-2022



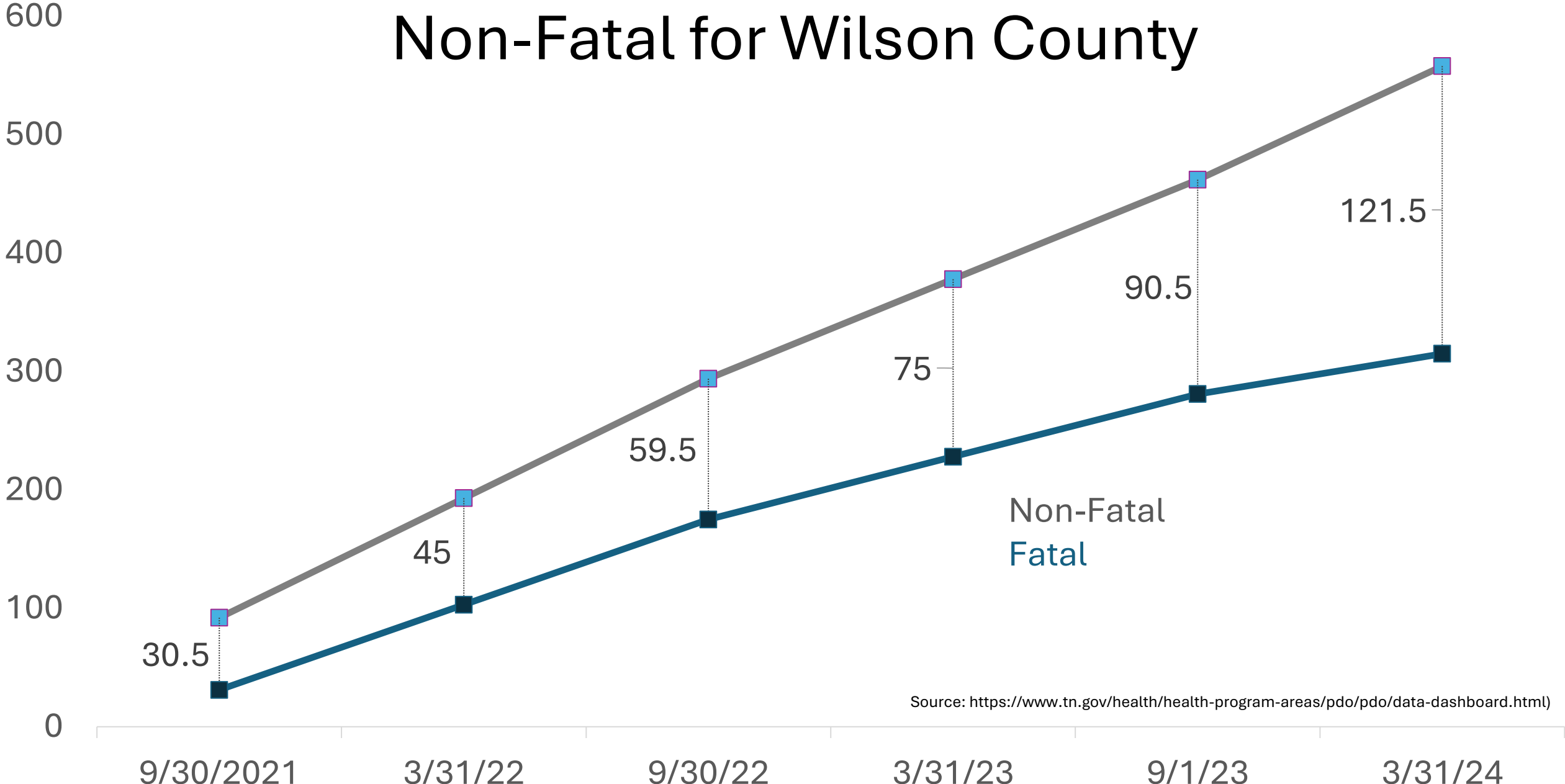
Analysis by the Office of Informatics and Analytics, TDH (last updated February 7, 2024). Limited to TN residents.  
Data Source: TN Death Statistical File.

<b>Number of Overdose Deaths among TN Residents by Drug Type</b>					
<b>Type</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
All Drug	1,818	2,089	3,032	3,814	3,826
Opioid	1,306	1,546	2,400	3,043	3,073
Pain Relievers	548	515	595	645	522
Heroin	367	380	331	167	89
Fentanyl	745	1,087	2,016	2,734	2,797

- Opioids have consistently played a role in drug overdose deaths among TN Residents and were involved in 3,073 overdose deaths\* in 2022.
- The increase in opioid overdose deaths is primarily driven by deaths involving illicit fentanyl.
- Deaths involving opioids identified as pain relievers (i.e., those typically obtained through a prescription) saw a decline in 2022 after a slight increase in 2020 and 2021.
- Deaths involving heroin have decreased significantly since 2019.

\*Drug categories are not mutually exclusive. An overdose may have involved multiple types of opioids, nonopioids or both. Due to improvement in text searches, opioid counts (fentanyl specifically) from previous years may be updated to reflect the new criteria.

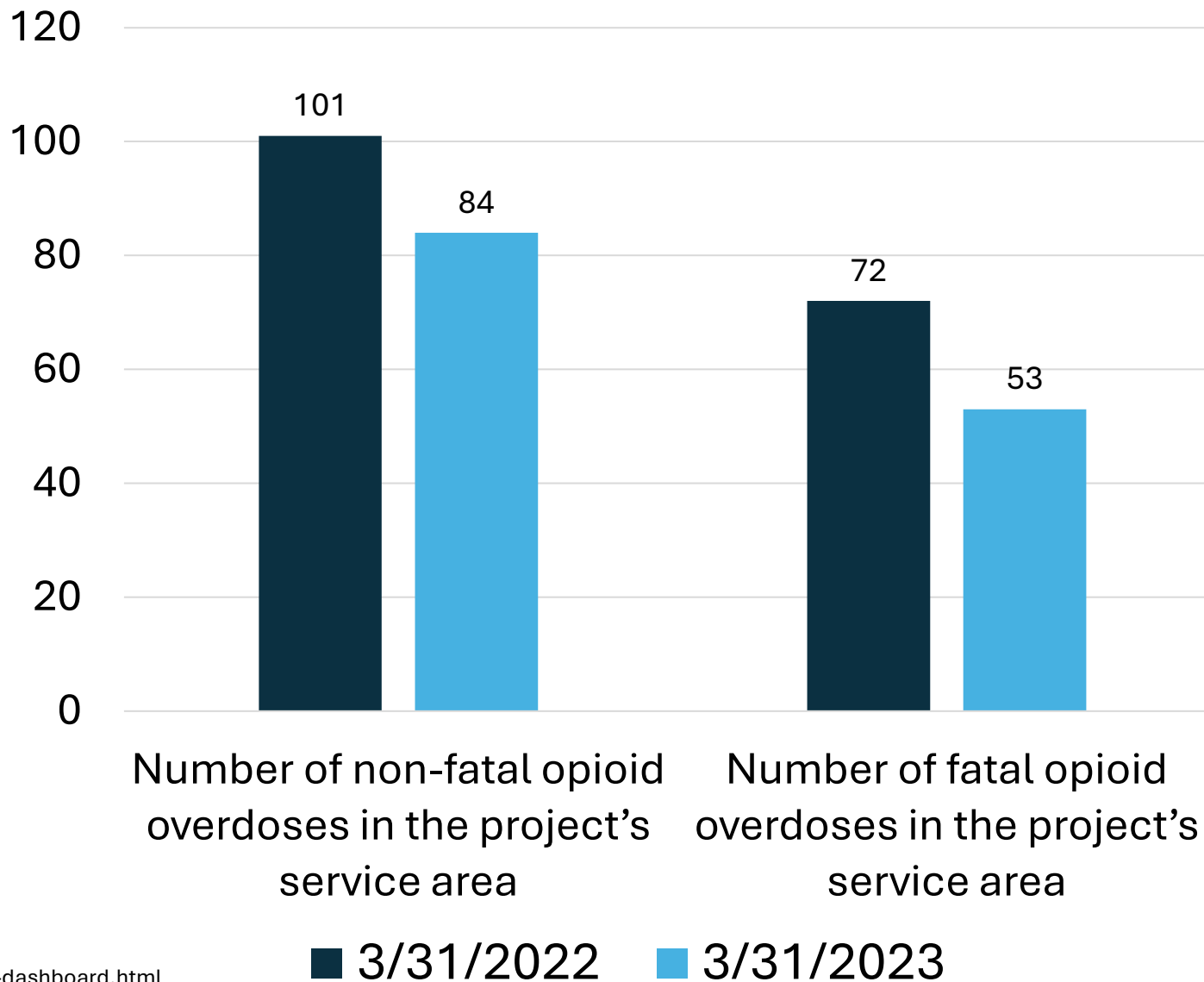
# Cumulative Opioid Overdoses: Fatal vs. Non-Fatal for Wilson County



Source: <https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html>

# One Year Comparison – Wilson County

- Reduction of non-fatal opioid overdoses by 16.8%
- Reduction of fatal opioid overdoses by 26.4%



# Opioid and Substance Use Disorder -Stigma



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# Stigma: What We Know



# What is Stigma and Why is Reducing it Important?



- Stigma against those with substance use disorder is a set of negative attitudes and stereotypes that can create barriers to treatment and recovery, and make these conditions worse (Volkow, 2020).
- Anyone can have stigmatizing attitudes – individuals, healthcare providers, and other professionals.
- Stigma is an overarching concern that is addressed as part of the Wilson County RCORP project activities.
- Addressing stigma as an overarching concern means we are more likely to be successful in all project activities and to demonstrate positive impact.

# Focus Groups from the Wilson County RCORP Project: Thoughts on Stigma

Stigma plays a role in healthcare workers and the Wilson County community's perception of opioid/substance use disorder.

Several key themes that emerged were:

Stigma is present in healthcare workers but not clear to what degree

Opioid/substance use disorder changes how patients are viewed at times by health workers and the community, particularly in the way it is viewed as an individual choice vs. a disease

It impacts "coming together" as a community to prevent substance use

# Focus Group Participant Comments



- “I think a lot of people try and generalize or they’ll stigmatize a certain group or certain kind of person that will be more likely to have this disorder, but it can happen to anyone, and it can happen to your family as well.”
- “The stigma is preventing education on substance abuse disorder in the schools.”
- “There’s a lot of stigma even still within the health profession, it is a hard population to work in.”
- “I think educating people is the best remedy.”

## **Barriers for eliminating stigma in Wilson County include:**

- A lack of education in the workforce and community settings
- Insufficient social support networks

## **Opportunities for eliminating stigma include:**

- Public education in these same spaces as well as in youth, where greater substance use disorder is found
- The faith community is highlighted as an opportunity to engage further in helping to eliminate this particular stigma



# Stigma: What Is Being Done

Billboards to raise awareness: launched unified “Reduce the Stigma” marketing campaign – 2022



Billboards to raise awareness: launched unified “Reduce the Stigma” marketing campaign – 2024



Training opportunities including with law enforcement, health care providers, and other professionals in the community.

**HRSA**  
Health Resources & Services Administration

**DrugFree Wilco**

**MIDDLE TENNESSEE**  
STATE UNIVERSITY  
CENTER FOR HEALTH AND HUMAN SERVICES

WILSON COUNTY LAW ENFORCEMENT

## COMBATING THE OPIOID CRISIS

*"Combating the opioid crisis is vital to everyone working on the front line and requires innovative solutions to enact prevention, intervention, and treatment efforts. I strongly encourage anyone who is in the public safety field to take advantage of this presentation so we can all work together in lowering the number of overdose deaths throughout Wilson County."*

- Capt. Scott Moore,  
Wilson County Sheriff's Office

This training is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award, grant # 6 G25RH40048-01-03, totaling \$200,000 with 100% funded by HRSA/HHS and \$0 amount funded by nongovernment sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, HRSA/HHS or the U.S. Government.

Our speaker:  
Ron Martin, retired NYPD  
detective sergeant

Choose any time slot:

January 11, 2022  
7:30 A.M., 3:30 P.M., 11:30 P.M.

January 12, 2022  
7:30 A.M., 3:30 P.M., 11:30 P.M.

**I AM trueBLUE**

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# Assessing Community Stigma

- The CHHS RCORP team, in collaboration with M.P.H. students at MTSU, developed a questionnaire to measure stigma based on research found in the literature.
- Surveys were administered after the billboard and stigma education activities were underway.
- Students and staff attended the Wilson County and State Fair of Tennessee in 2022, 2023, and 2024 and collected between 350-400 questionnaires each year.



# Survey Results

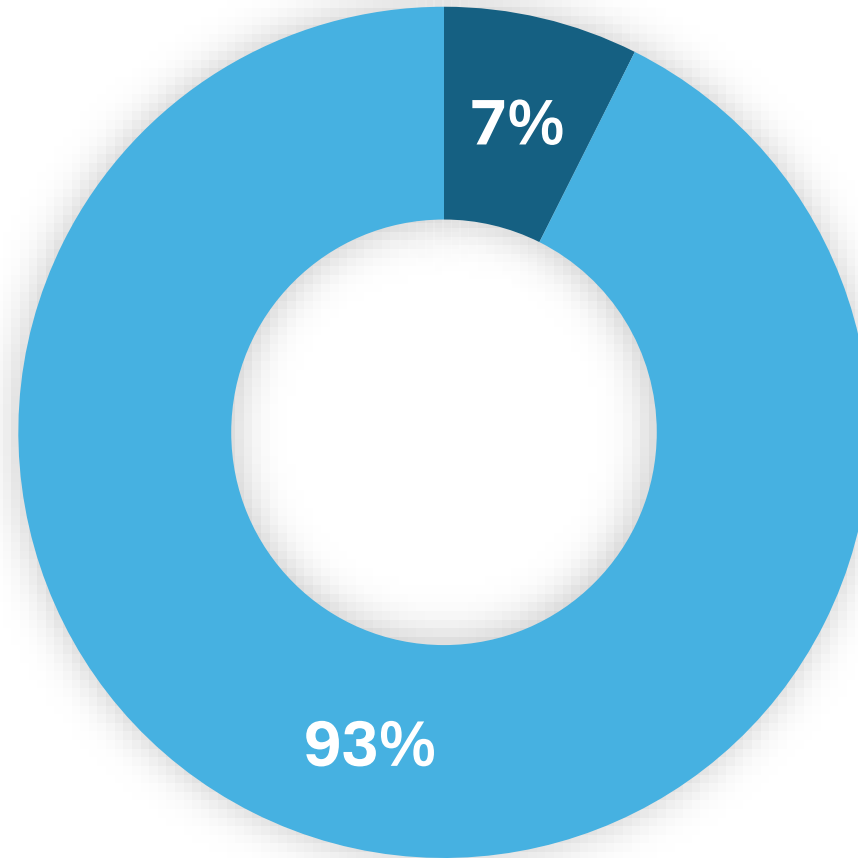
Results will be shared later in this presentation as part of “Successes” for the Wilson County RCORP Project activities.



*MPH students at the Wilson County and State Fair of TN, 2022.*

# Training Outcomes – Stigma Education

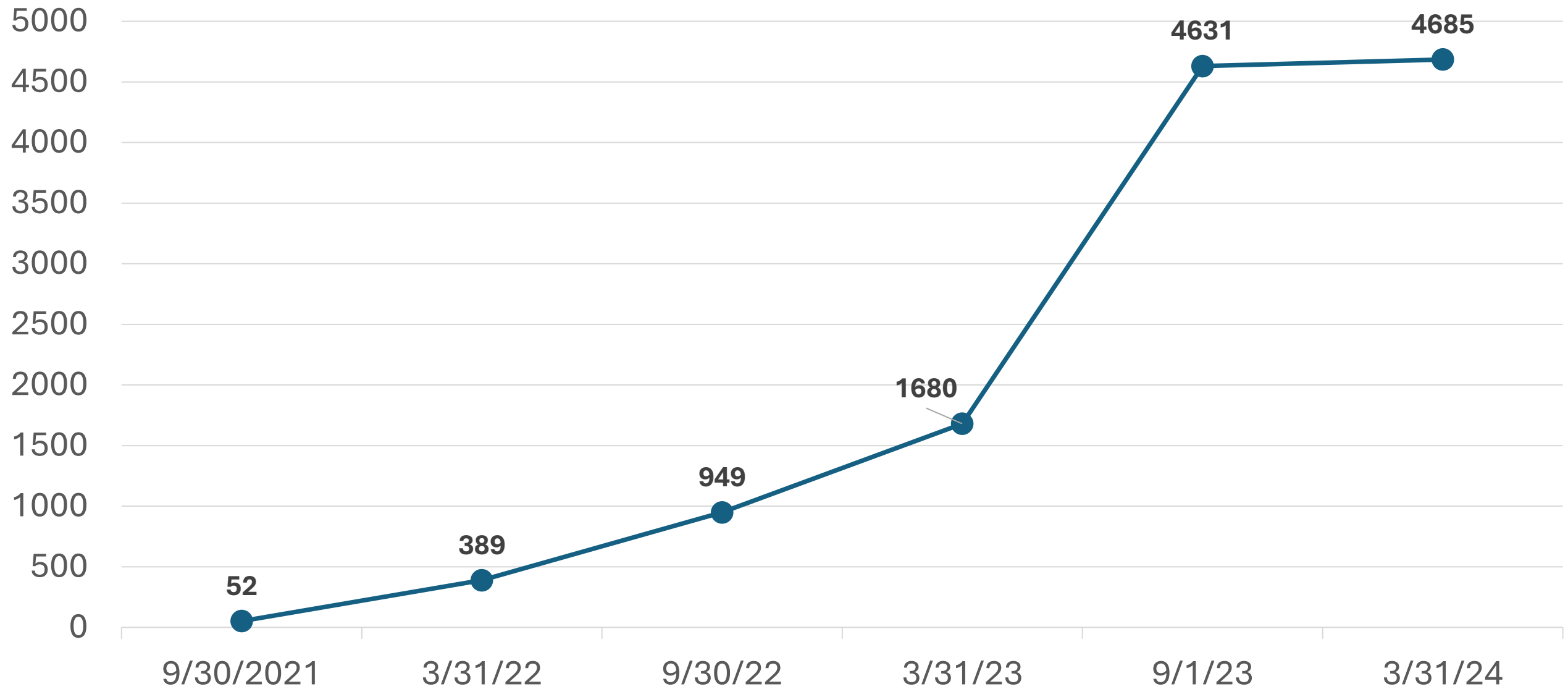
# Training and Education (4,676 total individuals trained)



■ Naloxone training

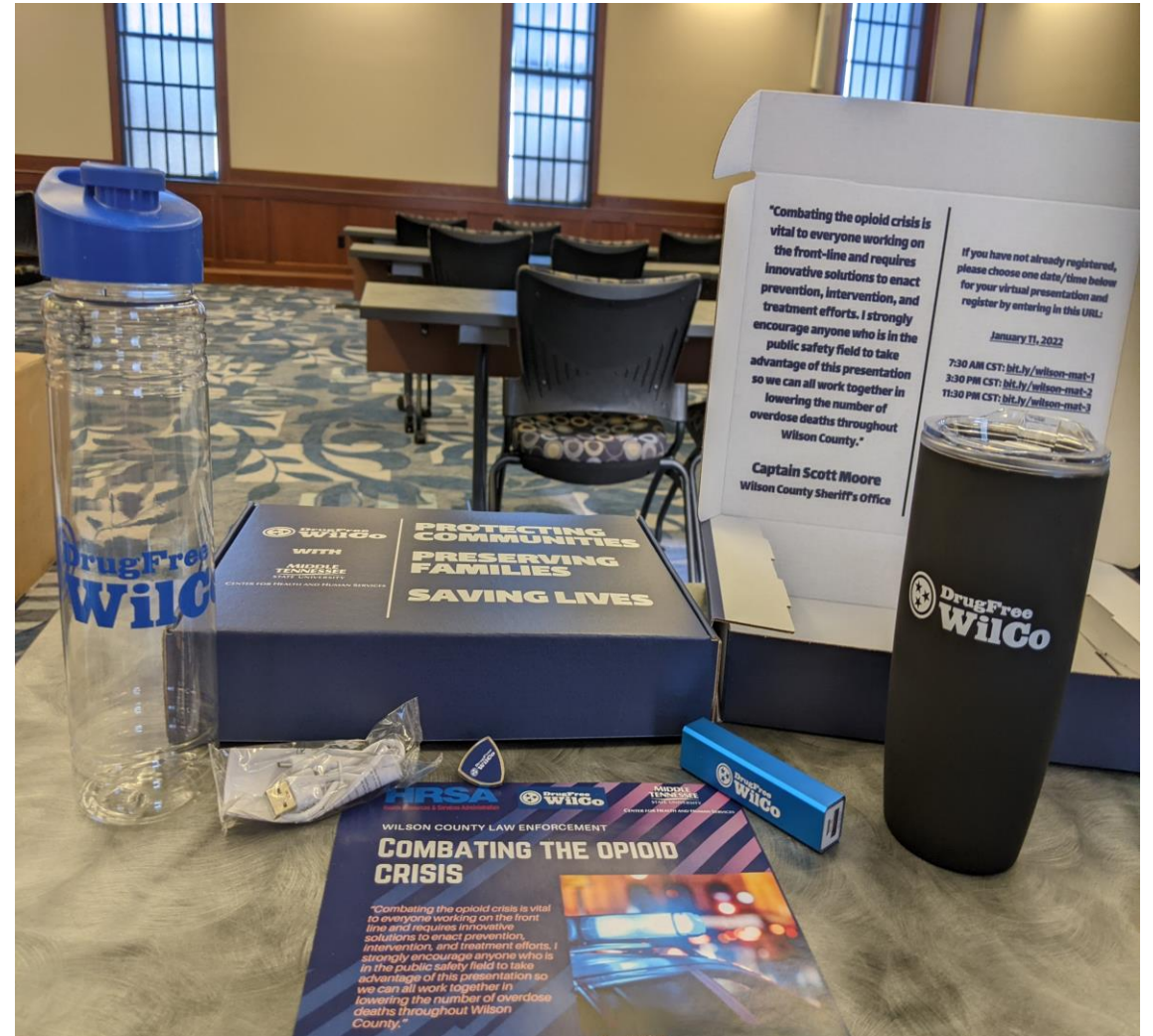
■ Stigma reduction education

# Total Number of participants who received SUD education or training



# Law Enforcement Training

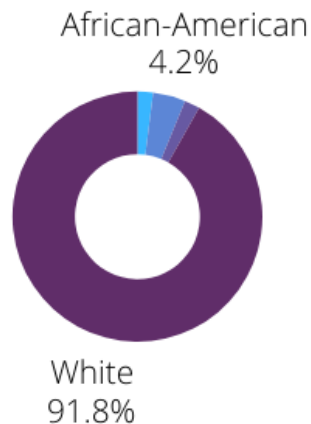
- Six virtual (Zoom) peer-led harm reduction presentations were delivered over two days in January 2022 for local law enforcement officers in Wilson County. A total of 172 officers were trained via Zoom and YouTube.
- These interactive training opportunities were a collaborative effort between the MTSU CHHS and DrugFree WilCo.
- Presentations were interactive and led by former NYPD detective Ron Martin.
- Goal is to measure stigma surrounding opioid and substance use.



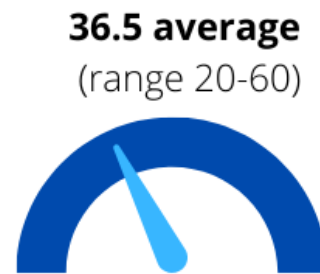
# Law Enforcement

Of the 112 law enforcement personnel trained, 52 agreed to participate in a pre-training survey and 18 agreed to a post-training survey. Because of this, limited analyses were conducted to look at changes in the pre/post-training. Of those taking the survey, their demographics are below.

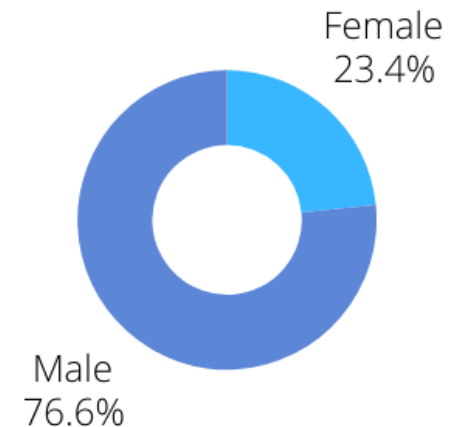
Race / Ethnicity



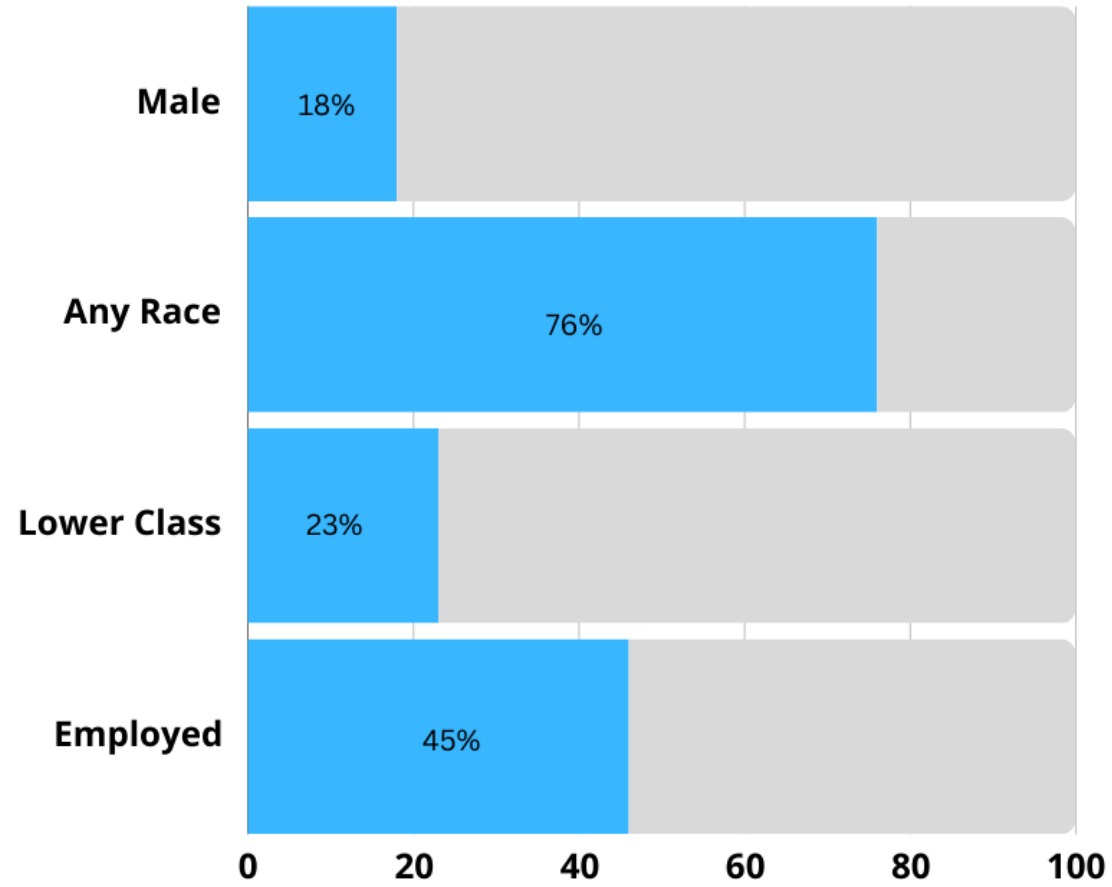
Age



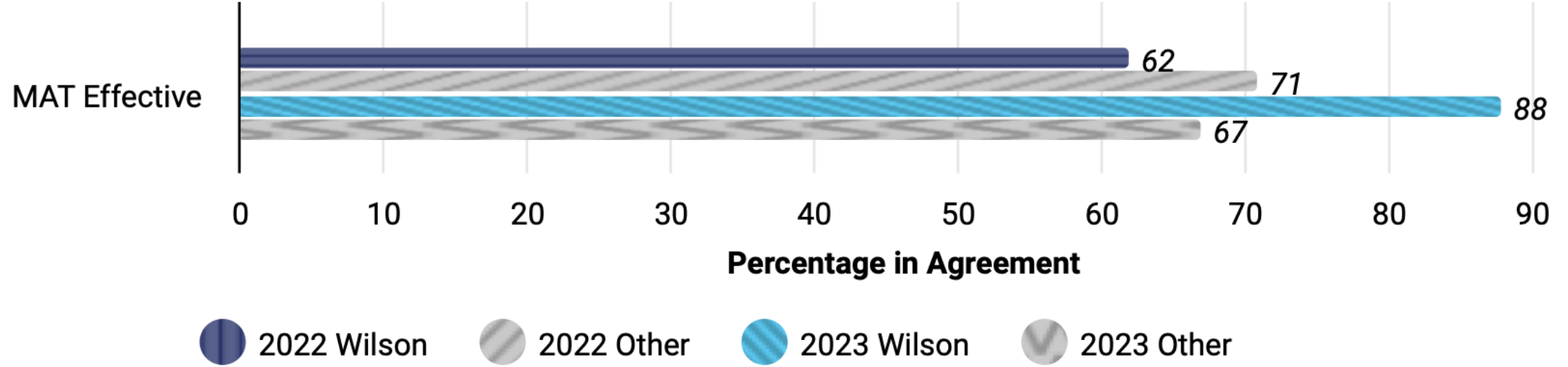
Sex



## Beliefs about a typical user (%)







# Stigma around MAT or Medication Assisted Treatment – Year 2 Stigma Report

The belief that MAT is effective increased in Wilson County, whereas the belief of it being effective outside of Wilson County, decreased.

# Availability of Services Performance Improvement Monitoring System (PIMS)



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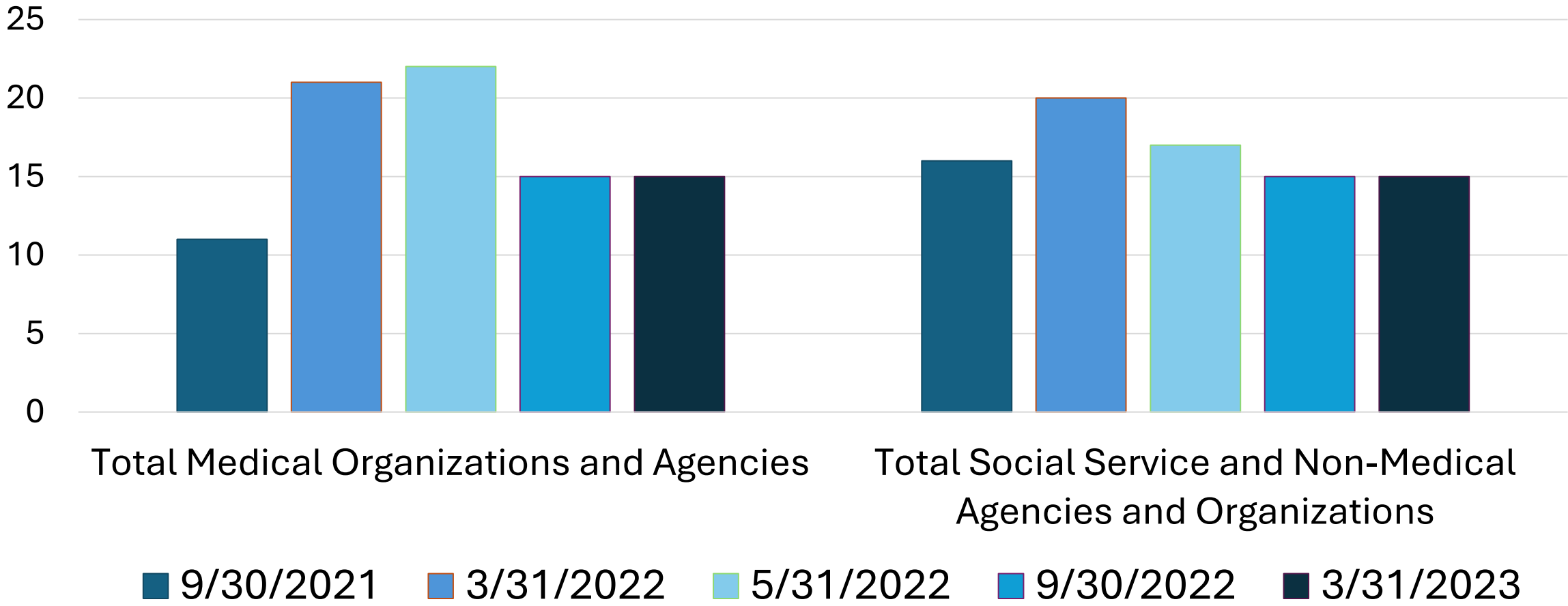


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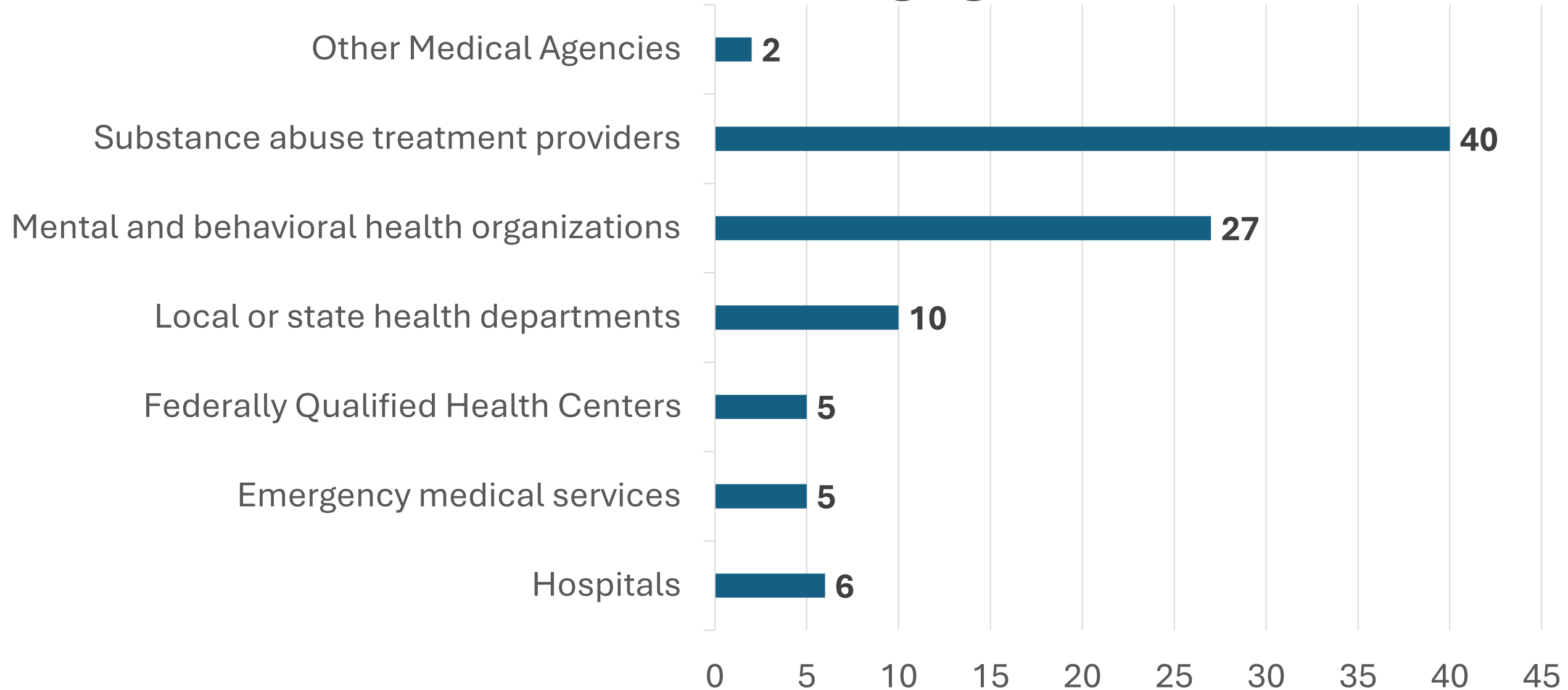


"Performance Improvement  
Monitoring System"  
or PIMS Data

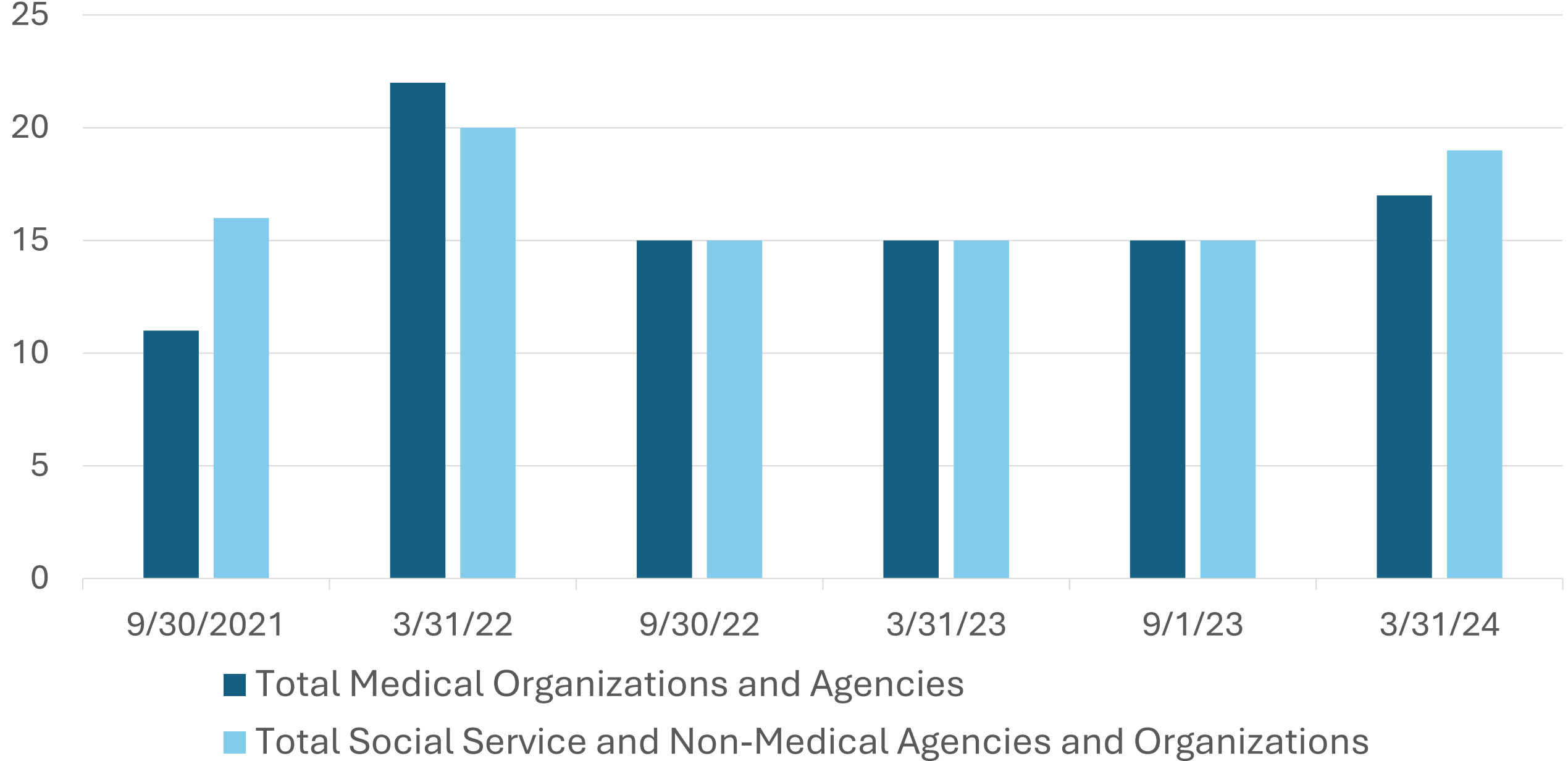
# Total Number of Performance Improvement Measures (PIMS) Data Partners Over Time



# Number of medical organizations providing treatment through grant



# Location types providing services



# Successes



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# Overview of Successes

Youth Prevention

PIC Center

OD Map

Stigma Activities

Patient Care



# Youth Prevention

DrugFree Wilco is the consortium partner championing multiple successful youth prevention activities under the RCORP grant.



# Prevention curriculum

- After a successful submission for grant funding from the county opioid settlement funds, “[The Screenagers Project](#)” curriculum in Wilson County Schools was approved and will be implemented.



**Wilson County**  
*Tennessee*

# Youth Prevention Activities

- Some of the biggest successes in prevention have come through the very active [youth prevention coalition, YPC WilCo](#). There are four current YPC groups. Three are in Wilson County high schools (Lebanon, Mt. Juliet, and Green Hills High School), as well as one in a middle school (Mt. Juliet).
- These groups of YPC WilCo have developed educational videos that are being played in the high schools, and the students in the youth prevention coalition travel to the middle schools for educational events as well.
- Prior YPC WilCo activities include "Escape the Vape" Kits that allowed the students to host their own escape room, a Family Feud style trivia game on the dangers of drugs, and a signed banner pledge from the students.



PIC Center



# Recovery Services

- There have been many successes with Wilson County's diversion center, also called the PIC Center, or Preventing Incarceration in Communities.
- The PIC Center exists to decrease the crime rate, reduce recidivism, and combat the opioid crisis in Wilson County, TN.
- When there are individuals arrested on a non-violent, drug-related charge in Wilson County, the District Attorney's office sends eligible participants to the PIC Center for assessment

# Success Rates and Individuals Served

The PIC Center staff (a Certified Peer Recovery Specialist) performs an assessment and recommends a level of care, referring that individual to a treatment provider. The staff then collects progress reports from the treatment center and the individual over the next 6 – 12 months.

At the time of the individual's court case, the DA's office can drop the individual's charges based on their participation in treatment. To date, there is a **67% success rate in the program**. **108 individuals have already successfully graduated from the program**, and there are **71 active participants in the PIC Center as of September 2024**.

# OD Map



# OD Map

ODMAP provides near real-time suspected overdose data across jurisdictions to support public safety and public health efforts to mobilize an immediate response to a sudden increase, or spike, in overdose events. ODMAP links first responders and relevant record management systems to a mapping tool to track overdoses to stimulate real-time response and strategic analysis across jurisdictions.



# OD Map

- After a multi-year effort to build support and connections, establishing OD Map is a major success of the Wilson County RCORP grant which will provide immense value to local OUD efforts.
- OD is up and running through WEMA as of February 2024.
- Working to get additional law enforcement data added in over time to better understand data and trends (MJPd, LPD, WCSO).



HOME

AGENCIES

SPIKE ALERTS

TRAINING

RESOURCE

## TRAINING

# Learn more about ODMAP features

[Learn More](#)



Patient Care – Direct Impact

# Patient Services

- Because of the RCORP Implementation grant, 40 of patients were provided with potentially life-saving treatment or services totaling \*\$338,999.26 that otherwise would not have received them.

*\*Does not include final month of the original grant period of 8/31/24.*



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# Changing Lives, Saving Lives!

- Leanne Harris, Lebanon, TN featured in the MTSU Spring 2024 Research Magazine.
- Grant funded treatment for Leanne who at the time of publication, was 2 years in recovery.
- Harris is convinced the grant saved her life.

Full article and magazine: [2024 MTSU Research by Middle Tennessee State University - Issue](#)



Leanne Harris at her Wilson County home

## TAKING THE LONG ROAD

ARMED WITH MTSU GRANT DOLLARS, ONE TENNESSEE COUNTY'S BATTLE AGAINST AN INSIDIOUS DISEASE—AND A LETHAL STIGMA—OFFERS HOPE FOR RECOVERING OPIOID ADDICTS

In 2021, Leanne Harris gave birth to a boy and gave him away. If he couldn't go home with her, she thought, he could at least go home with his big brothers, ages 2 and 5. They'd been adopted by a family friend.

"That's the major thing—I had to sign custody over of my oldest two," Harris said. "When I had my third, I also gave him up, because I wanted them all together. I didn't want them to be separated."

### HEALTH AND WELLNESS



Harris, who lives in Lebanon, lost custody of her three children because she'd lost battle after battle against meth and heroin. She'd tried rehab, including medication-assisted treatment (MAT) with suboxone, several times without success.

That's the way addiction often looks, said Dr. Josh Wienczkowski, because addiction is a chronic disease. Wienczkowski is medical director at Lebanon-based Cedar Recovery, where Harris had tried and failed to get clean with MAT.

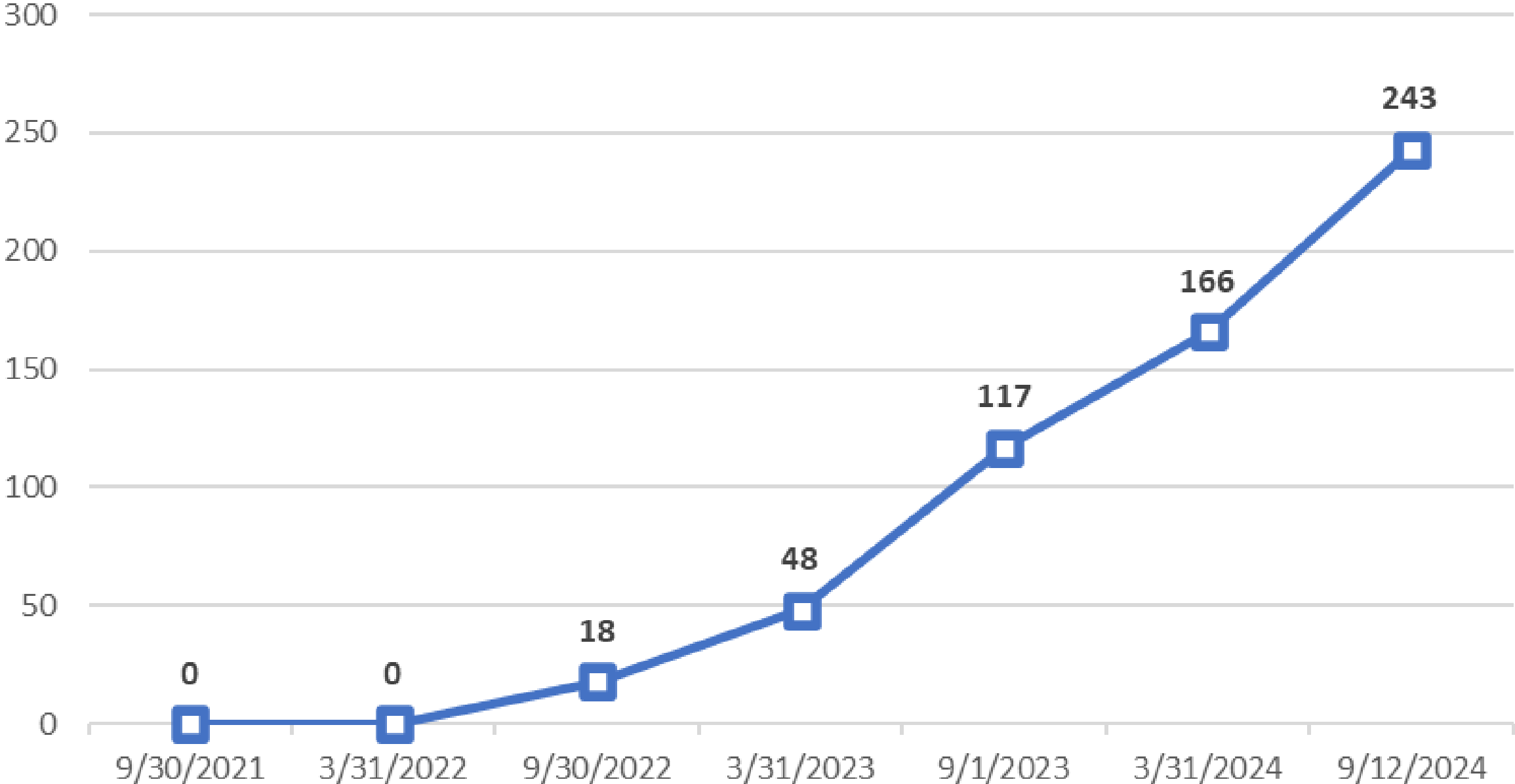
Just like cancer, diabetes, or high blood pressure, substance use disorder (SUD) is characterized by periods of relapse and remission. It's unrealistic to expect full recovery after a single course of treatment, Wienczkowski said. And with SUD, as with other chronic diseases, recovery can be complicated by depression, financial hardship, or any number of internal or external stressors. The important thing is to keep trying.

"What's comforting is that current literature shows the vast majority of those with SUD will recover fully—over 70%," he said. "And time in both treatment and recovery only increases that number."

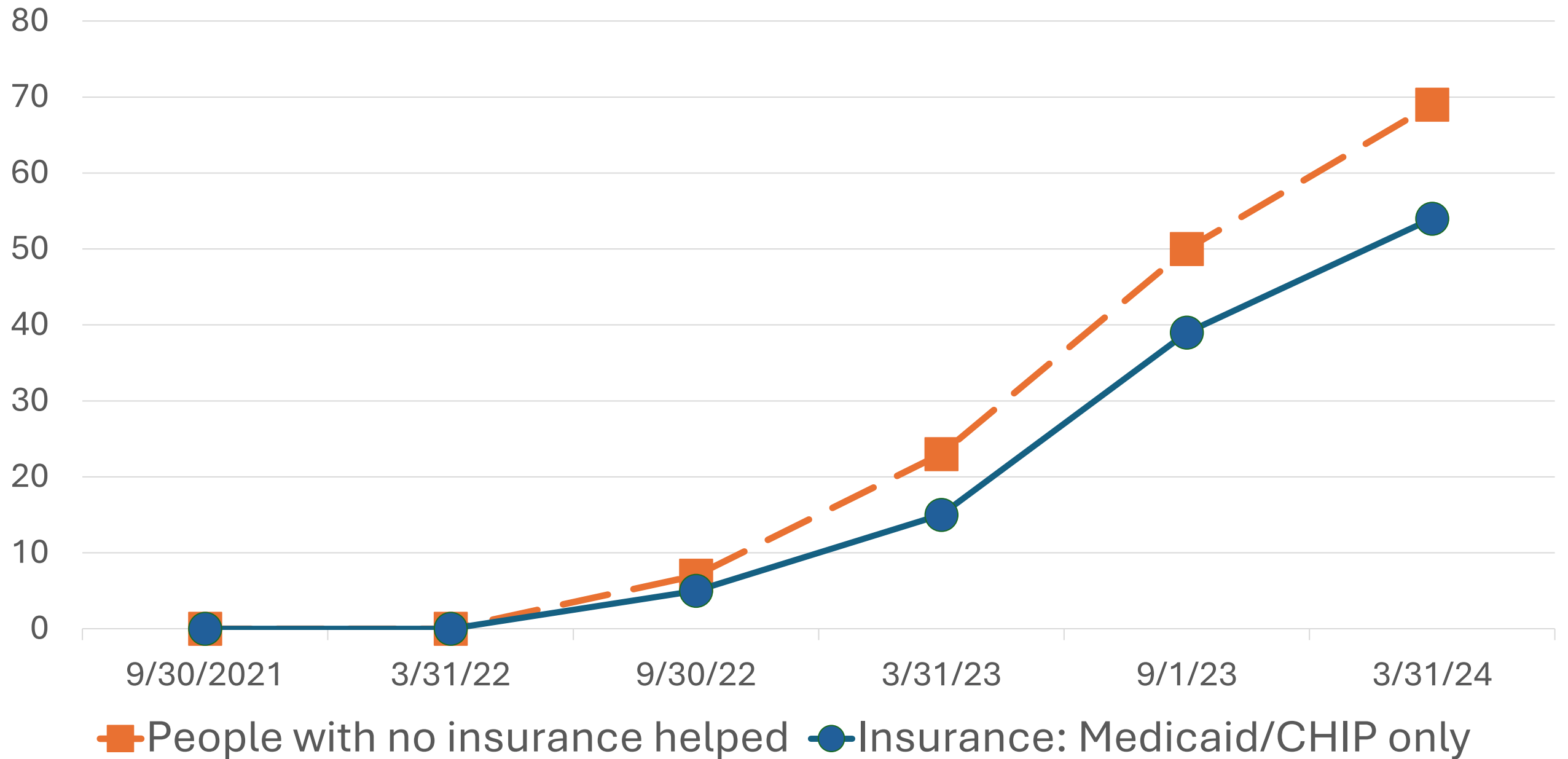
Harris can't recall exactly how many times she tried MAT, and she's not sure what made the last time different. All she knows is she was desperate to see her kids, including her baby, so she tried it again, and it stuck.

Article by  
Allison Gorman  
Photo by  
Andy Heit

# Patient Service Encounters

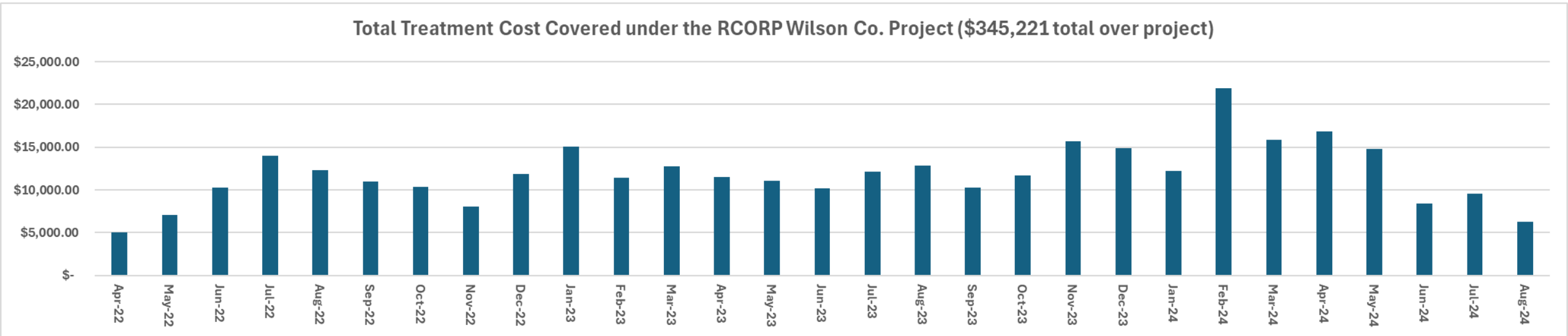


# Uninsured, Medicaid, and CHIP Impact



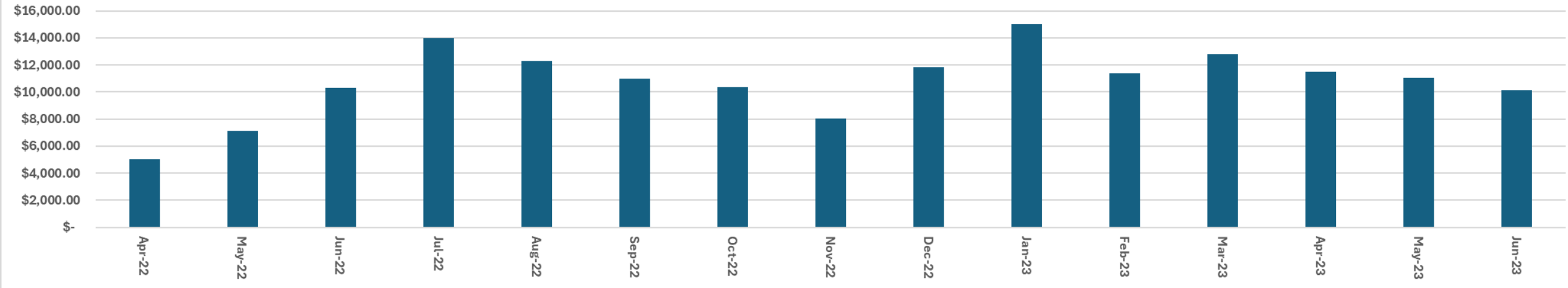
# Full Time Trend of Total Treatment Cost

Total Treatment Cost Covered under the RCORP Wilson Co. Project (\$345,221 total over project)



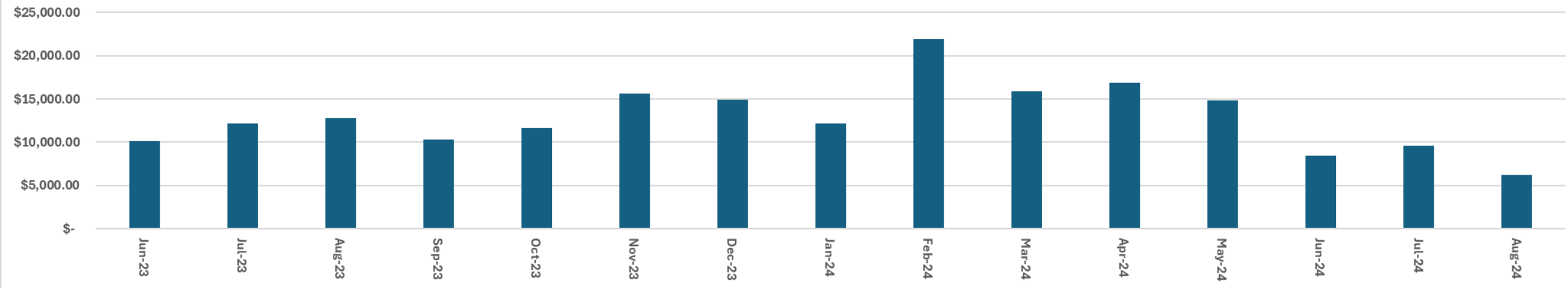


1st Half of Sample Period: Total Treatment Cost Covered under the RCORP Wilson Co. Project (\$345,221 total over project)

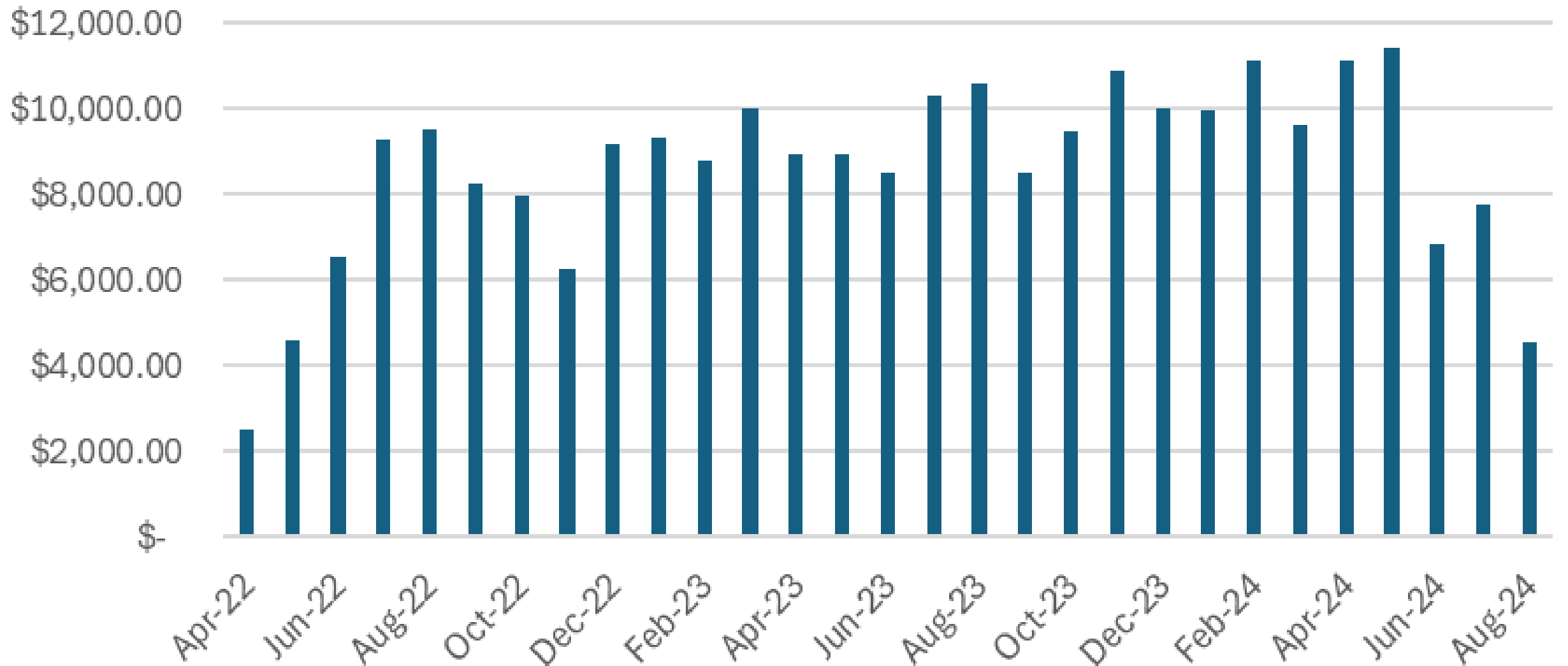


# Closer Look at Time Trends 1st half Vs 2nd Half

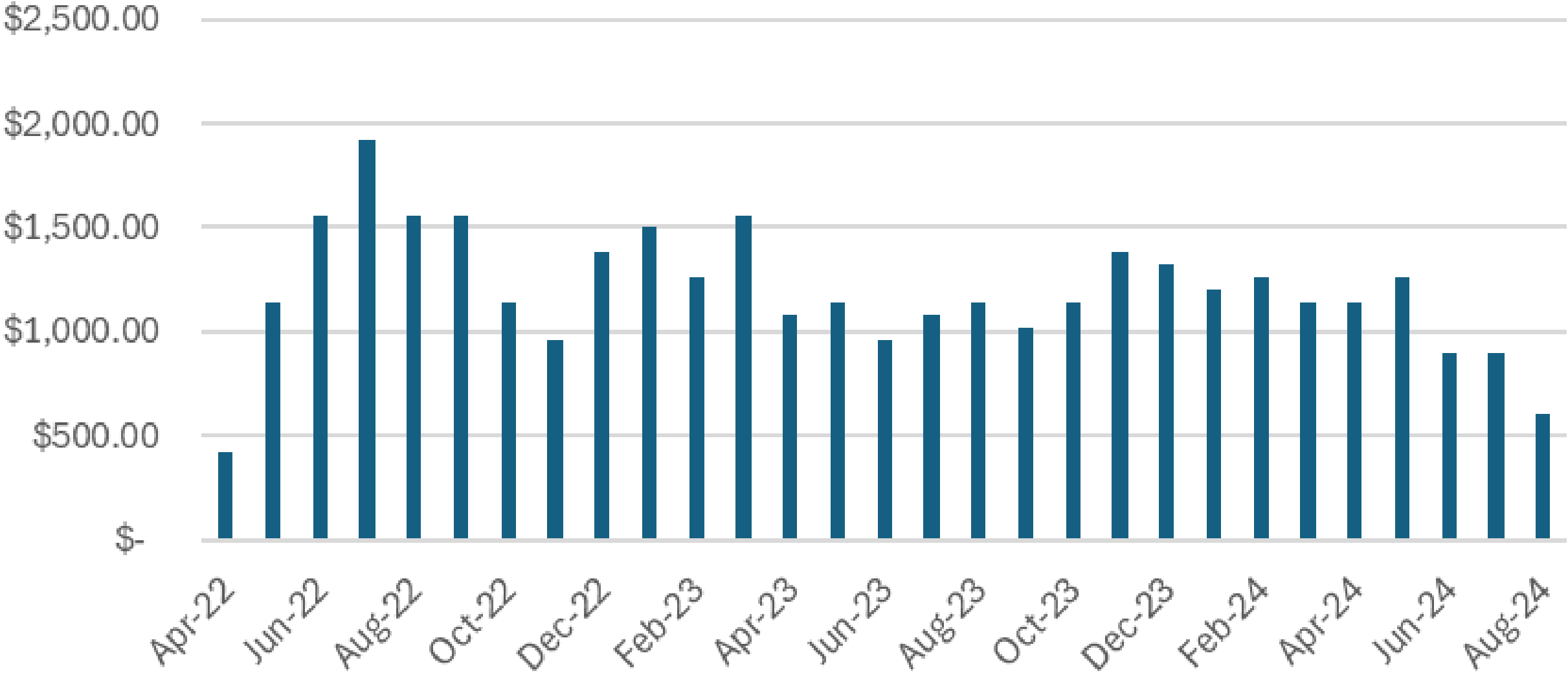
2nd Half of Sample Period: Total Treatment Cost Covered under the RCORP Wilson Co. Project (\$345,221 total over project)



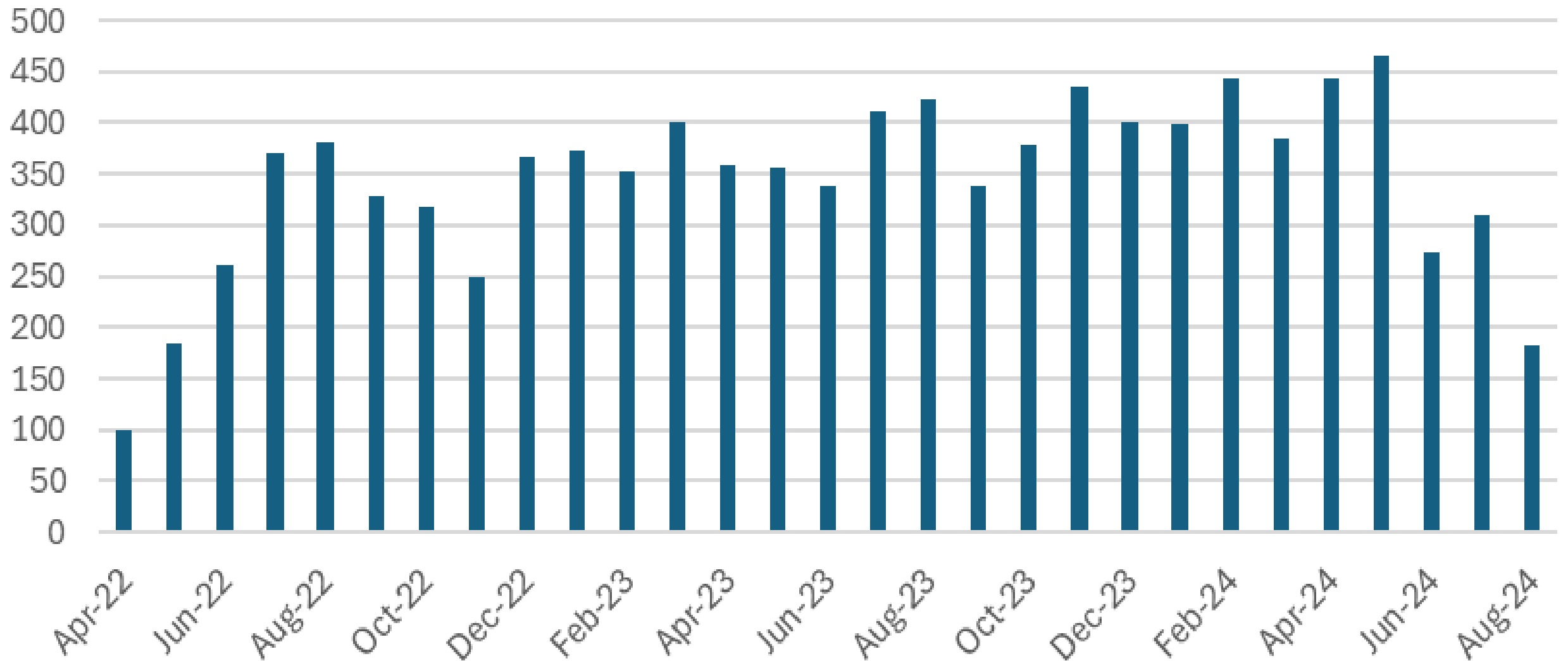
# Largest Expense (\$250,500): Daily Buprenorphine Medication



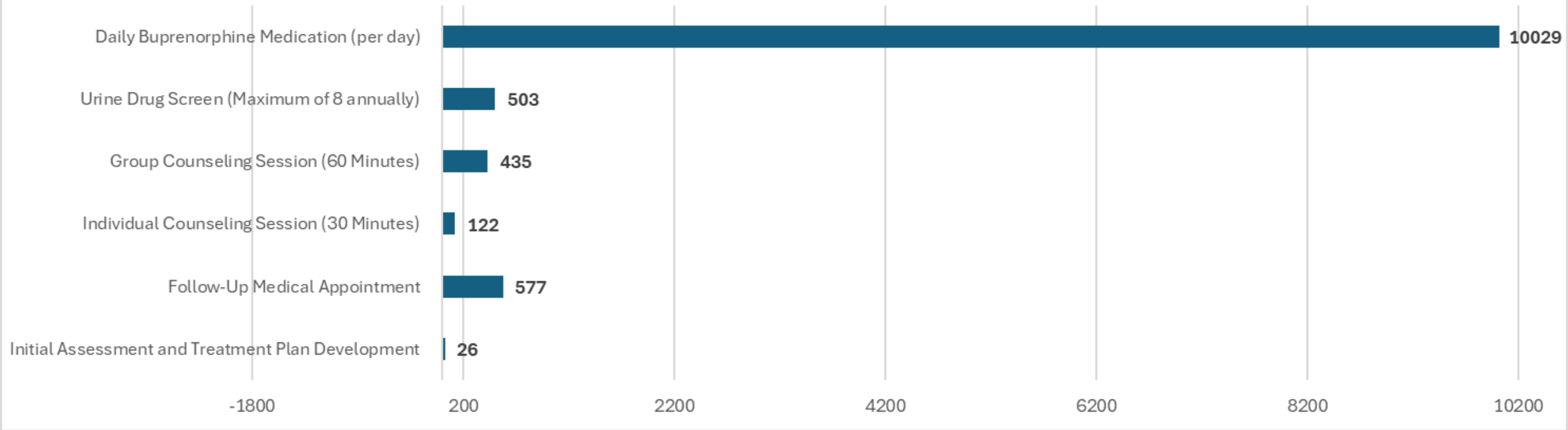
# Second Largest Expense (\$34,620): Follow-Up Medical Appointment



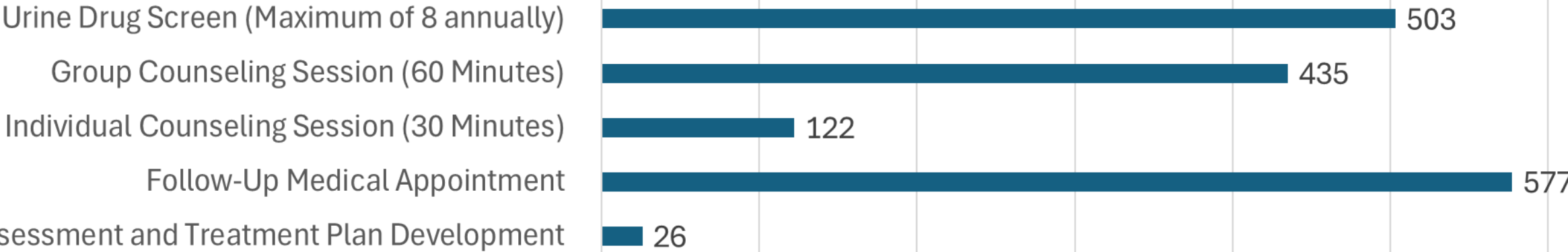
# Most Used Service (10,029): Daily Buprenorphine Medication (per day)



## Total Units Invoiced

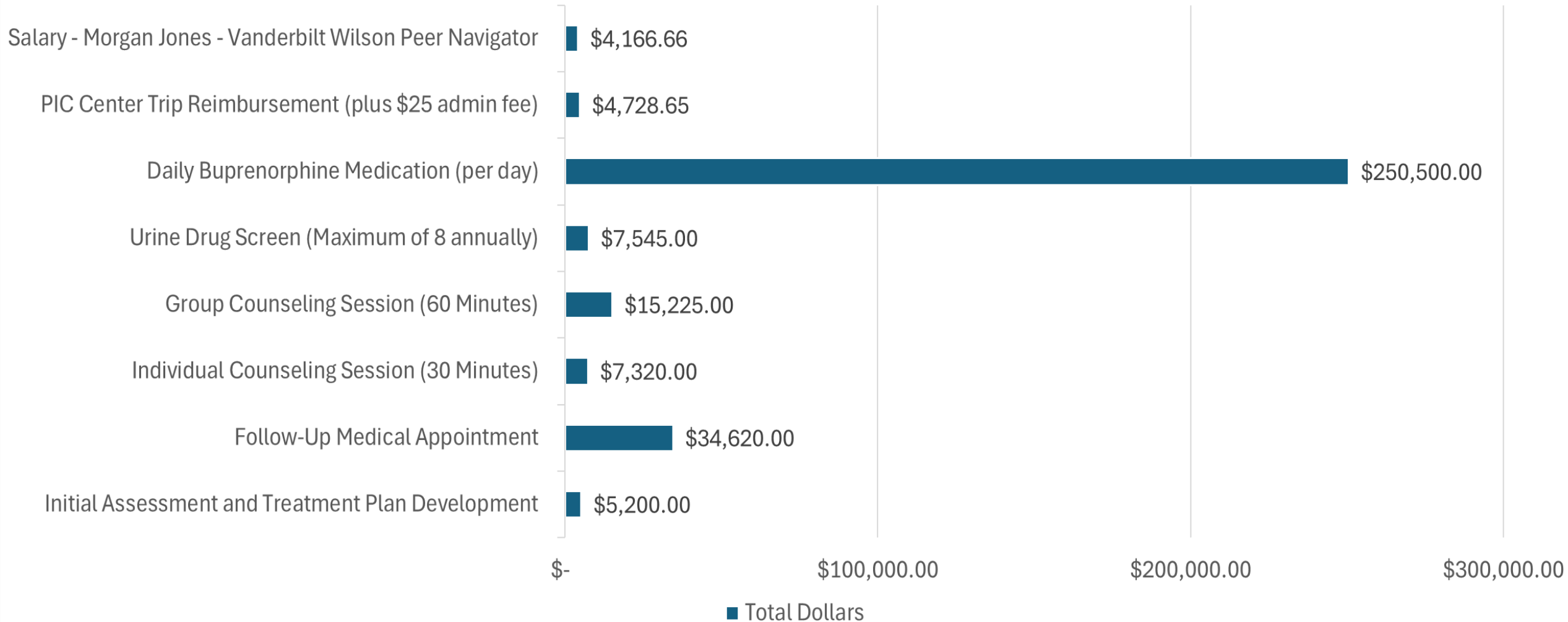


### Total Units Invoiced Excluding Buprenorphine

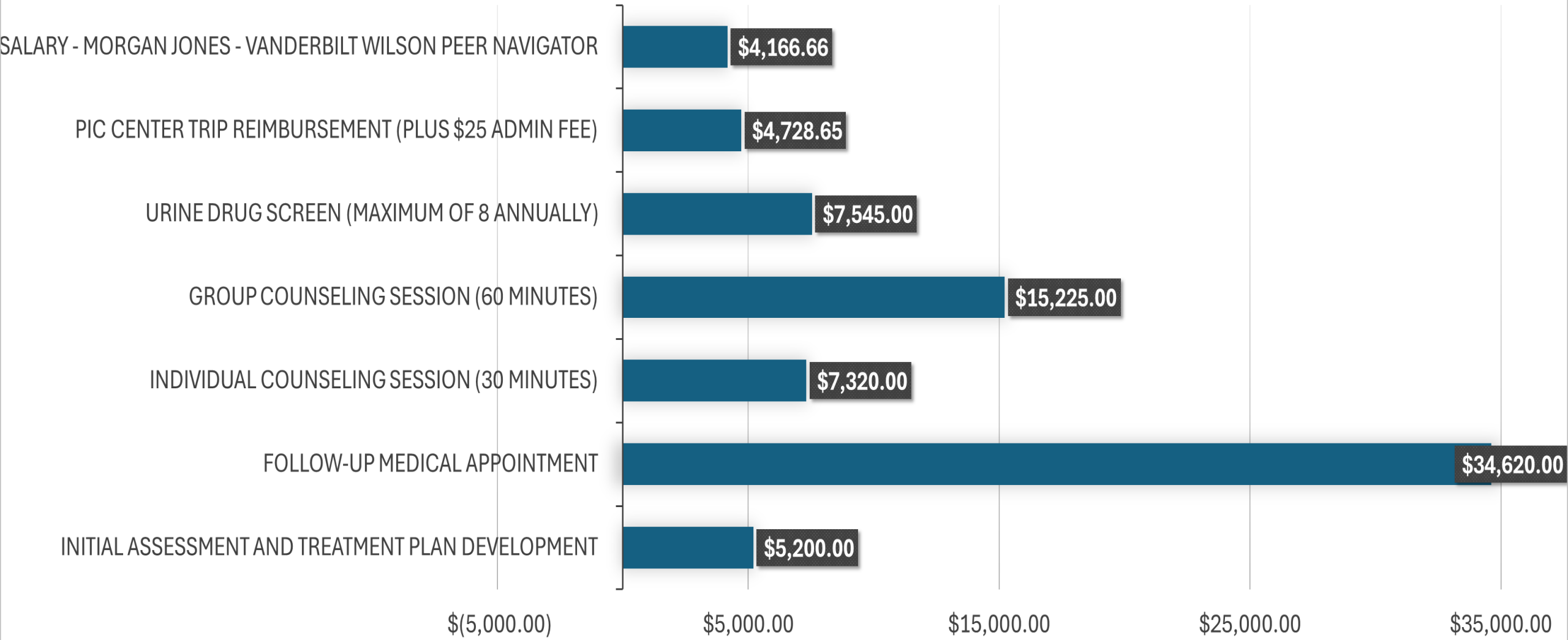


0 100 200 300 400 500 600

# Grant Funds Expended for Treatment

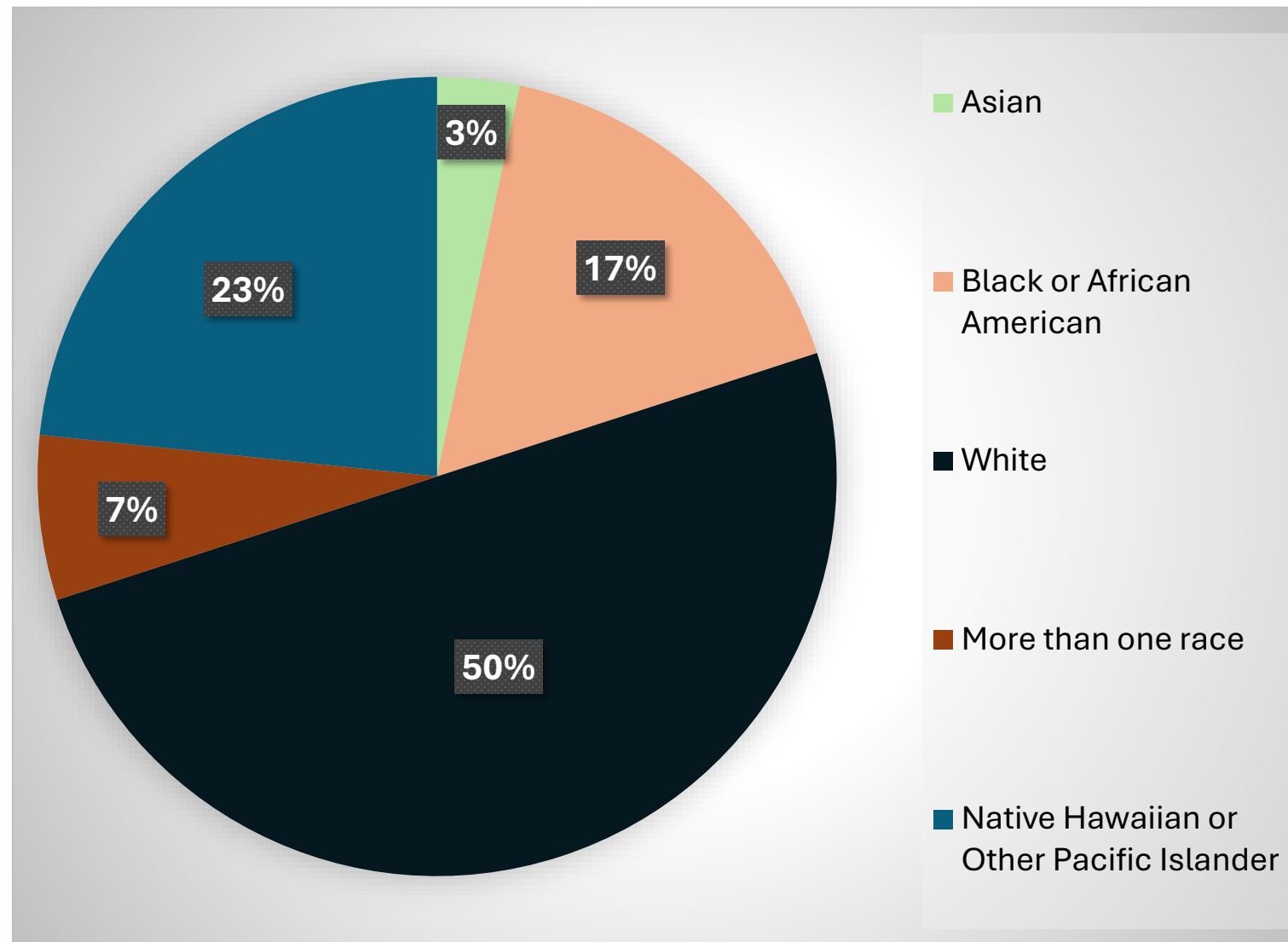


### Total Dollars Spent on all Invoice Items Excluding Buprenorphine

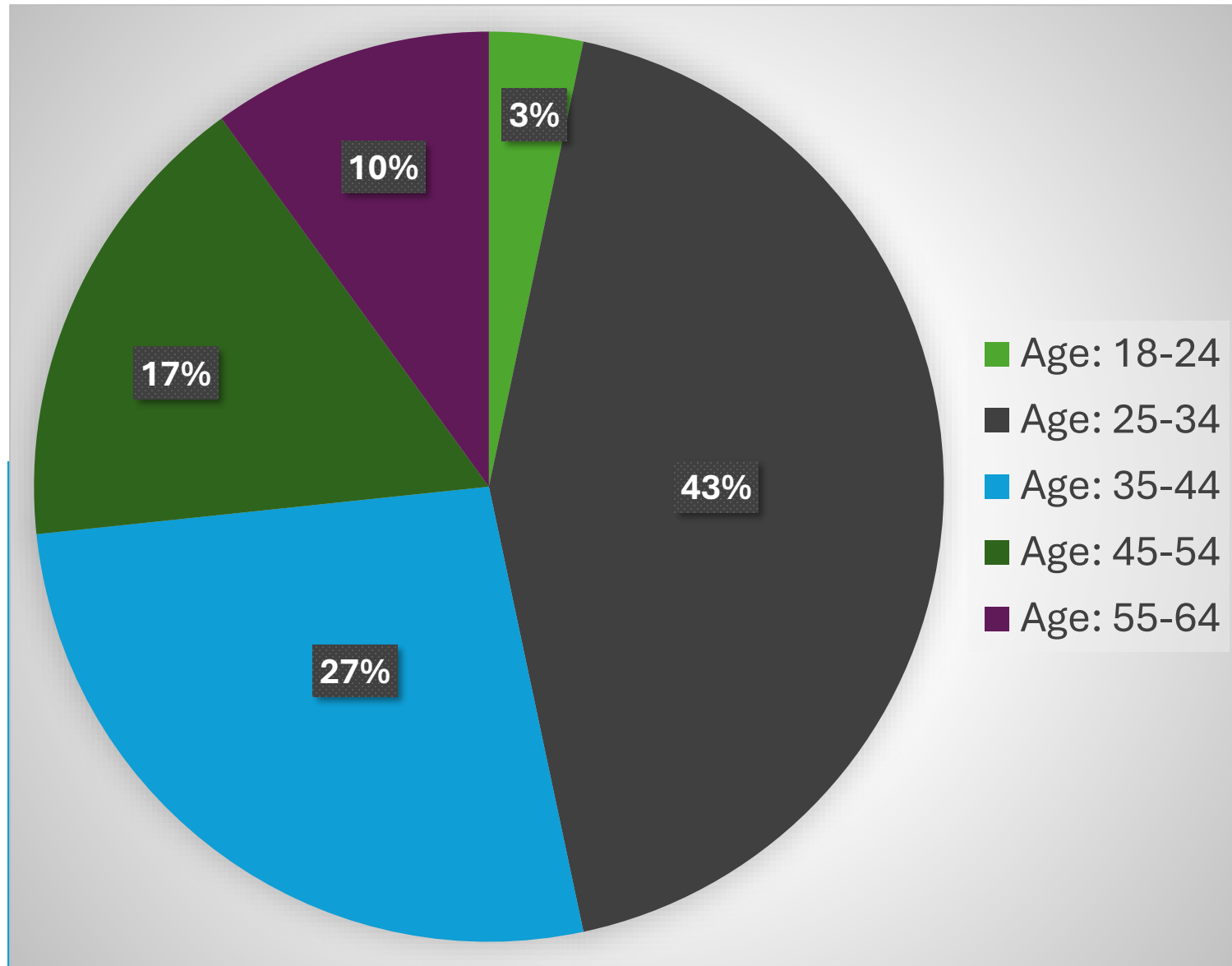




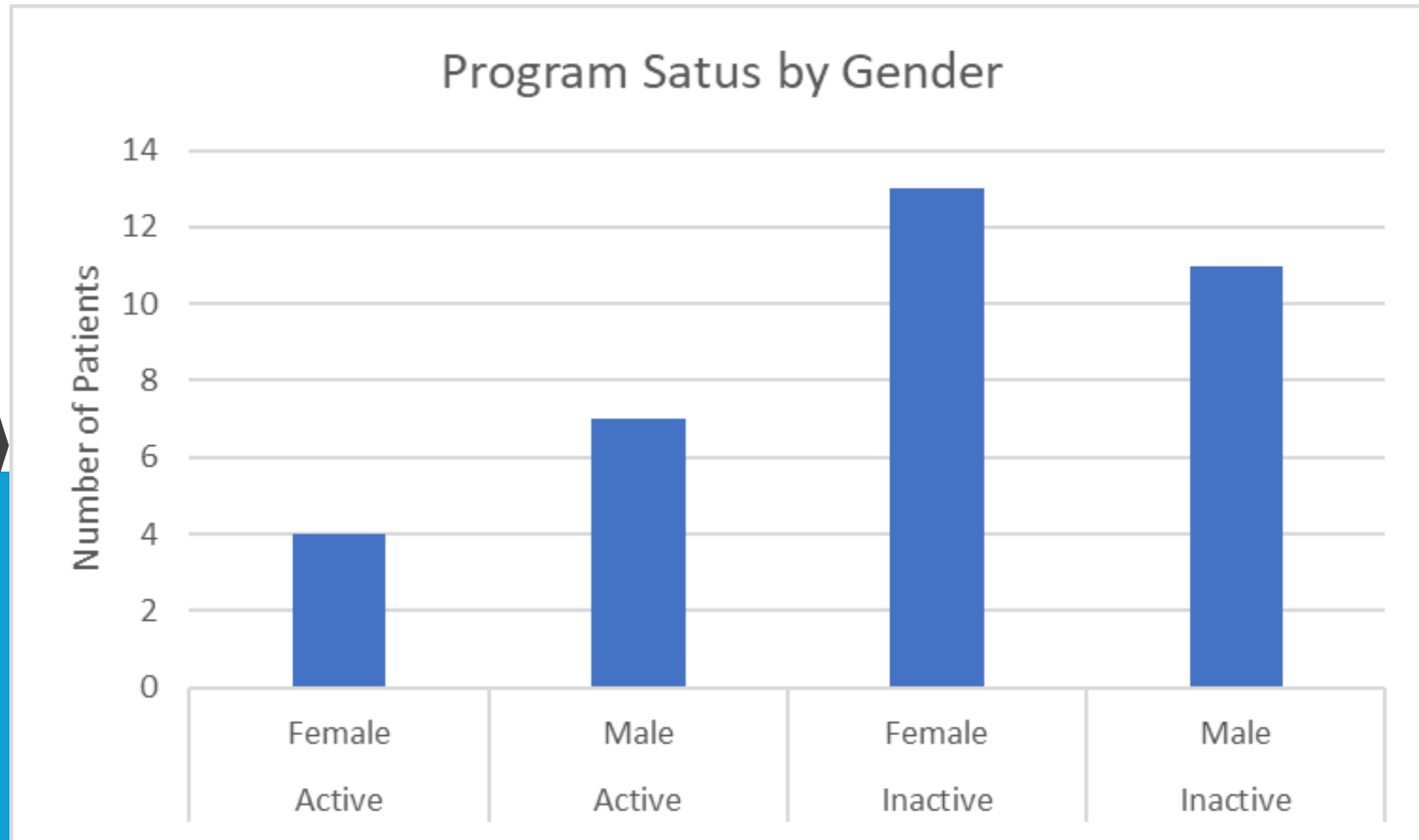
Snapshot: Race of people served over prior 90 days. Total of 40 participants. (Wilson County as of 3/31/23)



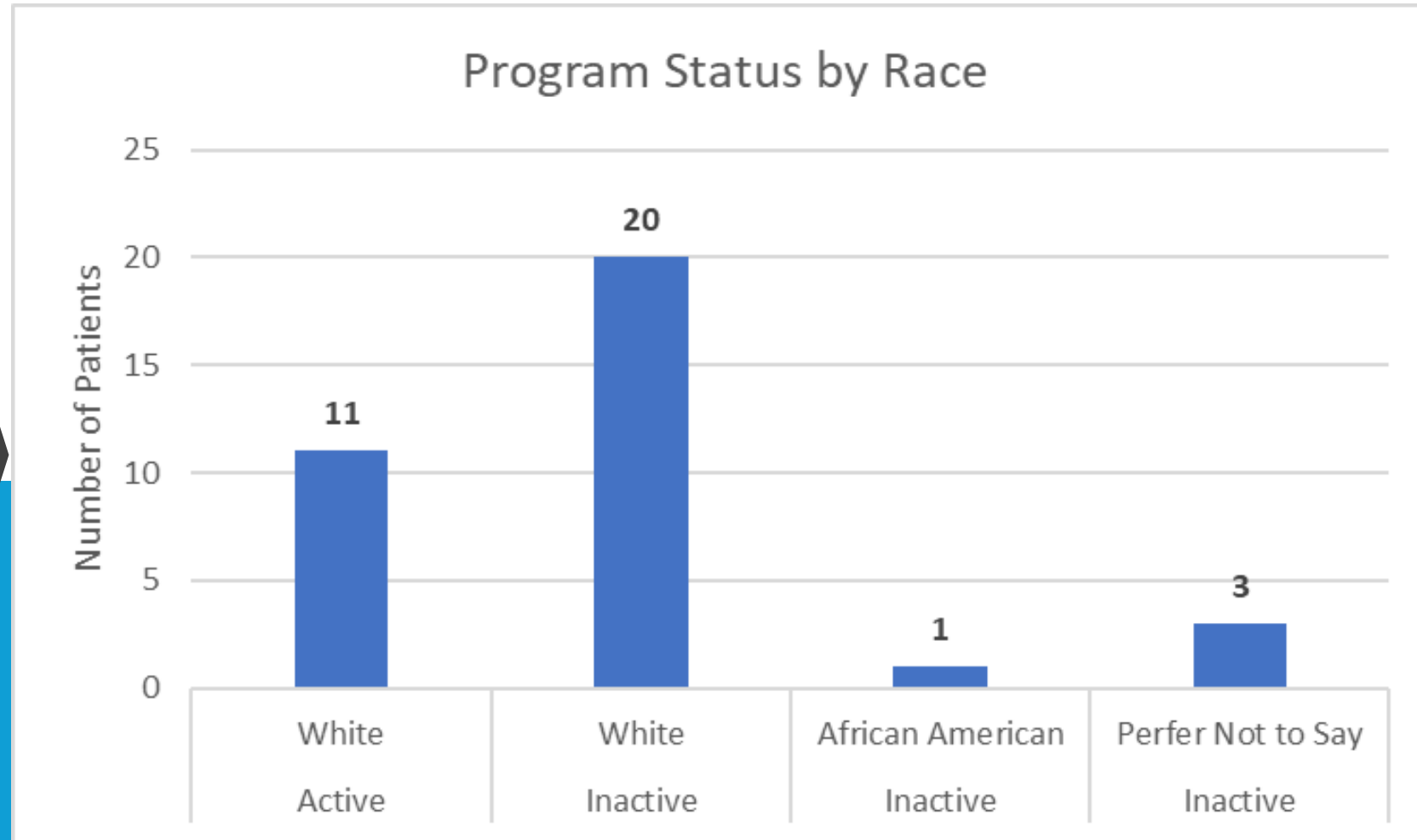
Snapshot: Ages of people served over prior 90 days. Total of 40 participants. (Wilson County as of 3/31/23)



Snapshot: Program Status by Gender:  
Data available for  
35 of 40  
participants  
(Wilson County as  
of 3/31/23)



Snapshot: Program Status by Gender:  
Data available for  
35 of 40  
participants  
(Wilson County as  
of 3/31/23)

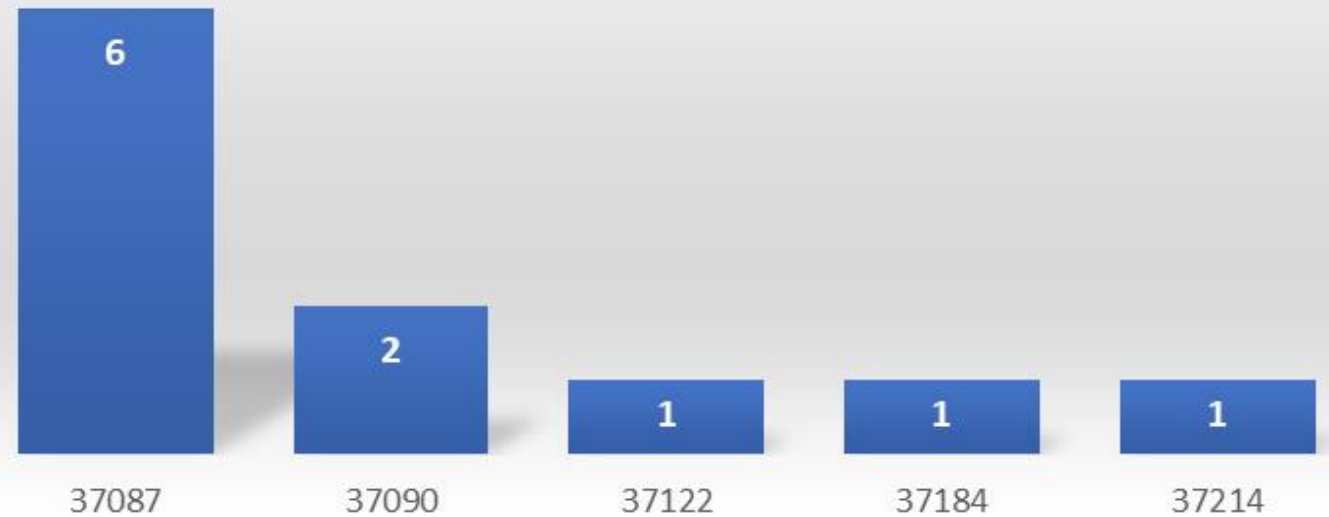


Snapshot:

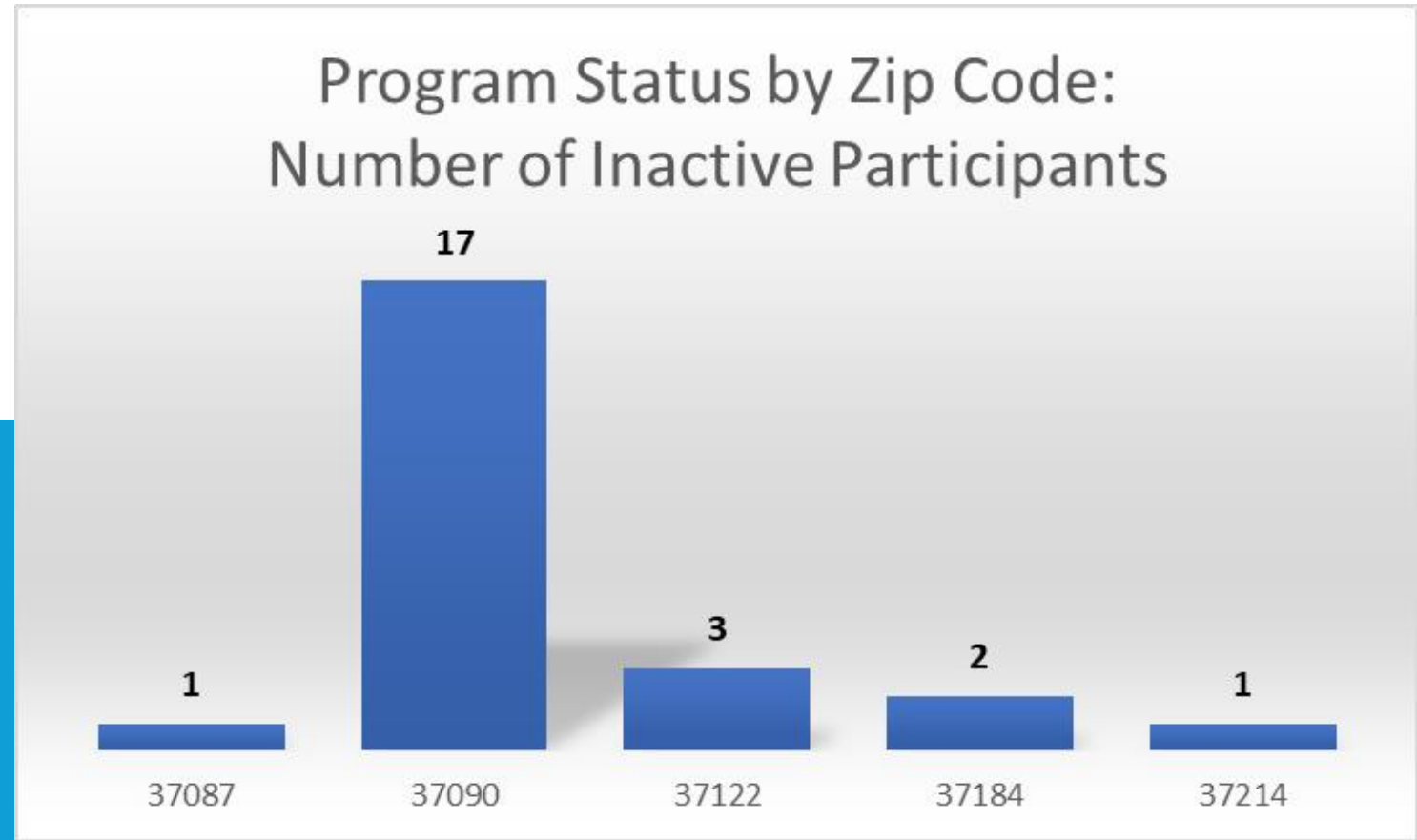
**ACTIVE**

Participants by  
Zip Code: Data  
available for 35  
of 40  
participants  
(Wilson County  
as of 3/31/23)

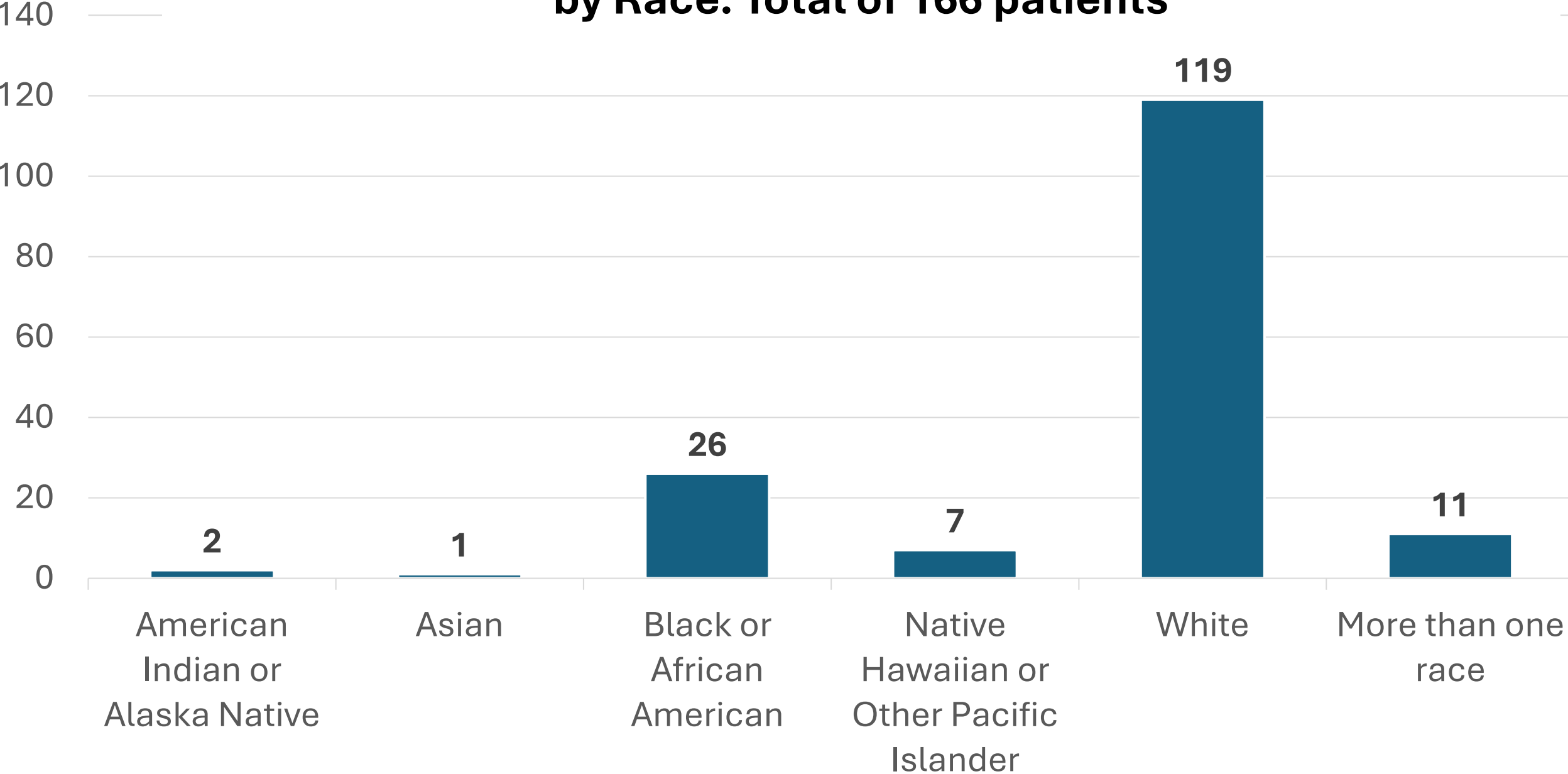
Program Status by Zip Code:  
Number of Active Participants



Snapshot:  
**INACTIVE**  
Participants by  
Zip Code: Data  
available for 35  
of 40  
participants  
(Wilson County  
as of 3/31/23)



# Patient Service Encounters (total number of people helped) by Race. Total of 166 patients



Stigma



# What is Stigma and Why is Reducing it Important?



- Stigma against those with substance use disorder is a set of negative attitudes and stereotypes that can create barriers to treatment and recovery, and make these conditions worse (Volkow, 2020).
- Anyone can have stigmatizing attitudes – individuals, healthcare providers, and other professionals.
- Stigma is an overarching concern that is addressed as part of the Wilson County RCORP project activities.
- Addressing stigma as an overarching concern means we are more likely to be successful in all project activities and to demonstrate positive impact.

Activities supporting stigma reduction as part of the RCORP grant include:

- Law enforcement training (n=112)
- “Lunch and Learns” for Health care providers, and other professionals in the community (n=58)
- Billboard campaigns (2022 and 2024)





# Stigma Reports

Three annual stigma reports were developed with outcomes from stigma reduction activities.

**RCORP Wilson County, TN**  
Provider and Community Stigma Report






Years One and Two reports are available at [CHHS Publications – The Center for Health and Human Services \(mtsu.edu\)](#) with Year Three in progress.

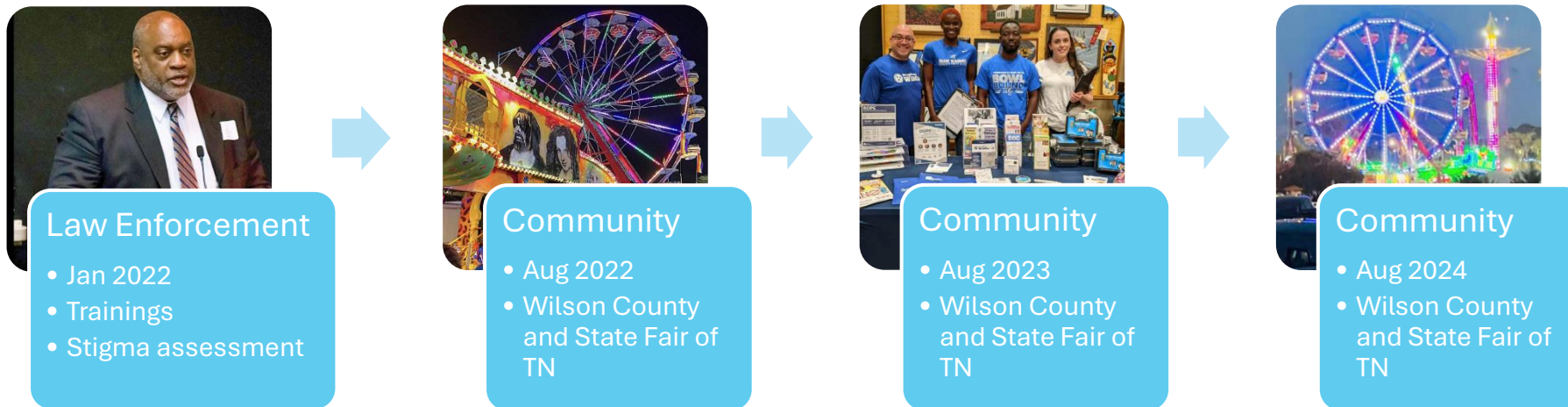
 Middle Tennessee   
Center for Health and Human Services 2023 Community Stigma Report Public Health

In 2023, the RCORP Wilson County Project, along with DrugFree WilCo, the MTSU Center for Health and Human Services, and the Public Health Program, surveyed community attitudes toward drug users at the Wilson County and Tennessee State Fair. Most participants in the survey were from Middle Tennessee, with Wilson County contributing the largest proportion.

**2023 Highlights**

-  Minimal change in perceptions of a drug user's profile from 2022 to 2023.
-  Wilson County saw social distance stigma fall, and acceptance of treatment and understanding of drug use improved.
-  Individuals with affected loved ones exhibit lower drug stigma and greater belief in treatment effectiveness.

# Stigma Assessment and Tracking Timeline



## Objectives

1. **Develop/adapt a tool** to measure provider stigma toward PWUD.
2. **Quantify stigma level** in Law Enforcement and Community members (the public).
3. Assess **differences** in Law Enforcement and Community.
4. Track **Community over time**.


# Assessing Stigma

- The CHHS RCORP team, in collaboration with M.P.H. students at MTSU, developed a questionnaire to measure stigma based on research found in the literature.
- **Community Stigma:** Surveys were administered at the Wilson County-Tennessee State Fair in 2022, 2023, and 2024 after stigma reduction activities were underway ( Collected between 350-400 questionnaires each year).
- **Law Enforcement Stigma:** Surveys were administered as part of six lunch and learn educational sessions in 2022 focusing on harm-reduction and led by HRSA-endorsed law enforcement officer.
- Disease model of addiction was the overarching scheme: Dangerousness, blame, social distance, fatalism.



## Opioid Use Disorder Questionnaire — Tennessee State Fair 2022

Date: \_\_\_\_\_ Interviewer initials: \_\_\_\_\_

 **Public Health**  
MIDDLE TENNESSEE STATE UNIVERSITY

I have read this informed consent document pertaining to the above identified research.....  Yes  No

The research procedures to be conducted are clear to me.....  Yes  No

I confirm I am 18 years or older.....  Yes  No

I am aware of the potential risks of the study.....  Yes  No


I affirm that I freely and voluntarily choose to participate in this study. I understand I can withdraw from this study at any time without facing any consequences.....  Yes  No

**1(8). Please indicate how strongly you agree or disagree with the following statements:**

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
A If I knew that a heroin addict lived nearby, I would not allow my children to play alone outside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B One important thing about people addicted to heroin or opioids is that you cannot tell what they will do from one minute to the next	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C People who use heroin or opioids are a threat to the safety of our community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D Although some heroin/opioid users may seem all right it is dangerous to forget that they are drug users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E Persons addicted to heroin and/or opioids are usually responsible for their own condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F If I knew someone was addicted to heroin or opioids I would try not to socialize with them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G It would bother me to live near a person who used heroin or opioids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H It would be difficult for me to develop a friendship with someone who uses heroin or opioids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I I would not vote for a politician if I knew they had been addicted to heroin or opioids.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J If I could, I would prefer not to work with someone who was a known user of heroin or opioids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K I would be fine letting someone who had a history of opioid and heroin use marry into my family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L Most people who become addicted to heroin or opioids are addicts for life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M A typical drug user belongs to the lower class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N Males are more likely to be a drug user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
O Most drug users are employed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P Drug abuse is a disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q Medicated assisted treatment (MAT) programs can be an essential tool in aiding in treatment and preventing overdose deaths?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2(9). From your experiences a typical drug user is which race/ethnicity?**

Black or African-American  American Indian / Alaskan Native  Asian  Hispanic or Latinx  White  Not Listed

 **Public Health**  
MIDDLE TENNESSEE STATE UNIVERSITY

**3(10). What is your age (in years)?** \_\_\_\_\_

**4(11). What is your gender?**

Man  Woman  Not Listed \_\_\_\_\_

**5(12). What is your race/ethnicity?**

Black or African-American  American Indian / Alaskan Native  Asian  Hispanic or Latinx  White  Not Listed


**6(13). Have you seen any of the DrugFree WilCo billboards displayed in Wilson County in the past year?**

Nope, I haven't seen any of them

I saw at least one, but only once

I saw one or more occasionally

I see/saw them routinely when they were up



**7(14). What County do you reside?**

\_\_\_\_\_ or  Outside of Tennessee

**8(15). Are you willing to be contacted in the future via email for a follow-up telephone interview as part of a qualitative study on substance use in TN?.....**  Yes  No thanks!

**9(18). Thank you for completing the survey!**

Please enter your email address below to be entered into the drawing for a \$150 Kroger Gift Card:

\_\_\_\_\_

*We thank you for your time!*

- Informed Consent
- 14 Stigma oriented questions
- Billboard sign visibility
- Drug user stereotyping questions (biases)
- Respondent demographics (age, gender, race)
- **Loved/close one affected question added – Years Two and Three**

# Highlights from Year Two Stigma Report - Community



## Middle Tennessee 2023 Community Stigma Report



In 2023, the RCORP Wilson County Project, along with DrugFree WilCo, the MTSU Center for Health and Human Services, and the Public Health Program, surveyed community attitudes toward drug users at the Wilson County and Tennessee State Fair. Most participants in the survey were from Middle Tennessee, with Wilson County contributing the largest proportion.

### 2023 Highlights



Minimal change in perceptions of a drug user's profile from 2022 to 2023.



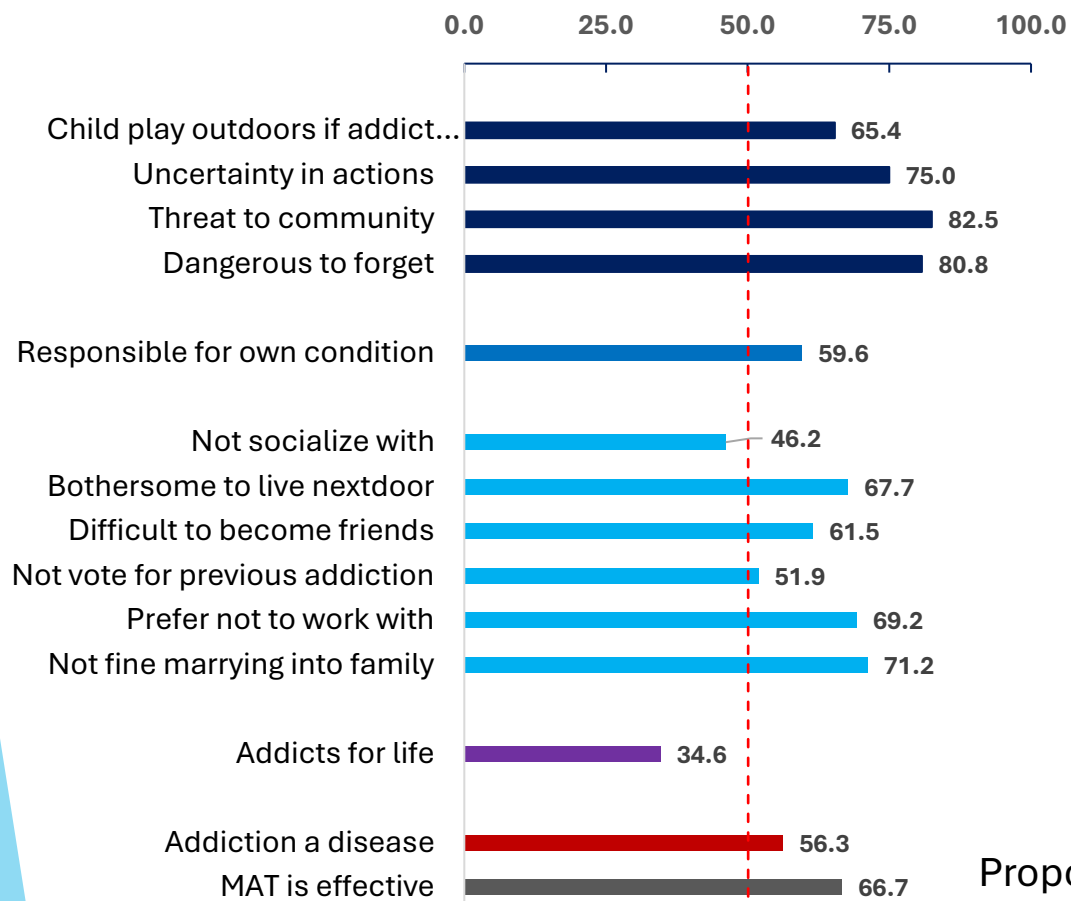
Wilson County saw social distance stigma fall, and acceptance of treatment and understanding of drug use improved.



Individuals with affected loved ones exhibit lower drug stigma and greater belief in treatment effectiveness.

# Highlights from Year One Stigma Report – Law Enforcement

**Law Enforcement Training** - Six virtual (held via Zoom) peer-led harm reduction model presentations were delivered over two days in January 2022, for local law enforcement officers in Wilson County. Of those that attended a classroom with lunch (N=112), 48 agreed to participate in the survey (N=48).



Proportion of participants strongly agreeing or agreeing to the statement

## Provider-level stigma is measurably present in Law Enforcement

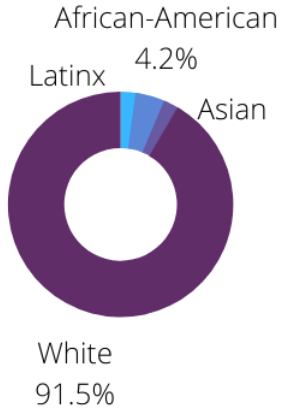
### Opportunities for further training

*“We all work in this field with a bias already and with the right information and tools the next generation of LEO learning from us, and I saw a lot of LEO leaders in this group, we could definitely get the wheels moving so that the newer guys do not wind up with the same biases we hold.”*

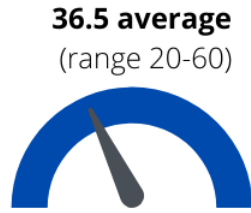


# 2022 Law Enforcement Sample

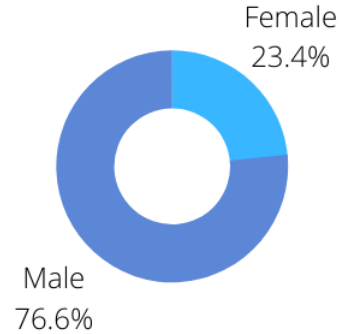
## Race / Ethnicity



## Age

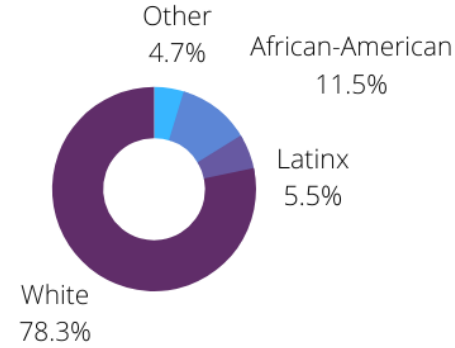


## Sex

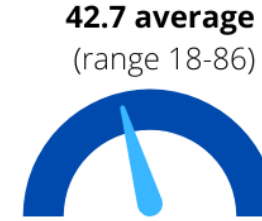


# 2022 Community Sample

## Race / Ethnicity



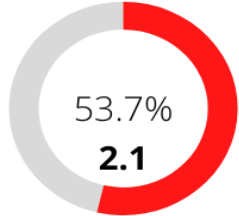
## Age



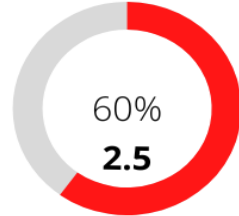
## Sex



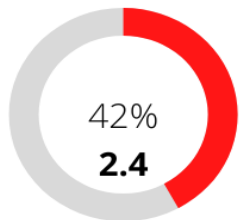
## Dangerous



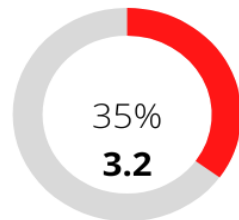
## Blame



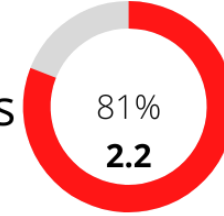
## Social Distance



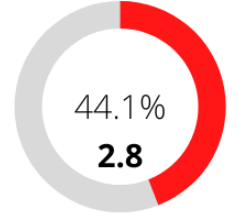
## Fatalism



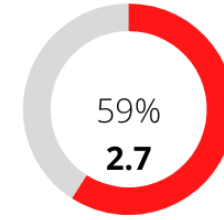
## Dangerous



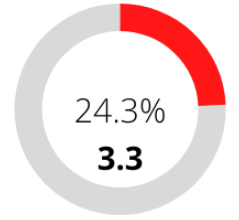
## Blame



## Social Distance



## Fatalism



On a scale of 1= Strongly Agree to 5=Strongly Disagree

On a scale of 1= Strongly Agree to 5=Strongly Disagree

## So, after year 1 (2022)?

- Both LEOs and community members showed “**similar**” stigma levels in **dangerousness, blame, social distance,** and **fatalism** domains with different distributions **and marginal significance** when adjustment is taken.
- Study **achieved its objective of estimating stigma prevalence** and highlighting parallels between LEOs and community members.

# Additional Successes: Stigma

The MTSU RCORP Project Team has been invited to share outcomes of stigma reduction activities at a national conference, one grantee national webinar, two statewide conferences, one regional event.

## **Annual Conferences:**

American Public Health Association  
Tennessee Public Health Association  
Rural Health Association of Tennessee

## **Quarterly Webinars:**

Rural Health Association of Tennessee  
HRSA Learning Collaborative



# Other Successes

# Additional Successes

- **Accessing data for consortium planning, monitoring consortium activities:** Consortium members can use the data collected for HRSA reporting to plan and track their activities. With the recent decision to **adapt OD Maps in all counties of Tennessee, additional data will be available to consortium members.** This provides all overdose data across the county in one centralized location.

# Additional Successes

- **Telehealth/telemedicine:** While our RCORP partner Cedar Recovery has several locations across the state of Tennessee, since Wilson County is a rural county, they started "Studio Health" in 2022 to give more people in rural Wilson county access to treatment. It also helps those who are not comfortable visiting a treatment center in person
- Participants connect with their doctor and therapist through the app, they perform mail-in drug screens, and medications such as Suboxone (buprenorphine) is prescribed to a pharmacy near their home. This initiative was completed outside of RCORP funding.

# Additional Successes

- **Accessing data from consortium members for HRSA reporting:** Even with staff turnover, we have been successful in getting needed data in part due to the data reporting structures set up by the MTSU RCORP Team.
- **Additional HRSA RCORP funding:** MTSU CHHS and Cedar Recovery received almost \$3,000,000 **to expand treatment** to six rural Tennessee communities and expand their work in Wilson County.
- **Additional Opioid Abatement funding:** DrugFree Wilco and MTSU Center for Health and Human Services applied for and receiving funding from local and state abatement funds to further work in Wilson County and throughout the state. This represents five grant applications and totals \$9,141,962.

# Economic Impact



Center for Health  
and Human Services



Public Health



*Data Science Institute*







# Economic Impact of Opioid Use Disorder



- Preventing opioid use disorder can have significant economic impact.
- The costs associated with OUD are substantial, including healthcare expenses, lost productivity, criminal justice costs, and more.
- The total cost of the opioid epidemic in 2017 was estimated at \$1.021 trillion including \$471 billion for OUD and \$550 billion for fatal opioid overdoses.

## Sources:

Luo, F., Li, M., & Florence, C. (2021). State-Level Economic Costs of Opioid Use Disorder and Fatal Opioid Overdose - United States, 2017. *MMWR. Morbidity and mortality weekly report*, 70(15), 541–546. <https://doi.org/10.15585/mmwr.mm7015a1>

Florence, C., Luo, F., & Rice, K. (2021). The economic burden of opioid use disorder and fatal opioid overdose in the United States, 2017. *Drug and Alcohol Dependence*, 218. <https://doi.org/10.1016/j.drugalcdep.2020.108350>

Jennings, K. (2022, May 23). Economic Toll of Opioid Epidemic: \$1.3 Trillion a Year. *Forbes*. <https://www.forbes.com/sites/katiejennings/2022/02/04/economic-toll-of-opioid-epidemic-13-trillion-a-year/>

# Economic Impact: Centers for Disease Control and Prevention (CDC) Model

Fatal Opioid Overdose:  
Value of a Statistical Life: \$10.1 million  
Lost Productivity: \$1.4 million  
Healthcare Costs: \$5,500

Total Cost: \$11.5 million

Living with Opioid Addiction:  
Reduced Quality of Life: \$183,200  
Lost Productivity: \$14,700  
Healthcare Costs: \$14,700  
Criminal Justice: \$7,000  
Substance Use Treatment: \$1,600

Total Cost: \$221,200

## Sources:

Luo, F., Li, M., & Florence, C. (2021). State-Level Economic Costs of Opioid Use Disorder and Fatal Opioid Overdose - United States, 2017. *MMWR. Morbidity and mortality weekly report*, 70(15), 541–546. <https://doi.org/10.15585/mmwr.mm7015a1>

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Jennings, K. (2022, May 23). Economic Toll of Opioid Epidemic: \$1.3 Trillion a Year. *Forbes*. <https://www.forbes.com/sites/katiejennings/2022/02/04/economic-toll-of-opioid-epidemic-13-trillion-a-year/>

# Economic Impact: Patients Treated through RCORP Wilson County Grant

Fatal Opioid Overdose:  
Value of a Statistical Life: \$10.1 million  
Lost Productivity: \$1.4 million  
Healthcare Costs: \$5,500

Total Cost: \$11.5 million  
Potential Lives Saved: 40 Receiving Treatment  
**Potential Economic Impact: \$460 Million**

Living with Opioid Addiction:  
Reduced Quality of Life: \$183,200  
Lost Productivity: \$14,700  
Healthcare Costs: \$14,700  
Criminal Justice: \$7,000  
Substance Use Treatment: \$1,600

**Potential Costs Saved: \$221,200 X 40 Receiving  
Treatment: \$8,848,000**

## Sources:

Florence, C., Luo, F., & Rice, K. (2021). The economic burden of opioid use disorder and fatal opioid overdose in the United States, 2017. *Drug and Alcohol Dependence*, 218. <https://doi.org/10.1016/j.drugalcdep.2020.108350>

Jennings, K. (2022, May 23). Economic Toll of Opioid Epidemic: \$1.3 Trillion a Year. *Forbes*. <https://www.forbes.com/sites/katiejennings/2022/02/04/economic-toll-of-opioid-epidemic-trillion-a-year/>

# Continuing Needs and Next Steps



Center for Health  
and Human Services



Public Health



*Data Science Institute*



# Continuing Needs

- **Availability of Substance Use Disorder (SUD) Treatment:** Treatment is available though there are ongoing issues with the **uninsured and underinsured** and treatment costs. Grants and other sources of outside funding are being pursued to address this.
- **Naloxone Distribution:** There is lack of availability of Naloxone nasal spray, which is also limited by high cost. In Wilson County, there is **currently limited support for intramuscular Naloxone**.
- **Stigma:** While there has been progress made in addressing stigma, it still is a challenge within the community at large and within law enforcement (this is the only sub-population where this has been studied – there may be others). **There is stigma surrounding harm reduction** in particular (intramuscular Naloxone and syringe exchange, etc.).
- **Researching Underserved Populations:** Treatment services data indicate a continued challenge in reaching racial and ethnic minorities equitably, though progress has been.

# What's next?



Secure additional grant funding

MTSU CHHS is happy to partner and support continuing efforts



Gain support from local officials to provide sustained funding



Continue local coalition efforts to collaborate on prevention, treatment, and recovery efforts leveraging available resources

# Recommended Next Steps

- Actively and continually seek **grant funding** to continue local OUD/SUD work
- **Share successes and Sustainability Plan** with **county and local officials** and ask for their support with future activities and endeavors
- Continue support for the **PIC Center** (Preventing Incarceration in Communities)
- **Develop sustainability plan for providing transportation** to treatment
- Continue to support and maximize Wilson County **Naloxone Distribution Program**
- **Fully utilize ODMaP** Implementation for real time data and spike alerts
- Continue support for Jail based **re-entry transition** specialist
- **Continue Education** in businesses and youth development settings
- Continue to **strengthen the local coalition** by recruiting and retaining new and active members to support prevention, treatment, and recovery

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Public Health



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**Thank you RCORP Wilson  
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**Thank you, HRSA RCORP Staff**

