

# Community Paramedic Collaborative

---

*RFP for Coronavirus State and Local Fiscal  
Recovery Funds*

## ***Buncombe County Government***

---

200 College St Suite 300  
Asheville, NC 28801

***Taylor Jones***

---

Taylor.Jones@buncombecounty.org

# Application Form

---

## *Question Group*

---

Buncombe County requests proposals for projects to help the community recover from and respond to COVID-19 and its negative economic impacts.

Buncombe County has been awarded \$50,733,290 in Coronavirus State and Local Fiscal Recovery Funds (Recovery Funding), as part of the American Rescue Plan Act. This infusion of federal resources is intended to help turn the tide on the pandemic, address its economic fallout, and lay the foundation for a strong and equitable recovery.

Buncombe County is committed to investing these funds in projects that:

- Align to county strategic plan and community priorities
- Support equitable outcomes for most impacted populations
- Leverage and align with other governmental funding sources
- Make best use of this one-time infusion of resources
- Have a lasting impact

Proposals shall be submitted in accordance with the terms and conditions of this RFP and any addenda issued hereto.

[Click here for the full terms and conditions of the RFP](#)

## **Coronavirus State and Local Fiscal Recovery Funds\***

Name of Project.

Community Paramedic Collaborative

## **Amount of Funds Requested\***

\$4,354,000.00

## **Recovery Fund Eligible Category\***

Please select one:

Enhance behavioral and mental health services

## **Brief Project Description\***

Provide a short summary of your proposed project.

With the expansion of our Community Paramedic program into four separate teams (PORT, MAT, Homeless Outreach, Crisis Response), we will put systems in place that will protect our community members and broaden access to care for all. We will coordinate with our Law enforcement, Fire Departments, and Public Health to create a sustainable new model for both Public Safety response and Prevention/Outreach.

This will also involve working directly with and compensating members of the community for collaboration in the field. Whether they live in marginalized communities, have lived experience with drug use, suffered from economic loss during the Pandemic, or have persistent mental health issues, we will collaborate with peer and community groups at every intersection of our growth to ensure our program's success, integrity, and avoid duplicating efforts. In doing this, we also care for each other and our first responders, who in turn provide better care for the entire community.

## Project Plan\*

Explain how the project will be structured and implemented, including timeframe.

- Structure – (reference budget for timeline of FY21-25)
  - Community Paramedic Collaborative Teams (Interdisciplinary)
    - o Homelessness and Behavioral Health Outreach Team
    - o Crisis Intervention Team
    - o Mobile Medication Assisted Treatment Team (MAT)
    - o Post Overdose Response Team (PORT)
  - Schedules
    - o 24 and 12 hour shifts depending on team and job rolls within team
  - Staffing plan
    - o Dogwood grant
    - o External and internal recruiting for staff
    - o 12 FTE Paramedics
    - o 1 Internal Peer Coordinator
    - o 5 Peer workers (subcontracted)
  - Deployment plan
    - o 24 hour EMS employees on a 24-48 schedule creates 24/7 coverage and supervision for certain teams (PORT, Homeless Outreach, Crisis)
      - o Patrol (day) and shelter (night) - shelter outreach
      - o 12 hour shifts for peers and EMS who transition into different roles at night for busiest hours
- Implementation
  - Manage the planning process
  - Conduct a situational assessment
  - Identify goals, populations of interest, outcomes
    - ☑ Decreasing illicit substance deaths
    - ☑ Reduce law enforcement responses connected to mental health and homelessness.
  - Own tracking system for outcomes related to alternative response (similar to PORT and what are developing with Mahec for MAT)
    - ☑ Reimagine public safety within Buncombe county
      - Create Metrics and measurable outcomes around providing equitable mobile 24/7 care
      - Identify strategies, activities, outputs, process
      - Develop indicators
    - o Creating a Quality Assurance staff member job description tailored to our programs
    - o Working with Management in dispatch to triage nature codes and develop safest most efficient system for routing 911 calls to Community Paramedic Teams.
      - o Continue to track Narcan administered, overdoses, overdose deaths, and demographics, utilizing paramedic charting software
        - Data tracking: find software that can provide case management and incident reporting. In the meantime continue to organize and migrate our outcome data into structured format in excel.
  - Staff Training:
    - o Administering Buprenorphine
    - o Cultural Competence
    - o Trauma Informed Care
    - o Providing Healthcare or support for LGBTQA community members

- o Racial Equity and Solidarity
- o Harm Reduction
- o Needle exchange
- o Suicide Risk Assessment
- o Nursing Assessment
- o Basic Spanish Language in health care
- Review the program plan

#### Timeframe

- Budget timeline -On the budget, currently
- Implementation timeline – also reference budget

## Statement of Need\*

Describe the need that this project will address. Include data to demonstrate the need, and cite the source of the data.

Opioid use is said to affect nearly 2 million Americans each year (ASAM, 2016) (Medline, 2020). Research has shown that Western North Carolina has been disproportionately affected by the Opioid Crisis, with Buncombe County having a value rate of 32.5 opioid deaths per 100,000 people in 2019- this is 15.3 value rates higher than the North Carolina value rate of 17.2 (NCDHHS, 2021). During the COVID-19 pandemic, the opioid crisis has only worsened. For example, emergency rooms in Rockingham County, NC saw a 46% increase in opioid overdose cases between January and August of 2020 compared to 2019 (Spear, 2020).

The onset of COVID-19 severely impacted services being provided to underserved communities across the United States, causing a snow-ball affect for drug usage. Without access to resources like computers and internet connections, those in need of mental health services were suddenly faced with not being able to receive the in-person services they had been relying on to handle their mental health concerns, including opioid addiction. Homeless populations were especially impacted negatively by COVID-19 protocols. During Buncombe County's 2021 Point-In-Time count, conducted in January of 2021, there were 527 homeless people counted. 30% of those identified in the count were Black, Indigenous, and People of Color (Burgess, 2021). The number of unsheltered homeless was 116, up 78% from 2020.

Through this project, Buncombe County Emergency Management will work to close these gaps between services and underserved communities by providing on the ground, in the field programming. Our first team, the MAT team, which provides 24/7 mobile on-site suboxone administration to community members experiencing an overdose, will be able to close the gap between medical help and those experiencing an overdose. We will create a mobile medical effort to make care more accessible based on social determinants of health and expand it to address the needs we identify.

## Link to COVID-19\*

Identify a health or economic harm resulting from or exacerbated by the public health emergency, describe the nature and extent of that harm, and explain how the use of this funding would address such harm.

Many members of our community struggled to successfully protect themselves from the COVID-19 outbreak and its affects. With the expansion of our program we will use the lessons learned from this pandemic to put systems in place for the future that will protect our community members and broaden access to care for all. Part The COVID-19 Pandemic brought both the United States and Buncombe County's gaps between services and underserved communities to the forefront. Underserved community members are at a higher risk for mental health issues and illicit drug use. During the pandemic services being provided to underserved communities across the United States, causing a snow-ball affect for drug usage. Members of underserved communities were often the ones losing their jobs, becoming isolated from their support

networks and services they had been relying on. This caused an increase in mental health issues and opioid usage, including relapses. When most of society went “virtual” during the pandemic to continue activities like work, school, and receive other services, underserved communities were often left behind due to a lack of resources.

Without access to resources like computers and internet connections, those in need of mental health services were suddenly faced with not being able to receive the in-person services they had been relying on to handle their mental health concerns, including opioid addiction. Homeless populations were especially impacted negatively by COVID-19 protocols. During Buncombe County’s 2021 Point-In-Time count, conducted in January of 2021, there were 527 homeless people counted. 30% of those identified in the count were Black, Indigenous, and People of Color (Burgess, 2021). The number of unsheltered homeless was 116, up 78% from 2020. Through this project, Buncombe County Emergency Management will work to close these gaps between services and underserved communities by providing on the ground programming.

## Population Served\*

Define the population to be served by this project, including volume and demographic characteristics of those served.

The Community Paramedic Collaborative aims to make a positive impact on the overall community as a whole. The target populations that we will focus on will be the homeless population, people in a behavioral health or mental health crisis, marginalized or vulnerable populations with little or no access to care, and those dealing with illicit substance misuse/addiction. These targeted populations often face difficulties when attempting to receive government programming. The reasons for this includes: they are invisible to the naked eye, the live/sleep in hard to reach places, or they are unable to travel and move freely to government services.

As previously discussed in the statement of need, Buncombe County’s 2021 Point-In-Time count for the homeless population, conducted in January of 2021, counted 527 homeless individuals. 30% of those identified in the count were Black, Indigenous, and People of Color (Burgess, 2021). The number of unsheltered homeless was 116, up 78% from 2020.

We have seen an increase over the past twenty years of illicit drug use, especially Opioids, in Western North Carolina (Western Carolina Medical Society, 2020). Illicit drug use has increased so much in the past twenty years that one of the strategic goals of Buncombe County is to stop illicit drug overdose deaths in the next five years. As mentioned in the previous section, the mental health crisis nationwide has grown (Panchal, 2021). These populations that we are serving through the collaborative are not siloed populations, but overlap with each other. We are seeing this clearly in Buncombe County during the first eight months of the Community Paramedic program because we are in a very unique position to collect demographics and gather important data.

## Results\*

Describe the proposed impact of the project. List at least 3 performance measures that will be tracked and reported. If possible, include baselines and goals for each performance measure.

We will use our Pilot phase with each team to carefully develop best tracking and reporting measures, similarly to how we have built out the tracking, baselines and goals for PORT. Examples of our outcomes for PORT and MAT are as follow: (reference entire chart attached in special considerations)

- Decreased number of OD in buncombe county in 12 month period
- Decreased deaths from unintentional OD in Buncombe County in 12 month period
- Increased knowledge of alternate methods of SUD treatment post OD
- Increased collaboration among agencies in Buncombe County

- Development of a successful model to address SUD as a partnership among EMS and providers in an area.
- Development of model/mode of success for post OD patients
- Improved quality of life for individuals with SUD

## Evaluation\*

Describe the data collection, analysis, and quality assurance measures you will use to assure ongoing, effective tracking of contract requirements and outcomes.

\*please see full ARP grant attachment under special considerations for logic models/evaluation blueprint

With the addition of each Community Paramedic Team (MAT, Homeless outreach, Crisis Response) we will work closely with our stakeholders to build out an evaluation process based on our first logic models designed with Mahec for Mobile MAT. We will purchase software that is conducive to sharing our data, case management and acute incident reporting similar to our EMS platform.

## Equity Impact\*

How will this effort help build toward a just, equitable, and sustainable COVID-19 recovery? How are the root causes and/or disproportionate impacts of inequities addressed?

The Community Paramedic Collaborative's target populations are the homeless population, the illicit substance misuse population, marginalized communities, and the mental health crisis population. These population have been traditionally underserved and tend to be made up of BIPOC communities (Volkow, 2019) (American Psychiatric Association, 2021) (National Alliance to End Homelessness, 2021) (). Achieving these Racial Equity Action Plan goals will also help meet the goals of this collaborative and the Strategic Goals of Buncombe County.

For this project, we want as much input from the community as possible to make sure we are setting the right goals and achieving them the right way. As mentioned above, we already have six letters of support from community partners, willing to work with us throughout this projects lifetime. Having this project under Buncombe County EMS will be able to raise the, "(percent) of community partners engaged and participating in coordination and alignment of equity efforts". This includes groups from the community working with us to build cultural competent and practices. These lead to safer practices in the field when people feel respected and trusting of our presence in their environment.

With the Community Paramedic Collaborative, we will also be offering our assistance in any kind of outreach or education event where the community might want or need our services. We will be mobile and available to participate in Community Events in ways that feel inclusive and safe for communities who may not have had access to public safety in the past. We also want to hire and train people, with not only racial diversity in mind, but a diversity of real, hands on experiences and backgrounds. The best way to affect change in a community is to get the community involved in more ways than one. Hiring and compensating members of affected communities with lived experience will give us the insight and trust we need to be successful in this project.

## Project Partners\*

Identify any subcontractors you intend to use for the proposed scope of work. For each subcontractor listed, indicate:

- 1.) What products and/or services are to be supplied by that subcontractor and;
- 2.) What percentage of the overall scope of work that subcontractor will perform.

Also, list non-funded key partners critical to project.

- Anchor group/Community partners (editing)
- BUNCOMBE COUNTY BUDGET OFFICE
- BUNCOMBE COUNTY PERFORMANCE MANAGEMENT
- JUSTICE SERVICES
- BUNCOMBE COUNTY MANAGEMENT OFFICE
- BUNCOMBE COUNTY STRATEGIC PARTNERSHIPS
- MAHEC
- BUNCOMBE COUNTY HHS
- Safer together
- Vaya health
- Sheriffs department
- Asheville Police
- 911 dispatch
- Fire department
- Umoja health
- Family Preservation services
- Eleanor health foundation
- RHA mobile crisis
- Haywood st congregational
- Jordan Peer Recovery
- Consulta tu Compa
- October Road

## Capacity\*

Describe the background, experience, and capabilities of your organization or department as it relates to capacity for delivering the proposed project and managing federal funds.

Current Capacity as related to EMS and Emergency Services for Community Paramedic Expansion

- Background of Emergency Services
  - o Community Paramedic started in November
  - o Have far more need than capacity
  - o Have to prioritize the type calls they can go on due to lack of staff to cover multiple calls at once
  - o Funding is limited to PORT role only, despite answering many other types of calls daily
- Experience of Emergency Services
  - o Have some current staff that are interested in participating in the CP program
  - o Need to hire more staff in order to expand services
- Capabilities of Emergency Services as it relates to capacity for delivering the proposed project
  - o PORT
  - o MAT
  - o Homeless Outreach/Shelter
  - o Crisis Response
  - o High Utilization / Mobile Integrated Health (HU/MIH)
- Capabilities of managing federal funds
  - o A lot of experience with this

- o Use Workday to track funds use for both Discretionary and Non-Discretionary items

#### Future capacity

- Letters of support
- Teams
- Robust Training Agenda with developed in coordination with community partners
- Internal Peer coordinator positions
- Subcontracted Peers from Non Profits and Grassroots groups
- Partnership with Mahec in behavioral health and homeless outreach
- QA position
- Relationships with AFD, APD, HHS, Sheriff's Office, Justice Services

## Budget\*

Provide a detailed project budget including all proposed project revenues and expenditures, including explanations and methodology. For all revenue sources, list the funder and denote whether funds are confirmed or pending. For project expenses, denote all capital vs. operating costs, and reflect which specific expenses are proposed to be funded with one-time Buncombe County Recovery Funds.

Download a copy of the budget form [HERE](#). Complete the form, and upload it using the button below.

Budget Appendix.docx

## Special Considerations\*

Provide any other information that might assist the County in its selection.

ARP Grant Full Document.docx

Methodology- While ARP funding will launch the pilot program for four years, but we are already looking towards the future and looking how we will sustain this project long term.

Sustainment is an important aspect of funding community health programs. We acknowledge that, due to several unknowns at present, it may take a number of years to get the Community Paramedic program up and running to its full potential. We have intuited several ways to generate revenue to offset the associated costs of these expansions. Some ideas about this are:

- Internal funding
  - o Leveraging existing resources: The leading organization, Buncombe County Emergency Services, may have to absorb the costs of the program in order to sustain it
  - o Once the pilot program has been determined as successful, the leading organization could transfer ownership of some activities to partners
- Funding from grants and contracts
  - o Secure grants from foundation organizations to start pilot teams
- Contributions from partner organizations
  - o Strengthening partnerships in order to maximize community impact
  - o Share the costs across all partners as equitably as possible
  - o Contributions from partner organizations may only include staff time and other resources
- Reimbursement for services
  - o If clinical services are provided, it may be possible to bill Medicaid or other insurers for services and/or use a sliding fee scale.
  - o It is critical to monitor trends in Medicaid and insurance payment policy in the event that changes occur.
- Other sustainment activities:
  - o Regular reviews of project performance by the group
  - o Capture data

- o Analysis of costs and benefits to each group member
- o Communication of the value of the program to members and other stakeholders
- o Analysis of return on investment and/or assessment of the monetary benefits of the program
- o Continuity of strong leadership for the program
- o Broadcasting successes to key entities and audiences

## File Attachment Summary

---

### *Applicant File Uploads*

- Budget Appendix.docx
- ARP Grant Full Document.docx

## Budget Appendix

### Full Ask

Cost of Two Teams			
Hr/Shift	Team Template	Total Staff	Salary w/Benefits
ABCD Schedule	Paramedics	16	\$1,339,696
ABCD Schedule	Supervisor	4	\$416,000
12 Hr	Peer Team Lead	4	\$331,776
12 Hr	Contract Position	4	\$200,000
ABCD Schedule	AEMT	8	\$644,736
12 Hr	LSW	4	\$421,836
Total			\$3,354,044

Divided by 4 funding sources

**\$838,511.00**

	Amount	Cost Per Item	Total Cost
<b>Uniforms</b>			<b>\$12,650</b>
Cleaning Expense			
Uniforms	23	\$550	\$12,650
<b>Travel and Training</b>			<b>\$36,000</b>
Employee Training			\$15,000
Food			\$1,000
Lodging			\$5,000
Registration			\$5,000
Rental Car			\$2,000
Training			\$2,500
Travel			\$5,500
<b>Office Expenses</b>			<b>\$40,128</b>
Dues and Subscriptions	23	\$300	\$6,900
Office Supplies	12	\$164	\$1,968
Postage	3	\$20	\$60
Printing	1	\$200	\$200
Safety Equipment			
<b>*Software</b>	1	\$31,000	\$31,000
Standby Supplies			
<b>Maintenance and Repair</b>			<b>\$23,200</b>
Vehicle Fuel (per Rick w/vehicle Maint.) (annually)	8	\$1,100	\$8,800

Vehicle Maintenance (annually)	8	\$1,000	\$8,000
Vehicle Insurance (annually)	8	\$800	\$6,400
<i>Equipment (Non Capital Equipment)</i>			<i>\$444,400</i>
*Cardiac Monitors	8	\$49,000	\$392,000
*Radios	8	\$5,000	\$40,000
Phones (per month)	8	\$50	\$400
*Laptops/Tablets	8	\$1,500	\$12,000
<i>Equipment (Capital Equipment (Vehicles))</i>			<i>\$1,084,400</i>
*Van	2	\$100,000	\$200,000
*SUVw/gear, lights and striping	8	\$110,550	\$884,400
<i>Contract and Professional Services (Better place for consulting?)</i>			<i>\$0</i>
<i>Contracted Services</i>			
<i>Medical Supplies(Narcan and everything else?)</i>			<i>\$20,000</i>
Medical Supplies	8	\$2,500	\$20,000

Mobile Command Center	\$	766,323.80
Air Truck	\$	315,469.00
Web EOC	\$	302,116.22

Start up                    \$2,214,298

Operating (over the next 3 years)    \$405,943

Staff                        \$1,733,759.88

ARP Ask

Staff & Operating \$2,139,702.40  
 Total Ask \$4,354,000.42

Limited Ask

	Amount	Cost Per Item	Total Cost
<b>Uniforms</b>			<b>\$8,800</b>
Cleaning Expense			
Uniforms	16	\$550	\$8,800
<b>Travel and Training</b>			<b>\$36,000</b>
Employee Training			\$15,000
Food			\$1,000
Lodging			\$5,000
Registration			\$5,000
Rental Car			\$2,000
Training			\$2,500
Travel			\$5,500
<b>Office Expenses</b>			<b>\$41,944</b>
Dues and Subscriptions	16	\$300	\$4,800
Office Supplies	16	\$164	\$2,624
Postage	16	\$20	\$320
Printing	16	\$200	\$3,200
Safety Equipment	16		\$0
<b>*Software</b>	<b>1</b>	<b>\$31,000</b>	<b>\$31,000</b>
Standby Supplies			\$0
<b>Maintenance and Repair</b>			<b>\$11,600</b>
Vehicle Fuel (per Rick w/vehicle Maint.) (annually)	4	\$1,100	\$4,400
Vehicle Maintenance (annually)	4	\$1,000	\$4,000
Vehicle Insurance (annually)	4	\$800	\$3,200
<b>Equipment (Non Capital Equipment)</b>			<b>\$166,650</b>
<b>*Cardiac Monitors</b>	<b>3</b>	<b>\$49,000</b>	<b>\$147,000</b>
<b>*Radios</b>	<b>3</b>	<b>\$5,000</b>	<b>\$15,000</b>
Phones (per month)	3	\$50	\$150
<b>*Laptops/Tablets</b>	<b>3</b>	<b>\$1,500</b>	<b>\$4,500</b>
<b>Equipment (Capital Equipment (Vehicles))</b>			<b>\$210,550</b>
<b>*Van</b>	<b>1</b>	<b>\$100,000</b>	<b>\$100,000</b>
<b>*SUVw/gear, lights and striping</b>	<b>1</b>	<b>\$110,550</b>	<b>\$110,550</b>
<b>Contract and Professional Services (Better place for consulting?)</b>			<b>\$0</b>
<b>Contracted Services</b>			
<b>Medical Supplies(Narcan and everything else?)</b>			<b>\$10,000</b>
Medical Supplies	4	\$2,500	\$10,000

Cost of Two Teams				
	Hr/Shift	Team Template	Total Staff	Salary w/Benefits
	ABCD Schedule	Paramedics	8	\$669,848
	ABCD Schedule	Supervisor	2	\$208,000
	12 Hr	Peer Team Lead	2	\$165,888
	12 Hr	Contract Position	2	\$100,000
	ABCD Schedule	AEMT	4	\$322,368
	12 Hr	LSW	2	\$210,918
<b>Total</b>				<b>\$1,677,022</b>

Divided by 4 funding sources \$419,255.50

Total \$485,544

Start up \$408,050

**ARP Ask**

Operating \$77,494 Staff & Operating \$1,986,998.00

**Total Ask \$2,395,048.00**

Staff 2 teams \$419,255.50

### **Brief Project Description**

Eliminating deaths due to illicit drug overdose is one of the thirteen goals set forth in the 2025 Strategic Plan for Buncombe County. With our vision for the Community Paramedic Collaborative we will not only move the county closer to this strategic goal, but also meet our other goals of re-imagining public safety and providing more equitable care for vulnerable and marginalized members of our community. Provisional data shows that drug overdoses have grown at an accelerated rate during the COVID-19 pandemic (Center for Disease Control and Prevention, 2021). Nearly 92,000 drug overdose deaths occurred in the United States from November 2019 to October 2020, the highest number of overdose deaths ever recorded in a 12-month period, according to recent provisional data from the Centers for Disease Control and Prevention and the National Center for Health Statistics (Ahmad, 2021). The newest release of national data shows that opioid deaths increased by 30% in 2020.

Many members of our community struggled to successfully protect themselves from the COVID-19 outbreak and its affects. With the expansion of our program we will use the lessons learned from this pandemic to put systems in place for the future that will protect our community members and broaden access to care for all. Part of this involves working directly with and compensating members of the community. Whether they work or live in marginalized communities, have lived experience with drug use, suffered from economic loss during covid, or have persistent mental health issues, there are peer groups that have valuable experience that we plan on collaborating with. Through this collaboration, we can build a safer, more effective and equitable program, striving to meet the strategic goals and Racial Equity Action Plan set forth by the Buncombe County Commissioners. In doing this, we also care for each other and our first responders, who in turn provide better care for the entire community. We view the Community Paramedic expansion as the first step in repairing relationships between the community and public safety, which we believe will increase employee satisfaction, retainment, bandwidth, and reduce burnout across agencies. This, in essence, is the re-imagination of public safety as no one organization can solve entrenched disparities and complex community struggles alone. With the expansion of our program into a larger pilot, we aim to place peers, mental health RN's, fire fighters, police, and community paramedics out in the community in new ways. These dynamics and resources will allow for teams to build trust and problem solve complex issues to develop a safer, more robust public safety model. This is a hybrid model encompassing both co-response and alternative community response, in partnership with Mahec's behavioral health team.

Buncombe County is currently involved in a pilot program called PORT (Post Overdose Response Team) who are called to respond to overdoses in real time via our 911 dispatchers. They arrive on the scene of a live overdose and quickly take over patient care when possible, getting all other EMS, fire and law enforcement units off scene fast and back in service. This pilot program has gained major community support and is utilized consistently, with success stories from both community members and our team continuing to roll in. In addition to PORT, Buncombe County Emergency Services has been a vital part of continuing our Safer Together program in collaboration with

Health and Human Services. This program seeks to, “provide wrap around psychological, medical, and social supports to person who have recently overdosed or are at high risk of overdose from opioids,” (Buncombe County Health and Human Services, 2019). In addition to working internally with other Buncombe County departments, the Community Paramedic Collaborative works directly with external partners around the community. These relationships serve to guide our efforts as we expand into the CHANGE team, so that we are building our program based on the true needs of and input from our community, while also informing and educating the community about safety from an emergency medical perspective. Our partnership around substance use and homeless outreach with MAHEC will be instrumental during the creation and continuation of the Community Paramedic Collaborative. Currently, the Community Paramedic Program sits on 4 community committees, provides community education on request, and attends several monthly planning sessions for community outreach and events. We are committed to building our program based on equitable practice, and wish to remain accountable to the populations we serve- not just vulnerable populations who are visible. We believe part of this involves not only working directly with but compensating members of the community for training and collaboration. Whether they work or live in marginalized communities, have lived experience with drug use, suffered from economic loss during covid, or have persistent mental health issues, these peer groups have valuable experience and we plan on collaborating with at every intersection or expansion of the program to ensure its success. We currently have six verbal agreements to write letters of support from community partners. Our partnership plans include, but are not limited to:

#### Inter-Governmental

- Buncombe County Fire Department
- 911 Dispatch
- Sheriff's Department
- Justice Services
- Health and Human Services
- Asheville Fire Department
- Asheville Police Department

#### Community Partners

- Safer Together
- Vaya Health
- Umoja Health and Wellness
- Family Preservation Services
- Eleanor Health Foundation
- RHA Mobile Crisis
- Haywood St. Congregational
- Jordan Peer Recovery
- MAHEC
- ANCHOR Collaborative
- Manna Foodbank
- Sunrise Wellness and Recovery
- Homeward Bound

- Asheville Unitarian Church
- Consulta Tu Compa
- October Road

With the expansion of our programs, we are looking to the future on how we can eliminate barriers and support our community members who struggle with access to care, behavioral health, homelessness, and drug addiction. The Community Paramedic Collaborative is a versatile and new kind of Initiative consisting of 4 teams; Post Overdose Response, Homeless and Shelter Behavioral Health Outreach, MAT (Mobile medical Assisted Treatment), and acute Alternative Crisis Response.

Each team will work independently under the same EMS and peer leadership program values and set of standards, serving the community with a specific purpose, but also work as a collaborative with collective goals in mind: eliminating deaths due to substance abuse in Buncombe County, re-imagining public safety, and creating support around homelessness and behavioral health.

The Homeless Outreach and high access shelter team will make daily and continual rounds through the homeless corridor of Buncombe County as an outreach team both on foot and in a vehicle, seeking opportunities to provide basic care and prevent 911 calls. They will also respond to any calls from the community- whether that comes through 911 dispatch, individuals or business owners calling about psychiatric, homeless, or intoxicated citizens. The calls this team could respond to range from a person outside a business, a welfare check on a homeless citizen or person having psychiatric issues, or a medical call about a homeless citizen from another agency. They will be able to help the citizen move to a shelter if need be, perform medical treatment on site, seek out behavioral health resources, and just be a friendly face that the community can trust. The Homeless Shelter Outreach team will be funded through American Rescue Plan money, or the City's plan for High Access Shelter. This team would ideally be housed or stationed at the shelter itself. During the evenings this team would transition to the homeless outreach shelter team and serve as 24/7 access to medical care and evaluation, and also a warm line to other public safety or psychiatric services. They would have a bedroom on site similar to a fire station, and a vehicle to respond if the shelter needed someone transported.

MAT is a pilot program that stands for Mobile Medical Assisted Treatment. Through the MAT program, we are able to provide 24/7 mobile on-site suboxone administration to community members experiencing an overdose. This team will also be in collaboration with MAHEC to provide wrap around care through a "Buncombe Bridge to Care Pilot," including the ability to follow up with patients for diversion and re-entry services. The MAT team will be funded through the Dogwood grant, awaiting approval, which will empower us to create this first team. After this, we plan to use American Recovery Plan to create an additional MAT team.

The Crisis Response team will be a cross-trained, interdisciplinary group who will work collaboratively with law enforcement, clinicians, faith groups, and peer support groups trained in behavioral health and de-escalation. Members of this team will have a wide range of crisis response training, from being trained by non-police community groups to cross training with law enforcement. This team will potentially work with a police officer liaison, a PEER member, a social worker, and a Community Paramedic.

When responding to 911 calls, this team will develop a best protocol on which member takes the lead on each call based on the details or nature codes of the specific call. This will allow for law enforcement not to be the first face a person sees when law enforcement is not the service the community member is needing during their crisis. Crisis Response will be funded through American Rescue Plan money, and through Opioid Settlement money, this way we should be able to have sustain funding for years to come.

These three teams will not only work collaboratively with other departments and organizations, such as the police department and MAHEC, but also work collaboratively with each other. For example, if the Crisis Response team receives a call and when at the scene realize the community member is actively overdosing, they are able to call our MAT team quickly to come and deliver suboxone. This allows for a better outcome for the community member, but also allows the Crisis Response team the ability to respond to another call.

Ahmad FB, Rossen LM, Sutton P. "Provisional drug overdose death counts." National Center for Health Statistics. 2021. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm#citation>

Buncombe County Health and Human Services. "Buncombe County News :: Buncombe County Awarded Multiple Grants to Improve Opioid Overdose Response in Buncombe County." Buncombe County News: Buncombe County Awarded Multiple Grants to Improve Opioid Overdose Response in Buncombe County, 2019. <https://www.buncombecounty.org/governing/depts/hhs/news-detail.aspx?id=18356>.

Center for Disease Control and Prevention. "Overdose Deaths Accelerating During COVID-19." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, December 18, 2020. <https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html>.

## **Project Plan**

Structure – reference budget for timeline of FY21-25

- Community Paramedic Collaborative Teams (Interdisciplinary)
  - Homelessness and Behavioral Health Outreach Team
  - Crisis Intervention Team
  - Mobile Medication Assisted Treatment Team (MAT)
  - Post Overdose Response Team (PORT)
- Schedules
  - 24 and 12 hour shifts depending on team and job rolls within team
- Staffing plan
  - Dogwood grant
  - External and internal recruiting for staff
  - 12 FTE Paramedics
  - 1 Internal Peer Coordinator
  - 5 Peer workers (subcontracted)
- Deployment plan

- o 24 hour EMS employees on a 24-48 schedule creates 24/7 coverage and supervision for certain teams (PORT, Homeless Outreach, Crisis)
- o Patrol (day) and shelter (night) - shelter outreach
- o 12 hour shifts for peers and EMS who transition into different roles at night for busiest hours

#### Implementation

- Manage the planning process
- Conduct a situational assessment
- Identify goals, populations of interest, outcomes
  - ✦ Decreasing illicit substance deaths
  - ✦ Reduce law enforcement responses connected to mental health and homelessness.
    - Own tracking system for outcomes related to alternative response (similar to PORT and what are developing with Mahec for MAT)
  - ✦ Reimagine public safety within Buncombe county
    - Create Metrics and measurable outcomes around providing equitable mobile 24/7 care
- Identify strategies, activities, outputs, process
- Develop indicators
  - o Creating a Quality Assurance staff member job description tailored to our programs
  - o Working with Management in dispatch to triage nature codes and develop safest most efficient system for routing 911 calls to Community Paramedic Teams.
  - o Continue to track Narcan administered, overdoses, overdose deaths, and demographics, utilizing paramedic charting software
- Data tracking: find software that can provide case management and incident reporting. In the meantime continue to organize and migrate our outcome data into structured format in excel.
- Staff Training:
  - o Administering Buprenorphine
  - o Cultural Competence
  - o Trauma Informed Care
  - o Providing Healthcare or support for LGBTQA community members
  - o Racial Equity and Solidarity
  - o Harm Reduction
  - o Needle exchange
  - o Suicide Risk Assessment
  - o Nursing Assessment
  - o Basic Spanish Language in health care
- Review the program plan

#### Timeframe

- Budget timeline

- o On the budget, currently
- Implementation timeline – also reference budget

### **Statement of Need**

The COVID-19 Pandemic brought both the United States and Buncombe County's gaps between services and underserved communities to the forefront. These gaps have been present not only during COVID-19 response (testing, vaccinating, etc.) but also when trying to continue services for overdose response, mental health care, and homelessness. Underserved communities include members of minority populations, those with disabilities, and homeless populations. Characteristics of underserved communities include lack of financial opportunities (work), barriers to services like health care access or public transport. Underserved community members are at a higher risk for mental health issues and drug usage, including opioid use.

The opioid crisis is one of the biggest health problems that the United States has ever seen. Opioid addiction and misuse is said to affect nearly 2 million Americans each year (ASAM, 2016) (Medline, 2020). Research has shown that Western North Carolina has been disproportionately affected by the Opioid Crisis, with Buncombe County having a value rate of 32.5 opioid deaths per 100,000 people in 2019- this is 15.3 value rates higher than the North Carolina value rate of 17.2 (NCDHHS, 2021). During the COVID-19 pandemic, the opioid crisis has only worsened. For example, emergency rooms in Rockingham County, NC saw a 46% increase in opioid overdose cases between January and August of 2020 compared to 2019 (Spear, 2020).

The onset of COVID-19 severely impacted services being provided to underserved communities across the United States, causing a snow-ball affect for drug usage. Members of underserved communities were often the ones losing their jobs, having to stay home isolated from their support networks, and overall services they had been relying on. This caused an increase in mental health issues and opioid usage, including relapses. One news article shared the story of a Spanish-speaking man recovering from Opioid addiction who was finding success and community through a Spanish AA group. Once COVID-19 hit though, the AA group was not able to make the transition to virtual meetings. Not having access to support was a factor that lead to the man's relapse. This example highlights the disparities many in underserved communities have faced in this pandemic. When most of society went "virtual" during the pandemic to continue activities like work, school, and receive other services, underserved communities were often left behind due to a lack of resources.

Without access to resources like computers and internet connections, those in need of mental health services were suddenly faced with not being able to receive the in-person services they had been relying on to handle their mental health concerns, including opioid addiction. Homeless populations were especially impacted negatively by COVID-19 protocols. During Buncombe County's 2021 Point-In-Time count, conducted in January of 2021, there were 527 homeless people counted. 30% of those identified in the count were Black, Indigenous, and People of Color (Burgess, 2021). The number of unsheltered homeless was 116, up 78% from 2020. This alarming spike highlights just one of the challenges the homeless population have faced during COVID-19. Homeless shelters had to follow certain protocols like distancing beds and administering COVID-19 tests, decreasing the overall capacity of the shelters. Like

other members of underserved communities, homeless populations have also experienced difficulties receiving health services during COVID-19.

Through this project, Buncombe County Emergency Management will work to close these gaps between services and underserved communities by providing on the ground programming. Our first team, the MAT team, which provides 24/7 mobile on-site suboxone administration to community members experiencing an overdose, will be able to close the gap between medical help and those experiencing an overdose.

American Society of Addiction Medicine. *Opioid Addiction Facts and Figures*, 2016.

Burgess, Joel. "Asheville Homelessness down Overall, but Unsheltered and 'Chronic' Homelessness Is Up." *The Asheville Citizen Times*. Asheville Citizen Times, May 18, 2021. <https://www.citizen-times.com/story/news/2021/05/18/asheville-homeless-numbers-chronic-homelessness-unsheltered-population-nc/5130054001/>.

Medline Plus. "Opioid Addiction: MedlinePlus Genetics." MedlinePlus. U.S. National Library of Medicine, August 18, 2020. <https://medlineplus.gov/genetics/condition/opioid-addiction/#frequency>.

NCDHHS. "The North Carolina Opioid Action Plan Data Dashboard." NCDHHS, 2021. <https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic/opioid-action-plan-data-dashboard>.

Spear, Susie C. "Opioid ODs Way up, ERs See 46% Case Hike." *Greensboro News and Record*, September 22, 2020. [https://greensboro.com/rockingham\\_now/news/opioid-ods-way-up-ers-see-46-case-hike/article\\_155a410e-fc80-11ea-b36a-a3876ce79885.html#:~:text=%241\\*%2Fmo.-,for%203%20months!,report%20by%20Injury%20Free%20N.C.](https://greensboro.com/rockingham_now/news/opioid-ods-way-up-ers-see-46-case-hike/article_155a410e-fc80-11ea-b36a-a3876ce79885.html#:~:text=%241*%2Fmo.-,for%203%20months!,report%20by%20Injury%20Free%20N.C.)

### Link to COVID-19

While there is no evidence yet that COVID-19 caused gaps between communities and service within Buncombe County, there is preliminary data that shows that the pandemic expanded existing gaps. COVID-19 created a worldwide problem of getting supplies to communities that would otherwise be blocked off, overly susceptible to the Coronavirus, or low socioeconomic communities that have no way of gathering the supplies themselves.

When testing was a large part of the fighting against COVID-19, a problem that all people and government, including Buncombe County had to solve was how to get testing to the populations that need it most. The same problem needed to be solved for the vaccine, how to both get the vaccine out to the mass population, but also make it readily available to the homeless population, the population dealing with illicit substance misuse, and those dealing with mental health problems. Buncombe County is still actively working to have solutions to these gaps in service we are seeing to these population, this is where our services will be the needed bridge.

The homeless population, illicit substance misuse population, and those dealing with mental health problems were unable to avoid COVID-19 as much as the rest of the population. Homeless populations were unable to avoid gatherings, due to needing to gather in shelters. The homeless population were also unable to "stay inside" to avoid

contact with others, since there was not a place for them to stay where they could support themselves. With this, this population was at a higher risk of both contracting COVID-19 and spreading the virus to volunteers at shelters and family members.

The illicit substance misuse population was affected differently by this global pandemic. Research has shown an increase in illicit substance misuse has increased during pandemic time (Kenny, 2021). With this, we are seeing more illicit substance abuse in Buncombe County and around the United States (Kenny, 2021) (NCDHHS, 2021). The reason for this could be that people are losing their jobs, homes, and since of normalcy and are turning to illicit substances for reprieve. Research has also shown a connection between stress and an increase in illicit drug/ substance, and research has also seen an increase in street throughout the United States during the pandemic (Abramson, 2021). In addition to COVID-19 increasing the dangers of substance misuse, research published in the Molecular Psychiatry journal shows people battling addiction are at higher risk to both contract COVID-19 and die from the virus (Wang, 2020). Research is also showing a 10.2 times more likely contraction of COVID-19 if one is misusing Opioids (Centers for Disease Control and Prevention, 2021) (National Institute on Drug Abuse, 2021).

Even though services did their best with the limited resources' available, the switch to online services was a hard one. This virtual switch was good for the vast population, but for low socioeconomic people the move to telehealth was unavailable to them due to lack of internet. Without the availability of services, people in mental health crisis were unable to contact a professional or get in person help. Also, as mentioned earlier, overall stress rates increased during pandemic time, which can increase the severity of multiple mental health crises. Research has also shown the increase in depression, anxiety, and other mental health problems during pandemic time (Panchal, 2021). This has caused more of a need for mental health experts and services to be outreaching to the population that have seen their mental health problems become more severe and those who are now dealing with mental health problems.

Abramson, Ashley. "Substance Use during the Pandemic." Monitor on Psychology. American Psychological Association, March 2021. <https://www.apa.org/monitor/2021/03/substance-use-pandemic>.

Kenney, Skylar. "COVID-19 Pandemic Results in Increased Substance Use Among Regular Drug Users." Pharmacy Times. Pharmacy Times, April 27, 2021. <https://www.pharmacytimes.com/view/covid-19-pandemic-results-in-increased-substance-use-among-regular-drug-users>.

National Institute on Drug Abuse. "COVID-19 & Substance Use." National Institute on Drug Abuse, May 27, 2021. <https://www.drugabuse.gov/drug-topics/comorbidity/covid-19-substance-use>.

NCDHHS. "The North Carolina Opioid Action Plan Data Dashboard." NCDHHS, 2021. <https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic/opioid-action-plan-data-dashboard>.

Panchal, Nirmita, Rabah Kamal, Cynthia Cox, and Rachel Garfield. Issue brief. *The Implications of COVID-19 for Mental Health and Substance Use*. San Francisco, CA: Kaiser Family Foundation, 2021.

“People Who Use Drugs or Have Substance Use Disorder.” Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, 2021. [https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/other-at-risk-populations/people-who-use-drugs/QA.html#anchor\\_1618942950612](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/other-at-risk-populations/people-who-use-drugs/QA.html#anchor_1618942950612).

Wang, Quan Qiu, David C. Kaelber, Rong Xu, and Nora D. Volkow. “COVID-19 Risk and Outcomes in Patients with Substance Use Disorders: Analyses from Electronic Health Records in the United States.” *Molecular Psychiatry* 26, no. 1 (September 14, 2020): 30–39. <https://doi.org/10.1038/s41380-020-00880-7>.

### **Population Served**

The Community Paramedic Collaborative aims to serve target populations in Buncombe County as well as make a positive impact on the overall community as a whole. The target populations that we will focus on with our teams will be the homeless population, people in a behavioral health or mental health crisis, marginalized or vulnerable populations with little or no access to care, and those dealing with illicit substance misuse/addiction. These targeted populations often face difficulties when attempting to receive government programming. The reasons for this includes: they are invisible to the naked eye, the live/sleep in hard to reach places, or they are unable to travel and move freely to government services.

As previously discussed in the statement of need, Buncombe County’s 2021 Point-In-Time count for the homeless population, conducted in January of 2021, counted 527 homeless individuals. 30% of those identified in the count were Black, Indigenous, and People of Color (Burgess, 2021). The number of unsheltered homeless was 116, up 78% from 2020. There was also 154 individuals counted that were identified as “chronically homeless”. The term “chronically homeless” refers to individuals experiencing homelessness for at least a year — or repeatedly — with a disabling condition like a serious mental illness, a substance abuse disorder or physical disability (Burgess, 2021).

We have seen an increase over the past twenty years of illicit drug use, especially Opioids, in Western North Carolina (Western Carolina Medical Society, 2020). Illicit drug use has increased so much in the past twenty years that one of the strategic goals of Buncombe County is to stop illicit drug overdose deaths in the next five years. As mentioned in the previous section, the mental health crisis nationwide has grown (Panchal, 2021). These populations that we are serving through the collaborative are not siloed populations, but overlap with each other. We are seeing this clearly in Buncombe County during the first eight months of the Community Paramedic program. During the first month, we received this comment from a Community Paramedic:

“We have one client in particular who is doing excellent despite frequent urges and consistently experiencing explosive panic attacks. She is now on MAT, medication for her anxiety, and engaged with her doctors at MAHEC. We have also been working with her on new grounding techniques and coping skills which she reports has been helpful. Since joining Post Overdose Response Team, she had no relapses, has a job, and we were able to have an application filled out for an apartment in the area as well as getting her application fee covered with thanks to AHOPE. Despite her struggles, she remains hopeful and positive and has voiced

a few times how the PORT team support has been what is keeping her motivated, and she eventually wants to use her story to help others as well. Great stuff! Client continues to do well, and is very grateful to CP program!" (Buncombe County Community Paramedic, 2021)

In this quote, we see the overlap of both the population struggling with mental health and the population struggling with illicit substance abuse. Helping one of these populations is also helping the all populations and the community at large.

Burgess, Joel. "Asheville Homelessness down Overall, but Unsheltered and 'Chronic' Homelessness Is Up." The Asheville Citizen Times. Asheville Citizen Times, May 18, 2021. <https://www.citizen-times.com/story/news/2021/05/18/asheville-homeless-numbers-chronic-homelessness-unsheltered-population-nc/5130054001/>.

Buncombe County Community Paramedic. Rep. *Community Paramedic Monthly Report: Current Progress*. Buncombe County EMS, 2020.

Panchal, Nirmita, Rabah Kamal, Cynthia Cox, and Rachel Garfield. Issue brief. *The Implications of COVID-19 for Mental Health and Substance Use*. San Francisco , CA: Kaiser Family Foundation, 2021.

Western Carolina Medical Society. "Opioids in WNC." Western Carolina Medical Society, January 2020. <https://www.mywcms.org/news-and-events/newsroom/opioids-in-wnc>.

## Results

## Evaluation

**Goal:** To collaborate with Buncombe County EMS, MAHEC, and AMCHC to provide MAT (Medication-Assisted Treatment) care to individuals in Buncombe County who have recently experienced an overdose and were treated by EMS.

Inputs	Activities	Outputs	Short-term & Interim Outcomes	Long-term Outcomes
--------	------------	---------	-------------------------------	--------------------

<p>Project Funding</p> <p>Time and expertise of MAHEC/ EMS/ and AMCHC staff</p> <p>Peer Support Services</p> <p>Social Determinants of Health Support</p> <p>Medication for OUD/SUD</p> <p>Evaluation team</p> <p>Partnerships with: Buncombe County EMS, and AMCHC</p>	<p>Develop overdose response team partnership access to care with Buncombe County EMS</p> <p>Recruit/employ Peer Support Specialists</p> <p>Develop SDoH fund</p> <p>Provide training to EMS and PSS</p>	<p># of OD responses from EMS in a 12 month period (by month)</p> <p># of OD deaths in a 12 month period by month</p> <p># of Naloxone reversals (in a 12 month period by month)</p> <p># of on-site buprenorphine inductions (in a 12 month period by month)</p> <p># of buprenorphine inductions within 1 week (in a 12 month period by month)</p> <p># of PSS deployed and # of PSS utilized (define engagement)</p> <p># of individuals that utilize ED for SUD</p> <p># of repeat OD/ relapse/ setback</p> <p># of transfers to HLOC</p> <p>\$ of money spent per person on SDoH fund</p> <p>Types of SDoH purchases</p>	<p># of MAT recipients engaged in care at 3, 6, 9, and 12 months</p> <p># of PSS hired and trained</p> <p># of EMS hired and trained in buprenorphine induction</p> <p>Increased awareness of interconnectedness between SDoH and SUD</p>	<p>Decreased number of OD in buncombe county in 12 month period</p> <p>Decreased deaths from unintentional OD in Buncombe County in 12 month period</p> <p>Increased knowledge of alternate methods of SUD treatment post OD</p> <p>Increased collaboration among agencies in Buncombe County</p> <p>Development of a successful model to address SUD as a partnership among EMS and providers in an area.</p> <p>Development of model/mode of success for post OD patients</p> <p>Improved quality of life for individuals with SUD</p>
---	--	---	---	--

Measures	Agency	Database/Source	Notes/Questions	Expected Outcomes
# of OD responses from EMS in a 12 month period (by month)	BC	EMS	Establish baseline	Decrease from baseline in Yr.1
# of OD deaths in a 12 month period by month	BC	EMS	Establish baseline	Decrease
# of Naloxone reversals (in a 12 month period by month)	BC	EMS	Establish baseline	Decrease
# of on-site buprenorphine inductions (in a 12 month period by month)	MAHEC/ AMCHC	EMS	Baseline from PORT	Increase
# of buprenorphine inductions within 1 week (in a 12 month period by month)	MAHEC/AMCHC	MAHEC/AMCHC (REDCap)	Baseline from PORT	Increase
# of PSS deployed	MAHEC/AMCHC	REDCap		Increase
# of PSS utilized (define engagement)	MAHEC/AMCHC	REDCap		Increase
# of individuals that utilize ED for SUD	MAHEC	NC Detect		Decrease
# of repeat OD/ relapse/ setback	MAHEC/AMCHC	NC Health Connex	Need to define setback	Decrease
# of transfers to HLOC	MAHEC/AMCHC	NC Health Connex		?
# of MAT recipients engaged in care at 3, 6, 9,12 mo.	MAHEC/AMCHC	REDCap		
# of PSS hired and trained	MAHEC/AMCHC	SS		
# of EMS hired and trained in buprenorphine induction	BC	SS/EMS		
Increased awareness of interconnectedness between SDoH and SUD	MAHEC/AMCHC	REDCap	Qualitative Survey- Patient	Increase
Decreased number of OD in buncombe county in 12 month period	BC	EMS		Decrease
Decreased deaths from unintentional OD in Buncombe County in 12 month period	BC	EMS		Decrease
Increased knowledge of alternate methods of SUD treatment post OD	MAHEC/AMCHC/BC	REDCap	Qualitative Survey- provider/EMS, etc.	Increase
Increased collaboration among agencies in Buncombe County	MAHEC/AMCHC/BC			
Measures	Agency	Database	Notes/Questions	Expected Outcomes
Improved quality of life for individuals with SUD	MAHEC/AMCHC/BC	REDCap	Patient Survey	

Development of a successful model to address SUD as a partnership among EMS and providers in an area	MAHEC/AMCHC/BC			
\$ spent on SDoH fund per person	MAHEC/AMCHC	SS	PSS will collect	
<b>Demographics</b>	MAHEC/AMCHC	REDCap	PSS will collect	
Age Housing Status (define homelessness) Race/ethnicity Sex Gender identity Insurance status MH diagnosis (including SUD) PH diagnosis SDoH Screening Prior OD Criminal Justice involvement Children? Marriage? Route of administration?	EMS			

Evaluation stakeholders	What information do they need/want/could use from the evaluation?	How will evaluation findings be shared with these stakeholders?
MAHEC/ AMCHC	<ul style="list-style-type: none"> <li>• Needs of providers and patients</li> <li>• Factors in retention in treatment</li> <li>• Factors in induction</li> <li>• What is success?</li> </ul>	<ul style="list-style-type: none"> <li>• Final evaluation report</li> <li>• <i>Interim reports, at team meetings (TBD)</i></li> </ul>
BC EMS	<ul style="list-style-type: none"> <li>• Needs of providers and patients from EMC / field perspective</li> <li>• Factors in retention in treatment</li> <li>• What is Success?</li> <li>• Barriers and facilitators to serving more underserved patients with SUD/Post OD</li> <li>• Which underserved categories seen more or less</li> </ul>	<ul style="list-style-type: none"> <li>• Final evaluation report</li> </ul>
Funders	<ul style="list-style-type: none"> <li>• Factors in improving access to evidence-based OUD care, especially for underserved and low-income patients, importance in PSS and SDoH, timing of post OD in update of SUD tx</li> </ul>	<ul style="list-style-type: none"> <li>• Final evaluation report</li> <li>• <i>Interim reports as required</i></li> </ul>
Other counties/ municipalities		<ul style="list-style-type: none"> <li>• Evaluation summary with Implications and Recommendations, particular emphasis on best practices; needs; etc.</li> </ul>
Policymakers		

**Equity Impact**

The Racial Equity Action Plan sets out six categories of goals for Buncombe County to achieve. The Community Paramedic Collaborative will not just help achieve one of these goals in these categories, but will assist in achieving at least one goal in every category. The Community Paramedic Collaborative's target populations are the homeless population, the illicit substance misuse population, and the mental health crisis population. These population have been traditionally underserved and tend to be made up of BIPOC communities (Volkow, 2019) (American Psychiatric Association, 2021) (National Alliance to End Homelessness, 2021) (). Achieving these Racial Equity

Action Plan goals will also help meet the goals of this collaborative and the Strategic Goals of Buncombe County.

The first category of goals is “Create Pathways to Ensure Engagement in Racial Equity Strategies that Improve Quality of Life”. Under this category, one of the goals is to, “Support and expand community partnerships in equity programs and efforts for high impact and better outcomes”. The reason our project is entitled Community Paramedic Collaborative is because we want as much input from the community as possible to make sure we are setting the right goals and achieving them the right way. As mentioned above, we already have six letters of support from community partners, willing to work with us throughout this projects lifetime. Having the Community Paramedic Collaborative within Buncombe County EMS and within Buncombe County will be able to raise the, “(percent) of community partners engaged and participating in coordination and alignment of equity efforts”.

The second category of goals is, “Provide Racial Equity Education and Communication to the Community”. Within this category we see the goal of, “Create authentic, honest, transparent community engagement around racial equity” there is a mini goal of “Move from iterative, project-based outreach to ongoing engagement”. With the Community Paramedic Collaborative, we are helping achieve this goal by offering education through our four teams. This will cut down on the amount of iterative outreach and will move Buncombe County into ongoing engagement, since these teams will always be roving. This team will provide education on COVID-19 vaccines, simple drug safety, and other safety education. This education will go to the populations most affected by homelessness, mental health crises, and drug misuse, falling in low income and BIPOC communities.

The third category laid out is, “Improve Quality of Life Outcomes Through Racial Equity Initiatives”, specifically, “Improve justice outcomes for the most impacted communities”. This category and goal ties straight into our goal of reimagining public safety with this project and collaborative. The Community Paramedic teams will be responding to drug overdoses and mental health crises instead of law enforcement, taking these low level offenses off the hands of the police. This will both help reduce arrest rates in the short term, but with providing clear and equitable addiction help, will slow repeat overdoses. This will not only lower the arrest rates for Buncombe County, but lower the amount of drug overdoses the county sees.

The next category of, “Cultivating a Thriving Workforce within Buncombe County that Ensures Racial Equity,” is done from the inside of the Community Paramedic Collaborative. It is out goal to “recruit, engage, and retain” a diverse workforce for the teams in this Collaborative. We want to hire and train people, with not only racial diversity in mind, but a diversity of real, hands on experiences. The best way to affect change in a community is to get the community involved in more ways than one. Hiring members of affected communities will give us the insight and trust we need to be successful in this project.

The second to last category is, “Institute Organizational Policies and Processes to Ensure Equity and Accountability”. Making “data informed decisions” is one of the main goals of the Community Paramedic Collaborative. As mentioned earlier in this document, we have processes in place to gather information to make the best decisions on where to send team, what teams to send, and how often our teams are being utilized

by the community. This data will not only inform our decisions, but show the community all of the great work that the Community Paramedic Collaborative is doing. Hopefully, as time goes on, our hard work and transparency garner public trust.

The last goal is straightforward, “Establish Buncombe County as an Equity Inclusion Model”. While the goals listed to not explicitly pertain to us, we can continue to be conscious on the language and budgeting practices we use for this project to make sure they are being looked at through an equitable lens. Making sure that none of the cost falls directly on BIPOC communities and the other populations that we serve is of the utmost importance to this project.

Our goal of the Community Paramedic Collaborative is to help as many people as possible and minimize the gaps to serves. Through aligning our goals with both the Racial Action Equity Plan and the Strategic Goals of Buncombe County, we are able to plan and achieve the greatest amount of success for our project.

American Psychiatric Association. Mental Health Disparities: Diverse Populations, 2021. <https://www.psychiatry.org/psychiatrists/cultural-competency/education/mental-health-facts>.

Buncombe County . Rep. *Racial Equity Action Plan*. Buncombe County, 2020.

National Alliance to End Homelessness. “Homelessness and Racial Disparities.”

National Alliance to End Homelessness, April 1,

2021. <https://endhomelessness.org/homelessness-in-america/what-causes-homelessness/inequality/>.

Volkow, Nora. “Access to Addiction Services Differs by Race and Gender.” National Institute on Drug Abuse, July 7, 2020. <https://www.drugabuse.gov/about-nida/noras-blog/2019/07/access-to-addiction-services-differs-by-race-gender>.

## Project Partners

- Anchor group/Community partners (editing)
- BUNCOMBE COUNTY BUDGET OFFICE
- BUNCOMBE COUNTY PERFORMANCE MANAGEMENT
- JUSTICE SERVICES
- BUNCOMBE COUNTY MANAGEMENT OFFICE
- BUNCOMBE COUNTY STRATEGIC PARTNERSHIPS
- MAHEC
- BUNCOMBE COUNTY HHS
- Safer together
- Vaya health
- Sheriffs department
- Asheville Police
- 911 dispatch
- Fire department
- Umoja health
- Family Preservation services
- Eleanor health foundation

- RHA mobile crisis
- Haywood st congregational
- Jordan Peer Recovery
- Consulta tu Compa
- October Road

## Capacity

### Current Capacity as related to EMS and Emergency Services for Community Paramedic Expansion

- Background of Emergency Services
  - Community Paramedic started in November
  - Have far more need than capacity
  - Have to prioritize the type calls they can go on due to lack of staff to cover multiple calls at once
  - Funding is limited to PORT role only, despite answering many other types of calls daily
- Experience of Emergency Services
  - Have some current staff that are interested in participating in the CP program
  - Need to hire more staff in order to expand services
- Capabilities of Emergency Services as it relates to capacity for delivering the proposed project
  - PORT
  - MAT
  - Homeless Outreach/Shelter
  - Crisis Response
  - High Utilization / Mobile Integrated Health (HU/MIH)
- Capabilities of managing federal funds
  - A lot of experience with this
  - Use Workday to track funds use for both Discretionary and Non-Discretionary items

### Future capacity

- Letters of support
- Teams
- Robust Training Agenda with developed in coordination with community partners
- Internal Peer coordinator positions
- Subcontracted Peers from Non Profits and Grassroots groups
- Partnership with Mahec in behavioral health and homeless outreach
- QA position
- Relationships with AFD, APD, HHS, Sheriff's Office, Justice Services

## Budget

### Introduction

To launch the Community Paramedic Collaborative pilot, we are applying and receiving funds from multiple avenues. We are able to apply for grants such as this one,

the American Rescue Plan, as well as receiving money from the Opioid settlement down the line. We also see sustainment money coming from Medicaid billing in the future. We are also supported by many different community partners during this pilot phase and beyond, which will both help us share the costs of some parts of this pilot and keep costs down. We will then look to future sustainment funding sources such as private/state/federal insurances, our community partners, the ET3 program, City and County funding through partnerships and budgets, United Healthcare, and Medicare (Julota, 2021).

The first avenue being the American Rescue Plan, where a lot of the short term start up costs would be. These start up costs would be priorities such as one time expenses and salaries for team members. To begin this pilot, we are only going to have one team per type. For example, we will create one Homeless Shelter team in the beginning. ARP money would also cover the vehicles and supplies that will need to be purchased at the beginning of this project. These supplies include software to track data and make sure the Collaborative is achieving its goals and to make sure that the Collaborative is serving its community in the best way possible. Tracking these statistics, that were mentioned earlier, will not only help us achieve the goals we set out, but also help create transparency throughout this process, a strategic goal set out by Buncombe County. For more information, please see the spreadsheet attached.

The second revenue source we will be able to pull from is the Opioid settlement funds. Steve Mange, the Senior Policy and Strategy Counsel to the North Carolina Attorney General, stated Opioid settlement funds would go towards, “evidence-informed strategies to address the epidemic,” (Knopf, 2021). Our Community Paramedic Collaborative would fit perfectly into this definition. With this avenue source we will be able to add teams and continue to create sustainment funding past FY25.

While we are continuing to search for grants and ways to pay for this program internally, there is a large opportunity for the Community Paramedic Collaborative to be funded through multiple departments and community partners. Cost sharing this program in its later form with the City of Asheville, Asheville Police Department, Buncombe County Sheriff’s Office, and Justice Services are always options. With this cost sharing option, we will be able to spread out costs of operations to where no one department is bearing the burden of running a Collaborative that is helping many departments.

Even without the pure cost sharing, such as these departments putting this Collaborative in their budget, there are many different ways that other departments can help with costs. An example of this is the Asheville Police Department shares resources for us to do more community engagement. Another example of cost sharing through resources is collaborating with Asheville’s homeless shelter to have a low-barrier shelter for our Homeless Outreach Team to take community members in need.

As well as cost sharing, there are many different opportunities for future funding. We are currently working and learning more about private/state/federal insurances, the ET3 program, City and County funding, United Healthcare, and Medicare to assist with future funding. These are options that we have in mind, but are currently receiving education on these opportunities.

Start up	\$2,214,298
Operating	\$405,942
Salaries	\$1,733,759
<b>Total</b>	<b>\$4,354,000</b>

Julota. "Top 7 Ways to Fund Your Mobile Integrated Healthcare-Community Paramedicine Program." Julota, July 12, 2021. [https://www.julota.com/news/top-7-ways-to-fund-your-mobile-integrated-healthcare-community-paramedicine-program/?utm\\_medium=email&\\_hsmt=139884711&\\_hsenc=p2ANqtz--Y2VOuBGZVc850BLDxeBgEqJHIEnG8hGVKLQi0oWCmarRRw5WcYavcEGKaK9xyMXW6f9YAtGUQ0aGylCrqV7KlgMMPAG5D6xEnIDw8Mya8iHjxg&utm\\_content=139884711&utm\\_source=hs\\_email](https://www.julota.com/news/top-7-ways-to-fund-your-mobile-integrated-healthcare-community-paramedicine-program/?utm_medium=email&_hsmt=139884711&_hsenc=p2ANqtz--Y2VOuBGZVc850BLDxeBgEqJHIEnG8hGVKLQi0oWCmarRRw5WcYavcEGKaK9xyMXW6f9YAtGUQ0aGylCrqV7KlgMMPAG5D6xEnIDw8Mya8iHjxg&utm_content=139884711&utm_source=hs_email).

Knopf, Taylor. "North Carolina Could Get \$850 Million in Opioid Settlement Money. How Will the State Spend It?" North Carolina Health News, May 11, 2021. <https://www.northcarolinahealthnews.org/2021/05/11/north-carolina-opioid-settlement-money/>.

### Project revenues

We have determined sources to both start up and sustain the expansion of Emergency Services. While the Community Paramedic Collaborative's services are still evolving, at its core, Community Paramedics tend to fill gaps in local health care systems which is valuable to many organizations.

- Current Options
  - Grant Funding for Start-Up Costs;
    - ♣ Dogwood Health Trusts
    - ♣ American Rescue Plan
    - ♣ Opioid Settlement
  - Internal funding
    - ♣ Buncombe County
    - ♣ City of Asheville
- Future Revenue Possibilities
  - Hospice Agencies
  - Home Health Agencies
  - Care Management Agencies
  - Medicaid Authorized Funds
  - Managed Medicare Reduce Expenditures
  - Patients and Concierge Medical Services
  - Commercial Payers
  - Further cost sharing opportunities
    - ♣ Partnering with Asheville's future low barrier shelter(s)
  - Insurance Revenue
    - ♣ Private
      - Medicaid (Well Care)

- ♣ State
- ♣ Federal
- Medicaid Transformation
- Medicare Reimbursement
- ET3 program (Diverting people from the hospital)
- United Healthcare
- Nurse Triage/Medicare

**Project expenditures**

- Cost Sharing Opportunities
  - Buncombe County Government
    - ♣ Buncombe County Sheriff Office
    - ♣ Buncombe County Justice Services
  - City of Asheville
    - ♣ Asheville Police Department
    - ♣ Asheville Fire Department
- Possible Cost Savings
  - Fire Departments
    - ♣ Freeing up resources
  - Law Enforcement
    - ♣ Freeing up resources
    - ♣ Jail diversion

Example of expenditure use:

Teams/Staff Salaries (Non-Discretionary)	FY21	FY22	FY23	FY24	FY25
Quality Assurance/Compliance Position		\$112,857	115,678.43	\$118,570.39	\$121,534.65
Post Overdose Response Team (PORT)	\$420,453.00	\$240,000.00	\$500,000.00	\$512,500.00	\$525,312.50
Mobile Assessment team (MAT)		\$882,868.00	\$650,868.00	\$667,139.70	\$683,818.19
Homeless Outreach Team			\$838,511.00	\$859,473.00	\$880,960.00
Crisis Intervention Team				\$838,511.00	\$859,473.00
MIH Team					\$838,511.00
Operational (Start Up)		\$1,660,778.00			
Operational (recurring)			\$131,987.00	\$135,286.68	\$138,668.84
Capital Expenses			\$766,323.80 (Mobile Command Center)	\$315,469.00 (Air Truck)	\$302,116.22 (Web EOC)

     Already requesting funding from Another source

## Explanations

- Teams/Positions
  - Quality Assurance
  - Post Overdose Response Team (PORT; the original Community Paramedic Team)
    - ♣ Will remain dedicated to Post Overdose Response, with some additional Peer support members and medics to provide the coverage we need.
  - Mobile Assessment team (MAT)
    - ♣ The MAT team is essentially an extension of PORT. We will work in tandem with the PORT team to go a step beyond initial overdose response and provide 24/7 mobile on-site suboxone administration and organized wrap around care in collaboration with Mahec and AMCHC in a "Buncombe Bridge to Care" Pilot. Paramedic and Community Health Worker/Peer Support can also follow-up in real time for diversion and re-entry services.
  - Homeless Outreach/Health and Wellness Team (in coordination with Mahec)
    - ♣ The Homeless Outreach and low barrier Shelter Team will be able to:
      - ♣ -do daily "rounds" in the community as an interdisciplinary street team in coordination with our partners such as Mahec.
      - ♣ Communicate with, triage calls for, and utilize the other Community Paramedic Teams such as the Crisis Intervention Team and MAT.
      - ♣ -do mobile welfare checks on our participants and community members.
      - ♣ -respond to community or local business inquiries about alternatives to 911
      - ♣ -collaborate and cross train with grassroots and non-profits in de-escalation for after hours response to local shelters and 24/7 response services.
      - ♣ -serve as a recourse for law enforcement if someone is eligible for "help" or alternative transport
      - ♣ -provide education, medical support, wound care, and outreach at community events
      - ♣ -participate in community engagement events where culturally competent medical training or presence is necessary.
      - ♣ \*\*\*\*In the event that a low barrier shelter is built, this team will transition into the "SHELTER TEAM" at night and station themselves inside the shelter to provide 24/7 medical support, triage, and transport for the shelter under medical direction\*\*\*
  - Crisis Intervention Team

- ♣ The Behavioral Health Crisis Response Team is an interdisciplinary team loosely based off of the CO springs model, with one law enforcement member/liaison embedded within the team to provide safety, incite, and a warm line to Law enforcement. This team will cross train with LE to develop a pilot for our area. This team responds to events that the homeless outreach team is not able to handle without Law Enforcement co-response. This team will work together to re-imagine public safety, determine what co-response protocol best fits our population and area, and how alternative transport or de-escalation can be accomplished safely for the team and community.
  - Equipment needed
    - Air Truck
      - ♣ An Air System/Air Truck allows firefighters to refill their SCBA bottles on scene of emergencies. The current Air System for Buncombe County was purchased in 1999. It was originally mounted on a 1986 Ford F350 Ambulance Chassis. Then it was remounted on a 2005 GMC 5500 Chassis, which it is still mounted on today. The Air System itself has reached it's life expectancy. This is due to manufacturers phasing out outdated equipment and parts, causing the current Air System to become obsolete. It is imperative to emergency response that there is a reliable Air Unit that can travel to emergencies that require around the clock response.
    - Mobile Command Center
      - ♣ A mobile command center can be a vital piece of equipment during disasters, both man-made or natural. The mobile command center enables quick response and uninterrupted communications. Not only are mobile command centers useful during critical incidents, they can be an extremely effective community outreach tool.
    - WebEOC
      - ♣ WebEOC is an emergency management and homeland security communication platform. It is highly customizable, and includes dashboards, task tracking, and maps to meet the needs of emergency management organizations. This program would allow Buncombe County to strengthen it's ability to train personnel and the overall response to emergencies.
    - Resources:
      - ♣ <https://www.policechiefmagazine.org/product-feature-mobile-command-centers-of-today/>
      - ♣ <https://www.fema.gov/node/465107>
  - Priorities

The American Rescue Plan Grant is highly competitive and only has a set amount of funds available for Buncombe County. If we are unable to receive our full ask of funding,

we have set out priorities for the funding we do receive. Without full funding we will still be able to go forward with some of our goals for the Community Paramedic Collaborative, just not all. Our priorities are:

- o Non-Discretionary
  - ♣ Salaries
    - MAT
    - Homeless/Crisis (Merged team)
- o Discretionary
  - ♣ Vehicles (2)
  - ♣ Software
  - ♣ Operating budget
    - Requesting that the ARP funds cover the operating for the pilot years since the request is lower

	American Rescue Plan (Limited) Ask
Start up	\$ 408,050
Salaries & Operating	\$ 1,986,998
<b>Total</b>	<b>\$ 2,395,048</b>

### Methodology

As mentioned earlier in this section, cost sharing is going to be a big part of future budgeting. With many hands lifting together, Buncombe County and all of our partners will benefit. On top of cost sharing, we intend to continue using and applying for grants, federal aid, and other sources to continue this program past its pilot years. The ARP funding will launch the pilot program for four years, but we are already looking towards the future and looking how we will sustain this project long term.

### Sustainment

Sustainment is an important aspect of funding community health programs. We acknowledge that, due to several unknowns at present, it may take a number of years to get the Community Paramedic program up and running to its full potential. We have intuited several ways to generate revenue to offset the associated costs of these expansions. Even though they are still being hashed out by several different sources, our research has identified the following sustainment options;

- Internal funding
  - o Leveraging existing resources: The leading organization, Buncombe County Emergency Services, may have to absorb the costs of the program in order to sustain it
  - o Once the pilot program has been determined as successful, the leading organization could transfer ownership of some activities to partners
- Funding from grants and contracts
  - o Secure grants from foundation organizations to start pilot teams
- Contributions from partner organizations
  - o Strengthening partnerships in order to maximize community impact

- o Share the costs across all partners as equitably as possible
  - o Contributions from partner organizations may only include staff time and other resources
- Reimbursement for services
  - o If clinical services are provided, it may be possible to bill Medicaid or other insurers for services and/or use a sliding fee scale.
  - o It is critical to monitor trends in Medicaid and insurance payment policy in the event that changes occur.
- Other sustainment activities:
  - o Regular reviews of project performance by the group
  - o Capture data
  - o Analysis of costs and benefits to each group member
  - o Communication of the value of the program to members and other stakeholders
  - o Analysis of return on investment and/or assessment of the monetary benefits of the program
  - o Continuity of strong leadership for the program
  - o Broadcasting successes to key entities and audiences

### Citations

- Abramson, Ashley. "Substance Use during the Pandemic." Monitor on Psychology. American Psychological Association, March 2021. <https://www.apa.org/monitor/2021/03/substance-use-pandemic>.
- American Psychiatric Association. Mental Health Disparities: Diverse Populations, 2021. <https://www.psychiatry.org/psychiatrists/cultural-competency/education/mental-health-facts>.
- Buncombe County . Rep. *Racial Equity Action Plan*. Buncombe County, 2020.
- Buncombe County Community Paramedic. Rep. *Community Paramedic Monthly Report: Current Progress*. Buncombe County EMS, 2020.
- Buncombe County Health and Human Services. "Buncombe County News :: Buncombe County Awarded Multiple Grants to Improve Opioid Overdose Response in Buncombe County." Buncombe County News: Buncombe County Awarded Multiple Grants to Improve Opioid Overdose Response in Buncombe County, 2019. <https://www.buncombecounty.org/governing/depts/hhs/news-detail.aspx?id=18356>.
- Burgess, Joel. "Asheville Homelessness down Overall, but Unsheltered and 'Chronic' Homelessness Is Up." The Asheville Citizen Times. Asheville Citizen Times, May 18, 2021. <https://www.citizen-times.com/story/news/2021/05/18/asheville-homeless-numbers-chronic-homelessness-unsheltered-population-nc/5130054001/>.
- Center for Disease Control and Prevention. "Overdose Deaths Accelerating During COVID-19." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, December 18, 2020. <https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html>.

- Kenney, Skylar. "COVID-19 Pandemic Results in Increased Substance Use Among Regular Drug Users." Pharmacy Times. Pharmacy Times, April 27, 2021. <https://www.pharmacytimes.com/view/covid-19-pandemic-results-in-increased-substance-use-among-regular-drug-users>.
- Knopf, Taylor. "North Carolina Could Get \$850 Million in Opioid Settlement Money. How Will the State Spend It?" North Carolina Health News, May 11, 2021. <https://www.northcarolinahealthnews.org/2021/05/11/north-carolina-opioid-settlement-money/>.
- Medline Plus. "Opioid Addiction: MedlinePlus Genetics." MedlinePlus. U.S. National Library of Medicine, August 18, 2020. <https://medlineplus.gov/genetics/condition/opioid-addiction/#frequency>.
- National Alliance to End Homelessness. "Homelessness and Racial Disparities." National Alliance to End Homelessness, April 1, 2021. <https://endhomelessness.org/homelessness-in-america/what-causes-homelessness/inequality/>.
- National Institute on Drug Abuse. "COVID-19 & Substance Use." National Institute on Drug Abuse, May 27, 2021. <https://www.drugabuse.gov/drug-topics/comorbidity/covid-19-substance-use>.
- NCDHHS. "The North Carolina Opioid Action Plan Data Dashboard." NCDHHS, 2021. <https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic/opioid-action-plan-data-dashboard>.
- Panchal, Nirmita, Rabah Kamal, Cynthia Cox, and Rachel Garfield. Issue brief. *The Implications of COVID-19 for Mental Health and Substance Use*. San Francisco, CA: Kaiser Family Foundation, 2021.
- "People Who Use Drugs or Have Substance Use Disorder." Centers for Disease Control and Prevention. Centers for Disease Control and Prevention, 2021. [https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/other-at-risk-populations/people-who-use-drugs/QA.html#anchor\\_1618942950612](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/other-at-risk-populations/people-who-use-drugs/QA.html#anchor_1618942950612).
- Rep. *Opioid Addiction Facts and Figures*, 2016.
- Spear, Susie C. "Opioid ODs Way up, ERs See 46% Case Hike." Greensboro News and Record, September 22, 2020. [https://greensboro.com/rockingham\\_now/news/opioid-ods-way-up-ers-see-46-case-hike/article\\_155a410e-fc80-11ea-b36a-a3876ce79885.html#:~:text=%241\\*%2Fmo.-,for%203%20months!,report%20by%20Injury%20Free%20N.C](https://greensboro.com/rockingham_now/news/opioid-ods-way-up-ers-see-46-case-hike/article_155a410e-fc80-11ea-b36a-a3876ce79885.html#:~:text=%241*%2Fmo.-,for%203%20months!,report%20by%20Injury%20Free%20N.C).
- Volkow, Nora. "Access to Addiction Services Differs by Race and Gender." National Institute on Drug Abuse, July 7, 2020. <https://www.drugabuse.gov/about-nida/noras-blog/2019/07/access-to-addiction-services-differs-by-race-gender>.
- Wang, Quan Qiu, David C. Kaelber, Rong Xu, and Nora D. Volkow. "COVID-19 Risk and Outcomes in Patients with Substance Use Disorders: Analyses from Electronic Health Records in the United States." *Molecular Psychiatry* 26, no. 1 (September 14, 2020): 30–39. <https://doi.org/10.1038/s41380-020-00880-7>.
- Western Carolina Medical Society. "Opioids in WNC." Western Carolina Medical Society, January 2020. <https://www.mywcms.org/news-and-events/newsroom/opioids-in-wnc>.

