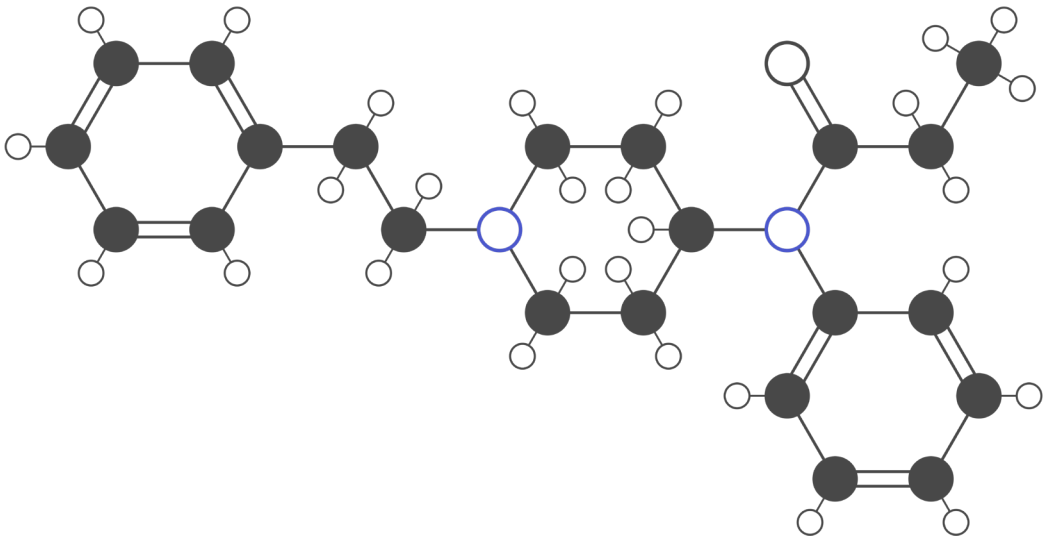
HENDERSON COUNTY

STRATEGIC PLAN

FOR THE USE OF OPIOID SETTLEMENT FUNDING

FY2023-2028



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Fall 2023

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"Henderson County envisions a future where Opioid Use Disorder no longer has a devastating impact on its residents. Our vision is for all individuals and families to have access to well-coordinated, community-wide evidence-based services and resources that address Opioid Use Disorder, including education, prevention, intervention, and treatment programs."

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Introduction

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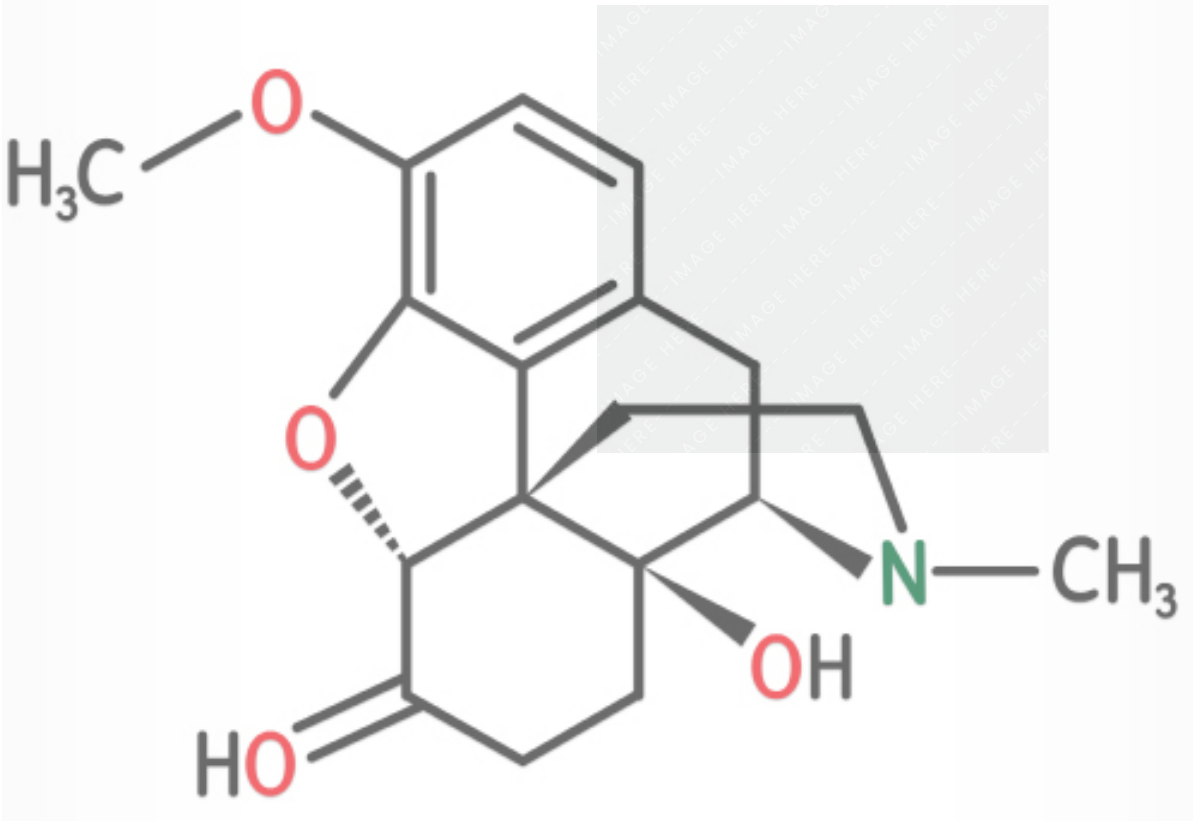

Description of the Problem

Opioid Use Disorder (OUD) affects approximately 2.1 million people in the United States and is attributed with over 120,000 deaths globally each year (Dydyk, Jain, & Gupta 2022). In North Carolina alone, 28,000 people's lives were lost to overdose (Combatting North Carolina's Opioid Crisis n.d.). According to SAMSHA's key findings from the 2019 National Survey on Drug and Health Use, of the 21.6 million people nationally that were identified as needing treatment for substance use disorders (including OUD) only 1.5% received any treatment (Substance Abuse and Mental Health Services Administration 2020). These statistics imply that the disposition for many individuals experiencing OUD is more likely to be long-term extended use or even death from overdose, rather than treatment and recovery.

OUD impacts individuals, families, and communities on a daily basis. NC Department of Health and Human Services announced that in 2020 approximately 9 individuals died every day from a drug overdose, up 40% from 2019 (2022). According to a recent study in the Journal of the American Medical Association, Henderson County ranks in the 41 counties identified as "opioid high risk" (Haffajee et al.). The metrics used to develop this ranking system were the number of primary care physicians per 100,000 residents, unemployment rates, percent of the population that is white, percent of residents under the age of 25, and rate of high school graduation. These metrics illustrate potential root causes and contributing factors for the onset of OUD.

Leading Cause of Death

While economical and societal impacts are profound, the impact of OUD on individuals and families is equally, if not more, detrimental. The "collateral damage" felt by the family members of individuals with OUD, and the individual themselves, can include divorce, loss of parenting roles, incarceration, and death. Parents who have lost children to overdose experience depression, post-traumatic stress disorder, and other mental health disorders (Daley et al., 2018). Age-adjusted rates of OUD have tripled since the 2000's and are now the leading cause of death due to unintentional injury (Brat et al., 2018).

Quality of Life

Broken families, increased risk of suicide and mental health problems, increased risk of disease and chronic health problems, incarceration, financial difficulties, and loss of quality of life are but a few examples of the effects of the "symptoms" of OUD experienced by individuals and families.

Strategic Planning Process

In response to the opioid epidemic, legal action has been taken against opioid manufacturers, distributors, and pharmacies across the country. These legal actions have resulted in significant settlements intended to support efforts to address the opioid epidemic and improve outcomes for individuals and communities affected by OUD.

As a result of these legal proceedings, Henderson County will receive approximately $16 million over the course of the next 18 years (NCDHHS). This funding represents an opportunity to address the opioid epidemic in the county by supporting prevention, treatment, and recovery services, as well as other initiatives to reduce opioid-related harms and improve public health outcomes. The strategic plan for the use of opioid settlement funding in Henderson County is designed to guide the use of these funds and maximize their impact in the community

Needs Assessment

The plan begins with a needs assessment to identify the specific needs and gaps in services related to the opioid epidemic. This includes gathering data on the root causes of opioid-related deaths, hospitalizations, and overdoses; and identifying gaps in services available to Henderson County residents. The needs assessment provides the foundation for setting clear and measurable goals and objectives for the use of the funding.

Strategic Priorities

Once the goals and objectives have been established, the plan outlines a comprehensive set of strategies and interventions to achieve them. The prioritized strategies were selected by Henderson County leadership from the list of recommended strategies under Section A of the NC Memorandum of Agreement Between the State of North Carolina and Local Governments on Proceeds Relating to the Settlement of Opioid Litigation.

Interventions

Interventions that align with the strategies were then developed by the Opioid Settlement Workgroup using public health data and information from community stakeholders. As the Strategic Planning process commenced, County leadership decided to utilize this work to unlock funding to further strengthen the selected priorities under Option B of the NC MOA.

Strategic Planning Workgroup

The Opioid Settlement Workgroup (herein referred to as "the county workgroup") was formed from individuals who have been leading the efforts in developing a plan for Opioid Settlement initiatives, as well as the more encompassing public health issue of Substance Use Disorder (SUD). Members of the workgroup include representation from the Henderson County Department of Public Health, technical assistance from the North Carolina Association of County Commissioners, the Henderson County Manager, the contracted consultant from the REAL Academy, LLC, the Hope Coalition, and other county employees as needed for expertise in grant and program oversight. The county workgroup reviews the deliverables related to Opioid Settlement strategic planning and the development of Recovery Court. Long-term goals for this workgroup will be to oversee the implementation of the strategic plan and to ensure that the evaluation process outlined in the strategic plan is followed.

Evaluation

The evaluation process enables Henderson County leadership to assess the effectiveness of the strategies and interventions implemented with the opioid settlement funding. This includes identifying key performance indicators (KPIs) and data sources for tracking progress toward goals and objectives; and planning for ongoing monitoring and evaluation to ensure that strategies and activities remain relevant and effective, and that milestones within the strategic plan are being met.

Overall, the strategic plan for the use of opioid settlement funding in Henderson County provides a clear and focused approach for addressing the opioid epidemic and improving outcomes for individuals and families affected by opioid use disorder. Each strategy and corresponding intervention is specific and actionable, with timelines and responsible parties identified. It is a crucial tool for ensuring that the funding is used effectively and efficiently to achieve measurable and sustainable impact in the community.

ROOT CAUSE ANALYSIS

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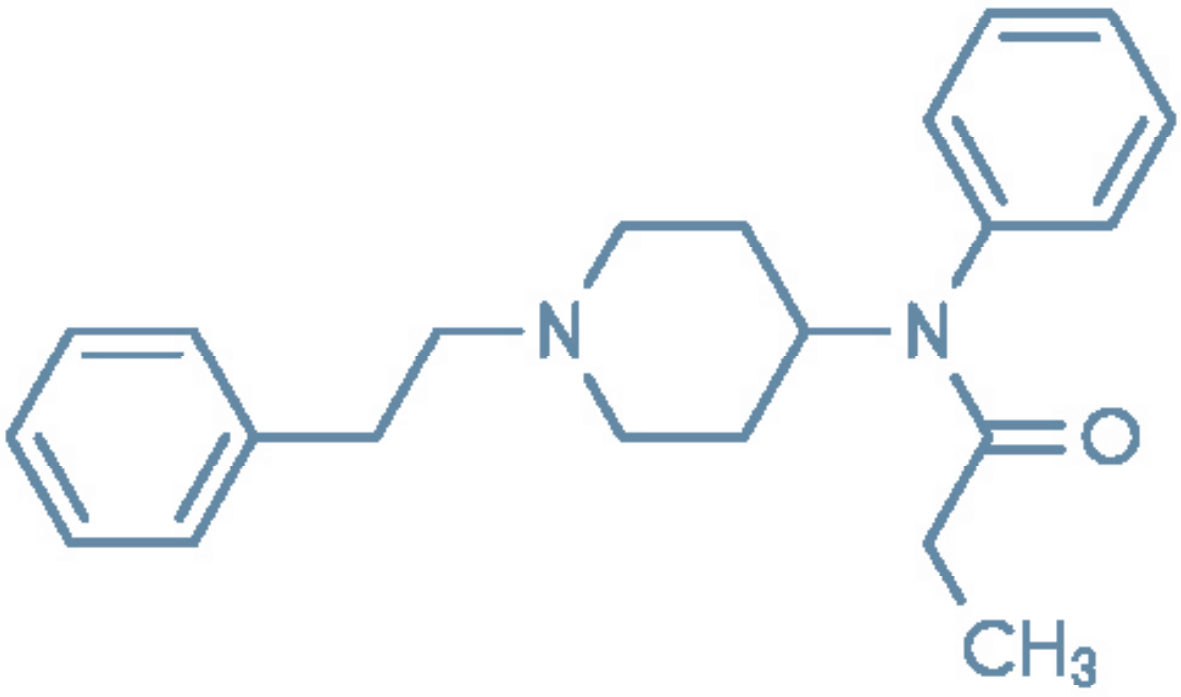


Determining Root Causes

Methodology

The needs assessment was developed from analyzing root causes of OUD in Henderson County and gaps in services in the continuum of care developed by the American Society of Addiction Medicine (ASAM). Feedback from stakeholders participating in the Substance Use Action Team and Crisis Collaborative was also incorporated into the needs assessment. The compilation of public health data, identification of service gaps, and information received directly from stakeholders created a comprehensive overview of the symptoms of OUD that Henderson County residents and stakeholders are experiencing as well as the gaps in the continuum that selected interventions could be selected to address.

The root cause analysis identifies the primary factors that contribute to OUD. The Henderson County root cause analysis traces the root causes from the symptoms observed through stakeholder feedback and public health data to identify the primary factors that are specific to the county. The identified root causes can then be addressed through selected interventions and used as baseline data when evaluating outcomes.

Symptoms

For this report's purposes, symptoms are defined as adverse events caused by primary/root factors that lead to the problem. In other words, they are the harmful byproducts of OUD that interventions targeting the root causes of the disease will alleviate. The following symptoms have been identified through Federal, State, and County priorities. Identifying and understanding these symptoms allow local task forces to distinguish the root causes that contribute to their existence.

"Symptoms" of OUD

Opioid Overdoses & Overdose Deaths

84% of fatalities directly attributed to illicit use of opioids

People who have lost their lives to OUD are considered to have succumbed to “deaths of despair”. According to the 2021 Henderson County Community Health Assessment, the rate of overdose deaths in 2020 was 26.4 per 100,000 residents, with 84% of these fatalities directly attributed to the illicit use of opioids. This rate is higher than the state average of 75% (Henderson County Health Assessment 2021).

Considering the low percentage of individuals receiving treatment, the upwards trend in overdose rates could mean that individuals are not receiving any type of intervention until “Stage 4” of their disease progression. As with any other disease that is in a terminal or critical stage, the need for crisis interventions like emergency departments and EMS utilization increases, creating capacity issues within these systems.

Capacity Issues for Crisis Services

15 individuals per month

For every 1 overdose death in NC there are 5 emergency department visits (NCDHHS Data Dashboard 2022). In Henderson County, the frequency of opioid overdose visits has gone from 61 encounters in 2016 to 105 encounters in 2021 (Data Dashboard). In 2022, 61 overdose encounters were specifically identified as directly related to opioid use, up from 52 for the same time period in 2021 (NC Detect).

EMS utilization, specifically naloxone administration, has also doubled from 2010 to 2017 (NC Detect). In 2019, there were 95 naloxone administrations (NC DHHS). Data reports from Henderson County EMS indicate that an average of 15 individuals per month receive naloxone, administered by EMS (Marino et al., 2022). These statistics do not include many of the “self-reversals" that occur due to the availability of Narcan in the community.

North Carolina Priority

20% Decrease

Overdose prevention is a priority listed in North Carolina's Opioid and Substance Use Action plan. The statewide goal is to reduce all drug overdoses by 20% by the year 2024. Understanding the root causes of overdose and implementing interventions that address them can have widespread impact on multiple county systems. Preventing deaths from overdoses also prevents the grief and trauma that families experience from losing their loved ones to OUD.

Economic & Socio-Economic Impacts

The Opioid Epidemic has had considerable impact on state, federal, and local economies. Although the National data indicates that only a fraction of individuals experiencing substance use disorders have received treatment, healthcare costs from Opioid Use Disorders have exponentially increased. High-risk opioid use has been shown to significantly increase healthcare costs and encounters. A 2018 study "Healthcare costs and utilization associated with high-risk prescription opioid use: a retrospective cohort study" indicated that the total healthcare costs were 40% higher than their counterparts.

A frequently cited study on the societal costs of opioid misuse estimated a national average of 2.6 billion dollars in healthcare costs, 1.4 billion dollars in criminal justice costs, and 4.6 billion dollars in workplace costs in 2001. The article ended with a prediction that rising rates of OUD would escalate an economic and public health burden in subsequent years (Clin 2006). This prediction has come to fruition, as evidenced by crowded emergency departments and high rates of EMS utilization.

North Carolina's State Center for Health Statistics estimates that the economic impact on Henderson County from loss of life due to overdose equated to approximately $393,226,561 in 2020, including total medical costs and total Statistical Life Loss for fatalities in that year (Medication and drug overdose in Henderson County). The individual economic impact results in a cycle of poverty. At-risk individuals already include those living in poverty. Substance use often worsens these pre-existing conditions. However, substance use can also lead middle- and upper-class individuals into poverty, due to drug use (Nccaa, 2020). Once in the cycle of drug use and poverty, treatment and recovery become secondary to survival.

Economic & Socio-Economic Impacts ctd.

Individuals with OUD experience negative socio-economic impacts to a higher degree than those that do not use opioids. These socio-economic impacts include higher rates of divorce, unemployment, and housing insecurity. The effects of these socio-economic impacts of substance use strain capacity for community resources, reduce quality of life for the individual, and decrease the potential for the individual to remain in recovery by adding chronic stress (NCCAA, 2020). Of the economic impacts previously listed, loss of quality of life and loss of future earnings accounted for a large percentage of the financial cost of OUD. The inability to work, have purpose, and have meaningful relationships with a healthy support system are all side-effects that contribute to hardships for individuals with OUD, and the families and communities that support them.

Arrests & Recidivism in Jails

38.6% of Incarcerated Individuals

A 2019 study on the correlation of Opioid Use Disorder and adverse outcomes found that individuals that misused prescription painkillers were 7.43 times more likely to be involved with the justice system than individuals without a substance use disorder. Individuals with heroin use disorder were 18.79 times more likely to have justice involvement, and those with both prescription pain killer and heroin use disorders were 25.83 times more likely (Prince, 2019). When compared to the rate of individuals involved in treatment, it can be inferred that individuals with OUD are more likely to enter jail than they are treatment.

On May 11, 2020, a point in time count in the Henderson County detention center revealed that 38.6% of individuals in incarceration that day were charged with crimes directly related to illicit drugs (Marino et al., 2022). While research supports that OUD treatment during incarceration is shown to reduce recidivism rates, most jails in NC do not offer treatment options like Medication Assisted Treatment (MAT) (US Department of Health and Human Services 2022).

Statistically, individuals are 40 times more likely to succumb to fatal overdose within two weeks after they are released from incarceration (North Carolina's Substance Use Action Plan). These instances of overdose have a large ripple effect within the justice system and human services industry because they impact multiple systems within the community, including probation/parole, EMS, and Emergency Departments.

Children in Foster Care

67.4% of Children in Foster Care

Opioid use disorder has also created an increase in the number of children being served in foster care or with DSS involvement. The definition of Drug Endangered Children is "Children who are at risk of suffering physical or emotional harm because of drug use, possession, manufacturing, cultivation, or distribution" (Marino et al, 2022). Henderson County's rate of children in foster care due to parental substance use is significantly higher than that of the State. In 2021, Henderson County reported a rate of 67.4%, while the overall rate for NC was 45.7% (NCDHHS).

Of the 1200 child protective investigations conducted by Henderson County DSS, 80% involved a substance use issue. 95% of in-home cases and 85-95% of foster cases involved substance use. The number of referrals for Drug Endangered Children to the Child Advocacy Center in Henderson County increased by 211% from 2018 to 2019 (Marino et al, 2022). Exposing children to illicit substances increases the likelihood of adult substance use. Therefore, these numbers are indicative of a pattern of substance use, trauma, and DSS involvement that could continue for subsequent generations, without intervention.

Members of the Henderson County Behavioral Health Summit specified "Number of Children in Foster Care" as a data priority for the 2021 Community Health Assessment. Interventions aimed at reducing the number of Drug Endangered Children in foster care can expand DSS capacity and prevent and/or minimize the harmful effects of early childhood exposure to substances.

Risk Factors & Local Conditions

The following risk factors are divided into individual, environmental, economic & socioeconomic, and systemic categories. The risk factors have been identified through research to contribute to Opioid Use Disorder and the detrimental effects of the disease.

The local conditions are county level data that provide insight into the prevalence of root causes, as observed in the community.

Individual Risk Factors

The individual risk factors for OUD are personal experiential and innate variables localized to the individual. These risk factors have been documented in a variety of scholarly publications as contributing to the vulnerability of substance use disorder in adulthood. They include genetics, chronic pain, chronic stress, and co-occurring disorders.

Genetic Predisposition

As addiction science has evolved over the last several decades, genetic associations regarding addiction have become more evident. Some studies have demonstrated that 54% of the liability for OUD was related to genetic variance (Berrettini, 2017). Although genetic risk factors are significant root causes of addiction, community-driven interventions are often limited to external factors, as genetic root causes can be more expertly explored by scientists and medical professionals. However, these genetic risk factors must be taken into account in order to decrease the stigma associated with OUD.

Chronic Pain

The onset of the Opioid Epidemic has been causally linked with chronic pain, and the corresponding response of physicians in prescribing opioids as a treatment method (Dasgupta et al., 2018). Many individuals sought relief from chronic pain from accidental injuries and long-term health problems only to find themselves addicted to the opioids prescribed to them.

More than 1 in 5 Americans report experiencing chronic pain (Young et al., 2021). In Henderson County, that equates to an estimated 23,000 residents living with chronic pain, according to the national statistical formula. Chronic pain management without the use of opioids continues to be explored by medical professionals, but for many individuals living with an opioid dependency, the underlying condition of chronic pain is a deterrent for treatment and recovery.

Chronic Stress

Chronic stress is defined as the prolonged or continuous feeling of stress. Stress is a commonly recognized risk factor for the onset of substance use disorders, as well as relapse (St. Joseph). A frequently cited study from the New York Academy of Sciences revealed that specific stressors that are predictive of addiction include early life stress, child abuse, and accumulated adversity (Sinha, 2008). Chronic stress that is greater than a person's ability to adapt to triggers a biological response that damages the immune system and is also linked to maladaptive behaviors like addiction (Marriotti, 2015). The March 2022 Stress in America Report from the American Psychological Association indicated that inflation and the rising costs of living were top sources of stress in 2021. This statistic supports the position that economic factors, stress, and OUD are linked.

Co-occurring Disorders

Co-occurring mental health disorders and abuse of other substances are common among individuals with OUD (Jones & McCance-Katz, 2019). In 2020, 17 million adults in the US reported having a co-occurring substance use and mental health disorder. The National Institute on Drug Abuse released findings that 52.5% of the population of individuals with co-occurring disorders received neither substance use or mental health treatment. The majority of these individuals received treatment for mental health only, while less than 10% received treatment for both (Han et al., 2017).

There is an increased risk of mortality and morbidity for individuals with co-occurring disorders. Individuals with prescription painkiller disorder were 2.4 times more likely to attempt suicide than individuals without a substance use disorder (Prince, 2019). Individuals with OUD are also more likely to have chronic pain (even before the OUD diagnosis) and other physical health problems, such as higher rates of HIV and Hepatitis C (Hser et al., 2017). Co-occurring disorders and health complications from Opioid Use Disorder are an example of a symptom that could potentially also be a root cause. The severity of one disorder likely increases the severity of the co-occurring disorder. Proper diagnosis and treatment are fundamental elements of mitigating symptoms and determining which disorder is the root cause.

Environmental Risk Factors

Availability of Opioids

Over the past three decades, the rates of overdose and addiction have risen synchronously with the increase in opioid analgesic prescription and consumption. An increase in chronic pain prevalence during the 1990's gave rise to a corresponding increase in the prescription of opioids, marking the beginning of the Opioid Epidemic. A report from the Institute of Medicine attributed the escalation of chronic pain prevalence to trends in patients' pain relief expectations, obesity, musculoskeletal disorders in aging populations, increased survival rates for cancer and after injuries, and an increase in complex surgical procedures (Dasgupta et al., 2018). At the same time the federal government required healthcare providers to meet standards that included pain control as indicated by patient satisfaction surveys. Since these patient satisfaction scores impacted reimbursement, providers were incentivized to reduce pain. Compounding the problem, many insurance providers limited coverage for alternative pain therapy options.

Overprescribing has long been identified as one of the root causes of the Opioid Epidemic. Most pain relievers that are misused are obtained by prescription or are given to the individual with OUD by a friend or relative with a prescription (Substance Use and Mental Health Administration 2021).

The second phase of the Opioid Epidemic is marked by an increase in heroin overdoses, which tripled from 2010 to 2015. Studies suggest that individuals have transitioned to heroin usage, as a less expensive and more potent alternative to prescription pharmaceuticals (Dasgupta et al., 2018). The emergence of fentanyl and its analogs in 2013 commenced the third phase of the epidemic that continues today. Deaths from fentanyl analogs accelerated by 540% nationally, creating a public health emergency (Dasgupta et al., 2018). In Henderson County, the availability of illicit opioids alongside heroin, fentanyl, and/or fentanyl analogs has driven up overdose rates locally. In the most recent PRIDE survey, 19.9% of students reported accessibility to prescription drugs (Marino et al., 2022). As the epidemic has evolved, more individuals with OUD report starting opioid use with heroin, rather than prescription analgesics (Dasgupta et al., 2018).

Initiatives in North Carolina's Substance Use Action Plan directly target prescription activity as an area of opportunity to decrease availability of illicit opioids. The current prescription rate for narcotics is 78.4 pills per resident in Henderson County. In 2021, 13.7% of residents were dispensed opioids, down from 23.3% in 2016. This significant reduction can be attributed to the State's implementation and enforcement of the Controlled Substances Reporting System (CSRS), and alternatives to pain management (DHHS).

While the over-prescribing of Opioids is trending downwards due to state and local interventions, it is important to note that prescription opioid overdose death rates have not decreased alongside declining prescribing. As the epidemic has evolved, more individuals with OUD report starting opioid use

with heroin, rather than prescription analgesics (Dasgupta et al., 2018). The comparison of prescription rates with overdose death rates supports this reported trend in the evolution of the epidemic. This data indicates that interventions for prevalence of heroin and other illicit "street" substances should be considered as well as interventions for the over-prescription of opioids.

Early Childhood Exposure

Early exposure (below age 15) to alcohol and illicit drugs has been associated with negative outcomes in adulthood. The Dunedin Multidisciplinary Health and Development Study, a 30-year prospective study, demonstrated that 50% of adolescents in the study that were exposed to illicit drugs and alcohol before the age of 15 were at an increased risk for substance use disorders in adulthood, as well as early pregnancy, sexually transmitted diseases, and justice involvement (Odgers et al., 2008). The increase in the rate of Drug Endangered Children in Henderson County indicates a trend in early exposure to illicit substances, creating the potential for substance use and other negative consequences in adulthood.

Trauma

Adverse Childhood Experiences (ACEs) and trauma are upstream causes of all substance use disorders. Addressing trauma as a root cause of SUD and OUD is listed as a strategy included in North Carolina's Substance Use Action Plan. ACE's include physical and emotional abuse, neglect, caregiver mental illness, and violence experienced by individuals in early childhood (What are aces? and how do they relate to toxic stress? 2020). According to the CDC, ACEs are associated with at least 5 of the 10 leading causes of death, including suicide and deaths from overdose. The risk of adult opioid misuse is 30 times higher for adults reporting four or more ACEs, compared to adults reporting no ACEs (Adverse childhood experiences, overdose, and suicide 2022). A 2018 Professional Research Consultants report for the Community Health Assessment revealed that 13.1% of respondents reported 4 or more ACEs in Henderson County.

Healthy People 2030 has determined an objective to reduce the number of young people who report 3 or more ACEs (U.S. Department of Health and Human Services, n.d.). ACE's and trauma also directly relate to Henderson County's priority of interpersonal violence in the 2021 Community Health Assessment. Individuals with a history of interpersonal trauma have been disproportionately impacted by the Opioid Epidemic (Williams et al., 2020). Domestic violence, sexual assault, and child abuse all potentially result in ACEs and/or PTSD; contributing to the onset of OUD.

Isolation

Strong bonds with other people improve quality of life and have been associated with longer, healthier lives. Just as the existence of social bonds is a protective factor for health and well-being, its absence (isolation) creates a risk factor for opioid misuse and other negative outcomes. Isolation can be measured through the amount of family & social support that an individual receives. Only 69.9% of respondents to the Henderson County 2021 Community Health Survey reported that they "always" or "usually" get the social and emotional support that they need. This percentage was 76.5% in 2018 and 81.1% in 2015.

Research is currently underway examining the neurological impact of opioids on the brain's ability to form social connections. The use of opioids is being linked to a biological response that prohibits bonding, further isolating individuals with OUD (Christie, 2021). This inability to bond even extends to maternal infant bonding, which could further explain the rising trend in DSS abuse and neglect reports, Drug Endangered Children, and foster care placements in Henderson County.

The COVID-19 Pandemic has likely had a role in increasing isolation for individuals over the last two years. Disruptions in treatment and separation from social safety networks have likely contributed to the increase in opioid-overdose related deaths (Haley & Saitz, 2020). Many of the social supports, like peer support services, where unavailable during times of quarantine. Social support also creates links to treatment services and resources to maintain recovery. Isolation, on the other hand, decreases the likelihood that a person will enter and receive treatment. The decrease in the percentage of individuals reporting adequate social support in the Henderson County Health Assessment could indicate that isolation is a root cause for opioid use.

Social & Economic Risk Factors

Fatalities from Opioid Use are associated with indicators of lower economic and socioeconomic status. Common characteristics of opioid high-risk counties in NC included unemployment rates, high school dropout rates, race, and age (Duong, 2019). These were among the contributing factors to the rating that Henderson County received as being in the top 41 NC counties for high-risk of opioid-related deaths in a 2019 survey of the characteristics of US counties with high overdose rates (Haffajee et al., 2019).

Age, Race & Sex

Those at the highest risk of death from illicit opioid use are White or American Indian/Alaska Native males between the ages of 25-54. Although overdose death rates are currently the highest for males, women between the ages of 40-64 represent the fastest growing category for deaths as well as emergency department presentations (Salmond & Allread, 2019). Of the 116,829 residents in Henderson County, 83.1% of the population is primarily "White, non-Hispanic or Latino", with a median age of 47.4 (U.S. Census Bureau, 2020). In more simplistic terms, the majority of the population of Henderson County falls within the parameters of being at-risk based on the demographics of age, race, and sex.

Poverty

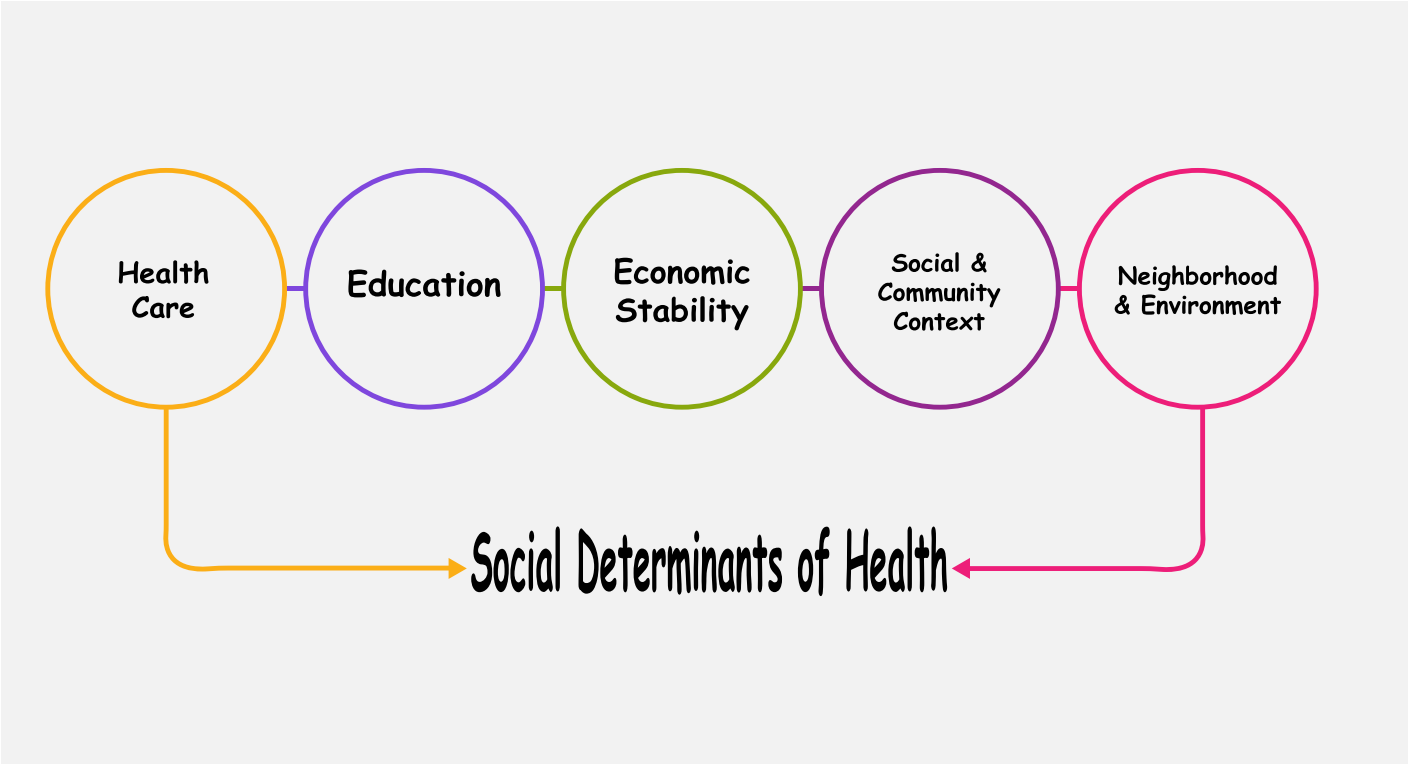
People living in poverty are more likely to die from opioid overdoses (Altekruse et al., 2020). Although median family income and per capita income levels are higher than state averages, 10.9% of Henderson County residents live below the poverty level. Of these residents, 17.7% of all children under the age of 18 and 21.5% of children below the age of 5 are below the poverty level (Henderson County Community Health Assessment, 2021). As previously stated, poverty also exaggerates chronic stress; further contributing to the root causes of OUD.

Education

Individuals without high school diplomas are also more likely to die from opioid overdose than those that graduate or have college education (Altekruse et al., 2020). The current drop-out rate in Henderson County is at its lowest. Henderson County schools reported a 91.5% graduation rate for the 2019-2020 school year (Henderson County Community Health Assessment, 2021). The current trend in the percentage of students that are successfully completing high school is a protective factor in preventing OUD in future generations.

Employment

The unemployment rate in Henderson County is below the state rate, even though there was an increase following the COVID-19 pandemic. The majority of employees in Henderson County work in retail, manufacturing and healthcare/social assistance sectors (Henderson County Community Health Assessment, 2021). In consideration of the poverty rate and low unemployment rate, underemployment may be of considerable concern. Underemployment is also often experienced in retail, which makes up 14.43% of the workforce in Henderson County. According to the 2021 Henderson County Community Health Assessment, average weekly wages for this sector were $557. As inflation continues to directly impact living expenses like rent, the average weekly wages indicate that underemployment will continue to be an issue for many individuals working in retail and food services in Henderson County.



Insurance Coverage

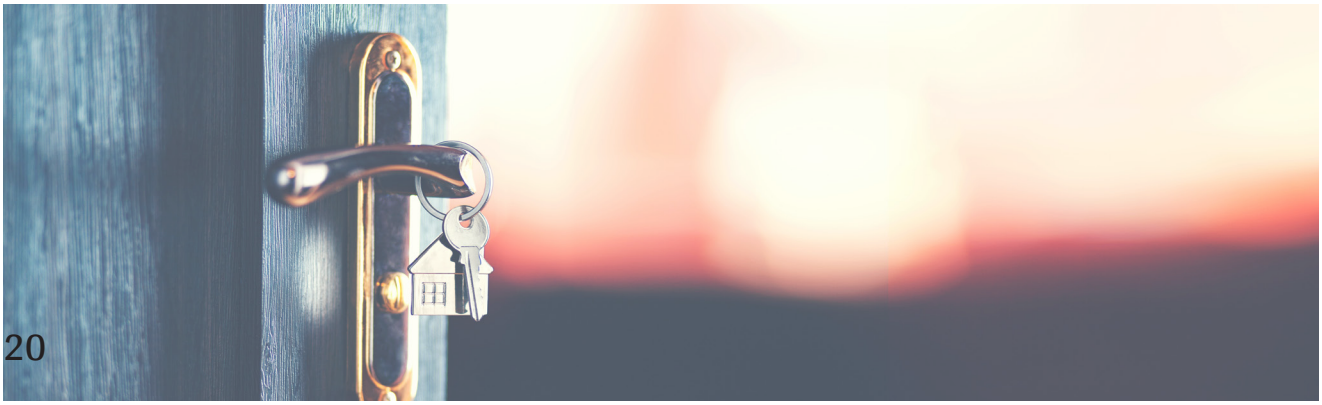
Unemployment and underemployment often determine health insurance coverage. Insurance coverage is directly tied to adverse health outcomes like higher rates of crisis service utilization and death from overdose. Many individuals in the US are insured privately through their employers. Those that are not, are insured through programs like Medicare or Medicaid, purchase plans through Healthcare.gov, or are not insured at all. The 2021 Henderson County Community Health Survey indicated that 17.6% of the population was Medicaid-eligible; 15.9% of adults were without health insurance. Of those adults without insurance, 24.2% were between the ages of 19-34, falling within the age bracket of those at highest risk for OUD.

Many private or employer-provided plans do not cover intensive or long-term substance use treatments. Of those that do provide coverage for substance use treatment, only a small percentage of individuals with drug use disorders accessed the benefit (Mojtabai et al., 2020). Coverage of treatment options may also vary by insurance company, leaving many individuals unaware of the benefits that they may be able to access.

A large percentage of individuals in substance use treatment programs are either Medicaid recipients or uninsured (self-pay). In 2020, 1 in 3 NC emergency department visits for a drug overdose was self-pay (NCDHHS Action Plan). Depending on income, uninsured individuals may qualify to receive services under state funds. These funds are designated by the state, then contracted to providers via managed care organizations. Over the years, this designation of funding has been reduced. Many providers report that their budget for state dollars is expended in the third quarter of the fiscal year, leaving them with the decision to either A). Not serve uninsured individuals who cannot afford to pay, or B). Continue treating uninsured individuals at the providers' expense.

Housing

Homelessness and housing insecurity has been shown to be connected to opioid overdoses, especially among Veterans. Individuals experiencing housing insecurities were twice as likely to need hospitalization (Milaney et al., 2021). Safe and affordable housing is a health priority in the 2021 Henderson County Community Health Assessment. In 2019, 42.8% of renters and 25.8% of homeowners reported spending more than 30% of their income on housing. Additionally, there is no vacancy in government-funded subsidized housing, and 150 individuals were counted as homeless in the 2020 Point in Time Count. Lack of affordable housing options also impacts the sustainability for potential treatment programs, like treatment courts, that may require participants to be Henderson County residents.



Systemic Risk Factors

Examining systemic risk factors for OUD involves analyzing barriers in the system that create challenges for individuals to begin or sustain treatment. These include the ability to access treatment when and where it is needed, have successful linkages to recovery supports, and overcoming stigma. Increasing the number of individuals in treatment is a priority in NC's Opioid and Substance Use Action Plan. In Henderson County, only 437 individuals were in treatment for Opioid Use Disorder in 2021. A national estimate in 2019 indicated that between 2-3% of the population were living with OUD (Keyes et al., 2022). 2% of the population of Henderson County would be approximately 2,336 individuals. This indicates that less than 20% of individuals with OUD are receiving treatment. To effectively increase that number, localized system barriers will need to be identified.

Stigma

Stigma is often cited as one of the biggest barriers to accessing treatment. Historically, substance use disorders have been perceived to be moral shortcomings, rather than medical illnesses. The presence of stigma also exists towards treatment modalities and harm reduction efforts for OUD, even for practices that have been proven effective (Madden, et al., 2021). National policy emphasizes medically assisted treatment practices, but social stigma for these practices effectively prevents their development in many areas (Dasgupta et al., 2018). The prevalence of stigma toward the individual experiencing OUD and toward the treatment options for the disease compounds the barrier to accessing supports.

Access to Treatment

In addition to affordability and insurance coverage, barriers to accessing treatment also include availability of local services, transportation to and from services, and practicality of services. A key element of successful treatment is accessing the right service at the right time. The gaps in services analysis examined available treatment options along the ASAM continuum. However, data from community stakeholders like EMS and treatment providers indicate that prevalence of treatment options is a secondary concern next to accessibility of the available options. Data from the Crisis Response Collaborative (CRC) indicates provider capacity issues, clinical staffing shortages, and barriers related to social drivers of health. The CRC is a community collaborative group that meets monthly to discuss services and service gaps along the continuum of care for behavioral health crisis treatment programs. Barriers to accessing treatment directly contribute to high utilization of emergency and crisis services and low rates of outpatient and less restrictive treatments.

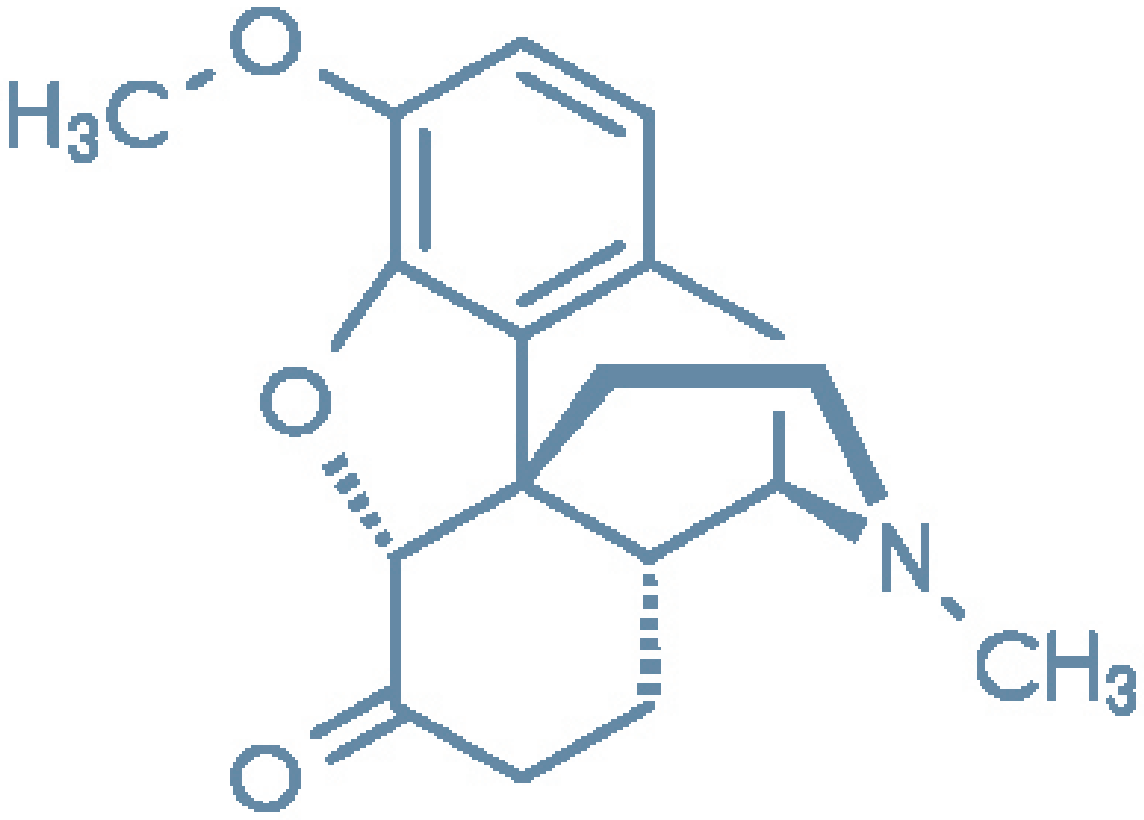
Continuity of Care

Cross-linkages to services and supports are vital to effective treatment for OUD. Based on the primary causes for OUD, a person in treatment will likely have interactions with multiple community agencies. Resources are better leveraged when collaborative processes and efficient communication support the continuity of care for the person receiving treatment. Continuity of care requires macro-level system alignment, and the dissolution of silos. A NC priority for Opioid Settlement funding is establishing or expanding recovery supports. Continuity of care is essential in this community-based service line.

Recovery supports are pivotal in preventing relapse and overdose deaths. A lack of recovery supports could be a root cause of relapse. Individuals discharged from inpatient treatment facilities are exponentially more likely to die from overdose if they relapse. Recovery supports include programs like peer support services, support groups, recovery housing, and workforce development. The Recovery Ecology framework, championed by Dr. Michelle Geiser, illustrates the necessity for recovery supports to help successfully sustain recovery for individuals with OUD. Ongoing local research from the REAL Academy also indicates that collaborative relationships among helping agencies are vital to the Recovery Ecosystem (Marino et al., 2022). While a lack of recovery supports may not be a root cause for the onset of OUD, it is a root cause for relapse and subsequent death from overdose. Managing collaborative partnerships, fostering communication and warm hand-off, and establishing positive bonds between agencies are cornerstones of a strong continuum of care that will support recovery for individuals with OUD.

GAPS IN SERVICES ANALYSIS

03



Identifying Needs & Gaps

The gaps in services analysis identified Henderson County treatment services and resources across the spectrum of Opioid Use Disorder, spanning from prevention to recovery supports, as recommended by NC's Opioid Settlement MOA under Option A. Treatment services that are identified in this report are programs that serve adults with substance use disorders or dually diagnosed adults, as evidence indicates that individuals with Opioid Use Disorder are in the age range between 25-54. Services in a directory developed by the Henderson County Department of Public Health were mapped under the domains listed in the NC MOA to create a visual representation of available services and any corresponding gaps.

Opiod Use Disorder Continuum of Services

The categories of prevention/early intervention, evidence-based treatment, harm reduction, and recovery supports were identified through evaluation of NC's MOA and the Opioid and Substance Use Action Plan. These priorities serve as the guidelines for selecting programs to be employed under opioid settlement funding. The category of crisis services was added to further investigate available community resources, and as a precursor to determining capacity in these service areas. Sections under the Evidence-based Treatment category are the Levels of Care recommended by the American Society of Addiction Medicine (ASAM).

The spectrum of services and supports represent a comprehensive continuum of care model, based on State recommendations & priorities, best practices determined by ASAM, and local priorities. A "map" of resources were identified through workgroups and the Henderson County Health Assessment team and populated into a directory. These resources were reviewed and organized in the corresponding category. Workgroups will be able to review the map and visualize gaps in the continuum of services for individuals experiencing opioid use disorder.

Treatment Services

ASAM Levels of Care

As part of The ASAM Criteria, the American Society of Addiction Medicine (ASAM) has established five levels of care as best practice for substance use treatment. The levels of care are early interventions, outpatient services, intensive outpatient/partial hospitalization, residential/inpatient services, medically managed intensive inpatient services. These levels serve as a standard of placement for individuals who are assessed for substance use disorders, including Opioid Use Disorder (OUD). In order to uphold these standards, communities must be able to meet the needs of the recommended level of care. Evaluating existing services in the community will allow stakeholders to observe gaps in the levels of care and prioritize potential services to implement under opioid settlement funding that will address these gaps. ASAM has rated the levels of care from 0.5 to 4, with 4 being the most intensive.

.5 Level 0.5: Prevention/Early Intervention

Prevention and early intervention often include education and awareness for individuals at risk for developing substance use disorders. The purpose of prevention and early intervention is to detect and intervene before individuals develop substance use disorders (2022). For Henderson County, the increase in the number of Drug Endangered Children could indicate a target population for prevention and early intervention for at-risk youth that who have experienced early exposure to substances (Henderson County Root Cause Analysis Report, 2022).

1 Level I: Outpatient Services

According to the ASAM definition, outpatient services are treatment options for individuals with less severe substance use disorders, or as step-downs for more intensive options. Outpatient services are less than 9 hours per week and usually involve one-on-one sessions or group therapy facilitated by a behavioral health professional certified in addiction counseling (2022). Many outpatient providers operate private practices that are open during traditional business hours.

Outpatient services in Henderson County include several private practices, as well as behavioral health centers that are affiliated with larger organizations and hospitals. There are also a variety of regional options available to Henderson County residents.

2 Level II: Intensive Outpatient/Partial Hospitalization

Intensive outpatient services are classified as level 2.1. Medical care is included in intensive outpatient services and is typically offered within 72 hours in person or 24 hours a day via telephone. These services are provided for a minimum of 9 hours of treatment per week, but no more than 20 hours. AdventHealth offers some intensive outpatient services and Family Preservation Services offer IOP.

The next step in Level II is Partial Hospitalization, classified as Level 2.5. Partial hospitalization is a minimum of 20 hours per week but is not 24-hour treatment (2022). Individuals in partial hospitalization report to, or are transported to, treatment facilities for regimented programs. Both Intensive Outpatient and Partial Hospitalization services are designed for individuals with more monitoring and support than typical outpatient services provide.

3 Level III: Residential/Inpatient Services

Level 3 services include 4 sub-levels of care. Level 3.1 is low-intensity treatment that is clinically managed. Group homes are an example of residential services. Residential services are recommended for individuals who need recovery maintenance support, as treatment requirements are only 5 hours per week. Level 3.3 is population-specific, high-intensity, clinically managed treatment. Individuals with traumatic brain injuries, cognitive functioning issues, or developmental disabilities benefit from this level of care, as it is designed to allow for more time to process and internalize treatment.

Level 3.5 consists of clinically managed residential services for individuals who are at-risk of harm to themselves or others, and often are experiencing severe psychological or social issues. Care is provided 24 hours per day. Level 3.7 is high-intensity inpatient treatment that is medically managed. This service provides intensive medical and/or psychological monitoring. Although the service is provided 24 hours per day, daily physician interaction is not required (2022). Regional residential options have been identified as Silver Ridge Recovery Center, Crest View Recovery Center, and Tapestry Residential Programs.

4 Level IV: Intensive Inpatient

The most intensive treatment services in the continuum fall under Level 4. Level 4 services include 24 hour per day nursing care and daily physician requirements (2022). AdventHealth and Pardee Paths offer these inpatient services in Henderson County. Regional options include ADATC State Substance Use Treatment, Rutherford Regional Inpatient Unit, and Freedom Detox.

Crisis Services

It is necessary to map and evaluate crisis services that are available to Henderson County residents, as data in the Root Cause Analysis Report indicates that these services are often the first point of contact for individuals experiencing Opioid Use Disorder (OUD). County data and community feedback also indicate that this category of services is often over-utilized or above capacity.

For this report, the crisis services category includes walk-in centers and facility-based crisis, community-based services, and crisis hotlines. Most individuals access walk-in crisis services through emergency departments. Pardee Hospital and Advent Health Hendersonville offer 24/7 Emergency Department services for Henderson County.

Community-based crisis services include EMS and Mobile Crisis. Henderson County EMS frequently responds to community overdoses and has observed an upwards trend in the utilization of Narcan and/or Naloxone for overdose reversals. RHA provides mobile crisis services to Henderson County residents.

Emergency services is most often dispatched through 911, which serves as a primary crisis line for many residents. NC has also recently implemented 988, as a behavioral health-specific crisis line. This crisis line went live in 2022 and is managed by the National Suicide Prevention Lifeline.

Crisis lines are often accessed by family members or individuals needing information rapidly. Vaya Health, Henderson County's Managed Care Organization (MCO), offers a 24/7 access to care crisis line that provides resources and linkages to individuals needing crisis services. Additionally, commercial insurance plans that manage state Medicaid contracts are now required to operate 24/7 crisis lines for their beneficiaries. These include AmeriHealth Caritas, Healthy Blue, United Healthcare, WellCare, and Carolina Complete Health.

Harm Reduction

The purpose of harm reduction programs is to keep individuals safe until they are able to enter treatment or provide clear pathways to treatment as an alternative to justice involvement. Naloxone distribution, diversion programs, syringe exchange and treatment courts are harm reduction interventions. These interventions are recommended programs in the NC MOA.

Syringe exchange programs are available in Buncombe County through WNCAP and Buncombe County Health & Human Services. Naloxone can be accessed through non-profits such as the Free Clinics, and is left at the scene when EMS responds to an overdose. There are currently no diversion programs or treatment courts in Henderson County.

Recovery Supports

Community supports that help maintain stable recovery are essential in the treatment process. Peer Support Services and Support Groups are evidence-based practices that provide individuals experiencing OUD vital connections to other people with lived experience and community resources. Peer support professionals also offer connections to care that assist in the continuity of treatment services along the continuum. Henderson County has access to multiple peer support services and support group options, as well as a post overdose response team (PORT).

Medication Assisted Treatment (MAT) is also a recovery support that is recommended as a priority in the NC Opioid and Substance Use Action Plan. Henderson County has access to both local and regional MAT providers.

Recovery housing and workforce development are essential elements of recovery, also recommended in the action plan and the NC MOA. REAL Recovery Sober Living and First Step Farms were identified in the directory as regional recovery housing and workforce development resources. Further investigation into programs and resources for recovery housing and workforce development located within Henderson County will be necessary.

Needs Assessment Conclusions

The analysis of services in Henderson County included mapping identified resources according to State recommendations and in accordance with ASAM's standards of levels of care. This mapping allows surface-level visualization of potential gaps in the continuum of services for substance use disorders in Henderson County. It does not account for barriers to accessing treatment services, which appear to be critical in consideration of the data trend of high utilization of crisis services and low utilization of walk-in services.

Observations from this preliminary analysis indicate opportunities for growth in all five domains. Of note are the categories of prevention and early intervention, inpatient and residential treatment programs, naloxone distribution, diversion programs, treatment courts, recovery housing, and workforce development. These observations are based on the qualitative measure of the existence of available programs in Henderson County. However, the existence of a program does not always indicate access to individuals who need services.

Ongoing research in Henderson County has indicated fractures in the care continuum that may not be obvious from simply mapping resources. The REAL Academy's Administrative Tethering Theory has been used to evaluate deficiencies in the substance use treatment delivery service model (Marino et al., 2022). A subsequent assessment in determining gaps in services will need to penetrate the layer of quality and accessibility of services in the continuum, as a follow-up to the evaluation of the existence of services in the county.

The identified strategic priorities of recovery support services, early identification, evidence-based addiction treatment, collaborative strategic planning, and criminal justice diversion programs align with the observations in root causes and service gaps. Ongoing observations and data collection will need to be performed throughout the life cycle of the Opioid Settlement funding to evaluate the effectiveness of interventions selected to address root causes and service gaps. Additionally, barriers to accessing treatment will need to be identified and addressed, in order to successfully implement interventions that fall under the strategic priority of evidence-based addiction treatment.

GOALS & OBJECTIVES

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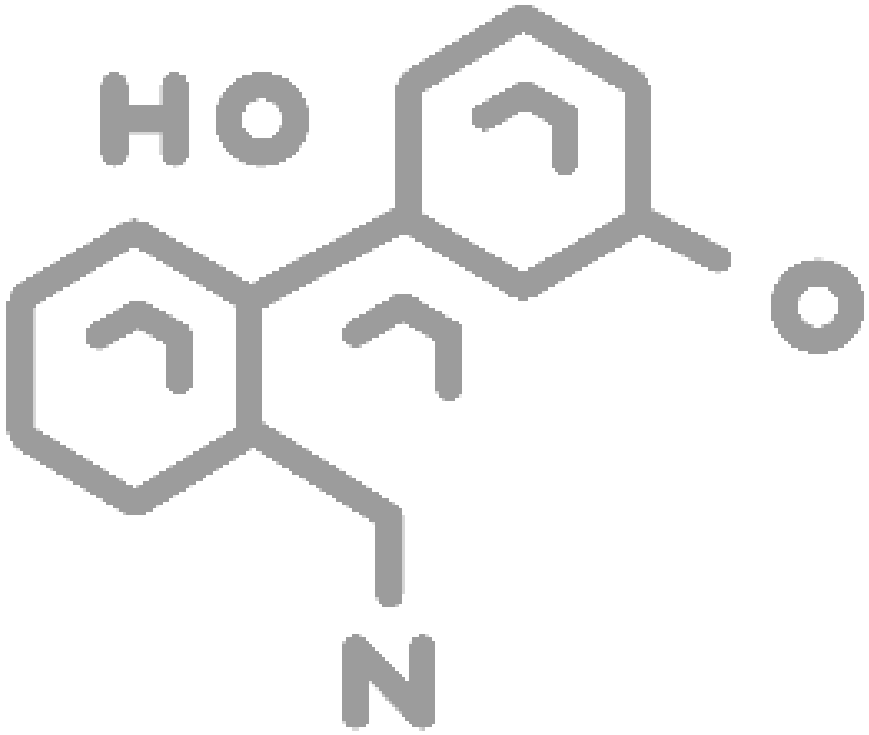

Shared Vision for Positive Community Change

The goals and objectives for the use of Opioid Settlement funding begin with the shared vision for positive community change. This vision articulates the collaborative nature of achieving the shared goal of eliminating OUD and its impacts on Henderson County. Within the vision statement are the elements of the goals and objectives of the County.

Formulating and articulating a shared vision is central to building an aligned consensus among stakeholders working on a shared project. Agreeing on a common goal and working together towards that goal exponentially increases the impact of coordinated efforts, as well as the capacity of resources. Cohesiveness and commitment to a shared vision for positive community provides the framework for community partners to develop programs and networks to achieve the mission of preventing opioid misuse and providing access to treatment for those that are experiencing Opioid Use Disorder (OUD).

The development of the shared vision increases ownership and commitment to finding solutions that work to achieve the common goal of decreasing the prevalence and negative effects of OUD. Likewise, this alignment encourages collaboration and cooperation between diverse agencies and programs that not only strengthen services for OUD but can also be generalized to other public health and social issues that the community may face. Henderson County's shared vision for positive community change provides a foundation for action that is sustainable throughout the lifespan of Opioid Settlement Funding.

Feedback from Collaboratives and County Workgroup

The shared vision was developed from feedback gathered from community collaboratives and the county workgroup. Trends in data from the CRC, the Substance Use Task Force, and the Opioid Settlement Workgroup were compiled to ensure that the vision was comprehensive and relevant. These trends included access to treatment and resources, alignment and coordination of resources, prevention, education and support systems for individuals in recovery.

From these common themes, it can be derived that Henderson County stakeholders are invested in preventing OUD and providing training, working together to achieve solutions, and supporting individuals in recovery. In turn, this indicates a vision where Henderson County residents have access to these supports and services. These elements were then compiled into a single vision statement that was refined and finalized by the County Opioid Settlement Workgroup.

Vision Statement

Henderson County's shared vision statement for positive community change is:

"Henderson County envisions a future where Opioid Use Disorder no longer has a devastating impact on its residents. Our vision is for all individuals and families to have access to well-coordinated, community-wide evidence-based services and resources that address Opioid Use Disorder, including education, prevention, intervention, and treatment programs."

The elements of the vision statement are the macro-level goal of eliminating the detrimental effects of OUD across the county and the elements of the strategic priorities, which demonstrate how this vision will be accomplished. County data supports the necessity to increase access to care and to develop efficient coordination among providers. The vision statement articulates the importance of access and coordination, in addition to the strategic priorities.

Goals & Objectives

Using the vision statement as a guide, goals and objectives were then created from needs assessment data. North Carolina's Opioid Settlement Dashboard and Substance Use Action plan also provide recommendations for community-level goals that impact state-level outcomes. Based on the root cause analysis, report on gaps in services, and input from community stakeholders, the following goals and objectives can be used to evaluate the impact of selected interventions. The following objectives are specific, measurable, achievable, relevant, and time-bound (SMART):

Reduce Opioid-Related Deaths :

- Specific: To reduce the number of opioid-related deaths in Henderson County by 25% by 2028.
- Measurable: The success of the goal can be measured by tracking the number of opioid-related deaths in Henderson County before and after the implementation of interventions aimed at reducing the number of deaths.
- Achievable: The goal is achievable with the implementation of targeted interventions and strategies aimed at reducing opioid misuse and overdose, such as increasing access to treatment services, improving recovery supports, and providing education and awareness campaigns.
- Relevant: Reducing opioid-related deaths in Henderson County is highly relevant to the local community, as it impacts not only individuals and families, but multiple organizations along the continuum of crisis services. Opioid-related deaths are also preventable deaths. Achieving this goal can prevent trauma occurring from the loss of a loved one, keep families together, and increase capacity in crisis services.
- Time-bound: The goal is time-bound with a specific timeframe of five years for achieving a 25% reduction in opioid-related deaths.

Reduce Rate of Overdoses :

- Specific: To reduce the rate of fatal opioid overdoses in Henderson County by 20% within the next 5 years.
- Measurable: The success of the goal can be measured by tracking the number of fatal opioid overdoses in Henderson County before and after the implementation of interventions aimed at reducing the rate of overdoses.
- Achievable: The goal is achievable with the implementation of targeted interventions and strategies aimed at reducing opioid misuse and overdose, such as increasing access to treatment services, improving recovery supports, and providing education and awareness campaigns.
- Relevant: Reducing the rate of fatal opioid overdoses in Henderson County is relevant to the local community, as evidenced by increases in occurrences of Narcan administration, ED presentations, and EMS utilization.
- Time-bound: The goal is time-bound with a specific timeframe of five years for achieving a 20% reduction in the rate of fatal opioid overdoses.

Increase Access to Treatment

- Specific: To increase the number of individuals with Opioid Use Disorder who receive treatment in Henderson County by 30% within the next 5 years.
- Measurable: The success of the goal can be measured by tracking the number of individuals with Opioid Use Disorder who receive treatment in Henderson County before and after the implementation of interventions aimed at increasing access to treatment.
- Achievable: The goal is achievable with the implementation of targeted interventions and strategies aimed at increasing access to treatment, such as identifying and addressing barriers to accessing treatment, providing coordination and navigation services, and implementing diversion programs like Recovery Court.
- Relevant: Increasing access to treatment for individuals with Opioid Use Disorder is highly relevant to the local community, as evidenced by the low occurrence of individuals accessing walk-in and outpatient treatment.
- Time-bound: The goal is time-bound with a specific timeframe of two years for achieving a 30% increase in the number of individuals with Opioid Use Disorder who receive treatment in Henderson County by 2028.

Improve Coordination of Care

- Specific: To improve coordination of care for individuals with opioid use disorder by implementing a care coordination system that ensures timely and effective communication among healthcare providers, behavioral health providers, and community-based organizations within the next 5 years.
- Measurable: The success of the goal can be measured by tracking the number of individuals with opioid use disorder who receive coordinated care, as well as by assessing improvements in health outcomes, such as reduced relapse rates and improved recovery outcomes.
- Achievable: The goal is achievable with the employment of healthcare navigators and coordinators.
- Relevant: Improving coordination of care for individuals with opioid use disorder is highly relevant to the local community, as opioid misuse and addiction is a significant public health issue that requires a coordinated and comprehensive approach to treatment and recovery.
- Time-bound: The goal is time-bound with a specific timeframe of 5 years for implementing a care coordination system and measuring improvements in coordination of care and health outcomes.

Decrease Jail Recidivism

- Specific: To reduce jail recidivism for individuals with opioid use disorder by 30% within the next 5 years through the implementation of evidence-based interventions aimed at supporting reentry and recovery.
- Measurable: The success of the goal can be measured by tracking the recidivism rate for individuals with opioid use disorder before and after the implementation of reentry and recovery support interventions.
- Achievable: The goal is achievable with the implementation of targeted interventions and strategies aimed at supporting reentry and recovery, such as care coordination services.
- Relevant: Reducing jail recidivism for individuals with opioid use disorder is highly relevant to the local community, as evidenced by the significantly high population of individuals in the Henderson County detention center with substance use disorders.
- Time-bound: The goal is time-bound with a specific timeframe of five years for achieving a 30% reduction in jail recidivism for individuals with opioid use disorder.

Decrease Utilization of Crisis Services

- Specific: To decrease the utilization of crisis services for individuals with opioid use disorder by 20% within the next 5 years by improving access to and utilization of community-based treatment and support services.
- Measurable: The success of the goal can be measured by tracking the number of crisis service utilization before and after the implementation of community-based treatment and support services.
- Achievable: The goal is achievable with the implementation of targeted interventions and strategies aimed at improving access to and utilization of community-based treatment and support services, such as increasing access to treatment programs, providing care navigation to target populations, and providing education and awareness campaigns to increase awareness of available treatment options.
- Relevant: Decreasing the utilization of crisis services for individuals with opioid use disorder is highly relevant to the local community, as the utilization of emergency services as continued to trend upwards, creating capacity issues in the public health system.
- Time-bound: The goal is time-bound with a specific timeframe of 5 years for implementing community-based treatment and support services and measuring the decrease in the utilization of crisis services.

STRATEGIES & INTERVENTIONS

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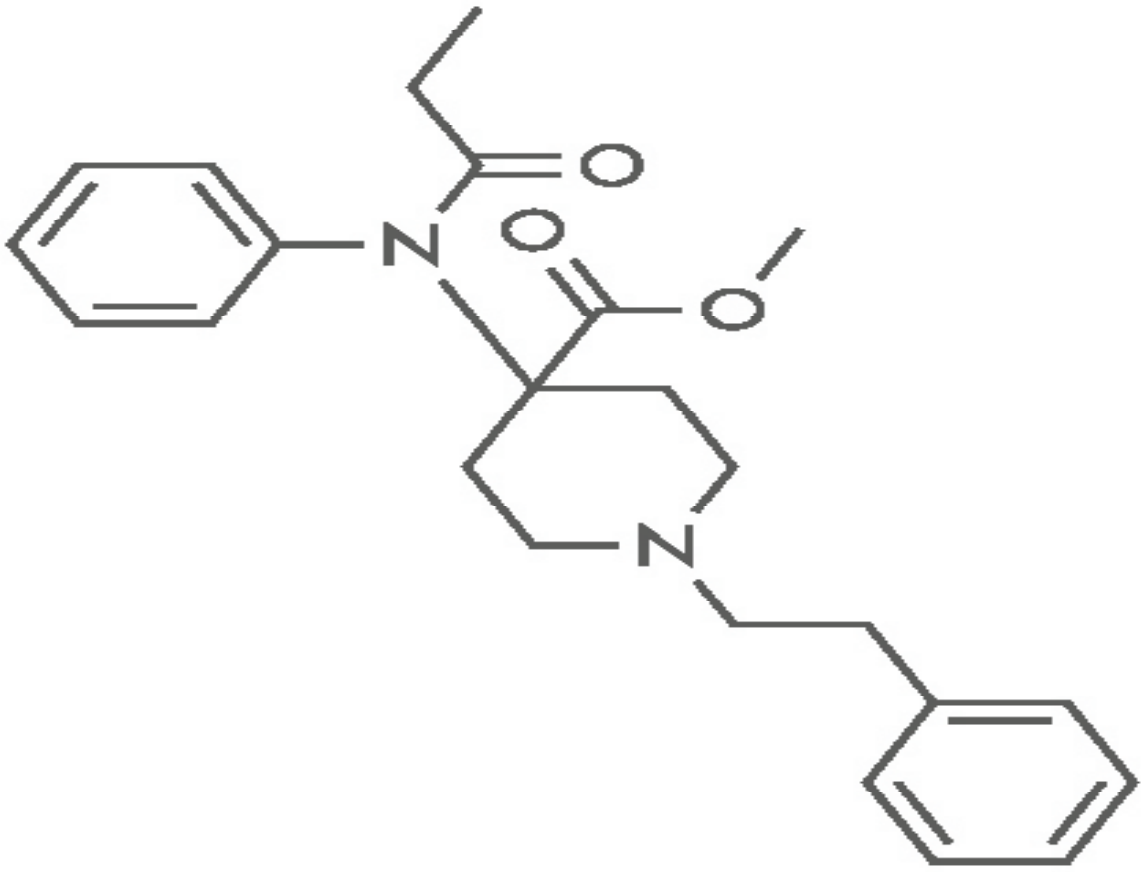

Prioritized Strategies

In consideration of the priorities set by both the federal and state governments, and the guidelines of the MOA, Henderson County leadership utilized existing workgroups to establish strategic priorities that best address the needs of the county. Commissioner Lapsley re-convened the Substance Use Task Force that he chaired in 2018-2019. The Task Force had previously created a report that was submitted on May 9, 2019. This report offers an extensive history of the impact of the opioid crisis on Henderson County and recommendations from the Task Force.

The re-convened Task Force met on three occasions: January 13, February 17, and March 17, 2022, and was comprised of representatives from the following community organizations: AdventHealth Hendersonville, Pardee UNC Healthcare, Blue Ridge Health, MAHEC, the Hope Coalition, the Free Clinics, the Sheriff's Department, the Health Department, DSS, VAYA, First Contact Addiction Ministries, and community members Dr. Medina, Stephen Mace and Jason Harris.

Task force members voted on the strategies listed under Option A of the NC MOA. The top four strategies were then selected to be prioritized. The results of the poll identified the top four strategies as:

1. Recovery Support Services

2. Early Intervention

3. Evidence-Based Addiction Treatment

4. Criminal Diversion Justice Programs

These strategies were selected based on the expertise and observations of Task Force members, which include representatives from substance use treatment, prevention, and advocacy organizations as well as public schools, law enforcement and the justice system.

Additionally, much of this work began with the Community Health Assessment, which has historically identified mental health and substance use as public health priorities. While planning for the 2021 Community Health Assessment, team members selected key indicators to observe while collecting information for the assessment. These indicators were: number of EMS response call for overdoses, county emergency department visits for overdoses, number of naloxone administrations, and number of children in foster care due to parental substance use. These key metrics serve as a starting place in the strategic planning process because they identify where in the system that the community is seeing the most impact from OUD and could potentially serve as baseline indicators for outcome measures.

The 2021 Community Health Assessment once again identified Substance Misuse as a health priority for Henderson County. Each priority is assigned to an action team, hence the inception of the Substance Use Action Team, which began meeting quarterly in January 2023.

The data indicators and the strategies that were prioritized from both local workgroups lend insight into the negative consequences of OUD that providers and county agencies are experiencing; as well as the approach that the members have collectively agreed upon in terms of selecting interventions.

Finally, the County workgroup selected an additional two priorities to support and sustain the original four selections. Collaborative Strategic planning will be necessary in the coordination of efforts to address OUD, as well as ensure that milestones within the implementation plan are being reached. Further research into the development and implementation of priorities needed to address service gaps and root causes demonstrated the need to also unlock selections under Exhibit B of the NC MOA.

The culmination of the root cause analysis and service gaps reports, developed by the REAL Academy consulting team outside of the workgroup, lends credence to the prioritized strategies that were selected by the workgroup. Together, the reports demonstrate root causes that contribute to Opioid Use Disorder in Henderson County, and potential gaps in services that further antagonize these root causes.

In consideration of the prioritized strategies, Henderson County leadership will be able to:

- A.) Explicitly identify interventions that fit into a strategy under the selected option of the MOA;
- B.) Address root causes of OUD; and
- C.) Strengthen the continuum of care by adding services and/or capacity where there are identified gaps.

Exhibit A Priorities

1. Recovery Support Services

Under Exhibit A to the NC MOA, recovery support services include peer support specialists and care navigators in settings that support individuals in recovery from OUD by helping them access resources and services. The behavioral health environment in NC is fragmented and hard to navigate, which creates an additional barrier to care across the state. Providers and helping organizations often work in silos, further complicating an already complex system.

Assistance and advocacy navigating community resources could also promote treatment at an earlier phase in the disease cycle, before crisis or overdose. The Root Cause Analysis Report (2022) demonstrated that individuals are more likely to enter crisis services or the criminal justice system than they are outpatient or less restrictive treatment options. Henderson County data indicates upwards trends in EMS and ED utilization for opioid-related presentations, as well as significantly high numbers of individuals incarcerated for drug-related offenses. Recovery support programs have been shown to improve participation in treatment and lower crisis service utilization and justice involvement.

Creating and/or expanding recovery support services aligns with addressing many of the primary causes of OUD that were identified in the Root Cause Analysis Report. However, placement and scope of work of these interventions will need to be examined against already-existing services. The Preliminary Gaps in Services (2022) report reflected the presence of multiple agencies with peer support services and Peer Living Rooms. Additionally, a key element of Medicaid Transformation in NC is providing beneficiaries with care managers through the Managed Care Organizations (MCOs). Many of these services are experiencing capacity issues or may be limited to a very specific population- both of which may be opportunities for increasing impact.

Recent data from the Henderson County Crisis Response Collaborative illustrated an opportunity for improving outreach after discharge from a treatment facility. The MCO's are required by the state to follow-up with individuals within seven days of discharge, through contracts with provider agencies. This critical window after discharge is significant due to risk of overdose and noncompliance with prescribed treatment plans. Examining the seven-day follow-up process in Henderson County may provide additional insight into interventions that can increase the rate of follow-up through recovery support services.

Key metrics for identifying outcomes from recovery support interventions include increasing the rate of follow-up after discharge and increasing the number of individuals accessing outpatient or walk-in services, while decreasing crisis services utilization and recidivism. Root causes can also be prioritized for peer support specialists or care navigators to address, such as employment, transportation, housing, and eliminating barriers to treatment. Further examination of existing recovery support services in Henderson County in terms of accessibility and capacity should help decision-makers further define areas of opportunity to instate recovery support interventions through Opioid Settlement funding.

2. Early Intervention

The NC MOA outlines early intervention as programs, services, or training to "encourage early identification and intervention for children or adolescents who may be struggling with problematic use of drugs or mental health conditions, including Youth Mental Health First Aid, peer-based programs, or similar approaches". Selected trainings may target individuals who serve or are in contact with children and adolescents.

Henderson County Department of Social Services (DSS) data exhibits an increase in children that are exposed to drugs in their homes. Early exposure to illicit substances is listed as a root cause of substance use later in life. Early interventions and education could offset this upwards trend through targeting this population that was identified in the Substance Use Action Team, which could also serve as an outcome metric. Early intervention could also contribute to the downstream impact of reducing stigma and raising awareness so that adults access treatment services before crisis.

Other critical issues that were identified in the Substance Use Task Force were absenteeism from school related to drug use, and the prevalence of childhood trauma. Trauma and resiliency training are potential options that can be explored that address the root cause of trauma, as well as build protective factors for those that have already experienced trauma.

As with recovery support services, Henderson County leadership will need to further examine existing programs to evaluate for duplication and need of expansion. Partnership with the school system, DSS and other community agencies will be vital in identifying baseline data, existing trainings, and opportunities to target interventions.

3. Evidence-Based Addiction Treatment

Following the American Society of Addiction Medicine's national guideline, county governments have the option to support evidence-based treatment services. This includes Medication Assisted Treatment (MAT), Federally Qualified Health Centers (FQHC), treatment that is provided through collaboration with justice systems, and other evidence-based programs. Capital expenditures for facilities that address OUD are also allowable, on a prorated basis if OUD treatment is not the entire service array.

The Preliminary Service Gaps Analysis (2022) examined the continuum of care in Henderson County ranging from Early Intervention/Prevention to Recovery Supports. Evidence-based treatments were categorized according to the American Society of Addiction Medicines recommendations. The consultant team mapped available programs according to these categories to demonstrate the presence of services. According to the preliminary overview, outpatient services had the most options while intensive inpatient/partial hospitalization, residential services, and intensive inpatient had the least amount of consumer options.

Further examining pressure points in the service continuum is necessary to identify barriers in accessing treatment and capacity issues. Feedback from the Substance Use Action team and data presented in the Henderson County Crisis Response Collaborative indicate that individuals needing to access treatment are experiencing very long wait times before being assessed, are not being assessed, are sent home awaiting placement, or are unable to pay for services. This feedback, coupled with the service gaps report, exhibits a potential bottleneck in the continuum of care. Staffing and capacity issues in outpatient services combined with few options beyond that level of care are creating an over-utilization of crisis services because the disease has come into a critical phase.

Considering the crisis services on the continuum, EMS and Emergency Departments are experiencing increases in presentations for opioid use disorders and overdoses. Building capacity through targeted interventions like Community Paramedicine has shown evidence in surrounding counties of engaging individuals with treatment in a critical window while increasing capacity for emergency response services.

While the Root Cause Analysis Report and the Gaps in Services Report support the strategic priority of evidence-based addiction treatment, it will be necessary for Henderson County leadership to evaluate barriers to accessing treatment and provider capacity when selecting an intervention. Recovery support interventions can potentially be used in tandem with evidence-based treatment interventions, to promote upstream engagement in treatment. However, if provider and emergency services capacity is not examined, the selected intervention could strain an already-stretched continuum.

4. Criminal Diversion Justice Programs

Pre- and post-arrest diversion programs and pre-trial programs that connect individuals with resources related to treatment, recovery, harm reduction, prevention, healthcare, and other services are included in Option A of the NC MOA. Henderson County data supports the need for diversion programs. A significantly high percentage of the jail population is in custody due to a drug infraction. National data from SAMHSA indicates that an individual with OUD is more likely to enter the justice system than treatment. Diversion programs break the cycle of recidivism and offer individuals options outside of the detention center. Currently the jail partners with a local non-profit organization to bridge persons released from jail to treatment in the community. A more robust diversion program may be an effective method of intervention in creating accessible treatment.

Currently, Henderson County community partners are evaluating regional treatment court programs for efficacy and barriers to implementation. Other funding sources for treatment courts will also need to be identified, to ensure that all components of the program are able to be funded.

5. Collaborative Strategic Planning

Solid performance measures and environmental evaluation will prove to be critical in the County's ability to adapt interventions over the course of the funding. As interventions become effective and the needs of the community change, short-term and long-term planning and flexibility will be necessary as the County works to address the Opioid Epidemic.

6. Recovery Housing

Recovery housing supports are a part of a long-term strategy for Henderson County, as the Root Cause Analysis Report indicated housing and poverty to be cause for concern. Stable housing is a fundamental element for other interventions and maintaining recovery. When the Substance Use Task Force met in 2022, funding for recovery housing support did not appear feasible given the original allocation of $9 million over 18 years. However, the additional Opioid Settlement funding may allow a sustainable platform for establishing recovery housing in Henderson County.

Remaining Strategies

Of the remaining 8 strategies under Option A, Syringe Service Programs, and PORT tied for 5th rank, followed by Addiction Treatment for Incarcerated Persons, Naloxone Distribution, Reentry, and Employment-Related Services, respectively. Henderson County has existing harm reduction services and naloxone distribution through the Public Health Department and partnering agencies. PORT has also already been established; however, feedback from treatment agencies indicate obstacles in maintaining contact with individuals who have overdosed. A coordinated effort within EMS of a Community Paramedic and a Co-responder may offer a more effective alternative. Prioritized interventions, like recovery supports, can be designed to help bolster existing Henderson County programs.

Exhibit B Priorities

1. Criminal Justice Diversion Programs

In addition to supporting and expanding treatment services, additional funding will be needed to implement a successful Recovery Court program. While the Program Coordinator and related case management expenses are allowable under Exhibit A #10 Criminal Justice Diversion Programs, additional staff support from the District Attorney's office will be necessary to launch and sustain the program. An analysis of personnel capacity determined that the District Attorney's office would require additional staff to be able to support the needs of the Recovery Court program. Funding for District Attorney Staff will need to be designated under Exhibit B Part D #3: Support treatment and recovery courts that provide evidence-based options for persons with OUD and any co-occurring SUD/MH conditions.

Additionally, the establishment of a Community Paramedicine program would serve as a "bridge" to connect individuals to treatment and resource options. Leveraging the accessibly and specialized training of paramedics within the community will offer outreach at critical windows to engage individuals with treatment. Employing the already-existing infrastructure of the County's EMS team will expand access to evidence-based treatment programs, while establishing increased coordination on the continuum of care for Opioid Use Disorders.

2. Prevention

Henderson County has established a prevention program in the public school system called the STAR program. This program is designed to prevent young people from misusing opioids. Utilizing Opioid Settlement funding would further sustain the program and potentially add capacity. Funding for the STAR program falls under the prevention category of Exhibit B, G #9 in the NC MOA. School-based or youth-focused programs or strategies that have demonstrated effectiveness in preventing drug misuse and seem likely to be effective in preventing the uptake and use of opioids. Additionally, County leadership is considering additional programming, similar to that of "TC Strong" in Transylvania County, that also aims to prevent substance use in young people. This program will likely fall into the same category as the STAR program.

RECOMMENDED INTERVENTIONS

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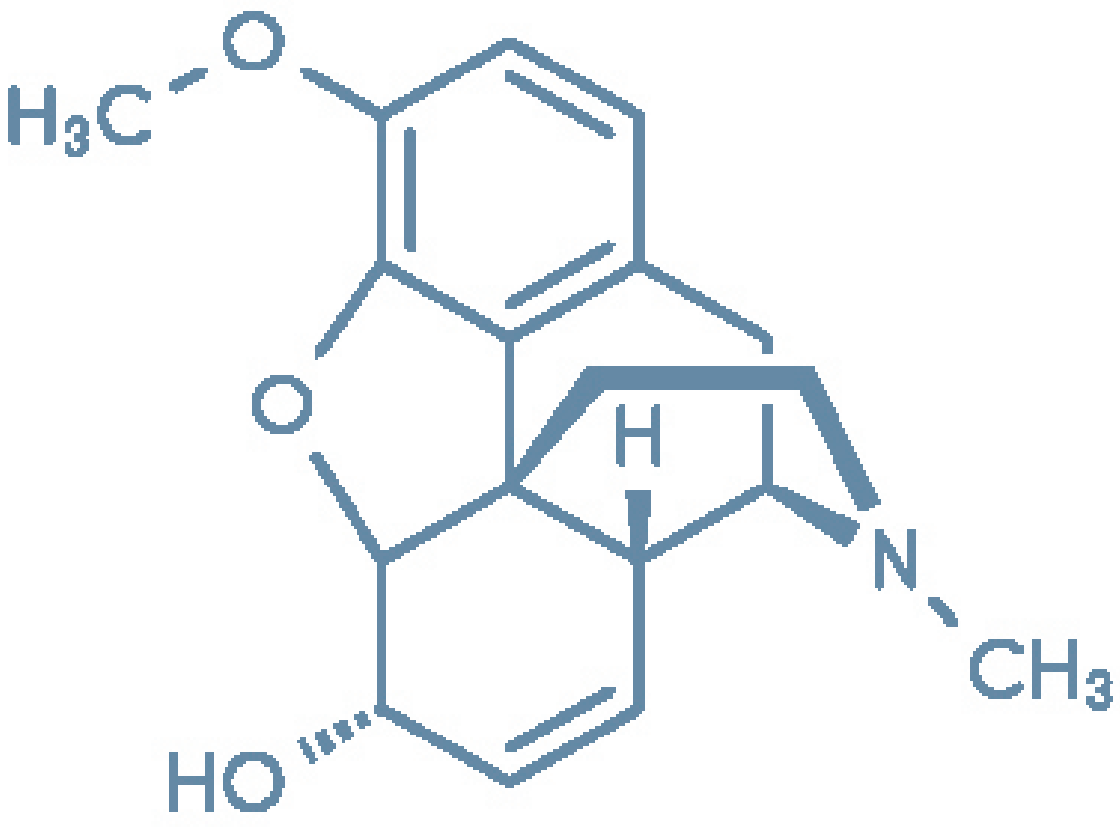

Intervention Details

The following recommendations for interventions were developed by the county workgroup. Goals and objectives were mapped to align with the strategic priorities to identify interventions that would follow the guidelines of the NC MOA as well as address the root causes of OUD and gaps in the continuum of services. The selected interventions were evaluated for fitness within the strategic priority, level of impact, and funding qualifiers.

Strategic Priority	Intervention(s)
Early Intervention	Detention Healthcare/Reentry Navigator Recovery Housing DSS Staff Support
Evidence-based Addiction Treatment	Address Barriers to Accessing Treatment & Bolster Existing Programs
Criminal Diversion Justice Programs	Adult Recovery Court / Coordinator
Collaborative Strategic Planning	Substance Use Grant and Contract Coordinator
Recovery Housing	Develop Recovery Housing Programs & Long-term Strategies
Treatment	Staff Support for the District Attorney's Office Community Paramedicine
Prevention	STAR Program School-based Interventions

Substance Use Grant & Contract Coordinator

The needs assessment and feedback from the community indicated a gap in centralized organization of county-funded substance use services. The Opioid Settlement Workgroup compiled a “master budget” of substance use funding currently managed by Henderson County. With the potential influx of more Opioid Settlement funding, as well as grant funding for programs like Recovery Court, it became apparent that there is a critical need for a position that oversees contracts and grants related to substance misuse. This position will also ensure that the strategic plan for Opioid Settlement funding is being followed, and that outcomes are reported accordingly. Responsibilities of this position include:

- Monitor Opioid Settlement/Substance Use Disorder strategic plan implementation & track milestones.
- Update strategic plan according to policy/protocol.
- Oversee county contracts for substance use services to ensure that service providers comply with contractual obligations, meet performance standards, and deliver quality services.
- Maintain extensive knowledge of substance use programs and resources available to residents in Henderson County and stay informed of changes to substance use treatment practices, regulations, and funding streams.
- Identify barriers to accessing treatment services and make recommendations to address identified barriers.
- Identify service gaps in the substance use treatment continuum, assess the needs of the community, and make recommendations to the county manager to address identified service gaps.
- Manage substance use grants, including grant application, reporting, and compliance with grant requirements.
- Collect program data and report outcomes to county leadership, using data analysis to identify trends, program effectiveness, and areas for improvement.
- Leverage funding and services to obtain additional funding as needed.

The value in this position is demonstrated through successful achievement of goals and milestones in the strategic plan, compliance with funding requirements, sustainability of programs, and creating efficiency in County substance use funding. The Key Performance Indicators (KPIs) for this position include:

- Strategic Plan Compliance: Ensure that the County is progressively implementing the approved strategic plan through the accomplishment of short-term and long-term milestones.
- Contract Compliance: Ensure that all county contracts effectively address the County's needs and that contractors comply with the contract terms.
- Service Gap Identification: Identify service gaps in the substance use treatment continuum and develop strategies to address them.
- Outcome Reporting: Collect program data and prepare outcome reports for county leadership.
- Grant Management: Manage substance use grants and ensure compliance with grant requirements.
- Service Accessibility: Ensure that substance use services are accessible and available to all county residents in need. Cost Control: minimize/eliminate duplications in contracted services. Streamline contracted services to efficiently work together. Utilize outcome reports to ensure effective utilization of funds.

The estimated five-year cost of the position falls within the range of the Opioid Settlement budget. The cost benefits of the position include streamlining funding, preventing paybacks due to noncompliance, leveraging additional funding opportunities, and monitoring outcomes for quality assurance purposes.

Targeted Community Training

Targeted community training is necessary to ensure that education and resources are delivered to at-risk populations. The needs assessment identified a significantly high number of children in foster care due to parental substance use. This is an example of a population that would benefit from targeted education to prevent substance use later in life, offer early resources, and potentially address childhood trauma- a root cause of Opioid Use Disorder.

Detention Healthcare/Reentry Navigators

The Detention Healthcare/Reentry Navigator position will be in addition to an already-established position that has demonstrated positive impact in the detention center. The volume and workload of the existing position supports the recommendation of a second navigator. These positions play a crucial role in helping individuals released from jail to reintegrate into society. The navigators provide support and guidance to individuals during their transition from incarceration to the community. This position will also work in tandem with the Recovery Court Coordinator to identify appropriate referrals into the program.

Navigators help individuals access the complex web of social services, such as housing assistance, job training, and healthcare services, necessary to successfully reintegrate into society. They also provide individuals with information about community resources, such as support groups and counseling services, that will help maintain recovery while decreasing recidivism.

The Navigator's value has been witnessed through the work performed by the initial position. The additional position will expand the capacity to provide navigational services, and to support the retention of staff in these positions by more efficiently managing the workload. The position also addresses root causes of OUD identified in the needs assessment such as barriers to accessing care and isolation.

This identified intervention fits well with the strategic priority to provide recovery support services. The Navigator will help meet this priority by providing linkages to community services and supports to individuals while they are incarcerated. Additionally, these positions will serve as coordinators that will improve the continuity of care along the service continuum.

The cost to fund the position reasonably falls within the budget of Opioid Settlement funding. Reducing recidivism rates and preventing crisis services are examples of how the position can create cost-savings to the County, while meeting the goals of this strategic plan.

Recovery Court Coordinator & Related Case Management Expenses

Henderson County leadership has developed a goal of launching a Recovery Court Program in 2023. Recovery Court, sometimes referred to as treatment court, is a specialized court that aims to help individuals with substance use disorders overcome their addiction and avoid recidivism. The Recovery Court Coordinator will be critical in successful implementation of the program. This position will help develop policies and procedures and finalize the standard operating procedures before launch. After the program's launch, the coordinator will oversee its daily operations to ensure that it is effective in achieving the goals and objectives of supporting recovery while reducing recidivism.

Some specific duties of the recovery court coordinator will include:

- Program Management: A recovery court coordinator is responsible for overseeing the program's operations, including coordinating participant intake, managing court schedules, and ensuring compliance with program requirements. This helps to ensure that the program runs smoothly and efficiently, maximizing the chances of success for program participants.
- Participant Support: A recovery court coordinator works closely with program participants to provide them with support and guidance throughout the program. They can help participants access resources such as substance abuse treatment, mental health services, and employment assistance to address the underlying issues that contributed to their addiction.
- Collaboration: A recovery court coordinator works closely with a team of professionals, including judges, attorneys, treatment providers, and probation officers, to ensure that the program is effective in achieving its goals. They can facilitate communication and collaboration among team members to ensure that everyone is working together towards the common goal of supporting program participants.
- Data Management: A recovery court coordinator is responsible for maintaining accurate records and data related to the program's participants and outcomes. This information is essential for evaluating the program's effectiveness, identifying areas for improvement, and reporting on the program's impact to stakeholders.

The recovery court coordinator plays an essential role in the operation of a successful and sustainable recovery court program. By assisting with program startup, managing program operations, providing participant support, facilitating collaboration among team members, and maintaining accurate data, they demonstrate value by ensuring that the program is effective in achieving its goals of helping individuals overcome addiction and avoid recidivism.

The cost of the recovery court coordinator falls within the parameters of the Opioid Settlement budget. Many of the other necessary roles in the operations of Recovery Court are volunteers. This position will add value through cost-savings in the reduction of recidivism and protect the program's in-kind assets.

Additional Support for Recovery Court

Treatment and Recovery courts require involvement from various county disciplines to maintain the national standards for the program. Upon examining the capacity of the different county departments involved in the development and implementation of the program, it was determined that additional staff for the District Attorney's office would be needed to support the Recovery Court program.

Recovery Housing

The needs and gaps analysis indicates a critical need for recovery housing. Recovery housing, also known as sober living or transitional housing, plays a vital role in supporting individuals who are in recovery from OUD. These housing programs provide a safe and stable living environment for individuals who may not have a supportive home environment to return to. Recovery housing can also serve as a bridge between inpatient treatment and returning to independent living. When evaluating the sustainability and efficacy of other interventions (like Recovery Court), recovery housing is often a recommendation and/or requirement.

While surrounding counties, like Catawba and Buncombe, have options like Oxford House for recovery housing, Henderson County has no recovery housing within the county. During the initial phase of priority setting, the cost of establishing recovery housing within the county was outside of the budget range for annual allocations. However, as additional Opioid Settlement funding is being designated to NC counties, designating funds for recovery housing as an intervention under the priority of recovery supports is now a feasible budget item.

Funding for Treatment Services

The needs assessment identified gaps in the treatment service continuum, but data from collaborative groups and crisis services indicated that individuals are not accessing lower-level treatment options. This is evidenced by a disproportionately small number of individuals accessing outpatient and walk-in clinics, compared to those that are accessing services through EMS or the Emergency Department.

To properly address the strategic priority of evidence-based treatment options, barriers to accessing existing services will need to be addressed. Addressing barriers to accessing treatment allows existing treatment resources to be utilized more effectively, maximizing the impact of available services. Individuals seeking treatment will be more likely to receive appropriate care, resulting in improved treatment outcomes. Identifying and addressing barriers to accessing treatment can also help reduce disparities and improve heath equity. Individuals will also be more likely to remain in treatment and recovery, lowering the relapse rate.

From this assessment service gaps can be further defined. This information can be used to then fund new treatment programs or expand capacity in existing programs. Addressing barriers to accessing treatment before expanding treatment services is important to ensure that available resources are being used effectively, improve treatment outcomes, reduce disparities, improve retention rates, and identify service gaps.

STAR & TC Strong Programs

Prevention programs like the Sheriff's Department's STAR Program and TC Strong in Transylvania County have been acquiring success. Strengthening existing programs and considering initiatives similar to that of TC Strong with Opioid Settlement funding will provide sustainability and the potential for increasing capacity, as the programs continue to provide results.

DSS Support Staff

Treatment and Recovery courts require involvement from various county disciplines to maintain the national standards for the program. Upon examining the capacity of the different county departments involved in the development and implementation of the program, it was determined that additional staff for the District Attorney's office would be needed to support the Recovery Court program.

EVALUATION

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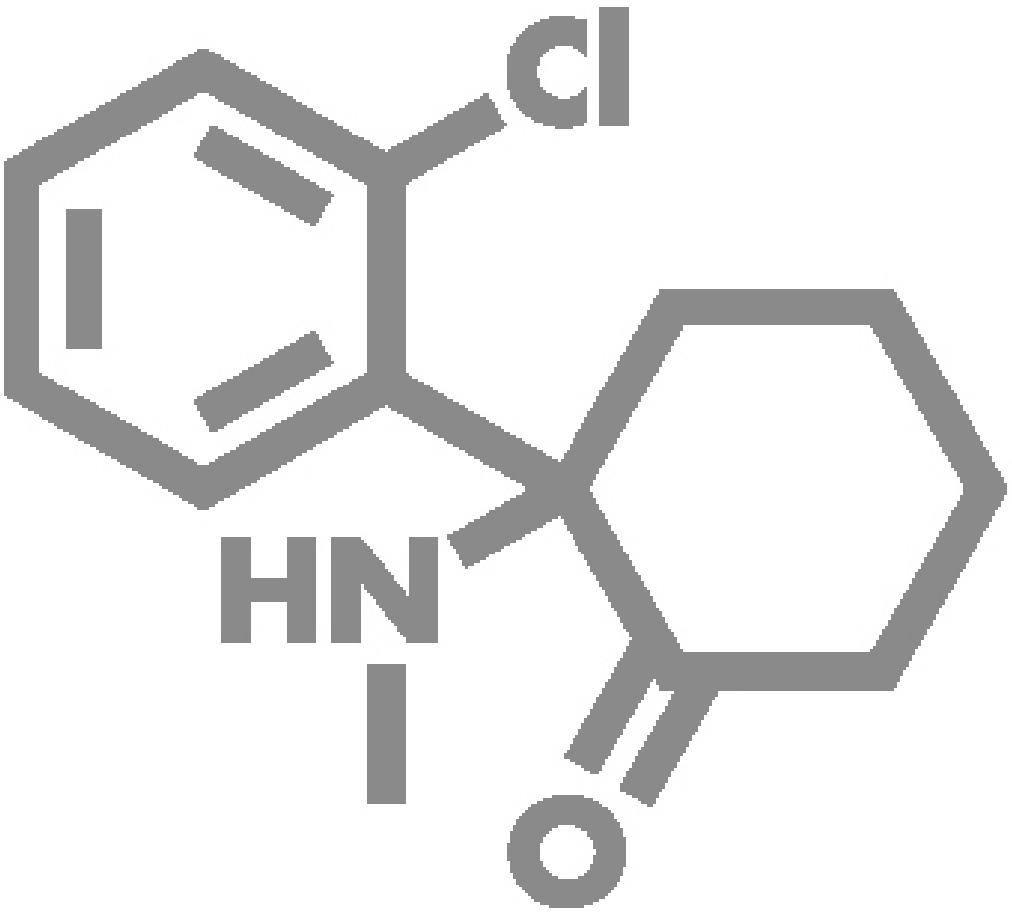


Identification of Key Performance Indicators (KPIs)

The following identified indicators were developed from the strategic priorities established by Henderson County leadership and an additional priority generated from the County Opioid Workgroup. The original priorities are: Early Intervention, Recovery Support Services, Evidence-Based Addiction Treatment, and Criminal Diversion Justice Programs. The fifth strategic priority was developed after the Root Cause Analysis Report and the Gaps in Services Report identified barriers to accessing treatment and an absence of macro-level coordination between programs, particularly those that are county funded.

Number of opioid-related overdoses in Henderson County.

Percent of Individuals who receive timely access to treatment.

Percent of Individuals who receive follow-up after discharge from inpatient treatment.

Percent of individuals who receive follow-up after release from incarceration.

Percent of individuals in target population who receive early intervention and overdose prevention education.

Number evidence-based treatment options (following ASAM Continuum).

Percent of jail-population of individuals with OUD.

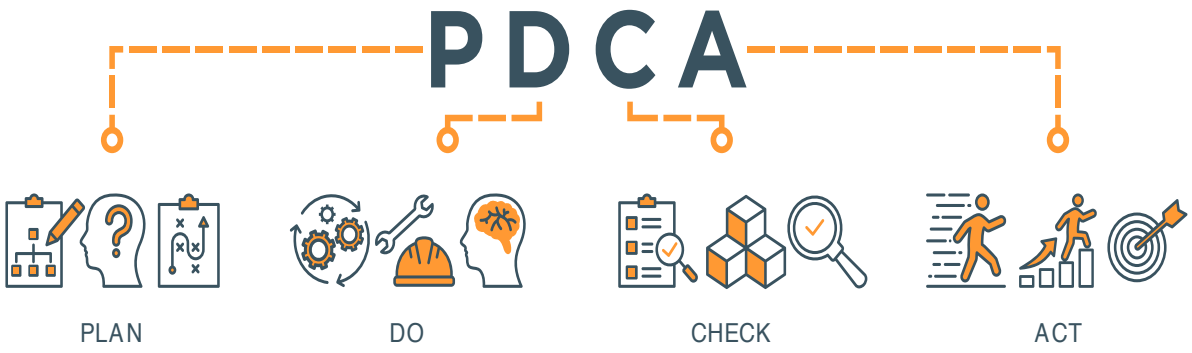
Each of these indicators can be used to evaluate the performance of selected interventions. However, they also factor into the development of interventions and job descriptions.

Monitor Progress

The Substance Use Grant and Contract Coordinator will be responsible for data collection and reporting outcomes to county leadership. Funded programs will routinely submit data to the coordinator who will serve as a centralized point of contact for information related to Opioid Settlement funding.

Conduct Evaluation

The Substance Use Grant and Contract Coordinator will be responsible for data collection and reporting outcomes to county leadership. Funded programs will routinely submit data to the coordinator who will serve as a centralized point of contact for information related to Opioid Settlement funding.



Refine Interventions

By following this plan for evaluating the effectiveness of the strategies and activities implemented with the opioid settlement funding, Henderson County can ensure that the plan remains relevant and effective over time, and that the funding is used to achieve measurable and sustainable impact in the community.

Conclusion

The Henderson County Strategic Plan outlines the needs of the community, objectives to achieving the shared vision, interventions that fit within the selected strategic priorities, and a framework for ongoing evaluation. The strategic plan complies with the recommendations of the NC MOA and will provide the foundation for the overarching mission of Opioid Settlement Funding to address the impact of the opioid crisis and the effects of substance misuse in Henderson County.

From this strategic plan, a corresponding implementation plan will be designed to identify a timeline and actionable milestones that will bring the interventions listed in the strategic plan to fruition. The implementation plan will provide a timeline with milestones to help track progress towards achieving the shared vision through the selected interventions.

Ongoing evaluation of the strategic plan is essential to ensure that the plan is achieving its intended goals and objectives, that resources are being allocated effectively, and that the plan remains relevant and adaptable over time. By monitoring progress, identifying areas for improvement, and engaging stakeholders, evaluation helps to ensure that the strategic plan is effective in addressing the opioid epidemic and improving the health and well-being of affected individuals and communities.

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