

Building the City of Solutions

Evaluating the Addiction Crisis Response in Huntington/Cabell County WV





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Executive Summary

Project Description

With funding from the Centers for Disease Control and Prevention (CDC) and the National Association of County and City Health Officials (NACCHO), the Division of Addiction Sciences within the Joan C. Edwards School of Medicine at Marshall University (Marshall) conducted this study to identify and describe the impact of critical elements of a community-wide response in Huntington/Cabell County, WV to the addiction epidemic. The community response resulted in an increase in the number of individuals with substance use disorder identified and referred to treatment that correlated with a two-year drop in overdose deaths just prior to the COVID-19 pandemic. This study describes the severity of the epidemic including the significant barriers. Key actionable components for other communities are reported with the approach and timing required to deploy them.

Introduction

By 2014, Huntington/Cabell County found itself in the midst of an addiction epidemic that put the entire community into crisis mode. The community came together to create a response to the epidemic, which was built on an unprecedented level of collaboration. This report evaluates the development of that response and outlines the critical timing and resources that made it successful.

Prior to the community response, Huntington, WV and surrounding Cabell County was much like many communities in regards to addiction. The focus of services were primarily on the clinical aspects of treatment and recovery. Agencies operated separately and often functioned as competitors. Medication assisted treatment (MAT) providers and peer-based or 12-step programs spoke of each other with disdain. The local governmental approach to addiction was

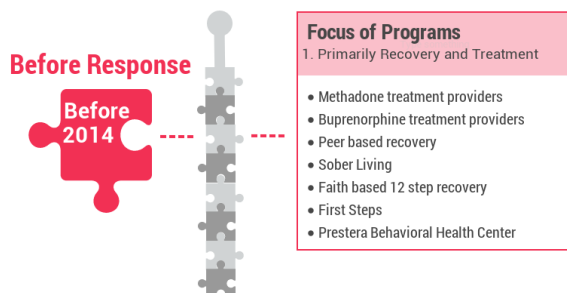


Figure 1: Programs prior to response

channeled through the police department. As the number of people struggling with addiction increased across the community, it became clear to many that those approaches were not sufficient to address the growing problem. Frontline workers often felt that with control over the resources (Key Stakeholders) did not understand the full consequences of addiction and were not empowered to address many critical issues.

“I think we spend a lot of time with people with initials after their names thinking they have the answer and the only thing they've been in is a book.”

- Frontline Worker

Those attitudes changed when the political, health, and university leadership publically admitted that the community was in trouble and worked together to create an environment of collaboration across the community. Frontline workers and patients were

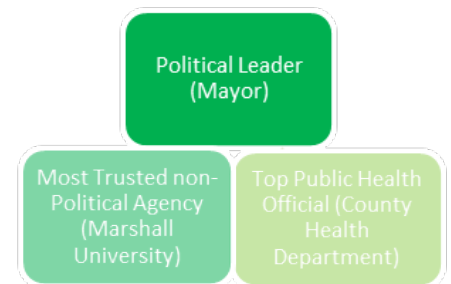


Figure 2: Critical leadership entities.

sought out for their expertise and encouraged to build natural connections between agencies. The overall result was a large increase in referrals to treatment and a decrease in overdose deaths.

Methods

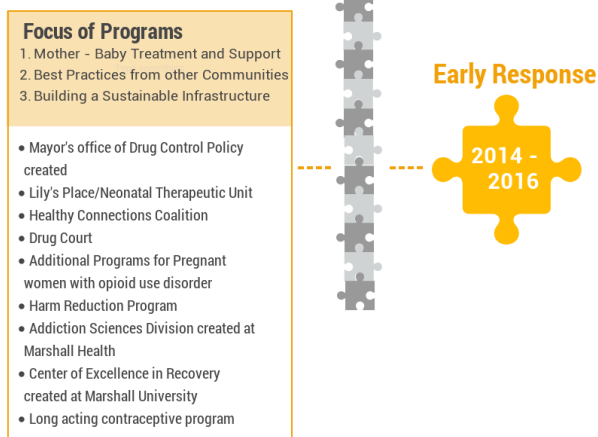
A multi-layered mixed methods approach was used by evaluators. Data was collected and analyzed using a variety of complementary methodologies.

- Qualitative data from those involved with the Huntington/Cabell County addiction epidemic response was collected by semi-structured interviews with 44 Key Stakeholders (administrative level) and 56 Frontline Workers (those who work directly with those affected by substance use).
- A non-affiliated “client survey” was conducted of individuals with substance use disorder (SUD) to collect the patient perspective of the response.
- A partnership survey and network analysis was used to determine the level of agency collaboration.
- Evaluators also conducted a review of SUD and Cabell County-related media activity.
- A community shared data system was developed to aggregate clinical data to determine success of the evaluation through existing data.

Findings

Building the Response

The response to the addiction epidemic in Huntington/Cabell County, WV was a process with the community searching for answers. The key attribute that made the response successful was the attitude and approach of leadership that the community should search for answers



together. Community buy-in was still a challenge early on, so efforts were focused on adopting best practices from other communities (such as establishing a drug court) while building a sustainable infrastructure that would allow the community to react quickly as the consequences of widespread addiction.

As part of creating infrastructure, local government, county health officials, and university members emphasized the collection and analysis of more real-time data for the community to convince State and Federal agencies of the critical nature of the situation. Data available to these agencies was not timely or representative of the size of the problem, making it difficult to secure grant funding for the area.

“I think having access to data, just information is so crucial because people don't understand what's happening.”

- Key Stakeholder

Community agencies began immediately building collaborations, but with an emphasis on mother – baby resources. As part of the epidemic, Cabell County was experiencing an alarming number of births in which the neonate was prenatally exposed to drugs. Most of the community viewed these babies as innocent, and community support for these resources met with minimum stigma.

Buy-in from the larger community for patients with substance use disorder outside of exposed neonates did not happen until August 2016 when the area experienced 26 overdoses in a single day. After this day, the response became focused on improving access to care and building community collaboration. These later efforts were directly responsible for the success of the response, but would not have been possible without the earlier infrastructure and collaboration already in place.

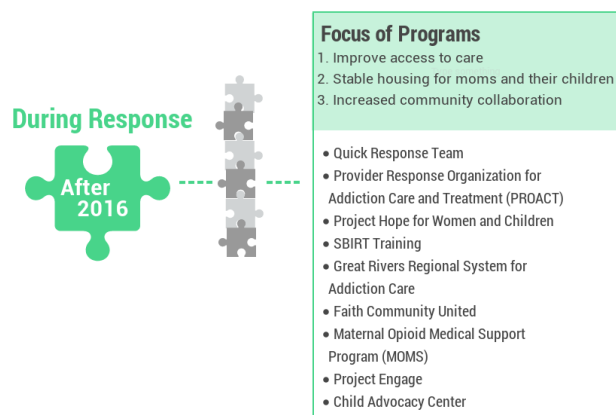


Figure 3: Programs early in the response

Figure 4: Programs during the full response

What Worked?

Key Stakeholders and Frontline Workers agreed that collaboration, community buy-in, and a client-centered approach are what made the response effective. The collaboration structure in Huntington/ Cabell County, WV is unstructured, denoting an environment of collaboration and not a controlled process. There was a strong sense from the community members that participated in data collection that, while the new programs are an important part of the response, the collaborative approach was the key to identifying and deploying the programs that were best suited to this community specifically. Culture, or cultural specificity, was an important part of the overall process. All of the programs developed after 2016 also have a peer component in order to extend that cultural sensitivity directly to the clients in need of support or care.

Key Stakeholders also discussed that data collection and the willingness to try new methods and approaches were key factors, while Frontline Workers and surveyed clients focused on more practical aspects of recovery (access to care, transportation, fulfilling personal commitments, etc.).

Recommendations for other communities:

- **Admit there is a problem:** This will likely require strong political leadership
- **Empower existing resources:** Many answers were found existing within the community already
- **Create an environment of Collaboration:** Natural collaborations are the most effective, but can require encouragement.
- **Focus attention on whole life recovery and families:** Every patient represents a larger group that needs support.
- **Treat patients as human beings:** Services will not be utilized to the fullest extent if the clients don't feel welcome.
- **Control the message with shared data:** Tell others about your community; don't wait for them to decide who you are.
- **Watch out for compassion fatigue:** Those in the thick of the fight need to know that their efforts are worthwhile.

ABOUT NAACHO

National Association of County and City Health Officials (NACCHO) was established in 1965 to improve the health of communities by strengthening and advocating for local health departments. NACCHO currently serves over 3000 local health departments and is the leader in providing cutting-edge, skill-building, professional resources and programs, seeking health equity, and supporting effective local public health practice and systems. NACCHO is dedicated to supporting local health departments, optimizing strategic partnerships and alliances, and advocating for local health departments.



ABOUT MU Joan C. Edwards School of Medicine

The Joan C. Edwards School of Medicine at Marshall University is a community-based, Veterans Affairs affiliated medical school established in 1977 to address health disparities in rural tri-state region of southern West Virginia, southeastern Ohio, and eastern Kentucky and dedicated to providing high quality medical education and post graduate training programs to foster a skilled physician workforce to meet the unique healthcare needs of the population we serve. The mission was and still is today to provide healthcare and education to Appalachia.



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Funding from the CDC was made possible through the Center for State, Tribal, Local, and Territorial Support (CSTLTS) Cooperative Agreement OT18-1802 "Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health."

Introduction: For the last few decades, a major epidemic grew and the United States saw an increase in the incidence and complication rates of drug addiction. ¹ This epidemic would result in deaths by drug poisoning surpassing death by suicide, homicide, firearms and motor vehicles accidents by 2017. ² A culmination of events placed the small Appalachian city of Huntington, West Virginia at the epicenter. Huntington and surrounding Cabell County, developed a community response that included an unprecedented level of collaboration and a number of novel solutions. In Dec 2019, the Centers for Disease Control and Prevention (CDC) through the National Association of County and City Health Officials (NACCHO) funded an evaluation of the community response to the addiction epidemic to:

1. Identify and describe the impact of critical elements defined as part of the response in Huntington/Cabell County, WV
2. Understand the role of public health system partners on the effectiveness of system delivery and utilization in the response in Huntington/Cabell County
3. Identify the actionable factors for translating the Huntington/Cabell County response to other communities.

Utilizing a mixed methods approach, evaluators conducted 100 interviews with Key Stakeholders (administrative level) and Frontline workers (those who work directly with those affected by substance use). By conducting a partnership survey to determine the level of agency collaboration; a client survey of individuals with substance use disorder (SUD); a review of SUD-related media activity and a quantitative clinical data system, evaluators were able to report on the response to the addiction epidemic in Huntington/Cabell County. This report will describe the severity of the epidemic, the response, and report indicators of effectiveness. The ultimate goal is to identify the key components of the response that may be adapted and used in other communities to respond to public health crises.

Background: Cicero et al demonstrated that the pattern of first opioid use changed significantly in the last 40 to 50 years. Eighty percent of individuals who had their first opioid use in the 1960's reported that first exposure to be heroin. Contrast this with the 2000's, where 75% of users reported prescription opioids as their first exposure. ³ Despite an increased likelihood of abuse, only 4.2% of those using opioids non-medically turned to heroin ⁴. Some researchers speculate OxyContin abuse may have increased the rates of heroin abuse, ^{5 6} but as OxyContin prescribing decreases heroin use continues to rise. ⁵

As efforts continue to reduce the over-prescribing of opioids, availability of opioids made significant inroads. Data from the Centers for Disease Control and Prevention (CDC) WONDER Database found increases in overdose deaths associated with heroin and synthetic opioids like fentanyl. ^{7 8} In fact, heroin related overdose deaths jumped from 1,842 in 2000 to 10,574 in 2014 ⁹ with heroin use increasing significantly in most demographic groups. ⁴ The influence of overprescribing on the addiction epidemic may have waned with prescribing restrictions, but the substance abuse continued to grow as an increasing number of patients reported heroin as their first opioid ⁸, reversing the trend of the previous few decades.

By 2015, claims were being made of Middle America being specifically targeted by opioid producers and "Mexican drug lords." ¹¹ Heroin became more readily available in areas not traditionally considered centers for drug distribution ¹² and the cost per gram dropped from \$2,690 in 1982 to less than \$600. ¹³

This increased availability and lower cost of heroin, coupled with the poor economic conditions and isolating terrain throughout Central Appalachia, created a fertile soil for this targeted drug activity to grow. West Virginia (WV), the only state located entirely in Central Appalachia, ranks consistently as one of the worst states for health and economic status. WV had the highest age-adjusted death rate from drug poisoning in the country.¹⁴ The state reported a rapid growth in the rates of opiate overdoses,^{15,16} Hepatitis C and other communicable diseases related to sharing needles, and Neonatal Abstinence Syndrome (NAS)¹⁷ throughout WV with the most severe effect on Southern WV.¹⁸ This culmination of evidence indicates that West Virginia was, likely, the most impacted state in the union and Huntington/Cabell County was the most affected part of the state.

Numerous anecdotal accounts report the majority living in the Huntington or Cabell County, WV either struggled with SUD or had a loved one who did. Because of the widespread personal impact, the community was quick to set aside biases and individual agendas to work toward a comprehensive solution.

I always kind of have to smile to myself when I hear people talk about how the opioid crisis became a big thing in the 2000s, because, I was here in ninety-seven and it was already a fairly big thing then. It was, of course, more pain pills at that time.
 – Key Stakeholder

A Community in Trouble: Prior to 2013, during the building stages of the epidemic, there were a few already aware of the continued increase in substance use in Huntington/Cabell County. The number and variety of available SUD resources suited a community its size, but would prove inadequate in the face of the high volume of individuals with SUD within the community. There were faith-based programs, like Celebrate Recovery and Loved One’s, as well as both Alcoholics Anonymous and Narcotics Anonymous. Huntington’s numerous sober living houses demonstrated some success helping those who sought recovery. A peer-based recovery facility that would eventually become Recovery Point of West Virginia opened in 2011. In 2012, First Steps Wellness & Recovery Center opened to serve people experiencing homelessness and the opioid using population. During this time, the Huntington Comprehensive Treatment Center and Valley Health Systems provided medication-assisted treatment options to the community. All of this was in addition to the county’s behavioral health



Figure 1: Incidence of new diagnosis of opioid use disorder within WV CAD partner agencies.

facility, Pretera Center, which ran a variety of programs across the community for decades by this time.

While many resources existed in the community, they were largely working in isolation. Independently, those involved in these organizations were noticing a sharp rise in patient volume.

It doesn't seem like the community became aware at the same time, but we felt little changes happening – Frontline Worker

Data would later confirm these observations, but official reports of both incidence and prevalence are often years behind. A retrospective report using data assembled from the CDC's Wonder Database shows that, in 2014, West Virginia led the U.S. in Overdose Death Rate with 35.5 deaths per 1000, almost 2.5 times the national average and 35% more than the next

The initial reaction was, frankly, one of being overwhelmed with the sheer number of patients we were caring for... but also overwhelming resources and not being able to care for babies that truly needed an intensive care unit and having to turn those patients away. – Sean Loudin: Former Medical Director of Lily's Place and Cabell-Huntington Hospital Neonatal Therapeutic Unit

closest state (New Mexico and New Hampshire are tied with 26.2 deaths per 1000 each).¹⁹

Overdose deaths were not the only data to demonstrate the severity of the substance use problem at the time. The number of individuals diagnosed with opioid use disorder (OUD) continued to rise during this period. (Figure 1) Hepatitis C (HCV) infection present in infants at the time of delivery in West Virginia was the highest in the nation at 22.6 per 1000 live in 2014²⁰, suggesting that the number of substance abusers was quite high the area. Anil and Simmons published a comprehensive report on Hepatitis B (HBV) and HCV incidence in WV.²¹ The incidence of acute HBV infection in 2015 was 14.7 per every 100,000 West Virginia residents, nearly 14 times the national average. By 2015, West Virginia had almost 5 times the HCV infection rate as the rest of the country combined (3.4 per 100,000 compared to 0.7 per 100,000)²¹. In developed countries, about 90% of people infected

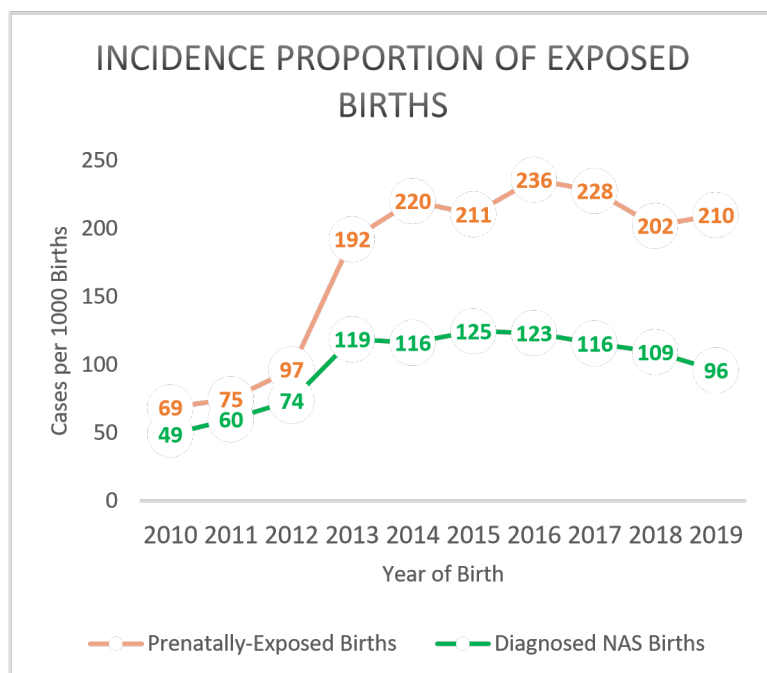


Figure 2: Verified number of babies born prenatally-exposed to opioids in Cabell County, WV per 1000 births Between 2010 and 2019.

with HCV are former or current injection drug users²². Although increased infectious disease transmission rates are a significant part of the overall societal cost, infection rates are dependent on several factors (harm reduction, sexual activity, transmission rates, etc.) and does not include non-injection misuse of opioids exclusively.

Perhaps the most impactful and alarming aspect of the addiction epidemic was the surge of babies born with in utero exposure to opioids and other substances and those that developed Neonatal Abstinence Syndrome (NAS). Among 28 states with publicly available data in the Healthcare Cost and Utilization Project during 1999-2013, the overall NAS incidence increased 300% from 1.5 per 1000 hospital births in 1999, to 6 per 1000 hospital births in 2013. Using state-based data, the CDC reports that WV has the highest rate of babies born with NAS in 2013 at 33.4 per 1000¹⁷. It has also been reported using the WV Health Care Authority (HCA) database and the Uniform Billing Database that southeastern region of WV has the highest incidence of NAS in the state at 48.76 per 1000 births.¹⁸ Based on a comprehensive review of cases from Cabell County's primary birthing hospital, Cabell Huntington Hospital (CHH), it is possible that the numbers from these databases vastly under-reported the true severity of the situation. The 33.4 per 1000 NAS patients for West Virginia in 2013 is much lower than the 76.4 per 1000 patient treated for severe withdrawal due to prenatal exposure in the same year and 163.9 neonates per 1000 live births with known *in utero* exposure to drugs, also in 2013. Those numbers continued to increase and were reported as 94.3 neonates with severe withdrawal per 1000 live births and 185.8 per 1000 with known *in utero* exposure in 2015.²³ That number rose to 236 per 1000 by its peak with 123 per 1000 of those neonates exhibiting severe enough symptoms to be diagnosed with NAS. (Figure 2)

Of course, in 2011 and 2012, none of these statistics were available. Tolia et al reported in 2015 that NAS was increasing in frequency and represented a large percentage of admissions to some NICUs across the country.²⁴ This was certainly true in Huntington/Cabell County. The NICU at Cabell-Huntington Hospital was so inundated with withdrawing neonates that newborns with more severe medical needs were often sent to regional hospitals hours away.

Huntington and the surrounding community were desperate for solutions. Those who treated SUD felt isolated, community sentiment to those suffering was unkind, and there was a distinct lack of leadership. While the members of this small community suffered across the board, the data lagged behind the reality of the devastation. State and Federal agencies, who only had access to data that was years old, were largely dismissive of the gravity of the problem. Without numbers to reinforce the claims, the outside world could not see the signs of the epidemic ravaging on the inside. Discussions of SUD and Cabell County, WV were rarely held outside the region. The community felt invisible. As the epidemic increased in intensity, the community went from relative obscurity to intense scrutiny. By 2017, four percent (4%) of all media and social media coverage related to addiction worldwide mentioned Huntington or Cabell County. That number had dropped to less than 2% by 2019.

In the face of doubt, feelings of isolation, and general hopelessness the Huntington/Cabell County community developed a collaborative response perceived by the individuals connected to the local SUD population as being highly successful. This response has been credited for a decrease in overdose deaths and building the infrastructure necessary for long-term community-wide recovery. Many communities face, or will face, similar public health crises and could potentially benefit by developing a similar response. An evaluation of the community response to the addiction epidemic was conducted to fully understand the key components, aggregate the community-wide measures of success, and create a roadmap for other communities.

Methodology: A mixed methods approach was applied to explore the perceived effectiveness of the addiction epidemic response in Huntington/Cabell County by key stakeholders, frontline workers, and individuals in treatment. Participants were asked to identify the effective components of the response, barriers, and remaining gaps. To support this data, a partnering survey was conducted to determine the level of interagency collaboration across the community and a media analysis was completed for 2014 through 2019. One or all of the above instruments were used to collect data representing 67 separate agencies or major divisions including representation for treatment, recovery, public health, education, recovery and family services, criminal justice, economic/workforce development, and advocacy. The Marshall Institutional Review Board (IRB) reviewed and approved all study mechanics and participant interactions. Before each interview, the interviewer conducted informed consent with the participant to assure voluntary participation.

Interviews:

1. Definitions:
 - a. Key stakeholders (KS) – defined as individuals that were directly involved with the response and had decision-making authority (or significant influence over decision making authority) for an agency with regular interaction with the SUD population
 - i. Data was collected from 44 KS by in-person individually interviews.
 - b. Frontline workers (FL) – defined as individuals who had substantial direct client contact with individuals with SUD or their family members during the response.
 - i. The original intent was to conduct focus groups of FL based on sector representation. COVID-19 restrictions required a shift to individual telephone interviews. Fifty-six (56) FL were interviewed.
2. Interview Design: An interview guide was developed for each population type (KS and FL) to maintain consistency between interviews. Conduct of the interviews were semi-structured to allow participants to express themselves freely thus allowing for more accurate data capture. As Marshall University is imbedded in the Huntington/Cabell County community; evaluators had internal knowledge and experience of the response. This knowledge was augmented by additional local stakeholders not related to the study team, including individuals with lived experience, to formulate value-based questions aimed at identifying the critical elements of the response in Huntington/Cabell County, WV. Interview guides were then independently reviewed by members of NACCHO and the CDC for appropriateness and project relevance. In addition to an accounting of the history of the development of the community response, questions identifying critical areas are best surmised with the following questions:
 1. At a community level what is working and how has the community gaged that progress or success? How do you know it is ‘working’?
 2. What barriers must be overcome?
 3. What gaps remain currently in the community response? Has the community tried to address them to date – why or why not?
 4. What changes occurred at the community level as a result of the community response in Huntington/Cabell County?
 5. What are the most important ways in which the community responded from 2015 to 2019 that other communities should understand?

Participants were initially identified based on their association with agencies known to participate in the response or interact with a significant portion of the SUD population in Huntington/Cabell County. Further participants were identified using snowball sampling. Interviews were recorded and transcribed. Partners at NACCHO independently screened interviews to assure fidelity and identify bias prior to analysis. The research team conducted an analysis of qualitative data using NVivo qualitative analysis software (QSR International Pty Ltd., Melbourne, Australia). We developed a codebook to identify themes and topics of interest based on the research hypotheses.

Organizational Representation of Interviews

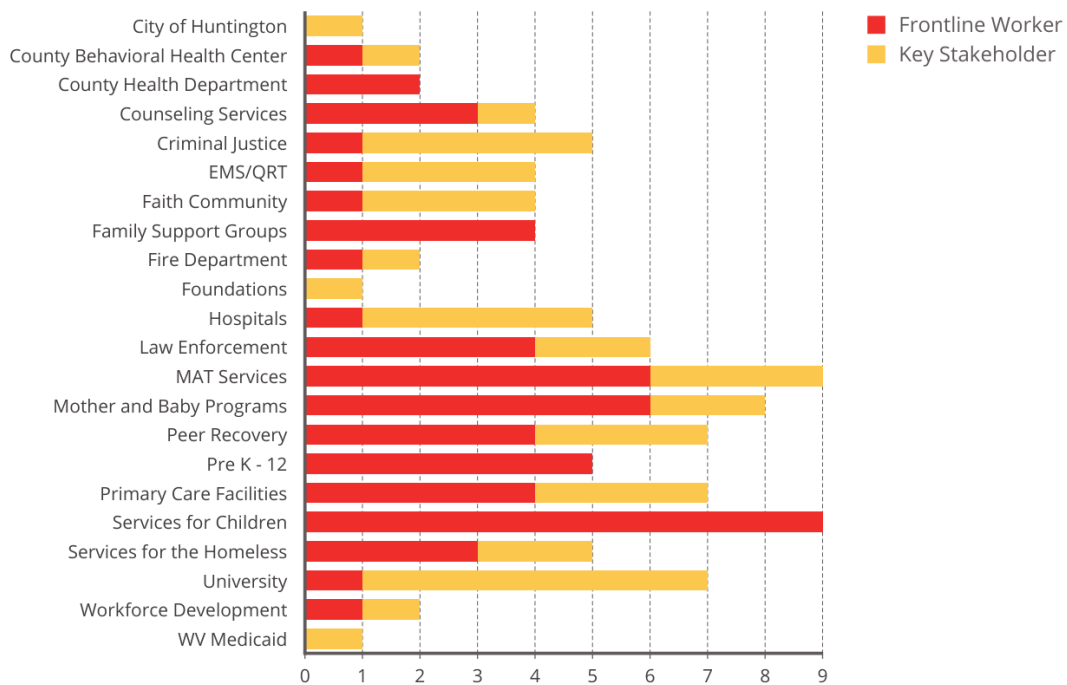


Figure 3: Distribution of community interviews by organization type.

Surveys:

1. Partnering Survey – Individuals participating in the KS and FL interviews were provided a partnering survey at the conclusion of the interview. The survey received 75.7% participation with all agencies represented. Participants were provided a comprehensive list of agencies involved with the SUD population and asked to rate the relationship based on the level of collaboration with their own agency. The strength of the tie between agencies was rated on a scale from 0 to 5.
 - a. No Interaction (0): No interaction with your organization at all.
 - b. Networking (1): Aware of organization - Loosely defined roles - little communication - All decisions are made independent from this organization.
 - c. Cooperation (2): Provide information to each other - Somewhat defined roles - Formal communication - All decisions are made independently

- d. Coordination (3): Share information and resources - Defined roles - Frequent communication - Some shared decision making
 - e. Coalition (4): Share ideas - Share resources - Frequent and prioritized communication - All members have a vote in decision making
 - f. Collaboration (5): Members participate in programs that function as one system - Frequent communication is characterized by mutual trust - Consensus is reached on many or all decisions.
2. Anonymous Client Survey: Individuals in SUD treatment or served by recovery supportive programs were surveyed to determine client perceptions of the response. Questions were designed to determine, in the last five years, which programs were most helpful in their recovery journey, key factors in recovery, barriers to recovery, and changes in access to care. Surveys were distributed to individuals in all aspects of addiction, treatment, or recovery throughout the community including Medication Assisted Treatment (MAT) programs, peer-based programs, sober living facilities, those with SUD that are experiencing homelessness, and individuals served by Lily's Place NAS treatment facility. Surveys were provided online and email using Qualtrics (Qualtrics, Provo, UT) or via paper. Paper surveys were later entered into the system by research staff.

Quantitative Methodology: In addition to the primary qualitative and survey data collection mechanisms, the West Virginia Community Data System (WV CAD) was developed to aggregate substance use disorder data from multiple agencies. WV CAD brings the data from different agencies using different data collection systems into a single-dimensional database that can identify unique individuals across the community system in a way that protects patient privacy utilizing a "Safe Harbor" concept. Our methodology allows us to aggregate private health information (PHI) while complying with regulations promulgated under HIPAA, HITECH, 42 C.F.R. Part 2 (in regards to PHI, and other substance use disorder information as contemplated by the confidentiality regulations of 42 CFR Part 2), as well as W. Va. Code § 27-3C-1 and W. Va. Code § 16-3C-1 et seq., as amended.

WV CAD currently houses data from ten separate programs and agencies representing 70-80% of the substance use treatment and related programs (by patient volume - approximately 440,000 unique patients that receive care in Cabell County, WV) in Huntington, WV. Data elements include treatment, program utilization, success measures, substance use data, and a variety of social determinants of health. Initial quantitative data representing referrals to treatment, increases in those receiving treatment, and 90-day success rates related directly to the response, as well as SUD population demographics, were extracted from this system.

Media Analysis: Data was collected Cision Communications Cloud (Cision, Chicago, IL) for media monitoring of the keywords: substance use disorder, addiction, opioids, opioid use disorder, drug epidemic, opioid epidemic co-mentioned with Huntington or Cabell County, West Virginia between 2014 and 2019. Cision combs a collection of global online news, blogs, social, print and broadcast channels for relevant mentions. Then, we analyzed those mentions by key topics, audience reach, ad value equivalency, and sentiment.

Findings: Addressing the Barriers: Interviewees reported that attitudes across the community varied from compassionate to outright hostile towards individuals with SUD in the early 2010's. The broader community was not aware of the severity of the situation and a great deal of stigma permeated the community. When asked about the barriers that needed to be overcome both KS (40.9% of interviews) and FL (28.8% of interviews) answered "stigma" more often than any other answer. (Figure 4) The two groups similarly agreed for the need of funding as the second most significant barrier. Finances were a common theme across the interviews as many referred to a data gap between what was available to federal agencies and the local reality as a major struggling in attracting funding in the early days of the response. Both groups also mentioned lack of education along with poor understanding of addiction and mental health. Beyond those main issues, there was some variance between the groups. KS, whose responsibilities are primarily administrative, discussed agency level barriers, such as silos between agencies, employee burnout, access to care, and the politicizing of SUD. Frontline workers focused more on patient levels barriers like access, long-term facilities, housing, and transportation.

What are the barriers in the Cabell/ Huntington area?

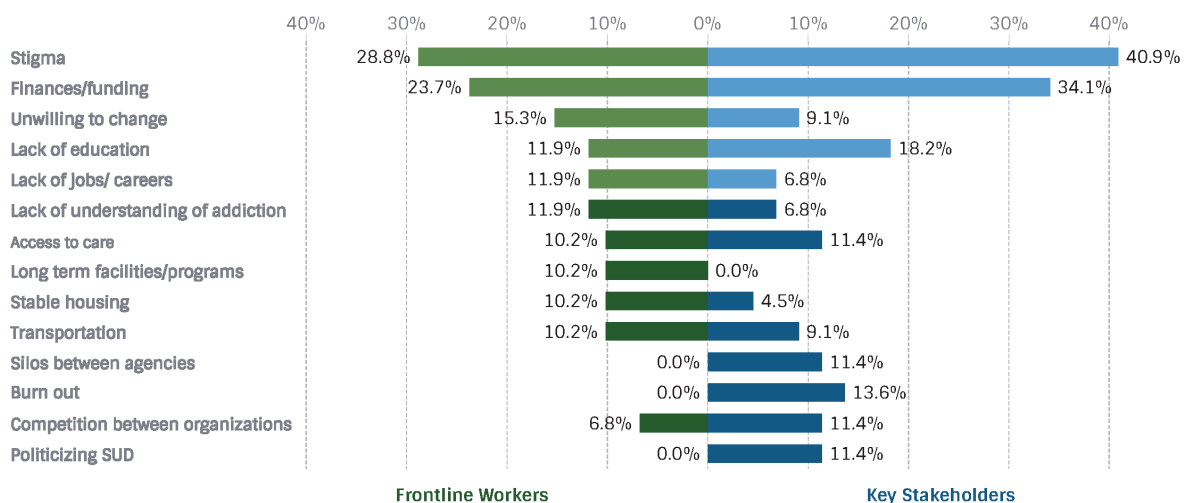


Figure 4: Answers given to the question, "What were the barriers?" answered by more than 10% of interviewees.

The perception of the most impactful barriers by KS and FL were slightly different from those identified by those with SUD. An anonymous survey of clients receiving services in the community showed that "personal commitments" was the biggest barrier. A second tier of barriers were reported by clients that suggest issues with access to care ("transportation and "no open beds available") and stigma ("feeling embarrassed" and "feeling judged"). (Figure 5) While stigma is important to all of the groups, it seems to be viewed as a more significant barrier by KS and FL than the clients; who see their personal commitments and basic access as larger barriers.

Despite these barriers, the overwhelming tone from the interviews was in regards to a remarkable level of collaboration. Both KS (50.0%) and FL (30.5%) reported “collaboration” more than any other response when asked, “What is working?” (Figure 6) Many KS and FL interviews also mentioned community buy-in, education, and a client-centered approach as functional aspects of the community response. Similar to the barriers question, the consensus answers from FL interviewees focused on their impression of what helped the clients directly, naming a number of specific programs (PROACT and QRT). While KS interviewees mentioned access to care and approach issues, many discussed how efforts to collect and disseminate data was critical to attracting funding and changing policies. Another theme by KS was coded as “trying,” or the willingness of a variety of individuals and agencies to step outside of their standard procedures to attempt new methods and approaches.

Barriers to Treatment for Individuals with SUD

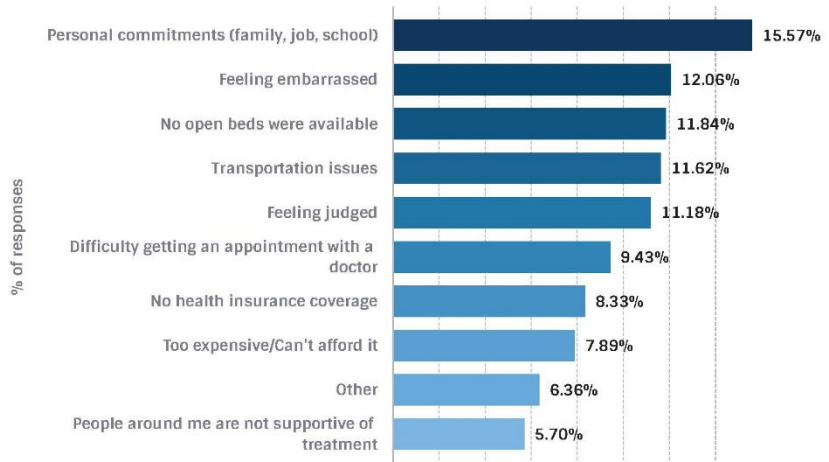


Figure 5: Patients with SUD were asked to identify the barriers to treatment with the question: "Whenever you've thought about getting treatment (either residential or outpatient), which of the following would you say are the biggest barriers for you to get into a treatment program?" N=456

What is Working in the Cabell/ Huntington area?

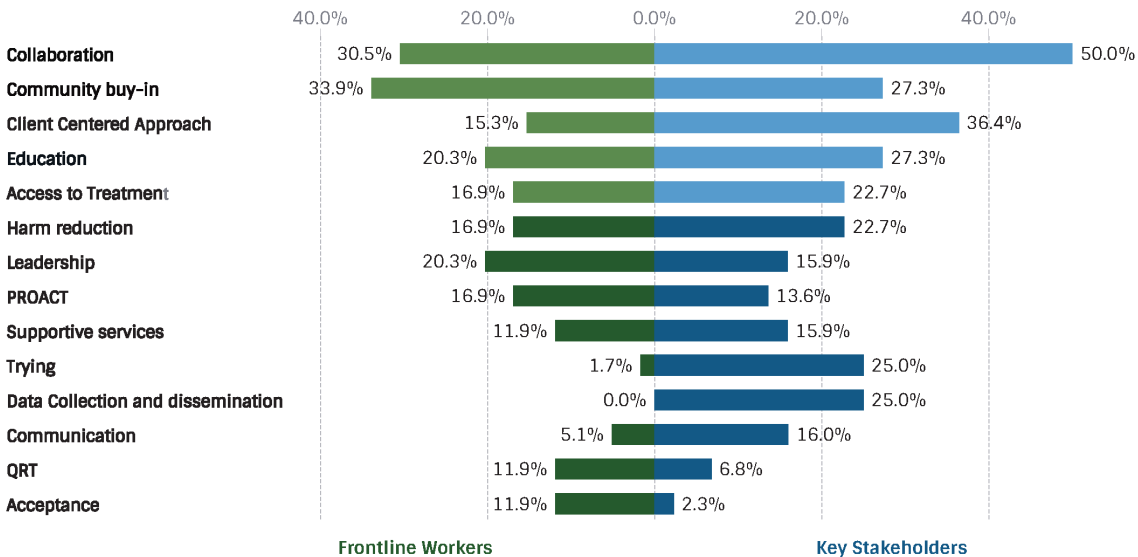


Figure 6: Answers given to the question, "What is working?" answered by more than 10% of interviewees.

While KS listed siloes between agencies and competition between agencies as barriers, those barriers were often considered less critical than others. Several FL interviewees did discuss problems in the continuity of care while others associated access to care issues with poor communication between agencies. These barriers may have been more impactful than suggested by discussing specific issues. There was agreement across the interviews that the mechanism for overcoming many of the identified and potentially unidentified barriers was an unprecedented level of collaboration. Unity of purpose and a collaborative spirit was overwhelmingly credited as the primary reason for the success of the community response to the addiction epidemic.

Building Collaboration is a multi-Step Process: Collaboration was identified as the key factor in the Huntington/Cabell County Response to the Addiction Epidemic. While the participants in the response were, by their own admission, learning as they went, the process that developed was deliberate and should be replicable. The tangible elements of the response came into effect because of the community-wide sense of collaboration. This allowed Huntington/Cabell County to identify and address gaps quickly by optimizing existing programs and creating a few new programs strategically to take advantage of limited resources. Creating this collaborative environment required a number of key elements and followed a precarious timing of events. The steps of the process and the timing of those steps were equally important.

Evaluation of Community Collaborative Structure: An analysis of the collaborative structure in the Huntington/Cabell County community showed a lot of collaboration that was unstructured. The absence of central point, or even cluster of collaboration suggests that the community developed an environment of collaboration that encouraged natural connections to occur instead of an institutionally driven collaborative structure.

In order to understand the nature of this community-wide collaboration, we conducted a partnering survey in which we asked agencies from across the community to rate the strength of the tie between their agency and a list of 80 different organizations across the community on a scale from 0 to 5. With a 75.7% response rate to the survey, there were 52 organizations represented in the survey response data (39 of which were among the 80 partners included as questionnaire items). Of these 52 organizations, 35 were represented by at least one FL respondent, 27 were represented by at least one KS respondent, and 10 were represented by at least one of each type of respondent. Participants were requested to indicate the level of interaction between their agencies and 79 other agencies based from 0 to 5. No Interaction (0): No interaction with your organization at all. Networking (1): Aware of organization - Loosely defined roles - Little communication - All decisions are made independent from this organization. Cooperation (2): Provide information to each other - Somewhat defined roles - Formal communication - All decisions are made independently. Coordination (3): Share information and resources - Defined roles - Frequent communication - Some shared decision making. Coalition (4): Share ideas - Share resources - Frequent and prioritized communication - All members have a vote in decision making. Collaboration (5): Members participate in programs that function as one system - Frequent communication is characterized by mutual trust - Consensus is reached on many or all decisions. There was no clear community structure indicated by either group. A- Key stakeholders were evenly distributed while B- Frontline workers were either weak (<3) or strong (5). Lighter lines represents weaker collaboration strength while darker lines represent stronger collaboration strength. There were 4 instances where 2 FL respondents from the same organization participated in the survey and 4 more instances where 2 KS respondents from the same organization participated in the survey; we

obtained a single response vector in each of these cases by taking the entry-wise maximum of the dual responses present.

Organizations tend to be listed as collaborators by roughly 20 other organizations normally distributed between Key Stakeholders and Frontline workers (in-degree), while the collaborations an organization claims to have are uniformly distributed (out-degree) (Figure 7). This is an indication that many organizations are less collaborative than they report, particularly when reported by Key Stakeholders. The differential distribution pattern is likely an indication of a collaborative environment in which there was social pressure to appear collaborative. Even with the variance of in-degree vs (no comma) out-degree distribution patterns, the large amount of interagency collaboration mentioned in the interviews appears to be functional.

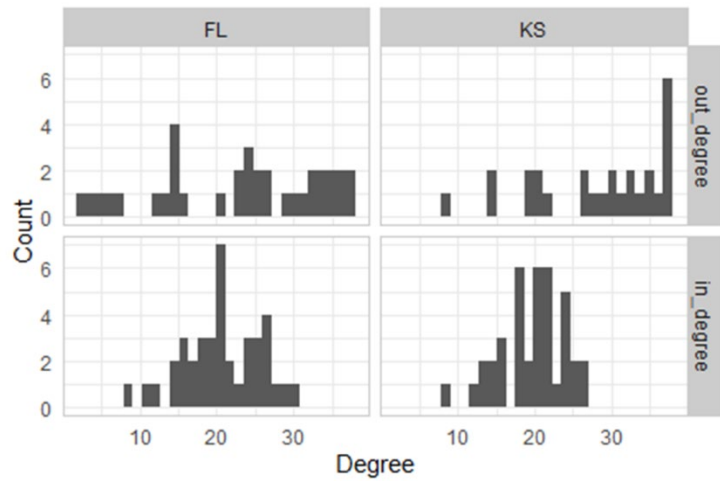


Figure 7: Distribution of partner survey collaborators. Organizations tend to be listed as collaborators by roughly 20 other organizations. (in-degree) This number tends to be normally distributed. The number of collaborations that an organization says it has tends to vary uniformly. (out-degree) "Count" indicates the strength of collaboration (0-5). "Degree" is the number of agencies indicated as having some a level of collaboration >0.

Key Stakeholders, most having administrative authority, reported a strong sense of collaboration and the expectation of collaboration from the community. The partner survey responses indicate this phenomenon. Undirected network maps show an even distribution of the strength of interagency collaborations, but no clear community structure is indicated. (Figure 8A) This suggests an effective environment of collaboration instead of a specifically directed structure. FL had a slightly different distribution by reporting primarily either weak (<3) or very strong collaboration (=5). FL partnering analysis still failed to show a clear community structure. (Figure 8B)

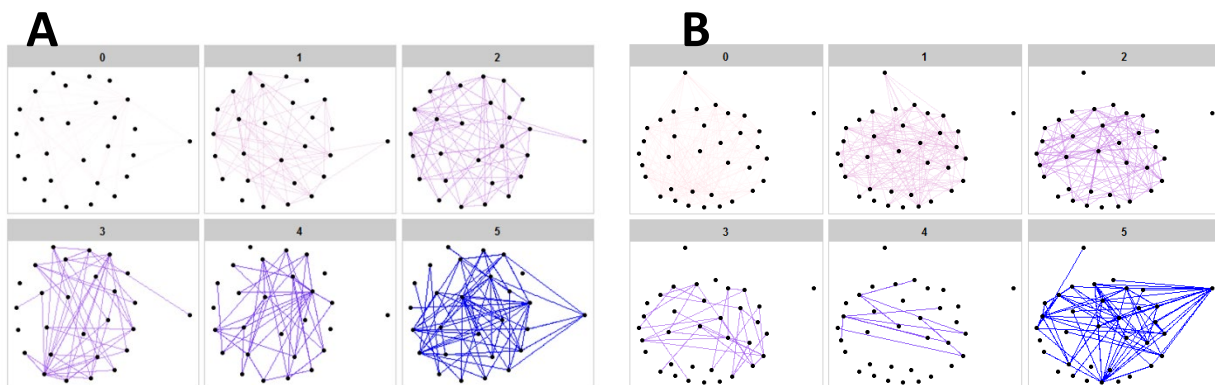


Figure 8: The partnership study results for A- Key stakeholders and B- Frontline workers.

Weak ties in social networks are associated with distant clusters within a social system. As this study is measuring across a community, it is likely that weak ties (<3) are more representative of

individual relationships interacting across agencies. Strong ties (=5) are official or public collaborations recognized by every level of the organization. Intermediate ties (3,4) in this study would represent the interagency collaboration that go beyond individual relationships, but are not yet official or public agency connections. Under the suggested model of a widespread environment of collaboration, this data would then suggest that KS, as the administrative officials, have a wider view of agency collaboration. FL on the other hand see the most collaboration at a personal level or when the collaboration reaches widely across the organization, but not necessarily collaboration in the intermediate stages.

Process of Developing a Community-Wide Collaborative Environment: Several interviewees credited the togetherness of the Appalachian culture for the collective nature of the response to the addiction epidemic. It is unclear how much of the cooperation was cultural, or if the desire to work together for the common good is necessarily unique to Appalachia. The data suggests however, in addition to the general building of infrastructure, that major components were necessary to allow the community to come together in such a way. Based on interview responses and the timeline and focus of the efforts; three key approaches were determined to be a necessary part of overcoming the barriers and building an environment of collaborative healthy recovery in the face of the epidemic.

- *Finding Common Ground*
- *Leadership*
- *Community Response Approach*

1. Finding Common Ground:

Despite community-wide stigma, there was one population who shared ubiquitous support, the prenatally-exposed neonate. One Key Stakeholder summed up the consensus that prenatally-exposed children were not subject to the same stigma presented to others in the SUD population by stating, "...it is easy to get people to support babies, even if they won't support their mothers." The large number of babies who had become victims of the addiction epidemic became a rallying point for the community.

Interview respondents, regardless of position, discussed a need for support for children, particularly those exposed to substances *in utero*. Supporting this perception, the first programs developed that enjoyed broad community support were related to these youngest victims of the epidemic.

You know, the building for Lily's place donated by a prominent family, each nursery room within Lily's place was donated, every bit of that facility; the flooring, the cribs, the paint, the furniture within each nursery was donated by a family or a church or something. That Lily's place has never bought or purchased a diaper in its existence in 2014 because the community has always donated diapers and wipes and baby clothing and bubble bath and everything else. So that, you know, that is how this community has rallied around that you will see. We've seen children forgoing their birthday parties or presence at their birthday parties so that they could throw a baby shower for a little place...

...because it's babies.

– Sean Loudin: Former Medical Director of Lily's Place and Cabell-Huntington Hospital Neonatal Therapeutic Unit

While Pretera Center had women and children's program for years, a number of new programs changed the landscape of treatment for pregnant women with SUD. Marshall Health developed the Maternal Addiction Recovery Center, a medication assisted treatment program

for pregnant women up to six weeks postpartum. Valley Health System, a local Federally Qualified Health Center, developed their own pregnancy program, co-currently. Cabell-Huntington Hospital created a specialized unit just for withdrawing neonates. These programs helped provide the necessary infrastructure to handle the rapidly growing need, but one effort captured the community psyche more than any other— Lily’s Place. Despite the fact that this outside facility had a lower capacity than the hospital’s Neonatal Therapeutic Unit, interviewees from both groups, who mentioned babies or NAS, also mentioned Lily’s Place.

Lily’s Place is a private not-for-profit facility where prenatally exposed babies with no other medical problems can recover in a more homebound setting. Lily’s Place uses therapeutic handling methods and weaning techniques to treat patients. Developing this unique facility was truly a community effort with donations from around the community and shared resources with other medical facilities. Lily’s Place changed the discussion. It was a positive story of helping the helpless that allowed many within the community to begin to see the severity of the epidemic. Once the community rallied around saving the neonates, it was a short step to getting support to get more resources to their mothers, leading eventually to the coalition Healthy Connections, Project Hope for Women and Children, Hope House, and numerous programs and resources targeted at helping new mothers with SUD.

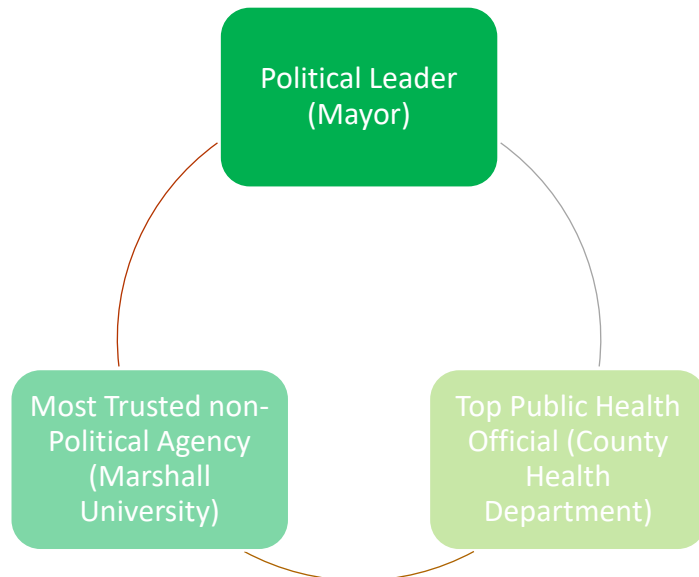


Figure 9: Three major leadership components in Huntington/Cabell County

2. Leadership

When it comes to identifying those primarily for the response, a few names rose to the top. However, it was very clear that Key Stakeholders and Frontline workers all felt that the Huntington/Cabell County response to the addiction epidemic was a broad effort with too many champions to mention. At the end of the day, everyone was expected to do their part and most delivered above and beyond expectation. This community collaboration did not happen in a vacuum.

Although early on it was important to give the community a single program on which to focus support there were other more difficult programs critical to an effective response that required taking political risks. The individuals who took those risks were identified by key stakeholders in the community as the primary champions of the response. It likely is no accident that the named champions represent the most influential organizations in Cabell County, i.e, the City of Huntington, the Cabell-Huntington Health Department, and Marshall University. It is clear that the leadership had to come from these three entities (Figure 9) while being supported strongly by the two major hospitals in town (St. Mary’s Hospital and Cabell-Huntington Hospital), the County’s Behavioral Health Center - Prestera Center, and the area’s largest Federally Qualified Health Center – Valley Health System. These agencies developed their own response while

working together to create an environment that allowed a single unified community response that started with treating those patients already on the front lines of the epidemic and approaching patients as the content experts. Thus, it was not just that the recognized community leaders came together, but the approach they used empowered those most able to make the critical changes. Many Frontline personnel interviewed indicated that prior to the founding of the Mayor’s Office of Drug Control Policy and the Division of Addiction Sciences at Marshall University, they and their counterparts were often underappreciated.

Of the six individuals named by more than ten percent of interviewees as “Champions” of the community response (Figure 10) to the addiction epidemic, four (Mayor Steve Williams, Dr. Michael Kilkenny, Dr. Stephen Petransy, and Former Police Chief Jim Johnson) admitted to having a steep learning curve. Some of the critical individuals involved with making the response a success knew very little about addiction or recovery at the beginning. However, each was able to put their reservations and biases aside to bring the community together and focus on developing a response based on best practice and improving the community as a whole.

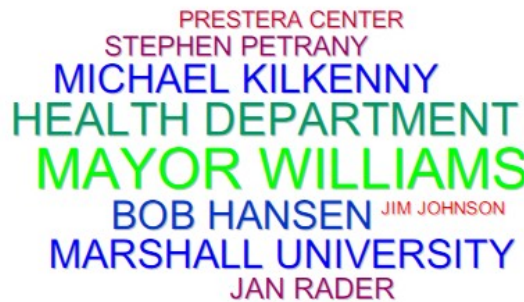


Figure 10: Top responses of both KS and FL in response to the question, "Who are the Champions?" in discussion of the response.

a. Mayor Steve Williams – City of Huntington

In 2014, shortly after being elected Mayor, Steve Williams responded to citizen complaints about the growing epidemic by supporting the “River to Jail” program, which took a law enforcement approach to addressing the addiction problem. Like many before him, Mayor Williams thought that increased arrests and drug seizures would stem the tide of drugs entering Huntington. The Mayor quickly realized that he did not understand the epidemic that was now plaguing the City in which he was responsible. So, leaving politics aside (as many might not do), he changed his approach.

I didn't go to city council and ask for an action on it. This is just something that we needed to do. I called it the Mayor's Office of Drug Control Policy. We just got moving, started meeting with people. Now, I was a bit naive at the time in January of 2015. – Steve Williams: Mayor Huntington, WV

In 2015, the Mayor’s Office of Drug Control Policy (MODCP) was established. Former Police Chief Jim Johnson, and Fire Chief Jan Rader were tasked with developing a comprehensive plan for the community. Chief Johnson and Chief Rader used the influence of their office to bring together anybody and everybody who were spending resources to address SUD or were strongly affected by the epidemic. Stakeholders in the community responded well to the formation of the new office. Everyone involved with the Mayor’s Office of Drug Control Policy used each meeting to learn from those who had been working with the substance using population. In addition to the specific question of “Champions,” Jan Rader was mentioned specifically throughout the interview transcripts. Her association with the MODCP was noted as

important for changing the perception of the SUD population. Experts in addiction from across the area started to feel more empowered than isolated, and the siloes started to break.

While actively working to establish a community resolve to respond to the addiction epidemic, the City of Huntington began a campaign to address the critical data gap. Police data analyst Scott Lemley was assigned to create a database of addiction related information. Through this effort, the Mayor's Office of Drug Control Policy was able to demonstrate that a large portion of crime in the City of Huntington was drug related and that the number of overdoses in the City were rising rapidly well ahead of the State Medical Officer's report on overdose deaths.

b. Michael Kilkenny, MD – Cabell-Huntington Health Department

As the Mayor's office was establishing its response, the Cabell-Huntington Harm Reduction Program (CHHRP) began at the Cabell-Huntington Health Department (CHHD). This program began providing an array of harm

reduction services including infectious disease care, wide-spread naloxone distribution, as well as providing syringes to 1,155 Cabell County residents that were persons who inject drugs (PWID), primarily heroin and drugs sold as heroin²⁵ in the first year. Harm reduction has been a critical part of

*The champions, can I say the Health Department as one of the champions? They would be one of the champions because it's a group effort, it's not just harm reduction, it's nurses, it's environmental.-
Frontline Worker*

controlling infectious disease outbreaks during the epidemic while providing a path to treatment for PWIDs. By keeping his message focused on best practice and scientific methodology while engaging and addressing concerns, Dr Kilkenny and his staff were able to gain tentative acceptance in a resistant community to establish this program. Thus, despite public resistance, Cabell County has widely distributed naloxone and maintained a functional syringe exchange program.

As in the efforts of the Mayor's Office, CHHD focused on utilizing the data collected to obtain more accurate estimates of the epidemic. The City and Dr. Kilkenny alike were confronted with sorting the differences between available data and the reality on the ground.

c. Marshall University

Marshall University has always had a special relationship with the City of Huntington. While this is true of many universities, a full community response would not have been possible in Huntington/Cabell County without the full participation of Marshall. This is why the University was one of the earliest visits made by the Mayor's office.

The University reacted immediately along two major efforts paths. 1) The Marshall University President created a task force to coordinate University resources directed at addressing the epidemic. This effort coordinated a variety of activities from a number of different colleges and departments. 2) Developed the Division of Addiction Science within the Joan C. Edwards School of Medicine to provide infrastructure for research and expanded SUD treatment. The physician's group of the medical school (Marshall Health) would also provide clinical infrastructure for the creation of sustainable programs. In 100 of 100 interviews, Marshall was mentioned as a partner, champion, or key to a long-term successful response in addressing SUD in the community. Throughout the response, various Marshall University Colleges and departments were collaborating in dozens of different community efforts. Per the interviews,

many Key Stakeholders and Frontline workers did not specifically name an individual, department, or project at the University. More than a dozen individuals from Marshall University were identified as “Champions,” but only two were indicated by at least 10% of interviewees.

- Dr. Stephen Petrany, Chair of the Department of Family and Community Health in Marshall’s medical school, created the Division of Addiction Sciences which would provide the infrastructure for sustaining new programs (described below) designed to fill critical gaps in the continuum of care across the community.
- Bob Hansen, former CEO of Presteria Center was hired as the first Director of the Division of Addiction Science, becoming the primary architect for major components of the full community response. After serving as Director, Bob moved on to lead the Office of Drug Control Policy for the State of West Virginia.

Results from the frontline worker interviews clearly show a strong emphasis on the overall sense of collaboration across the community and that the groundwork laid for the NAS focused response and the leadership framework were critical to the response being effective and timely. Without the coordination of resources and the support from those who managed such resources, a collaborative effort of community members would have proven ineffective. As evidence, on May 22, 2005 four teens were found dead in Huntington after prom in a violent crime that was a direct result of illegal drug activity. Police reported that one of the teens was targeted while the rest were killed to eliminate witnesses.^{27,28} The community rallied and there were many “calls to action,” community coalitions started to form, and the event even garnered national attention.²⁷ The incident was severe enough to capture the attention of the community as was the 28 person in one day overdose event of 2016, which caused the community to respond. However, without a concerted effort from the community leaders, who largely disregarded events of a growing addiction problem in the community and considered the circumstances a police matter, there was little in the way of effective response.

Huntington still celebrates a “Day of Hope” on the anniversary of these murders. Two projects developed from the efforts of private citizens, Hope House and what would become Recovery Point of WV, but both programs struggled for 5+ years before becoming an effective part of the Huntington/Cabell County recovery community.

I think that the mayor really was being honest and open about what the problem were, that the city was having problems and he was willing to talk about it. You know, there are other mayors and other political officials around the country and certainly in West Virginia that wouldn't face issues. –Key Stakeholder

Community Response Approach: Having little knowledge of the collective opinion of the KS, FL, and clients across the community, local leaders set out to understand how to address the growing issues. The first step in this process was for the community leaders to admit there was a problem and face the epidemic. KS and FL interviews often (53 of 100) mentioned that a key component in beginning a response was the willingness of social and political leadership to admit that the community was in trouble. How they approached the next phase was equally important. Several interviewees commented that having a number of KS in certain positions with extensive experience as Frontline workers made a big difference in the response approach.

While the leadership in Huntington/Cabell County pulled together in both purpose and approach, agencies across the community came together quickly in response. Clinical agencies and those that deal with substance using populations joined the effort very

quickly. This was particularly true of efforts or resources directed specifically at helping newborn babies who were prenatally exposed to opioids and other neuroactive substances. Many of the existing agencies began collaborating despite long-held differences based on philosophical differences in recovery approach. Agencies that had programs in place noted by both Key Stakeholders and Frontline workers as early contributors and collaborators in the response are as follows (alphabetical order):

- Cabell County Drug Court
- Cabell County Prosecutor's Office
- Cabell County Child Protective Services
- Harmony House (including First Steps) - a day shelter for people experiencing homelessness and families
- Lifehouse – Sober living facility
- Lily's Place – Independent treatment facility for neonates experiencing withdrawal
- Marshall's Maternal Addiction Recovery Center – MAT program for pregnant women
- Mountain Health Network - owns the Cabell Huntington Hospital and St. Mary's Medical Center in Huntington
- Pretera Center – County Behavioral Health Center
- Recovery Point of West Virginia – Residential peer recovery facility

According to many interviewees, the community at large came along more slowly, despite the fact that a growing number of families were directly affected by the epidemic. Individuals outside the agencies that routinely deal with an SUD population, particularly those in the faith community, reported a growing sense of urgency and often felt isolated dealing with the increases in crime, used syringe litter, and trying to find help for loved ones. A response to the epidemic was underway, but it was not yet a full community response.

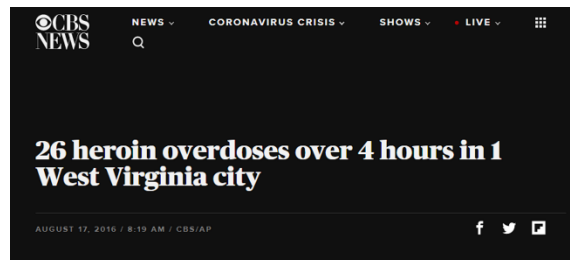
On 15 August, 2016 everything changed. That was the day that

Not a normalization of an opioid epidemic. But making it no longer something that has to be hidden, I think is one of the first steps of a much stronger response. -Frontline Worker

Twenty six overdose calls are called within a four hour period. Twenty eight people overdosed that day. However, two of the individuals were never called in. They used drugs by themselves. They both, unfortunately did pass. But however, all 26 people who were called in on that single day, all were saved from an overdose. And that was the first time that we knew that we had a band from heroin to fentanyl and car fentanyl mixed into the drugs being far more potent. And that's all public knowledge because of some court papers. Certainly went after the individual who distributed those drugs in the community. So on that day, it became national and international news. So if you had had your head buried in the sand, it was no longer possible. -Key Stakeholder

fentanyl and fentanyl analogs arrived and were responsible for 28 overdoses in Cabell County. Twenty six of these overdoses were responded to by emergency medical services within 4 hours. ²⁶ This single event galvanized the majority of the community into a single response, because the leadership had been preparing a response and could offer immediate, well-vetted answers. Cries of “What can we do?” and “Who is going to stop this?” were quickly marginalized with people asking, “What can I do?” More than half (23 of 44) of the Key Stakeholders mentioned this day as a seminal event in the response. After August 2016, whatever remained of the interagency siloes were (temporarily) torn down.

Agencies and services for SUD prior to the addiction epidemic and subsequent response in Huntington/Cabell County were primarily focused on recovery and treatment. As the increasing number of individuals with SUD were recognized by frontline agencies across the community, programs were developed that either focused on the agreed sub-population (prenatally-exposed babies) and adopted as best practice from other communities (Drug Court, Harm Reduction), or were attempts by leadership organizations to develop a functional plan (Mayor’s Office, Marshall) (Figure 12). These programs were largely developed in isolation or with a limited group of interested parties that simply did what they could. After the events of August 15, 2016, the establishment of programs became more directed.



HUNTINGTON, W.Va. - Officials in a West Virginia city are warning people about an especially dangerous batch of heroin after authorities responded to 26 overdoses in within a four-hour span.

The rash of overdoses came Monday in the city of Huntington, which sits in Cabell County along the Ohio River in the western part of the state. Gordon Merry, the county's EMS director, said at a news conference Tuesday that the heroin the users had taken was laced with a strong substance, but authorities aren't sure what it is.

Figure 11: One example of the national reports about the overdoses on 15 August, 2016 in Huntington/Cabell County.

In meetings joint hosted by Marshall University’s Division of Addiction Science and the Mayor’s Office of Drug Control Policy, community members that work with SUD populations were asked for their opinion of what should be the focus of the community response. For the many individuals and agencies that had felt underappreciated from traditional approaches, this was a significant change in approach. In that meeting several needs were identified:

- Lack of Detox Beds
- Poor access to care across the population, i.e., need to “meet population where they are.”
- Not enough housing for new mothers with SUD
- Programs do not work well together

New programs developed after this meeting largely addressed one of these defined needs. Prester Center immediately doubled the number of Detox beds. Project Hope for Women and Children was developed to address the need for more housing for new mothers with SUD. Collaborative efforts designed programs that either Improved access to care or developed a community collaboration to continuously improve

I think we spend a lot of time with people with initials after their names thinking they have the answer and the only thing they've been in is a book. –Frontline Worker

system optimization (Figure 12). These new programs developed quickly because agencies in the community were willing to share infrastructure. All of the post-Aug 2016 programs went from concept to implementation in less than two years, with early results realized by early in 2018. Timing seems to have been critical. Many interviewees reported a lack of public support prior to Aug 2016. However, had the leadership structures not been in place when the events of that day occurred, there is a strong possibility that the overall response would have been too slow to effectively change the course of the epidemic.

Prior to the response (before 2014) programs largely focused on treatment or recovery exclusively. Without widespread support,

We had people hiding in plain sight. –Key Stakeholder

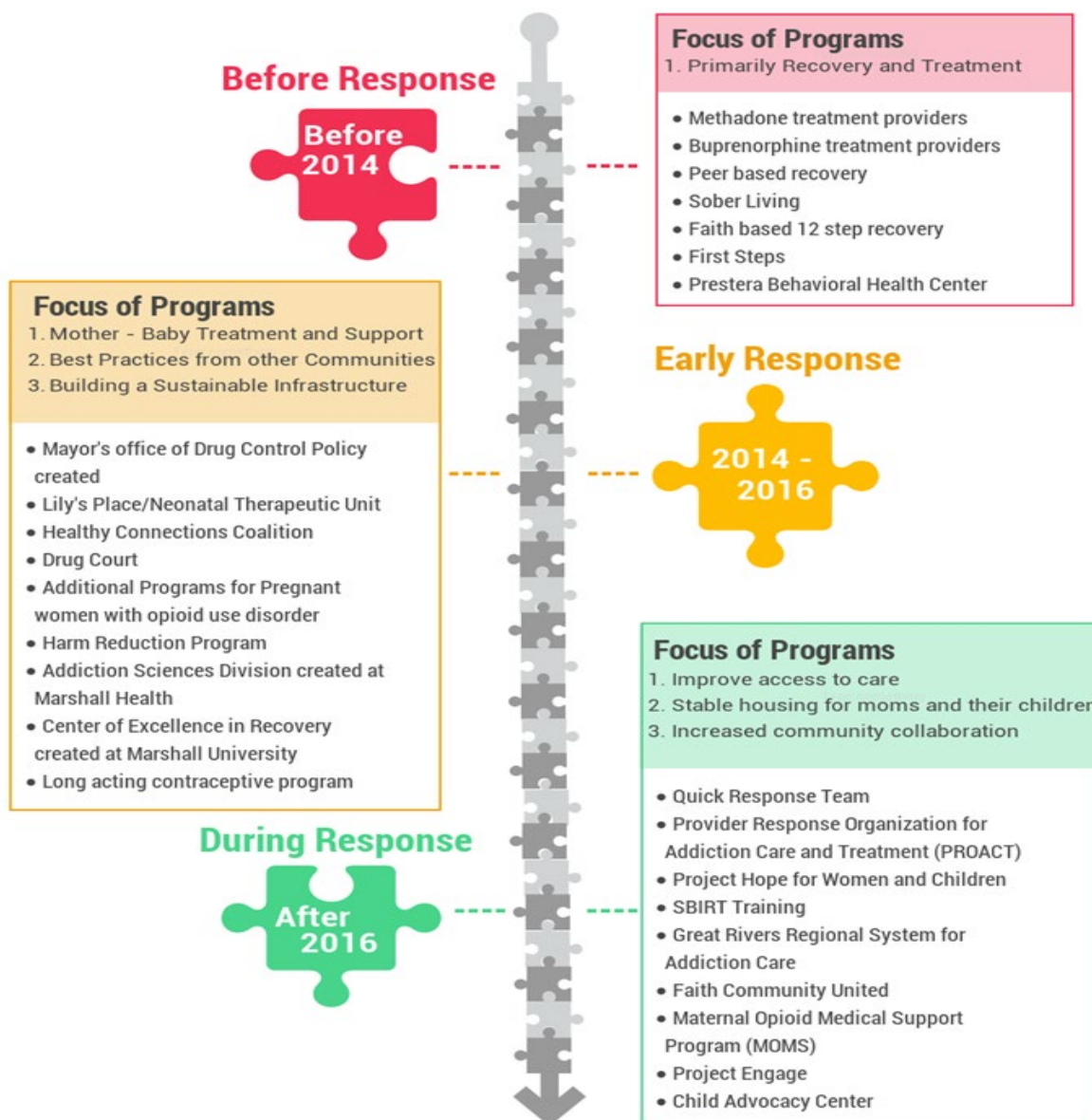


Figure 12: Programs for individuals and Families with SUD in Huntington/ Cabell County established before the response, early in the response, or during the full community effort.

agencies created the programs that were sustainable through medical reimbursement claims. As these agencies were at the forefront of addiction in the community, they often understood the need for additional services and recovery support, but did not have the resources to fund such efforts with grants that are time consuming and unreliable long-term. Thus, many programs developed by community agencies throughout the years prior to the epidemic were ultimately short-lived.

In the early days of the response, public support for those struggling with addiction was largely restricted to prenatally-exposed babies. Thus, the steps taken to establish the Mayor’s Office of Drug Control Policy, the Cabell-Huntington Harm Reduction Program, and the Marshall University Division of Addiction Sciences and Center of Excellence for Addiction Care required leaders to shoulder a fair amount of political risk.

Treatment/ Recovery Services by Client "Helpfulness" Rating.

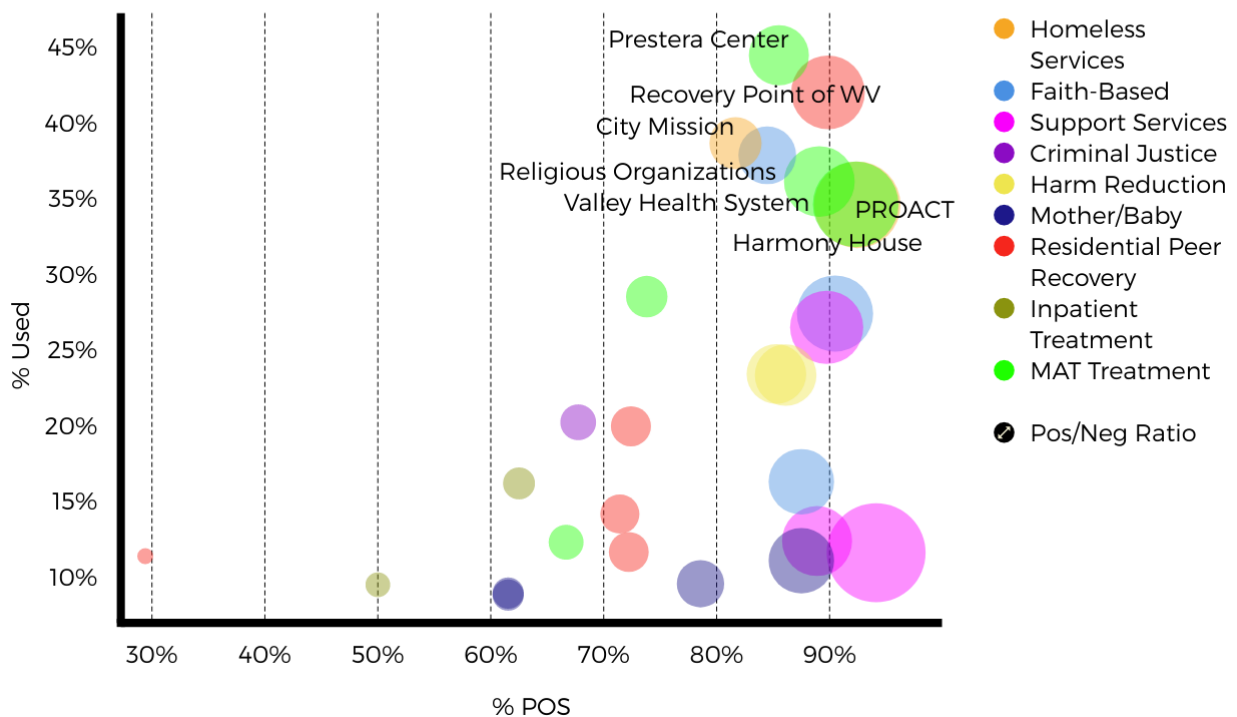


Figure 13: Indication of usefulness of agencies in the response to the addiction epidemic in Huntington/ Cabell County, WV. Participants in the client survey (n=219) identified which community services they utilized which agency or services they utilized and indicated which (yes/no) if that agency or service was helpful to their recovery. Labeled organizations represent those agencies who were identified as used by >30% of participants and 80% of those who used the agency in their recovery indicated that agency as ‘helpful.’ Harmony House and PROACT very closely overlap in the figure.

The Client Survey (n=219) identified PROACT and Harmony House (a drop in center for individuals experiencing homelessness) as the most impactful organizations by being used by >30% of respondents with >90% of those that used the agencies labeling them as ‘helpful.’ All of the agencies labeled in Figure 13, with the exception of PROACT, existed prior to the response, but have made significant changes to their services during the response.

Collaboration Creates Opportunity for Sustainable Programs: All 44 Key Stakeholders reported that expanded services either improved utilization or created new programs during the response. Many attributed open dialogue across the community or better communication with partner agencies for these expansions. This is a strong example of how collaboration helped to overcome critical barriers and optimize existing agencies. While the community-wide collaboration helped to improve utilization of existing programs, new programs were developed through partnerships to fill critical gaps.

Quick Response Team (QRT) – QRT is a response team that visits victims of overdose within 24-72 hours after the event. The concept is to engage those with severe SUD at their most vulnerable time in order to get these most at risk individuals into treatment. Operated by Cabell County Emergency Medical Services (CCEMS), the QRT was originally developed as a collaboration between CCEMS, the City of Huntington, Marshall University’s Joan C. Edwards School of Medicine, Prestera Center, Recovery Point of WV, Huntington Police Department, and the faith community. The QRT is responsible for an increase in referrals to treatment. This program was funded by grants awarded to the City of Huntington.

Project Engage – Project Engage is a program adapted from a similar program developed at Christiana Health in Delaware. This program uses specially trained clinical staff and peer recovery coaches to identify and engage individuals with SUD in the hospitals so they can be referred to treatment. Project Engage was established through a collaborative effort of Mountain Health, which operates both Cabell-Huntington and St. Mary’s hospitals in Huntington, Recovery Point of WV, and Marshall University. Project Engage was established with grants from the State Targeted Response Program and funding from both hospitals and is sustained through medical reimbursements.

Provider Response Organization for Addiction Treatment (PROACT) – PROACT is a standalone facility designed to improve time to treatment for individuals referred. The goal of PROACT is to get patients treatment with 72h of interaction with the healthcare system. PROACT provides appropriate therapy, including Medication Assisted Treatment while connecting patients to recovery support programs. PROACT is the centerpiece of the community response. Initial funding for PROACT was provided by grants and donations from across the community with additional support from Mountain Health Network, Valley Health Systems (a local Federally Qualified Health Center) providing clinical support, Recovery Point of WV providing peer support. The physician’s group of the Joan C. Edwards School of Medicine at Marshall University (Marshall Health) operates the facility while providing additional recovery support. Valley Health Systems would eventually leave the collaboration once PROACT was able to operate independently through medical reimbursement.

Project Hope for Women and Children (Project Hope) – Project Hope, and later the transitional living facility Hope House, filled a critical need by significantly expanding the residential space for new mothers with SUD and their prenatally-exposed children. Operated by Marshall Health, Project Hope is a facility owned by and located at the Huntington City Mission that provides treatment and extensive support to mothers with SUD in conjunction with PROACT. Renovations of an existing building was made possible through grants from the Ryan Brown Foundation and SAMHSA with substantial private donations from the Huntington/Cabell County community.

Stigma, Misunderstanding, and Educating the Community: The top barrier mentioned by both KS and FL was stigma. For this evaluation, based on the interviews, stigma is defined as “a negative attitude and/or treatment toward persons with substance use disorder.” Stigma is often mentioned as a major issue in individuals struggling with SUD. In the same vein, “lack of education” and “lack of understanding of addiction” were also mentioned as significant barriers; these were both considered contributors to stigma and poor treatment of individuals with SUD. Several FL recounted stories of individuals not seeking care due to feeling stigmatized by the general public and healthcare workers. Clients reported the “General Public” as the social group in which they received the highest level of stigma. (Figure 14) It is not clear if this perception is derived from individual interactions across the community or from media depictions of those with SUD. “Churches/ religious community,” “Police/ Law enforcement,” and “Hospitals” had the next highest selections in the survey. Each of these areas were addressed in different ways.

I don't know of the right words, understanding that they have a little more sympathy towards the problem, and I think it was brutal there for a while. I mean, I would go out to eat...[and]...they would come up and they'd really get on my case. Why are you wasting money? Let these people die. We don't need them. –Key Stakeholder

While a campaign that was specifically designed to reduce stigma across the community was deployed in Huntington/Cabell County, implementation of the plan did not occur until late in 2019. Thus, the outcomes of the anti-stigma campaign are part of the ongoing plans and not the response as evaluated in this report. Anti-stigma efforts during the response were far more grassroots. Both KS and FL mentioned both community buy-in and education as key areas of success when asked, “What is working?”(Figure 6) Many interviewees specifically discussed in open dialogs about how the mechanisms and consequences of addiction helped many start to see the SUD population as individuals suffering instead of people with intent to harm the community. There were three areas broadly mentioned throughout the interviews credited with reductions in stigma:

Perceived stigmatization among extensive social support system by individuals with SUD

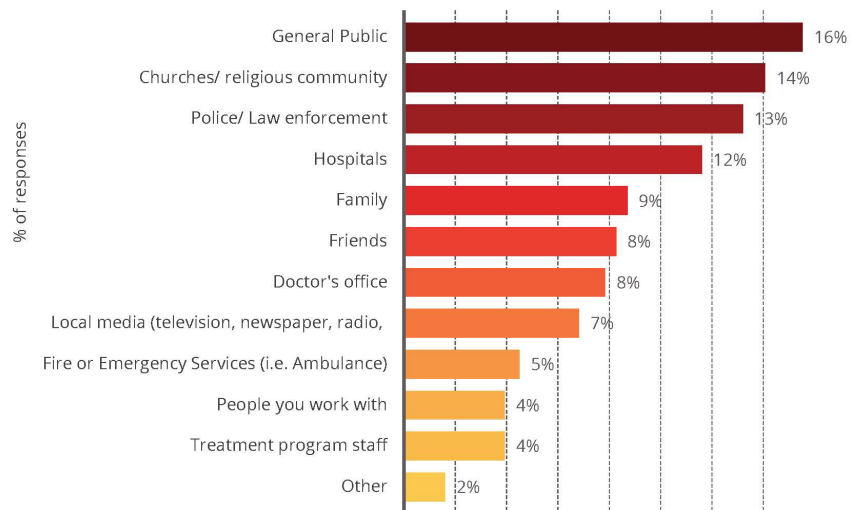


Figure 14: Patients with SUD were asked to indicate where they experienced stigma with the question: “Where in Huntington / Cabell County would you identify as having high levels of stigma?” N=219

1. Community leaders and medical professionals having a better understanding of addiction and insisting that their respective staff followed suit.
2. Education of people across the community, particularly those in positions of power.
3. Engagement of the faith community.

“I’ve-, seen a lot I’ve seen a lot more acceptance. And yes, there are some people out there who have certain beliefs, but I’ve seen more willingness to explore and to challenge those beliefs within themselves.” – Key Stakeholder

The educational programs mentioned throughout the interviews were, in reality, a mix of clinicians, researchers, and public health officials from Marshall University and the Cabell-Huntington Health Department providing educational sessions. Individuals from these organizations volunteered their time to provide addiction education and training sessions to any organization willing to support such a session. Despite the lack of a comprehensive curriculum or program, almost all of these educational sessions included some level of anti-stigma education.

While our client survey indicated a slight overall improvement in stigma as reported by individuals with SUD (Mean of 5.91 on a 1 to 10 Likert scale) (Figure 15), it is not clear how much these educational sessions affected the improvement of stigma outside of the organizations that specifically received the training. Client survey respondents indicated an improvement in stigma 57.21% of the time, with 23.88% reporting stigma worsening, and 18.91% of responding that stigma did not change.

Rating of Changes in Community Stigma by Individuals with SUD

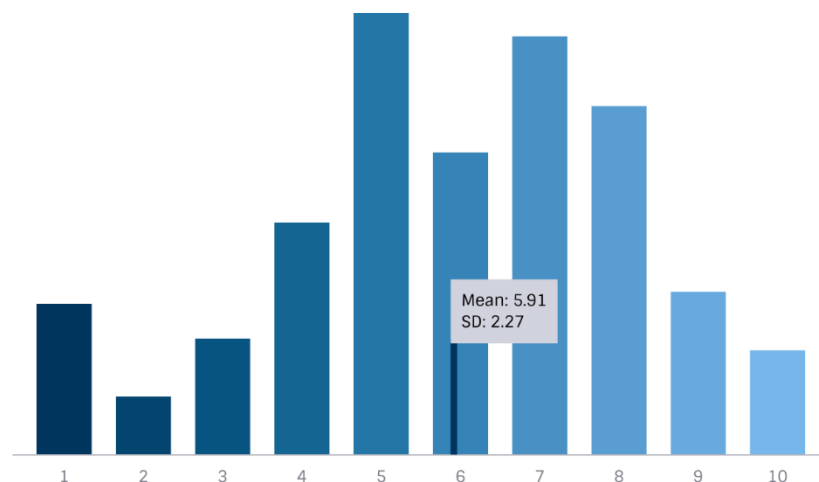


Figure 15: Patients with SUD were asked to rate on a scale of 0 (Much Worse) to 10 (Much Improved) – with 5 indicating “No Change” on the change in access to treatment with the question: “In the past five years have you seen a change in how those with substance use disorder are viewed by others in the community?” N=218

KS and FL interviewees mentioned “Community by in” and “Education” as two of the strongest factors working within the response. (Figure 6) One factor discussed through both KS and FL interviews was the individual impact of Fire Chief Jan Rader. Chief Rader, by her own volition, engaged in a public campaign in which she openly discussed the importance of the appropriate treating for people dealing with addiction. Both KS and FL widely mentioned Jan Rader as a key contributor to changing the public conversation.

One group of religious leaders formed a coalition, Faith Community United, to utilize the above-mentioned voluntary resources and bring education and understanding to the larger faith community. Faith Community United held special sessions in churches across the community in 2017 and 2018. A significant portion of these sessions included the importance of person-first approaches and the power of stigma.

While the vast majority of anti-stigma activity was a matter of time and sweat equity, there was one grant-funded program that served to provide a structure to educate people on the use of non-stigmatizing language. Marshall University began training individuals in 2016 thanks to a grant from the Substance Abuse and Mental Health Services' (SAMHSA) SBIRT (Screening, Brief Intervention, and Referral to Treatment) Program (Amy Saunders, PI). Through 2016 and 2018, the Marshall team trained over 5000 individuals from across clinical and behavioral health services. SBIRT is designed to enhance the continuum of care for substance use disorder by improving the recognition of individuals with SUD and referring them to the appropriate care. A large part of the training, conducted primarily by a single individual – Program Director Lyn O'Connell, included the best way to make SUD patients more comfortable and responsive to treatment options. The SBIRT program was the only widespread education program that included dedicated anti-stigma education during the community response.

Battling Stigma can be difficult, particularly when the general public (who SUD clients indicated as expressing the highest levels of negative attitudes) are subject to negative media attention. There was a reduction in the ad equivalency required to counter negative media and social media reports about SUD in Cabell County from 2017 to 2018, (Figure 16) but we cannot definitively determine if the community effort was causative. There was a slight rise from 2018

The faith community was having to reconsider as in addiction as a moral failing. We had to get additional training. Interestingly, when we created the quick response team pastors became part of the quick response team. They started undergoing training instruction. Early on when we were seeking to get the faith community involved this one pastor was very honest, he said, "honestly I don't know what to say. I'll pray for you? What do we do?" As a result, we helped put together some instruction for the pastors, That was quite helpful. – Key Stakeholder

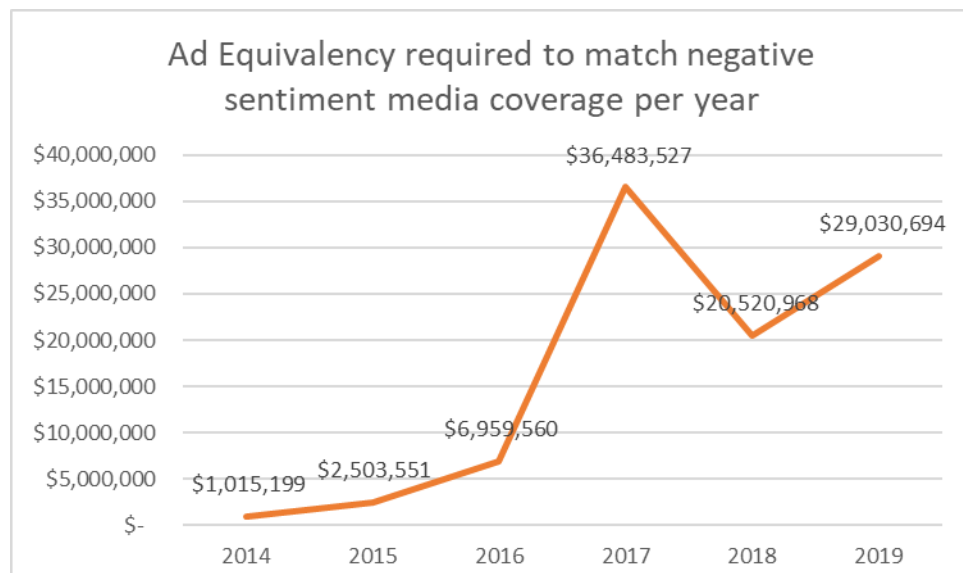


Figure 16: Ad Equivalency in media and social media articles about SUD and Huntington/Cabell County with negative sentiments. Ad Equivalency shows how much it would potentially cost to buy the total press coverage. It is calculated by multiplying the readership, potential viewership, and average ad cost. Sentiment analysis is performed by measuring the tonality of the keywords seen in the headlines and bodies of each article.

to 2019 in negatively worded media, although this rise is primarily due to reports about the opioid lawsuits with the negative sentiment directed towards pharmaceutical companies and distributors and not SUD patients. A concerted effort was initiated to reduce negative publicity about Huntington/ Cabell County, (comma) after several community leaders became frustrated with a growing amount of negative media attention in 2017. The Huntington-Cabell County Chamber of Commerce, the Cabell-Huntington Health Department, Marshall University, and the City of Huntington worked together to 1-educate local media on addiction and non-stigmatizing language and 2- limit access to key community leaders by media members that were not dedicated to developing a balance story without unnecessary negativity.

Financing the Response – Data is the Key: Key Stakeholders, particularly those in leadership positions, discussed a great deal of discontent with the response from funding agencies at the State and Federal level in the early days of the response. Both KS and FL indicated “finances/funding” as the second most significant barrier. It was difficult to attract funding and other resources when the reality of the large scope of the problem in Huntington was not yet clear in the data reported to State and Federal agencies. Community agencies were not able to attract the funding for programs until the community was able to present more real-time data.

I think having access to researchers is really important to collect the data and understand. I think having access to data, just information is so crucial because people don't understand what's happening. They don't have access to that. You know data can be like a year old sometimes even, or older. And so most people in the communities don't have access to data.
– Key Stakeholder

Grants that funded the later stages of the response were all developed through this model. KS and FL discussed throughout the interviews about how there was an emphasis on data collection. This was particularly the case from the three leadership agencies discussed previously. One Key Stakeholder summarized the data problem as, “We had to stop waiting for Charleston [State Capital of WV] and Washington to tell us who we are; we had to provide the data that explained who we are, on our terms.”

Everything from in law enforcement with the fire department, in finance just but making it all evidence-based. You don't want any of this stuff that is just a political thing. If the numbers support it, let the data speak. – Key Stakeholder

When KS and FL interviewees were asked how to measure success the majority of responses required quantitative measures. These

measures varied from system monitoring and longitudinal tracking (15 KS and 37 FL) to “more accurate numbers” (18 KS and 8 FL) and continuity of care tracking (4 KS and 19 FL). Social and lifestyle measures were also mentioned by a number of interviewees (11 KS and 24 FL) emphasizing a greater need for longer-term measures of success.

In addition to the approach of taking their lead from information about addiction in Huntington/Cabell County from the patients and frontline workers, the three leadership entities, along with Mountain Health Network and many of the SUD treatment and recovery providers, put a strong focus on accurate data collection. Most agencies, even in the face of limited funds, assigned resources (FTEs, new data systems, contractual data assistance) to improving the availability and timeliness of data related to SUD in the community. This focus on data collection culminated in the development of the West Virginia Community Addiction Data System (WVCAD). The WVCAD brings the data from all of these services, from different agencies, using different data collection systems into a single-dimensional database that can identify unique individuals across the community system in a way that protects patient privacy by utilizing the “Safe Harbor” concept.

Indicators of Success:

Huntington/Cabell County response efforts resulted in an increase in referrals to care for those with SUD from 20 to 30 per month to over two hundred per month directly associated with programs initiated as part of the response. (Figure 17). Peer recovery coaches were utilized in all the programs initiated as part of the response that resulted

The collaborative efforts are working, since overdose rates are going down. You know, when we, and I can only kind of look at a mom angle. Look at the number of moms and some of the drug free moms and babies data, I look at that data and I see improvements. Fewer moms being addicted three months after, so we see that it’s working. – Key Stakeholder

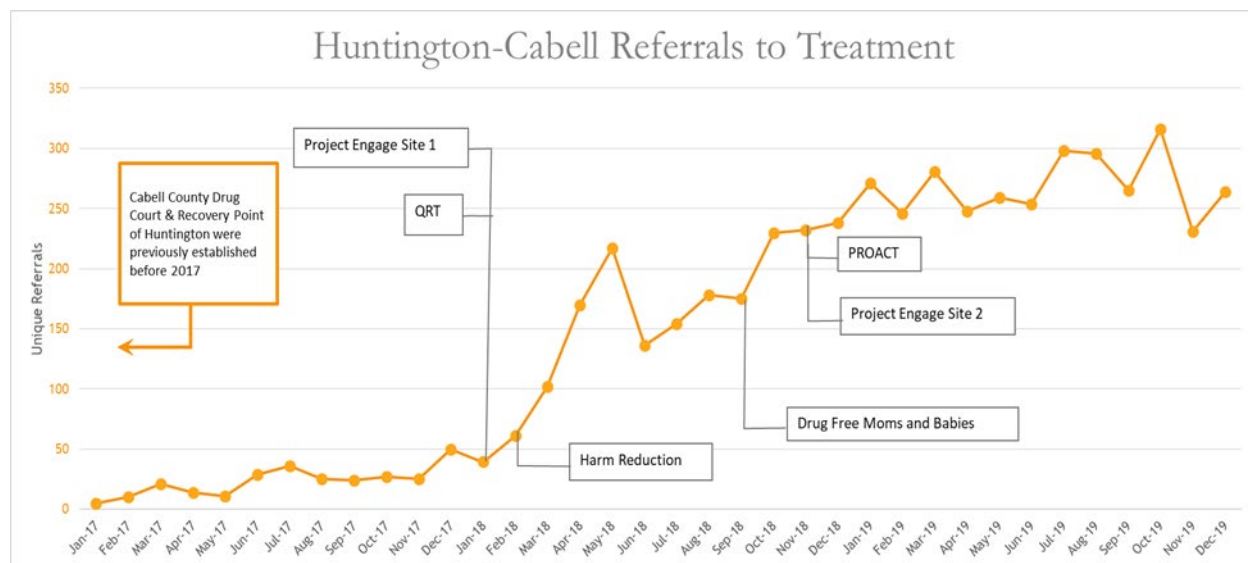


Figure 17: Monthly referrals from response programs.

in an increase in referrals to treatment. The area saw a corresponding decrease in overdose deaths. Charleston WV (Kanawha County), a city of similar size with more resources and infrastructure that sits approximately 50 miles east of Huntington, did not have a coordinated community response and saw no decrease in overdose deaths during the same period. (Figure 18)

Referrals & Overdose Deaths

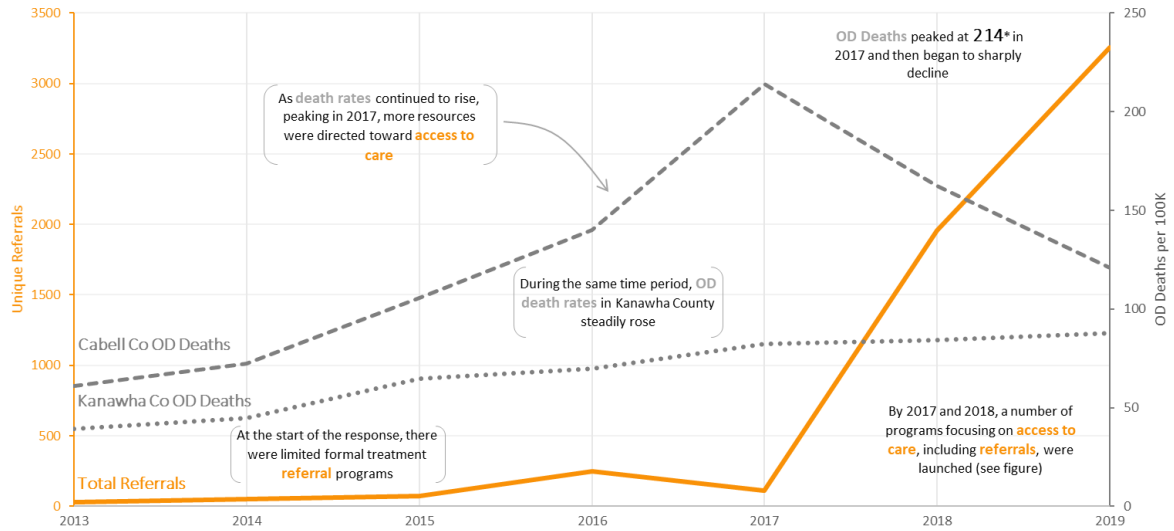


Figure 18: Monthly referrals from response programs cross-referenced with annual overdose deaths from Cabell County (Huntington) and Kanawha County (Charleston).

Several explanations have been suggested for the decrease in overdose deaths in Huntington/Cabell County:

- Increase in the availability of naloxone.** The Cabell-Huntington Health Department began public distribution of Narcan (naloxone) as part of the harm reduction program in 2015. Due to this effort, many citizens, especially those who live and/or associate with individuals at risk for overdose had Narcan available. While it seems likely that the wide availability of naloxone had a positive effect on controlling overdose deaths, the overall decrease in the Cabell County was not observed until 2018 (based on annual reports) and Narcan has been available on emergency response units since the late 1990's. Additionally, as a comparator, Charleston replicated the Cabell County distribution of naloxone with no decrease in overdose deaths.
- Transition to methamphetamine:** An increase in methamphetamine use is another potential reason for the decrease in overdose

Amphetamine Positivity Rates in Urine Drug Screen (UDS) and Overdose of Drug(ODD) Related Fatalities

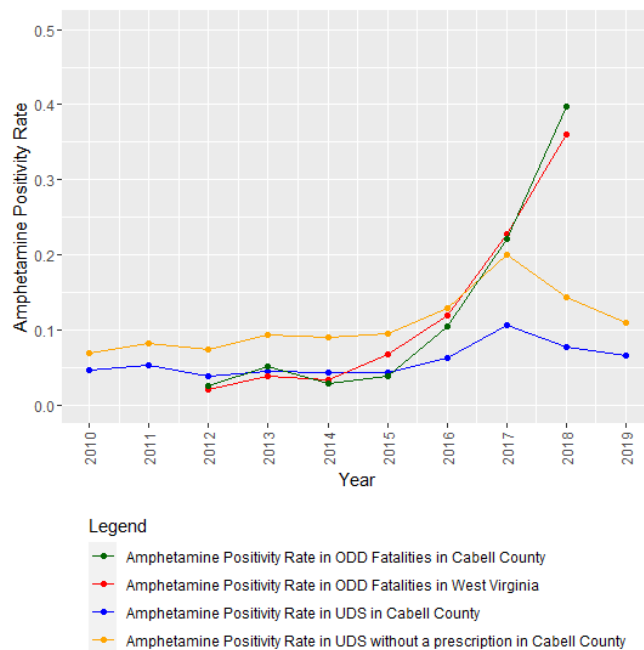


Figure 19: Percentage of drug toxicology results testing positive for amphetamines.

deaths as amphetamines do not create the respiratory depression caused by opioids. There was also an increase in methamphetamine in overdose death toxicology, although those individuals also tested positive for opioids, with few exceptions. A similar phenomenon of co-use of amphetamines and opioids was observed in new MAT patients. This suggests that the increase methamphetamine use did not substantively reduce opioid use across the population. Charleston saw a similar transition of some of the SUD population from opioids to methamphetamine with no decrease in overdose deaths. Urine Drug screen (UDS) toxicology indicated that the percentage of hospital tests showing positive for amphetamine decreased in 2018 and 2019 suggesting that a switch in use across the population to methamphetamine from opioids may not have been a strong factor in reducing overdose deaths. (Figure 20)

3. Increase in Individuals in Treatment: The increase in referrals was recorded with a corresponding increase in treatment initiation over existing programs. Initial increases in treatment initiation were first observed in abstinence-based recovery programs,

followed by MAT-based treatment as the necessary medical infrastructure was established at both the State and local levels. (Figure 20) West Virginia passed the 1115 Waiver

exemption in 2017 resulting in a 10-fold increase in MAT prescribers by 2019. Existing programs in Huntington/Cabell County reported that they remained at capacity for the entirety of the reported time period. Increases in treatment initiation is the only available data that corresponds with the decrease in overdose deaths.

As the number of treatment initiations increased, patients maintaining program compliance increased in a similar fashion. New programs initiated experienced a high percentage of patient continuity beyond 90 days initially when the provider to patient ratios

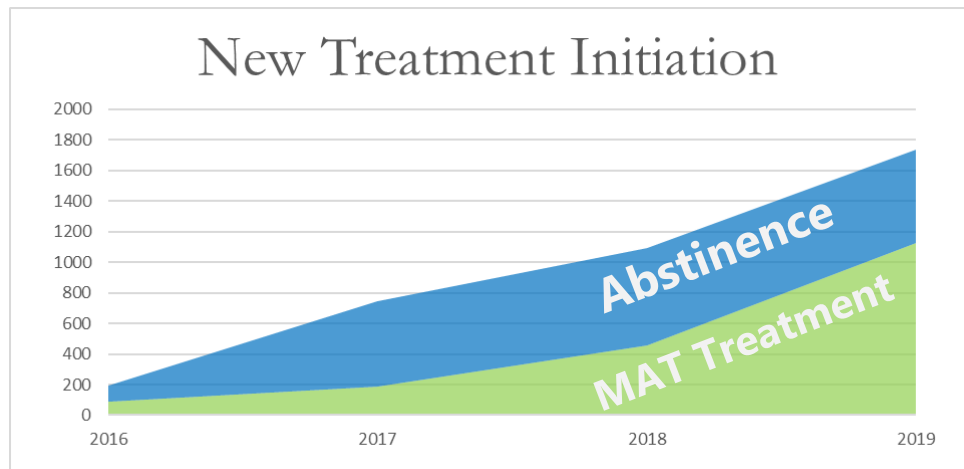


Figure 20: Treatment initiation above existing patient capacity.

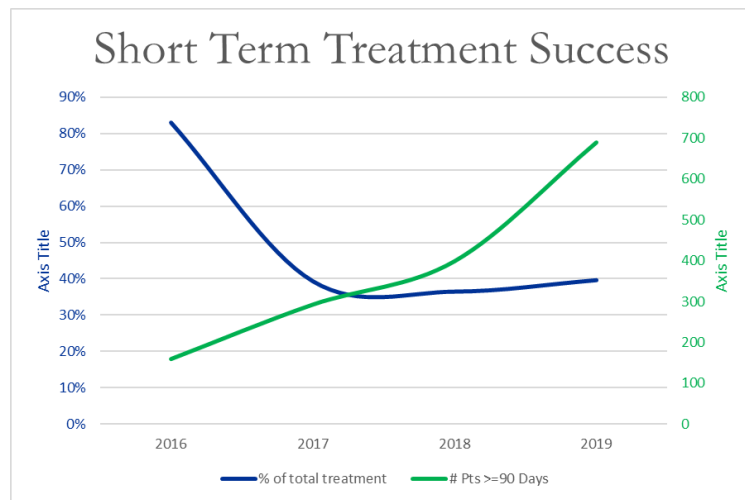


Figure 21: Total number of individuals from new or expanded programs staying in treatment longer than 90 days.

were high and the patient population was self-selected for those willing to utilize new programs. Program effectiveness, as determined by individuals maintaining program compliance for greater than 90 days, leveled off to approximately 40% as programs reached capacity. (Figure 21) The majority of individuals referred and initiated in treatment are in active.

The decrease in overdose deaths, increase in referrals, and treatment initiation correspond with a decrease in opioid used detected by UDS. There was a State-wide change in opioid prescribing practices. It is unclear how much impact the decrease in overall opioid prescribing had on overdose deaths, but the percentage of overdose deaths that included opioids did not change.

Referrals to treatment and the increased availability of services improved access to care as experienced by the patient population (Mean of 7.77 on a 1 to 10 Likert scale). Respondents reported improvements in access to care 85.91% of the time, 4.70% indicated a decrease in access, and 7.65% responded no change. A survey of individuals with SUD evenly distributed between MAT patients, individuals in peer (abstinence)-based recovery, and those with SUD who are also experiencing homelessness indicated a large improvement in their perception of access to treatment (Figure 22).

Rating of Changes in Access to Care by Individuals with SUD

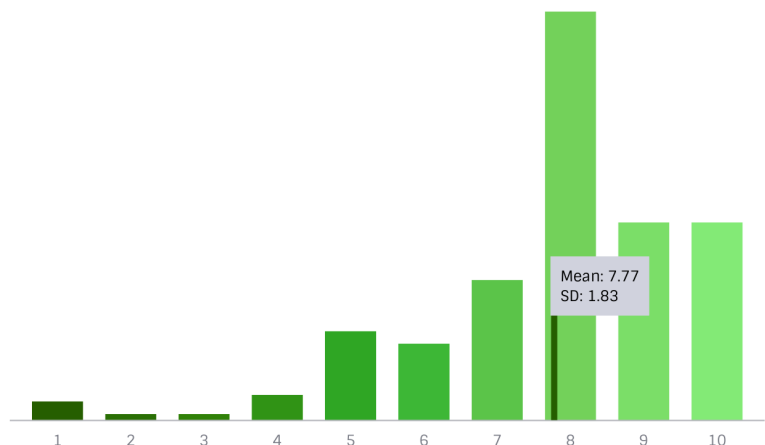


Figure 22: Patients with SUD were asked to rate on a scale of 0 (Much Worse) to 10 (Much Improved) – with 5 indicating “No Change” on the change in access to treatment with the question: “How has access to treatment and recovery for substance use disorder changed within the past 5 years? Please rate on the sliding scale below.” N=218

So I do believe when I'm saying that person needs support after their treatment, it's really the whole family that needs support. – Frontline Worker

Despite a clear impression of the response as being successful, many interviewees expressed concern at the lack of programs for children and families. The focus on programs reducing overdose deaths, increasing access to care, and individuals in treatment were considered good and necessary, but short term. Similarly, the efforts towards treating prenatally-exposed babies were considered a small piece of a larger problem. FL Interviewees strongly support a more integrated approach to SUD care that focus' on prevention and comprehensive family issue. (Figure 23)

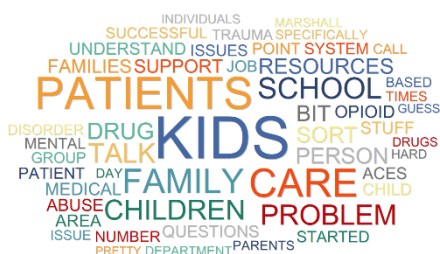


Figure 23: Single word broad concepts for next steps derived from FL interviews.

As the focus of the response was initially on reducing overdose deaths, increasing access to care, and individuals in treatment, prevention efforts were initiated slower than other programs.

Some evidence-based practices prevention practices and improved social emotional learning were initiated several years prior to the response (2012-2014), but were not ubiquitously utilized. Response related programs were not initiated until the 2018-2019 school year. Despite this lag, the number of High School age children self-reporting substance use decreased from 57.5% to 49.7%. (Figure 24) It is not clear whether this decrease is due to the earlier or later prevention efforts, or if it is a positive consequence of the active efforts of the larger response. This reduction could be a result of secondary prevention due to their family members receiving treatment, increase awareness and attention from teachers or coaches, or awareness on the part of the students themselves based on the publicity created by the epidemic and subsequent community response. FL interviews, whose participants work directly with the SUD population, including children, revealed strong themes related to the consequences of addiction on children.

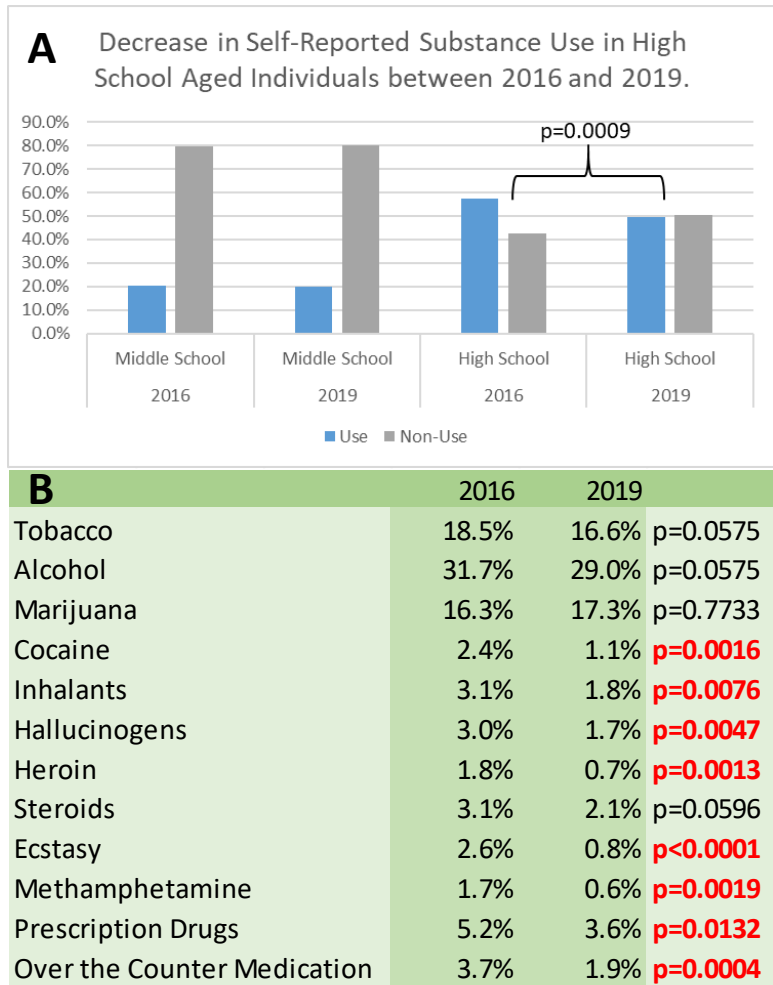


Figure 24: Self-report data collected by the Prevention Empowerment Partnership from the Pride Survey indicates a decrease in substance use in High School age students between 2016 and 2019. n=4179

Gaps and Future Directions: The response to the addiction epidemic was focused on improving access to treatment and reducing overdose deaths. This evaluation has provided evidence that the efforts put forth by the community were successful. Preventing overdose deaths and getting more individuals into treatment is the first critical step. The effects of addiction in the Huntington/Cabell County are more pervasive than these early stages. KS and FL were largely in agreement about the gaps in the current system. It is clear that both groups believe that better access to “mental and behavioral healthcare” and “resources for children” were

the two most important gaps in the community’s ability to assist individuals and families struggling with addiction. While several of the programs are now sustained through reimbursement models, sustainability is still a struggle as KS, and to a lesser extent FL, listed “funding” as the third most critical gap. KS continued to be focused on “timely treatment referrals” more than FL. Both groups strongly supported patient lifestyle issues like “integration in the workforce” and “affordable housing.” Issues addressed during the response “timely treatment referrals” and “stigma” were mentioned by both, but more strongly by KS. FL, on the other hand, were more concerned with “long-term treatment,” “Adverse childhood experiences,” (ACEs) and “resources for grandparents” (specifically referring to grandparents who are raising grandchildren because of issues in the family related to SUD). (Figure 25)

What Gaps remain after the response in the Cabell/Huntington area?

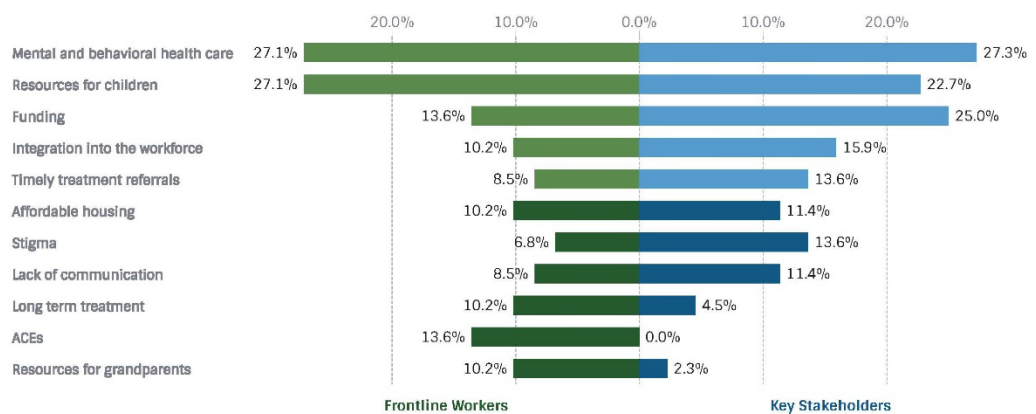



Figure 25: Answers given to the question, “What are the remaining gaps?” answered by more than 10% of interviewees.

Based on the identified gaps, a few key programs developed during the later stages of the evaluated response or after (late 2019+) may be important to the long-term recovery of the community. Recent programs are directed at improvements in behavioral health capacity, resources for children and childhood trauma, and special programs for long-term self-care.

Mental Health and Behavioral Healthcare: Despite improvements in capacity and access to care, the Huntington/Cabell County community still has a deficit of behavioral health professionals. Many KS and FL expressed a great deal of concern about the ability to attract qualified therapists to the area. Having enough therapists that have the appropriate training and experience to treat children with several behavioral health issues, including SUD, was reported as being particularly difficult. These sentiments are reflected in the gap analysis. Marshall University’s Departments of Social Work and Psychology have been attempting to address the problem directly through the training of more therapists and counselors. The Joan c. Edwards



School of Medicine at Marshall University has also started an Addiction Science Fellowship to expand the number of addiction specialists in the area.

Resources for Children: The Prevention Empowerment Partnership (PEP) is a coalition of concerned citizens that work with the schools and other agencies to engage in primary prevention activities. PEP has deployed a litany of structured and evidence-based interventions in education, outreach, and engagement of school age children specifically designed to reduce substance initiation and use.

Funding: Attracting extramural funding and reimbursable models remains a challenge. While most agencies remain collaborative, attracting funding for programs remains a competitive process. The community has been able to optimize funding by sharing responsibilities with agencies that already have the necessary expertise. For example, the Child Advocacy Center in Cabell County basic operations is subsidized by Cabell-Hunting Hospital (part of the Mountain Health Network), but relies on reimbursable therapists from Pretera Center and Valley Health System. Similarly, Project Hope for Women and Children clients receive services through PROACT. Collaboration allows agencies to optimize their expertise whereby improving sustainability and reducing resource requirements for some projects. Despite this, funding remains a challenge considering the scope of the problem.

Integration into the workforce: Frontline workers and clients have expressed the need for employment assistance through this evaluation process. Creating Opportunities for Recovery Employment (CORE) was established at Marshall Health to address this gap. Initially funded by Appalachian Regional Commission and established late in 2018, CORE was not in full operation in time to contribute to the response evaluation, but all sectors agree that it is critical for long-term community health. Through CORE, patients of the majority of SUD treatment providers or recovery programs can receive workforce readiness training and job placement services that coincide with their care. CORE has also worked with the WV State Chamber of Commerce and WV Jobs and Hope to establish an employer's tool kit to provide advice and human resource recommendations to establish a drug-free and recovery friendly work environment.

Timely Treatment Referrals: The timeline from referral to treatment initiation can be critical to establishing some individuals in treatment. Despite the development success of PROACT and Project Engage to ease the transition from initial interaction with the healthcare system to initiation of treatment, there remain barriers to a fully functional process. PROACT has increased hours of availability regularly since it opened, but is limited by the number of patients treated in those expanded hours due to issues related to sustainability. Project Engage, on the other hand, is dependent on finding the right staff to run the program and has struggled with culture shifts within the hospitals. Both programs have dramatically improved access to care, but still have some growing pains to overcome before they are optimal.

Affordable Housing: Affordable, recovery-friendly, housing that accepts clients that struggle with the challenges often experienced by those in recovery remains a problem. Two major efforts are addressing this gap. The first is the opening of Hope House in 2020, an extension of Project Hope for Women and Children that provides longer-term housing for families that graduated from the transitional program at Project Hope. A new effort Local provider OVB Health has

partnered with Fannie Mae, the Fletcher Group, and Marshall University to create a recovery housing strategy for the area.

Stigma: Marshall University and Quality Insights have developed a number of anti-stigma initiatives. The first is a highly targeted and measurable digital advertising campaign specific for and only promoted to hospital staff via their mobile devices. In addition an e-learn curriculum was developed as an interactive training session created and tested by a combination of physicians and nurses who have extensive experience with SUD and non-clinical individuals. This curriculum has clinical and non-clinical tracks designed to reach, educate, and impact individuals with the most effective stigma-reduction training for their work environment.

Lack of Communication: Communication in any community across agencies can be difficult, and Cabell County, WV is no different. Despite an unprecedented level of collaboration, the area still has challenges in communication. The WV Community Addiction Dashboard (describe in Methods) was designed to not only share data across SUD providers, but also to create a platform for continued cross-community collaboration. Governance of the data in the WVCAD is overseen by a committee of individuals from around the community to assure that the public health efforts of the data system was representative of the needs and will of the community as a whole.

Adverse Childhood Experiences (ACEs): In the process of the evaluation, an ACEs Advisory Group-comprised primarily of frontline workers developed a plan for addressing ACEs with NORC and the research team. That Advisory Group is now in the process of developing an implementation strategy for that plan (attached as Appendix B to this report).

Resources for Grandparents: Cabell County Schools have developed a program targeted at helping grandparents who are now raising their grandchildren due to problems related to SUD. This program was developed late in the response and was not able to be fully implemented due to the COVID-19 pandemic response requirements.

Limitations: The evaluators recognize that there are several limitations associated with this study. Researchers consciously worked to gather a broad spectrum of thoughts and opinions from both stakeholders of various levels of interaction with the SUD population across Cabell County, WV. However, study findings are limited to those stakeholders willing to participate in the research. The Client Survey, despite representing a sampling of individuals with SUD taken evenly from the population, had a small number of respondents (219). As a qualitative study that identified correlations suggesting an effective community response, it is impossible to definitively determine which components of the response had the greatest impact. Consistent themes were identified across respondents; however, the findings may not be generalizable to other settings. Additionally, the COVID-19 social distancing requirements delayed data collection and could potentially have influenced data collection.

Conclusion: The City of Huntington and surrounding Cabell County, WV has been called, “Ground Zero of the Opioid Epidemic.” While the validity of that statement can be debated, there is little doubt that this modest city with just over 100,000 people in the metro area became synonymous with the addiction crisis now facing many communities. A number of novel programs were developed as part of the response to this epidemic, some worked, others did not. A lot of the ideas behind these programs came from other communities, the QRT, Project Engage, Drug Court. Even the Mayor’s Office of Drug Control Policy contained concepts borrowed from other communities. Since the response, several communities have developed programs similar to those used in Huntington/Cabell County without the positive results. However, many of these programs work and are necessary to fill the critical gaps that many communities are experiencing.

For years, frontline workers asked for help or complained about poor access to care for their clients. First responders wearied of seeing the same individuals committing drug-related crimes or overdosing. Those families struggling with the consequences of addiction were often pushed aside because of lack of resources or programmatic bureaucracy. The three people who would eventually be named as the champions of the response by their peers were a mayor that initially thought it was a police problem, a health department director that did not fully believe in harm reduction, and a family physician who wanted nothing to do with addiction. All of this amongst a community that largely just didn’t want to deal with the people suffering from addiction lent to a weak or no response. This may sound familiar if you are in a community that is losing hope against this epidemic. These champions, along with countless individuals across the community, would put their preconceived notions aside to learn the realities of the situation and move forward without hesitation. Thus, Huntington/ Cabell County found its hope in ownership, collaboration, and knowledge.

From the top down the Huntington/ Cabell County community took ownership of the problem. Ignoring addiction was no longer an option and everyone was expected to do their part. Ownership quickly turned into a remarkable environment of collaboration as the problem was simply too big for any one group or agency. With this came the recognition that the data collection and analytics had to far exceed the methods of the past.

Extraordinary things came out of this new environment beyond just what was outlined through this report. Some brief examples include: Marshall Heath and Valley Health Systems – traditional competitors – worked together to operate PROACT. The Greater Huntington Chamber of Commerce helped teach businesses how to be “recovery friendly.” MAT programs engaged in peer-support to improve outcomes of their patients while peer-based programs that traditionally shunned medication worked collaboratively with MAT. Perhaps most importantly, individuals suffering from addiction are now looked at as families in trouble.

The fundamental lesson from this evaluation of the Huntington/Cabell County response to the addiction epidemic is that selecting and adapting the appropriate programs for your community is important, but far less important than the implementation process.

Lessons for Other Communities: When a community responds to a crisis and other communities face similar challenges, there is often talk about the services and programs that helped the community recover. While there were certainly innovative approaches like Lily's Place, PROACT, the Quick Response Team, and Faith Community United, the true story of the Addiction Epidemic Response in Huntington/ Cabell County, WV lies in how these programs developed through collaboration and willingness to change. Here are the recommendations for any community facing an addiction crisis that wishes to develop a full community response based on lessons learned from Huntington/ Cabell County, WV:

1. **Admit there is a problem:** The community leadership in Huntington/ Cabell County, WV did not shrink from the problem. An open and public admission of crisis was the first critical step to an effective response.
2. **Empower existing resources:** While there were new programs developed during the response, increased capacity and response came from existing agencies or collaborations between existing agencies. Every individual and agency in the community should be encouraged to do what they can and empowered to be creative with solutions. It is likely that the knowledge of the critical gaps in any given community exists within the frontline workers and patient population, but the key stakeholders hold the resources and authority to make that knowledge actionable.

...just do the best you can. Focus on trying to do 150 percent every day at all times and just be supportive and positive... – Frontline Worker

3. **Create Collaboration:** The overarching theme of the evaluation of the Huntington/ Cabell County response was collaboration. Everybody in the community has a role to play. Ego, status quo, and siloed organizations will inhibit any response.
4. **Focus attention on whole life recovery and families:** Substance use disorder has a collateral effect on all those connected to it. Community recovery includes all members of the community.
5. **Treat patients as human beings:** Stigma is an important part of creating an environment that encourages recovery. Individuals with SUD, like most people, respond better when they are treated with respect and kindness. When clients do not feel like a program or service will treat them well, they will not use it.
6. **Control the message:** Communities can control the message foremost through data collection. Federal and state agencies do not have access to the same real-time data as the local community, nor can they understand how that data relates to the reality of any crisis. To conduct a timely response, the local community has to inform federal and state agencies of the reality of a crisis through shared real-time data.
7. **Watch out for compassion fatigue:** Frontline workers and first responders often deal with difficult and frustrating situations related to SUD. Supervisors of these critical members must actively address compassion fatigue. Frontline workers, in the evaluation of the Huntington/ Cabell County response, reported lack of feedback as one of the most frustrating issues. First responders especially feel the need to know if those they arrest or treat with SUD find recovery; as the positive outcomes of their work may not be measured or shared.

Index of Community Members Mentioned in Evaluation:

In order of appearance:

- Sean Loudin
 - Former Medical Director of Lily's Place and Cabell-Huntington Hospital Neonatal Therapeutic Unit
- Steve Williams
 - Mayor, City of Huntington
- Jim Johnson
 - Former Director, Mayor's Office of Drug Control Policy
- Jan Rader
 - Huntington Fire Chief
- Scott Lemley
 - Former Police Data Analyst
- Michael Kilkenny
 - Medical Director, Cabell-Huntington Health Department
- Stephen Petrany
 - Chair, Joan C. Edwards School of Medicine, Department of Family Medicine
- Bob Hansen
 - Director, Division of Addiction Sciences
- Amy Saunders
 - Principle Investigator, Marshall SBIRT Program
- Lyn O'Connell
 - Former Program Director, Marshall SBIRT Program

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