

The Appalachian Regional Commission (ARC) is an economic development agency of the federal government and 13 state governments focusing on 420 counties across the Appalachian Region. ARC's mission is to innovate, partner, and invest to build community capacity and strengthen economic growth in Appalachia to help the Region achieve socioeconomic parity with the nation.

ORAU provides innovative scientific and technical solutions to advance national priorities in science, education, security and health. Through specialized teams of experts, unique laboratory capabilities and access to a consortium of more than 100 major Ph.D.-granting institutions, ORAU works with federal, state, local and commercial customers to advance national priorities and serve the public interest. A 501(c)(3) nonprofit corporation and federal contractor, ORAU manages the Oak Ridge Institute for Science and Education (ORISE) for the U.S. Department of Energy (DOE). Learn more about ORAU at www.orau.org.

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Communicating about

OPIOIDS in APPALACHIA

CHALLENGES, OPPORTUNITIES, AND BEST PRACTICES

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Background

From January–June 2017, the Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control (NCIPC), the Appalachian Regional Commission (ARC), and Oak Ridge Associated Universities (ORAU) conducted interviews and focus groups to explore best practices for communicating about <u>opioids</u> in the <u>Appalachian Region</u>. The goals of the project were to:

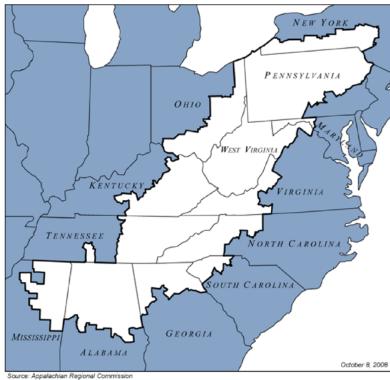
- 1) Explore how the opioid crisis is uniquely affecting diverse Appalachian communities.
- 2) Identify effective content and messaging strategies that Appalachian community-based organizations (CBOs) can use to support opioid abuse prevention, treatment, and recovery.

ORAU facilitated one-hour phone interviews with 24 subject matters experts from 12 states in the ARC Region (Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia). Experts were recommended by ARC State Program Directors. They represented diverse organizations including anti-drug coalitions, behavioral health and drug treatment centers, family medical practices, local health departments, and state organizations including the Office of Drug Control Policy, Bureau of Alcohol and Drug Services, and Division of Substance Abuse Services. See *Acknowledgements* (page 20).

In collaboration with community-based organizations (see Acknowledgements), ORAU also conducted twelve in-person focus groups in four Appalachian communities (London, Kentucky; Kingston, Tennessee; Oneida, Tennessee; and Princeton, West Virginia). A total of 47 community members participated (see *Appendix A. Focus Group Participants*). In each community, ORAU conducted focus groups with three different target audiences:

- Community members ages 25-39
- Community members ages 40–54
- Community members ages 25–54 in recovery from opioid addiction

Interviews and focus groups were audio recorded, transcribed, and analyzed to identify recurring themes. Given the parity between responses from the expert interviews and community members, this report summarizes key findings across both groups of research participants. Any significant differences between the two groups are described and delineated by "expert" and "community member."



Click for PDF file of large map featuring counties

Key Findings

Impacts of the Opioid Epidemic on Appalachian Communities

The following section serves as a concise summary of the anecdotal impacts of the opioid epidemic in Appalachia <u>as conveyed by participants</u>. This section does not attempt to incorporate a broader view of the full statistical impact of the epidemic, as chronicled in the research literature.

Health

When discussing the opioid epidemic in Appalachian communities, the public health impact is the most commonly reported concern of subject matter experts and community members. They described increases not only in the number of overdoses and fatalities, but related health impacts, including increased rates of neonatal abstinence syndrome, outbreaks of Hepatitis C and HIV, dental issues, mental health issues, malnourishment, automobile accidents, and suicide.



Crime

Participants also cited increasing criminal activity as a primary byproduct of opioid addiction. They described a confluence of secondary crimes correlated with the issue, noting increased rates of "pill-related" DUIs, battery, domestic violence, breaking and entering, property theft, and prostitution.

Also frequently mentioned by both community members and subject matter experts was a shift from the use of prescription opioids to heroin as prescribing guidelines and other regulations reduce the availability of opioids in their communities. Participants described a concomitant uptick in gang activity resulting from sale of illicit drugs (though this was more prevalent in the more urban and highly populated areas of Appalachia).

Local Economy

Community members also cited the discouraging economic impacts of the opioid crisis. A theme across the Region was a collapse in the workforce and lost opportunities for economic development. Participants gave examples of both small businesses and larger manufacturing firms that were unable to recruit workers who could pass drug screening. Additionally, turnover rates are high, as workers frequently fail random drug screenings. One community member expressed concern about attracting industries to the Region because of widespread perceptions that addiction has stunted workforce development in the Region.

Families

Participants described the corrosive effect of the opioid epidemic on families. Often mentioned was widespread parental absenteeism, either due to fatal overdose, intoxication, or incarceration. They felt parental absenteeism was strongly correlated with an increase in chronic school absenteeism. Participants also cited an increase in divorce rates and loss of parental custody due to opioid addiction. Lastly, experts regularly noted the rise in cases of neonatal abstinence syndrome (NAS) and the disorder's potentially life-long impacts on both child and caretakers.



Community Awareness

Both subject matter experts and community members discussed community awareness of the dangers associated with prescription opioids. Findings from these discussions varied, not only between the experts and the community members, but also between the community members themselves.

Awareness of Risks

Subject matter experts were divided on what the general public's level of awareness is regarding the dangers and addictive potential of prescription opioids. Roughly a third argued that most community members, specifically adults, were aware of the dangers. These experts were likely to point out that this awareness is, at least partially, a result of increased national and local media coverage, and "is better than it was five years ago."

Most of the experts, however, felt that many people were still not aware of the risks, especially children and young adults. Several factors were cited as contributing to a perception of low risk, including:

- Lack of healthcare provider (HCP) consultation on opioid risks
- A belief that medications provided by a doctor are inherently safe
- The widespread availability and frequent prescription practices, especially in communities where legitimate pain issues are common (often from injuries or chronic pain resulting from jobs with intensive physical labor)

Community members were also divided about awareness of the risks of prescription opioids; their reasoning echoed that of the experts. Some participants felt that people in their community perceive less risk because they "trust their doctors" and see prescriptions as commonplace.

Other participants expressed strong feelings about the "dangers of these medications" and relayed stories about family, friends, and neighbors who refuse to take opioids prescribed to them or who are "scared" of them (either because of the risk of overdose/addiction or the risk of becoming a victim of associated criminal activity).

Community members also spoke about awareness of the addiction crisis in Appalachia and throughout the country. They believed that knowledge of the issue is commonplace, particularly in their communities. This point was underscored by several participants who stated that "everyone knows someone who has been affected [by opioid addiction]."

Attitudes Toward Those with Addiction and Those Who Overdose

Though some subject matter experts and community members report that the opioid crisis in Appalachia may be common knowledge, they also report that this does not translate to frequent discussions about the topic in the community (i.e., at work, school, church, or other public functions). Though news stories, town halls, and community organizations are raising awareness in some communities, others report that it is a topic that is often avoided – due to lack of information, apathy, or, as was overwhelmingly reported, stigma.



A few participants described opioid addiction as "the new leprosy." Descriptions of judgmental and contemptuous attitudes towards those who are addicted from other community members, law enforcement officers, city officials, and health care providers pervaded discussions on this topic. Subject matter experts and community members alike described scenarios in which addictions sufferers are labelled as "trash" or "junkies" and overdose deaths are welcomed as "one more off the street."

This attitude is reflected in discussions regarding the use of life-saving drugs like Naloxone. While some subject matter experts described improvements with the use of this drug (e.g., availability, training on use), they also described resistance to its use and the perception that its administration was "enabling" and a waste of resources – particularly in instances where it is administered to the same person multiple times.

Some thought leaders and community members did point to specific instances where public opinion of opioid addiction and overdose is shifting to more positive tones (i.e., a focus on the potential for recovery). These includes grassroots efforts by family members who have lost oved ones and public awareness campaigns by community organizations. However, despite these efforts, consensus was that stigma surrounding the issue was rampant and many people hold highly negative views of those who may be suffering from addiction. In the words of one expert, "we still have a long way to go to reduce stigma."

Contributing Factors for Opioid Abuse, Addiction, and Overdose (Specific to Appalachia or some Appalachian Communities)

Research participants were asked to describe factors specific to their community or unique to the Appalachian Region that contribute to the opioid crisis. Below is a summary of contributing factors that emerged as themes across groups. See *Appendix B: Contributing Factors* for lists of all contributing factors by research group.



Healthcare Providers

Participants in every interview and focus group noted overprescribing among healthcare providers in their communities as a contributing factor to the opioid crisis. They noted that overprescribing among certain physicians in their area persists, despite efforts to remove "pill mills" and a few cases of physicians being prosecuted for prescription drugrelated crimes. Community members noted that "everyone knows the doctors willing to prescribe" and "where to go if you need a refill."

Community members in every group shared stories of physicians providing them or their loved ones (including children) opioid prescriptions in too large quantities compared to the medical condition and expected severity/duration of their pain. A few participants told stories of receiving pushback or being "called crazy" by their providers when they questioned or declined receiving an opioid prescription. Community members in recovery were particularly sensitive to providers who continue to prescribe opioids or encourage them to take opioids despite having made their providers aware of their history of addiction. Community members noted that most physicians in their communities will eventually stop refilling prescription opioids, but often this happens too late; the person is already addicted and likely to seek out other providers or to pursue illegal opioids.

Community members and experts presumed that many in their communities do not question taking prescription opioid medications when they are prescribed by a physician, especially when education on the potential risks is not also provided. Only two community members (out of 47) discussed ever being counseled by a provider when being prescribed opioids. Several reported that their doctors give them prescriptions without telling them the name or type of medication (e.g., "I don't know what he's given me until I see it printed on the bottle at the pharmacy"). Several participants in community groups noted that pharmacists offer education and counseling on prescriptions, though this counseling is typically optional and most people decline.

Experts and community members viewed healthcare providers, particularly physicians, as having a significant responsibility for the opioid crisis. They want community programs to educate providers on responsible prescribing and patient counseling practices to mitigate risks.

Economic Decline, Lack of Employment Opportunities, Poverty, and Reliance on Government Assistance

Research participants in most interviews and focus groups noted economic decline in their communities as a contributing factor to (and a resulting byproduct of) the opioid crisis.

Experts cited anecdotal evidence that the number of opioid abuse cases in their communities increased following closures of plants, mines, and other large businesses (e.g., Wal-Mart). Some experts and community members stated that job losses and poverty have led many formerly productive individuals to become anxious and depressed; in absence of hope for finding a new job or getting out of poverty, many turn to opioids to "self-medicate."

Several community members discussed the relationship between opioid addiction, economic decline, and reliance on government assistance. Some community members felt that reliance on government assistance helped support addiction, because people have nothing to do, yet have access to funding for prescription opioid medications. They described that family reliance on government assistance combined with addiction was particularly troublesome for youth. They described youth growing up without role models who are working, contributing members of the community. As one Kentucky community member described, "You'll ask (a child) 'what do you want to do when you grow up?' and they say 'nothing.' So you ask, 'well what does your dad do?' They answer 'nothing.'"

Multi-generational Addiction; Adverse Childhood Experiences (ACEs)

Community members and experts described many families in which several generations experience substance use disorders; they articulated a cycle in which children grow up watching substance abuse at home, become desensitized to drug use or normalize drug-taking behaviors, and often end up using drugs themselves at young ages. Two community groups described extreme examples of this cycle, one saying that kids in their communities "snort smarties in the bathroom" and another stating that kids in their community "learn to count in 'quantities and milligrams." Experts qualify multi-generational addiction as part of Adverse Childhood Experiences (ACES). Several experts



encounter many in their substance use treatment programs that have experienced profound trauma or abuse during childhood, have high ACE scores, and thus correspondingly higher risk for addiction.

Lack of Access to Healthcare Services

Participants noted several types of healthcare services that are needed to support opioid abuse prevention and treatment, but are often absent or in insufficient quantity across the Appalachian Region. These include:

- Non-narcotic alternatives to addressing pain management such as physical therapy, acupuncture, and cognitivebehavioral therapy
- Local, affordable, and licensed programs for treatment of opioid addiction

Nearly all subject matter experts and community members discussed the need for additional treatment and recovery options. Some experts emphasized that treatment programs need to be available locally; they felt that individuals would be more successful in their long-term recovery if they can learn coping strategies and receive support in the community where they reside.

However, the stories from the community members in recovery most powerfully demonstrated the need for expanding access to local and affordable treatment. Community members in recovery discussed struggling to find affordable programs once they had made the decision to seek treatment. Some told stories of being continually denied treatment because they could not afford to pay for treatment or to travel (e.g., "Finding ways to get help is hard. I called fifty places in one day and none would take me because I couldn't pay. A lot of the places I called wanted money up front, and if you are using you don't have that kind of money"). Others were only able to receive treatment after they were arrested and their treatment was mandated and paid for through state drug courts (e.g., "when I went to rehab, I had to go through the Department of Corrections. The state paid for my rehab. If it wasn't for that I would be dead or still using").

Lack of Support for Prevention Programs

While subject matter experts described many successful prevention programs, some described a lack of support for prevention in the Region. They noted that evidence-based prevention takes time and sustained funding. They indicated that some people, including politicians, fail to see the value in prevention, preferring a "quick fix" (e.g., "It can be very hard to sell prevention, because people do not always see the value. They want to act immediately after a spike in overdoses, to do something right now. But prevention is a journey, it takes time").

Community members also described a lack of support for prevention in their communities, primarily in terms of funding. Community members in focus groups from two different Tennessee communities discussed that their local anti-drug coalitions were facing closure after their grant funding ends next year (note: both programs are funded by SAMHSA's Drug Free Communities Grant). Groups in West Virginia described being unable to find grants or funds for prevention programs, particularly those that would impact poor and vulnerable children (e.g., "we can't get any money for prevention. We have to show kids safe ways to live and healthy choices. It's pulling teeth to get prevention money. When you do get it, it's not real money. It goes to the middle class. It doesn't go to the poor kid who has never been out of his community").

"Nothing to do"

Several community members, including many participants in recovery, noted a lack of recreational activities for youth as a contributing factor to early opioid use (e.g., "There is nothing to do here besides get high. Maybe go out in the woods. Besides sitting around, going to a bar, or going outside," "There is nothing for them to do. The reason the cool kids are the party kids is because they are the only ones who are doing anything. Going in the mountains and partying, that's all they have."). Some noted that even when youth activities are held in their downtown, many cannot or do not attend. Groups suggested allocating funds to provide recreational activities in the community (e.g., parks, bowling allies) and mandating, incentivizing, or otherwise addressing barriers to youth (particularly kids from vulnerable families) to participate in after-school and community programs.

Protective Factors and Opportunities (Specific to Appalachia or some Appalachian Communities)

During the focus groups, community members were asked to describe factors that were improving the opioid crisis or presented opportunities for supporting prevention, treatment, and recovery efforts in their communities. Participants in every focus group mentioned their local anti-drug coalition or community-based organization as vital forces in bringing partners and community members together, leading substance-abuse prevention programs and awareness campaigns (e.g., "simulated workplace," random drug screening, peer-to-peer clubs, prescription drug take-back programs), and assisting in finding treatment for those facing addiction. Several mentioned the significant role religion, pastors, and churches are playing in addressing the opioid crisis. Faith-based organizations are reaching out to individuals in need of treatment, partnering with programs like <u>Celebrate Recovery</u>, supporting children and families impacted by addiction



(e.g., providing mentorship, meals), and challenging community apathy and stigma (e.g., "Our churches are everything; in our community. They're saying 'we know this is here. We are not going to turn our backs. We are going to face this together'").

Community members in recovery frequently mentioned drug courts as providing access to treatment and giving those struggling with addiction a necessary chance to turn their lives around.

Though subject matter experts were not specifically asked about protective factors during their interview, the majority represented prevention, treatment, and recovery organizations that were implementing successful programs. The following tables summarize the interventions discussed.

Awareness Initiatives, Communications, and Campaigns

- Memorial videos about loved ones lost to overdose. Hosting a community memorial walk for families that have been affected.
- Local sheriff hosting a series of public events showing the film <u>Behind the Orange Curtain</u>. After the film, leading discussions on recognizing addiction and discussing opioid dangers.
- Contract with Kentucky Broadcasters Association to provide a community anti-drug coalition free access to 1 PSA daily on radio stations and TV stations.
- Local marketing/branding company donating time to state government awareness campaign.
- Public service announcements (PSA) via Facebook, Instagram, and Twitter; disseminating materials to students and parents using Schoology[®] and MailChimp[®] platforms
- Knowdope.org; an education campaign and resource center targeting high-school students and parents
- <u>Born Drug-Free Tennessee</u> campaign to raise awareness of Neonatal Abstinence Syndrome (NAS) and babies born exposed to prescription and other drugs.
- Count-it, Lock-it, Drop-It campaign encouraging monitoring, safe storage, and disposal of prescription drugs









Prevention

Community Organizing

• Opiate Task-Forces and other multi-sector initiatives; experts reported engaging a wide-range of disciplines including universities, regional community groups, insurance providers, health departments, coroners' offices, mayors' offices, healthcare providers, hospitals, pharmacies, local chambers of commerce, churches

School-based and Youth Initiatives

- Random drug testing in schools (not punitive, children who test positive are linked to counseling and mentorship programs)
- A week-long education program for kindergarten- through college-age students that centers on presentations from someone in recovery, law enforcement, and a current inmate
- A pharmacist developed a drug education program for schools that teaches kids safe medication practices (e.g., who should give you medicine?)

Healthcare Providers

- Medical resident education programs (rural track) that promote appropriate prescribing and recognition/referral of substance-use disorders
- Pharmacist collaborating with <u>Generation Rx</u> to teach all customers about safe medication habits including counting and secure storage; pharmacy provides medications in labeled blister packs to help customers more easily track their medications
- Pharmacy students giving presentations to senior citizens about safe medication habits (safe storage, in particular)

Law Enforcement

- Sheriff's office offers to pick up people's prescriptions at home
- Training for law enforcement on drug diversion and pill identification

Other

- Prescription drug drop boxes and medication take-back days
- Pilot programs to counsel pregnant women on preventing neonatal abstinence syndrome using live video chats and prepared scripts
- Providing education stipends to individuals who have been unemployed for two years or more, primarily for healthcare degrees (e.g., nursing).



Treatment

- Increasing awareness of and access to Medication-Assisted Treatment (MAT), with an emphasis on medication and counseling
- Programs to increase training on and availability of Naloxone
- Peer-support programs in emergency rooms for individuals who are hospitalized following an overdose
- Programs to begin buprenorphine upon discharge from the emergency room for overdose victims
- Programs administering naltrexone in jails and during probation; programs providing naloxone upon discharge from jail
- Pilot program to assign case workers to those who experience a non-fatal overdose; case workers providing access to treatment, birth control, and examining family members and other social networks to identify others interested in help.
- Web-based treatment and training by partnering with local business, colleges, and community health centers who provide computers for people without access

Recovery

- Parent and community support groups for parents/grandparents of a loved one with addiction and for those
 wishing to support someone through treatment and recovery
- <u>Celebrating Families</u>, evidence-based program for children and families in which one or both parents have substance use disorders; intended to support recovery and increase resiliency in children



Communication Best Practices

Experts and community members were asked to describe the most important education and communication points that must be disseminated to help address the opioid crisis in their communities. They were also asked to define the audiences that need to receive these messages and how messages should be delivered so that audiences are most likely to receive, attend, and trust them. See *Appendix C: Communication Recommendations* for tables summarizing all recommendations by research group.

The research yielded communication and messaging insights for several specific target audiences including the general population, youth, parents/caregivers, and individuals with addiction. Below is a summary of recommendations by key target audiences.

General Population (All Audiences)

Throughout the interviews and focus groups, research participants noted troublesome attitudes common in their communities regarding the opioid crisis, prescription opioid drugs, and toward those suffering from addiction and those in recovery. Experts and community members agree that comprehensive and coordinated communication strategies are needed to disrupt these negative attitudes and beliefs, and to encourage community members to become actively involved in solutions to address the opioid crisis. Importantly, the need for messaging to address the stigma of addiction was the strongest finding of this research, noted by every expert and community member.

Key Messages (for General Population)

The most commonly recommended messages for the general population included:

- Messages designed to reduce stigma toward individuals with addiction/substance use disorders
 - o Examples include: Addiction is a chronic disease not unlike diabetes; not a moral failure; anyone can become addicted (i.e., challenging stereotypical depictions such as those with addiction are all poor, homeless, dependent on government assistance); no one would choose to be addicted; addiction is often associated with early childhood trauma and abuse; those facing addiction need compassion; stigma does great harm; stigma prevents individuals and families from getting the help they need; people can and do recover; success rates for addiction treatment are similar to the success rates of treatment for asthma).
- Messages describing proper use, storage, and disposal of prescription opioids
 - o Key points for proper use include: take only as directed; do not take more than prescribed per day; stop taking when your pain subsides and can be managed with over-the-counter pain medication; do not share your medication with anyone else; do not sell medication)
 - o Key points for proper storage and disposal include: monitor medication amounts; keep them locked up; dispose at a prescription drug drop-off location; locations of community prescription drug drop-offs or takeback programs (e.g., Count It, Lock It, Drop it! (TN)).
- Messages promoting that help is available for those facing addiction
 - o These messages should emphasize locally available and affordable treatment for those facing addiction and include specific calls to action (e.g., call help-line number to learn about your treatment options).

- Messages promoting awareness of the risks of taking prescription opioids and encouraging people to ask
 questions when they are prescribed an opioid
 - o These messages may include scripts for talking to doctors about pain medication (e.g., are these needed? What are the risks? How can I decrease my risk for becoming dependent on this prescription? Are you prescribing more than is needed to address my pain?); increasing awareness of locally-available alternatives for pain management; encouraging people to consider that the "quick fix" for their pain may have lasting and devastating consequences.
- Messages encouraging community members to become actively engaged in local efforts to address the opioid crisis
 - o These messages are intended to challenge apathy and may include: we are all in this together; we can turn the tide; our community is too important; don't complain, ask what you can do to help.
- Messages describing the signs and symptoms of addiction, including early warning signs
 - o These messages may assist family members in noticing signs and symptoms of loved ones and help those in the initial stages of addiction or those in denial realize they have a problem.
- Messages promoting hope and the fact that people can and do recover from substance use disorders
 - These messages are intended to shift focus from the commonly reported negative consequences (i.e., overdoses, crimes) to community successes in providing treatment to those facing addiction. Messages may include the number of Americans living in active recovery.

Framing and Spokespersons (for General Population)

Participants across all focus groups and expert interviews recommended that messages be conveyed through personal stories of individuals from the community who have battled addiction and are now in active recovery. Participants felt that stories that provide emotional and detailed descriptions of the impacts of addiction on personal and family relationships would resonate with Appalachian cultural values. Specific examples suggested by community members in recovery included describing:

- What it feels like to have your child taken away
- The relief that your mother feels when you are arrested or in the hospital, because she does not have to worry about you dying or where you are that day

Participants recommended that stories specifically describe the "path to addiction," particularly when the person became addicted from a legally-obtained doctor's prescription. They felt that details including what caused them to receive the initial prescription (e.g., sports injury, back pain), how much they were prescribed, and factors that led to their becoming dependent (e.g., began taking more than prescribed, took them longer than the physical pain) underscore the dangers of prescription opioids and provide prevention education.

Participants across interviews and focus groups noted that pairing stories with "before" and "after" photographs of someone during the low point of their addiction (before) and then living in recovery (after) would be a powerful way to depict both the consequences of addiction and the hope and benefits of recovery. They recommended that stories clearly describe the "path of addiction," particularly when it started from a doctor's prescription.

Similarly, several experts recommended that messaging on the consequences of addiction accompany messaging that instills hope and a desire to turn the tide on the opioid crisis. They noted that the increasing news media reports of opioid-related overdoses and crimes has led many to overlook the fact that prevention programs are working and that many people are entering treatment and living in active recovery.

Other potentially effective spokespersons or messaging sources included community-based organizations/anti-drug coalitions and trusted local leaders, which would vary by community. Trusted local leaders may include the sheriff, district attorney, or high-school coaches. Importantly, several experts and community members acknowledged the significant role that churches, pastors, and clergy can play in addressing opioid abuse. As an integral part of many Appalachian communities, research participants felt that pastors/churches have a responsibility to convey messages to their parishioners to combat the stigma of addiction, connect those struggling with addiction to treatment, and support struggling families. Community members noted that – as many vulnerable families do not attend church regularly – pastors and church members may need to conduct programs and build relationships outside of their church campus.

Dissemination (for General Population)

To effectively disseminate opioid messages to all members within a community, experts and community members recommended a multi-pronged approach that bridges communication preferences, age, and access to technology. Recommended dissemination methods depend on the community, but may include:

- Social media (particularly Facebook, some Instagram and Twitter)
- Video streaming platforms (e.g., YouTube, Netflix, Facebook Live)
- Websites
- Church bulletins, sermons, church meetings
- News releases, advertisements, op-eds
- Local news media interviews
- Community-events (e.g., football games, country fairs), presentations, town halls
 - o Some experts and community members described that presentations and town halls had not been effective in engaging the public. They described previous events that were poorly attended or attended only by citizens who were already engaged in addressing the opioid crisis (e.g., board members of the local anti-drug coalition). These participants suggested that opioid and substance use education may be more effective if delivered as part of larger community outreach programs intended to support and show compassion toward vulnerable children and families in the (often isolated) communities where they live.
- Bulletins/newsletters of community organizations (e.g., women's clubs. Boy Scouts, 4-H)
- Outdoor media (e.g., billboards)
- Print materials for doctors and pharmacists (to give patients prescribed opioids)
- Comments sections of online news stories
 - o One expert reported using volunteers to reply to comments on news stories to address misinformation and anti-treatment/stigma messages
- Telephone/Call-lines

Youth

The second strongest finding across this formative research, consistent across nearly every expert interview and all community groups, was the expressed need for prevention activities targeting youth. Given the prevalence of addiction in families across Appalachia, research participants felt strongly that ongoing, age-appropriate communications and evidence-based education programs (e.g., Strategic Prevention Framework) were needed, starting at young ages, to help break cycles of addiction. Importantly, many experts and community members emphasized the importance of programs intended to provide mentorship, build positive relationships, teach lifestyle, job, and coping skills, and demonstrate alternatives to poverty and substance abuse.

Some participants expressed concerns about how to reach the most vulnerable children in their communities, many of whom are geographically isolated (e.g., "live in the hollers") and do not have transportation or caregiver support to attend after-school programs or other community events. Working with law enforcement to identify areas with vulnerable children, conducting programs in isolated regions of communities, and mandating participation in after-school programs under certain circumstances were offered as potential solutions.

Key Messages (for Youth)

The most commonly recommended messages for youth included:

- · Messages that promote alternatives to using drugs and normalize not using drugs among their peers
- Messages describing prescription and illegal opioid drugs and the risks and consequences of misusing them

Framing and Spokespersons (for Youth)

Research participants were consistent in suggesting that messages to youth would be most effective if they focus on positive alternatives or "gain-frames" (i.e., what kids can achieve by staying away from drugs or breaking the cycle of addiction within their families). Participants were also consistent in discouraging use of statistics, unless they are specific to youth in the community and help to normalize not using drugs (e.g., "90% of X community high-school students have never taken a pain pill recreationally"). Participants felt that community-based organizations and local individuals respected by youth (e.g., high school football coach, teen leaders, and celebrities) were well suited to assist in the delivery of such messaging.

Responses were mixed on the best ways to frame the consequences of opioid addiction and the best spokespersons to use when delivering this content to youth. Most participants felt that sharing real-life stories of individuals who had battled addiction and were now in long-term recovery would be effective. In particular, participants felt that such stories would resonate if the person in recovery was from the community, experienced hardships commonly experienced in the community (e.g., family members with substance use disorders, raised by grandparents, etc.), started using as a teen, and emphasized specific examples of how addiction impacted the individual's life and relationships. A few experts recommended against using individuals in recovery when educating teens, because they worried that teenagers would take away that they could use drugs for a brief period of time and then stop without long-term consequences. Similarly, while participants generally recommended against using fear-based messaging for any audience, some community members felt that graphic depictions or descriptions of the consequences of opioid abuse may be needed to capture teens' attention.

Lastly, participants emphasized the need to carefully convey the consequences of addiction given many children may have parents or siblings that have substance use disorders. It is important to discuss risks without judgment and pair them with messaging aimed at decreasing stigma toward those with addiction.

Dissemination (for Youth)

As discussed previously, experts and community members agreed that prevention messages for youth would be most effective if delivered in-person, as part of school, church, or community-based programs. Research participants also recommended disseminating messages via social media, with YouTube, Instagram, and Snapchat being mentioned most frequently.

Parents and Caregivers

Experts and community members agreed that parents and caregivers (e.g., grandparents in many communities) were a key target audience for opioid messages and a necessary audience of youth-focused prevention efforts.

Key Messages (for Parents/Caregivers)

The most commonly recommended messages for parents and caregivers included:

- It can happen to your child; do not be naive and assume that your child is not experimenting with prescription opioids or other drugs
- Signs/symptoms of substance use in children/teens
- Best ways to intervene if you suspect your child is using drugs
- Proper storage and disposal of prescription drugs (e.g., <u>Don't be an accidental drug dealer</u>: "Don't look at me, he
 got them from your purse")

Experts recommended additional education for parents and caregivers to include:

- Tips for establishing and maintaining open lines of communication about substance use and risk-taking behavior
- What to do if your child is prescribed pain medication
- How to conduct at-home drug testing; messages encouraging at-home drug testing (e.g., "give your child a reason to say no")

Some research participants noted that parents believe "addiction will not happen to my child" and that messages need to grab attention and evoke emotional responses to "disrupt" this type of apathetic thinking. They recommended using real-life stories from community members in recovery from addiction (preferably those who started using while a teenager) and those of family members who lost loved ones to drug overdoses.

Dissemination (for Parents/Caregivers)

Experts and community members agreed that opioid messages geared to parents and caregivers should be disseminated via school-based communication systems. Some experts successfully reported using school-wide messaging platforms such as Schoology[®]. Others reported using MailChimp[®] (a communication system that is free for a specified number of subscribers) as a way of communicating directly to parents. Others recommended emailing, sending letters home with students, and providing education at school events such as registration and assemblies.

Individuals with Addiction

Research participants described challenges in communicating with those suffering from opioid addiction including:

- Many with opioid addiction withdraw from their communities and keep in contact primarily with other substance users
- Often those with opioid addiction are unknown to potential support organizations until they overdose or are arrested
- Some with opioid addiction may not know they are addicted or may be in denial
- Those suffering from addiction combat powerful chemical dependency that causes "a tunnel vision toward drugs" and any other issues or messages to fall by the wayside
 - o Many community members in recovery said that at some points during their addiction no communication would have prevented their drug use or caused them to enter treatment

Research participants felt that individuals with addiction should be inundated with positive/affirming messages that promote treatment-seeking and the benefits of recovery.

Key Messages (for Individuals with Addiction)

The most commonly recommended messages for individuals with addiction included:

- Help is available! Talk to someone; find a local provider and get assessed; learn about your different treatment options
 - Importantly, community members (particularly those in recovery) emphasized that treatment messages must include information about how those battling addictions can get treatment (e.g., who to call?) and how they can afford treatment without insurance.
- Treatment works! People recover and you can too!
- Consequences of long-term addiction

Framing and Spokespersons (for Individuals with Addiction)

Participants nominated individuals in long-term recovery as spokespersons for encouraging others facing addiction to enter treatment. They noted that those facing addiction want to hear "from someone who has been there," who can

acknowledge the struggles of addiction while also providing an example of the possibility and benefits of recovery.



While some community members questioned if any messaging could persuade someone to enter treatment, some in recovery felt that focusing on the consequences that addiction can have on loved ones, particularly mothers can be effective (e.g., "When you're using, you don't care about yourself. But thinking about what I was doing to my mom was really powerful").

A few experts and community members recommended that messengers convey compassion toward those with addiction and suggests that they will be treated well by providers in treatment facilities; they noted that many with addiction have had negative and stigmatizing experiences with healthcare providers that may prevent them from seeking help.

Dissemination (for Individuals with Addiction)

Research participants agreed that messages intended for those struggling with addiction could be disseminated on many of the same channels as those for general audiences; however, they emphasized that those struggling with addiction were unlikely to attend in-person events. Many recognized the potential of using social media, particularly Facebook and YouTube, and felt that individuals who were more recently in recovery may be able to influence their social networks that are more likely to include others suffering from addiction.

A few experts noted the importance of providing confidential and discrete ways for individuals to receive information and counseling about treatment options due to stigma. For example, they described that those with addiction would be unwilling to visit their local anti-drug coalition for fear that neighbors might see.

Overarching Notes on Messaging (All Audiences)

In nearly every interview and focus group, participants overwhelmingly agreed that the term "opioid" would be confusing when used in communication aimed at anyone other than professionals (e.g., providers, law enforcement, anti-drug coalitions). Further, participants cautioned that using the term "opioid" might cause some to dismiss the information if they felt it did not pertain to them (e.g., "I'm not taking opioids, I'm taking hydrocodone"). Experts recommended using more general terms such as "prescription pain medicine/medication," "pain medicine/medication," and "pain pills," while most of the community members suggested using actual brand names, or more simply "pills."

Additionally, many community members recommended using strong, vivid messaging and visuals and avoiding "beating around the bush." Examples included stating someone "died" rather than saying they "passed away." Community members often expressed the desire to see and hear honest, straightforward messaging about the consequences of opioid misuse and abuse – even if it was graphic or hard to take in. For example, one participant from West Virginia recalled a YouTube video that was shared on Facebook and played on their local news station showing the reaction of an 8-year-old boy after being told by his father that his mother died from a drug overdose. Several others mentioned the image posted by an Ohio police department of the young child strapped in his car seat while his parents were overdosing in the front seats.

Despite high awareness of the opioid crisis, many reported that the issue was infrequently discussed in their communities and some reported that the issue was avoided or that their community had become apathetic. To combat stigma and make it more socially acceptable to discuss the issue in an open setting, communication on opioid addiction should encourage compassion and community-building, inspire hope, and contain actionable steps individuals can take to make a difference. Messages should be framed in terms of Appalachian culture and values – storytelling, emphasis on family, friends, and loved ones.

To get the attention of a local audience, it is important to think and act locally. Research participants repeatedly underscored the importance of having local organizations drive the conversations using local spokespeople and storytelling techniques. Several experts and community members initiated discussions about the general distrust of

the Federal Government, especially in rural Appalachia. Participants also discussed the importance of being authentic in messaging by having a local person talking about a local problem and avoiding the use of Appalachian stereotypes (e.g., "poor, toothless hillbillies"). Video storytelling was indicated as a particularly effective technique which local organizations can freely do using a simple smart phone camera.



Conclusion

The findings of this research reinforce the ARC value and grassroots/ public health model stating that community members are best positioned to understand and address their own local challenges. There was tremendous value in interviewing both subject matter experts and community members (or "community experts") concurrently, as there was often great consensus between the two groups. These two groups each provided complementary information about what to communicate and how.

This research was also unique in including the perspectives of individuals in recovery from opioid addiction. Community members in recovery were overwhelmingly grateful to have been invited to share their stories and to be asked their opinions in these focus groups. After the groups, they profusely thanked the researchers and often shared anecdotes of how participating in prevention and treatment activities helps to provide them with a sense of pride and purpose. It is critically important that organizations attempting to address the opioid epidemic in Appalachia work alongside individuals in recovery. Involving this audience in all stages



of community planning can also go a long way to reducing the stigma that is still a reality of daily life – even for those in long-term recovery – and provide tremendous insight into effective strategies to impact the epidemic.

One of the strongest findings of this research was the need for prevention activities targeting youth in Appalachia, particularly those that address root causes (e.g., Adverse Childhood Experiences (ACEs)) and provide an evidence-based curriculum. Small, community-based organizations – best positioned to deliver such programs – often struggle to show long-term impact of their work because of a lack of sustainable funding. Experts and community members, as well as the community-based organizations that facilitated this research, report that few long-term funding opportunities are available for local prevention programs. Of note, several organizations receive funds through the Substance Abuse and Mental Health Services (SAMHSA) Drug-Free Communities grant program; however, many organizations are facing disbanding after their 10-year grant period expires this year. It is important to recognize that community-based organizations in Appalachia are often operating in economically distressed areas that cannot support a coalition without external funding.



After building partners and infrastructure over the last 10 years, we are now beginning to see the acceptance of the value of our Coalition. Sadly the funding is closely coming to an end. We would ask that continued support and consideration be given to the pioneers of rural communities that are beginning to see true positive community change in areas that are many times forgotten.

Trent Coffey, Chief Executive Officer
 STAND Coalition Oneida, Tennessee

Further Research

This research also identified areas for further study that would assist federal, state, and local communities to better understand opioid communication strategies, specifically in the Appalachian Region. Research questions include:

- What specific channels (e.g., social media platforms, video streaming services) are being used by different age groups, in different communities, throughout the Appalachian Region?
- What communication opportunities (i.e., messages and tactics) could be effective in reaching economically distressed and geographically/socially isolated Appalachian families, including children who are home-schooled?
- What is the role of faith-based organizations in addressing the opioid epidemic and what are best practices for utilizing faith-based communication channels and spokespeople?
- What is the relationship between peer/drug using networks and the social media networks of those with substance use disorders? How can social media and peer-influencers be used to encourage those with addiction to seek treatment?

Acknowledgments

The CDC's National Center for Injury Prevention and Control, the Appalachian Regional Commission, and ORAU would like to thank all of the experts, community members, and organizations for their contributions to this project and to the fight against opioid addiction throughout Appalachia. The following organizations and subject matter experts have given their permission to be listed in this report.

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Appendix A: Focus Group Participants

Below is a summary of demographic information and responses to questions on communication preferences posed to focus group participants. Responses were combined for all three focus group audiences: community members ages 25–39, community members ages 40–54, and community members in recovery from opioid addiction ages 25–54.

- Gender
 - o 31 women, 16 men
- Age

o Average age: 40o Age range: 22–64

Education

Highest Level Completed	#
Attended High School	2
Graduated High School	4
Some College	6
Associate's Degree	7
Bachelor's Degree	18
Master's Degree	10

- Race
 - o 46 respondents listed race as white, one respondent also identified as Latina.
 - o One respondent selected "other" and provided additional detail: "American"

• Income

Total Household Income in Past 12 Mo.	
(in Thousands of Dollars)	#
<25	5
25–34	8
35–49	8
50–74	8
75–99	10
100–149	6
>150	1
Prefer not to answer	1

Recovery Status

- o 13 individuals participated in focus groups for those in recovery. Of those 13, in the pre-survey, one person stated they had never been addicted to prescription opioids. Another intentionally left the personal addiction and recovery questions blank.
- o Demographic responses from the remaining 11 in recovery are summarized below.
- o Average length of time in recovery: almost 5 years
- o Range of time in recovery: 6 months-17 years

Treatment Types	% Who had Received Treatment (n=13)
Behavioral Counseling	54%
Detoxification	46%
Other [included Rehab (n=3), Fellowship home, 12 step recovery narcotics anonymous, drug court, church]	46%
Medication-assisted Treatment	15%

Information Sources

- 96% of respondents own a smartphone, tablet, or computer
- 96% of respondents have internet access in their homes

Media Type	Consumption Frequency (average)	Most Frequent Response (mode)
Internet (generally)	Daily	Daily
Billboards	2–5 times/week	Daily
Radio	2–5 times/week	Daily
Videos (Internet)	Once a week	Daily
Internet (health information)	2–3 times/month	2–5 times/week

Video Access	% That Often Use
Local/Cable/Satellite TV Channels	81%
Netflix	53%
YouTube	53%
Amazon Prime	34%
Redbox Movies	34%
Hulu	13%
Other (included Amazon Firestick; Kodi; Internet Movies)	6%
Chromecast	2%
Flixter	0%
Itunes Movies	0%

Social Media	% That Often Use
Facebook	96%
Instagram	45%
Snapchat	28%
Twitter	23%
LinkedIn	15%
Other (included Google News, Yammer, Reddit)	4%
Tumbler	0%
Flickr	0%

News Sources	% That Get Most of Their News From This Source (could select more than one)
Internet	72%
TV	55%
Social Media	49%
Newspaper	34%
Radio	34%
Other (included Google news and podcasts)	6%

Health Information Sources	% Who Often Get Their Health Info From This Source (could select more than one)
People	83%
Internet [included WebMD (n=8), Google (n=3), Medscape (n=2), ALS Association, American Red Cross, CDC, Google news, Mayo Clinic, MedlinePlus, Reddit]	40%
TV or Radio (included local news)	19%
Social Media Friends	17%
Social Media Organizations	17%
Other (included books)	2%

Health Information Source	Level of Trust in Information (average)	Level of Trust (most frequent response)
CDC	Strongly trust (4.6)	Strongly trust
Local Anti-Drug Coalition	Strongly trust (4.53)	Strongly trust
State Health Department	Somewhat trust (4.3)	Somewhat trust
Local Health Department	Somewhat trust (4.23)	Somewhat trust
Red Cross	Somewhat trust (4.13)	Strongly trust
United Way	Somewhat trust (4.13)	Somewhat trust

^{*}Likert scale: Strongly distrust (1), Somewhat distrust (2), Neutral (3), Somewhat trust (4), Strongly trust (5), Don't know them well enough (6)

Appendix B: Contributing Factors for Opioid Abuse, Addiction, and Overdose

Expert Interviews

Contributing Factors
Accessibility (included discussions on healthcare overprescribing, pharmaceutical marketing, and access to illegal opioids through drug trafficking)
Economic decline, job loss, poverty (in turn, depression and hopelessness)
Multigenerational addiction; Adverse Childhood Experiences (ACEs)
Lack of adequate numbers of licensed treatment facilities
High-rates of manual labor and associated injuries (i.e., legitimate need for pain management)
Lack of alternatives to narcotic pain treatment (e.g., physical therapy, acupuncture)
Cultural beliefs around prescription medication (e.g., beliefs that pain medication is needed immediately for any pain, beliefs that sharing medications with family and friends is helpful/friendly, beliefs that substance use and addiction is "part of life in this area")
Lack of support/funding for prevention programs
Alcohol and marijuana use (particularly at young ages)

Focus Groups

Contributing Factors

Healthcare provider overprescribing, ease of access to prescription opioids

Multi-generational addiction, children growing up around many family members with substance use disorders

Poverty, lack of economic opportunity, reliance on government assistance

Community attitudes (e.g., apathy toward the problem, normalizing substance use and addiction, "it's a part of everyday life here")

Lack of recreational activities, particularly for youth; "Nothing to do"

Lack of access to affordable treatment

High rates of depression and mental illness, lack of coping strategies or support to address the hardships of daily life, stigma toward seeking help for depression or other mental illness

Lack of support/funding for prevention programs

High-rates of manual labor and associated injuries (i.e., legitimate need for pain management)

Cultural beliefs around prescription medication (e.g., beliefs that pain medications are needed for any pain, beliefs that you should share your prescriptions with anyone who needs them)

Appendix C: Communication Recommendations

Communication Recommendations from Expert Interviews

Target Audience: General Population/All Audiences			
Key Messages	Dissemination Channels	Spokespersons	
 Addressing stigma (addiction is a chronic brain disease; not a moral failure; no one would choose to have addiction; often caused by early trauma and abuse; stigma prevents individuals from getting help they need) Safe storage and disposal (secure medications, monitor/count them, and dispose properly) Consequences/dangers of taking prescription opioids; path from prescription opioids to illegal substances; think twice about taking them for pain management Appropriate use of prescription opioids (take as prescribed; stop taking immediately after pain subsides; do not share your medications) Be a responsible patient; learn other options for pain management that are available in your community; the "quick fix" may not be the best Hope! People can and do recover! Help is available; where and how to get help; who to call Be a part of the solution; we cannot ignore this problem in our communities; it will not go away overnight; progress is slow but vitally important If you have been using prescribed opioids for a long time, what is the best way to get off them safely and manage chronic pan Signs/symptoms of addiction Opioids and benzodiazepines are a lethal mix; mixed toxicology reports are common in overdose victims What is an opioid; what drugs fall under this category; are some pain medications safer than others? 	Multi-pronged approach: Social media (particularly Facebook, some Instagram, and Twitter) Video streaming platforms (e.g., YouTube, Netflix, Facebook Live) Websites Church bulletins, church meetings News releases, ads, op-eds Media interviews Community-events In-person community outreach Bulletins/Newsletters of community organizations (e.g., women's clubs. Boy Scouts, 4-H) Presentations/town-halls (cautiously) Outdoor media (e.g., billboards) (cautiously) Information for doctors and pharmacists to give patients prescribed opioids Comments sections of online news stories (use volunteers to combat misinformation, anti-treatment or stigma messages) Telephone/Call-lines	Individuals from the community who battled addiction and are now in active, long-term recovery Trusted local leaders (depending on community). May include sheriff, state attorney general, district attorney, health department Local community-based organizations and antidrug coalitions Local clergy/pastors	

Communication Recommendations from Focus Groups

Target Audience: Youth		
Key Messages	Dissemination Channels	Spokespersons
 Provide messaging consistent with evidence-based substance abuse prevention curricula (e.g., Strategic Prevention Framework, CADCA Toolkit), including coping skills for dealing with stressful life situations. Alternatives to using drugs; normalizing NOT using drugs; positive peer images; "above the influence" Messaging specific to prescription and illegal opioid drugs and the dangers/consequences; emphasizing they are "not just any drug" 	In-person (e.g., school-based programs, youth coalitions, mentorship programs, peer-based model programs such as "Teen ambassadors") Social media, particularly Instagram. Also Facebook, Twitter, and Snapchat (depending on the region)	Local community-based organizations and antidrug coalitions Individual who has battled addiction in active, longterm recovery (cautiously) Youth ministers

Target Audience: Parents/Caregivers		
Key Messages	Dissemination Channels	Spokespersons
 It can happen to your child; it can happen to any child Proper medication storage and disposal ("Got the drugs from mommy's purse") 	School-based communication systems (e.g., MailChimp®, Schoology©) or events (e.g., registration, assemblies)	See general population
 Tips for establishing and maintaining open lines of communication about substance use 		
 What to do if your child is prescribed pain medication (legitimate use) 		
Signs/Symptoms of addiction		
What to do if you think your child is using drugs		
How to conduct at-home drug testing; "give them a reason to say no"		

Target Audience: Senior Citizens		
Key Messages	Dissemination Channels	Spokespersons
 Opioid addiction and overdose impacts older populations too Path to addiction; can begin with a legal prescription opioid Anti-stigma messages (a chronic brain disease like diabetes, not a moral deficiency) Appropriate use of prescription opioids (take as prescribed; stop taking immediately after pain subsides; do not share your medications) Proper medication storage and disposal; where to go to safely discard medications 	In-person Church bulletins Give-aways (e.g., magnets, dated "blister packs" for monitoring medications)	See general population

Key Messages	Dissemination Channels	Spokespersons
 Involvement of the faith-based community is essential to addressing the opioid crisis Anti-stigma messages (addiction is a chronic brain disease; not a moral failure; no one would choose to have addiction; often caused by early trauma and abuse; stigma prevents individuals from getting help they need) 	In-person	Local community-based organizations and antidrug coalitions

Target Audience: Law Enforcement		
Key Messages	Dissemination Channels	Spokespersons
 Anti-stigma messaging/Sensitivity training Emphasize they may be the difference in someone's life 	In-person	Local community-based organizations and anti-drug coalitions

Key Messages	Dissemination Channels	Spokespersons
 Help is available! Talk to someone; Find a local provider and get assessed; Learn about different treatment options. Call local providers. 1-800 numbers are no good. You recover in your community. You are loved and you matter. You can find help from those who will be kind and compassionate. 		Individuals from the community who battled addiction and are now in active, long-term recover Individuals from the community who battled addiction and have recently entered recovery (to their own social networks)

Target Audience: Healthcare Providers			
Key Messages	Dissemination Channels	Spokespersons	
 Responsible prescribing Additional training starting in medical/nursing schools about substance use disorders Anti-stigma messaging/Sensitivity training Invitations to join in community discussions regarding education, counseling, and linking those experiencing addiction to treatment; particularly relevant to providers working in hospital settings who treat overdose victims resuscitated with Narcan 	In-person	Local community-based organizations and anti-drug coalitions	

Target Audience: General Population/All Audiences		
Key Messages	Dissemination Channels	Spokespersons
 Be a part of the solution; we cannot ignore this problem in our communities Addressing stigma (addiction is a disease not a moral failure; show compassion; stigma prevents individuals from seeking treatment) Help is available; how and where to get help/who to call Addiction can happen to anyone; everyone is at risk; you can be on the path to addiction and not realize it; rejecting stereotypes of what someone with addiction looks like There is hope! People can and do recover! Talk to your doctor about prescription opioids (what are you prescribing; is it really needed; what are the alternatives; what are the risks) Consequences/dangers of addiction Proper use of prescription opioids (take as directed; take only until pain subsides; do not share; do not sell) Safe storage and disposal (count medications; keep them locked up; do not advertise that you have them; dispose after use) Signs and symptoms of opioid addiction/overdose What to do if you encounter someone who is addicted; someone who may be overdosing What is an opioid; differences in "controlled" and "uncontrolled" medications; what pain medication are safe versus not 	Social media, particularly Facebook Video streaming sites (e.g., YouTube, Netflix). Many participants noted lack of cable TV access in the Region Faith-based community efforts (in community versus traditional services) Across communication channels (all) Outdoor media (in some areas) Newspapers (in some areas)	Individuals from the community who battled addiction and are now in active, long-term recovery Local clergy/pastors Local family physicians, EMTs, pharmacists Local community-based organizations and antidrug coalitions Law enforcement/Sheriff

Target Audience: Youth		
Key Messages	Dissemination Channels	Spokespersons
Medication safety ("don't touch")	In-person (e.g., presentations,	Local community-based
Introduction to opioid drugs and substance use disorders	mentoring programs, peer-to-peer clubs)	organizations and anti- drug coalitions
 What to do/who to talk to if a loved one is using opioids 		

Key Messages	Dissemination Channels	Spokespersons
 Alternatives to using drugs; normalizing NOT using drugs "Break the cycle:" "you can choose a different path" Consequences/dangers of addiction 	In-person, particularly in school and out in the community. Need to travel to various places within a community to reach kids who cannot travel to downtown events or churches. Social media, particularly video streaming platforms (e.g., YouTube), Instagram, and Snapchat	Local community-based organizations and antidrug coalitions Local people teens trust (e.g., high-school coaches) Individuals from the community who had ris factors (e.g., bad home life, parents/siblings whused drugs) but chose a different path, became successful Individuals from the community who battled addiction and are now in active, long-term recover (cautiously)

Target Audience: Parents/Caregivers		
Key Messages	Dissemination Channels	Spokespersons
 It can happen to your child and you may not realize it Signs/symptoms of substance use in children/teens Proper medication storage and disposal ("Got the drugs from mommy's purse") Training in how to handle reports from children about opioid use at 	See general population Additionally, communications through school (in-person, print, email, etc.) In person	See general population Also, school leaders (e.g., principle, coaches, teachers)
home (to ensure child is comfortable speaking to you, feels supported, and is not negatively impacted/abused by their parents because of the report)		

Key Messages	Dissemination Channels	Spokespersons
Hope/encouragement (e.g., Treatment works! People recover!) Where, how to get affordable treatment; who to call Consequences of long-term addiction, particularly on relationships with loved ones	Same channels as general population, particularly social media (Facebook) Must allow for discrete methods for individuals with addiction and family members to receive help (e.g., call lines)	Individuals from the community who battled addiction and are now in active, long-term recover

Key Messages	Dissemination Channels	Spokespersons
 Hope/encouragement (one day at a time; everyday gets better; stay strong) Coping strategies How to reverse the health effects of addiction Tell your story! Help someone else! Don't be ashamed. 	Same channels as general population, particularly social media (Facebook)	Individuals from the community who battled addiction and are now in active, long-term recovery