Delta UPSOAR Project Evaluation Report

Background
Funded by the United States Department of Agriculture (USDA) Delta Health Care Service Grant, Winrock International and its consortium, Ozarka College and the University of Arkansas for Medical Sciences, implemented a two-year project that delivered opioid and substance abuse training, education, and awareness to Baxter, Fulton, Izard, Sharp, and Stone counties in north-central and northeast Arkansas, a region plagued with high rates of opioid overdose deaths and risk factors.

The proactive and prevention-oriented project delivered education to adults and youth who had not received targeted, intensive opioid and substance abuse awareness, education, and training through other programs. While many first responders, officials, and some school-age children in this region have received education in opioid awareness and response, most of the population has not. The project equipped rural residents with the knowledge of how to recognize a drug dependence problem among their friends, colleagues, neighbors, and even themselves; where to seek help through area treatment and counseling options; how to prevent drug exposure, dependency and overdose from occurring; how to respond to an overdose; and an improved understanding that opioid dependence and substance abuse can happen to anyone.

Delta UPSOAR has increased knowledge, reduced stigma, and increased confidence in identifying and reacting to opioid and substance abuse. Education included live presentations, community event participation, and online learning modules focused on opioid and substance abuse identification and response. The project also delivered risk-free simulation training to adults and youth in the region to help them recognize and react to opioid overdose.

Figure 1. UPSOAR Counties Reached

This report provides an overview of evaluation efforts conducted and demonstrates the broad impact of the project.
Project activities took place in Stone, Sharp, Izard, Fulton, and Baxter counties in Arkansas. Activities also reached participants from Independence County, Cleburne County, Van Buren County, Cleveland County, Randolph County, Boone County, Marion County, Faulkner County, and Woodruff County in Arkansas (Figure 1). Additionally, a few participants reported to be from bordering counties in Missouri, including Ripley County, Howell County, and Oregon County. These numbers bring the total counties reached by adult education workshops to 16.

Methodology

Winrock developed pre-test and post-test surveys to collect data during adult and youth educational workshops. The surveys were directly related to the content of training material and the objectives of the project and were tailored for each specific audience. The surveys included questions regarding informed consent, basic demographic data, and knowledge about Opioid Use Disorder (OUD) and Substance Use Disorder (SUD). The surveys also included a section where participants could indicate whether they wanted to be referred for additional support services. Winrock developed the surveys online using Survey123, an ArcGIS product, which allowed for data collection in computers, smartphones, or paper form. This method led to more accurate and real-time data analysis. A copy of the pre/post surveys are included in Annex A.

A pre/post test evaluation was selected to gauge the effectiveness of the educational trainings in increasing knowledge about OUD/SUD, reducing stigma about OUD/SUD, and helping participants know how to access relevant resources. Since most participants would only be engaged in educational interventions once, it was important to capture baseline knowledge and changes to the participants' knowledge after the trainings.

When the project pivoted to virtual trainings in response to COVID-19, live-polling was integrated into the training to help increase interaction and facilitate discussion. The live-polling responses represent a complimentary dataset to the pre/post surveys that could help better reveal underlying beliefs and stigmas. A complementary evaluation report using live-polling data is included in Annex B.

Data Collection

Survey collection methods evolved over the life of the project to ensure that participants successfully completed them and so that Winrock would have needed data to assess project success. For adult educational trainings, Ozarka College initially sent a link to the pre-test survey for participants to complete ahead of time. Immediately after training, Ozarka College sent a link of the post-test. This method did not yield a high rate of responses. As a result, Winrock requested Ozarka College to allocate time during the trainings for participants to complete the pre/ post surveys. To accomplish that, Winrock included QR codes for both surveys at the beginning and end of the adult presentation (Figure 2). For those without access to a smartphone, Winrock provided printed copies. Winrock staff manually tabulated the responses of the printed surveys into the Survey123 platform. This approach proved very successful and significantly increased the survey response rate.

A written option is available on the presentation table.

Figure 2. UPSOAR Adult Surveys’ QR codes
For youth trainings, Winrock and Mid-South Health Systems (MSHS) designed age-appropriate pre/post surveys. The surveys included informed consent, questions related to the material covered, and basic non-identifiable demographic information. The surveys were developed and delivered via Survey123 (Annex C). MSHS worked with school faculty to deliver the pre/post surveys in advance for students to complete before and after the training. However, this approach led to an error in the data collection process, where faculty mistakenly interchanged the pre/post surveys. As a result, survey responses for the youth trainings were not included in this evaluation. Despite Winrock’s efforts to encourage MSHS to allow time during the actual training for students to complete the surveys, this was not possible.

Winrock and MSHS created a separate “Follow Up” survey (Annex D). The follow-up survey allowed students to confidentially indicate whether they, a family member or a friend had in the past struggled or were currently struggling with OUD/SUD and to request help for them or a loved one. The survey was delivered via a printed copy and administered during the youth educational presentations. This approach led to a significant response rate and generated 40 student referrals. MSHS handled each of the referrals directly, and when appropriate and school resources available, referred them to school resources.

Results

Participant Demographics

Delta UPSOAR project staff conducted 35 adult trainings, nine youth trainings, and 13 simulation trainings over the life of the project, despite the various restrictions and challenges brought on by the COVID-19 pandemic. These trainings reached a total of 726 adults, 1,275 youth, and an additional 184 adults trained in simulation. Winrock also gathered 42 referrals (Figure 3).

These participants represent a variety of different sectors of public life, indicated by the diversity of organizations reached by these trainings. Delta UPSOAR trainings served a total of 132 unique organizations, including seven K-12 school districts, 11 institutions of higher education, 21 private businesses, three public entities, 11 public safety organizations, two support organizations, and an additional 77 organizations with unknown affiliations.

Figure 3. Delta UPSOAR Project Reach

![Graph showing Delta UPSOAR Project Reach](image)

Despite the negative impact of the COVID-19 pandemic, which resulted in fewer trainings and fewer participants, several important outcomes were still achieved. The following indicators were identified to help illustrate the overall impact of project activities and trainings:

**Delta UPSOAR will increase knowledge of opioid use disorder and substance abuse among adults and youth in five rural delta counties.**

- 85% of participants will exhibit an increase in knowledge.
- Participants will exhibit 50% increase in knowledge.
Delta UPSOAR will reduce stigma associated with Opioid Use disorder and substance abuse among participants in five rural delta counties.

- 80% of participants will understand that opioid and substance addiction can happen to anyone.
- 50% of participants will have an improved perspective of those who struggle with OUD/SUD.

Delta UPSOAR will increase confidence in identifying and reacting to opioid overdose.

- 80% of participants will be able to identify at least three symptoms of an opioid overdose.
- 70% of simulation training participants will feel greater confidence in reacting to an overdose.

Survey Responses

Adult training participants completed the baseline survey 267 times and the post-test survey 295 times. Due to the discrepancies in the number of surveys received, the team manually cleaned the data and elected to exclude approximately 1/3 of the responses from each survey in order to achieve a more accurate pre-post comparison. This left 197 complete responses to analyze.

Often, one of the most challenging areas to measure is changes to attitude and behavior. Participants are unlikely to change their opinions and patterns of behavior after a single exposure to new information. However, in the case of this project, an overwhelming percentage of participants demonstrated changes to their attitudes surrounding opioid and substance use disorder.

One indicator related to reducing stigma is understanding that SUD/OUD are a disease. Prior to participation, only 31% of respondents believed that addiction was “a brain disease” only. Following the training, 85% of participants described addiction as “a brain disease” only and a mere 1% described addiction as “a moral failing” only (Figure 4). These results indicate that, after the trainings, participants understood this important concept, which has a direct impact on the way people interact with and support others suffering from these diseases.

**Figure 4. Pre/Post Survey Comparison - SUD/OUD as Brain Disease**

Additionally, participants were exposed to different types of stigmatizing and preferred language to use when discussing substance use disorder (e.g., using “person with substance use disorder” rather than “addict”). This is another indicator for a change in stigma. Only 20% of respondents used preferred language exclusively in the baseline survey, compared to 73% of respondents in the post-test survey (Figure 5). The acknowledgement that substance use disorder can happen to anyone regardless of morals and that addiction is a treatable, brain disease is an important step in developing a more compassionate, effective approach to addressing the opioid crisis.

**Figure 5. Pre/Post Survey Comparison - Use Preferred Language**
Several participants also demonstrated increased knowledge and increased confidence related to opioid and substance use disorders. Ninety-seven percent (97%) of respondents either agreed or strongly agreed that they were knowledgeable about OUD/SUD following the training, compared to 76% in the baseline survey. Further, 93% of respondents felt confident they could explain OUD/SUD to others following the training, compared to only 52% in the baseline survey (Figure 6). These self-reported increases in knowledge and confidence explaining participants’ newfound knowledge are important indicators of the successful reach of the trainings.

Figure 6. Pre/Post Survey Comparison - Confidence Explaining OUD/SUD to Others

Increases in knowledge are also supported by participants’ ability to recognize the signs of an overdose and how to access appropriate resources. Following the training, 97% of participants either agreed or strongly agreed that they felt confident they could recognize when someone is experiencing an opioid overdose, along with 84% of participants correctly identifying three or more signs of an opioid overdose (Figure 7).

Further, 96% of participants either agreed or strongly agreed that they knew how to access appropriate resources for prevention, treatment, and recovery of substance use disorder, compared to only 55% of participants in the baseline survey (Figure 8). This is an important indicator of increased knowledge, given that navigating available resources was one of the most commonly cited issues in the appropriate response of OUD/SUD in rural areas.

Figure 7. Pre/Post Survey Comparison – Participants Identifying Three Symptoms of Opioid Overdose

Though youth survey results were not fit to be included in this evaluation report due to a collection error, the follow up or referral survey illuminates the need for ongoing education at the youth level. The follow up survey was administered via printed copies during the youth educational trainings. During the
youth trainings, Winrock and MHSH collected 130 follow up surveys.

From follow up surveys, 60 students indicated that an immediate family member previously struggled or is currently struggling with addiction. Additionally, 29 students indicated that a close friend was struggling or had previously struggled, and five (5) indicated that they themselves were struggling or had struggled in the past with addiction to a controlled substance or opioid (Figure 10). This admission is an important step towards seeking help and demonstrates the effectiveness of the training in building trust with participants.

Figure 10. Follow Up Survey: Students or Loved Ones Struggling with OUD/SUD

Finally, and most importantly, Winrock collected 40 referrals through the follow up survey (Figure 11). These referrals came from students during the youth educational trainings and demonstrate the value of these educational interventions. Six students requested a referral for themselves, while 18 students requested one for a friend or peer, and 16 requested a referral for a family member. MSHS followed up each of the referral requests and provided direct support. When the local school from which the referral came had appropriate support resources, MSHS coordinated with the school so that the students received ongoing support for them or their loved one in a safe and confidential manner. Through the adult survey, Winrock received two referrals, bringing the total for the project to 42.

Figure 11. Follow Up Survey Referrals

Recommendations

The Delta UPSOAR project demonstrated significant success in increasing knowledge, reducing stigma, and equipping participants with the tools and skills to identify and respond to an overdose. However, a few recommendations emerged that can enhance the evaluation and monitoring efforts of a future project:

- Collect qualitative data through interviews or focus groups. This was a planned effort in the design of the project, but due to the COVID-19 pandemic, it became difficult to reach participants after the trainings.
- To measure long-term efficacy of educational interventions as well as behavioral change, conduct a follow-up survey at least 3 months and/or 6 months after the training.
- Set aside time during the educational trainings to complete the pre/post surveys to encourage high participation rates and accurate survey results.
- Ensure that printed copies are available when conducting in-person trainings to ensure diverse survey participation.