DART Comprehensive Evaluation: Final Report 2020-2021

The University of Toledo Human Trafficking and Social Justice Institute
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Introduction

The purpose of the Community Advocates Outreach Project (CAOP), the educational division of the Lucas County Sherriff's Office Drug Abuse Response Team (DART), is to provide outreach services that prevent drug use and encourage occasional users to discontinue use all while building resiliency skills to reduce the demand of opioids and other drugs, reduce the supply of opioids and other drugs, and to promote harm reduction. To assess the impact of the CAOP, The University of Toledo Human Trafficking and Social Justice Research Institute conducted a comprehensive process, impact, and outcome evaluation.

Evaluators employed various methodologies to evaluate both treatment outcomes of the Lucas County Sherriff's Drug Abuse Response Team (DART) and community outreach initiatives of the CAOPE, which included outreach and education to high school youth receiving the Science of Addiction presentation as well as feedback from parents and community members who participated in the Hidden in Plain Sight workshop. The evaluation consisted of 10 participants, 10 surveys analyzed, and 78 pages of qualitative data analyzed. Additionally, the research team conducted a literature review on best practices for evidence-based programming geared toward drug education programming. Themes from data analysis were created and are reported throughout this report. Results from this comprehensive evaluation will provide continuous quality improvement to the CAOP and fulfill the following goals identified by DART: inform and engage youth on the dangers of substance misuse through community-based awareness and supporting media campaign (Goal 2) and enhance DATA collection, sharing, and analysis to improve understanding of and response to the disease of drug addiction.

Quantitative Data

The evaluation team conducted quantitative evaluation for three components of DART programming: Community Advocates Outreach Project Enhancement (CAOPE), Hidden in Plain Sight workshop, and an updated Records Review in collaboration with the Lucas County Mental Health and Recovery Service Board (LCMHRSB).

Community Advocates Outreach Project Enhancement (CAOPE)

DART's Community Advocates Outreach Project Enhancement aims to prevent or delay the misuse of drugs among teens. To evaluate the educational component of the CAOPE, The University of Toledo Human Trafficking and Social Justice Research Institute employed a quasi-experimental design to compare the knowledge, attitudes, and skills to combat drug use of

students who receive CAOP intervention to a baseline group of students who do not participate in CAOP or receive no intervention.

Research Design. The original research plan was written according to the quasi-experimental diagram below comparing three different groups (two combined experimental groups and one control group) of students based on the intervention received: (1) students who receive CAOP and the state health curriculum on alcohol and other drugs; (2) those who receive general health class curriculum on alcohol and other drugs only; (3) a baseline group of students who receive no intervention or alcohol and other drugs programming. In the original design, students from intervention groups would receive a pretest, a post test within two weeks of the intervention, and a second posttest at three months. Students in the baseline group would complete a posttest only. An experimental diagram detailing the original research plan is shown below:

Exp. G1 (Bowsher, Start Students)	O1 (pretest)	X1 (CAOP Intervention + State Health Curriculum)	O3 (post-test)	O6 (post-test at 3 months)
Exp. G2 (Bowsher, Start Students)	O2 (pretest)	X2 (State Health Curriculum only)	O4 (post-test)	O7 (post-test at 3 months)
Control G3 (Bowsher, Start Students)	-	Baseline / no intervention	O5 (post-test)	O8 (post-test at 3 months)

The original research plan was amended though a quasi-experimental design was still implemented comparing three groups of students: (1) Experimental group one: Start students who receive CAOP intervention (2) Experimental group 2: Bowsher students who receive CAOP intervention and (3) Control or baseline group of Rogers students who receive no intervention or alcohol and other drugs programming. Researchers did not have access to students exposed to the State Health Curriculum, so any element of the proposed plan including the State Health Curriculum was amended. In the original design, students from intervention groups would receive a pretest, a post test within two weeks of the intervention, and a second posttest at three months. The second posttest at 3 months was eliminated due to the timing of the study. More specifically, it was not feasible to posttest students in school settings 3 months after the intervention, as the academic calendar causes students to change courses on a quarterly basis in a timeframe of less than three months. An experimental diagram detailing the amended research plan is shown below:

Exp. G1 (Start Students)	O1 (pretest)	X1 (CAOP Intervention)	O3 (post-test)
Exp. G2 (Bowsher Students)	02 (pretest)	X2 (CAOP Intervention)	04 (post-test)
Control G3 (Rogers Students)	-	Baseline / no intervention	O5 (post-test)

To evaluate the COAP project, the Institute employed the above quasi-experimental design of to evaluate the following objectives: (a) Difference in youth knowledge of drugs after participation in the intervention, (b) Difference in youth attitudes regarding drug abuse after participation in the intervention (c) Difference in youth skills to combat drug abuse after intervention, and (d) difference in youth knowledge, attitude, and skill in relation to the type of intervention. Additionally, the research team collected data relative to participant perceptions of alcohol and other drugs, use, and at-risk behavior.

Research Sample. The sample included in this study was reliant on accessing students through teachers who have previously worked with DART CAOP staff in their classrooms. As such, health students were inaccessible. The sample consisted of 10th grade students from Toledo Public Schools. Specifically, students in the experimental group were 10th grade students from two Toledo Public High Schools: Start and Bowsher. Students in the control group were 10th grade high school students from Rogers High School (TPS).

Results. The research team designed a 62-item survey collecting data on participant demographics, knowledge, attitudes, skills, perceptions of alcohol and other drugs, use or intent to use, and at-risk behavior. A total of 106 pre-tests were collected from Experimental Group 1 and 127 pre-tests from Experimental Group 2 from the two school sites who received the intervention. A total of 76 posttests were collected from Experimental Group 1 and 48 posttests were collected from Experimental Group 2. A total of 66 participants had complete data on both pre and posttests for Group 1 and 33 participants had data on pre and post tests for Group 2. A total of 189 posttests from the control group were collected for analysis.

Results presented below report significant differences between pre and post test scores and are presented separately for each intervention group. Data were analyzed using SPSS (Version 28). Descriptive statistics were used to describe the frequencies, means, and standard deviation of study variables. Paired samples t-tests were used to assess statistically significant differences between pre and post-test scores for six program assessment areas (i.e., knowledge, attitudes, skills, perceptions, use, and at-risk behavior). Effect sizes (cohen's d) for statistically significant differences in pre-post measures are reported (small effect = .20; medium effect = .50; large effect = .80). Statistical significance levels were set at $p<.05$ (two-tailed).

Missing data on post-tests for both experimental groups resulted in small sample sizes included in the final analyses (N = 66 for Group 1, N = 33 for Group 2). As such, results from the analyses, particularly from Experimental Group 2), should be considered in light of this limitation. Still, findings were generally consistent across both intervention groups. Future studies should use larger samples to replicate findings and ensure complete data are collected on both pre and post-test measures.

Additionally, internal consistency and reliability of items for each study measure is provided below for Experimental Group 1 given the larger sample size available for analyses. Notably, some measures had low reliability. Future studies should consider additional measures of study constructs (e.g., knowledge, attitudes, etc.) to measure changes in program outcomes.

***Demographics*.** Participants in the study were asked to disclose their age, racial and ethnic identity, gender identity, and sexual orientation. Table 1 presents demographic information for each intervention group.

Table 1. DART Intervention Sample Demographics.

	Experimental Group 1 (Start) N =106	Experimental Group 2 (Bowsher) N = 127
	% (n)	% (n)
Age		
15	58.5 (62)	94.5 (120)
16	16 (17)	
17	10.4 (11)	
18	5.7 (6)	
Race/Ethnicity		
Black/African American	34 (36)	42.5 (54)
Latino or Hispanic	6.6 (7)	7.1 (9)
Asian	1.9 (2)	0
Native American	.9 (1)	0
White	34.9 (37)	23.6 (30)
Two or more/mixed	20.8 (22)	24.4 (31)

Other race	.9 (1)	2.4 (3)
Gender identity		
Male	34 (36)	48 (61)
Female	61.3 (65)	47.2 (60)
Transgender	3.8 (4)	2.4 (3)
Not sure	.9 (1)	2.4 (3)
Sexual orientation		
Heterosexual	66 (70)	70.9 (90)
Gay/lesbian	4.7 (5)	3.9 (5)
Bisexual	19.8 (21)	15.7 (20)
Queer	1.9 (2)	.8 (1)
Other sexual orientation	.9 (1)	3.1 (4)
Not sure	5.7 (6)	4.7 (6)

Knowledge. Higher scores on this 12-item scale indicate more knowledge about alcohol and drug use (range = 0 to 20). Students from Experimental Group 1 reported a mean score of 14.71 (SD = 2.26) before the intervention. After the intervention, students in Group 1 reported slightly lower mean scores (M = 14.41, SD = 2.79). Paired samples t-test results did not show a statistically significant difference in attitudes post-intervention for Group 1 (t = .71, p=.478). Students from Experimental Group 2 reported a mean score of 15 (SD = 2.03) before the intervention. After the intervention, students from Group 2 reported slightly lower mean scores on knowledge (M = 14.63, SD = 2.66), however, paired samples t-test results did not show a statistically significant difference in attitudes post-intervention (t = .66, p=.510). Students from the control group reported an overall mean score of 13.82 (SD = 2.87) on the knowledge measure.

Students were also asked to write in a response to a question on one thing they can do if they are asked to participate in alcohol or drug use. Students from both experimental groups largely reported responses such as "just say no," “say no and walk away from the situation,” and “tell the person you don’t drink.” Students from the control group reported similar themes.

Attitudes. Higher scores on this 7-item scale indicate more favorable attitudes (i.e., less acceptance of myths and misconceptions about addiction and alcohol and drug use) (range = 1 to 4). Items in this scale demonstrated less than acceptable reliability in the sample (Cronbach alpha = .489). Students from Experimental Group 1 reported a mean score of 2.34 on the attitudes scale (SD = .42). After the intervention, students in Group 1 reported higher mean scores (M = 2.64,

SD = .50). Paired samples t-test results showed a statistically significant difference in attitudes post-intervention (t = -4.33p<.001) and a small effect (cohen's d = -.504); such that students in Group 1 became less accepting of common myths and misconceptions of addiction and alcohol and drug use after the intervention. Students from Experimental Group 2 reported a mean score of 2.35 (SD = .38) before the intervention. After the intervention, students in Group 2 reported higher mean scores (M = 2.48, SD = .39), however, paired samples t-test results did not show a statistically significant difference in attitudes post-intervention for Group 2 (t = -1.57, p=.125). Students in the control reported a mean score of 2.41 (SD = .43) on the attitudes measure.

Skills. Higher scores on this 13-item scale indicate higher levels of skills related to addressing problems with alcohol and drug use for themselves and for friends/peers (range = 1 to 4). Items in this scale demonstrated acceptable reliability in the sample (Cronbach alpha = .624). Students from Experimental Group 1 reported mean score of 2.40 (SD = .32) on the skills scale before the intervention. After the intervention, students in Group 1 reported higher mean scores (M = 2.34, SD = .34), however, paired samples t-test results did not show a statistically significant difference in perceptions post-intervention (t = .99, p=.325). Students from Experimental Group 2 reported mean score of 2.37 (SD = .39) before the intervention. After the intervention, students reported higher mean scores (M = 2.51, SD = .50), however, paired samples t-test results did not show a statistically significant difference in perceptions post-intervention (t = -1.37, p=.182). Students in the control reported a mean score of 2.40 (SD = .41) on the skills measure.

Perception of Alcohol and Other Drugs. Higher scores on this 8-item scale indicate acceptance of the danger of using alcohol and other drugs and lower likelihood of intent to use in the future (range = 1 to 4). Items in this scale demonstrated adequate reliability in the sample (Cronbach alpha = .698). Students from Experimental Group 1 reported a mean score of 1.99 (SD = .52) before the intervention. After the intervention, students in Group 1 reported slightly lower mean scores (M = 1.97, SD = .49), however, paired samples t-test results did not show a statistically significant difference in perceptions post-intervention (t = .23, p=.882). Students from Experimental Group 2 reported mean score of 1.94 (SD = .47) before the intervention. After the intervention, mean scores slightly increased (M = 1.98, SD = .48), but paired samples t-test results did not show a statistically significant difference in perceptions post-intervention (t = -.405, p=.688). Students in the control reported a mean score of 1.93 (SD = .56) on the perceptions measure.

Use. Higher scores on this 4-item scale indicate more alcohol and drug use in the past 30 days (range = 0 to 16). Items in this scale demonstrated less than adequate reliability in the sample (Cronbach alpha = .586). Students from Experimental Group 1 reported mean score of 5.95 on the alcohol and drug use scale (SD = 2.89). After the intervention, students reported lower mean scores or less alcohol and drug use in the past 30 days (M = 5.63 SD = 2.61), however, paired samples t-test results did not show a statistically significant difference in use post-intervention (t = .74, p=.46). Students from Experimental Group 2 reported a mean score of 4.47 (SD = 1.24) on the use scale. After the intervention, students in Group 2 reported higher mean scores (M = 5.32 SD = 2.59), or an increase in use in the past 30 days, however, paired samples t-test results did not show a statistically significant difference in use post-intervention (t = -1.76, p=.087). Students in the control reported a mean score of 5.85 (SD = 3.02) on the use or intent to use measure.

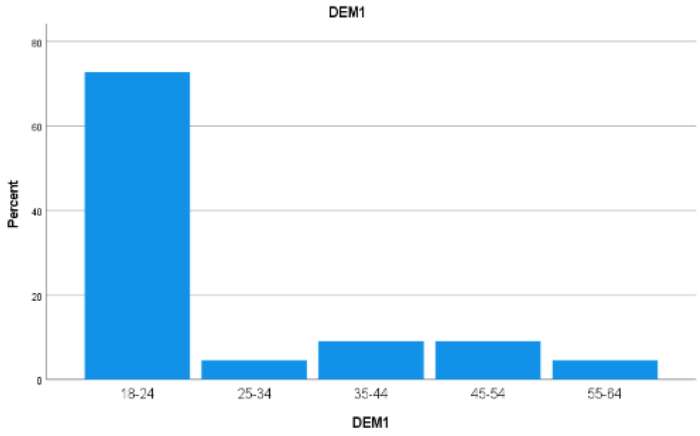
At-Risk Behavior. Higher scores on this 13-item scale indicate more frequent risk behaviors in the past 30 days (range = 1 to 4). Items in this scale demonstrated acceptable reliability (Cronbach alpha = .726). Students Experimental Group 1 reported a mean score of 1.47 (SD = .35) on the risk behavior scale before the intervention. After the intervention, students reported the same mean scores (M = 1.46 SD = .48) or no change in risk behavior. Paired samples t-test results did not show a statistically significant difference in risk behaviors post-intervention (t = .07, p=.94). Students from Experimental Group 2 reported a mean score of 1.27 (SD = .22) before the intervention. After the intervention, students in Group 2 reported higher mean scores (M = 1.48 SD = .59), or an increase in risk behaviors, however, paired samples t-test results did not show a statistically significant difference in risk behaviors post-intervention (t = -1.89, p=.067). Students in the control reported a mean score of 1.53 (SD = .51) on the at-risk behavior scale.

Hidden in Plain Sight

Hidden in Plain Sight is a 2-hour hands-on workshop which allows adult participants to search a re-created teen bedroom to identify over 50 indicators of high-risk behaviors. Participants are presented with an educational PowerPoint presentation detailing the emerging drug trends in Lucas County, OH as well as signs and symptoms of drug misuse. Participants are then given the opportunity to conduct a search of the teen room for indicators of high-risk behavior before coming together as a group and discussing their findings with members of the DART team. The debrief is an open-ended dialogue that allows participants to explain and educate others in the group on their findings and for DART to educate on any indicators that may have been missed. Participants include youth and those who may influence the lives of youth, including teachers, coaches, siblings, and services providers where workshops and family-to-family psychoeducational groups. After the completion of the workshop, age-appropriate community resources kits are provided to each participant, adult, and youth.

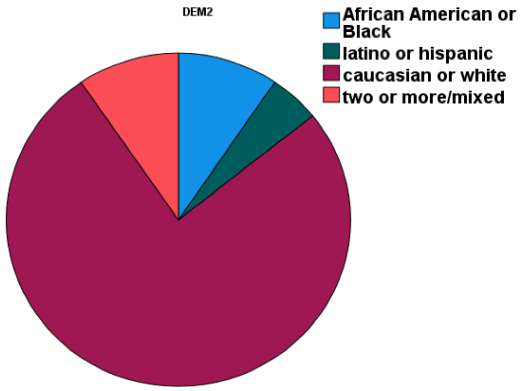
The evaluation team created a 31-item post-test for attendees of the workshop to assess participant attitudes toward substance abuse and addiction as well as their knowledge of high-risk indicators before and after the workshop. The post-test primarily collected quantitative data, though 5 open-ended, qualitative questions were also included and are presented in the Table 1 below. The evaluation team attended two sessions of the Hidden in Plain Sight workshop. The first session included community members, specifically, Resident Assistants from Lourdes University. The second session included parents from Toledo Public Schools. A total of 22 post-tests were completed. Results were analyzed and are presented below:

Participant Demographics

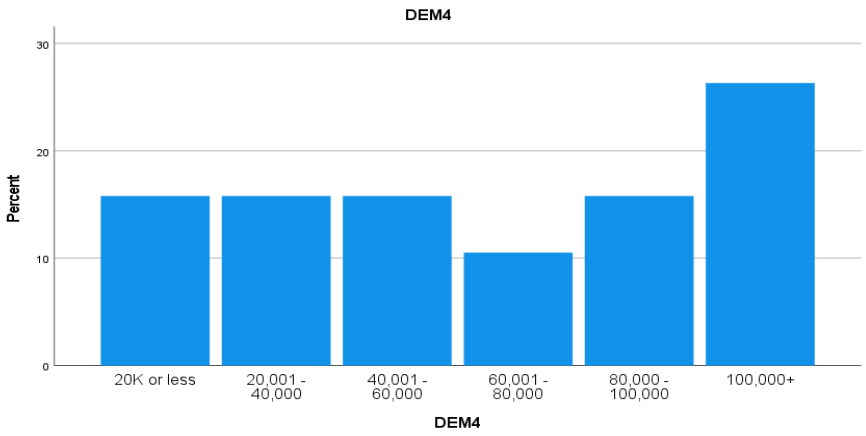


The following participant demographics were collected: age, race/ethnicity, level of education, zip code, and household income. The first demographic collected was participant age. All 22 participants provided their age on the post-test. Participants were predominantly ages 18-24, as most participants in the sample were Lourdes Resident Assistants. A breakdown of age is as follows: ages 18-24 (72.7%); ages 25-34 (4.5%); ages 35-44 (9.1%); ages 45-54 (9.1%); ages 55-64 (4.5%).

The second participant demographic collected was race/ethnicity. Most participants provided their race/ethnicity on the post-test, though one participant did not answer. Participants were predominantly Caucasian/White (76.2%), followed by African American/Black (9.5%) and Two or More Races/Mixed (9.5%). One participant identified as Hispanic/Latino (4.5) and no participants identified as Asian, Native American, Native Hawaiian/Pacific Islander, or Other/Not Specified.



The third demographic participants were asked to self-report was their level of education. All participants reported this information. This demographic was relatively homogenous, as most participants stated that their highest level of education was some college (81.9%), while (9.1%) of participants indicated their highest level of education was a high school diploma or GED and another (9.1%) of participants indicated they had earned a graduate degree. When asked to report their residential zip code, participant responses reflected a clear majority due to the sample: 40.9% of participants listed the Sylvania, OH zip code 43560, while 9.1% of participants listed the Toledo, OH zip code 43605. All other zip codes listed were represented at 4.5% each. Other Toledo zip codes included 43606, 43609, 43614, and 43623. Zip codes outside of Toledo and the surrounding areas included 43402, 43443, 44857, 45807, 48423, 49221, and 49424. These zip codes were representative of Resident Assistants who attend Lourdes but list their permanent zip code as their parent/guardian residence.



The last participant demographic, household income, was the most diverse. All participants reported this demographic. Participants from the Lourdes Resident Assistant group were instructed to answer according to their primary level of financial support. Participants in this group who primarily supported themselves with little to no assistance from their parent(s) or guardian(s) were asked to report only their income; participants who received primarily financial support from their parent(s) or guardian(s) were asked to disclose their income inclusive of parent(s)/guardian(s).

Overall, the population who attended the workshops caused many demographics to be homogenous. Most participants were Lourdes Resident Assistants (17/22), and their demographics are not reflective of the diverse overall population that DART serves. To better reflect the population of the Toledo area, more evaluations of Hidden in Plain Sight are needed with a diverse set of community members.

Descriptive Statistics: Attitudes. Participants in the Hidden in Plain Sight workshop were asked a series of 8 questions regarding their attitudes toward substance use and addiction. Responses were recorded on a Strongly Agree to Strongly Disagree Likert Scale. A summary of mean answers to each question reflective of participant attitudes is presented below:

Statement	**Mean Score**	**Summary**
Addiction is a choice	2.68	Respondents were divided between agree and disagree on whether addiction is a choice, with slightly more respondents selecting disagree
Addiction is a disease	1.18	Respondents agree that addiction is a disease
If someone wants to stop using, they can do so on their own	3.41	Respondents either disagree or strongly disagree that an individual can stop using on their own

It is common for teens to try substances such as alcohol, tobacco, and marijuana	1.45	Respondents either strongly agree or agree that this use is normalized
It is common for teens to try drugs such as cocaine, meth, or heroin	3.1	Respondents disagree that this use is normalized
It is common for teens to try prescription medications	2.64	Respondents were divided between agree and disagree on whether this use is normalized, with slightly more respondents selecting disagree
Help with substance abuse should be addressed privately within the family	3.29	Respondents disagree
I would be comfortable seeking help outside of the home if concerned about substance abuse within my family	1.52	Respondents either strongly agree or agree with this statement

Respondents affirmed the following: addiction is a disease, substance abuse cannot be resolved by an individual alone or privately within the family, that teen use of tobacco/alcohol/marijuana is a normalized behavior, and that they would be comfortable seeking help outside of the home. Respondents disagreed that use of cocaine, meth, or heroin is not a normalized behavior for teens. While responses to many of the statements align with DART principles and expectations, there are a few responses that present opportunities for more focused educational objectives in the future. For example, though respondents agreed that addiction is a disease, they were divided between agree and disagree on the previous statement, "*addiction is a choice*," suggesting that there exists a gray area between choice and disease. Additionally, respondents were divided on the statement, "*It is common for teens to try prescription medications*", suggesting that recreational use of prescription medications has become normalized.

Descriptive Statistics: Before and After. Participants were asked to reflect on the skills that they learned from participating in Hidden in Plain Sight. Overwhelmingly, respondents indicated that they learned to recognize high-risk behaviors, high-risk indicators, and community resources. In addition, participants stated that after the workshop, they felt that they had the tools to engage with their child/a teen if they found an item indicative of high-risk behavior and were also confident that they were equipped with the tools needed to speak with their child/a teen about substance use/abuse. A summary of average scores is presented below:

Statement	Mean Score	Summary
After HIPS, I had a strong understanding of what high-risk behaviors were	1.1	Respondents strongly agree
HIPS increased my recognition of high-risk indicators	1.14	Respondents strongly agree
HIPS provided me with tools to engage with my child/a teen if I found an item indicative of high-risk behavior	1.45	Respondents either strongly agree or agree
Before HIPS, I was aware of resources in my community	2.41	Respondents are divided between agree and disagree
HIPS increased my awareness of community resources	1.14	Respondents strongly agree
Before HIPS, I had spoken to my child/a teen about substance use/abuse	3.1	Respondents disagree
HIPS provided me with the tools I need to speak with my child/a teen about substance use/abuse	1.45	Respondents either strongly agree or agree with this statement

In addition to quantitative data, participants were asked 5-open ended, qualitative questions regarding Hidden in Plain Sight. Relevant responses from Lourdes Resident Assistants and parents are provided below:

Table 1: Written Comments

Parent Responses	Lourdes Resident Assistant Responses
1.Which high-risk indicators were new to you? • Lipstick • Looking for discoloration on sleeves and bottoms of hoodies for huffing • Needle in tissue in bathroom • [Those that are] hidden in common items/things	1. Which high-risk indicators were new to you? • Bindles • Overdue bills • Parking ticket • Folded paper (containing drugs) • GPA drop • The squishy toy • Hidden drugs in regular products • The toilet paper roll where they clean their needs • One hitters (2)

2. What high-risk indicators were most concerning to you?
• The covering up apps on phones
• Needles
• Book with hole in it
	2. What high-risk indicators were most concerning to you?
	• Needles
	• Things that look like normal objects
	  ○ Heroin kit in glasses case
	  ○ Tennis ball
	  ○ Hairbrush
	  ○ Alcohol in the lotion bottle

• [Those to do with] body image	• Pill bottle • [Those indicative of] prostitution • Hard drugs / heroin • Mental health issues • Toilet Paper • Foil • Indicators of eating disorders
3. How will you apply what you learned? • Regular sweeps through my teen's room as well as talking with her • Go through rooms more thoroughly • Speak with my children, keep open communication • Have talk with kids, deep discussions	3. How will you apply what you learned? • Ability to recognize many discrete objects indicative of high-risk behaviors • I will pay closer attention to the high-risk factors my residents may display • By providing help/resources for potential overdose • By reading and understanding people's changing • Catch symptoms early on • How to recognize high-risk residents • When I am with students, I feel like are abusing drugs, I know I can actually talk/apply what I learned • I will use it with interactions with residents as well as friends and family • Being more observant in general • I have used this information for my RA job. I found a hollowed-out Coke can one time • High-risk signs/concerns do not only pertain to marijuana or drug abuse…could also be mental health concerns or dangerous situations like prostitution
4. What additional resources or information would be helpful? • Ways to share statistics in an impactful way to kids • Use provided info/will look it over	4. What additional resources or information would be helpful? • Summary of resources to give to residents • Mental health resources • Learning the street names for drugs • If there was a shorter number for specific drug emergencies • How to go about discussing the information • Hotlines more directed toward teens/college students • Crisis hotlines for non-substance high-risk behaviors • Recommend response/how to talk about victims/users
How can *Hidden in Plain Sight* improve? • Just keep up with changing information • Just keep trying to help educate families. Don't stop this program!	5. How can *Hidden in Plain Sight* improve? • Updated objects, like a phone walk through • Handouts with info – it's too much to remember but it's all very valuable information • Displaying common forms of weed • This was awesome and very eye-opening • Have both male and female room examples because those risky behaviors might be different • Give a little bit more time to search the room

Records Review Data

In partnership with the Lucas County Mental Health Recovery Services Board (LCMHRSB), a records review was conducted concerning the population DART served from 2018-2019 via the LCMHRSB data mart system. The goal of this records review was to compare treatment

outcomes and treatment costs of those who received opioid treatment through DART services opposed to public opioid treatment options in Lucas County. A detailed PowerPoint presentation of specific treatment outcomes and dollars spent can be found at the end of this report. A summary of the main findings will be discussed in this section.

Summary of Records Review. In 2018-2019, DART served 1,325 unique individuals. Most of these individuals were found in the LCMHRSB data mart (79% or 1,051). Of these 1,051 individuals, 638 were found to have received opioid-only services within 1 year of their respective DART date from 2018-2019. The typical DART client is more involved with both Rescue/MRSS as well as the Lucas County jail compared to non-DART cliental. Most DART clients are White (76%), their average age is 36 years of age, and the top zip codes they reside in are 43605, 43612, 43615, 43613, 43609, and 43611. The LCMHRSB notes the following limitations to this records review: this review is limited to those DART individuals found in the LCMHRSB data mart; Medicaid data is not all-inclusive or 100% complete; data on private treatment is not available in the data mart. A review of records answered the following questions relative to DART Client Population vs. LCMHRSB Population:

(1) How much money does a DART opioid client use in comparison to non-DART clients for opioid treatment?
The DART Opioid Population uses $3,548 more per capita exclusively for Opioid treatment Vs LCMHRSB's Opioid Population

(2) How much money does a DART opioid client use in comparison to non-DART clients for treatment overall (I.e., a variety of treatments as opposed to opioid treatment only)?
The DART Opioid Population uses $3,728 more per capita Vs LCMHRSB's Opioid Population.

- 18% of dollars for DART's Opioid Population is used for non-opioid services
- 23% of dollars for LCMHRSB's Opioid Population is used for non-opioid Services

(3) How do treatment costs for DART clients compare to the LCMHRSB population?
The DART Population uses ~$7,724 or ~184%, per capita compared to the LCHMHRSB system population.

(4) How long does it take for a client to receive services after initial engagement with DART?
32% of DART clients in 2018-2019 received services within 5 days, while 54% of DART clients in 2018-2019 received services within 30 days.

(5) What type of services are DART clients utilizing?
DART clients utilized a wide variety of over 20 services. The range of the number of clients utilizing a particular service was 1-211 clients. The most common services utilized included by clients included case management (211), psychotherapy (208), drug screening (198), and office visits (195). The range of the number of days for a particular

service was 2-1355. The services with the longest days of treatment included Substance Abuse Disorder (SUD) partial hospitalization (1355), AOD acute detox (848), drug screening (543) and case management (511).

(6) Is there a connection between Opioid treatment and mental health treatment as found in the data?
64% of DART clients who were treated for Opioid disorders in CY 2018-2019 received services for both Mental Health & Alcohol/Drug compared to 60% of non-DART clients who were treated for Opioid disorders in CY 2018-2019 received services for both Mental Health & Alcohol/Drug

Overall, findings indicate that the average number of days of treatment that DART clients receive, as well as dollars per capita, are significantly greater than both the general population, as well as the non-DART Opioid Population. The typical DART client is an opioid user who has been in the LCMHRSB billing system for almost 10 years, meaning that most DART clients have received some type of services prior to their DART date (79% or 1,051). However, DART may have been able to re-engage these clients and increase the amount of frequency and services these individuals receive.

Qualitative Data

The evaluation team conducted qualitative evaluation regarding three components of DART programming: Community Advocates Outreach Program Enhancement (CAOPE), Hidden in Plain Sight workshop, and DART Treatment. The process evaluation included 4 focus groups: 1 with CAOPE staff, 1 with parents, 1 with teachers, and 1 with DART clients who completed treatment. Open-ended questions focusing on Strengths, Weaknesses, Opportunities, and Threats (SWOT) to the program were asked and responses were audio-recorded, transcribed, and analyzed using constant comparative analysis for project improvement. Significant findings from these groups are categorized and presented below:

All 4 focus groups occurred via Zoom, including 2-3 individuals per group and lasting between 1-2 hours. More participants were contacted from each group to participate; however, schedules and availability were an obstacle within the time frame requested.

Each of the focus groups were conducted in the same manner as participants were encouraged to share feedback regarding their experiences and included; 1) feedback from recovered individuals regarding their experience with the DART Program, 2) input from teachers whose students participated in DART presentations focusing on their perspectives on the approach and effectiveness of the CAOPE intervention, 3) TPS parents that participated in the Hidden in Plain Sight presentation and 4) DART Officers currently presenting the CAOPE Program and providing services to assist opiate users to move into treatment.

Common themes did present among the teachers and the CAOPE/DART Officers focus groups including agreement that additional presentation training is needed for the CAOPE/DART Officers and that CAOPE/DART Officers should be providing presentations to TPS students throughout their middle and high school years for more of an impact on students' skills, knowledge, and attitudes. Individuals that participated in the Hidden in Plain Sight focus group also stated more presentation offerings should occur throughout the school year so more parents can receive education about substance use disorders. Another focused theme among parents that participated in the Hidden in Plain Sight presentation as well as the teacher focus group was having a recovered individual present to discuss their experience. Both teachers and parents agreed that real life experiences, including having someone in recovery speak to the students and parents, would be a valuable way to learn about this topic.

Parents. Each of the parents that participated in the Hidden in Plain Sight focus group concluded that the presentation taught them things they did not know before they participated. One parent stated, "*I knew to look for drugs, but I did not think about the other items like small baggies and rubber bands, and I never thought to check what might be hidden in their books*". Parents thought the time allotted to go through the room was ample time and agreed that a video from a recovered youth or having a recovered youth and their parent at the presentation would be helpful, "*so parents could hear from a kid that has gone through substance abuse treatment and ask them questions about their experience".* All parents agreed that more marketing and outreach needs to occur in order for more TPS parents to have the opportunity to view the Hidden in Plain Sight room. One parent stated, "*I had never heard of this program and think it could be offered as part of open houses and could be held once a semester at each HUB*". Parents suggested that teachers take this course to assist them with identifying signs and indicators of drug use at school. Overall, the parent focus group enjoyed the opportunity to view the Hidden in Plain Sight presentation and would recommend this presentation to other parents.

Teachers. The teacher focus group participants stated their appreciation for including them and requesting their feedback regarding the CAOPE/DART Officers program and they stated they appreciate DART's efforts in their classrooms. All agreed that a presentation about different types of drugs should be included among other subjects taught to TPS students. Participants suggested that CAOPE/DART Officers should be provided with the opportunity to learn best practices regarding presentation skills. One teacher stated, "*I personally would like to see a presentation that is more professional",* while another stated, "*When there were two presenters, all try to talk, you know, back and forth and share who's talking and who's leading it just kind of got a little lost".* An agenda of the presentation topics and sharing the PowerPoint ahead of the program would help the teachers know what will be covered. Although the agenda might need to be adapted, it would still help teachers to have an idea of what their students will be viewing and/or what exercises their students will be participating in during the session. One teacher suggested that DART hire trained presenters that would go to classrooms to provide the presentation to students. The teachers suggested that this would allow DART Officers to provide other services to the community during the day and possibly allow more TPS students to participate in the program.

Another topic of discussion included updating presentation content frequently. The current presentation uses out-of-date rap stars and in your face scare tactics to grab the student's

attention, but this content has the opposite effect on the students according to the teachers. "*They (students) need some more real-world things where the kids can say 'oh my god, I know that neighborhood. Oh my god, I know people who are in that neighborhood.*" Teachers suggested using more up-to-date videos that are clear to see and other activities/tools to engage students. Teachers stated that in the past CAOPE/DART Officers would interact more with the students and have them moving around and participating in the presentation. The teachers agreed that this was a much more effective way to engage the students. The teachers also suggested that DART talk to the students at the beginning of the presentation to gauge the level of knowledge of their students. "*Some students know a lot about drug use because they deal with it in their homes while other students have never been exposed to the topic*". Knowing the level of the student's experience would allow DART to adapt the presentation to their audience. The teachers suggested using real-life experiences and stated that would be a powerful learning tool. Either through a recorded video or having a recovered individual present to speak to the students would get their attention and make the students more empathetic to those that struggle with drug use themselves or those struggling with drug use in their family. One teacher shared that she wanted more information specifically about Toledo within the presentation. DART Officers could easily add this to their presentation as this data is shared in the Hidden in Plain Sight presentation. All teachers agreed that a drug presentation should happen throughout a student's academic career. "*It be great if we could start with them and I don't know what grade, let's just say eighth grade for the heck of it, eighth grade, then freshmen, sophomores, and follow them to provide content that is relative to what stage of life their in".* Additionally, all the teachers believe that the current presentation does not provide the students with any skills, knowledge, or any change in attitude about the topic.

DART Clients. The opiate users who have obtained treatment within the last 12 months or longer that participated in this focus group all agreed that CAOPE/DART Officers are needed and appreciated by those that have taken advantage of the help offered to them. All want the program "*to expand and want more people to have the opportunity to get treatment".* Both participants' lives are currently on track, and they have completely different views of the world because they are in recovery. One of the participants stated that she would love to work with DART and help others get into treatment. Focus group participants suggested that when the DART Officers speak to youth in our community, they "*need to be more honest and blunt*" with youth and present the students with what "*withdrawing from drugs feels like and the real effects of drugs on your life, not just teaching, don't do drugs"*. One participant suggested that not enough residents in Toledo know that this program is available. Participants suggested an advertising campaign, using social media and other means to inform the public about the work being done. Another comment focused on the users interacting with officers as weird and uncomfortable at first and that sometimes users do not want to talk to an officer. The participant stated, "*I'm not gonna get caught talking to no cop but, figured out it was not his goal to make me go tell on people. It was to help me".* This change in thinking only occurred because the DART Officer kept checking in on the participant and asking more than once if they wanted to go to treatment.

Next, the focus group was asked about other community resources that were most impactful while in recovery. One participant stated that the now defunded RISE Program (a human trafficking program) case manager, took them to all their appointments and helped them as soon

as they got out of jail. "*She really helped me figure out my life and helped me save for a house".* The other participant stated that they participated in drug court and asked to participate because they were ready to stop using drugs. Through the drug court, this individual was able to gain access to mental health services and advocacy for legal issues and they are currently receiving job placement services.

Participants verified that the DART Program assisted in their own recovery along with the other community services but shared ranges of involvement with their individual DART Officer. One participant stated that their DART Officer only contacted them twice a month and met in person one time at first, while the other participant shared that their assigned officer held them accountable and continues to check in on them often. The DART Program should implement an approximate timeline of activities for interaction with users to ensure all participants receive similar services. All participants shared that the DART Program might consider having recovered individuals work with newly recovered individuals. "*People that are getting their lives together might be an instant motivation right next to an officer, I think that would do some good".* Both participants stated that would have made a difference to them and would be a motivating and inspiring factor in their recovery. It would show that if someone else can do it, they can do it, too. Participants agreed, "*at the end of the day the only person that understands an addict is another addict, right?"*

CAOPE Staff/DART Officers: This focus group was asked to describe their work in the community and to discuss the effectiveness of the current high school presentation. Participants stated that in high schools, they educate about drugs and within the community, they inform about addiction and treatment options. "*(DART) provides education to the youth in our community on the dangers and like you mentioned, the risks associated with using certain drugs, not just opioid related, but all illegal substances as well as hopefully steering them away from ever trying these illegal substances and having the courage to say no when presented, or when they're presented these situations throughout their time in school or outside of school."* Officers think the CAOPE program is effective because they are getting the information into the community and the schools. One Officer stated that when in high schools, the students eventually open up to the officers. "*There's been a few that have shared family, you know, they haven't got into the detail, the personal details but they talked about (drugs) being in their family".* Evaluators asked what skills the students learn through the CAOPE program. Officers stated, "*I just think them being educated and informed on what's going on. Now in the community, you know, we try to keep up on the latest of what's going on out there and we try to provide that to them, so I think it's just the information that we give, and what to look for and why you shouldn't do any drugs, let alone, certain ones, but any drug, so I think that's the biggest skill they probably learned".* Officers were asked how they create a space where students feel comfortable asking for help if they need it. Since the presentation is only 45-50 minutes, officers leave their business cards with the teachers, and they give the students their work cell phone numbers along with a bag that contains community resource information. Officers were asked why students might not feel comfortable asking DART for help. Thoughts were "*embarrassment, probably be one. Yeah, I think maybe I'll get in trouble because we're the cops, you know that's a big stigma for us. They may think they're snitching".*

Officers were next asked to describe how parents respond to the Hidden in Plain Sight presentation. One Officer stated, "*I think their eyes (parents) are being open to dangers and risks that they never even would have thought of had they not been presented this information and education".* Another stated, "*I think they're very shocked. I think shocking is the biggest word. I don't think they really realize that this, I think a lot of people come in with the notion that it's all drug related; we show them other avenues of the dangers that their children can be in just by, you know the magazines, in the books, in the music, and the pictures, and things like that, so it's not just drug related and I think that is a big shock sometimes for some of the parents".*

Next, DART Officers were asked to discuss the opioid overdose protocols between the Toledo Police Department (TPD) and DART. The Officers stated that each entity operates separately, but over time, TPD and DART have developed a strong working relationship. TPD will be on an overdose call and request that dispatch contact DART to come out or to meet the victim at a certain hospital. TPD street officers might also call DART and make a request such as, "*we've been here five times in the last two months, you guys might want to come out here and try and talk to them".* DART Officers also take calls from local emergency room departments, whether it is a doctor, nurse, or social worker, when a patient has been treated for an overdose.

Evaluators asked if a standard client assessment has been developed when talking to patients. Officers stated that basic questions are asked of all those referred to them. "*Have you ever been in treatment, what's your experience like with treatment, do you want to go to a certain treatment provider*" are all questions asked no matter where the referral originated. Evaluators also asked what aspects of the CAOPE Program stand out to the Officers the most and why. All agreed that they, "*think it's the information that we give, and because the three we really talk about the most are alcohol, marijuana and vaping; that's what's really prevalent today in high schools, in the media, and with young people. So I think that's probably the biggest, I mean that's huge".* Evaluators asked the Officers what they think stands out to students about the CAOPE Program. Officers stated the information shared about alcohol and vaping probably stand out the most. The current CAOPE Program describes the chemicals that the user is sucking deep into their lungs and with alcohol being so prevalent, students have very easy access to it and need to know it is addicting.

The last question revolved around how the CAOPE Program could be improved. Officers agreed that they were never trained to provide high school or community presentations and that it would be helpful. Officers stated that they believe more sessions should be offered to students throughout their school years. One Officer stated, "*I think it needs to pick up a lot of the junior high level. Okay. And all the way through high school, not just the freshmen or sophomores, I think, seniors that are getting ready to go out on their own that are going to become adults".*

Challenges and Adaptations

Throughout the year one evaluation, researchers experienced challenges that caused adaptations to be made to the original research proposal. The following challenges and adaptations to year one are discussed below, as well as potential implications for year two:

1. Research design: It was initially proposed that three groups of students would participate in CAOPE evaluation: an experimental group with DART intervention, an experimental group with DART intervention and the state health curriculum on alcohol and other drugs, and a control or baseline group of students receiving no intervention.
    a. Adaptation: Because researchers did not have access to health teachers or students in health class, this experimental group was eliminated. One experimental group receiving DART intervention and one control group were compared.
    b. Future research: If future research involves comparing three groups as initially proposed, greater coordination amongst DART, the research team, and TPS teachers will be needed.

2. CAOPE data collection: It was reported by teachers that the surveys utilized in the CAOPE evaluation were too long. Some surveys were not fully complete and/or there was a significant difference between the number of students completing a pretest and the number of students completing a post test. Additionally, students were not given unique identifiers, so analysis focused on group results as opposed to more nuanced individual results.
    a. Future research: The research team will refine the data collection tools utilized for year two. The research team will distribute surveys with unique identifiers in year two (I.e., 001, 002, 003, etc.) so that pre and post tests can be analyzed on an individual level as well as at the group level.

3. HIPS data collection: It was initially proposed that a total of 50 parents and/or community members would participate in *Hidden in Plain Sight* evaluation.
    a. Adaptation: During the course of the evaluation, two sessions of *Hidden in Plain Sight* were scheduled with a total of 22 participants, the majority of which were RAs from Lourdes University.
    b. Future research: The sample was largely homogenous, and the sample size was small. Future evaluation would benefit from a larger sample more reflective of the Lucas Co. Population.

4. Records review data collection: The LCMHRSB data mart did not have data variables that directly corresponded to the three questions initially proposed.
    a. Adaptation: The research team collaborated with the LCMHRSB to replicate the previous DART report completed by the LCMHRSB and to answer six questions comparing treatment costs and outcomes for DART users vs. non-DART users.

Future Directions: Literature Review

To assist with future directions with DART prevention programming and community education, including CAOPE and Hidden in Plain Sight, the evaluation team conducted a literature review on best practices of evidence-based substance abuse prevention programs geared toward high school students and parents. The literature review focused on answering the following questions:

(1) What are the program elements for effective and evidence-based substance abuse prevention programs for high schoolers? (2) What are the evidence-based program elements specifically for parent education on substance abuse? (3) What are some evidence-based programs geared toward parent education? (4) What are some common elements as to how the above evidence-based programs are delivered? References for the literature review can be found at the end of the report.

What are the program elements for effective and evidence-based substance abuse prevention programs for high schoolers in the U.S.? Nation et al. (2003) reports 9 principles of effective prevention programs:

1. Comprehensive programs combining multiple interventions in multiple settings. Multiple interventions involve combining awareness-raising, skill development and provision of services rather than just one activity. Multiple settings involve combining parent, peer, and school interventions, e.g., classroom management in schools, social and health services in schools for students, family members and community members, teaching positive parenting skills and parent-child interactions, social and emotional skills education.

2. Varied teaching methods, including active, skills-based instruction. Teaching should be interactive and targeted at increasing a participant's skills rather than relying too much on imparting knowledge or engaging in group discussions. The National Institute on Drug Abuse finds that programming that prevents substance use helps participants develop resistance skills, including the ability to be assertive and effectively communicate around issues related to drug use.

3. Sufficient dosage. Participants need to be exposed to enough of the intervention to influence their knowledge, beliefs, attitudes, behaviors, and skill acquisition. This is informed by the length of the program, how many sessions it comprises, the spacing of the sessions, and the duration of the program. Effective interventions usually include some type of follow-up or booster sessions which recap the prior skills taught or teach new developmentally appropriate skills to maintain positive outcomes.

4. Timing of intervention. Interventions should be timed to occur in a child's life when they will have maximal impact rather than when children already exhibiting unwanted behavior or when programs developmentally less relevant to participants (Nation et al, 2003). Elementary to middle school transition may be an important opportunity to affect problem behavior before it begins. Additionally, materials should be tailored to participants' cognitive and social development.

5. Based in theory and research. Programs should be driven by understanding of what the causes or risks are of substance use in the local community where they are operating, and in turn the empirically tested intervention theories which have been shown to enhance

protective factors and reverse or reduce risk factors.

6. Opportunities for building positive relationships. Programming that provides opportunities to improve parent-child relationships and children's relationships with significant others (peers, teachers, and community members) is consistently associated with positive outcomes.

7. Sociocultural relevance for participants. Programs should be relevant for participants' community norms and cultural beliefs. Adapted programs should still retain the core elements of the original research-based intervention in terms of structure, content, and delivery. Programs should also respond to risks specific to their audience characteristics, e.g., by age, gender, and ethnicity and participants should be included in planning and implementing the program where possible.

8. Staff need to receive sufficient training and supervision. Staff members must be sensitive and competent and have received sufficient training and guidance, especially for teachers in school-based programs.

9. Emphasis on continuous quality improvement. Regular outcome evaluation needs to take place to determine program effectiveness and adapt the intervention accordingly. Follow-up findings must be collected more than six months after the program is delivered to evaluate the duration of the outcomes.

What are the evidence-based program elements specifically for parent education on substance abuse? Prevention principles identified in National Institute on Drug Abuse report (2003) include:

- Family-based prevention programs should enhance family bonding and relationships and include parenting skills; practice in developing, discussing, and enforcing family policies on substance abuse; and training in drug education and info (Ashery et al, 1998).

- Family bonding can be strengthened through skills training on parent supportiveness of children, parent-child communication, and parental involvement (Kosterman et al, 1997).

- Parental monitoring and supervision can be enhanced with training on rule-setting; techniques for monitoring activities; praise for appropriate behavior; and moderate, consistent discipline that enforces defined family rules (Kosterman et al, 2001).

- Drug education and info for parents and caregivers reinforces what children are learning about harmful effects of drugs and opens opportunities for family discussions about abuse of legal/illegal substances (Bauman et al, 2001).

- Positive outcomes have been shown in high-intensity, family-based interventions focusing on parental skill-building and parent-child relationships: delayed onset of alcohol and tobacco use and reduced past month frequency of drinking, which are sustained at more than three years follow-up. Parental education alone is not effective.

What are some evidence-based programs geared towards parent education? The Strengthening Families Program for Parents and Youth 10-14 and Familias Unidas are rated 1 by the California Evidence-Based Clearinghouse for Child Welfare, meaning they are 'well-supported by research evidence'. Guiding Good Choices is rated 2, or 'supported by research evidence'.

What are some common elements as to how the above evidence-based programs are delivered? Common elements include:

- Sessions must be interactive and skills-based to provide opportunities for parents to practice skills and get feedback. Methods of content delivery include video clips depicting common parenting scenarios; discussion groups; role-plays and games.

- Whole-family approach rather than involving parents or children alone; usually a combination of sessions just for parents, then additional sessions involving parents and children together.

- Intensity of intervention: ranges from 10 hours over 5 weeks (Guiding Good Choices) to 20 hours over 12 weeks (Strengthening Families Program). Each program has a two-hour weekly session with parents.

- Small group size: typically, 5-10 families per group (Strengthening Families Program) to 12-15 (Familias Unidas)

- Sessions delivered in community-based agencies or school settings.

- Programs typically incorporate booster sessions ranging from once every six months (Strengthening Families Program)

- Parents involved in workshops receive workbooks/family guides with activities and tips; also receipt of homework to practice communication and family management skills between sessions.

- Provision of financial support and/or access to transportation for youth and parents to attend sessions informs program take-up and retention rates.

- All interventions include materials in Spanish, as well as English.

Recommendations

Based on findings from the comprehensive evaluation, the evaluation team makes the following recommendations:

1. CAOPE: Research for effective and evidence-based substance abuse prevention programs for high schoolers emphasizes that interventions should be comprehensive, blend knowledge with skills, have varied instructional methods, and be delivered across multiple sessions. Data collected for the current *Science of Addiction* intervention revealed a minor correlation between the intervention and attitudes, as students in Group 1 became less accepting of common myths and misconceptions of addiction and alcohol and drug use after the intervention. However, there were no statistically significant differences regarding knowledge, skills, use, perceptions of alcohol and other drugs, and at-risk behavior post intervention.

    a. Based on the CAOPE quantitative data collected as well as best practices for effective programming, the research team recommends the following to align with the development of evidence-based programming:

        i. To create a comprehensive program, DART should further develop CAOPE into multiple modules: (1) knowledge (2) attitudes (3) skills and (4) module of DART's choice (I.e., communication, community resources, etc.) and (5) a student-parent module.

        ii. DART CAOPE modules should be delivered on a consistent basis throughout a semester to be more effective.

        iii. DART should consider incorporating "homework" between modules so that students can reflect on and interact with DART by sharing their experiences.

        iv. Consider incorporating Hidden in Plain Sight as the student-parent module with greater emphasis on student-child communication post-activity. As is, post-activity discussion focuses primarily on educating participants of what certain items are. While this is critical, combine this with a discussion involving both parents and their children (i.e., How would a parent approach their child after finding this item? How would this approach make a child feel or react? What could be a better approach and why?). This would allow both parents and children to speak and be involved while problem-solving and communicating in a safe environment moderated and lead by DART.

        v. In the classroom, consider utilizing guest speakers such as former DART clients and members from community organizations as a varied instructional method

1. If possible, include speakers who live in the community to increase relevance to students.

b. CAOPE qualitative data revealed specific activities that need to occur for program improvement/growth and program delivery. Based on CAOPE qualitative data, the research team makes the following recommendations:

   i. CAOPE/DART Officers need to continuously develop their presentation skills as well as consistently update course content and include information relevant to Toledo in their sessions. Scare tactics and examples students cannot relate to tend to make youth question the presenter's actual content knowledge if materials are not up to date. DART could also consider contracting with an outside entity to provide the presentations to the students.

   ii. DART should consider incorporating interactive exercises within each module to ensure the students' comprehension of course content. All the teachers agreed that the more the students are actively engaged, the more content they will digest and retain and incorporate new skills into their daily lives.

   iii. CAOPE/DART Officers need to provide age-appropriate presentations for students beginning in middle school and extending through high school. As the opiate pandemic can affect anyone of any socioeconomic status, race, age, etc., it is important to start educating students about substance use disorders and how to combat these issues early in their academic careers.

   iv. DART could consider incorporating recovered individuals into their community and high school presentations. Teachers, parents and recovered individuals interviewed in focus groups all indicated that including recovered individuals in the presentations would be very beneficial to those attending sessions.

   v. DART Officers need to develop a timeline or plan of engagement when working with clients. Although each case is different, programs need to provide consistent services to the community. The plan should include specific activities and what is the sequential order. Components would include, after first engagement, when to contact again, in person or a phone call, what is step 2, when should it occur, what is the completion date, if that occurs do this type of guide. All activities should be documented to show the amount of time DART spends with each client and time spent on each client should be a similar amount of time. DART needs to show a system of engagement.

   vi. DART should develop a written policy with the Toledo Police Department and other entities in the region that provide referrals to ensure that all

involved understand their obligations and for consistent collaboration when managers/directors move out of their positions.

2. Hidden in Plain Sight: Data collected revealed that participants overwhelmingly found the activity to be useful. Participants included TPS parents as well as Lourdes University resident assistants, demonstrating the utility of the information across different groups. Feedback on evaluations demonstrated that participants gained knowledge of at-risk behaviors and community resources. However, participants expressed interest in receiving additional follow-up materials and the opportunity to develop skills to speak with youth and/or their child.

    a. Based on quantitative participant feedback, the research team makes the following recommendations regarding Hidden in Plain Sight:

        i. DART should brainstorm on how to incorporate HIPS within CAOPE to offer parents and students the opportunity to build skills and communicate. Currently, HIPS exists separately from CAOPE. DART should decide if this is a separate program or how to incorporate it as its own module that is part of CAOPE.

        ii. Have an open discussion to dispel the idea that addiction is a choice, as participants were split on this statement though they agreed that addiction is a disease (I.e., why do participants believe addiction is a choice?)

        iii. Have an open discussion on the normalization of use of prescription medications, as respondents indicated that it is somewhat normalized for teens to try prescription drugs.

        iv. Both Lourdes RAs and TPS parents indicated that while they could apply what they have learned to identify at-risk items and behaviors, there exists a gap in communicating with youth. DART should focus on equipping participants with communication skills on how to go about discussing what they have learned and communicating with youth regarding at-risk behaviors.

        v. Participants expressed appreciation for takeaway resources. However, feedback indicated that additional mental health resources are needed and that while the information is useful, it is a lot to look over. Additionally, some respondents expressed that they would have liked to be able to share the bagged takeaway resources with others.

            1. To alleviate this, DART should consider taking 5-10 minutes to highlight community resources and/or incorporate resources electronically so that they are readily accessible and shareable.

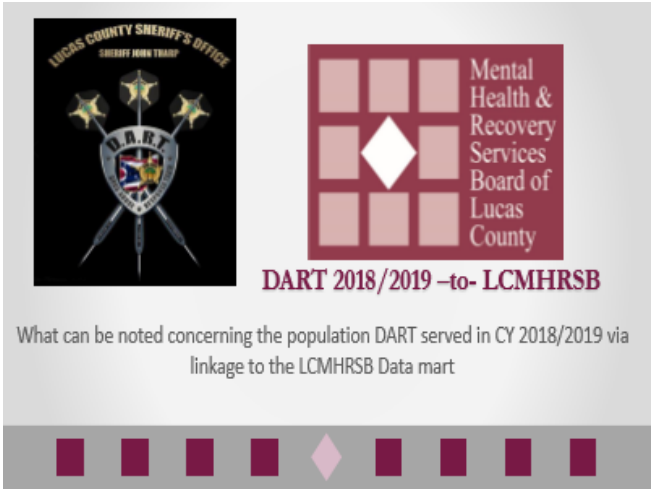
b. Hidden in Plain Sight qualitative data revealed opportunities for program expansion and the addition of real-life experiences coinciding with the current presentation. Based on qualitative feedback, the research team makes the following recommendations regarding Hidden in Plain Sight:

    i. This program should advertise more extensively throughout the TPS system so more parents get the opportunity to participate. Examples of events where this program should be offered included open houses and any parent event TPS might be sponsoring.

    ii. A recovered youth and their parents sharing their life experiences during the program would be a valuable learning resource. Parents could ask questions and hear from a student about how their addiction started and the parent could explain how they helped their child in recovery.

    iii. Course content needs to be updated on a constant basis to ensure participants receive the most current information about national and local trends. Nicknames for drugs should be reviewed but also what is the latest trending drug, which celebrity or song is making it popular, and what is happening in our local neighborhoods. Statistics regarding recent drug activity within their school zip code would be important information to share.

Records Review PowerPoint Slides



Data Limitations

- Not all DART individuals are found in the LCMHRSB system; and therefore, cannot be linked *(we do not know what happened to them and have no additional information on them)*
- Medicaid data is neither complete nor all-inclusive *(this is out of our hands as ODJFS manages this, in agreements, between themselves and OMAS)*
- Lag exists between when service is rendered and when claim is finalized
- LCMHRSB does not have data/details on private treatment, which is conducted outside of our system of care (all data available to us was used)
- Dollar amounts should be considered minimums as data is incomplete

Summary

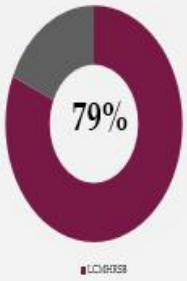
- **The typical DART client is an Opioid user who has been in LCMHRSB's billing system for almost 10 years, meaning that the majority of DART clients received services prior to their respective DART date. DART may have been able to not only re-engage these clients, but also increase the amount and frequency of services these individuals receive.**
- A large group of DART clients, 1,051/1,325 79% are found somewhere and some point in the LCMHRSB system. With 72% of the found clients having received service after their DART date.
- The majority of found clients, 71%+, received services for AoD with 67%+ for Opioids between CY 18 to Date.
- The average # of days of treatment that DART clients receive, as well as dollars per capita, are significantly greater than both the general population, as well as the NON-Dart Opioid Population. The typical DART client is more involved with both Rescue as well as the jail compared to the NON-DART clental.
- The majority, 63%, received service within 30 days of their respective DART date with 17% of the clients having received their first service on record on or after CY 18.
- The majority of DART clients started out as *having Neurotic/Personality* diagnosis prior to Opioid use disorders
- 2018/2019 DART clients received over $9.3M in CY 2018/2019 per LCMHRSB billing data.

DART CY 2018/2019

- 1,325 unique individuals
- 1,051 unique individuals, or 79%, of DART's 1,325 unique individuals in CY 2018/2019 were also found in LCMHRSB's 20 year billing data
- 679 unique individuals, or 51%, of DART's 1,325 unique individuals were found to have received services within 1 year of their respective DART date

1,051 of D.A.R.T.'s 1,325 unique individuals in CY18/19 were also found in LCMHRSB's 20 year billing data

Unique Individuals



DART CY 2018/2019 Demographics

- Out of the 1,052 unique individuals in DART 2018/2019 found to have demographic data in LCMHRSB billing system
  - Female 39%
  - Black 11%
  - Hispanic 8%
  - White 76%
  - AVG Age 36

42% of individuals fall between 26 and 35 years of age

Top ZIPs	%
43026	6.3%
43062	3.9%
43015	3.0%
43065	2.9%
43059	2.6%
43011	2.5%

of Days of Service w/in 1 Year of DART

# of DAYS OF SERVICE w/in ONE YEAR of DART	#
1	23
2 to 5	34
6 to 10	23
11 to 20	19
21 to 30	17
31 to 40	10
41 to 50	13
51 to 100	59
101 to 200	41
201 to 300	7
AVG	42.44
MIN	1
MAX	281
MED	28
MODE	1
Avg – 5%	42.5

Net Dollars w/in 1 Year of DART

Dollar Range	#
$1 - $100	23
$101 - $500	73
$501 to $1,000	69
$1,001 - $5,000	200
$5,001 - $10,000	119
$10,001 - $20,000	104
$20,001 to $30,000	62
$30,001 to $40,000	20
Over $40,000	9

Min	Max	Avg
$20	$55,949	$8,322

Med $4,320

$7,160 avg w/ 5% high/5% low excluded

Days Between CY 18/19 DART & 1st Date of Service after DART

Day bet CY19 DART & 1st DOS after		
0-3 Days	163	22%
4-5 Days	73	10%
6 to 14 Days	86	11%
15 to 30 Days	78	10%
31 to 60 Days	73	9%
61 to 90	36	5%
91 to 365	168	23%
OVER 365	84	11%
Total	736	100%

MH/AoD Breakout

- 58% of DART clients received services in CY 18/19 for both Mental Health & Alcohol/Drug
- 64% of DART clients who were treated for Opioid disorders in CY 18/19 received services for both Mental Health & Alcohol/Drug
- 60% of NON-DART clients who were treated for Opioid disorders in CY 18/19 received services for both Mental Health & Alcohol/Drug

CY 18/19 Service Profile within 5 Days of DART Interaction

PROVIDER	#	%
ZEPF	101	43%
NONAFFIL	53	22%
UNISON	45	19%
A RENEWED MIND	22	9%
PHILJO	10	4%
MARBOR	9	4%
CHOICES EM	6	2%
LIVEADAPT	3	1%
RESOLVE	3	1%
TASC	1	0%
TOTAL (DISTINCT)	236	100%

PROC GROUPING	#	%
AoD ACUTE DETOX	96	41%
CASE MGMT	62	26%
PSYCHOTHERAPY	33	14%
OFFICE OP VISIT	31	13%
DRUG SCREEN	47	20%
SUD PARTIAL HOSP	40	17%
ASSESSMENT	39	17%
AoD GROUP COUNSELING	37	16%
METHADONE ADMINISTRATION	24	10%
AoD SERVICE	21	9%
TBS	20	9%
CPST	15	6%
PSYCHOSOCIAL REHABILITATION	10	4%
ADD ON	7	3%
AoD AMBULATORY DETOX	5	2%
HOME HEALTH	5	2%
COUNSELING	3	1%
SUB ACUTE DETOX	2	1%
AoD TREATMENT PROGRAM	1	0%
ASSERTIVE COMMUNITY TREATMENT PROGRAM	1	0%
AoD ASSMT	1	0%
MH DAY TREATMENT	1	0%
CRISIS BED	1	0%
TOTAL (DISTINCT)	236	100%

236 out of 736, or 32%, Received Service w/in 5 Days of DART interaction

CY18/CY19 DART

PROC GROUPING	# of Clients	# of Days of Service	Total Value
ADD ON	58	77	$2,760
AoD ACUTE DETOX	133	943	$107,070
AoD AMBULATORY DETOX	25	89	$26,550
AoD ASSMT	2	2	$154
AoD GROUP COUNSELING	98	288	$10,828
AoD SERVICE	111	241	$10,765
AoD TREATMENT PROGRAM	11	101	$20,733
ASSERTIVE COMMUNITY TREATMENT PROGRAM	1	2	$1,092
ASSESSMENT	116	121	$14,021
CASE MGMT	211	571	$26,479
COUNSELING	11	29	$1,046
CPST	41	86	$3,597
CRISIS BED	6	21	$0
DRUG SCREEN	195	542	$8,025
HOME HEALTH	16	78	$2,254
HOME VISIT	2	3	$258
METHADONE ADMINISTRATION	58	241	$10,044
MH DAY TREATMENT	1	2	$92
OFFICE OP VISIT	195	396	$48,270
PSYCHOSOCIAL REHABILITATION	28	80	$2,817
PSYCHOTHERAPY	106	489	$58,575
STEP PEER RECOVERY SUPPORT	1	2	$103
SUB ACUTE DETOX	3	20	$7,258
SUD PARTIAL HOSP	142	1288	$259,719
TBS	75	288	$10,920

400 out of 736, or 54%, Received Service w/in 30 Days of DART

~52,137 per capita of service w/in 30 Days of DART

~$855k of service w/in 30 Days of DART

DART 2018/2019 Population –to- LCMHRSB 2019 Vs CY2018/2019 LCMHRSB Opioid Population Excluding DART

	[illegible]	CY 2018/2019 Opioid Population	Diff
[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]
Female	[illegible]	[illegible]	[illegible]
Black	[illegible]	[illegible]	[illegible]
Hispanic	[illegible]	[illegible]	[illegible]
White	[illegible]	[illegible]	[illegible]
Avg Age	[illegible]	27	
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		
[illegible]	[illegible]		
DART Program Recidivism	[illegible]		
[illegible]	[illegible]		
Avg Arrests per Person (CY 2018 to Date)	[illegible]	[illegible]	

Entire System- over $24.2M across 22 Years and 1,051 CY18/CY19 D.A.R.T. Individuals

ENTIRE SYSTEM – over $24.2M across 22 Years and 1,051 DART Individuals

	#	AVG $	MAX $	AVG # of DOS	MAX # of DOS	AVG YRS in SYS	MAX YRS in SYS
DART -to- FULL SYSTEM	1,051	$23,327	$226,454	194	3,384	8.7	22
DART -to- FULL SYSTEM (OPIOID ONLY)	658	$31,598	$226,454	264	3,384	8.7	22
SERVICES AFTER DART DATE	780	$14,259	$125,425	89			
SERVICES AFTER DART DATE (OPIOID ONLY)	590	$16,619	$125,425	116			

CY 18/19 D.A.R.T. -to- Full System

1,051 Individuals

Average Spent: **$23,327**	Max Spent: **$185,513**
Average # of DOS: **194**	Max # of DOS: 3,384
Average years in System: **9**	Max Years in System: **22**

ENTIRE SYSTEM – over $24.2M across 22 Years and 1,051 DART Individuals

80% had most recent service on or after CY 18

17 % had first service on or after CY 18

First CY of Service in le System	#	Most Recent CY of Service in System	#
2021	4	2021	208
2020	21	2020	188
2019	59	2019	188
2018	93	2018	108
2017	63	2017	51
2016	62	2016	32
2015	60	2015	30
2014	52	2014	23
2013	50	2013	21
2012	42	2012	14
2011	42	2011	9
2010	51	2010	8
2009	50	2009	11
2008	26	2008	8
2007	28	2007	4
2006	42	2006	7
2005	42	2005	2
2004	26	2004	4
2003	42	2003	5
2002	28	2002	2
2001	42	2001	3
2000	65	1999	1
1999	58		

	#	%
Opioid Dx full system	817	79%
Opioid Dx after DART	525	76%
Opioid Dx prior to DART	671	81%
Opioid Dx after & prior to DART	472	57%
Opioid Dx after but not prior to DART	156	19%

CY 2018/2019

LCMHRSB POPULATION

LCMHRSB Population	# of Clients	Total Net Dollars	Average Dollars per Person
CY 2018/2019 LCMHRSB Opioid Population (Opioid Treatment Only in any Dx)	5,226	$40,211,179	$7,696
CY 2018/2019 LCMHRSB Opioid Population (Opioid & Other AoD/MH Treatment)	5,226	$82,488,470	$15,253
ENTIRE LCMHRSB CY 2018/2019 Population	39,839	$165,870,588	$4,198

23% of dollars for LCMHRSB's Opioid Population is used for Non-Opioid Services

DART Population	# of Clients	Total Net Dollars	Average Dollars per Person	Diff	
DART CY 2018/2019 LCMHRSB Opioid Population (Opioid Treatment Only)	638	$7,205,028	$11,454	$3,548	1
DART CY 2018/2019 LCMHRSB Opioid Population (Opioid & Other AoD/MH Treatment)	638	$8,907,379	$13,961	$3,728	2
ENTIRE DART CY 2018/2019 LCMHRSB CY 2018/2019 Population	780	$9,299,288	$11,922	$7,724	3

18% of dollars for DART's Opioid Population is used for Non-Opioid Services

1. DART Opioid Population uses $3,548 more per capita exclusively for Opioid treatment Vs LCMHRSB's Opioid Population
2. DART Opioid Population uses $3,728 more per capita Vs LCMHRSB's Opioid Population
3. DART Population uses ~$7,724 or ~ 184%, per capita compared to the system population

Takeaway

- The typical DART client is an Opioid user who has been in LCMHRSB's billing system for almost 10 years, meaning that the majority of DART clients received services prior to their respective DART date. DART may have been able to not only re-engage these clients, but also increase the amount and frequency of services these individuals receive.

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