Cuyahoga County Board of Health

Cuyahoga County Overdose Data to Action Initiative (OD2A)

Yearly Evaluation Report

September 1, 2019 – August 31, 2020

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The Begun Center for Violence Prevention Research and Education, Jack, Joseph and Morton Mandel School of Applied Social Sciences, Case Western Reserve University promotes social justice and community development by conducting applied, community-based and interdisciplinary research on the causes and prevention of violence, and by educating and training social workers, teachers, law enforcement and other professionals in the principles of effective violence prevention. The Center also develops and evaluates the impact of evidence-based best practices in violence prevention and intervention, and seeks to understand the influence of mental health, substance use, youth development and related issues on violent behavior and public health.

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I. Executive Summary

The Begun Center for Violence Prevention Research and Education (Begun Center) at Case Western Reserve University **serves as the evaluator for the Cuyahoga County Board of Health (CCBH)** ***Cuyahoga County Overdose Data to Action (OD2A) Initiative*** funded by the Centers for Disease Control and Prevention (CDC) (CDC-RFA-CE19-1904). The overarching purpose of OD2A is to obtain high quality, comprehensive and timely data on overdose morbidity and mortality and to use those data to inform prevention and response efforts.

While the data collected and presented within this report are extensive, it is important to remember the very human element of this project and not get lost in the numbers. People experimenting with or misusing opioids, and especially those suffering from opioid use disorder (OUD), often face countless barriers: comorbidity with mental illness, stigma associated with drug use, lack of health insurance, homelessness, lack of a support system, and the inability to seek help and treatment for a disease that is often treated like criminal behavior. Additionally, agencies working to support these individuals have their own challenges: working in silos with minimal external support; a lack of funding, insurance coverage for patients and clients, availability of beds, staff, and naloxone; and a general unwillingness of other stakeholders to share data. With each patient denied insurance coverage, each person lost to follow-up because they have no cell phone or mailing address, each time an agency in one jurisdiction fails to connect those in another, a human life is put at risk.

The OD2A project in Cuyahoga County has worked during Year One to manage and overcome these challenges. Fourteen agencies came together to openly share data, collaboratively seek solutions to connect silos within the county (e.g., bridging jurisdictions, joining law enforcement with social workers, developing tools to bring systems together and establish linkages to care), and implement evidence-based solutions connecting people at risk to viable solutions. Hopefully, the data presented here will become more than just a dot on a map or a number on a chart; it will become a person who never overdosed, a person who survives an overdose and seeks treatment, or a grieving family member who sees their response to a tragedy become policy that prevents another death.

This report summarizes and evaluates OD2A Year One partner agency program activities (September 1, 2019 - August 31, 2020). These activities are centered on six consecutively numbered strategies identified by the CDC as Strategies Three through Eight. While outcome measures have been established to provide quantitative data benchmarks for measuring success of each strategy, qualitative data also is collected via partner agencies' self-reports as a means to gauging implementation progress, documenting more fully activity barriers, and recording innovative ideas.

The OD2A team is composed of staff from CCBH, the Cuyahoga County Medical Examiner's Office (CCMEO) and the Begun Center. The OD2A team was able to achieve multiple milestones in Year One relating to ***Implementing Innovative Surveillance to Support Interventions - Strategy Three.*** Key datasets for surveillance activities were developed by focusing on collecting and integrating diverse datasets from both public and private sources. CCBH executed two Data Use Agreements (DUA) with the Ohio Department of Health (ODH) which provided access to Vital Statistics (VS) and EpiCenter data. CCBH has been able to link VS death certificate data to EpiCenter and CCMEO drug-related overdose fatalities data using probabilistic matching methodology. CCBH also monitors emergency department (ED) visits due to suspected overdoses using EpiCenter data. **If the number of overdose visits that occur in a 24-hour period exceeds the expected value, CCBH receives an alert.** CCBH has developed a procedure to respond to these alerts and notifies OD2A partners and other stakeholders within one business day. This process was enhanced by comparing these alerts to CCMEO alerts. CCMEO releases alerts when they observe a spike in overdose deaths. Mutual notification is now occurring between CCBH and CCMEO to facilitate detection of overlap, potential seasonal patterns, etc.

The OD2A team also recognized that a key, real-time data source available for purposes of public health surveillance is overdose incident response data from public safety entities, including law enforcement (LE) and Emergency Medical Services (EMS). **Countywide EMS data on nonfatal overdose incidents is not currently available for the OD2A Initiative and creates a gap in understanding the burden that nonfatal overdoses create in Cuyahoga County.** Access to EMS data would provide a better understanding of the burden nonfatal overdoses present related to opioid misuse and would serve as a significant source of surveillance information to enhance efforts by identifying at-risk populations for targeted programming and response efforts. Through records requests from the City of Cleveland as well as drug overdose incident data from two local police jurisdictions (Parma and Lakewood), a Public Safety Pilot Data (PSPD) project was undertaken in Year One to assess how this data could be used to enhance surveillance efforts. Public safety data provides: 1) demographics on overdose victims; 2) identification of multiple overdose victims; 3) identification of high burden areas and/or locations where multiple overdoses occur; 4) identification of persons in need of treatment programs; and 5) potential drug trends. Although these initial records requests and processes are not ideal for long-term information sharing and analysis, the PSPD demonstrated the value of public safety overdose data for public health surveillance.

For purposes of intervention, the PSPD project also was valuable in identifying Cleveland residents who experienced a nonfatal overdose. **Access to overdose incident data is the primary means by which Quick Response Teams (QRT) can identify and visit overdose victims.** Although Cleveland EMS data is not currently available to assist the MetroHealth QRT, overdose figures from one year of PSPD shows Cleveland Division of Police (CDP) responded

to 2,559 incidents and Cleveland EMS (CEMS) responded to 5,695. Some of these responses included both CEMS and CDP personnel and some were responses without the other agency. This initial inquiry helped to identify that: (a) EMS responses through the public records requests were limited to date, time and location of the incident with no individual identifiers (i.e. name and home address) that are needed for QRT purposes; and (b) CDP overdose incident reports contained significant detail that would not only satisfy QRT purposes, but also contained many other useful variables that could help OD2A data surveillance activities (e.g., naloxone administration and number of doses, suspected drug type, ingestion method). This review supports using CDP data as a basis for initiating MetroHealth QRT responses in the City of Cleveland, which is part of the OD2A Initiative Strategy 8, in the hope of including identified CEMS data next year should this data become accessible.

CCBH is currently developing the Drug Overdose Integrated Epidemiologic Profile (DOIEP) that will serve as a valuable tool for state, regional, and local entities when determining allocations for opioid prevention and care resources, planning programs, and when evaluating programs and policies. The DOIEP will describe the burden of the opioid crisis on Cuyahoga County residents in terms of socio-demographic, geographic, and behavioral characteristics of persons who may suffer from OUD. **Merging and mapping locations where overdoses most frequently occur, including naloxone administration, provides important surveillance data.** Results were recently shared with the Family and Children First Council (FCFC) to assist in the identification of high-risk school districts and K-12 schools where FCFC could direct resources for prevention programming.

To enhance the sharing and dissemination of information to partner agencies and key stakeholders, CCBH and the Begun Center began detailed planning and development for a public-facing dashboard in July 2020, as well as the development of quarterly data briefs/infographics on surveillance activities. Various data sources are being explored for these dissemination activities, including: (1) opioid prescribing; (2) drug use, misuse, and substance use disorder, and treatment; (3) nonfatal overdose hospitalizations and ED visits; and (4) drug overdose mortality. Using different platforms to disseminate surveillance data can foster greater understanding of drug use in specific areas (e.g., it can provide greater insight into what drug types impact specific demographic groups). Dissemination of the dashboard and data briefs/infographics will occur in Year Two. The OD2A team also intends to build and expand its surveillance activities for Strategy 3, especially access to public safety overdose incident data. The PSPD project will be used to demonstrate the value of information that is available and how it can be used to benefit surveillance and treatment efforts.

This year MetroHealth Medical Center (MetroHealth) has been collaborating with the Centers for Health Affairs (CHA) to enhance the utilization of Ohio's ***Prescription Drug Monitoring Program (PDMP) – Strategy 4.*** MetroHealth uses PDMP data to improve its current prescriber

peer-review model for identifying high volume prescribing activity to trigger proactive reports to providers. To identify high-volume prescribers, MetroHealth uses reports generated from its electronic health records management system (EPIC) and Ohio's Automated Rx Reporting System (OARRS) data, Ohio's version of PDMP. Each provider is reviewed in comparison to others in the same department or specialty. This allows MetroHealth to identify and educate outlying high-volume prescribers. Providers are required by law to review OARRS prior to prescribing opioids. **In Year One there was an overall 2% increase in the number of MetroHealth providers who checked the PDMP prior to issuing an opioid prescription.** However, when examining provider reviews of the PDMP at least once during the month prior to issuing an opioid prescription, there was a 5% decrease. The reason for this decline is currently being explored. It is possible that some providers check the PDMP initially when issuing an opioid prescription for a client but then for subsequent prescriptions to the same client neglect to re-examine the PDMP or note that it was done in EPIC. Another objective is to increase the use of the PDMP over time by providers. In an analysis of providers where data was available for baseline and Year One, a paired-samples *t*-test revealed a ***significant difference*** between mean levels of PDMP checks prior to issuing an opioid prescription, which shows that prescribers checked PDMP more often when issuing an opioid prescription in Year One than at baseline.

CHA is developing a toolkit to enhance utilization of OARRS (PDMP) data based on best practices that can be replicated in other health systems. MetroHealth is providing technical assistance to CHA on the toolkit design. During Year One, CHA focused on developing an educational portal which will allow healthcare systems to access information. One best practice model currently being incorporated into the toolkit is MetroHealth's peer review model. Doctors with the highest prescribing volume are identified and then 10 patients are reviewed for each identified provider. The results are brought to the MetroHealth peer review committee for discussion and identification of which medical providers would benefit from the peer review process.

MetroHealth is also continuing its work on the design of prescriber report cards. MetroHealth is creating prescriber report cards for medical providers that identify patients with more than one controlled substance prescription. The report card provides information to providers explaining the purpose of the report, CDC guidelines for opioid prescribing, a summary of OARRS data, an index of drug categories, and additional provider resources. **In Year One, MetroHealth issued prescriber report cards to all ED and internal medicine providers.**

Integration of State and Local Prevention and Response Efforts - Strategy Five concentrates on enhancing prevention and response efforts by increasing linkages between state and local resources and entities. The agencies involved in this strategy are the Alcohol, Drug Addiction and Mental Health Services Board of Cuyahoga County (ADAMHSB), CCMEO, MetroHealth, PAXIS, and the Educational Service Center of Northeast Ohio (ESC-NEO). **During Year One,**

the CCMEO and ADAMHSB reestablished the Overdose Fatality Reviews (OFRs). The target number of OFRs to complete in Year One was eight and the committee completed 14. Although COVID-19 prevented the ADAMHSB from conducting interviews with family members of decedents, the OUD Specialist was able to pilot interview questions by completing mock interviews allowing finalization of the interview template. Seven recommendations came out of OFR activities in Year One: (1) increase eligibility for drug court participation; (2) engage with domestic violence shelters and homeless shelters to provide naloxone kits, fentanyl test strips and follow-up with other needs; (3) support the Ohio Board of Pharmacy in updating OARRS risk scores; (4) engage with hospital EDs and the QRT to identify individuals who have had more than one nonfatal overdose in less than a year so that QRT can provide outreach to these high-risk individuals; (5) identify and provide mental health/bereavement support services to family/friends of a decedent who dies by suicide; (6) have QRT work with MetroHealth to identify patients who leave the ED after a nonfatal overdose-related incident against medical advice and conduct outreach; and (7) enhance SUD treatment for opioid-dependent individuals in jail.

PAXIS and the ESC-NEO worked to expand the PAXGBG (Good Behavior Game) into public schools located within high-risk neighborhoods. PAXGBG is an evidence-based environmental intervention that teaches young students, preschool to 5th grade, self-regulation, self-control, and self-management. Cuyahoga County school district rankings by number of resident drug-related overdose deaths and the geographical distribution of these deaths was completed in Year One. From 2016 to 2019 there were a total of 1,925 drug-related overdose deaths by residence city according to public records data available from the CCMEO. Through this project, school districts in these hotspot areas will be targeted for PAXGBG implementation. The ESC-NEO was the designated location for teacher trainings but, due to the pandemic, some trainings were canceled or rescheduled. To overcome these obstacles, PAXIS began providing virtual trainings.

CCBH and the Begun Center analyzed and ranked zip code-level data to identify locations that would benefit from increased distribution of naloxone. To increase the distribution of naloxone, Project DAWN kits were provided at a number of locations in Cuyahoga County, including CEMS, Cuyahoga County Corrections Center, Hispanic Urban Minority Alcoholism Drug Abuse Outreach Program (Hispanic UMADAOP) (with the CHS Syringe Services Program), Circle Health Services, CCBH, Cleveland Department of Public Health's Thomas McCafferty Health Center, and Project DAWN Expanded Mobile Unit. A total of 4,804 kits were provided in Year One. MetroHealth also facilitated naloxone training for 955 lay responders and 48 law enforcement officers. An additional 34 trainings were held for community provider agencies, educating a total of 202 staff participants.

As part of Cuyahoga County's OD2A Initiative, the Quarterly Implementation Roundtable (QIR) was created to connect opioid epidemic leadership at the state and county level. In addition to CCBH, ODH and the boards of public health of Franklin (Columbus) and Hamilton (Cincinnati) counties are included within the QIR. Its purpose is to focus on critical issues impacting surveillance, prevention and evaluation related to the agencies' respective work at the state and local levels, including prevention efficacy, barrier analysis, best practice dissemination, surveillance coordination (common data dashboards), and data sharing to enhance statewide and regional activities.

Although the goal of the QIR was to meet quarterly, COVID-19 impacted the ability of the leadership to meet. In an attempt to share information, successes and best practices, **the Begun Center developed cross-site partnerships with the evaluators from the other Ohio grantees in Franklin and Hamilton counties**. These meetings have resulted in the cross-site sharing of assessment tools, surveys, research articles, and project workplans.

CCBH partnered with Radio One and iHeart Radio in the summer of 2020 to create public awareness and spread a message of recovery to the African American community in Cuyahoga County. The campaign directed persons to either the mobile crisis hotline number at the ADAMHSB or to *drughelp.care*. Radio One reported 252,542 social media views and 873 post reactions (i.e., likes, comments, shares). For iHeart radio, 458 active web sessions were recorded, reaching 46% of the Northeast Ohio market adults between the ages of 25-54 (approximately 345,200 people).

Partner agencies involved in ***Establishing Linkages to Care – Strategy 6*** achieved many of their OD2A short-term and intermediate objectives. Thrive utilizes a Center for Medicare and Medicaid evidence-based 24/7 peer-to-peer support model that employs trained peer recovery supporters. Through the OD2A Initiative, Thrive provides services to the St. Vincent Charity Medical Center (SVCMC) ED. Woodrow uses a peer recovery supporter on-call model called Project SOAR (Supporting Opiate Addiction and Recovery), which provides services in the Cleveland Clinic Lakewood ED and Cleveland Clinic Lutheran Hospital ED. Both peer recovery programs provide awareness and connection to OUD treatment and other medical and/or social services in the community for individuals (or their family or friends) who have experienced an overdose. **In Year One, Thrive and Woodrow collectively connected with 408 individuals. Of the individuals encountered, 92% engaged in peer support services, and 70% of those referred were linked with community treatment.** Both programs are able to provide transportation to individuals for treatment services. It is unknown at this time whether there were other individuals who experienced an overdose and came to the EDs but were not reached by peer recovery supporters. This additional data would allow more insight into people who may not have consented or were otherwise overlooked for treatment intervention.

Circle Health Services (CHS) has expanded its outreach services within its Syringe Services Program (SSP) by providing better linkages to care for the drug-using community who visit their mobile sites. Care Coordinators work with SSP program participants to provide referrals for treatment and linkages for basic needs. **In Year One, CHS saw a 65% increase in the number of clients who engaged with Care Coordinators and were referred for treatment services.** CHS data collected for the OD2A Initiative demonstrates the importance of linking individuals to care. In the last year, slightly more than a quarter of individuals encountered by the SSP reported experiencing an overdose (26%, n = 2,455). Although it is unknown whether those individuals responding have overdosed more than once or are providing the same response to this question multiple times, the data demonstrates a high prevalence of nonfatal overdoses among this population. In addition to asking individuals if they have previously overdosed, CHS also asks individuals if they went to the ED. Since individuals may frequent the SSP more than once, an individual could be asked these questions on multiple occasions. From September 1, 2019 to August 31, 2020, of those individuals who reported experiencing an overdose, 72% reported going to the ED following the overdose.

Community-based referrals for treatment for these three linkage programs saw the majority of individuals being referred for either detox or inpatient hospitalization. **With the increases in the number of individuals encountered by peer support programs and the SSP, agency capacity to provide treatment will likely become an increasing issue for Cuyahoga County.**

Through the OD2A Initiative, SVCMC began providing Screening, Brief Intervention and Referral to Treatment (SBIRT) to patients in its Health Care Center (HCC) (primary and specialty care clinic) and to one floor of the inpatient of its Medical Center. SVCMC provides referrals and linkages to care using the SBIRT tool for individuals whose SBIRT screening score indicates a Substance Use Disorder. SVCMC's program began in April 2020. The program start was delayed due to personnel furloughs, as well as a decrease in the patient census due to COVID-19 restrictions, such as moratoriums on elective surgeries. Despite these setbacks, **SVCMC connected with 130 clients and a majority (74%, n = 96) engaged in the program.** Of those engaged, 97% received a referral for community treatment and 40% were linked with community treatment.

MetroHealth's ExAM program is a case management system that helps to identify and assess inmates incarcerated at the Cuyahoga County Corrections Center who may have OUD. The ExAM program provides Medication Assisted Treatment (MAT) treatment and direct patient care during incarceration, including the administration of buprenorphine and monitoring for medication adherence. **MetroHealth's ExAM Program encountered 514 incarcerated individuals during the first year. Of those encountered, 95% engaged in the program.** Linkage to community-based MAT was also tracked for individuals once they were released from jail, which showed that 98% of those released were linked with treatment.

Cleveland State University (CSU) is working to enhance the *drughelp.care* resource linkage tool to determine if web-based technology effectively reaches and links participants to treatment services. A new version of the web app was launched in March 2020; it is designed to be better suited for laypeople as the older version was more for professional use. The new app is also more modern, user friendly, and flexible. CSU worked this past year to contact new and existing agencies to update and register on *drughelp.care.* Although there are still many agencies who need to be registered on the web app, CSU was able to register 77 agencies, reporting 391 active services. From January to August 2020, the percent of agencies that updated services on the web app increased by 11%. The number of unique users accessing the *drughelp.care* website is measured using the IP address. The number of users has remained fairly steady, with a decrease in August 2020, following a significant increase in the number of users in July 2020.

Building on their efforts to enhance utilization of the PDMP, MetroHealth and CHA also spent time and energy this past year to enhance ***Providers and Health Support Systems Support - Strategy 7*** to increase opioid safety prescriber practices. Although delivery of an Academic Detailing (AD) program was delayed in Year One due to COVID-19, MetroHealth and CHA are collaborating with the Department of Veterans Affairs for information on their program. MetroHealth and CHA are also working to develop additional educational resources on AD strategies and alternative pain management. MetroHealth provided two trainings for providers on alternative pain management, and 36 MetroHealth ED clients were linked to alternative pain management in Year One (i.e., Nitrous Oxide Therapy).

CHA has made significant progress on the development of the toolkit, tentatively titled, *OD2A Opioid Mitigation Toolkit*. It was decided that the toolkit would be comprised of the peer review model process developed by MetroHealth, AD information, and additional educational resource information for hospitals and providers. The additional sources will include information for pharmacists, a collection of local resources, an opioid information provider course, and a seminar page for posting partner and CHA webinars.

MetroHealth is also working to increase the number of medical providers in the ED with a DEA waiver. To be eligible for a DEA waiver, a provider must receive training on MAT. Providers can then refer individuals in need of treatment services to MAT. **Two of three outcomes for expanding MAT capacity in the ED at MetroHealth were achieved with MetroHealth training 25 providers on MAT and all receiving a DEA waiver.** MetroHealth is continuing to refer clients to MAT from the ED. In Year One, 89 clients from the ED were linked with MAT. MetroHealth already has achieved 90% of its three-year target in Year One.

In collaboration with the CDP, MetroHealth and the Begun Center, staff made significant progress in the collection, utilization and dissemination of nonfatal and fatal overdose data

available from public safety sources for the MetroHealth Quick Response Team (QRT), thereby increasing Cuyahoga County's ***Partnerships with Public Safety and First Responders - Strategy 8***. Through a Public Safety Pilot Data (PSPD) project the Begun Center staff worked with Parma and Lakewood Police Departments to obtain nonfatal overdose incident information. Data analysis demonstrated its utility in identifying locations and individuals who have had more than one overdose incident. This data collection effort was then expanded to include incident location data from both the CDP and CEMS. The Begun Center staff also obtained location information for incidents identified as "sudden illness" from CDP and "overdose/poisoning" from CEMS. **Incident-based data can be used to identify clusters of overdose incidents by location, as well as provide some initial insight into individuals with multiple overdose events.** This data is helpful for surveillance, as well as assisting QRT or other prevention, education and intervention directives.

Moving forward in Year Two, there will be continued refinements of data collection and analysis of incident-based overdose data. The ability to routinely collect nonfatal overdose data from public safety agencies will be a priority. The Begun Center also will work to expand the data collection efforts to include more agencies within Cuyahoga County by leveraging access to the Cuyahoga County Criminal Justice Information Sharing Data Warehouse (DW). The DW has access to incident information from 53 of the 58 jurisdictions within the county. Expanding data collection to other jurisdictions will further inform surveillance efforts and expand the geographical areas for intervention and prevention outreach.

While much of the high quality, comprehensive and timely data collected by this initiative are quantitative in form, additional programmatic evaluation by the Begun Center provides assessment of OD2A's progress as reflected in the key themes discerned from analysis of the qualitative data collected from self-reporting partner agencies. This ***Project Performance Assessment*** facilitated the identification of challenges and facilitators impacting OD2A success. Partner agencies were asked about their understanding of the opioid epidemic, program successes and challenges, dissemination of knowledge gained from program activities, unexpected outcomes, and innovative ideas that developed out of project activities. The primary findings from the programmatic qualitative data were organized among six key themes:

Theme 1. Developing Organizational Capabilities for Quality Implementation – agencies defined outcomes in alignment with their program strategies and identified potential resources for improving the quality of their programs;

Theme 2. Improvements – agencies identified improvements made this past year to project activities which helped them achieve program outcomes;

Theme 3. Leveraging Resources – agencies recognized the need for leveraging resources to enhance outreach and program success;

Theme 4. Identifying Challenges – agencies identified challenges to program implementation and ways to overcome them;

Theme 5. Exploring Innovative Ideas – agencies explored innovative ideas to overcome these challenges and build upon program success; and

Theme 6. Dissemination and Data Sharing Strategies – agencies developed strategies for sharing knowledge gained and lessons learned through education, conference attendance and meetings with collaborative partners.

Despite these major milestones and advancements, the OD2A Initiative participating agencies were impacted at least to some extent by the COVID-19 Pandemic. The CCMEO experienced challenges to organizational capacity due to COVID-19 deaths and spikes in opioid-related overdoses throughout Cuyahoga County. Thrive and Woodrow's peer supporters observed a drastic decrease in ED admissions with the start of the stay at home orders in March, and SVCMC's SBIRT efforts were limited due to a furloughed employee and a decrease in elective surgery patients during lockdown. Overall findings demonstrate that the COVID-19 pandemic made establishing cross-agency data access and sharing protocols more time-consuming than expected, and made engaging people with substance abuse treatment more complicated than anticipated. Some data collection efforts also were impacted by public safety partners shifting time and resources to respond to COVID-related priorities.

The impact of COVID-19, however, was not necessarily completely negative as it highlighted the dedication of partner agencies and their staff. The pandemic challenged them to rethink how they identified and assisted those in need of education and treatment. Partner agencies were able to achieve many of the OD2A short-term and intermediate objectives, especially linkages to care, despite COVID-19. CCBH staff smoothly shifted in-person monthly meetings with OD2A partnering agency data-collection teams and the evaluation team to a virtual format. CHS successfully maintained services, and provided treatment referral services to hundreds of clients through the SSP. As offices moved to virtual settings or temporarily closed, priorities shifted, and some plans and trainings were not able to be held. However, agencies used these setbacks as an impetus to think "outside the box" to improve their efforts and delivery of services. PAXIS and the ADAMHSB revised their trainings to a virtual format to reach teachers and first responders who otherwise would have not been able to attend in-person training during this pandemic. At-risk prisoners referred themselves to outpatient treatment. Woodrow included a new virtual delivery of peer support services to ED clients, an addition to the in-person model implemented prior to the pandemic, with almost no disruption to (and even better response to) their peer support outreach. Woodrow reported, "Through this experience we have seen compassion, empathy and support can be delivered in a purposeful manner to the participants. Additionally, we continue to have great efficacy and efficiency in placing participants in their chosen pathway to recovery."

II. Overview

The Begun Center for Violence Prevention Research and Education (The Begun Center) at Case Western Reserve University (CWRU) serves as the local evaluator for the Cuyahoga County Board of Health (CCBH) Cuyahoga County Overdose Data to Action Initiative (OD2A) funded by the Centers for Disease Control and Prevention (CDC). This report provides a summary and evaluation of program activities reported by partner agencies from September 1, 2019 through August 31, 2020. A summary of all hiring and changes in personnel for OD2A Partner Agencies for Year One is included in Appendix 1.

The information collected from the partner agencies is reported by strategy, then by activity. During Year One, data collection tools for each agency continued to be refined and revised, with REDCap serving as the primary data collection tool for monthly reporting by partner agencies. Although the overarching objective is for consistency in the monthly data reported from partner agencies, there are differences in data collected from each agency due to the variability in programs and services. Additionally, each agency was asked to describe any delays due to COVID-19 and their responses are summarized in this report.

The following is a list of acronyms used to identify partner agencies. Other acronyms and abbreviations can be found in Appendix 2 at the end of this report.

ADAMHSB	Alcohol Drug Addiction and Mental Health Services Board of Cuyahoga County
Begun Center	Begun Center for Violence Prevention Research and Education
CCBH	Cuyahoga County Board of Health
CCMEO	Cuyahoga County Medical Examiner's Office
CDP	Cleveland Division of Police
CHA	Center for Health Affairs
CHS	Circle Health Services
CSU	Cleveland State University
ESC-NEO	Educational Service Center of Northeast Ohio
MetroHealth	MetroHealth Medical Center
NaRCAD	National Resource Center for Academic Detailing
PAXIS	PAXIS Institute
SVCMC	St. Vincent Charity Medical Center
Thrive	Thrive Behavioral Health Center
Woodrow	The Woodrow Project

III. Strategy 3

Strategy 3 focuses on developing and implementing innovative surveillance of nonfatal and fatal opioid overdoses in Cuyahoga County with the objective of disseminating lessons learned to inform prevention strategies. Efforts focus on the collection and integration of diverse datasets from both public and private data sources. Several data surveillance activities are associated with Cuyahoga County's OD2A Strategy 3. The targeted activities are:

- Link Cuyahoga County data to enhance review and overlay of data to identify high burden areas of opioid overdose deaths and nonfatal incidents
- Identify trends and patterns of additional risk factors, based on interviews
- Develop procedures using overdose data to identify prevention and intervention opportunities
- Use data to identify Quick Response Team (QRT) outreach
- Use data to identify education and training needs for medical providers
- Develop a communication network with stakeholders that includes opioid-related trends, periodic reports and data dashboards

Link Cuyahoga County data to enhance review and overlay of data to identify high burden areas of opioid overdose deaths and nonfatal incidents - CCBH, Begun Center and CCMEO

Surveillance questions for these activities examine ***to what extent can existing data sources be combined to identify specific patterns of opioid overdose death and nonfatal incidents and how can the linkage of data across platforms and agencies better inform countywide intervention and prevention efforts, especially in high burden areas of opioid overdose death and nonfatal incidents.***

Table 1

Short-Term and Intermediate Outcomes for Overdose Review and Identification of High Burden Areas

Description	YR 1 Data	Outcome Status
Increase number of completed DUAs/MOUs	1. Vital Statistics 2. EpiCenter	DUAs obtained through ODH: 1. Vital Statistics 2. EpiCenter (syndromic)
Increase in the ability to track nonfatal overdose related incidents	1. Vital Statistics 2. EpiCenter 3. CCMEO	Two data sets linked: 1. Vital Statistics and EpiCenter data 2. Vital Statistics and Cuyahoga County Medical Examiner's Office
Increase the identification of high burden areas for targeted outreach and education quarterly	1. EMS Naloxone 2. CCMEO / Vital Statistics	In progress: several products created and shared, and ongoing projects underway. The Drug Overdose Integrated Epidemiologic Profile (DOIEP) will provide insight into location, demographic burden, etc.
Increase the mapping of opioid-related deaths and nonfatal incidents within Cuyahoga County to determine and target high burden areas	1. EMS Naloxone 2. CCMEO / Vital Statistics 3. Public Safety Pilot Data 4. EpiCenter	In progress: examples of data collection efforts are included in Figure 1, Figure 2, & Table 3. The Data Dashboard, once developed, will include maps utilizing data discussed in this report.

Review of Fatal and Nonfatal Overdose Incidents

Vital Statistics and EpiCenter Data

CCBH has access to Vital Statistics (VS) death certificate data through a data use agreement (DUA) from the Ohio Department of Health (ODH). CCBH uses this data to monitor unintentional overdose deaths. The data are updated nightly, but the "lockdown file" (final file) can take a year to finalize. VS data include hundreds of identifiable variables, including name, address, date of birth, gender, race/ethnicity and education level. Cause of death variables using International Statistical Classification of Diseases and Related Health Problems (ICD-10) codes and manner of death variables also are included.

CCBH also has access to EpiCenter (syndromic surveillance) data through a DUA with ODH. CCBH uses Ohio opioid-related classifiers based on chief complaint data to monitor nonfatal overdoses and anomaly (spike alert) detection. EpiCenter data have limited identifiable variables including date of birth, gender, race and zip code. The chief complaint data include suspected drug overdose involving opioid/heroin. In addition, CCBH monitors anomalies, for example, the number of nonfatal drug overdoses higher than expected in a 24-hour period. When an alert occurs, CCBH analyzes the anomaly and develops a report. This report is sent to stakeholders to inform them of increases in nonfatal drug overdoses.

CCBH has been able to link VS death certificate data to EpiCenter and CCMEO drug-related overdose fatalities data using a probabilistic matching methodology. CCBH will continue this analysis in Year Two and report outcomes when available.

EMS and Law Enforcement Data

When reviewing EpiCenter data, aggregate EMS data, drug-related overdose fatality data and other data sources, the OD2A team recognized that a key, real-time data source available for purposes of public health surveillance is overdose incident response data from public safety entities, including law enforcement (LE) and Emergency Medical Services (EMS). Although EMS respond to a majority of overdose incidents, LE also responds to a significant number of overdose incidents.

LE overdose-related data can be accessed through public records requests and restrictions that apply to EMS data (e.g., HIPAA) may not apply to law enforcement reports. Access to either, or both of these data sources for all of Cuyahoga County in a real-time capacity would likely improve the ability to identify and track nonfatal overdose incidents, potential risk factors, and inform prevention and intervention strategies.

Countywide EMS data on nonfatal overdose incidents is not currently available for the OD2A Initiative and creates a gap in understanding the burden nonfatal overdoses create in Cuyahoga County. Local EMS agencies that are funded by Ohio EMS are required to report outcomes to the state EMS system, but this data is not readily available. Information from local private EMS companies also is not available. Although private EMS companies are not required to report metrics to the state, many do. Because Cuyahoga County does not have a central EMS data reporting mechanism, a request was made to Ohio EMS to obtain record-level information in April 2020. **Having access to state EMS data would provide a better understanding of the burden nonfatal overdoses present related to opioid misuse and serve as a significant source of surveillance information to enhance efforts by identifying at-risk populations for targeted programming and response efforts.** However, several issues arose delaying potential access to this dataset. The State EMS system was upgraded and moved from an offsite company's control back to the control of Ohio EMS. The Ohio EMS board also typically only shares data of this type for research purposes. OD2A funding is not categorized as 'research' funding, therefore it must be decided by the Ohio EMS whether the OD2A project qualifies for data sharing. In the meantime, a data request was made to Ohio EMS to share aggregate level information that included obtaining total overdoses by zip code on a quarterly basis and a list of local EMS agencies that report to the state. The latter was requested to foster a better understanding of the true numbers of local EMS-reported nonfatal overdoses versus those in geographic regions that do not report to the state. This request is currently pending approval by the state.

Recognizing the value of public safety incident responses to overdoses from both LE and EMS, the OD2A team submitted several records requests to the City of Cleveland as well as drug overdose incident data requests from two local police jurisdictions (Parma and Lakewood). The objective of this Public Safety Pilot Data (PSPD) was to assess how this data could be used to enhance surveillance efforts for the OD2A Initiative. Although these initial records requests and processes are not ideal for long-term information sharing and analysis, the pilot data received demonstrates the value of public safety overdose data for public health surveillance.

Cleveland, Parma and Lakewood accounted for 69% of drug-related overdose deaths as reported by the CCMEO (by death location) for all of Cuyahoga County from 2014 through mid-May 2020, and 56% of all drug-related overdose deaths based on decedent residence, making these data sources an excellent sample size for the county. The Cleveland Division of Police (CDP) and Cleveland Emergency Medical Services (CEMS) incident data was identified based on a query of CDP Records Management System (RMS) data for incidents categorized by CEMS as "overdose/poisoning" and by CDP as "sudden illness." One year (May 1, 2019 to April 30, 2020) of de-identified overdose incident data was provided. The CDP and CEMS data only include date, time and location of the incident. Lakewood and Parma Police Departments provided identified, and very detailed, records of overdose incidents from January 2017 to April 2020 (Lakewood) and May 2020 (Parma).

Data merging and analyses were conducted with this pilot data. Overdose incident location contained in the one-year (May 2019 – April 2020) sample data of CEMS incident responses (n = 5,695) was merged with residential addresses of drug overdose victims included in the datasets of approximately 3.5 years of overdose incidents responses provided by Parma (n = 464) and Lakewood (n = 278) Police Departments. The outcome shows that 21 Cleveland residents who overdosed in Parma and Lakewood reported an address in Cleveland that also had been responded to for "overdose/poisoning" by Cleveland EMS. **One-third of Cleveland addresses recorded for an overdose incident were located at addiction treatment centers or shelters (33%, 7 out of 21).**

The PSPD was then compared with CCMEO fatality data. Table 2 compares the total overdose responses (fatal and nonfatal) by public safety (EMS/LE) with the total number of overdose fatalities that occurred in those cities (data from CCMEO). Overdose deaths are separated out by place of death and city of residence as not all deaths that occurred within a city were from residents of that city.

Table 2

Overdose Responses and Related Deaths in Select Cuyahoga County Cities: 2017-2019

Year	Cleveland EMS Overdose Responses	Cleveland Overdose Deaths (place of death / city of residence)	Parma PD Overdose Responses	Parma Overdose Deaths (place of death / city of residence)	Lakewood PD Overdose Responses	Lakewood Overdose Deaths (place of death / city of residence)
2017	5236	458 / 383	221	34 / 34	123	24 / 20
2018	4410	322 / 247	128	31 / 30	90	20 / 20
2019	5496	357 / 293	159	16 / 20	89	16 / 15

Table 3 compares the total number of public safety responses to suspected overdose incidents with overdose fatality records for each city; data came from either LE or EMS. The ratio of *Total Overdoses* to *Fatal Overdoses* illustrates the importance of examining the trajectory of overdose-related incidents and how it can be impacted by harm reduction strategies (e.g. naloxone distribution) or the potency of the illicit drug supply. Comparing 2017 to 2019 data, there were less fatalities per suspected overdose in 2019. This comparison also helps identify the overall burden in these communities.

Table 3

Ratio of total overdose responses from public safety entities data (both fatal and nonfatal) to drug-related overdose deaths for Cleveland, Parma and Lakewood per CCMEO "place of death" records: 2017-2019

City	**2017** Ratio of EMS or PD responses vs. Overdose Deaths	**2018** Ratio of EMS or PD responses vs. Overdose Deaths	**2019** Ratio of EMS or PD responses vs. Overdose Deaths	**Totals**
Cleveland	5236 : 458 or **11.4 : 1**	4410 : 322 or **13.7 : 1**	5496 : 357 or **15.4 : 1**	15142 : 1137 or 13.4 : 1
Parma	221 : 34 or **6.5 : 1**	128 : 31 or **4.1 : 1**	159 : 16 or **9.9 : 1**	508 : 81 or 6.3 : 1
Lakewood	123 : 24 or **5.1 : 1**	90 : 20 or **4.5 : 1**	89 : 16 or **5.6 : 1**	302 : 60 or 5.03 : 1
	5580 : 516 or **10.8 : 1**	4628 : 373 or **12.4 : 1**	5744 : 389 or **14.7 : 1**	**Grand total 15952 : 1278** or **12.5 : 1**

Note: The ratio / comparison in Table 3 is total overdose responses (fatal and nonfatal) vs. fatal overdose in the city. The identified data accessed through Parma PD and Lakewood PD data does allow comparisons of nonfatal vs. fatal events. In this case, Parma PDs fatal to nonfatal ratio from 2017 to 2019 was 511 nonfatal overdoses to 49 fatal overdoses (10.4 : 1). Lakewood's ratio for the same time period was 264 nonfatal events to 56 fatal events (4.7 : 1).

Although this is only pilot data, the analysis demonstrates the potential value of compiling county-wide overdose data to better inform intervention and prevention efforts. Public safety

data provides: 1) demographics on overdose victims; 2) identification of multiple overdose victims; 3) identification of high burden areas and/or locations where multiple overdoses occur; 4) identification of persons in need of treatment programs; and 5) potential drug trends. The execution of DUAs and other agreements are in progress to allow for continued collection of this data. CCBH and the Begun Center will attempt to expand this initiative with additional public safety partners, especially targeting two or three cities experiencing high numbers of overdose incidents (e.g., Cleveland Heights, Euclid, East Cleveland).

In Year Two of the project, CCBH will reach out to the Cleveland Public Safety Director to discuss OD2A efforts and the availability of overdose-related data. The Begun Center will continue to coordinate with the Northeast Ohio Regional Fusion Center (NEORFC) regarding opportunities to access data available from the Cuyahoga County Criminal Justice Information Sharing Data Warehouse (DW). Among other law enforcement reporting data, the DW contains data on nonfatal overdose incidents to which public safety personnel have responded for the majority of jurisdictions in Cuyahoga County, other than Cleveland.

Identification of High Burden Areas and Geospatial Analyses of Opioid-Related Overdoses

Surveillance data has been utilized to identify high burden areas. Figures 1 and 2, along with Table 4, are examples of geospatial analyses conducted and shared with stakeholders. The CCBH OD2A analytics team is nearing completion of the ***Drug Overdose Integrated Epidemiologic Profile*** (DOIEP). This document will describe the burden of the opioid crisis on the population of Cuyahoga County in terms of socio-demographic, geographic, and behavioral characteristics of persons who may suffer from Opioid Use Disorder (OUD). The DOIEP is a valuable tool for use by state, regional, and local entities when determining allocations for opioid prevention and care resources, planning programs, and when evaluating programs and policies.

The data sources used to identify high burden areas include:

1. CCMEO drug-related overdose fatalities in Cuyahoga County;
2. ODH VS data on unintentional drug overdose fatalities for Cuyahoga County residents;
3. EpiCenter data reflecting people who have experienced a suspected drug overdose presenting at hospital Emergency Departments (ED) (Syndromic Surveillance data);
4. Ohio EMS naloxone administration data (EMS naloxone data); and
5. CDP and CEMS public safety incident responses accessed through public records requests from May 1, 2019 to April 30, 2020 (PSPD).

These data sources vary in level of geographic detail and the frequency at which the data are updated and made available. Drug-related overdose fatality data from CCMEO and ODH vital statistics are typically available within four months of the incident and provides overdose incident injury location (if available), residential address of the decedent, and the location of

death. Syndromic Surveillance data from the EpiCenter is available to CCBH in real-time and can be used to track reported drug-related overdose incidents for persons presenting in hospital Emergency Departments (ED). These data contain patient zip codes which can be used to identify locations where substance use may be more prevalent. The Ohio EMS collects naloxone administration data from a majority of the EMS agencies across Ohio (~85%). EMS naloxone data is available at the zip code level and includes the number of naloxone doses administered by EMS on a quarterly basis. PSPD allows for identification of high burden areas within the City of Cleveland including specific address locations where overdoses repeatedly occur, such as homeless shelters (Table 4).

Table 4

Cleveland EMS "Overdose/Poisoning" Incident Responses (Top Locations) May 2019 to April 2020

Location of "Overdose/Poisoning" with Address Redacted	Number of Incidents
Men's Shelter (44114)	142
County Jail (44113)	55
Women's Shelter (44114)	44
Public Shopping Complex (44113)	31
Corrections & Treatment Center (44103)	29
Homeless Shelter (44115)	26
Gambling Establishment (44114)	20
Gas Station (44120)	17
Bus Station (44114)	13
Residential Home (44105)	11
Apartment Complex (44103)	11
Two Gas Stations at same intersection (44105)	11
Rapid/Train Station (44111)	10
Apartment Complex (44102)	10
Residential Home (44113)	10
Residential Home (44111)	10

Merging and mapping locations where overdoses most frequently occur provides important surveillance data (Figures 1 & 2). Figure 1 is an example of merging fatal and nonfatal drug overdose datasets to identify high burden areas. **Results were recently shared with the Cuyahoga County Family and Children First Council (FCFC) to assist in the identification of high-risk school districts and K-12 schools where FCFC could direct resources for prevention programming.**

Figure 1

Merging Zip Code-Level Data to Identify High Burden Areas of Drug Overdose

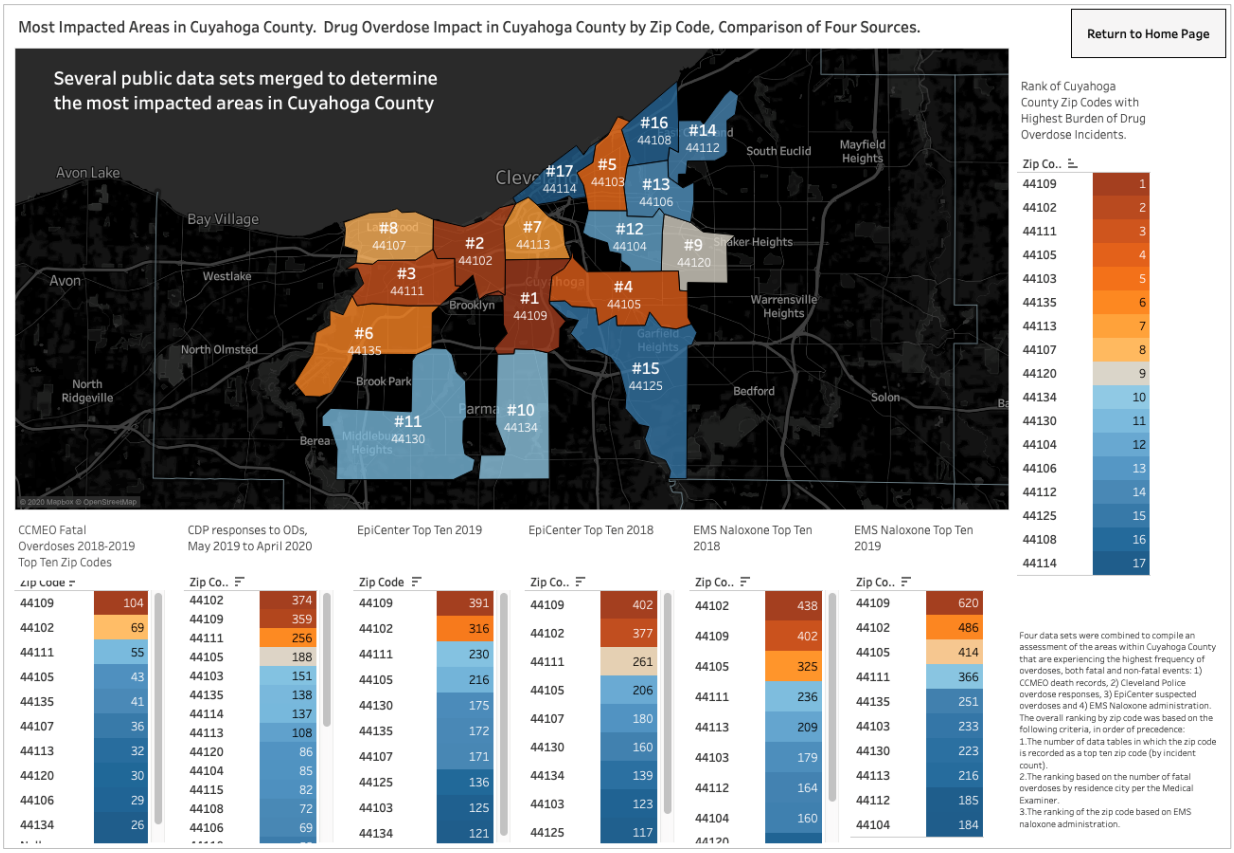
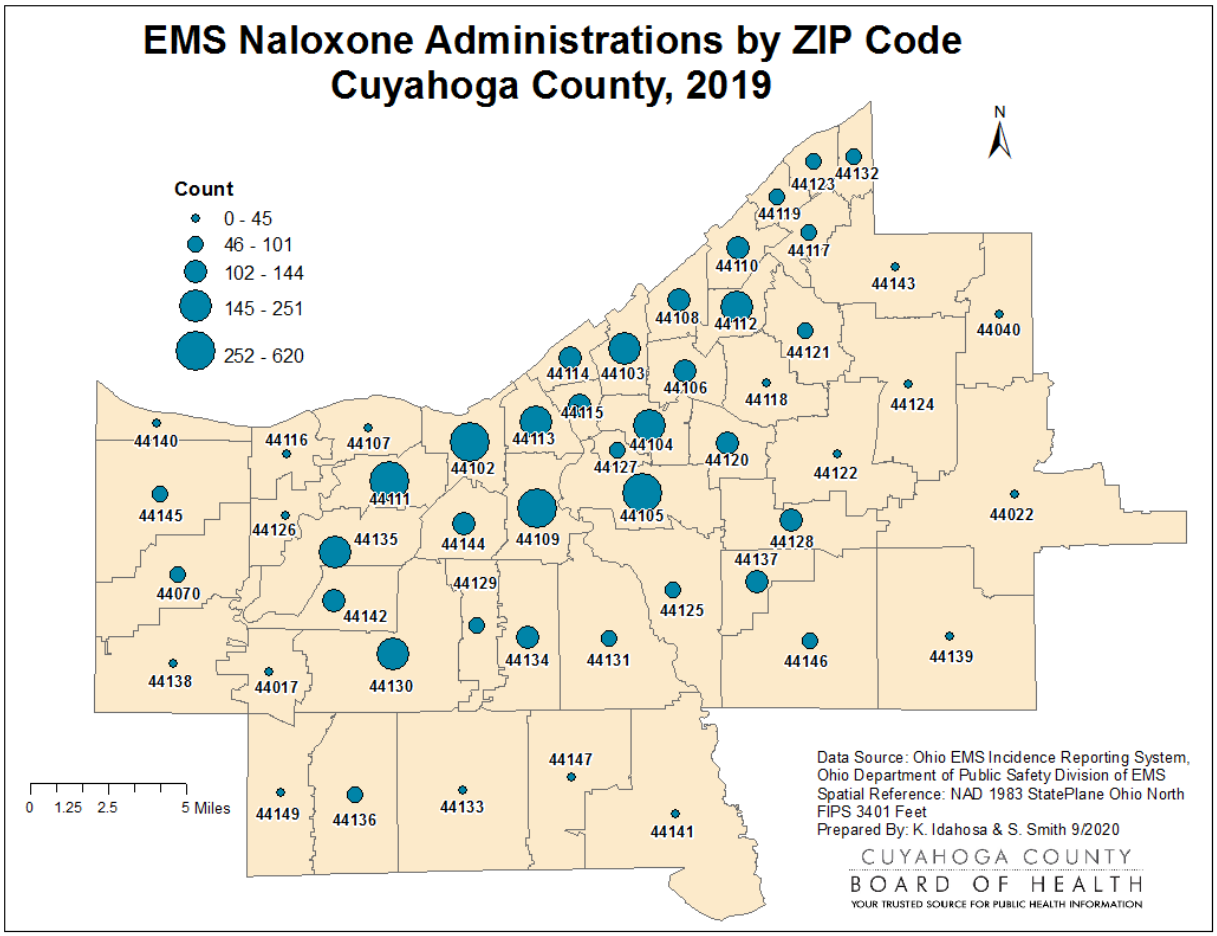


Figure 2 is an example of using EMS naloxone data to identify high burden areas. These data were mapped in time series (by quarter) and by year. **EpiCenter data also was mapped at the zip code level and provided to Project DAWN (Deaths Avoided with Naloxone) to help identify locations for naloxone distribution.** Similar figures will be incorporated into the OD2A data dashboard that is currently under development.

Figure 2

Mapping EMS Agencies Naloxone Administration by Doses for the Year 2019



Although zip code-level data provides opportunities to better assess the overall burden of drug overdose in Cuyahoga County, **access to real-time public safety data, including both law enforcement and EMS, is invaluable**. Continued access to this data is still being explored. CCBH requested and gained access to High Intensity Drug Trafficking Areas (HIDTA) Overdose Mapping and Application Program (ODMAP) software, originally developed by the Washington-Baltimore HIDTA, and used by local HIDTAs around the country to map overdose incidents in near real time. The Ohio HIDTA is the local entity overseeing ODMAP in Cuyahoga County. Although this program provides real-time surveillance of drug overdose incidents, very few public safety agencies in Cuyahoga County submit data to this platform at this time.

Identify trends and patterns of additional risk factors, based on interviews – CCBH, ADAMHSB and CCMEO

This activity examines: **(1)** ***whether or not interviewing friends and family members of overdose victims helps identify additional risk factors that can inform prevention strategies and (2) how the linkage of surveillance data informs and enhances the Overdose Fatality Review (OFR) process.***

Table 5

Short-Term and Intermediate Outcomes for Identification of Additional Risk Factors from OFR

Description	YR 1 Data	Outcome Status
Increase the identification of additional risk factors to inform prevention strategies	N/A	In progress: COVID-19 delayed the agencies' ability to interview family and friends of overdose victims. OFRs also were postponed for a period of time in Year One due to COVID-19 but have resumed. Recommendations for prevention and intervention are currently being completed.
Increase identification of individuals or target populations in need of prevention and intervention	N/A	
Increase identification of complex risk factors associated with overdose, fatal and nonfatal incidents	N/A	

The OFR is currently under the purview of the CCMEO and is co-coordinated with the CCBH. The CCMEO created the OFR committee in 2013 when deaths by overdose began to increase substantially in Cuyahoga County. The OFR Committee put meetings on hold in 2016, but the committee resumed meeting in 2019 due to the availability of OD2A funding. In addition to these two agencies, the OFR committee includes representatives from the Begun Center, MetroHealth, Cuyahoga County Drug Court, CDP, Westshore Enforcement Bureau, ADAMHSB, Cuyahoga County Children and Family Services, Cuyahoga County Office of Reentry and Cleveland Department of Public Health. The committee integrates CCMEO drug-related fatality data with data from local boards of health, law enforcement, hospitals, and substance and mental health treatment agencies. A more detailed summary of the OFR is included in Strategy 5.

OFR cases are selected based on emerging trends in the overdose epidemic or re-occurring system gaps, identified by CCMEO or other committee members. The compilation of case information is completed to facilitate OFR Committee discussion and the development of recommendations stemming from each case reviewed.

The ADAMHSB hired an OUD specialist to conduct interviews with friends and family members of overdose victims to assist in the collection of information for the OFR process. Interviewing has been postponed in Year One due to COVID-19, but is scheduled to begin in

Year Two. The CCMEO will also hire a staff member in Year Two to conduct similar interviews. The additional information collected from these interviews will enhance the overall efforts related to this strategy, especially the identification of risk factors and target populations for prevention and intervention. Interview findings will be shared with the OFR Committee to assist in the development of ORF recommendations for prevention and intervention. These recommendations will be shared during meetings of the U.S. Attorney's Office of the Northern District of Ohio's (USANDO) Heroin and Opioid Task Force and CCBH's Opiate Task Force, both of which have worked to implement and champion recommendations.

Develop procedures using overdose data to identify prevention and intervention opportunities - CCBH & Begun Center

The surveillance question driving this activity is ***to what extent can existing data sources be linked to identify individuals in need of treatment and services?***

Table 6

Short-Term and Intermediate Outcomes on Identification of Prevention and Intervention Opportunities

Description	YR 1 Data	Outcome Status
Increase the use of data to inform, support, enhance and evaluate prevention interventions	1. EMS Naloxone 2. CCMEO / VS 3. PSPD 4. EpiCenter	In progress: the DOIEP will inform prevention activities. Client referrals and linkages to treatment data is collected from partner agencies and will be used to identify additional opportunities for prevention and intervention.
Increase the identification of additional risk factors to inform prevention strategies	1. EMS Naloxone 2. CCMEO / VS 3. PSPD 4. EpiCenter	In progress: the DOIEP and client referrals and linkages to treatment data will assist in the identification of additional risk factors.

As data is compiled and analyses of single data sources or overlay/merging of several datasets continues, trends and patterns can be identified. These processes and procedures will continue to inform prevention and intervention activities and training needs. For example, the previously discussed merging and analysis of several zip code-level data has allowed for the identification of geographic trends and changes pertaining to drug overdoses. Monitoring of fatality data (CCMEO and/or Vital Statistics), EMS naloxone administration data, naloxone distribution through Project DAWN, etc. will continue and will be incorporated into the data dashboard once developed. Dissemination efforts describing outcomes from these data analyses will include: 1) Cuyahoga County dashboard; 2) data reports, briefs, and bulletins; and 3) presentation at conferences and meetings. Figure 5 discussed later in this section is an example of data dissemination.

CCBH monitors emergency department visits due to suspected overdoses using EpiCenter data. If the number of overdose visits that occur in a 24-hour period exceeds the expected value, CCBH receives an alert. CCBH has developed a procedure to respond to these alerts using data analysis trends (e.g., demographic, geographic, and/or drug type), and will notify OD2A partners and other stakeholders within one business day. Additional efforts have been directed toward enhancing this process by comparing this information to CCMEO alerts. CCMEO releases alerts when they observe a spike in overdose deaths. Mutual notification is now occurring between CCBH and CCMEO to facilitate detection of overlap, potential seasonal patterns, and other trends. Discussions have also occurred regarding the integration of additional record-level data sources as they become available.

As referenced earlier in this section, CCBH intends to release a DOIEP report to OD2A partners, stakeholders, and the community on an annual basis addressing (1) the landscape of drug/opioid misuse in Cuyahoga County; (2) population groups most at risk of fatal and nonfatal overdose; (3) high burden geographic areas; and (4) emerging trends. The DOIEP report will include data from the ODH Vital Statistics, EpiCenter data, EMS Naloxone Administration data, and the Ohio EMS Incidence Reporting System. The intention is to expand the availability of surveillance data over time as more data sources are identified and greater access to existing data is allowed.

Use of data to identify Quick Response Team (QRT) outreach – MetroHealth

The surveillance question associated with this activity is ***to what extent can existing data sources be linked to identify individuals in need of treatment and services?***

Table 7

Short-Term and Intermediate Outcomes on Identification of QRT Outreach

Description	YR 1 Data	Outcome Status
Increase identification of individuals or target populations in need of prevention and intervention	Public Safety Data	In progress: public safety data (law enforcement) records are utilized to identify overdose victims for intervention purposes. Parma and communities west of Cleveland continue to receive support from MetroHealth QRT. Cleveland will also receive support from MetroHealth QRT in Year Two.
Increase identification of complex risk factors associated with overdose, fatal and nonfatal incidents	N/A	In progress: as QRT begins in Cleveland, MetroHealth QRT data will provide opportunities to identify risk factors associated with overdose incidents.

Access to overdose incident data is the primary means by which QRTs can identify and visit overdose victims. The MetroHealth Office of Opioid Safety has been performing QRT activities

in the City of Parma and several smaller municipalities west of Cleveland since 2018. MetroHealth's QRT will expand their efforts to the Cleveland area in Year Two.

To identify Cleveland individuals who have experienced a nonfatal overdose for intervention, the MetroHealth QRT social worker, who facilitates the QRT Advisory Board, relied on input and assistance from CCBH, CDP, Cuyahoga County Sheriff's Department (CCSD), the Northeast Ohio Regional Fusion Center (NEORFC), Drug Enforcement Administration (DEA) and the Begun Center to develop a data access and sharing plan for Cleveland overdose incident reports.

To understand the content and value of these incident reports, the Begun Center team submitted several public records requests to the City of Cleveland for both LE and EMS overdose incident responses. Although Cleveland EMS data is not currently available to assist the MetroHealth QRT, overdose figures from one year of PSPD provided by CDP Crime Analysts shows CDP responded to 2,559 incidents and CEMS responded to 5,695. Some of these responses included both CEMS and CDP personnel and some were responses without the other agency. This initial inquiry helped to identify that: (a) EMS responses through the public records requests were limited to date, time and location of the incident with no individual identifiers (i.e. name and home address) that are be needed for QRT purposes; and (b) CDP overdose incident reports contained significant detail that would not only satisfy QRT purposes, but also contained many other useful variables that could also help OD2A data surveillance activities (e.g., naloxone administration and number of doses, suspected drug type, ingestion method). **This review supports using CDP data as a basis for initiating MetroHealth QRT responses in the City of Cleveland with the future expectation of including identified CEMS data.**

A process was thereafter established by the QRT Advisory Board to access the CDP overdose incident records. The CCSD employs an analyst through the NEORFC and was authorized through CDP to access their records for QRT purposes. This approval took place in July 2020 and as of August 2020 the analyst had access to, and was beginning the process of pulling and disseminating names and addresses of overdose victims to the CCSD and MetroHealth QRT with an expected start date early in Year Two.

Access to multiple law enforcement data sources, in addition to the City of Cleveland, or jurisdictions for communities outside of Cleveland can also support QRT activities, as individuals frequently overdose in cities surrounding their home of residence (i.e. Lakewood overdose victims who reside in Cleveland). To facilitate access to countywide data for QRT use and potential information sharing and collaboration with other peer support or QRT programs, the Cuyahoga County DW is being explored as an additional data source. The DW contains law enforcement records from 53 of the 58 police agencies in Cuyahoga County. Obtaining this overdose incident data would significantly enhance surveillance activities and contribute to additional data sharing and analysis.

Use of data to identify education and training needs for medical providers – MetroHealth and CHA

The surveillance question behind this activity is ***to what extent can existing data sources be linked to identify education and training needs for medical providers on opioid-related trends?***

Table 8

Short-Term and Intermediate Outcomes on Identification of Education and Training Needs for Medical Providers

Description	YR 1 Data	Outcome Status
Increase the use of data to inform, support, enhance and evaluate prevention interventions	N/A	In progress: MetroHealth and CHA are developing educational resource information to enhance prevention and intervention with respect to provider prescribing practices. Some of these educational resources assist medical administrators to identify providers with prescribing practices who would benefit from training or peer review.
Increase the identification of additional risk factors to inform prevention strategies	N/A	

Through this project, MetroHealth will develop algorithms and identify reportable database metrics to more effectively recognize and track the patient population at high-risk for opioid misuse and high-volume prescribers. Their processes will be shared with the Center for Health Affairs (CHA) to incorporate into a toolkit that will expand academic detailing and other educational resources for hospitals and nontraditional medical settings. Further development and refinement of the database and toolkit will continue in Year Two.

Develop a communication network with stakeholders that includes opioid-related trends, periodic reports and data dashboards - CCBH and Begun Center

The surveillance question associated with these activities is ***to what extent can data sources be linked and/or combined to better inform stakeholders and the public on opioid-related trends?***

Table 9

Short-Term and Intermediate Outcomes for the Development of Communication Network

Description	YR 1 Data	Outcome Status
Increase the transmission of relevant data to CDC to inform public and key stakeholders	N/A	Per the CDC NOFO transmission of aggregate data will occur in Year Two.
Increase distribution of data to stakeholders and public	1. CCMEO 2. EpiCenter 3. PDMP/OARRS 4. Project DAWN 5. State EMS 6. CCRFSL	In progress: dashboarding and quarterly data briefs are being developed (See Figures 3, 4, 5). Current plan is to provide quarterly data briefs and updates to the dashboard along with dissemination of alerts in near real-time.

For this activity, CCBH and the Begun Center explored various data sources associated with drug overdose surveillance: (1) opioid prescribing; (2) drug use, misuse, and substance use disorder and treatment; (3) nonfatal overdose hospitalizations and ED visits; and (4) drug overdose mortality.

Opioid prescribing data in Ohio for surveillance purposes is provided by the Ohio Board of Pharmacy (OBP). The data is available quarterly at the county level and includes opioid, benzodiazepine, sedative and stimulant prescriptions by number of doses per capita, per person and total number of doses. This data will be used for surveillance dashboarding activities.

Drug use, misuse and substance use disorder, and treatment data includes: (1) CCMEO decedent drug toxicology; (2) Cuyahoga County Regional Forensics Science Lab (CCRFSL) for drug seizure and drug forensics lab; (3) Needle Exchange Programs; and (4) Project DAWN and other naloxone distribution activities. Additional data sources to be explored in Year Two include data from the ADAMHSB and the Ohio Substance Abuse Monitoring Network.

Nonfatal overdose hospitalizations data is readily available through EpiCenter, the ODH syndromic surveillance platform. This data is accessed directly by CCBH and is currently being utilized to monitor local activity and identify overdose spikes. Summaries including descriptive statistics, trends, and mapping will be communicated in the DOIEP, to be posted to the CCBH website, and communicated to OD2A partners and stakeholders. Spikes are currently communicated by CCBH to stakeholders through established distribution lists. Information provided includes: (1) date and times of overdose spikes, (2) notice if parallel increases in fatal overdoses are also reported by the CCMEO, and (3) links to resources for substance use treatment.

Using pilot data, the Begun Center has compared historic EpiCenter spikes and CCMEO fatality alert periods (high numbers of fatalities) with PSPD provided by the CDP. CEMS calls for service to "overdose/poisoning" incidents as part of the PSPD were also included to ascertain if there were spike periods in EMS calls during EpiCenter spikes. Although the initial analysis was not conclusive, CEMS data is likely to be the most comprehensive, real-time source of nonfatal overdose data for surveillance purposes, especially if it can be combined with real time CDP sudden illness data. While Epicenter data provides information on overdose hospitalizations, the data has a limited number of identifiers, therefore making it difficult to merge with other available data. CEMS data, merged with CDP data, however, contains more identifiers and in addition to overdoses reported by EpiCenter include incidents where the individual was not taken to the ED. If the data is identified it is also beneficial for outreach prevention efforts by the QRT team. Access to EMS data for Cuyahoga County, especially the City of Cleveland, will continue to be explored in Year Two.

Drug overdose fatality data is accessed through the CCMEO and the VS from the ODH. Although these data sources report drug overdose fatalities in slightly different ways, both have value for surveillance purposes. CCBH has full access to VS data which is comparable to statewide data. However, CCMEO data will likely be utilized for dashboarding due to the ongoing close collaboration with that agency and because the data is timelier.

CCBH and the Begun Center began detailed planning and development for a public-facing dashboard in July 2020 (Figures 3 and 4) as well as the development of quarterly data briefs or infographics on surveillance activities (Figure 5).

Figure 3

CCMEO Data - Visualized for Dashboard (Example)

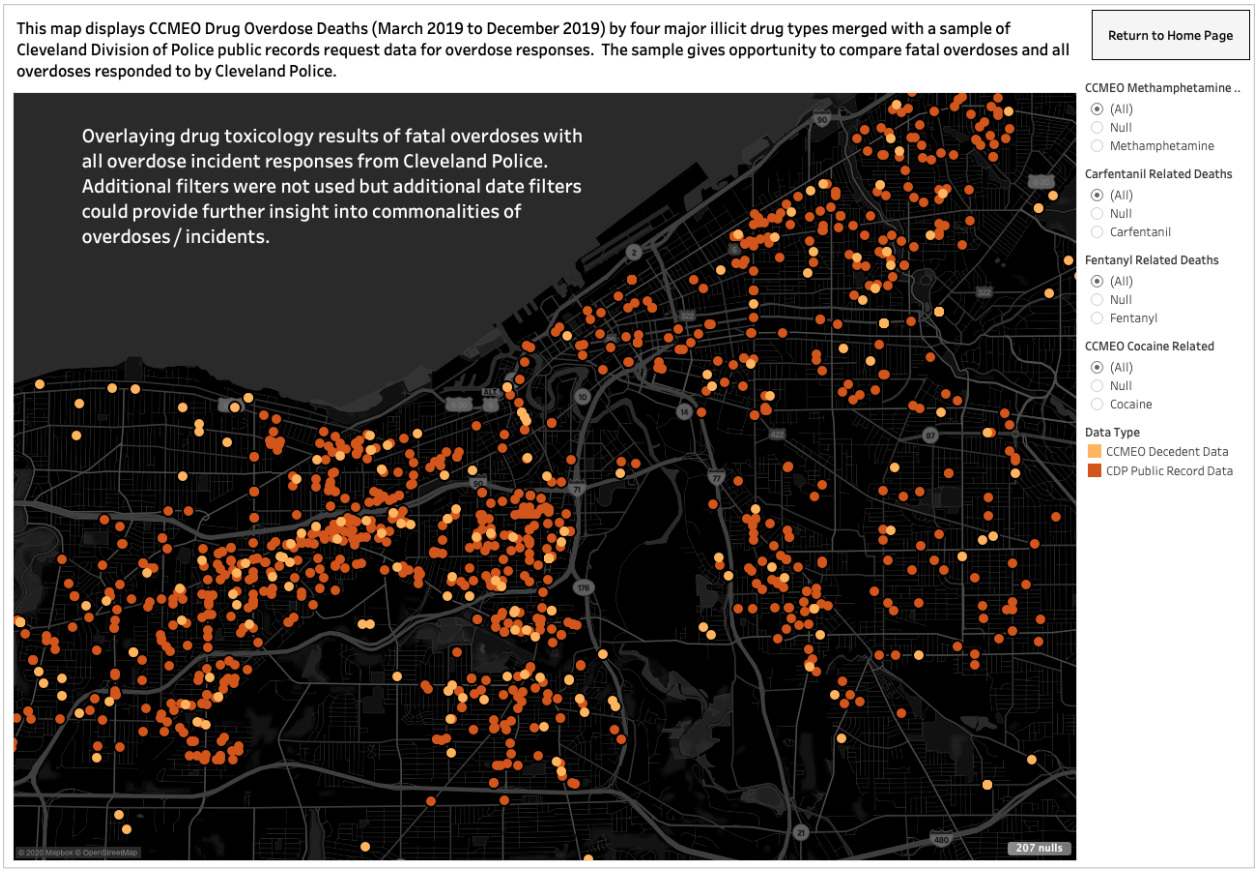
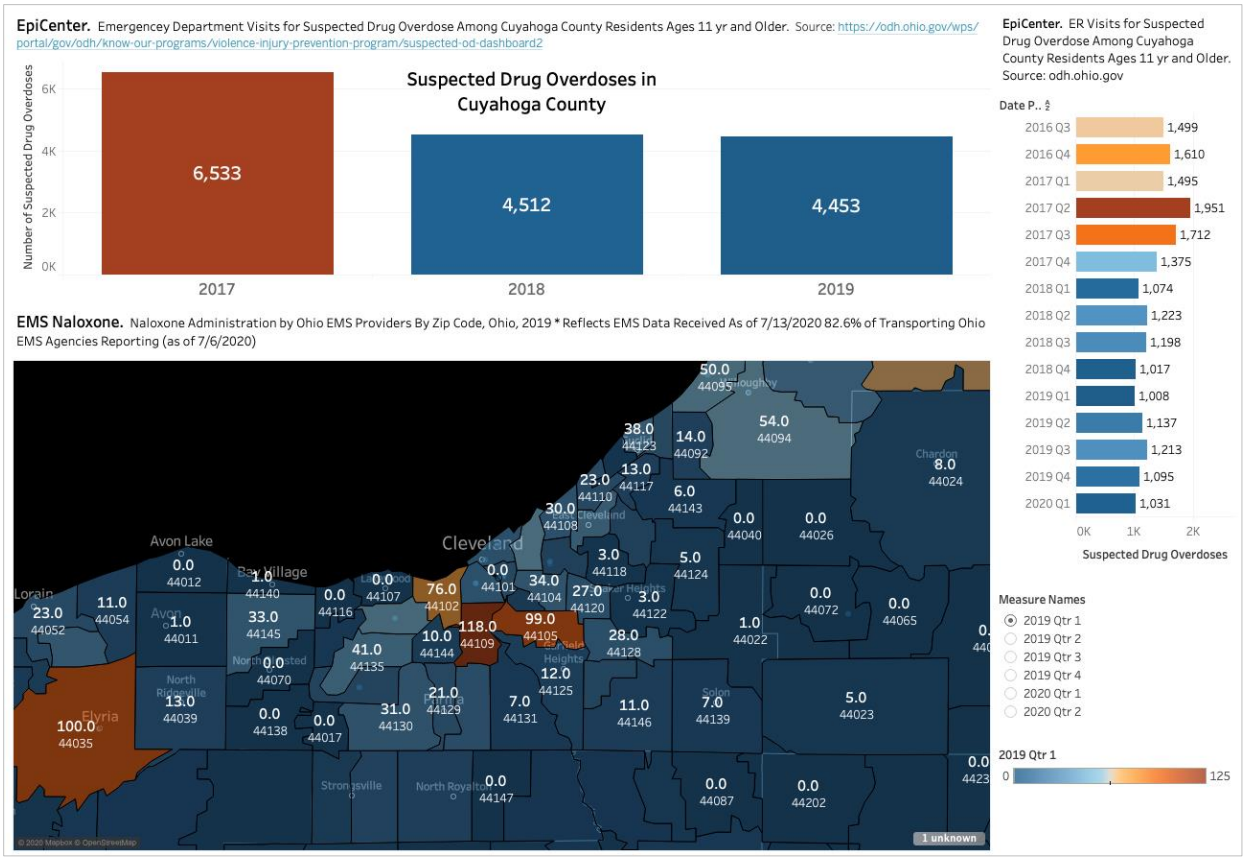


Figure 4

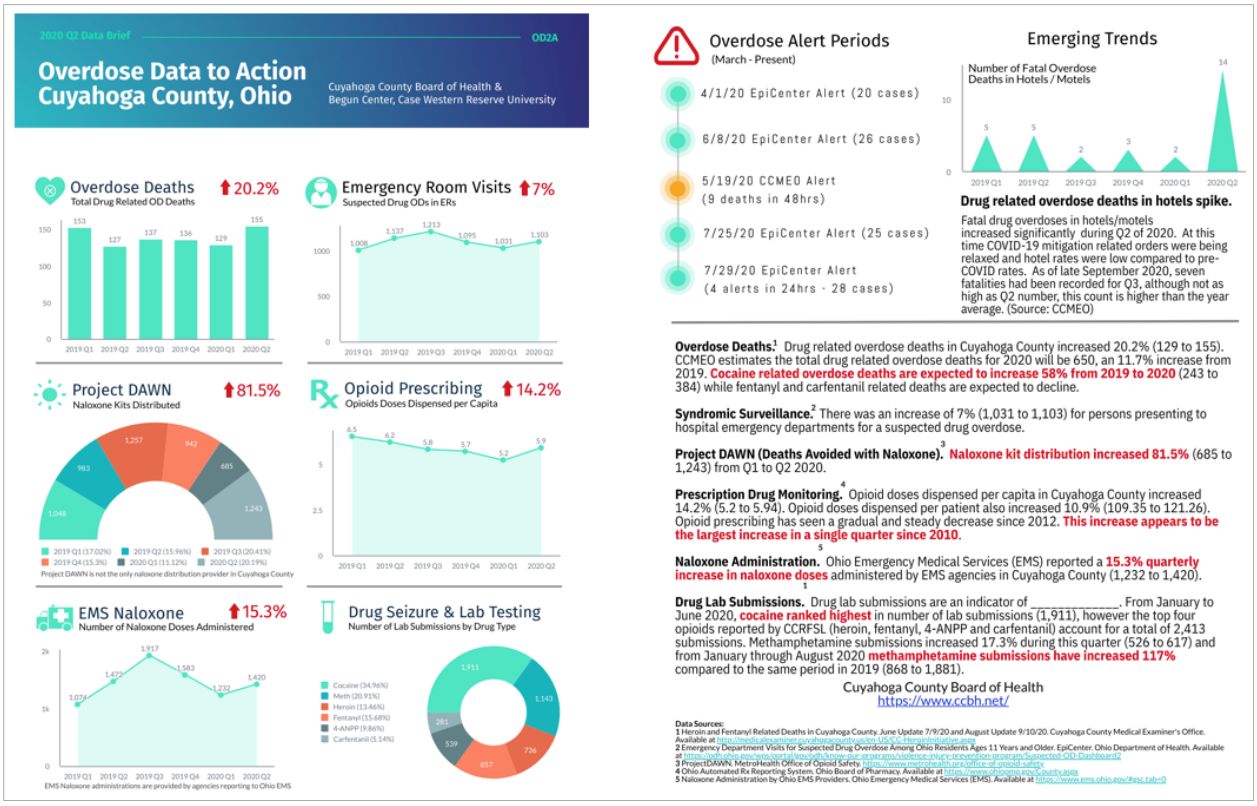
EpiCenter and Naloxone Administration Data - Visualized for Dashboard (Example)



Note: Chart based on publicly available information

Figure 5

Data Bulletin / Infographic (Example)



Using different platforms to disseminate surveillance data can foster greater understanding of drug use in specific areas (e.g., it can provide greater insight into what drug types are impacting specific demographic groups). Access to dashboards with additional levels of detail will also be considered in Year Two, but due to the sensitivity of the data, access will be limited to appropriate stakeholders. The data will be maintained in a secure data environment at Case Western Reserve University.

IV. Strategy 4

Strategy 4 is prevention focused and addresses Prescription Drug Monitoring Programs (PDMP). The agencies associated with this strategy are MetroHealth, Center for Health Affairs (CHA), and Cuyahoga County Board of Health (CCBH). The targeted activities are:

- Enhance PDMP review and reporting of high-risk clients;
- Develop a toolkit to enhance PDMP through an evidence-based program peer review model to better track opioid clients and prescriptions;
- Enhance the peer review model for educating high-risk prescribers; and
- Expand implementation of PDMP in non-traditional healthcare settings.

Enhance PDMP Review and Reporting of High-Risk Clients - MetroHealth

For this activity MetroHealth will enhance its management of PDMP data by improving its current prescriber peer-review model for identifying high-risk prescribing activity to trigger proactive reports to providers for action. The OD2A evaluators will examine ***whether or not the peer review model is effective in reducing high-volume prescribing behaviors within the healthcare setting.***

Table 10

Short-Term and Intermediate Outcomes for Enhancing PDMP Review and Reporting of High-Volume Prescribers

Description	Baseline	Target	YR 1 Data	Outcome Status
Develop algorithms to identify high-volume prescribing activity and protocols to notify providers	Data not previously collected.	2	N/A	In progress: MetroHealth is refining their algorithms
Increase number of opioid prescriptions where providers checked the PDMP prior to issuing the prescription	47%	52%	48%	2% increase
Increase the number of providers who check the PDMP at least once prior to issuing any opioid-related prescription	63%	↑10%	60%	Decrease rather than increase
Increase the use of PDMP by providers and pharmacists' overtime as measured by PDMP reporting	28%	↑10%	30%	Over a two-year period, providers were followed. There was a 7% increase in provider use of the PDMP prior to issuing a prescription. Data are not currently available for pharmacists.

Define and identify high-risk clients and high-volume providers

MetroHealth is currently in the process of designing, validating and refining algorithms, and identifying reportable database metrics to more effectively recognize and track high-risk patients and high-volume prescribers. To identify high-volume prescribers, MetroHealth uses reports from EPIC (MetroHealth's Electronic Health Records system) and Ohio's Automated Rx Reporting System (OARRS) data, Ohio's version of PDMP. Each provider is reviewed in comparison to others in the same department or specialty. This allows MetroHealth to identify and educate outlying high-volume prescribers.

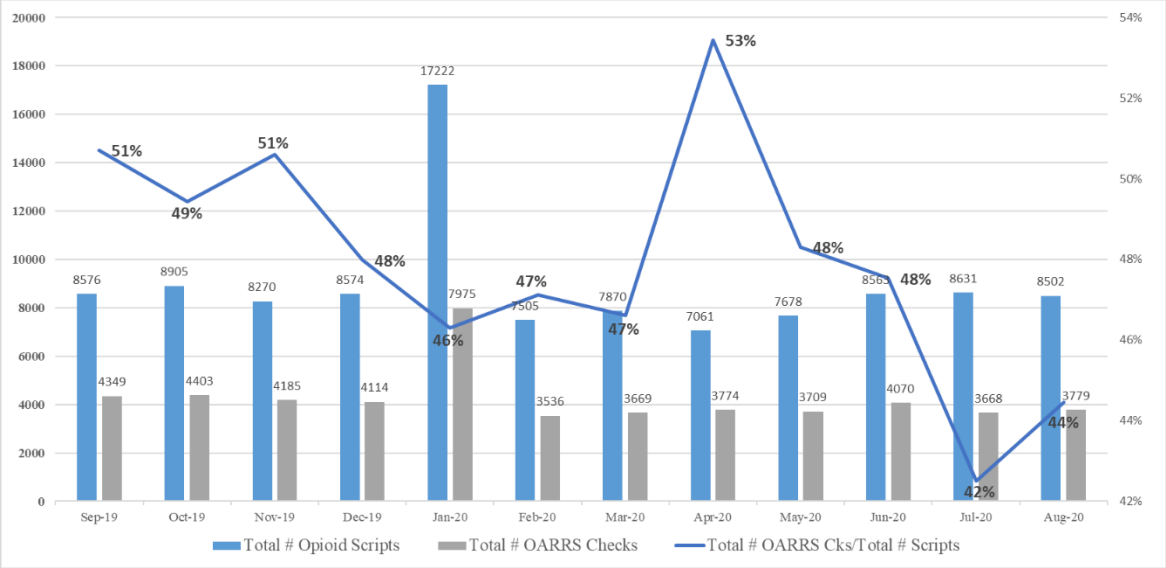
Analysis of medical providers who check PDMP before prescribing

Providers are required by law to review OARRS prior to prescribing opioids, to be self-reported in EPIC. One desired intermediate outcome for Strategy 4 is an increase in the number of providers utilizing OARRS prior to issuing a prescription for an opioid. MetroHealth has provided data on the number of its providers that issued an opioid prescription each month and whether OARRS was checked. It is possible that not all OARRS checks are recorded if the provider did not make the notation in EPIC. The data provided by MetroHealth includes all providers and is not broken down by department or specialty. The data only includes provider activity and is not differentiated by clients; therefore, the number of clients who received prescriptions is unknown during this timeframe and the same client could be reported more than once in the database.

From the period of September 1, 2019 to August 31, 2020, there were 107,357 opioid prescriptions issued by MetroHealth providers of which 51,231 had a notation in EPIC that OARRS was checked. Baseline covers the period of September 1, 2018 through August 31, 2019, wherein 47% of the providers checked OARRS (n = 50,773) prior to issuing an opioid prescription (n = 107,037). In Year One which covers the period of time from September 1, 2019 through August 31, 2020, 48% of the providers checked OARRS (n = 51,231) prior to issuing an opioid prescription (n = 107,357), an increase of 2%. Figure 6 summarizes the number of opioid prescriptions issued each month by MetroHealth providers and the number of times OARRS was checked.

Figure 6

Summary of MetroHealth Provider OARRS Checks When Issuing Opioid Prescriptions: September 1, 2019 to August 31, 2020



MetroHealth data also provides a summary of the number of providers that checked OARRS at least once during the month when issuing an opioid prescription. An intermediate outcome for this strategy seeks a 10% increase in the number of providers utilizing PDMP (OARRS). Baseline covers the period of September 1, 2018 through August 31, 2019, wherein 63% of the providers (n = 806) checked OARRS at least once prior to issuing an opioid prescription (n = 1284). In Year One, which covers the period of time from September 1, 2019 through August 31, 2020, 60% of the providers checked OARRS at least once prior (n = 766) to issuing an opioid prescription (n = 1,273), a decrease rather than an increase. Figure 7 summarizes the number of MetroHealth providers each month that issued at least one opioid prescription compared to the number of MetroHealth providers who checked OARRS at least once the same month. The reason for this decline is currently being explored. It is possible that some providers check the PDMP initially when issuing an opioid prescription for a client but then for subsequent prescriptions to the same client neglect to re-examine the PDMP or note that it was done in EPIC.

Figure 7

Number of MetroHealth Providers who Checked OARRS at least once When Issuing Opioid Prescriptions: September 1, 2019 to August 31, 2020

Another intermediate outcome for this activity is the extent to which prescribers increase their utilization of PDMP (OARRS) prior to issuing an opioid prescription. The objective is to increase the use of the PDMP (OARRS) over time by 10% for providers and pharmacists. Currently the review only includes medical providers and not pharmacists. Only those providers where data was available for baseline and Year One were included in the analysis. Baseline covers the period of September 1, 2018 through August 31, 2019 wherein 28% of the providers (n = 918) checked OARRS prior to issuing an opioid prescription. In Year One which covers the period of time from September 1, 2019 through August 31, 2020, these same providers checked OARRS 30% of the time prior to issuing an opioid prescription, an increase of 7%. Results were analyzed using a paired-samples *t*-test. The analysis revealed a ***significant difference*** between mean levels of OARRS checks prior to issuing an opioid prescription, $t(918) = 3.1$; $p<.00$, which shows that prescribers checked OARRS more often when issuing an opioid prescription in Year One ($M = .30$, $SD = .33$) than in baseline ($M = .28$, $SD = .32$).

Develop a Toolkit to Enhance PDMPs through an Evidence-Based Practice (EBP) Peer Review Model to Better Track Opioid Clients and Prescriptions - MetroHealth and CCBH

The evaluation question associated with this activity is ***whether an increase in the implementation and use of the PDMP (OARRS in Ohio) in healthcare settings decrease the number of opioid doses dispensed.*** Center for Health Affairs (CHA) is developing a toolkit of best practice models that will be made available to other healthcare settings in Cuyahoga County. MetroHealth is providing technical assistance (four technical assistance sessions in Year One) to CHA on the toolkit design to enhance utilization of OARRS (PDMP) data based on best practices that can be replicated in other health systems.

Table 11

Short-Term and Intermediate Outcomes for Developing Toolkit

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase measurable collaboration & communication among medical providers to increase use of PDMP	Data not previously collected.	2	N/A	In progress: MetroHealth intends to conduct focus groups in Year Two.
Increase the number of reviews of providers for high volume prescribing	Data not previously collected	↑10%	59	Achieved: Since data was not previously collected any reviews would represent an increase.
Decrease high volume prescribing behaviors and decrease number of unique patients with prescriptions greater than 50 Morphine Milligram Equivalents (MME)	Data not previously collected	↓10%	N/A	In progress: MetroHealth will begin collecting data in Year Two once its peer review process is finalized.

One best practice model currently being incorporated into the toolkit is MetroHealth's peer review model. MetroHealth is continuing its work on the design of prescriber report cards. The algorithm to identify high-risk patients by MetroHealth will be used to create prescriber report cards for medical providers that identify patients with more than one controlled substance prescription. The report card provides information explaining the purpose of the report, CDC guidelines for opioid prescribing, a summary of OARRS data, an index of drug categories, and additional provider resources. MetroHealth has issued prescriber report cards to all Emergency Departments (ED) and internal medicine providers. Emergency Medicine report cards were sent to providers in August 2020, a total of 59 reports. Report cards for family practice providers are in progress. MetroHealth has also created an internal dashboard to identify patients using an opioid with an active benzodiazepine prescription.

During Year One MetroHealth also focused on its peer review process. MetroHealth is developing a provider report that displays patients with the highest number of opioid prescriptions that will be used to identify potential providers for its peer review process. The report lists the medications and order date to identify those with more than one prescription on the same day. MetroHealth is also extracting patient information for patients who have received more than one prescription at the same time for specific drug combinations (e.g., opioid prescription with a benzodiazepine or two opioid prescriptions). The report will be given to the Utilization Review Nurse and the Case Management Nurse for review of the provider's documentation to see if the provider is following CDC guidelines. Patients are assigned to levels of care based on the review.

Doctors with the highest prescribing volume are identified and 10 patients are reviewed for each identified provider. The results are brought to the MetroHealth Peer Review Committee for discussion and decision making for those medical providers who would benefit from the peer review process. During the reporting period, no providers were involved in the Peer Review Process. MetroHealth will also be enhancing its Electronic Health Records (EHR) to increase educational opportunities on linkage to alternative treatment programs for providers.

Discussions also have included other best practices identified by MetroHealth and plans to develop/enhance a dashboard to capture appropriate data. A standard monthly meeting including CHA, CCBH and MetroHealth is held to move development forward.

Expand Peer Review Model of High-Volume Prescribers to Additional Hospitals - CHA & Expand Implementation of PDMP in Non-Traditional Healthcare Settings - CCBH

The evaluation question associated with these activities is ***whether an increase in the implementation and use of PDMP in healthcare settings decrease the number of opioid doses dispensed.*** Once the peer review model is developed within CHA's toolkit, CHA will support the spread and scale of this best practice to providers across hospital systems. For **Year One, progress was made on the development of the educational portal, which will allow healthcare systems to access information on the peer review model.** With the toolkit and peer review model still in the design phase, CHA has not yet distributed them to other hospitals and non-traditional settings.

Table 12

Short-Term and Intermediate Outcomes for Expansion Peer Review Model to Additional Hospitals and Implementation of PDMP review in Non-Traditional Healthcare Settings

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of providers involved in the peer review process	Data not previously collected	↑10%	N/A	In progress: MetroHealth will begin collecting data in Year Two once its peer review process is finalized
Increase the number of medical providers adopting best practice model	Data not previously collected	↑10%	N/A	CHA is in the process of developing the toolkit therefore this measure will be tracked in Year Two
Increase number of healthcare settings adopting PDMP review	Data not previously collected	↑10%	N/A	CHA is in the process of developing the toolkit therefore this measure will be tracked in Year Two

Working with CHA, CCBH will also work to enhance the utilization of PDMP data in non-traditional settings such as dental, private, and veterinary practices. Education and resource information for these efforts will be included within CHA's toolkit. Expansion to non-traditional healthcare settings will begin in Year Two after the toolkit is finalized.

V. Strategy 5

Strategy 5 focuses on enhancing prevention and response efforts by identifying opportunities for linking state and local resources and entities. The agencies involved in this strategy are the ADAMHSB, Cuyahoga County Medical Examiner's Office (CCMEO), MetroHealth, PAXIS Institute (PAXIS), and the Educational Service Center of Northeast Ohio (ESC-NEO). Activities that fall under this strategy are:

- Enhance overdose fatality review, including adding an Opioid Use Disorder Specialist;
- Expand PAX Good Behavior Game (PAXGBG), an Evidence-Based Practice/Program (EBP), in K-5 public schools;
- Develop a Rapid Response Lay Responder Narcan Distribution Protocol for overdose spikes;
- Increase overdose response trainings and naloxone distribution;
- Implement "OD2A Quarterly Implementation Roundtable;" and
- Media campaigns to populations at high risk for overdose.

Enhance Overdose Fatality Review, Including Adding Opioid Use Disorder (OUD) Specialist - ADAMHSB and CCMEO

The Alcohol Drug Addiction and Mental Health Services Board of Cuyahoga County (ADAMHSB) is providing support and assistance to the Cuyahoga County Medical Examiner's Office (CCMEO) in its efforts to reestablish Overdose Fatality Reviews (OFRs). The evaluation question assesses ***the impact of linking datasets across platforms and agencies, and how this information enhances the OFRs.***

Table 13

Short-Term and Intermediate Outcomes for Enhancing OFRs

Description	Baseline	Target	YR 1 Data	Outcome Status
Number of OFRs completed each year	0	8/yr.	14	Achieved
Number of families of decedents interviewed by OUD specialist	0	24	N/A	In progress: delays due to COVID-19
Identification of intervention points for treatment	0	2/yr.	7	Achieved
Increase in the number of OFR reports completed each year	0	8/yr.	NA	In progress: outcome tracked in Year Two

Incorporate Prescription Drug Monitoring Program (PDMP), investigative reports, autopsy and cause of death (COD) reports into OFR

The coordination and incorporation of data from new sources is ongoing despite a slowdown in the spring due to COVID-19. In the first half of the grant year, a process was streamlined to share decedent information with OFR members and methods were developed to securely receive, compile, and store data. In March 2020, new nonfatal overdose incident data from the Drug Enforcement Administration (DEA) and Cleveland Division of Police (CDP) regarding fatalities under review by the OFR Committee were incorporated into the case reviews. While no new data sources were identified recently, the OFR was able to access rehabilitation histories for some fatalities through the efforts of a CCMEO medicolegal death investigator.

OFR Committee Participation

Participation at the OFR committee meeting was tracked during this past year by agency and the number of attendees from each agency. After canceling meetings in April and May due to COVID-19, meetings resumed virtually in June, July, and August (Table 14). New stakeholders from St. Vincent Charity Medical Center (SVCMC) were added to the committee in August.

Table 14

OFR Membership and Attendance

Agency Name	Sept. 2019	Oct. 2019	Nov. 2019	Dec. 2019	Jan. 2020	Feb. 2020	Mar-20	Apr-20	May-20	6/1/2020*	7/1/2020*	8/1/2020*
Cuyahoga County Board of Health	yes (2)	yes (2)	yes (2)	yes (3)		yes (1)	yes (3)			yes (1)	yes (1)	yes (2)
Cuyahoga County Medical Examiner's Office	yes (2)	yes (3)	yes (2)	yes (3)		yes (2)	yes (2)			yes (3)	yes (3)	yes (3)
Cuyahoga County Dept. of Family and Children Services	yes (1)	yes (2)	yes (1)	yes (1)		yes (1)				yes (1)	yes (1)	
ADAMHS Board - CC	yes (1)	yes (2)	yes (1)	yes (2)		yes (1)	yes (1)			yes (3)	yes (2)	yes (3)
Case Western Reserve University	yes (2)	yes (1)	yes (2)	yes (3)		yes (1)	yes (1)			yes (1)	yes (1)	yes (1)
MetroHealth			yes (1)	yes (2)	no meeting	yes (2)	yes (1)	no meeting	no meeting	yes (1)	yes (1)	yes (1)
Cleveland Dept. of Health	yes (1)									yes (1)		
Cuyahoga County Office of Re-entry						yes (1)				yes (1)		yes (1)
Cuyahoga County Drug Court			yes (1)	yes (1)		yes (2)	yes (1)			yes (1)	yes (1)	yes (1)
WestShore Enforcement (DEA)			yes (1)	yes (1)			yes (1)			yes (1)		yes (1)
Cleveland Division of Police						yes (1)	yes (1)					

Note: * indicates virtual meeting
Note: Meetings canceled in April and May due to COVID-19 social distancing orders

OUD Specialist Interviews of Families of Decedents

The ADAMHSB hired an OUD Specialist in February 2020. While COVID-19 restrictions have prevented them from initiating interviews, in preparation for Year Two, the OUD Specialist has been attending virtual trainings and is working closely with the CCMEO to coordinate interviews with decedent family members.

The target number of OFRs to complete in Year One was eight and the committee completed 14. Three cases were reviewed between September 2019 and January 2020. During this time the OFR Committee also was working to establish membership, determine meeting frequency, and investigate and make decisions regarding data acquisition methods. Once those items were complete, the committee was able to re-focus on case reviews; 11 additional cases between February and August 2020 were completed.

COVID-19 prevented the ADAMHSB from conducting interviews with family members of decedents. A laptop was purchased to enable video interviews to begin in Year Two. In preparation for the official interviews, the OUD Specialist piloted the interview questions by completing three mock interviews. The interview template was adjusted based on feedback from the interviewees. The following is the current interview script and questions.

Interview Script and Questions [DRAFT – JULY 2020]

I want to thank you for agreeing to this interview, my name is Michaele Smith and I am the Opioid Use Disorder Specialist at the ADAMHSB of Cuyahoga County. Please feel free to use my first name.

Please let me know your preference as to how you would you like me to address you.

My purpose today is to get a better understanding of the history of your loved one/family member. This data will be collected for the purpose of finding common risk factors and develop ways to hopefully prevent future deaths of this nature. Your time and effort are very valuable, and I greatly appreciate your willingness to participate. I know this will be difficult so if you need to stop or a break at any time please let me know.

The process will begin with a series of questions regarding your family member. Some of the questions you may have answered before –my apologies for that. Some of the questions may seem intrusive, so if there is anything you are not comfortable answering, that is ok. I am also here to listen, so if there if anything you want me to know about (name) or think is important, feel free to share that information.

Do you have any questions before we begin?

1. Do you know what they were using? (Ever OD before?)
2. Does anyone else in their family have issues with substance use?
3. If so, is that person an Overdose risk? (Provide free Narcan info)
4. IOP Treatment/Detox history? Length of stay?
5. History of MAT?
6. Age and type of first drug use?
7. Do you know how long they used?
8. History of any physical, Mental trauma? If yes, did they receive any treatment? Type?
9. Where did they grow up? How many siblings? What was childhood like?
10. Education History?
11. What kind of work did they do? Were they employed when they died?
12. History of medical problems, surgery? (medications)
13. History of mental health problems? (medications)
14. Any children? (ages) If yes, do they have any issues with substance abuse?
15. Were they in a relationship at TOD?

Identification of Intervention Points for Treatment
A total of seven recommendations came out of OFR activities in Year One.

1. Increase eligibility for drug court participation.
2. Engage with domestic violence shelters and homeless shelters to provide naloxone kits, fentanyl test strips and follow-up with other needs.
3. Support the Ohio Board of Pharmacy in updating OARRS risk score.
4. Engage with hospital Emergency Departments (EDs) and the Quick Response Team (QRT) to identify individuals who have had more than one nonfatal overdose in less than a year. QRT can provide outreach for high-risk individuals.
5. Identify and provide mental health/bereavement support services to family/friends of a decedent who dies by suicide.
6. QRT will work with MetroHealth to identify patients who leave the ED after a nonfatal overdose-related incident against medical advice, and conduct outreach.
7. Enhance Substance Use Disorder (SUD) treatment for opioid-dependent individuals in jail.

Expand PAX Good Behavior Game, an EBP, in the Public Schools - PAXIS and ESC-NEO

The PAXIS Institute (PAXIS) and the Educational Service Center of Northeast Ohio (ESC-NEO) are working to expand the PAXGBG, an EBP, into public schools by identifying high-risk neighborhoods. PAXGBG is an environmental intervention that teaches young students, preschool to 5th grade, self-regulation, self-control, and self-management. The program is implemented by teachers in the classroom. Research suggests that the Good Behavior Game in conjunction with other classroom-based interventions may provide protection against the early onset of illegal drug use including heroin. The evaluation question tied to this activity is: ***How does the enhancement of student education affect local opioid prevention efforts?***

Table 15

Short-Term and Intermediate Outcomes on PAXGBG Expansion into School Districts

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase by 75 the number of teachers trained in the PAXGBG	109	184	26	35%
Increase the number of students receiving PAXGBG	0	375	N/A	In progress: Although some teachers have been trained on PAXGBG, schools in Cuyahoga County are conducting remote learning due to COVID-19, making it difficult to implement PAXGBG which is a classroom management technique. PAXIS is providing guidance to teachers on how to implement aspects of this program in a remote environment.
Increase the number of teachers implementing PAXGBG	109	184	N/A	
Increase the number of schools effectively implementing PAXGBG	0	↑25%	N/A	
Increase the number of students participating in EBP in neighborhoods that are deemed hotspots based on historical overdose data	0	350	N/A	

PAX Trainings

PAXIS Institute personnel are conducting trainings targeting school districts that overlap with drug overdose hotspots. Staff at ESC-NEO are providing assistance to PAXIS in communicating with these identified school districts. Several training types are being provided to Cuyahoga County school districts through this grant including:

(a) <u>PAXGBG</u>

This foundational training ensures proficiency in each of the PAX Kernels as well as the PAXGBG. In addition to learning how to implement the strategies, teachers learn the importance of a nurturing environment and its effects on trauma, self-regulation and mental health outcomes. Teachers also learn about the role they can play in supporting students who are most affected by negative environmental influences.

(b) <u>Heroes</u>

(For Previously Trained PAX Teachers Only) This training provides PAX teachers with additional strategies to scaffold Universal Intervention (Tier 1) PAX Kernels and Cues for children who continue to struggle in the classroom, including Tier 2 and Tier 3 enhancements for children who exhibit challenging behaviors and under-developed self-regulation skills.

(c) Next Step

(For Previously Trained PAX Teachers Only) This training includes strategies for using PAXGBG with tiered intervention, instances of trauma, and frameworks for expanding throughout the school.

(d) PAX Partners

This training provides participants who have already been trained in PAXGBG with the skills to support PAX teachers and improve implementation at schools and in classrooms. This training includes: Partnering the Kernels, Cues, and PAXGBG, collaborating with teachers and administrators, collecting and utilizing data, troubleshooting implementations, and embedding PAXGBG throughout schools and communities.

(e) Sustainability

Sustainability planning sessions guide groups into fitting PAXGBG into the Strategic Prevention Framework used in both mental health and education. This includes environmental scans and needs assessments to establish the capacity for implementation and training as well as facilitation in creating localized evaluation plans to prepare for expansion and maintenance as opportunities arise.

The ESC-NEO was the designated location for teacher trainings, but due to the pandemic, some trainings were canceled, rescheduled, or delivered virtually. The desired outcome for the first year was to host three PAX Trainings; two trainings were delivered.

- May 13, 2020: PAXGBG Training (virtual)
- May 14, 2020: Sustainability Training (virtual)

The short-term and intermediate outcomes for PAXGBG and ESC-NEO this year were mostly delayed due to COVID-19. Schools in Cuyahoga County initiated remote learning in the spring, then went on summer break, and many continue to utilize fully remote learning or hybrid remote/in-person schedules into the fall. Districts are focusing on the transition to online learning, prioritizing academic performance and student engagement, and providing in-house training for teachers and staff. Some districts are not allowing their staff to participate in outside training, even virtually, thereby delaying training and implementation of the PAXGBG. ESC-NEO is also facing resistance to PAXGBG training for teachers because districts are adopting other programs or they lack teacher buy-in. Similarly, teacher unions are concerned about added burden on teachers to implement additional programs.

Despite these obstacles, 26 teachers and staff from four districts were trained; Bedford City School District, Lakewood City School District, Bay Village City School District, and Garfield Heights City School District were represented at the training. Staff from the ESC-NEO also participated in the training. Increases in the number of teachers and schools implementing

PAXGBG and students exposed to the program will be measured in Year Two. Pre- and post-surveys and training evaluations will also be administered to measure the effectiveness of the program.

Identify Neighborhoods with High Incidence of Overdose

From 2016 to 2019 there were a total of 1,925 drug-related overdose deaths by residence city according to public records data available from the CCMEO (obtained through the decedent search tool on the CCMEO public internet page).

The following table (Table 16) and map (Figure 8) show, respectively, Cuyahoga County school district rankings by number of resident drug-related overdose deaths and the geographical distribution of these deaths for the period of 2016 to 2019 as recorded by CCMEO. The darker red color equals higher numbers of drug-related overdose deaths for residents of those school districts. Through this project, school districts in hotspot areas will be targeted to receive training on the PAXGBG.

Table 16

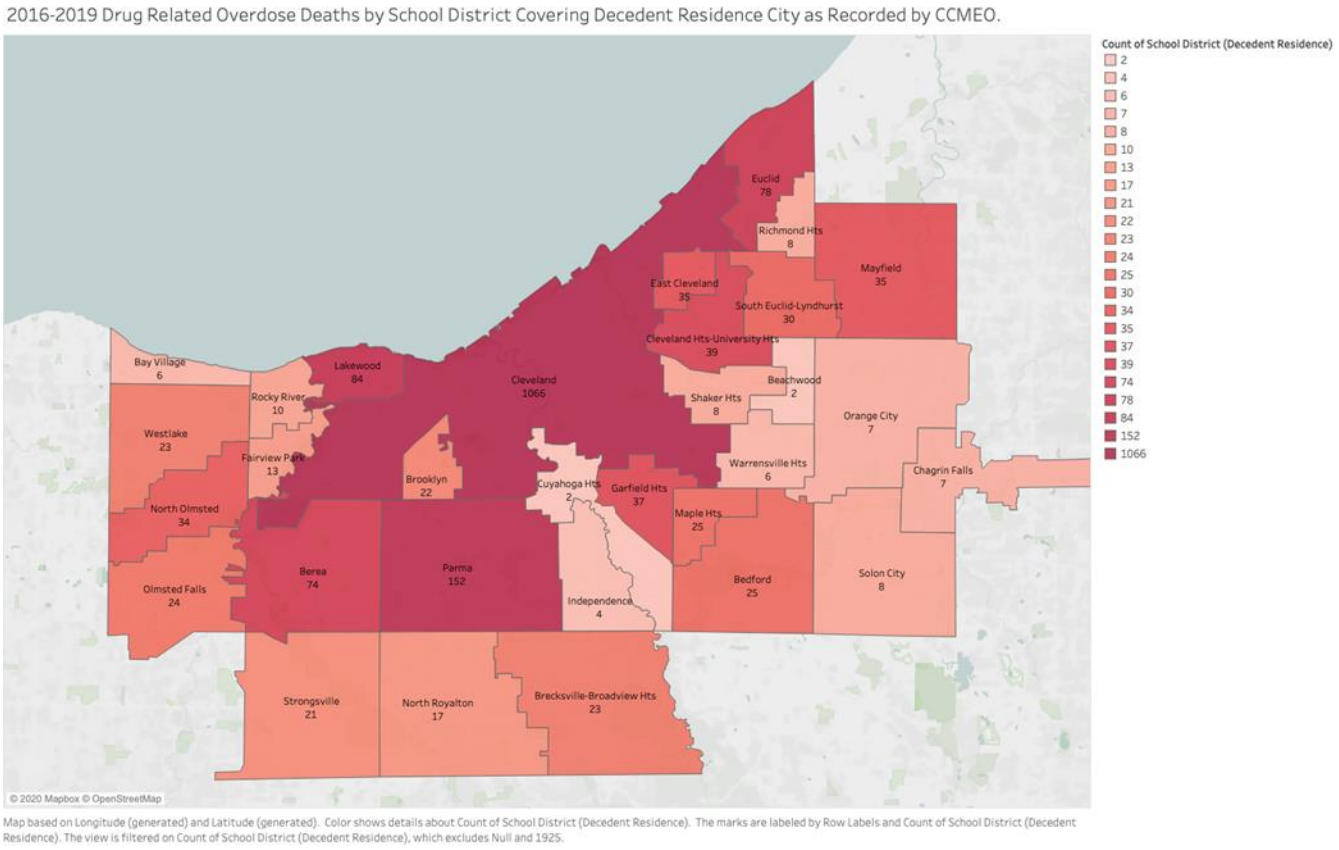
Count of Drug-related Overdose Deaths by School District of Decedent Residence: 2016-2019

School District	# of Overdose Deaths
Cleveland Municipal School District	1066
Parma City School District	152
Lakewood City School District	84
Euclid City School District	78
Berea City School District	74
Cleveland Heights-University Heights City School District	39
Garfield Heights City School District	37
East Cleveland City School District	35
Mayfield City School District	35
North Olmsted City School District	34
South Euclid-Lyndhurst City School District	30
Bedford City School District	25
Maple Heights City School District	25
Olmsted Falls City School District	24
Brecksville-Broadview Heights City School District	23
Westlake City School District	23
Brooklyn City School District	22
Strongsville City School District	21
North Royalton City School District	17
Fairview Park City School District	13
Rocky River City School District	10
Richmond Heights Local School District	8
Shaker Heights City School District	8
Solon City School District	8
Chagrin Falls Exempted Village School District	7
Orange City School District	7
Bay Village City School District	6
Warrensville Heights City School District	6
Independence Local School District	4
Beachwood City School District	2
Cuyahoga Heights Local School District	2
Grand Total	**1925**

Note: Districts highlighted have already received PAX training

Figure 8

Count of Drug-related Overdose Deaths by School District of Decedent Residence: 2016-2019



Rapid Response Lay Responder Narcan Distribution Protocol, Responder Training and Naloxone Distributions - MetroHealth & Cuyahoga County Board of Health (CCBH)

MetroHealth and CCBH are working to develop a Rapid Response Lay Responder Narcan distribution protocol for overdose spikes which includes identifying potential hotspots of overdose activity. MetroHealth is providing overdose response trainings to lay responders, law enforcement (LE), and community agencies. This activity also seeks to increase the distribution of Project DAWN (Deaths Avoided with Naloxone) kits. The evaluation question tied to this activity is ***whether the implementation of naloxone education and distribution programs increases participant access to naloxone.***

Table 17

Short-Term and Intermediate Outcomes for Overdose Response Training and Naloxone Distribution

Description	Baseline	Target	YR 1 Data	Outcome Status
Number of lay responders trained on overdose response	Data not previously tracked	200	955	Achieved
Number of LE trained on overdose response	0	100	48	48%
Number of community agency staff trained on overdose response	615	600	202	34%
Increase identification of provider barriers to distributing naloxone at discharge at ED and Inpatient Units	Data not previously tracked	2 focus groups/yr.	N/A	In progress: delays due to COVID-19. Focus groups to start in Year Two
Increase knowledge gained from overdose response training (pre/post)	Data not previously tracked	↑10%	0	In progress: delays due to COVID-19. Surveys to start in Year Two
Increase in naloxone distributions	3375	3975	4804	Achieved

Develop Narcan Distribution Protocol

Protocols for naloxone administration were developed prior to the start of the grant and will act as a template for Narcan distribution. The protocols include a clinical pharmacology of naloxone, indications for use, precautions, contraindications, and adverse reactions to naloxone along with a place to record the training information, dates, and frequency of reviews.

Identify Hotspots for Naloxone Distribution by Zip Code

As part of Surveillance Strategy 3, CCBH and the Begun Center analyzed zip code-level data from the following sources: (1) overdose fatalities recorded by CCMEO, (2) EpiCenter (syndromic surveillance), (3) EMS naloxone administration (number of doses), and (4) a one-year sample of sudden illness responses from CDP records. The outcome provided a ranked zip code list for the purposes of identifying locations which would benefit from increased distribution of naloxone.

Overdose Response Training

Overdose response trainings were tracked during Year One and were reported based on the entity receiving the training (e.g., LE, lay responder, service entity).

<u>Number of lay responders trained on overdose response</u>

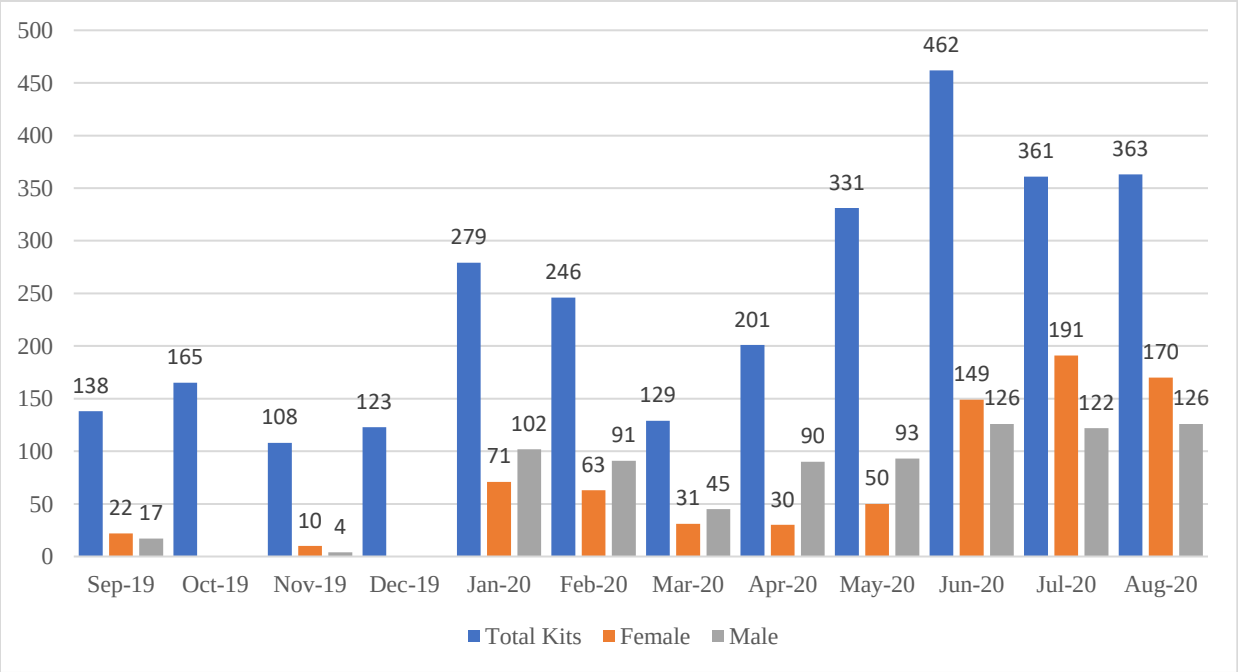
Lay responder training provides free education on opioid overdose risks, how to recognize the signs and symptoms of an opioid overdose, how to respond to an opioid overdose, and use of

naloxone. Training is provided at a number of locations in Cuyahoga County. **During the first year, 955 lay responders were provided training on naloxone.**

Individuals who have already been trained can also visit these locations to receive additional Project DAWN kits. Figure 9 depicts the total number of Project DAWN kits distributed via the three walk-in clinics (Hispanic Urban Minority Alcoholism Drug Abuse Outreach Program (HUMADAOP), Circle Health Services (CHS), and CCBH) and the county jail. The demographics are either unknown or not fully tracked for the first quarter of data. There are two doses of naloxone per kit.

Figure 9

Number of Project DAWN Kits Distributed to Individuals Each Month from September 1, 2020 to August 31, 2020



Number of Law Enforcement (LE) trained on overdose response

During the three-year grant period, MetroHealth is projected to host 10 LE trainings with 100 LE personnel. There were three trainings delivered to LE, one in December of 2019 and two in January, 2020 with a total of 48 attendees.

Number of community agency staff trained on overdose response

During the three-year grant period, MetroHealth is projected to host 65 trainings with 600 service entity personnel trained during the project. During Year One, 34 trainings were held at various locations, including Young Men's Christian Association (YMCA), Young Women's

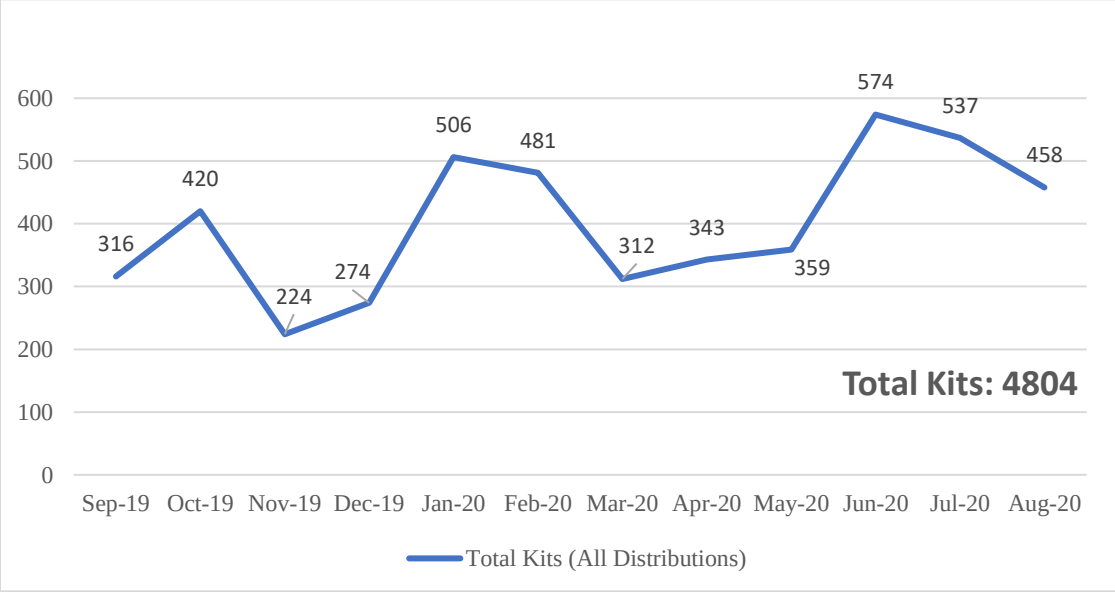
Christian Association (YWCA), Northeast Ohio Neighborhood Health Centers (NEON), MetroHealth Broadway Clinic, Lakeside Shelter, Hitchcock Center, The Lantern, Jack Mulhall Center and St. Malachi Shelter. A total of 202 staff participated in the training.

Increase Naloxone Distribution

Through the OD2A Initiative, MetroHealth is working to increase the distribution of naloxone. Project DAWN kits are provided at a number of locations in Cuyahoga County, including Cleveland Emergency Medical Services (CEMS), Cuyahoga County Corrections Center, HUMADAOP (with the CHS Syringe Services Program), Circle Health Services (CHS), CCBH, Cleveland Department of Public Health's Thomas McCafferty Health Center, and Project DAWN Expanded Mobile Unit. Figure 10 shows the total number of Project DAWN kits distributed. There was a decrease in overall distribution in the spring due to COVID-19 related delays, but kit distribution increased again in quarter four.

Figure 10

Total Project DAWN Kits Distributed Per Month



Note: April and May distribution was only out of the MetroHealth Mobile Unit (3 clinics were closed due to COVID-19)

Implement OD2A Quarterly Implementation Roundtable - CCBH

As part of Ohio's OD2A Initiative, the Quarterly Implementation Roundtable (QIR) was created to connect opioid epidemic leadership at the state and county level. In addition to CCBH, Ohio Department of Health (ODH) and the boards of public health of Franklin (Columbus) and Hamilton (Cincinnati) counties are included within the QIR. Its purpose is to focus on critical issues impacting surveillance, prevention and evaluation related to the respective work at the

state and local levels, including prevention efficacy, barrier analysis, best practice dissemination, surveillance coordination (common data dashboards) and data sharing that will enhance statewide and regional activities.

Although the objective of the QIR was to meet quarterly, COVID-19 has impacted the ability of the leadership to meet. One initial meeting was held in February; however, the QIR hopes to resume a regular meeting schedule in Year Two.

Table 18

Short-Term and Intermediate Outcomes for OD2A QIR

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase collaboration among OD2A QIR participants	Data not previously collected	TBD	N/A	In progress: Unfortunately, due to COVID-19 only One roundtable meeting was held in Year One. It is hoped in Year Two quarterly meetings will resume.
Identification of barriers to sharing and integration of state and local surveillance data	Data not previously collected	TBD	N/A	
Increase in the number of best practices identified	Data not previously collected	TBD	N/A	
Increase in the number of common data dashboards identified by OD2A QIR	Data not previously collected	TBD	N/A	
Increase understanding of context, resources and needs in county through training and technical assistance	Data not previously collected	TBD	N/A	
Increase preparedness and response at the state and county level through development of data surveillance dashboard	Data not previously collected	N/A	N/A	
Increase state involvement in local prevention efforts through OD2A QIR meetings	Data not previously collected	12	1	Delays due to COVID-19

Ohio Grantee Cross-Site Collaboration – Cuyahoga, Franklin, and Hamilton Counties

In an attempt to share information, successes and best practices, OD2A evaluation staff developed cross-site partnerships with the evaluators from the other Ohio grantees in Franklin and Hamilton counties. OD2A evaluation staff reached out to evaluation staff from Franklin and Hamilton counties and set up an initial Zoom meeting in Spring 2020. At this initial Zoom meeting, all three Ohio grantees provided background on their proposed project activities, the status of all activities and the impact of COVID-19 on project implementation. At this initial Zoom meeting, staff from all three counties agreed that it is important and valuable for all sites to develop an Ohio cross-site collaboration. As a result, the three counties committed to participating in this collaboration and hold regular cross-site meetings.

Since the initial meeting, multiple Zoom meetings have occurred with all three Ohio county project evaluation staff. These meetings have resulted in the cross-site sharing of assessment tools, surveys, research articles, and project workplans. OD2A evaluation staff suggested that it would be useful to develop a "crosswalk" of all three county workplans that compares all county activities for each OD2A strategy. For each county, this crosswalk document lists bullet points of every OD2A activity and data point. Completing this cross-site crosswalk allows Ohio grantees to share evaluation knowledge and resources, and will allow for the comparison of key data points across counties.

The initial crosswalk of Ohio grantee strategies showed that all three counties are using the four long-term OD2A outcomes, and are the obvious common cross-county measures. These measures include: (1) decreased rate of opioid misuse and opioid use disorder; (2) increased provision of evidence-based treatment for opioid use disorder; (3) decreased rate of ED visits due to misuse or opioid use disorder; and (4) decreased drug overdose death rate, including prescription and illicit opioid overdose death rates. In addition, the initial crosswalk revealed that there is some overlap in data points for Strategy 3 (Surveillance), and Strategy 4 (Prevention): PDMPs. Finally, there appears to be some common data items under Strategy 6 for all counties related to linkages to care.

The three OD2A Ohio counties continue to meet on a regular basis and will revisit and refine this data crosswalk, thereby facilitating communication across the three ongoing evaluations in the areas of best practices, lessons learned, and common outcome data points.

Media Campaigns to Populations at High Risk for Overdose - CCBH

The Cuyahoga County Board of Health (CCBH) is developing media campaigns targeting populations at high risk for overdose. The objectives include linking clients to clinics, gaining community feedback and support, and decreasing the number of fatal overdoses in Cuyahoga County.

Table 19

Short-Term and Intermediate Outcomes for Media Campaigns

Description	Baseline	Target	YR 1 Data	Outcome Status
Create awareness and education campaign for populations at risk of overdose	Data not previously tracked	2	2	Achieved
Increase outreach through social media campaign and radio spots	Data not previously tracked	↑10%	In Year One: Radio One reported 252,542 social media views and iHeart radio reported 345,200 people reached.	Achieved: As there is no baseline, any number would represent an increase.

Create Awareness and Education Campaign for Populations at Risk of Overdose

Utilizing data from the CCMEO, it was revealed that in the past year, there has been a marked increase in deaths of middle-aged African American males due to cocaine adulterated with fentanyl and other illicitly manufactured opioids. Therefore, radio spots and social media campaigns were geared toward African American males ages 35-54 who are residents of Cuyahoga County.

Increase Outreach through Social Media Campaign and Radio Spots

The target for this short-term outcome was to create two campaigns. CCBH partnered with Radio One and iHeart Radio in the summer of 2020 to create awareness and spread a message of recovery to the African American community in Cuyahoga County. Examples of the media messages are included in Appendix 3.

Radio One was selected as a partner because, as per their website, they are an urban brand representing Black culture. CCBH and Radio One partnered to record 60 second radio spots that aired on radio stations, 93.1 WZAK and Z107.9 and social media platforms; they also created images that were shared on Instagram and Facebook. The campaign directed persons to either the mobile crisis hotline number at the ADAMHSB or *drughelp.care*. These ads aired between June 15 and July 24, 2020. iHeart Radio's weekly reach is over 1 million people across Northeast Ohio. The campaign began on August 3 and ended on August 28, 2020. Radio One reported 252,542 social media views and 873 post reactions (likes, comments, shares). For iHeart radio, 458 active web sessions were recorded reaching 46% of the Northeast Ohio market adults between the age of 25-54, approximately 345,200 people.

VI. Strategy 6

Strategy 6 seeks to establish linkages to care. The agencies involved in this strategy are Circle Health Services (CHS), Cleveland State University (CSU), St. Vincent Charity Medical Center (SVCMC), Thrive, Woodrow, and MetroHealth. The following activities are encompassed within this strategy:

- Expand Thrive peer supporters in the Emergency Departments (ED);
- Expand Project SOAR (Supporting Opiate Addiction and Recovery) to Lutheran and Lakewood hospitals;
- Incorporate Screening Brief Intervention Referral and Treatment (SBIRT) training and practice into existing primary care operations;
- Increase warm handoff to Medication Assisted Treatment (MAT) for at risk-populations – Expanding Access to Medication Assisted Treatment (ExAM) program;
- Enhance *drughelp.care* resource linkage tool; and
- Enhance awareness and outreach efforts of Syringe Services Program (SSP).

Thrive utilizes a Center for Medicare and Medicaid evidence-based peer-to-peer support model that employs certified peer recovery supporters. These peer supporters connect directly with individuals (or their family or friends) who present in the SVCMC emergency department with a behavioral health diagnosis (particularly Opioid Use Disorder) to ensure awareness of and connection to treatment and other medical and/or social services in the community, if the patient is willing to engage with the peer supporter.

Woodrow uses a peer recovery supporters on-call model called Project SOAR, which provides services in the Cleveland Clinic Lakewood ED and Cleveland Clinic Lutheran Hospital ED. The peer recovery supporters connect directly with individuals (or their family and friends) in the ER who have experienced an overdose or have an Opioid Use Disorder and agree to meet with the Woodrow peer recovery supporters, to ensure awareness of and connection to Opioid Use Disorder (OUD) treatment and other medical and/or social services in the community.

SVCMC provides referrals and linkages to care using the SBIRT tool for individuals who have experienced a drug overdose or are otherwise at risk of experiencing an overdose based on a prescreen assessment. Case managers will provide care coordination to those clients who express interest, including referral to treatment for those with high assessment scores, assistance with navigating substance abuse treatment processes, and coordination of wraparound services.

MetroHealth's ExAM program is a case management system that helps to identify and assess inmates incarcerated at the Cuyahoga County Corrections Center who may have OUD. The objective is to provide MAT treatment and direct patient care during incarceration, including the

administration of buprenorphine and monitoring for medication adherence. Upon release from jail, ExAM will link clients with community-based MAT and other services.

CHS has enhanced its outreach services within its SSP by enhancing linkages to care for the drug-using community who visit their mobile sites. Care coordinators work with clients to provide referrals for treatment and linkages for basic needs.

The timeframe for the data evaluated during this review varies depending on when the agency began their OD2A program. Thrive and Woodrow have been reporting on peer recovery support services since October 1, 2019. MetroHealth has been providing data for the ExAM Program since September 1, 2019 as has CHS for its SSP Care Coordination. SVCMC began reporting on their services for the SBIRT program April 1, 2020. The following table summarizes the five partners' demographics and primary activities (Table 20).

Table 20

Key Demographics for Clients

		Peer Support Services Program		**ExAM Program**	**SSP Care Coordination Program**	**SBIRT Program**
		Thrive	Woodrow	MetroHealth	CHS	SVCMC
N		230	178	517	2057	130
Client's Avg Age (year, std)		38.5 (12.3)	35.5 (10.3)	34.9 (9.0)	38.6 (11.2)	52.3 (13.4)
Race*	*White*	68	149	382	1034	48
	Black	57	24	94	67	82
	other	1	1	7	40	0
Ethnicity*	*Hispanic*	6	31	35	109	2
	Non-Hispanic	115	147	481	976	127
Gender*	*Male*	90	111	230	746	76
	Female	47	67	147	395	54
	Other	2	0	1	2	0
Homelessness		20	22	NA	NA	19
Time spent with client (minutes, std)		63.9 (57.7)	117.4 (57.2)	NA	NA	NA
Encounter		230	178	517	2057	130
Engage (Agree to Participate)		197	178	489	1135	125
Referred for community treatment services		132	174	209	1135	122
Linked with community treatment services		63	150	206	NR	48

Race*, Ethnicity*, Gender* there are some missing data for Thrive and CHS
Note: SVCMC data collection since April, 2020. Data may include duplicated clients.
Note: ExAM referrals for community treatment only represent those individuals released from jail not representative of all clients participating in the program.
Note: CHS data includes individuals counted only once. These individuals, however can participate in the SSP Care Coordination more than once.
Note: Woodrow's initial approach are with clients who have already agreed to speak with a peer supporter.
Note: NA: Not Applicable vs. NR: Not Reported

Demographics and Characteristics

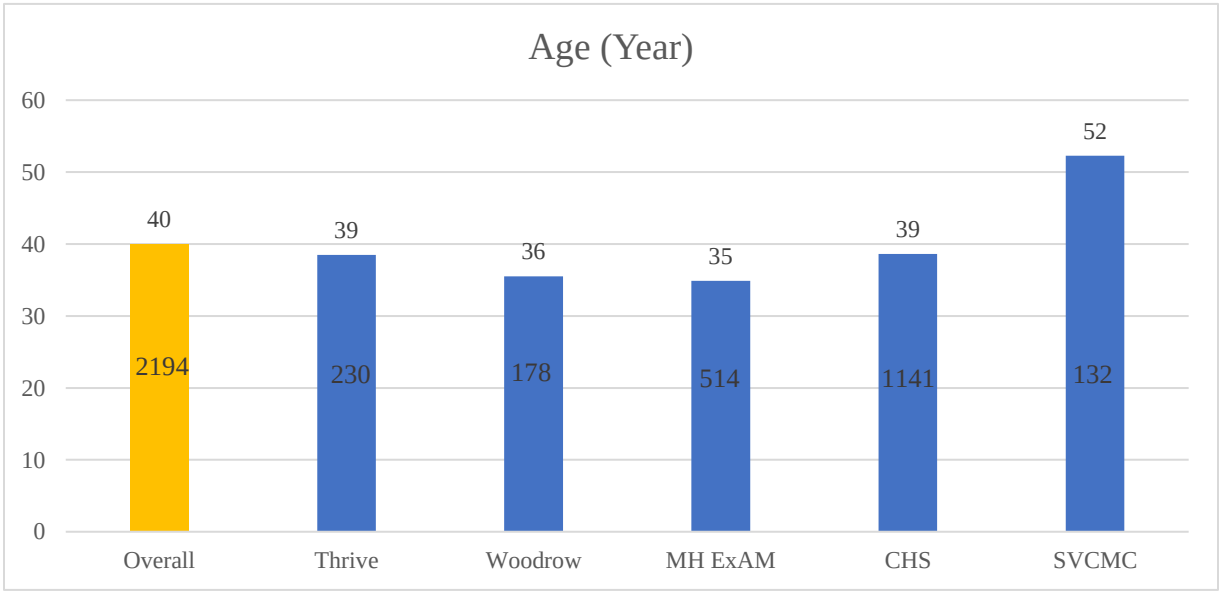
Overall characteristics for the clients served by the OD2A partner agencies are provided. This report includes separate sections for each agency as there are differences in activities, and primary indicators across the agencies. For example, each agency uses different indicators for program participation, referral for services, and linkage to care.

Client's Age

Figure 11 shows the age clients across the five agencies. The average age of a client is 40 years. The oldest average age is 52 (SD: 13.36) years for SVCMC and the youngest average age is 35 (SD: 9.00) years for MetroHealth ExAM.

Figure 11

Clients' Average Age Encountered by Partner Agencies



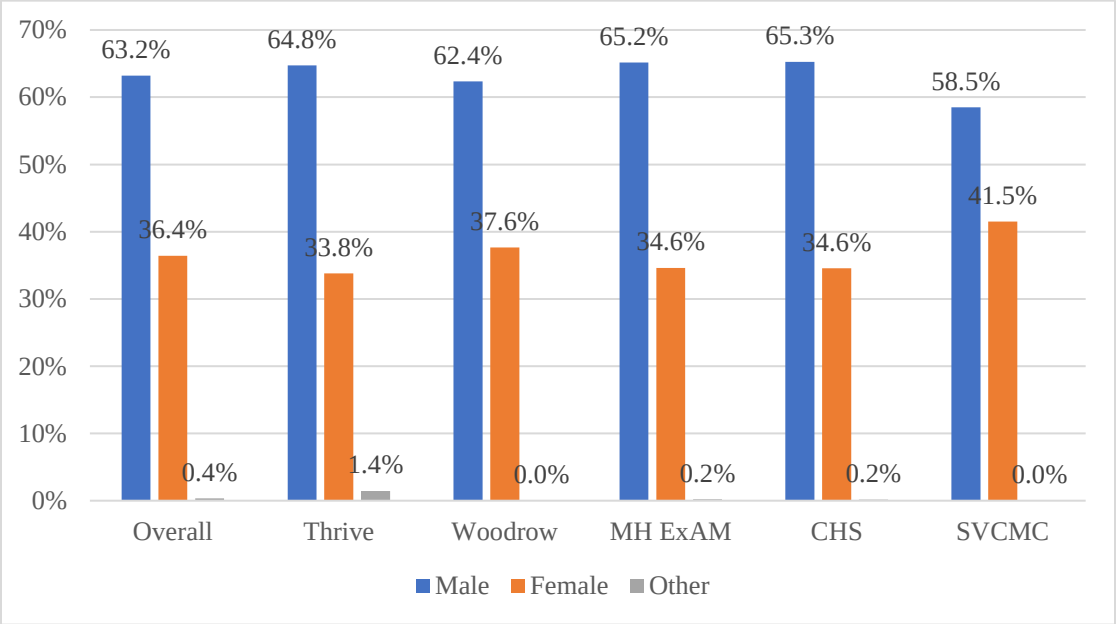
Note: The sample size (*n)* is shown by the number within each bar.
Note: Sample age counts for individuals first visit to CHS since September, 2019

Gender

Figure 12 shows the gender of clients encountered across the five partner agencies. Of those clients whose gender is known, over 60% were male, a third were female.

Figure 12

Gender of Clients Encountered by Partner Agencies



Race and Ethnicity

For clients whose race is known, almost three fourths of the clients encountered are White and approximately 24% of the clients are Black (Figure 13).

Figure 13

Race of Clients Encountered by Partner Agencies

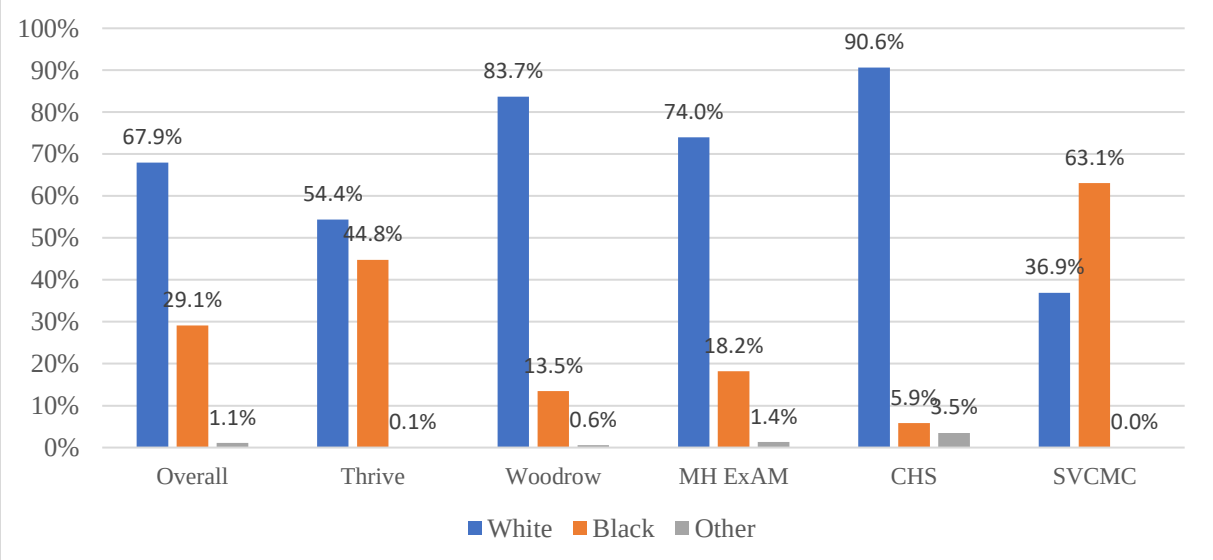
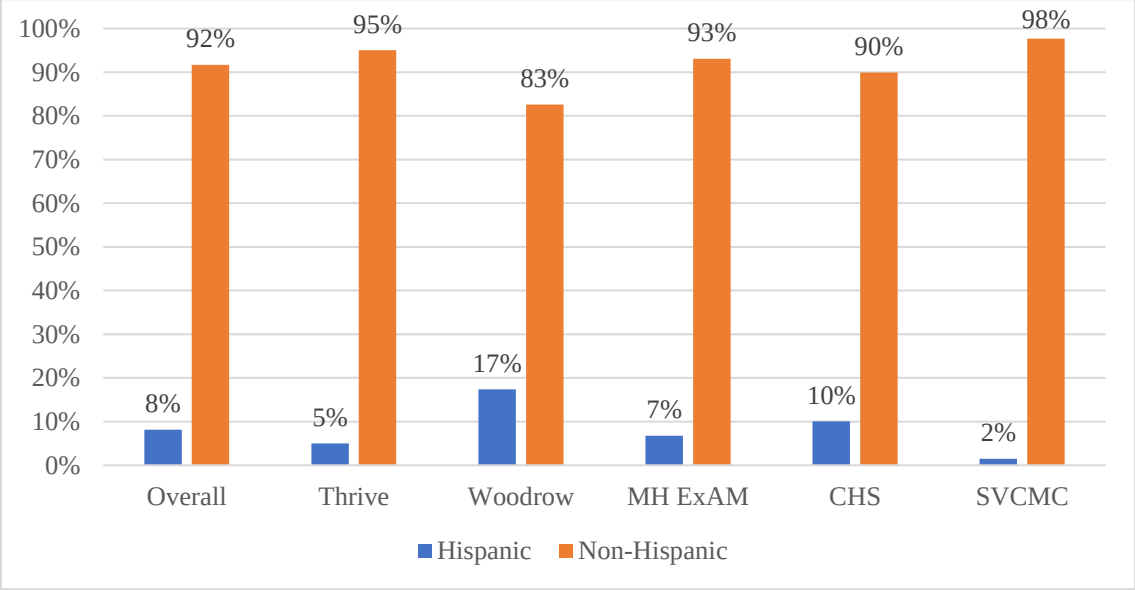


Figure 14 presents the ethnicity of clients encountered by the partner agencies. Of those clients whose ethnicity is known, 92% of the clients are Non-Hispanic, compared to 8% of the clients who are Hispanic.

Figure 14

Ethnicity of Clients Encountered by Partner Agencies



Expand Project SOAR to Lutheran and Lakewood Hospitals and Expand Thrive ED – Woodrow and Thrive

The OD2A project is working to expand peer recovery supporters to assist more individuals in need of treatment services and link them to care. As part of Strategy 6, Thrive will expand peer support in EDs at SVCMC and Woodrow will expand Project SOAR to Lutheran and Lakewood Hospitals. The evaluation question for these activities is ***whether the expansion and enhancement of peer recovery supporters in local hospitals increases the ability to engage and link clients who have experienced a nonfatal overdose into treatment.***

Thrive Key Indicators

Thrive peer supporters connect directly with individuals (or their family or friends), if they agree to speak with the peer supporter, who present in the ED with a behavioral health diagnosis (particularly OUD) in the SVCMC ED (regular and psychiatric) to ensure awareness of and connection to treatment and other medical and/or social services in the community. Thrive continued to make progress by hiring two additional peer recovery supporters and worked with one ED/hospital in peer recovery support-client linkage. When peer support is required, on-call staff is notified and arrive at the ED within 30 minutes to meet with the patient.

Table 21

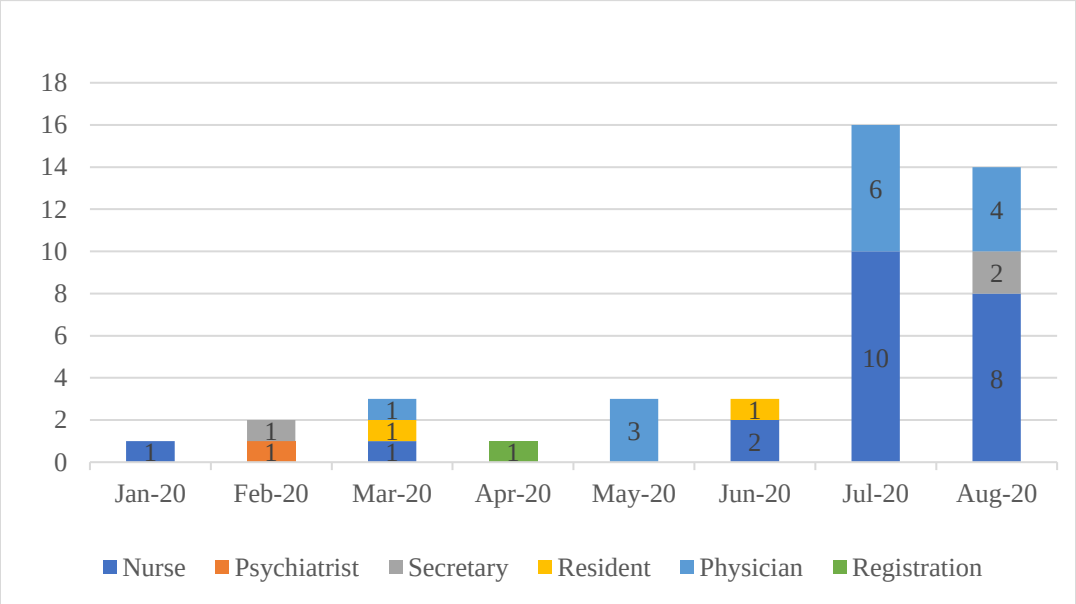
Short-Term and Intermediate Outcomes for Thrive Peer Recovery Support Services

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of support personnel trained on linkage programs and services	Data not previously collected	↑10%	75	Achieved: Since data was not previously collected any number would represent an increase.
Increase the average time spent by peer recovery supporters with clients	Data not previously collected	↑10%	65 mins (average)	Achieved: Since data was not previously collected, any time spent would represent an increase.
Increase notifications to peer recovery supporters of potential clients (Encounter)	Data not previously collected	↑10%	230	Achieved: Since data was not previously collected, any encounters would represent an increase.
Increase the number of clients who agreed to participate in the peer recovery program (Engage)	Data not previously collected	↑10%	197	Achieved: Since data was not previously collected, any participation would represent an increase.
Increase the number of clients referred to treatment services by peer recovery supporters (Refer)	Data not previously collected	↑30%	132	Achieved: Since data was not previously collected, any referrals would represent an increase.
Number of clients linked with treatment (Link)	Data not previously collected	↑10%	63	Achieved: Since data was not previously collected, any linkages would represent an increase.

During Year One, Thrive trained ED staff in peer support services (n = 43) (Figure 15).

Figure 15

Thrive Staff Trained by Month from January 1, 2020 to August 31, 2020



Encounter/Engagement in Program Services

During Year One, Thrive came into contact with 230 individuals who presented at the ED (Figure 16). Thrive peer supporters are notified by ED staff of individuals with a behavioral health diagnosis (particularly OUD). Data is only available for those individuals for whom Thrive received a referral. It is unknown at this time whether there were other individuals who experienced an overdose and came to SVCMC ED, but for whom Thrive peer recovery supporters received no referral, and were therefore unable to track. This additional data would allow more insight into those who may be overlooked for treatment intervention. It is important to note that more ED patients may be referred in Year 2, since Thrive will have 24-hour coverage, up from 12 hours during Year One. **Of those individuals encountered by Thrive peer support staff, 86% agreed to participate in peer support services *(*n = 197).** Only 14% of individuals with whom Thrive had contact declined to work with a peer supporter (n = 33).

Figure 16

Encounter/Engagement in Thrive Services from October 1, 2019 to August 31, 2020

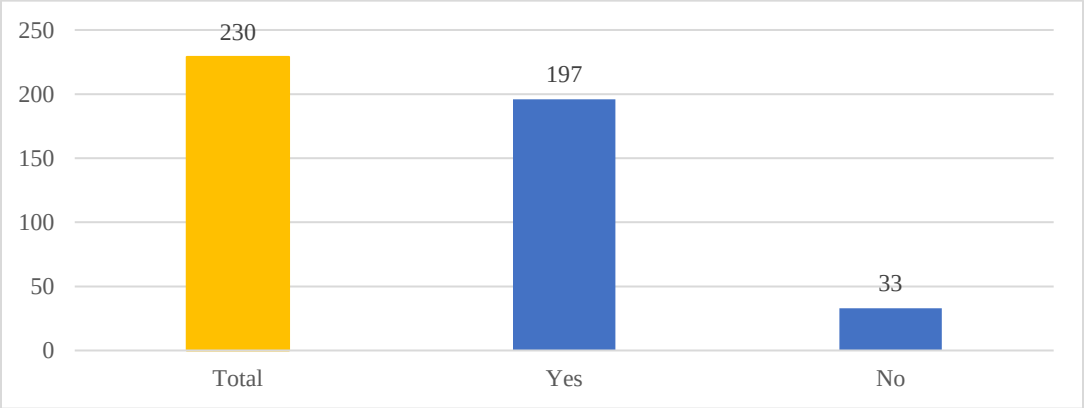
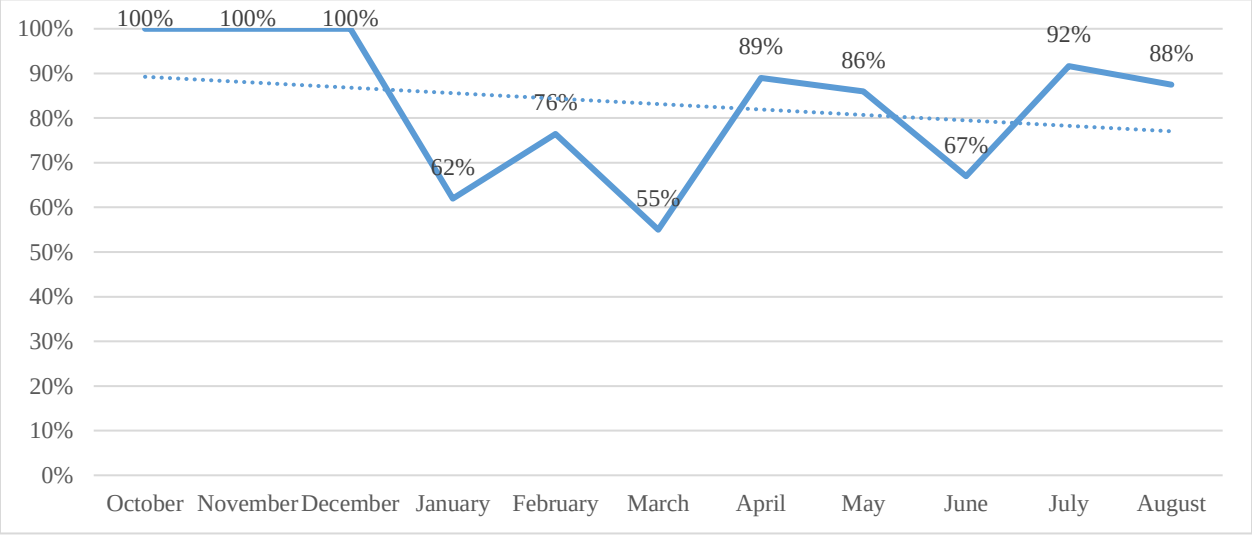


Figure 17 represents the trend line for individuals agreeing to receive peer support services. From October to December of 2019, all (100%) of the individuals Thrive encountered at the ED agreed to peer support services. However, from January to March 2020 the percentage declined, but then increased to 89% in April 2020 and 86% in May 2020. While a slight decline occurred in June, the percentage of successful encounters increased in July and August above the overall average of 86%.

Figure 17

Percentage of Individuals Each Month Who Agreed to Thrive Peer Support Services from October 1, 2019 to August 31, 2020

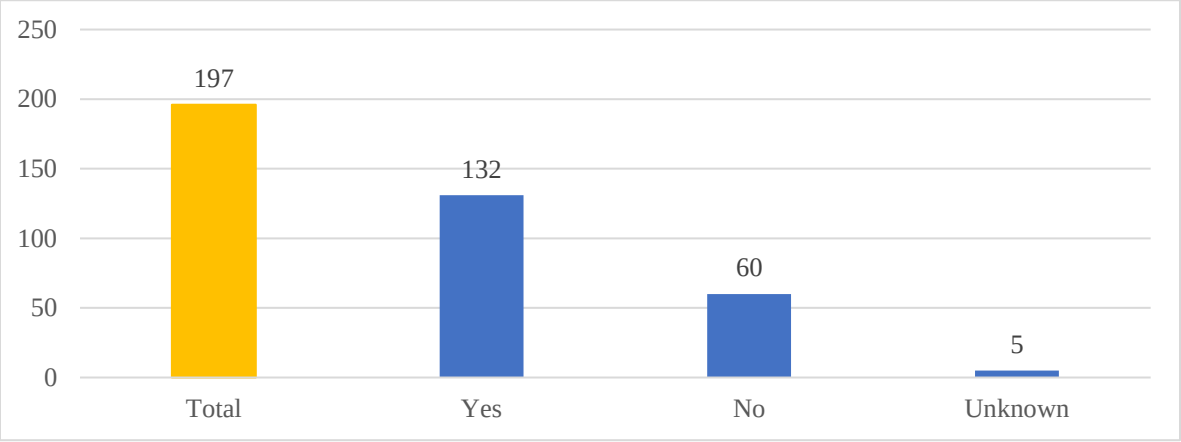


Referral to Treatment Services

From October 2019 to August 31, 2020, more than half of the individuals who agreed to work with Thrive Peer Support Specialists were referred for treatment services (67%, n = 132) (Figure 18).

Figure 18

Clients Referred for Treatment by Thrive from October 1, 2019 to August 31, 2020



Of those individuals who were referred to treatment, approximately 45% (n = 59) were referred to more than one treatment service, while 55% (n = 73) were referred to a single service such as detox (Table 22). Of those individuals referred to care, 71% were referred to detox (n = 94), 52% to Inpatient (n = 69), 20% to Outpatient (n = 26), 13% to Medication Assisted Treatment (n = 17), and 14% to Non-Professional Interventions (n = 18).

Table 22

Thrive Treatment Referrals by Type from October 1, 2019 to August 31, 2020

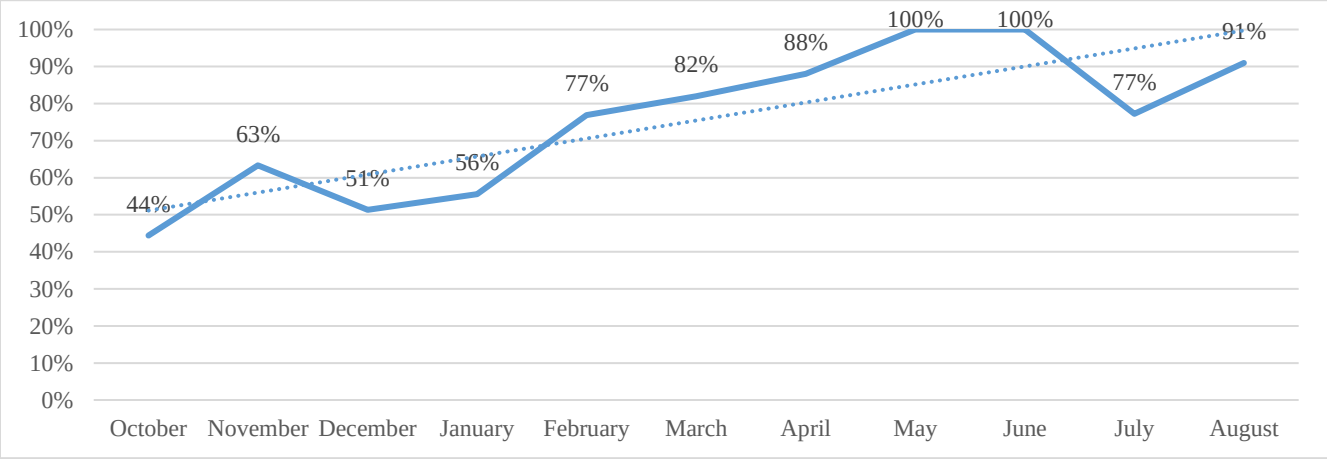
Types of Referrals for Treatment	Count Per Client		Multiple Cases by Client
	Single- N	%	Multiple- Ns
Multiple Referrals	59	44.7	
Detox	43	32.6	94
Inpatient	18	13.6	69
Non-Professional (AA, etc.)	3	2.3	18
Outpatient	8	2.3	26
Medication Assisted Treatment (MAT)	1	0.8	17
Total	132	100.0	224[a]

a: Clients could be referred to more than one service.

Figure 19 represents the trend line for referrals to treatment as a percentage of individuals engaged by Thrive in the ED setting. **The trend since October 2019 has generally shown increases in the percentage of individuals engaged who are referred for treatment services.**

Figure 19

Thrive Treatment Referrals Trend Line by Month from October 1, 2019 to August 31, 2020

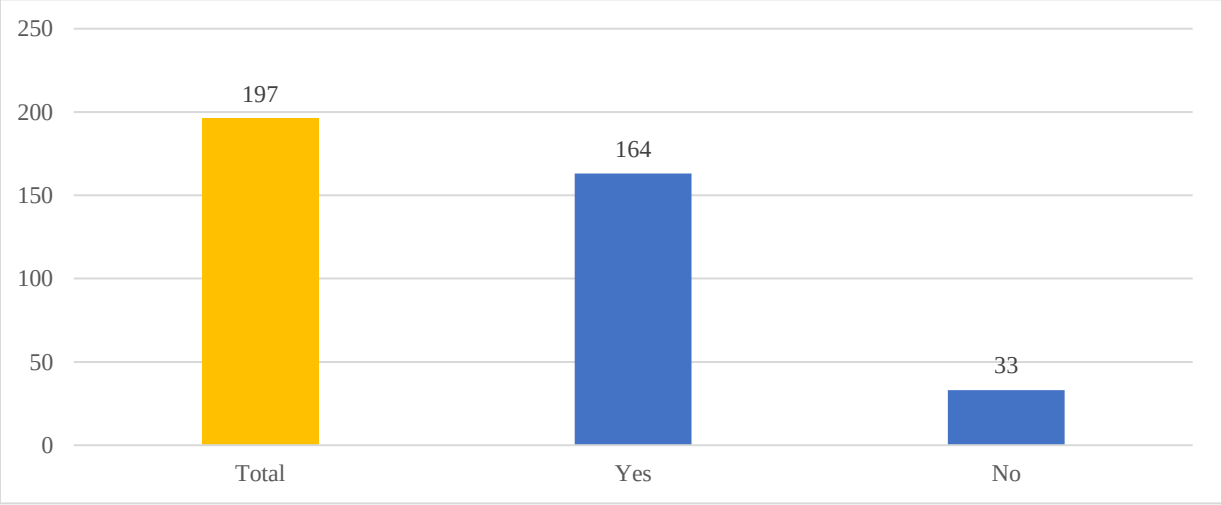


Referral to Other Services

In addition to referrals for treatment services, many Thrive clients were referred for other services (83%, n = 164) (Figure 20).

Figure 20

Number of Clients Referred to Other Services by Thrive from October 1, 2019 to August 31, 2020



The majority of the non-treatment referrals were for community peer support, housing and shelters and Aid to Dependent Children/Temporary Assistance for Needy Families (ADC/TANF)/Food Pantries/Food Stamps (Electronic Benefit Transfer (EBT) card) (Table 23). Please note a client could have been referred for more than one type of non-treatment service.

Table 23

Thrive Client Referrals for Other Services from October 1, 2019 to August 31, 2020

Other Service Referrals	Multiple Cases by Client	
	Multiple- Ns	% of referrals
Community Peer Support	157	68.3
Housing/ Shelters	17	7.4
ADC/TANF/Food Pantries/Food Stamps (EBT card)	13	5.7
Transport assistance	11	4.8
Other Services (Mobile/Catholic Charities etc.)	9	3.9
Clothing	7	3.0
Employment/Education Services	6	2.6
Legal assistance	3	1.3
Medicaid/Medicare assistance	3	1.3
Driver's license; state ID; birth certificates; social security	2	0.9
SSI/SSD	2	0.9
Total	230[a]	100.0

a: Clients could be referred to more than one service.

Linkage to Treatment

Of those clients who were referred to treatment (n = 132), less than half of clients (48%, n = 63) were known to have linked with treatment services (Figure 21). Of these clients, about 27% (n = 17) were linked to more than one treatment service, while 73% (n = 46) of clients were linked to a single treatment service such as detox (Table 24). **Of those individuals linking to care, 78% of the clients were linked to detox (n = 49), 36% to Inpatient (n = 23), 13% to Outpatient (n = 8), 5% to Medicine Assisted Treatment (n = 3), and 3% to Non-professional or "other" treatments (n = 2)**.

Figure 21

Thrive Linkage to Care from October 1, 2019 to August 31, 2020

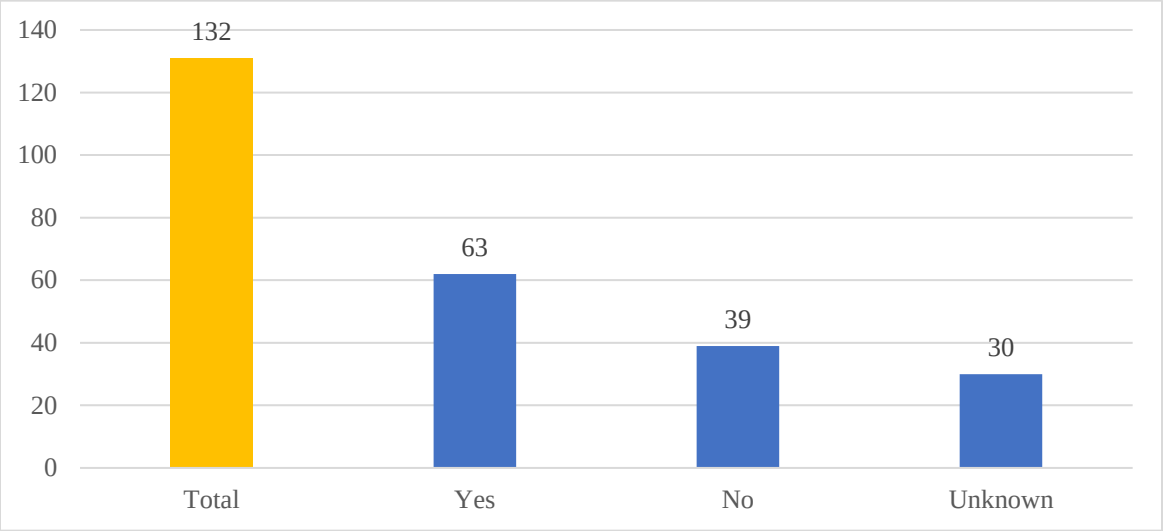


Table 24

Treatment Linkages Types from January 1, 2020 to August 31, 2020

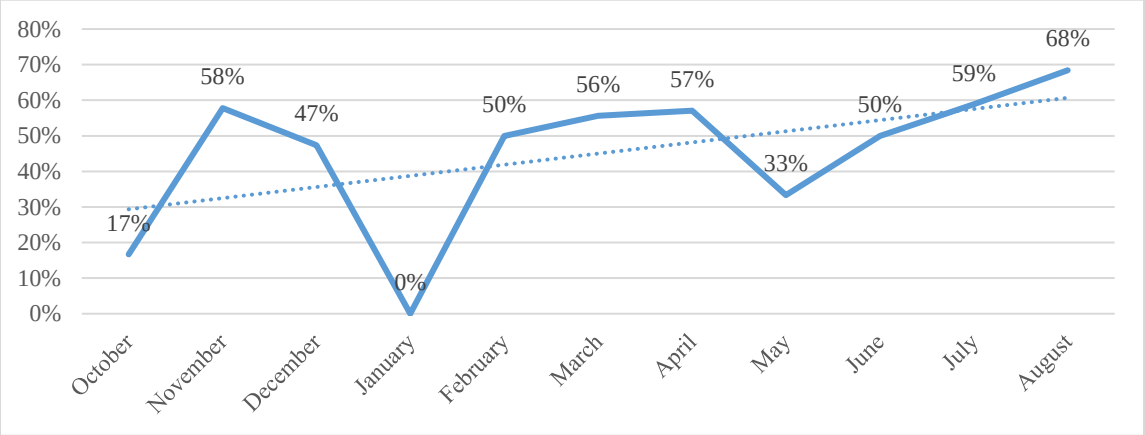
Types of Linkage to Treatment	Count Per Client		Multiple Cases by Client
	Single- N	%	Multiple- Ns
Multiple-Linkages	17	27.0	
Detox	34	54.0	49
Inpatient	7	11.1	23
Non-Professional (AA, etc.)	1	1.6	1
Outpatient	3	4.8	8
MAT	1	1.6	3
Other			1
Total	63	100.0	85[a]

a: Clients could be referred to more than one service.

Figure 22 represents the trend line for the percentage of Thrive clients linked to treatment. The overall trend line slightly increased during the last reporting period. **During the last quarter, linkage to care increased 18%.**

Figure 22

Thrive Linkage to Care Trend Line by Month from October1, 2019 to August 31, 2020



Thrive clients cited varied reasons for not linking with a referred treatment service. The majority of unlinked clients declined to engage in treatment (n = 8). Other reasons included clients only wanting community peer support (three clients), limited beds (n = 3), and unknown (n = 14). Other reasons for clients not linking with treatment services are listed below (Table 25). Information about why clients were not linked with treatment services was not reported prior to January 2020.

Table 25

Reasons Why Client did not Link with Treatment Services from January 1, 2020 to August 31, 2020

Types of Reasons	Frequency	%
Unknown	14	35.9
Client did not want to engage in treatment	8	20.5
Client only wanted community peer support	3	7.7
There were no beds available for client	3	7.7
Client had insurance issues	2	5.1
Client was admitted to the hospital	2	5.1
Client was referred to a non-professional	2	5.1
There were scheduling issues when client was waiting for linkage	1	2.6
Client denied substance abuse issue	1	2.6
Client was referred to another treatment facility before linkage	1	2.6
Client was non-compliant with medical/mental health medication	1	2.6
Client was under the influence	1	2.6
Total	39	100.0

Transportation to Treatment

Thrive offers transportation services to all individuals that qualify for services after completing the initial screening survey. Out of the total eligible individuals, Thrive transported 38 people to treatment.

Woodrow Key Indicators

Woodrow uses a peer recovery supporter on-call model called Project SOAR. Project SOAR provides services in the Cleveland Clinic Lakewood ED and Cleveland Clinic Lutheran Hospital ED. Although Woodrow continued to expand Project SOAR and provide peer support services during the first year, recently it has been doing so virtually due to concerns about COVID-19. Lakewood and Lutheran EDs have received iPads programmed to call a SOAR phone that is in-service 24 hours, seven days per week. The individual will then be connected directly with a peer recovery supporter.

Table 26

Short-Term and Intermediate Outcomes for Woodrow Peer Recovery Services

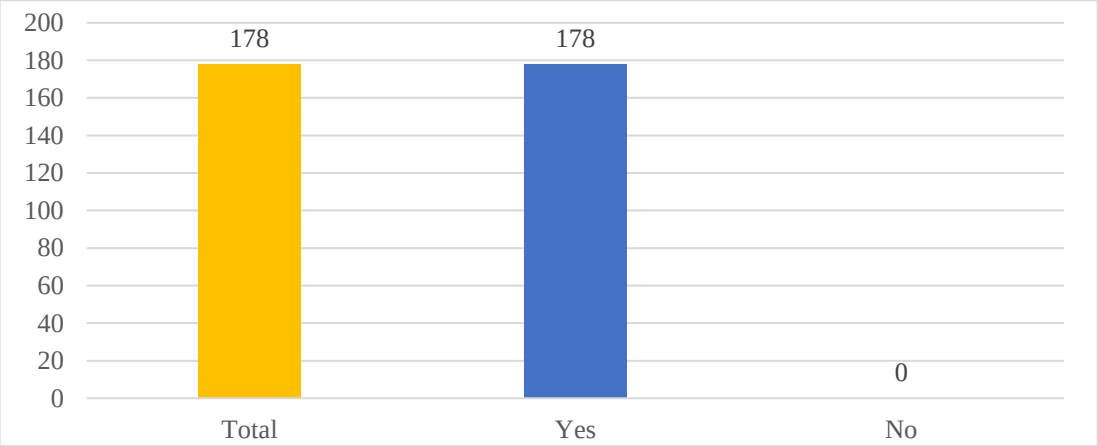
Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of support personnel trained on linkage programs and services	Data not previously collected	↑10%	30	Achieved: Since data was not previously collected, any number would represent an increase.
Increase the average time spent by peer recovery supporters with clients	Data not previously collected	↑10%	117 mins (average)	Achieved: Since data was not previously collected, any time spent would represent an increase.
Increase notifications to peer recovery supporters of potential clients (Encounter)	Data not previously collected	↑10%	178	Achieved: Since data was not previously collected, any encounters would represent an increase.
Increase the number of clients who agreed to participate in the peer recovery program (Engage)	Data not previously collected	↑10%	178	Achieved: Since data was not previously collected, any participation would represent an increase.
Increase the number of clients referred to treatment services by peer recovery supporters (Refer)	102	192	174	91%
Number of clients linked with treatment (Link)	Data not previously collected	↑10%	150	Achieved: Since data was not previously collected, any linkages would represent an increase.

Encounter/Engagement in Program Services

During this last year Woodrow encountered a total of 178 individuals who presented at the ED (Figure 23). Data are only available for those individuals for whom Woodrow received notice of agreement to talk to them. It is unknown at this time whether there were other individuals who experienced an overdose and came to Lakewood or Lutheran EDs, but for whom Woodrow peer recovery supporters received no notice, and were therefore unable to track. This additional data would allow more insight into people who may be overlooked for treatment intervention. **Since October 2019, all 178 of the clients agreed to participate in peer support services (100%).**

Figure 23

Encounter/Engagement in Woodrow Peer Support Services from October 1, 2019 to August 31, 2020



Referral to Treatment Services

Since October 2019, almost all of Woodrow's clients were referred for treatment services (98%, n = 174) (Figure 24)[1].

[1] One additional client was referred and linked to non-professional treatment; however, the client was ineligible for opioid-related treatment and therefore not reported in Figure 25.

Figure 24

Clients Referred to Treatment by Woodrow from October 1, 2019 to August 31, 2020

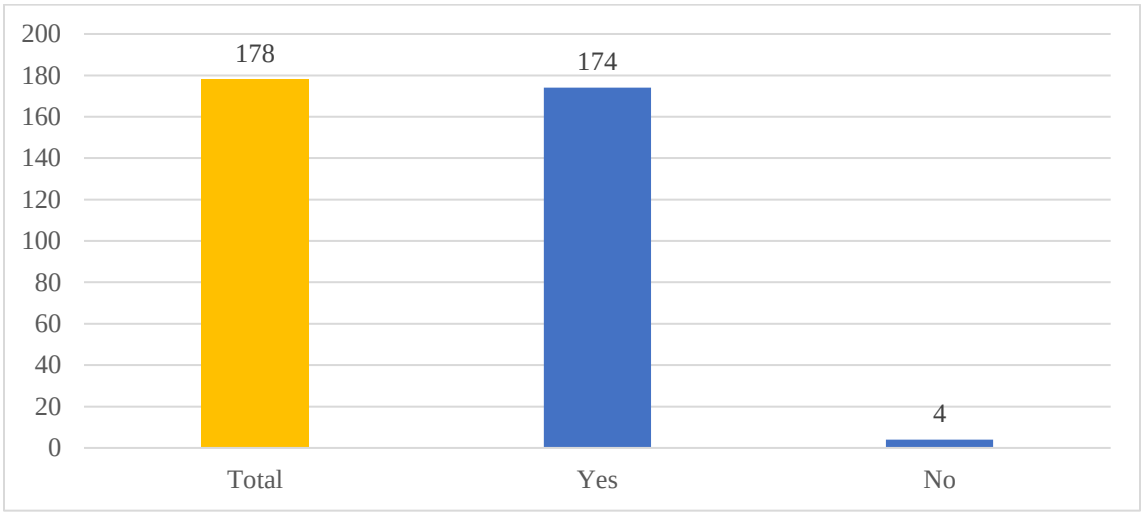
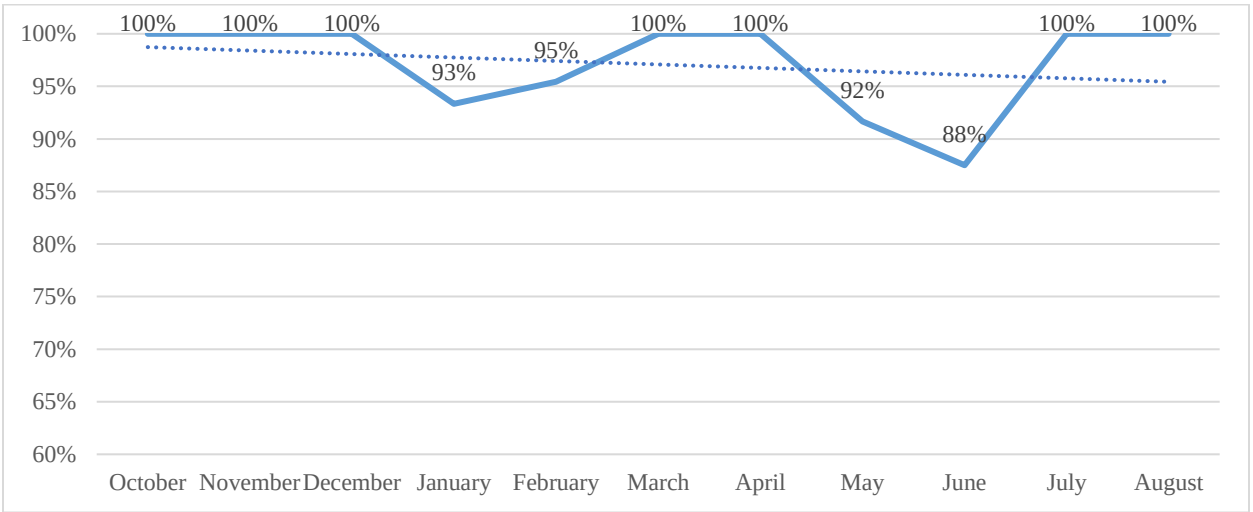


Figure 25 represents the trend line for Woodrow clients referred to treatment by month. From October to December 2019, all of Woodrow's clients were referred to treatment. There was a slight decrease from January to March 2020, however, referrals improved in April. During May and June 2020, referrals decreased to 88% but recovered in July and August to 100%.

Figure 25

Clients Referred to Treatment by Woodrow from October 1, 2019 to August 31, 2020



Of those individuals who agreed to peer recovery services, approximately 44% (n = 77) were referred to more than one treatment service, while 56% (n = 97) were referred to other services such as detox (Table 27). Of those individuals referred to treatment, the majority (92%) were referred for detox (n = 161), while 40% were referred to Inpatient (n = 69), 4% to Outpatient (n = 7), 7% to other treatments such as MAT or Recovery Housing (n = 13), and 1% to Non-professional treatments (*n* = 2).

Table 27

Woodrow Treatment Referrals by Type from October 1, 2019 to August 31, 2020

Types of Referrals for Treatment	Count Per Client		Multiple Cases by Client
	Single- N	%	Multiple- Ns
Multiple-Referrals	77	44.3	
Detox	89	51.2	161
Non-Professional (AA, etc.)	2	1.2	2
Outpatient	2	1.2	7
Inpatient	0	0	69
Other	4	2.3	13
Total	174	100.0	252[a]

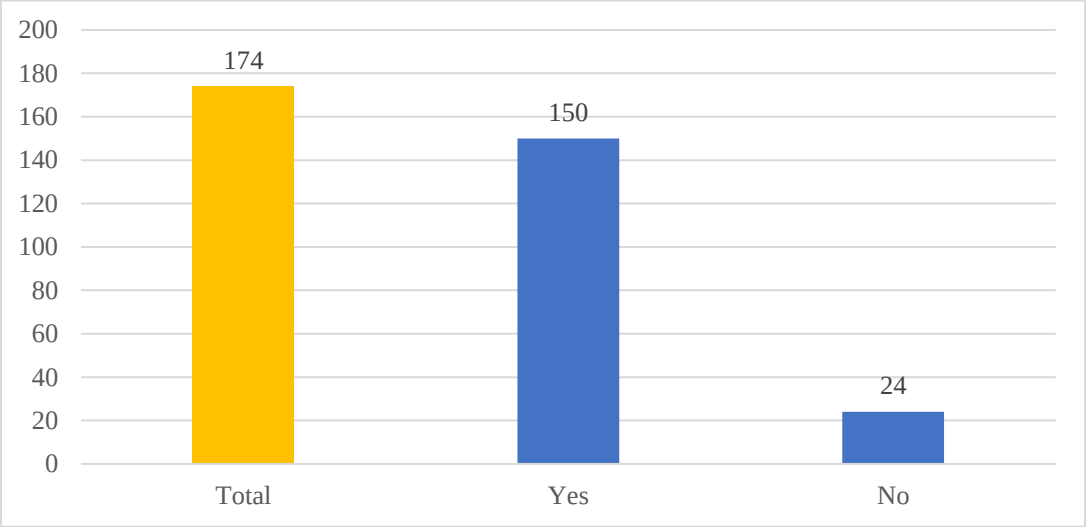
a: Clients could be referred to more than one service.

Linkage to Treatment

Of those clients who were referred to treatment (n = 174) (Figure 26), the majority were linked with treatment services with an overall success rate of 86% (n = 150).

Figure 26

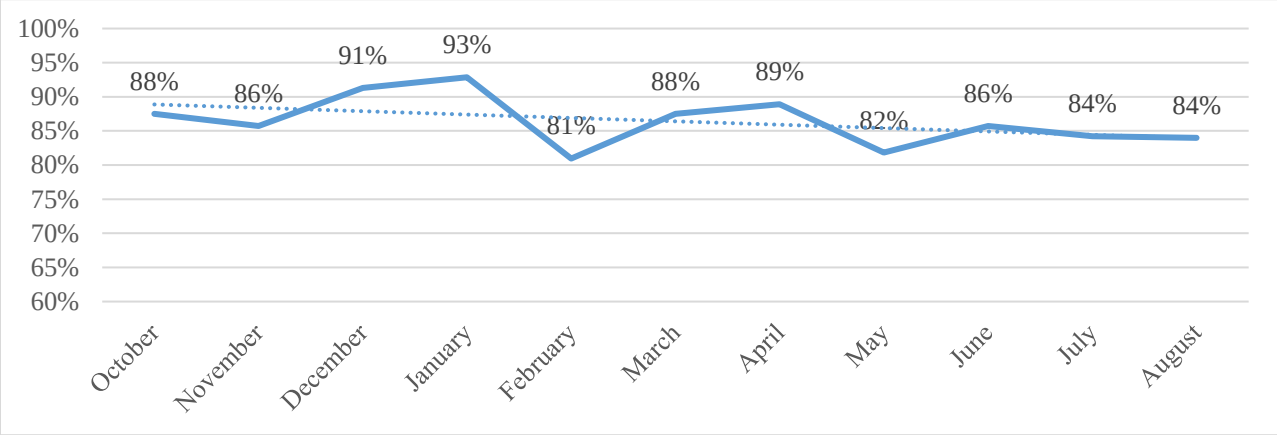
Woodrow Clients Linkage to Care from October 1, 2019 to August 31, 2020



The trend line graph (Figure 27) shows relatively consistent high rates for clients who linked with treatment services over the last year. The majority of clients were linked with treatment services (86%) but the trend line decreased in the last quarter of 2020 by 2%.

Figure 27

Trend line for Linkage to Care by Month for Woodrow Clients from October 1, 2019 to August 31, 2020



Of those clients who linked to treatment, about 48% (n = 71) were linked with more than one treatment service, while 52% (n = 78) of clients linked to only one type of treatment such as detox (Table 28). **The majority of Woodrow clients were linked with Detox (92%) (n = 137), while 5% were linked to Outpatient (n = 8), 9% to other treatments such as MAT or Recovery Housing (n = 13), and 1% to Non-professional treatments (n = 1).**

Table 28

Linkage to Treatment Services for Woodrow Clients from October 1, 2019 to August 31, 2020

Types of Linkage for Treatment	Count Case Per Client		Multiple Cases by Client
	Single- N	%	Multiple- Ns
Multiple-Linking	71	47.7	
Detox	71	47.7	137
Other	4	2.7	13
Outpatient	2	1.3	8
Non-Professional (AA, etc.)	1	.7	1
Total	149	100.0	159[a]

a: Clients could be referred to more than one service.

Reasons why clients did not link with treatment services varied. The majority of the clients who did not link with treatment services left the ED before Woodrow staff could link them with treatment services (n = 8). Other reasons included clients wanting to detox on their own (n = 2), needing a Spanish speaking placement (n = 2), and not wanting to wait too long for a linkage to care (n = 2). Other reasons for clients not linking with treatment services are listed below. Information about why clients were not linked with treatment services was not collected prior to January 2020 (Table 29).

Table 29

Reasons Woodrow Clients were not Linked to Treatment from October 1, 2019 to August 31, 2020

Client Reasons for not Linking with Treatment Services	Frequency	%
They left prior to a placement being made	8	33.3
They decided they wanted to detox on their own	2	8.3
They were unable to place them because of a lack of a Spanish-speaking program	2	8.3
They did not want to wait too long for linkage	2	8.3
They did not qualify for treatment. They were referred to non-clinical	1	4.2
They refused treatment	1	4.2
They denied substance abuse issues	1	4.2
They stated they had other treatments already set up	1	4.2
They had a negative drug test	1	4.2
They could not be accommodated due to use of external medical device	1	4.2
They were under the influence	1	4.2
They refused treatment after learning about placement	1	4.2
Unknown/ Missing	2	8.3
Total	24	100.0

Transportation to Treatment

Woodrow offers transportation to treatment to all individuals who are not already transported through the hospital service. As of August 31, 2020, Woodrow transported 45 clients to treatment.

Enhance Awareness and Outreach Efforts of Syringe Service Program - CHS

As part of Strategy 6, CHS is working to enhance awareness and outreach efforts of its SSP. CHS has expanded its outreach services within its SSP by providing better linkages to care for the drug-using community who visit their mobile sites. Care Coordinators work with SSP program participants to provide referrals for treatment and linkages for basic needs. The evaluation question for this activity seeks to examine ***whether the enhancement of care coordinators involved with SSP in Cuyahoga County increases the county's ability to engage individuals misusing opioids into treatment.*** To enhance their outreach efforts, CHS equipped a van for SSP, launching the service in February 2020.

Table 30

Short-Term and Intermediate Outcomes for SSP Care Coordination

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase number of agencies referring clients to SSP	10	TBD	Data currently not available	Unknown
Number of clients who were approached about SSP Care Coordination (Encounter)	Data not previously collected	↑10%	2,057	Achieved: Since data was not previously collected any number would represent an increase.
Number of clients who engage with the SSP Care Coordinator (Engage)	707	↑10%	1,166	Achieved: 65% increase
Increase number of clients referred to treatment services by SSP Care Coordinator (Referred)	707	↑30%	1,166	Achieved: 65% increase
Number of clients linked with MAT treatment (Link)	Data not previously collected	↑10%	28	Achieved: Since data was not previously collected any linkage would represent an increase.

During the last year, CHS created 20 new marketing materials for the SSP. Two flyers that were created in March specifically address concerns around COVID-19, "Syringe Services and Harm Reduction Provider Operations During the COVID-19 Outbreak" and "Safer Drug Use During the COVID-19 Outbreak". These flyers are included in Appendix 4. COVID-19 restrictions limited SSP services from March through June, reducing the number of clients seen each month. CHS has since reopened with full services on the west side of Cleveland, and the van has been outfitted for social distancing. As of June, Project DAWN did not have enough support staff to provide Project DAWN kits on site. Clients visiting SSP locations, however, are given flyers

with information on Project DAWN locations. In-person training has been on hold since March and has not yet resumed.

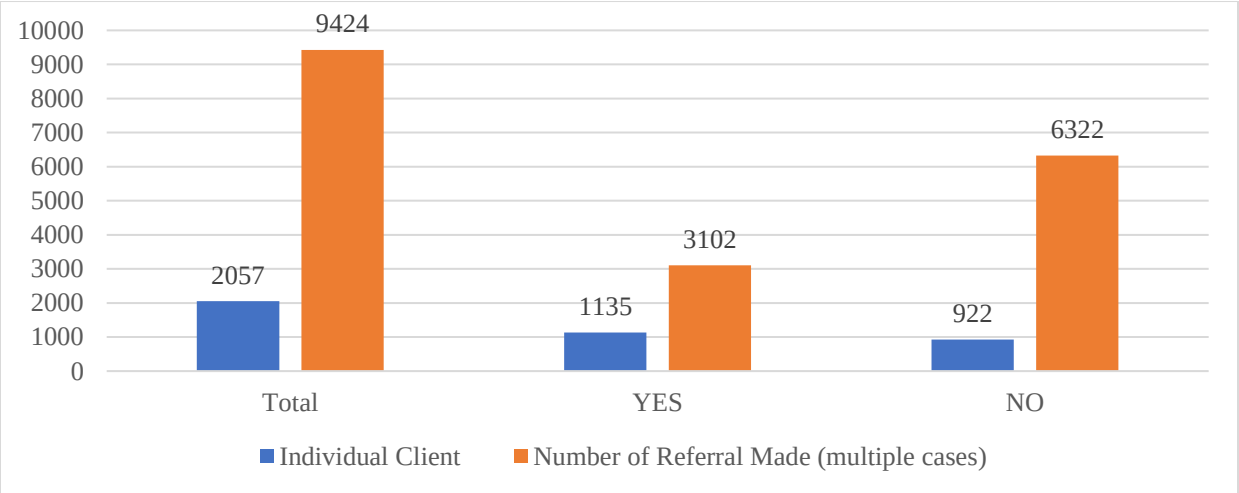
CHS's SSP Care Coordination is not specifically designed to refer individuals for treatment services; however, through the OD2A grant program, CHS care coordinators will talk with clients who are interested, and provide information on and referrals to treatment services. Referrals include all types of services such as treatment for Substance Use Disorder (SUD), medical needs and wound care. CHS's additional activities such as Project DAWN are also reported beginning in April 2020.

Encounter/Engagement in Program Services and Referrals to Treatment

During Year One, the SSP served a total of 9,424 persons, consisting of 2,057 unique individuals. Of these unique individuals, slightly over half agreed to talk with the SSP care coordinator at least once (55%, n = 1,135). The SSP care coordinators discussed treatment services with these individuals on a number of occasions during the year (n = 3,102) as a person could have come to the van more than once and agreed to discuss treatment options. All individuals who interact with the SSP care coordinators are referred for treatment services (n = 1,135). Of the 922 unique individuals who did not want to speak with a Care Coordinator, they participated in the SSP over 6,000 times during Year One (n = 6,322) (Figure 28).

Figure 28

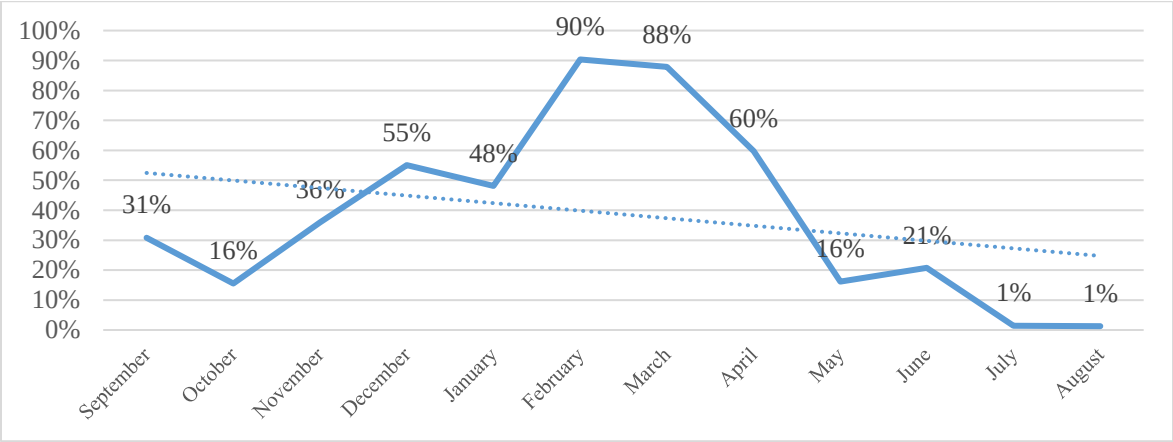
Encounter/Engagement of Clients and Referrals for Treatment from September 2019 to August 2020



Referrals for treatment peaked in February and March (February: 796 out of a total of 881 clients, March: 685 out of a total 780 clients). The lowest rate of referral occurred in the last quarter (June: 188 out of 905 clients; July: 24 out of 1,648 clients; and August: 23 out of 1,813 clients). Reasons for these low rates of referral for treatment are currently being explored.

Figure 29

CHS Clients Referred for Treatment by Month



Of those clients who were referred to care, 73% (n = 1,166) of the clients were referred to more than one type of treatment service, while 27% (n = 426) of the clients were referred to only one type of treatment such as detox (Table 31). The majority of CHS clients were linked with Detox (96%) (n = 1533), while 70% were linked to Inpatient (n = 1,122), and 70% to Outpatient (n = 1,114).

Table 31

CHS Client Referrals by Treatment Type from September 1, 2019 to August 31, 2020

Types of Referrals for Treatment	Count Per Client		Multiple Cases by Client
	Single- N	%	Multiple- Ns
Multiple Referrals	1166	73.2	
Detox	387	24.3	1533
MAT	20	1.2	116
Medical	9	.5	121
Dental	5	.3	530
Outpatient	2	1.1	1114
Inpatient	0	0	1122
Behavioral Health	1	.1	68
Abscess Treatment	1	.1	18
Prep	1	.1	19
Emergency Department	0	0	11
Total	1592	100.0	4652 [a]

a: Clients could be referred to more than one service.

Linkage to Treatment Services

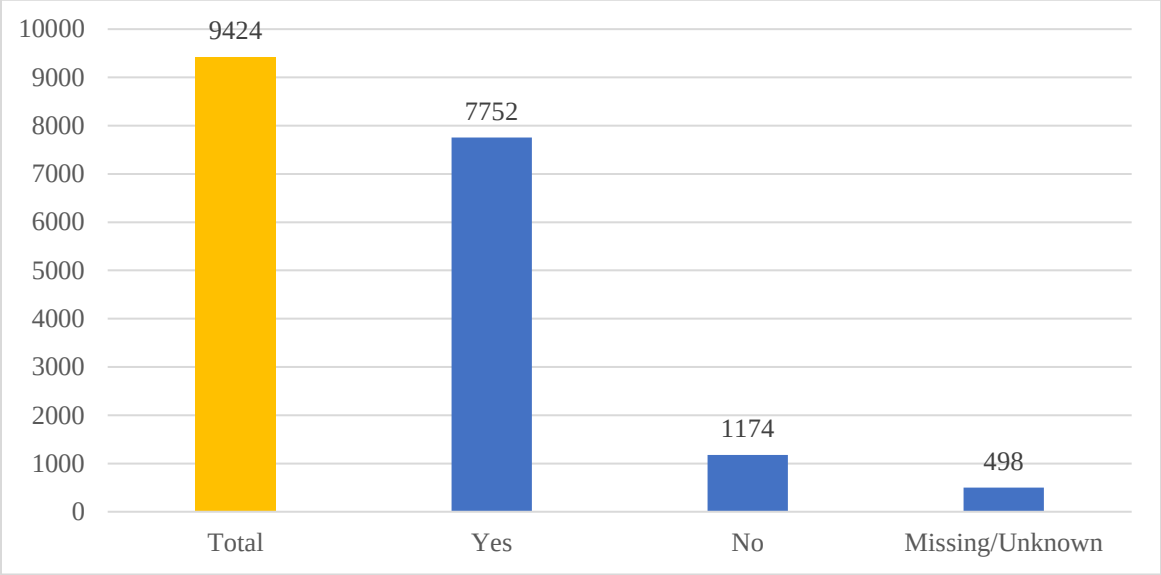
For the OD2A Initiative, CHS does not have the ability to track all linkages to services, except for linkages with community-based MAT. CHS began reporting this information in May of 2020. From May through August 2020, 28 individuals involved in SSP's Care Coordination linked with MAT.

Project DAWN Kits

As part of the SSP, individuals are asked if they have a Project DAWN kit. The following data includes all individuals who participated in SSP (n = 9,424) and not only those who agreed to meet with a care coordinator. In the last year, the majority of clients at the time of encounter had a Project DAWN kit (82%, n = 7,752). The number of client encounters does not represent the number of unique clients as clients may have interacted with CHS staff on more than one occasion. Less than a quarter of clients did not possess a Project DAWN kit (12%, n = 1,174) (Figure 30).

Figure 30

CHS Clients who Possessed a DAWN Kit at Time of Encounter from September 1, 2019 to August 31, 2020

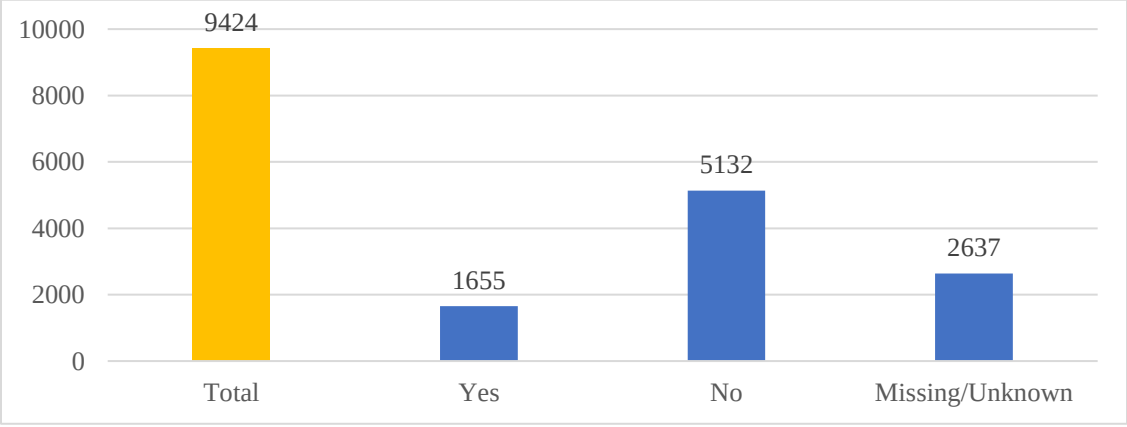


Naloxone Prior Use

During the last year, 1,655 individuals reported that they had used naloxone to reverse an overdose. This number does not represent unique clients as clients were likely asked this question each time they came to the SSP. **Over half of the individuals reported not using naloxone (54%, n = 5,132)** (Figure 31).

Figure 31

CHS Clients' Naloxone Use from September 1, 2019 to August 31, 2020

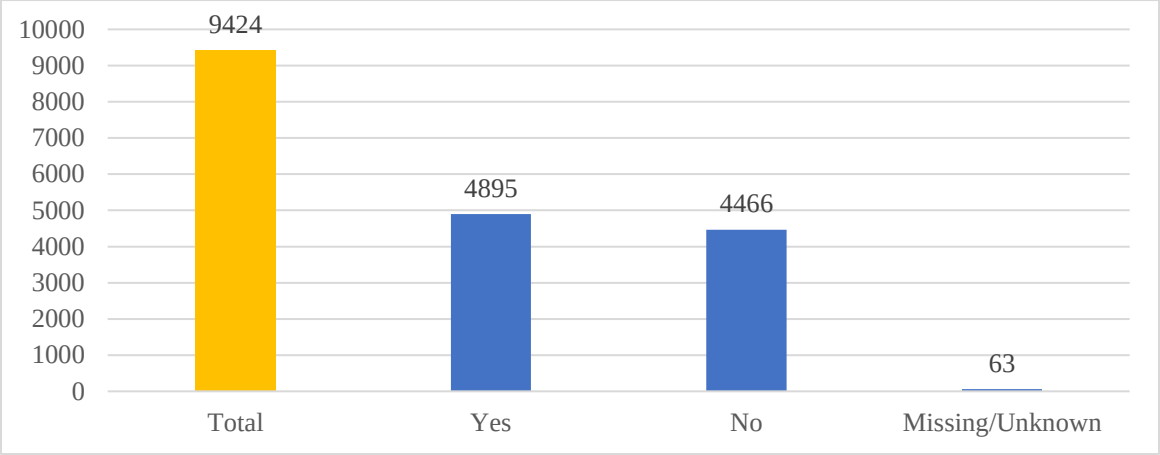


Referrals to Project DAWN

Almost half of the individuals participating in SSP received a referral to Project DAWN (n = 4,895) (Figure 32). Clients could be referred more than once so this number does not represent unique clients. Project DAWN provides prevention and educational information to clients as well as naloxone.

Figure 32

CHS Project DAWN Referrals from September 1, 2019 to August 31, 2020

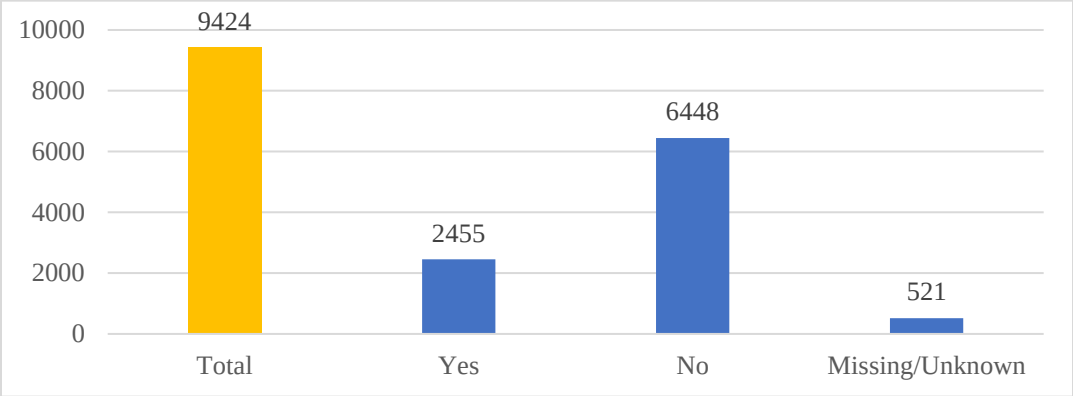


Previous Overdose

Figure 33 shows that in the last year slightly more than a quarter of the encounters with individuals participating in the SSP services reported experiencing an overdose (26%, n = 2,455). It is unknown whether the individuals responding have overdosed more than once or are reporting the same overdose at multiple visits.

Figure 33

CHS Encounters Reporting Previous Overdoses from September 1, 2019 to August 31, 2020



ED Visit After Overdose

In addition to asking individuals if they have previously overdosed, CHS also asks individuals if they went to the ED. Since individuals frequent the SSP more than once an individual could be asked these questions on multiple occasions. It is therefore unknown whether the individual has visited the ED more than once for an overdose or is reporting the same ED experience at multiple visits. Figure 34 shows the number of encounters by SSP where the individual reported going to the ED following an overdose (72%, n = 1,763).

Figure 34

Reports of Going to ED for a Previous Overdose from September 1, 2019 to August 31, 2020

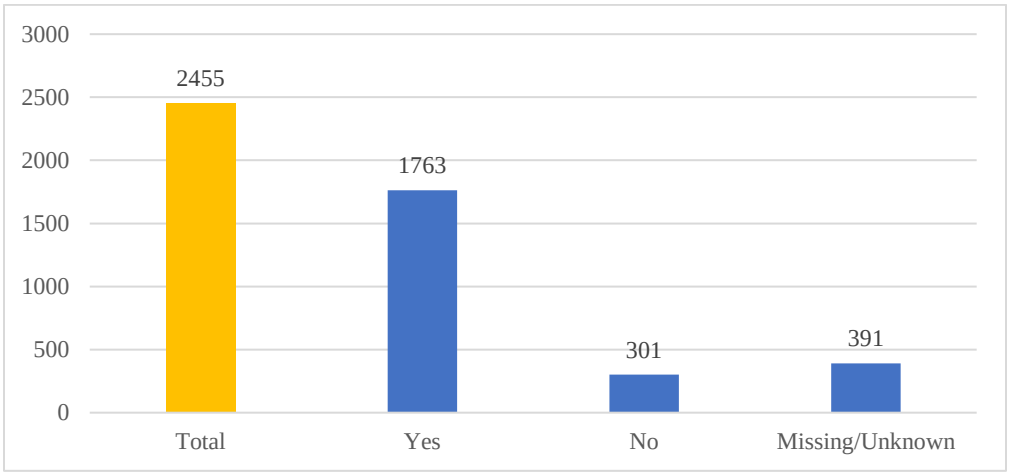


Table 32 summarizes responses for individuals who have reported an overdose. Although the data cannot tell us the actual number of overdoses individuals experienced, it does tell us the number of individuals frequenting the SSP who reported a past nonfatal overdose. **In the last**

year, 850 individuals reported an overdose and of those individuals, 654 reported going to the ED (77%). A small percentage reported not going to the ED after an overdose (8%, n = 65), and information regarding whether they went to the ED was missing for a number of individuals (15%, n = 131).

Table 32

Individuals Reporting an Overdose and ED Admission from September 1, 2019 to August 31, 2020

Reported Previous Overdose	Reported Emergency Department Admission for Overdose	Total Count		Individual Number of Cases	
		N	%	N	%
Yes	Missing/Unknown	391	15.9	131	15.4
Yes	No	301	12.3	65	7.6
Yes	Yes	1,763	71.8	654	76.9
Total		2,455	100.0	850	100.0

Incorporate SBIRT Training and Practice into Existing Primary Care Operations - St. Vincent Charity Medical Center

St. Vincent Charity Medical Center (SVCMC) is utilizing SBIRT in their health center to increase the identification of patients needing treatment services. The evaluation question for this activity is ***whether the use of SBIRT in EDs increases the identification of participants in need of treatment services***.

Table 33

Short-Term and Intermediate Outcomes for SBIRT Program

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of support personnel trained on linkage programs and services	Data not previously collected	↑10%	55	Achieved: Since data was not previously collected, any number would represent an increase.
Increase the number of facilities adopting the SBIRT as a means to link participants with treatment services	Data not previously collected	↑10%	2	Achieved: Since data was not previously collected, any number would represent an increase.
Increase the number of patients who are given initial SBIRT screening (Encounter)	Data not previously collected	2,175/yr.	130	6%
Increase the number of patients who are given the secondary SBIRT Screening (Engage)	Data not previously collected	↑10%	125	Achieved: Since data was not previously collected, any participation would represent an increase.
Number of patients referred for treatment services after SBIRT screening (Referred)	Data not previously collected	↑50%	122	Achieved: Since data was not previously collected, any referrals would represent an increase.
Number of patients linked with treatment (Link)	Data not previously collected	↑10%	48	Achieved: Since data was not previously collected, any linkages would represent an increase.

SVCMC has begun providing SBIRT to patients in its Health Care Center (HCC) (primary and specialty care clinic) and to all inpatients of its Medical Center. At this time, the SBIRT program is being offered to individuals who are committed to in-patient hospitalization. Despite a

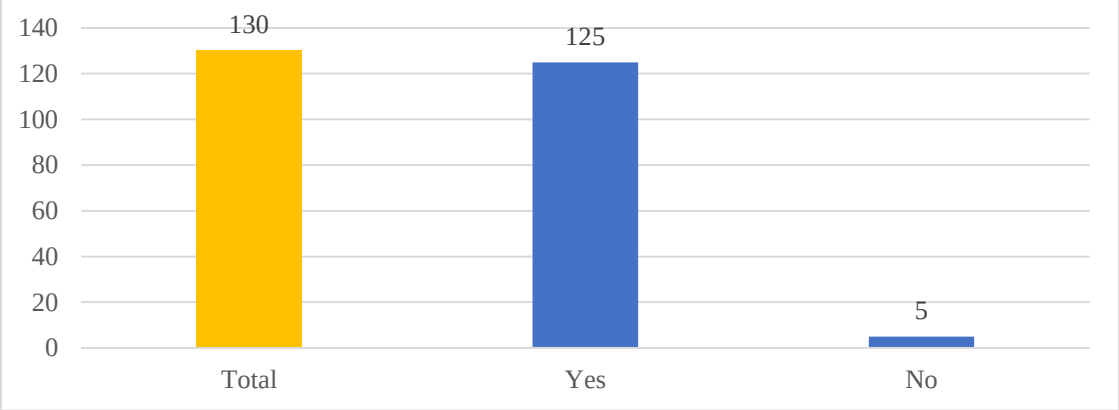
decrease in patients due to COVID-19, staff have been hired and the SBIRT program is moving forward.

Encounter/Engagement in Program Services

During the last year, SVCMC SBIRT Team approached 130 patients in the in-patient setting about participation in SBIRT. **Of the total patients approached, 96% agreed to the initial screen (n = 125).** Only five patients declined to participate (4%) (Figure 35). The program began screening patients in April of 2020.

Figure 35

Encounter/Engagement in SBIRT Services from April 1, 2020 to August 31, 2020



From April to May 2020 there was a 13% decrease in participation. However, from June to August 2020 rates improved to 100% (Figure 36).

Figure 36

SVCMC Patients Who Agreed to the SBIRT by Month from April 1, 2020 to August 31, 2020

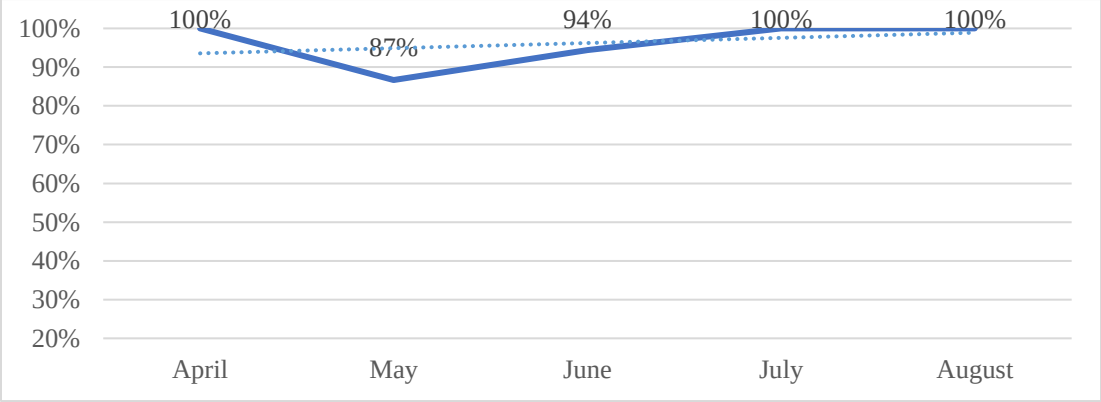


Table 34 summarizes the reasons patients chose not to receive an initial screening and included four responses. The primary reason was the patients' denial of drug and alcohol use (50%). The other two reasons included; did not want to engage or wanted to get sober on their own (50%).

Table 34

Client Reasons for Not Agreeing to Participate in SBIRT Team Services

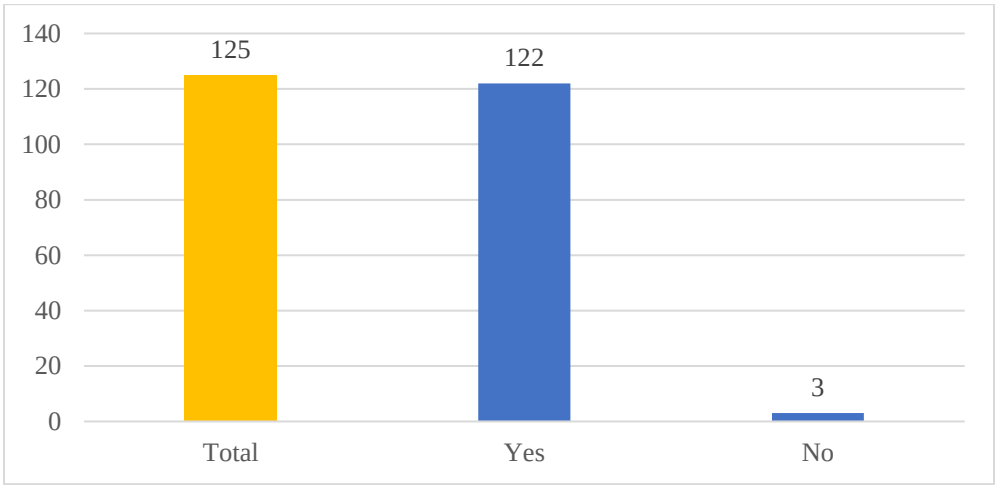
Reasons for not agreeing with SBIRT Case Worker services	Frequency	%
Did not want to engage	1	25.0
Wants to get sober on their own	1	25.0
Denied drug or alcohol use	2	50.0
Total	4	100.0

Referral to Treatment Services

Of those patients who agreed to the initial screening and received a secondary screen, 121 out of 125 patients were referred for general treatment services (97%) (Figure 37). SVCMC refers patients for treatment services provided by a professional treatment agency and does not refer to other treatment services such as Narcotics Anonymous (NA).

Figure 37

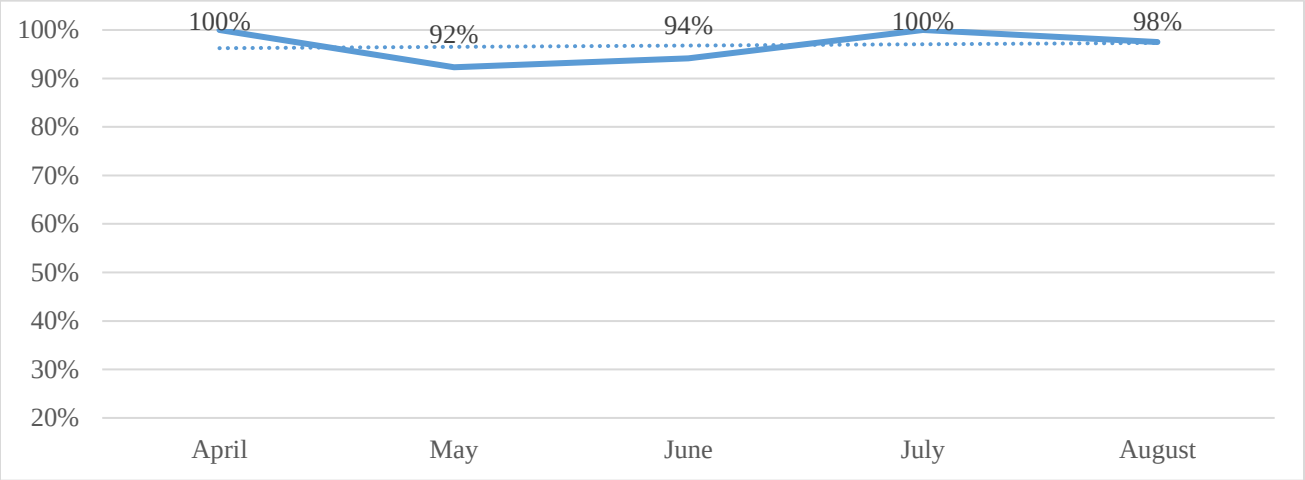
Patients Referred by SBIRT Team for Treatment Services from April 1, 2020 to August 31, 2020



From April to May there was an 8% decrease in referrals but a 6% increase from May through August (Figure 38).

Figure 38

SVCMC Patients Referred to Treatment by Month



Of those patients who were referred to treatment, about 5% (n = 6) of the patients were referred to more than one treatment service, while 95% (n = 112) of patients were referred to only one type of treatment service such as outpatient services (Table 35). Of those individuals referred to treatment, 42% of the referrals were for Outpatient services (n = 49), 24% were referred to Crisis/Inpatient services (n = 29), and 37% to "other" types of treatment services (n = 44).

Table 35

SVCMC Patient Referrals for Treatment Services from April 1, 2020 to August 31, 2020

Types of Referrals for Treatment	Count Per Client		Multiple Cases by Client
	Single- N	%	Multiple- Ns
Multiple Referral	6	5.1	
Crisis/Inpatient	28	23.9	29
Other	40	33.9	44
Outpatient	43	36.5	49
Non-Professional (AA/NA)	1	.85	
Total	118	100.0	123 [a]

a: Patients could be referred to more than one service.

Patients who Agreed to Treatment Referrals from SBIRT Team

In addition to tracking the number of patients referred for treatment services, SVCMC also tracks the number of patients who accepted the referral for treatment. Of the 122 patients referred for treatment by the SBIRT Team, over half of the patients (52%) agreed to the referral (n = 63)

(Figure 39). Figure 40 depicts the number of patients who agreed to a referral for treatment by month, an average of 52% over the last five months.

Figure 39

SBIRT Patients who Agreed to a Referral for Treatment Services from April 1, 2020 to August 31, 2020

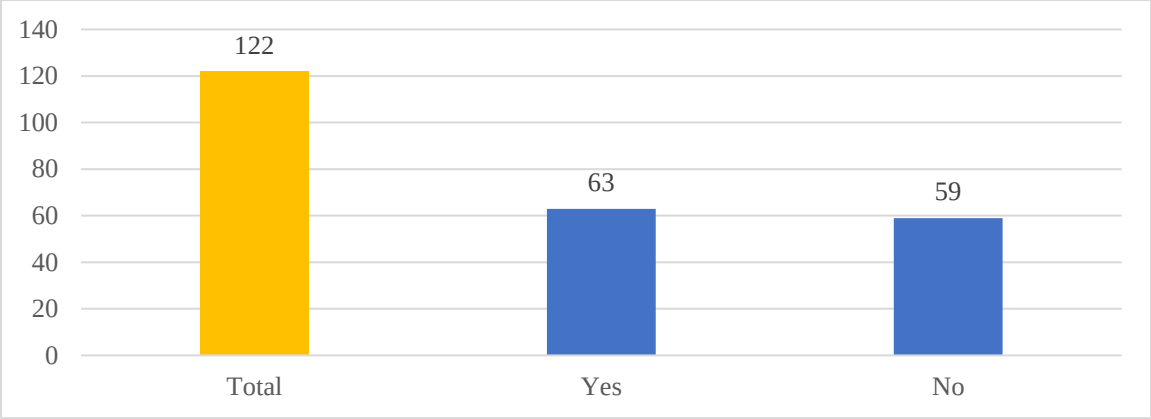


Figure 40

SVCMC Patients that Agreed to a Referral for Treatment by Month from April 1, 2020 to August 31, 2020

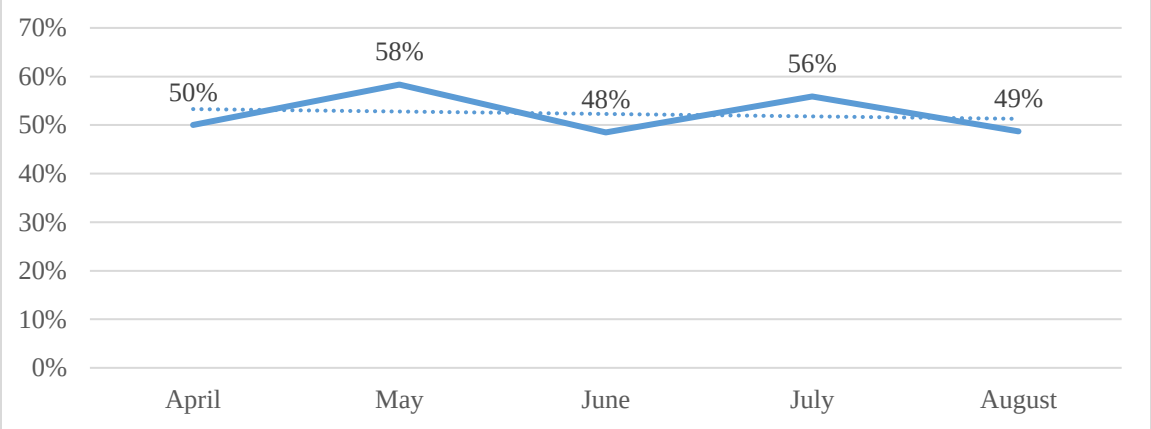


Table 36 summarizes the reasons why patients declined a referral for treatment services; 76% patients indicated they were not interested in receiving treatment at this time (n = 45). During the last year, the SBIRT team also made three attempts to re-engage with patients that had refused treatment (5%).

Table 36

SVCMC Patient Reasons for Declining Referral for Treatment Services

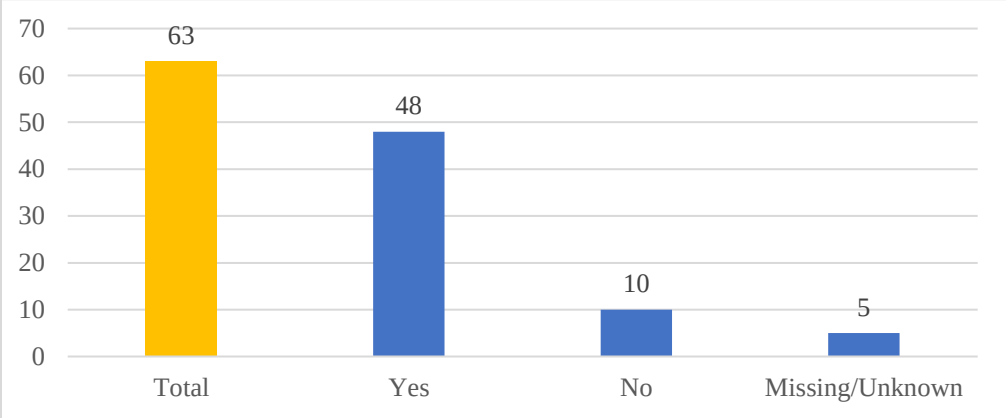
Reasons for not Agreeing to Referral for Treatment	Frequency	%
Not Interested in Treatment	45	76.3
No Time	2	3.3
Other Reason	12	20.3
Total	59	100.0

Linkage to Treatment

For those patients who agreed to a referral for treatment over half (76%, n = 48) of patients were linked to treatment services (Figure 41).

Figure 41

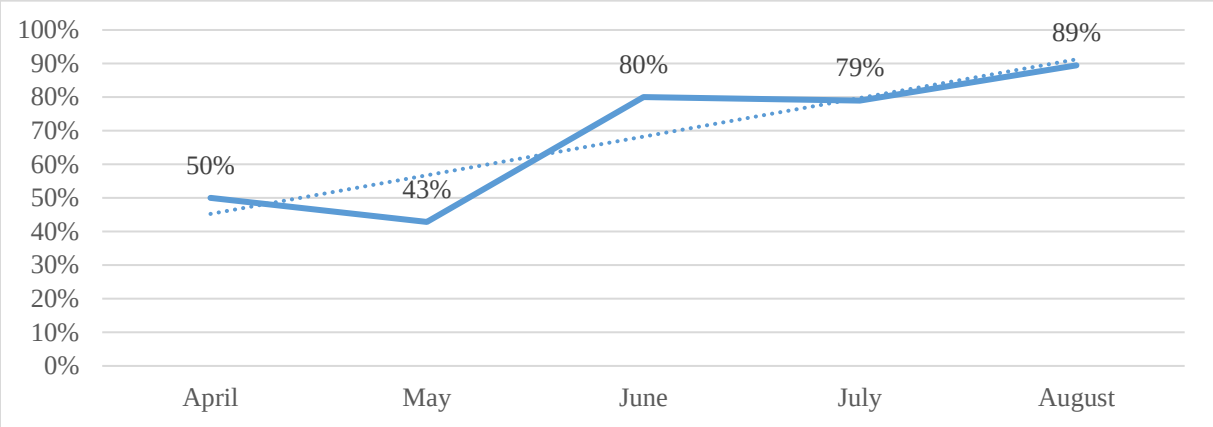
SVCMC Patients Linked to Treatment Services from April 1, 2020 to August 31, 2020



From April to May there was a 7% decrease in linkage to treatment. However, from June to August rates improved to 89% (Figure 42).

Figure 42

SBIRT Patients Linked to Treatment by Month



Transportation to Treatment

All SBIRT patients are offered transportation to treatment. During the first year, 18 patients accepted transportation to treatment.

Increase Warm Handoffs to MAT for At-Risk Populations (ExAM Program) - MetroHealth

The role of MetroHealth in Strategy 6 is to increase warm handoffs to Medication Assisted Treatment (MAT) for at-risk populations as part of the ExAM Program. The program provides MAT to persons incarcerated in the Cuyahoga County Corrections Center. **Warm handoffs to community-based MAT will occur upon the inmates' release from the jail.**

Table 37

Short-Term and Intermediate Outcomes for MetroHealth ExAM Program

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of inmates identified for ExAM Program (Encounter)	414	↑10%	517	Achieved
Increase the number of inmates who participate in the ExAM program (Engage)	414	↑10%	489	Achieved
Increase the number of warm-handoffs to community-based MAT (Refer)	63	↑10%	209	Achieved
Increase the number of clients linked with treatment (Link)	Data not previously collected	↑10%	206	Achieved: Since data was not previously collected, any linkages would represent an increase.

Encounter/Engagement in Program Services

During the twelve-month period from September 2019 to August 2020, 517 inmates at the Cuyahoga County Corrections Center were assessed and approached for participation in the MetroHealth ExAM program. **Out of that total, 95% inmates (n = 489) agreed to participate in the MetroHealth ExAM program, while only 28 inmates declined participation** (Figure 43). In the last year, February and March participation rates were the lowest but increased in April (Figure 44). It is possible this rate of decline was related to COVID-19.

Figure 43

Encounter/Engagement in MetroHealth ExAM Program from September 1, 2019 to August 31, 2020

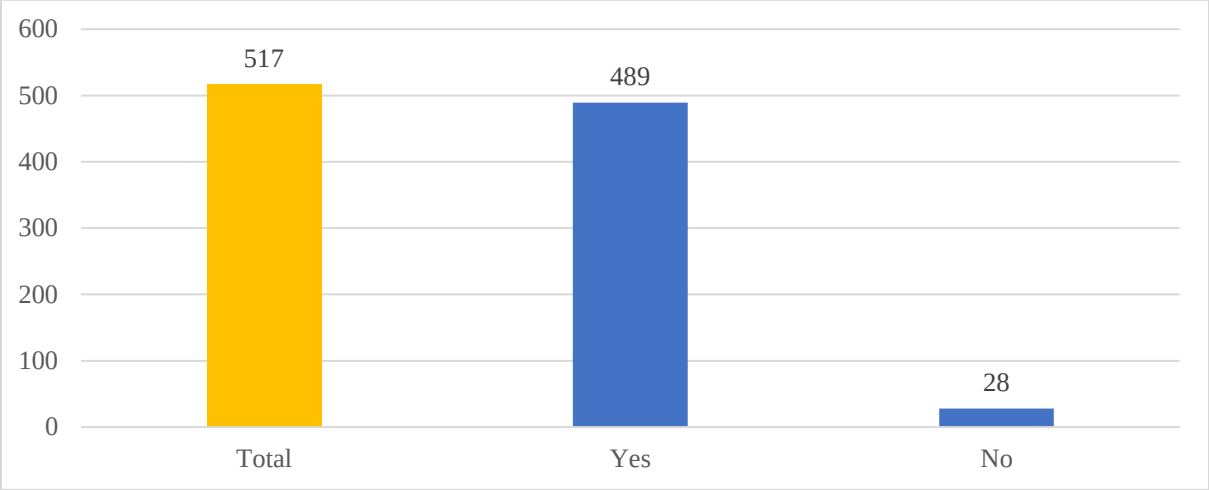
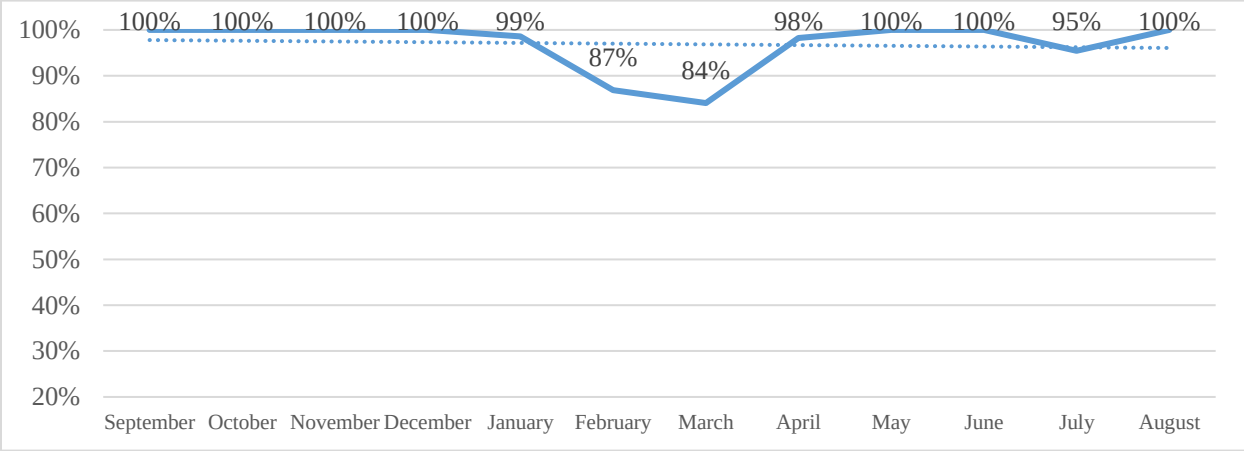


Figure 44

Cuyahoga County Corrections Center Inmates Who Agreed to Participate in MetroHealth ExAM Program by Month



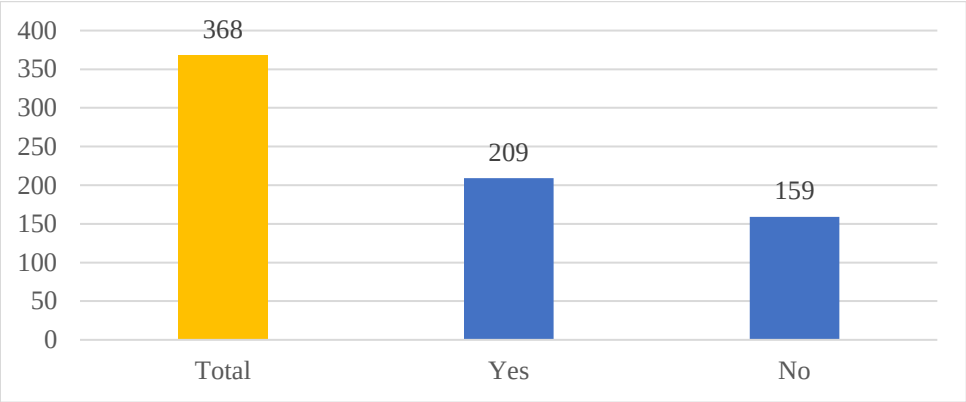
Referral to Treatment Services

Once released from incarceration, inmates will be referred to community-based MAT treatment services. The MetroHealth ExAM program is designed to refer all clients who participate in the program for community treatment services. During this reporting period, 368 inmates were released from jail and of those 209 were referred to community-based MAT (Figure 45). In addition to being referred to treatment by the MetroHealth ExAM program staff, some clients

received information about community treatment services from other inmates; a total of 70 additional referrals.

Figure 45

MetroHealth ExAM Clients Referred to Community Treatment Services from September 1, 2019 to August 31, 2020



Slightly more than half of referrals for community-based MAT were for outpatient treatment (n = 115), and the other half (n = 94) were for Inpatient treatment services (Table 38). All MetroHealth ExAM clients were provided with vouchers for transportation for community treatment services.

Table 38

MetroHealth ExAM Clients Referred for Community Treatment Upon Release from Corrections Center from September 1, 2019 through August 31, 2020

Referral Types to Community Treatment	N	%
Inpatient	94	45.0
Outpatient	115	55.0
Total	209	100.0

Inmates were referred for other community-based services (n = 146) in addition to treatment services (Table 39). The majority of services were for housing/shelters, transportation, and employment education services (n = 128).

Table 39

Types of Referrals for Community-Based Non-Treatment Services from September 1, 2019 to August 31, 2020

Additional Services Referred	Frequency	%
Housing/Shelters	56	29.8
Transport	37	19.7
Employment/Education Services	35	18.6
Identification	17	9..0
Medicaid/Medicare	16	8.5
Clothing	7	3.7
Legal Assistance	7	3.7
ADC TANF Food	5	2.7
Other	4	2.1
SSI/SSD	2	1.1
Children and Family Services	2	1.1
Total	188[a]	100.0

a: Clients could be referred to more than one service.

Linkage to Treatment

In the last year, nearly all of the 209 clients who were referred for community-based MAT treatment services were linked (99%, n = 206) (Figure 46). Figure 47 shows that nearly every month all clients were linked with treatment.

Figure 46

MetroHealth ExAM Clients Linkage to Community Treatment Services from September 1, 2019 to August 31, 2020

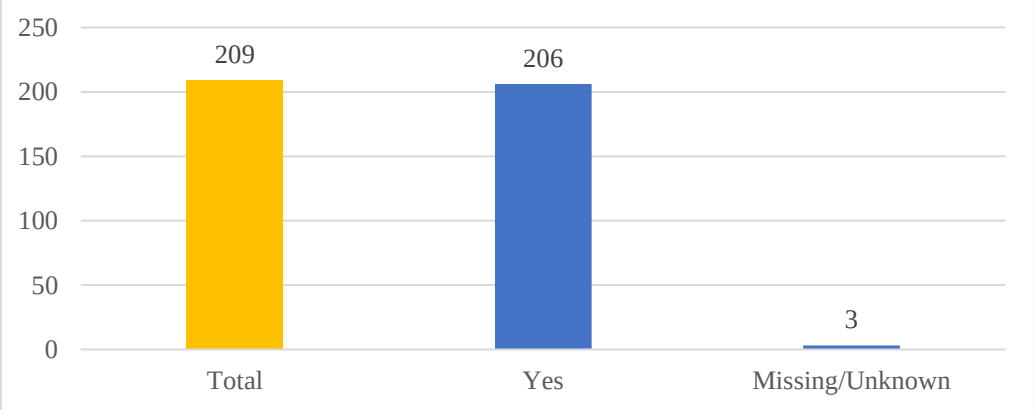
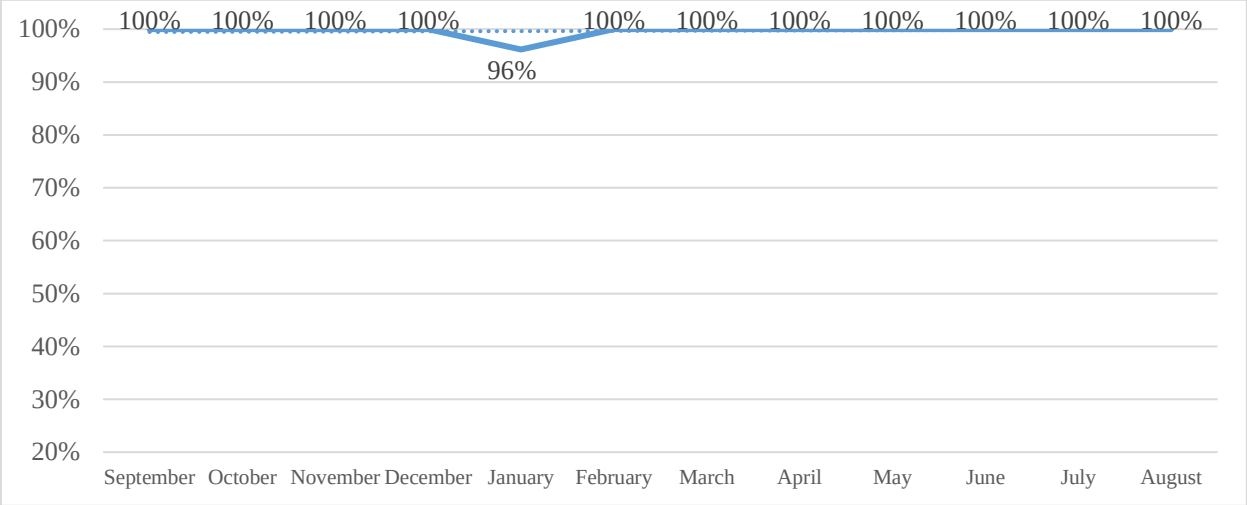


Figure 47

Cuyahoga County Correction Center Inmates in MetroHealth ExAM Program Linked to Treatment by Month



Enhance *drughelp.care* Resource Linkage Tool - CSU

As part of Strategy 6, Cleveland State University (CSU) is working to enhance the *drughelp.care* resource linkage tool. The evaluation question for this activity is ***whether web-based technology is effective in reaching and linking participants to treatment services.*** CSU continues to work on three major activities: (a) refining the web app, (b) registering agencies on the web app, and (c) training first responders to use the web app.

Table 40

Short-Term and Intermediate Outcomes for drughelp.care

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of new agencies registered on the web app	46	96	31	62%
Increase the number of agencies inputting information on web-app	25	↑10%	31/month	Achieved
Increase the number of clients using the web-based app	2,265	↑20%	4,332	Achieved
Increase # of new treatment services included on the web-app	293	↑5%	394	Achieved

Usefulness of Web App

The target number of focus groups to be conducted through the OD2A Initiative is five and in Year One, a total of three focus groups were conducted. CSU intended to do more focus groups but COVID-19 and social distancing orders made it impossible to get stakeholders together in a room to provide feedback on the website.

Web App Enhancements

The new version of the web app was launched in March and is designed to be better suited for laypeople as the older version was for professional use. The new app is also more modern, user friendly, and flexible. The new version seeks to include the following features:

- Graphics including a custom logo
- Easy to understand language (developed through focus groups) regarding substance use treatment
- Educational messages in the form of tooltips, videos, and slides
- A guided navigation to help those who are unfamiliar with substance use treatment
- A Google map for each program/agency location
- A search bar
- Agency self-management of webpage
- Increased accessibility for visually impaired users
- Instantly identify local treatment facilities that have available space through real-time updates
- Addition of an integrated “distance from you” sort feature for search results

Several of these features were integrated into the web app, such as changing the language for ease in navigation and increased comprehension, testing the search bar for functionality, and improving the display to match brand standards. Enhancements made are detailed in Table 41.

Table 41

Enhancements to drughelp.care web app

March	April	May	June	July	August
Template for search boxes created and implemented. Daily updates made as quick and simple as possible. Consolidated emails sent to agencies. Finished changes to make new sites functional. Added Telehealth services. Can update emails and communicate with agencies.	Designed and built a new landing page. Completed MAT educational video and a "how to" video for the website. Added two user guides: (1) how to update slot information that accompanies update emails, and (2) agency admin user guide that helps agencies make changes to their services as needed independently. Developed a mobile app for Android and iOS (in testing) Added a feature to the backend to duplicate a service - reduce time it takes to register new agencies that have a higher number of treatment services Added telehealth services to search filter and added information about 170 registered services available via telehealth Updated the "Harm Reduction" search page to be more user friendly. Added links for additional peer and family support services to search page.	Launched new landing page with two new educational videos (MAT and how to use the site) that are now live. Improved the search bar to allow searches by agency name. Added automatic scroll-to-top feature. Added "Agency Name" to the search bar functionality on the search pages.	Added "distance from you" feature that lets web users know how far each service is from their current location.	First draft of the mobile app was completed. Updated filter needed adjustments. Fixed website so website is secure when typing full address. Added pop-up descriptions of various services to make it easier to use. Made changes to interface so users can view website on various screen sizes and magnifications.	Added "Privacy Policy" and "Terms and Conditions." Added alternative text behind the scenes to videos so that screen readers can "read" the content of the videos. Created a development server to test new code without endangering the live site. Added a search filter for "some uninsured." Minor improvements to user interface (including displaying "0 slots available" if there are none, but the agency has not inputted waiting time data).

Although a map of alcohol and substance use providers and services in Cuyahoga County exists, it is not currently available on the website. CSU's software engineers are working to integrate Google Maps into *drughelp.care* to create an application that will utilize Global Positioning System (GPS), allowing users to locate nearby services.

Agency Registration

CSU's registration team worked diligently this past year to contact new and existing agencies to get them updated and registered on *drughelp.care*. The registration team has been connecting with community partners and created a master list of agencies to use to contact agencies that have not been updating services on the website. Additionally, following the launch of the new website, CSU staff contacted each agency administrator and service contact via email to provide instructions for the transition; paper mail was also sent to each agency with the same instructions, along with a thank you note and a gift card. CSU noted that the number of treatment providers updating slots on the website has increased since then. As of August 2020, 77 agencies were registered (Figure 48) with 394 services (Figure 49), which represented an increase from the 46 agencies with 39 active treatment services registered at the beginning of September 2019 . **Although CSU was able to increase the number of agencies registered on *drughelp.care* there are more agencies in Cuyahoga County that need to be registered.**

Figure 48

Agencies Registered on drughelp.care from January 1, 2019 to August 31, 2020

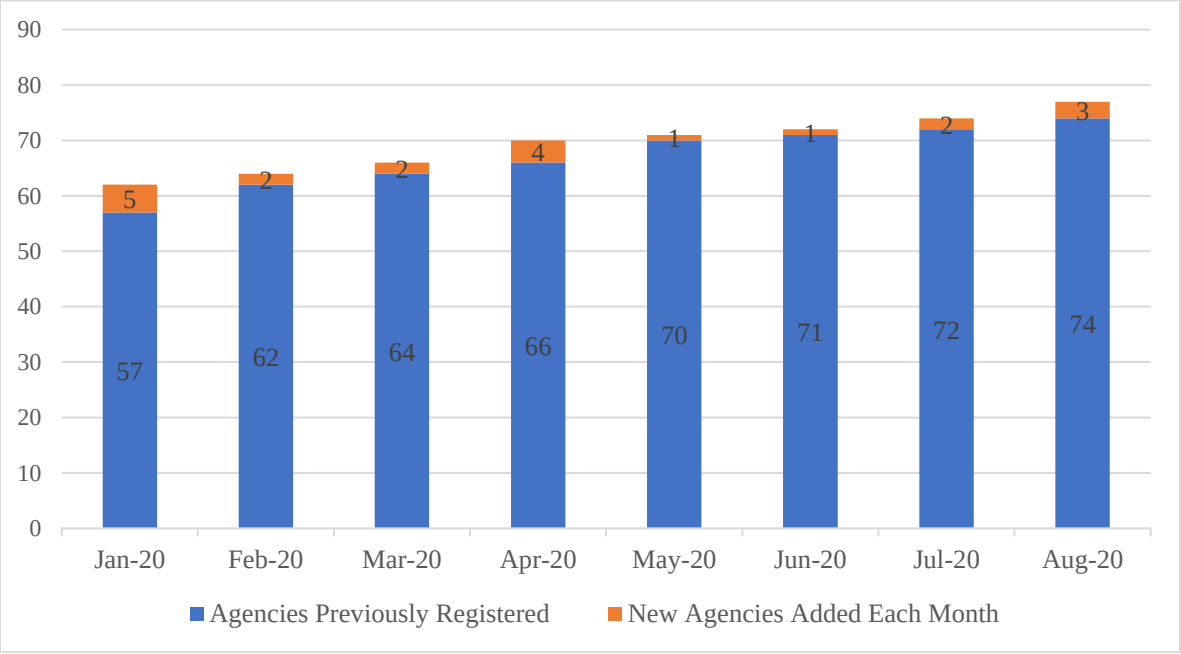
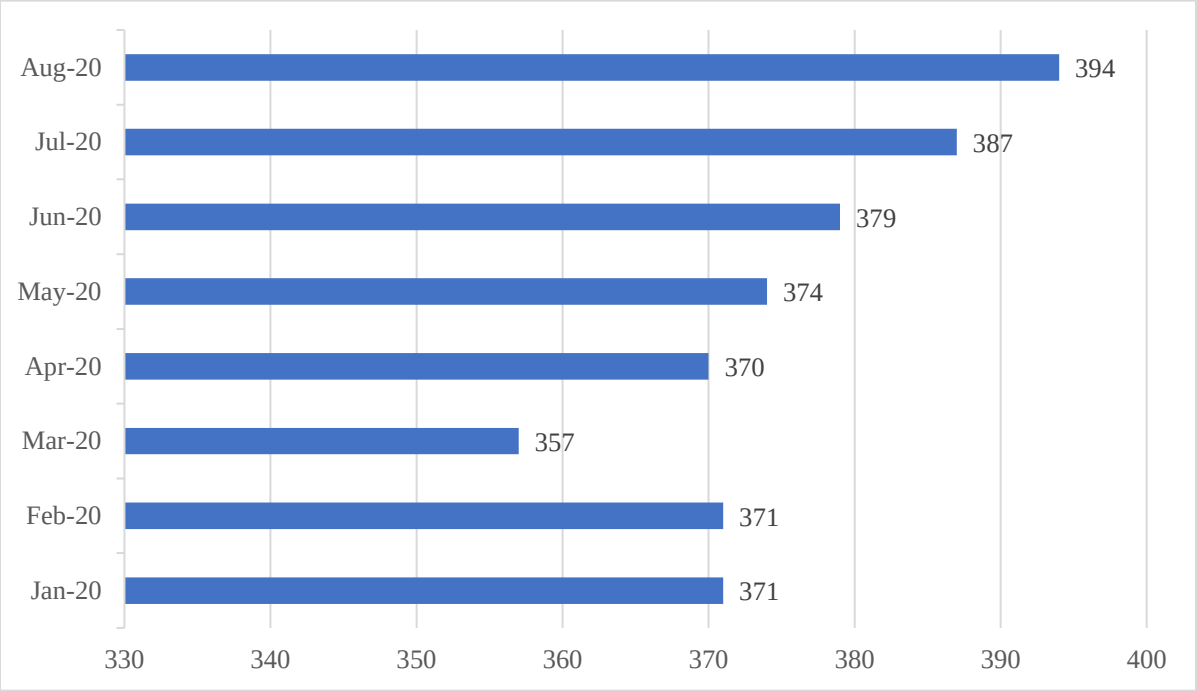


Figure 49

Active Services on drughelp.care by Month January 1, 2019 to August 31, 2020

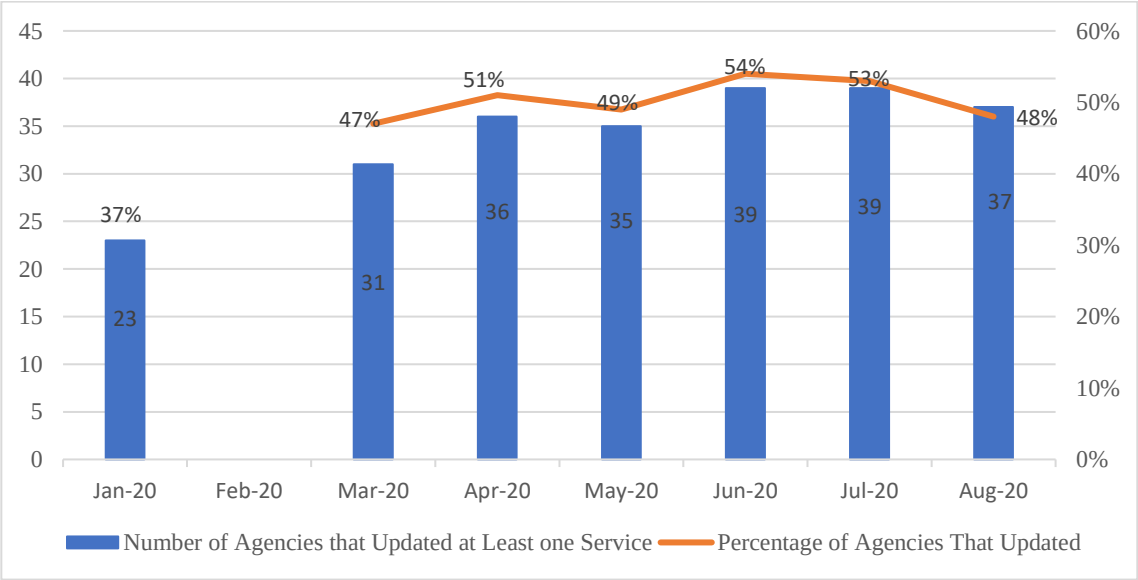


Note: The number of services decreased when all of the data and services were transferred from the old website to the new website. In late February and early March, it was discovered that some services had become inactive or were included in the master list but not actually registered on the site.

Figure 50 shows the number and the percent of total number of agencies that updated at least one service. In the last year, the percent of agencies that updated increased by 11% from January 2020 to August 2020. There was a slight decrease during May and August 2020. Information is not available for February due to a malfunction of the old website and the issue was not addressed at the time due to the launch of the new website.

Figure 50

Number of Agencies and Percent of Total Agencies that Updated at Least One Service from January 1, 2019 to August 31, 2020

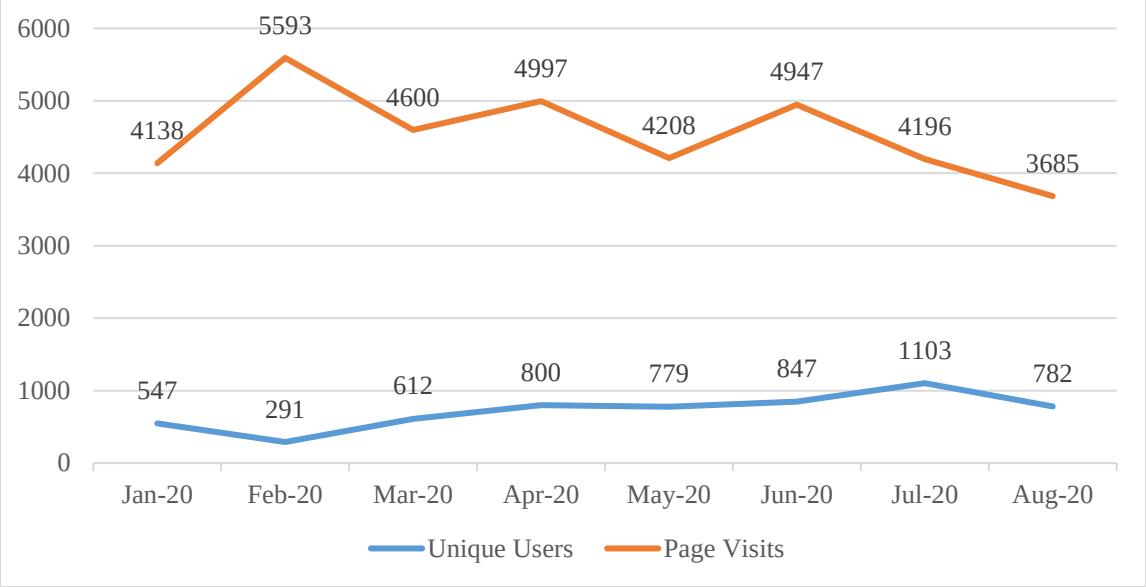


Note: Information is not available in February due to a malfunction of the old website and the issue was not addressed at the time due to the launch of the new website.

The number of unique users accessing the *drughelp.care* website is measured using the Internet Protocol (IP) address. This number has remained fairly steady, with a decrease in August 2020, following a significant increase in the number of users in July 2020. The number of page visits also is being tracked; page visits refers to the number of clicks a page on the site receives. A unique user may view multiple pages, multiple times. There was a significant increase in the number of page views in February which occurred while the website was being updated. Since then, numbers have remained relatively steady with a slight decrease over time which may be due to the launch of the new website and enhancements that make the site easier to navigate. Once focus groups resume, more information on these trends will become available.

Figure 51

drughelp.care Unique Users and Page Visits by Month



Training on Web App

As with the focus groups, COVID-19 delayed training of service providers, first responders, and criminal justice system staff on the *drughelp.care* web app. **A total of three training sessions were delivered to 55 participants in Year One**; those trainings were held in February, July, and August 2020 (July and August via Zoom).

VII. Strategy 7

Strategy 7 is prevention oriented and focuses on providers and health systems support. The agencies involved in this strategy are: MetroHealth, Center for Health Affairs (CHA), and Cuyahoga County Board of Health (CCBH). The following activities are associated with this strategy :

- Develop an Academic Detailing (AD) program for opioid safety and overdose reduction;
- Develop a toolkit to expand the use of AD and other educational resources to additional hospital and non-traditional settings; and
- Expand Medical Assisted Treatment (MAT) capacity in Emergency Departments (EDs).

Develop an Academic Detailing Program for Opioid Safety and Overdose Reduction - MetroHealth & CHA and Develop toolkit to expand use of academic detailing and other educational resources to additional hospital and non-traditional settings - CHA

As part of Strategy 7, MetroHealth is working with CHA to develop: (1) an AD program for opioid safety and overdose reduction; and (2) create a toolkit to expand the use of AD to additional hospitals and non-traditional settings. These two activities are presented together as there is significant overlap in both the process measures and the short term and intermediate outcomes. There is one evaluation question: ***Does AD increase opioid safety prescriber practices; i.e., reduce the number of opioid prescriptions and increase referrals for alternative pain management?***

Table 42

Short-Term and Intermediate Outcomes for AD Program

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase # of providers receiving training related to AD	Data not previously collected	30	31	Achieved
Increase in # of providers receiving training on AD	Data not previously collected	30	0	Postponed due to COVID-19
Increase in # of providers receiving training on alternative pain management	Data not previously collected	↑10%	12	Achieved: Since data was not previously collected any referrals would represent an increase.
Increase number of hospitals and non-traditional systems using toolkit	Data not previously collected	4	0	CHA is still in the process of developing the toolkit therefore this measure will be tracked in Year Two
Increase use of non-opioid medications and non-pharmacological treatments for pain management	Data not previously collected	↑10%	36	Achieved: Since data was not previously collected any referrals would represent an increase.
Increase in knowledge gained by providers from training on AD and alternative pain management	Data not previously collected	↑10%	0	CHA is in the process of developing the toolkit therefore this measure will be tracked in Year Two
Decrease in high volume prescribing behaviors for medical providers who received AD	Data not previously collected	↓10%	0	CHA is in the process of developing the toolkit therefore this measure will be tracked in Year Two

Track number of staff trained to deliver AD programs

Initially, prior to COVID-19, the AD program depended largely on staff attending National Resource Center for Academic Detailing (NaRCAD) training, with the Program Manager scheduled for training in March. Due to social distancing orders, the training was rescheduled to June, then postponed indefinitely. Not long after that, MetroHealth and CHA received notification that NaRCAD would no longer be offering AD training for OD2A; rather, an organization in San Francisco may be providing remote training in the future.

With NaRCAD trainings on hold, CHA contacted Veterans Affairs (VA) for information regarding their AD program (e.g., implementation, lessons learned). The possibility of a local AD training event was discussed via phone with the National Clinical Program Manager at the VA. A webinar was scheduled for OD2A partners, but by June, the VA's AD program had diverted their resources to COVID-19 priorities, limiting their capacity to assist outside agencies, including CHA. However, they did provide their Academic Detailing Implementation Guide to assist in the development of the OD2A Academic Detailing program. MetroHealth and CHA are currently exploring other means to provide AD training.

Staff at MetroHealth and CHA also have been attending webinars that provide useful information on AD and alternative treatments. NaRCAD webinars attended include:

- April 29, 2020 - E-Detailing for Clinician Engagement: Virtual Connections for Clinical Change
- May 20, 2020 - Steps of Detailing Visit, Translating 1:1 Connections to Virtual Platform
- May 22, 2020 - Strategic Data Collection & Tracking: Best Practices for Program Sustainability
- June 24, 2020 - Opioid Use Disorder: Understanding Clinician Stigma to Encourage Behavior Change
- June 30, 2020 - Virtual Educational Materials: Adapting Tools for Optimal
- July 29, 2020 - AD for Opioid Safety - An Overview for New OD2A Programs

Develop an Academic Detailing Program

MetroHealth continues to facilitate the development of AD processes including implementing one at its MetroHealth Medical Center and training other organizations to replicate new processes within their facilities. During the Educational Opioid Safety Task Force (OSTF) Meeting, initiatives related to AD and hospital education regarding opioids were discussed. This committee was hand selected to address the needs of the units and departments within the organization.

CHA also has been working toward the development of the program. The CHA program team began developing stages regarding AD strategies and alternative pain management educational resources, as well as increasing countywide provider training to increase utilization of evidence-based approaches involving Opioid Use Disorder (OUD) prevention and intervention.

Increase providers receiving training related to academic detailing

Although COVID-19 limited the ability of MetroHealth and CHA to provide training to providers on AD, MetroHealth has been providing opportunities for its providers to attend webinars and training related to AD. **During Year One, 31 providers received training related to AD, exceeding the target** (Table 43).

Table 43

Description of Providers Receiving Educational Training on AD

Occupation	Field	Number Trained
Medical Doctors (MD)	Internal Medicine	21
	Family Medicine	3
Nurses	Advanced Practiced Registered Nurse (APRN)	5
	Family Nurse Practitioner Certified (FNP C)	
Physicians' Assistant (PA)		1
Program Pharmacist		1
Total		31

MetroHealth also sponsored On-Boarding Provider training in August 2020. MetroHealth's Office of Opioid Safety presents overall OUD/Substance Use Disorder (SUD) education and resources surrounding MetroHealth policies about the state of Ohio's current laws and regulation regarding OUD/SUD. This presentation provides best practice and guidelines that all providers must follow. Sixteen providers were trained: 1 Advanced Practice Nurse - Certified Nurse Practitioner (APRN-CNPs), 13 Medical Doctors (MDs), and 2 Doctor of Osteopathic Medicine (DOs).

Increase use of non-opioid medications and non-pharmacological treatments for pain management

Through this project MetroHealth seeks to identify three types of alternative treatment to opioid prescribing. Two possible treatments that emerged in Year One are Nitrous Oxide and pain blockers. Earlier this year, a simulator and synthetic cadavers were purchased to test these alternative options. MetroHealth also provided two trainings in 2020 for providers on alternative pain management. A total of 12 ED providers attended the trainings. Unfortunately, attendance was low due to scheduling conflicts. **In Year One, 36 ED clients were linked to alternative pain management (Nitrous Oxide)**.

Create a toolkit to replicate an AD program and other educational resources for other hospital systems

In Year One, MetroHealth provided four technical assistance sessions to CHA on the development of the toolkit, tentatively titled, *OD2A Opioid Mitigation Toolkit*. Discussions included best practices and plans to develop/enhance a dashboard to capture appropriate data and effectively establish AD. It was decided that the toolkit would be comprised of the peer review model process developed by MetroHealth, AD information, and additional educational resource information for hospitals and providers. The additional sources will include information for pharmacists, a collection of local resources, an opioid information provider course, and a seminar page for posting partner and CHA webinars. **A schematic detailing the toolkit components was developed by the CHA program manager.**

Progress also was made on developing help desk support for the toolkit (which includes CHA's Information Technology (IT) supervisor) and assigning IT duties to web developers to begin building out the education portal. The IT supervisor conducted meetings on project design and toolkit management with employees assigned to this project. CHA is working with its IT and marketing departments to determine the logistics of making documents available online, how the toolkit will function, and where it will reside on the Educational Portal. One barrier identified was trying to obtain original webinar media files from partners for posting. Large files must be downloaded from the webinar account that did the recording and files can be extremely large and hard to transfer via email.

Expand MAT capacity in ED (Metro)

Through education and training, MetroHealth is working to increase the number of medical providers in the ED with a Drug Enforcement Administration (DEA) waiver. To be eligible for a DEA waiver, a provider must receive training on MAT. Providers can then refer individuals in need of treatment services to MAT.

Table 44

Short-Term and Intermediate Outcomes for ED MAT Referrals

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of providers receiving training on MAT	6	↑10%	25	Achieved
Increase the number of providers with a DEA waiver	70	↑10%	25	Achieved
Increase the number of clients linked to MAT	90	↑10%	89	90%

Increase the number of providers receiving training on MAT and a DEA waiver

Despite COVID-19 MetroHealth has facilitated training for its providers on MAT. **In Year One 25 ED providers completed training on MAT and all 25 received DEA waivers** (11 in March and 14 in April).

Increase the number of clients linked to MAT

MetroHealth is continuing to refer clients to MAT from the ED. **In Year One, 89 clients from the ED were linked with MAT. MetroHealth has achieved 90% of the target already in one year**.

VIII. Strategy 8

Strategy 8 focuses on developing and enhancing partnerships across public safety and first responders who respond to calls for service associated with opioid overdoses. The Begun Center, Cleveland Division of Police (CDP), Alcohol Drug Addiction and Mental Health Services Board (ADAMHSB), and Cuyahoga County Board of Health (CCBH) are the lead agencies for this strategy. The activities within this strategy are:

- Enhance nonfatal overdose incident data collection, utilization, and dissemination;
- Expand the CDP Computer Aided Dispatch (CAD) System to improve observation and recording of nonfatal data by crime analyst/case information;
- Implement outreach to nonfatal overdose victims;
- Expand Police-Assisted Referral (PAR) card - now referred to as "Link2Care Card" - use to Heroin Involved Death Investigation (HIDI) detectives/others;
- Enhance "compassion fatigue" awareness and training for HIDI detectives/law enforcement (LE)/first responders; and
- Cross training to public safety forces to raise awareness of new partnerships, programs and challenges (including Adverse Childhood Experiences (ACES) related risk factors) regarding the local opioid epidemic.

During the first year of this grant, efforts focused on assessing current data collection sources to identify response trends, areas for collaboration and coordination, and data collection enhancement. While COVID-19 significantly impacted the progress of efforts for this strategy, especially in the area of training delivery, there was movement in using data that was collected from Cleveland Emergency Medical Services (CEMS) and CDP regarding nonfatal opioid incidents. The Begun Center staff has analyzed incident data, identified areas for improved data collection through implementation of Data Use Agreements, and will be moving forward with expanding efforts to conduct compassion fatigue training, identifying first responders to receive the "Link2Care Card", and tracking individuals who consent to follow-up contact and enter treatment.

Enhance Nonfatal Overdose Incident Data Collection, Utilization, and Dissemination – Begun and CDP & Expand CDP CAD System to improve observation and recording of NF data – CDP

The evaluation question tied to this activity is ***how can law enforcement improve the tracking and notification of nonfatal opioid-related overdose incidents?***

Table 45

Short-Term and Intermediate on Overdose Incident Data Collection and Recording

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase coordination of Public Health and Public Safety Efforts with DUAs for sharing and integration of nonfatal overdose	0	2	0	Draft DUAs Prepared, None Executed
Increase use of shared data to inform collaborative public health/public safety prevention and response activities through number of data systems being shared and input of nonfatal overdose into CAD	0	2	0	In Progress
Increase data reports of nonfatal overdose data available from LE	0	↑10%	0	In Progress

Regarding the development/use of CAD for enhancing overdose incident data collection, the system was examined and it was determined that queries for suspected drug overdose should include calls listed under "sudden illness" as well as calls of "police assist EMS/ Fire." **This has dramatically expanded the number of nonfatal overdose calls for tracking and analyses.** Action has been taken to more fully and accurately utilize the existing CAD system to clearly identify calls for service descriptions in the current CAD system.

As Begun Center staff begin data collection, analysis and dissemination from the Public Safety Pilot Data (PSPD) to support Strategy 3 as applied to Parma PD and Lakewood PD, there will likely be opportunities to receive nonfatal overdose records on a routine basis from these jurisdictions. The objective is to provide a summary of the pilot data to Parma and Lakewood PD, then address longer-term information sharing.

The Cuyahoga County Sheriff's Department (CCSD) analyst has the ability to query the Cuyahoga County Data Warehouse (DW) for overdose reports from the jurisdictions in Cuyahoga County that are utilizing the DW (53 of 58 jurisdictions contribute to the DW). This data collection process was tested with some initial success this year. Due to COVID-19, there has been little movement on this activity as Law Enforcement (LE) is currently focusing on emergency responses relating to the pandemic. The ability exists, however, to pull these records on a routine basis which will also provide insight for surveillance. These records could also be

used to assist with Quick Response Team (QRT) or other prevention, education and intervention efforts if the appropriate process and approvals are developed. The CDP "sudden illness" reports accessed through their records management system, combined with potential access to County DW overdose incident responses will provide significant insight into nonfatal overdose incidents, although this would only include LE encounters, not EMS.

The Begun Center has gained significant familiarity with the data available through public safety channels. In mid-2020, the Begun Center's analysts received some initial pilot data from CEMS and CDP for the time period May 1, 2019 through April 30, 2020. The de-identified data lists incident location, time and date of suspected nonfatal overdose incidents. The CEMS data identifies locations associated with overdose incidents and the CDP data identifies locations for calls for service associated with "sudden illness." **Begun Center staff is analyzing the pilot data in order to identify potential areas for improvement in data collection and to perform additional queries.**

CDP is coordinating the hiring of an analyst specifically tasked with supporting QRT activities and collecting overdose incident data for analytical purposes that include support to public health surveillance activities. The position has not been filled at this time.

Implement Outreach to Victims of Nonfatal Overdose – Begun, CDP and MetroHealth

The evaluation question tied to this activity is ***how can Cuyahoga County improve and enhance partnerships with public safety and first responders to reduce opioid overdose-related deaths and nonfatal incidents.***

Table 46

Short-Term and Intermediate Outcomes for Outreach to Victims of Nonfatal Overdose

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase the number of processes to link nonfatal overdose victims to care by first responders/case workers through focus groups	0	2	0	In Progress
Increase number of clients who are referred to MetroHealth QRT (Encounter)	0	↑10%	0	In Progress
Increase number of clients who agree to participate in MetroHealth QRT (Engage)	0	↑10%	0	In Progress
Increase number of clients referred for treatment by MetroHealth QRT (Referred)	0	300	0	In Progress
Increase number of clients linked with treatment after QRT referral	0	↑10%	0	In Progress

Initially Beech Brook was identified as the treatment agency to provide services for the QRT and participate in the Link2Care Card process, but withdrew participation in the OD2A Initiative during the first quarter of the project. Although Beech Brook is no longer a partner agency in the OD2A Initiative, the agency did report for the period of September through December 2019. During this time Beech Brook met with CCBH and Begun Center staff members which allowed for a better understanding of grant expectations and also led to a discussion about the collection of additional data that would benefit the initiative.

MetroHealth replaced Beech Brook in January 2020 as the agency to provide QRT services under this activity. Several members of the MetroHealth QRT Advisory Team (MetroHealth, DEA, Begun Center, Cuyahoga County Sheriff Department (CCSD), Northeast Ohio Regional Fusion Center (NEORFC), CCBH) began discussions in early 2020 to improve access to nonfatal overdose data for Cleveland, as the information being received from the High Intensity Drug Trafficking Area (HIDTA) program for the purposes of QRT was not comprehensive; incident reports were mostly fatal incidents. The QRT Advisory Board drafted an action plan and recommendations for improved access. The action plan was funneled through MetroHealth's Office of Opioid Safety to the CDP. CDP agreed to use the current CCSD analyst placed at the NEORFC to pull overdose incident records from the CDP records management systems. The QRT will begin visiting overdose victims in Year Two.

Expand PAR Card Use to HIDI Detectives and Others

Table 47

Short-Term and Intermediate Outcomes on PAR (Link2Care) Card Expansion

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase number of Link2Care cards distributed to victims, family and friends	0	400	Draft Link2Care Card Developed	In Progress

The "PAR card" draft that has been developed, will now be referred to as "Link2Care Card." It will likely not be utilized by CDP, or not solely by CDP, as the HIDI detectives are not routinely interacting with nonfatal overdose persons. The discussion for this activity has evolved into utilizing the MetroHealth QRT to provide these to persons they will interact with. Additional discussion has taken place regarding the option to mail this information to addresses of nonfatal overdose individuals, if QRT does not develop as planned. A copy of the draft Link2Care card is included in Appendix 5.

The aforementioned CDP pilot overdose incident data spanning a one-year period identified that CDP responded to 2,559 "sudden illness" reports. While HIDI detectives are not routinely

interacting with nonfatal overdose persons, the Begun Center team will analyze the CDP incident information to identify those elements of CDP that are interacting with nonfatal overdose persons and assess "Link2Care Card" implementation.

Enhance Compassion Fatigue Awareness and Training for HIDI Detectives, Law Enforcement, and First Responders – Begun Center

Table 48

Short-Term and Intermediate Outcomes on Compassion Fatigue Awareness Training

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase jurisdictional awareness of opioid overdose epidemic and evidence-based approaches by public safety and first responder partners as measured by number of LE, EMS and ED staff trained	0	50/yr.	0	Postponed Due to COVID-19

Scheduling of the Compassion Fatigue Awareness training for HIDI detectives and LE/first responders has been delayed due to COVID-19. The Begun Center has identified someone to conduct the training, Steven Click, First Responder Liaison with the Ohio Mental Health & Addiction Services. Training will begin in Year Two and initially done virtually.

Cross Training of Public Safety Forces to Raise Awareness of New Partnerships, Programs, and Challenges Regarding the Local Opioid Epidemic – ADAMHSB & CCBH

Table 49

Short Term and Intermediate Outcomes for Cross Training of Public Safety Forces

Description	Baseline	Target	YR 1 Data	Outcome Status
Increase number of trainings on local opioid related efforts	0	4	3	75%
Link LE to ACES Training	0	0	0	Postponed due to COVID-19
Increase jurisdictional awareness of opioid overdose epidemic and evidence-based approaches by public safety and first responder partners as measured by number of LE, EMS and ED staff trained	0	50/yr.	43	86%

The ADAMHSB will link LE, EMS, and ED staff with training to raise awareness of new partnerships, programs, and challenges (including Adverse Childhood Experiences (ACES) related risk factors) regarding the local opioid epidemic. The ADAMHSB reported conducting three trainings on the topic of "Crisis Caring" with 43 first responders. Due to COVID-19, ADAMHSB is working on developing a virtual training using Zoom. It is hoped that in addition to in-person training, virtual training will increase capacity and attract more participants.

IX. Impact of COVID-19

The onset of the COVID-19 global pandemic in Cuyahoga County impacted OD2A activities. Most OD2A partnering agencies closed their physical offices and moved to remote work environments early in March 2020. Despite closing physical offices, most partner agencies have been able to conduct effective project activities virtually including meetings, program management, training protocol development, and material distribution. A few agencies reported that the interruption of some program activities meant they might fall short of programming targets.

There have been a wide range of impacts across all partner agencies due to the pandemic. On the one hand, the more significant negative impacts were reported by the Cuyahoga County Medical Examiner's Office (CCMEO) that experienced COVID-19 deaths and spikes in opioid-related overdoses throughout Cuyahoga County as a challenge to organizational capacity. Agency lockdown, regular staff testing, and social distancing measures at the CCMEO also temporarily halted the Overdose Fatality Review (OFR) meetings. Thrive observed a drastic decrease in emergency department (ED) admissions with the start of the stay at home orders. Thrive also was challenged by the need for personal protective equipment (PPE) for staff who continued working in the EDs, and the need to implement changes to protect staff who felt uncomfortable providing in-person peer support.

On the other hand, there were positive outcomes to partner agencies' responses to the pandemic. Cuyahoga County Board of Health (CCBH) staff smoothly shifted monthly meetings with OD2A partnering agency data collection teams and the evaluation team from in-person to a virtual format. OD2A partner agencies that are engaged in collaborative activities, such as Center for Health Affairs (CHA) and MetroHealth, continued to meet remotely and move forward on joint deliverables. Circle Health Services (CHS) successfully maintained services and, through the Syringe Service Program (SSP), provided services to hundreds of clients. Woodrow's pandemic response included a new virtual delivery of peer support services to ED clients in addition to the in-person model used prior to the pandemic. Woodrow was pleasantly surprised by the positive response of the peer-support participants and hospital staff. Woodrow reports, *"Through this experience we have seen compassion, empathy and support can be delivered in a purposeful manner to the participants. Additionally, we continue to have great efficacy and efficiency in placing participants in their chosen pathway to recovery."*

The following section summarizes responses from each of the partner agencies regarding COVID-19 related delays or challenges.

Alcohol Drug Addiction and Mental Health Services Board of Cuyahoga County (ADAMHS)

The ADAMHSB of Cuyahoga County is involved in enhancing OFR (Strategy 5) and providing cross training to public safety forces (Strategy 8). Shutdowns due to COVID-19 impacted the agency's ability to move forward with these activities since March. Social distancing orders prevented in-person interviews and OFR meetings were canceled in March, April, and May. There have been no in-person trainings since February. ADAMHSB considered moving training to an online environment; however, technology limitations at training recipients' sites and at the ADAMHSB posed challenges to virtual learning. Some challenges were overcome. OFR meetings resumed virtually in June, July, and August and mock survivor interviews were conducted in Quarter 4 (Q4). These mock interviews helped the Opioid Use Disorder (OUD) Specialist refine the list of questions and interview style.

Cuyahoga County Medical Examiner's Office (CCMEO)

The CCMEO reported the postponement of OFR meetings during Q3 due to COVID-19, but resumed in June with virtual meetings. The agency is still on a hiring freeze and has not been able to hire someone to conduct interviews. In the interim, the CCMEO is working with the OUD Specialist at ADAMHSB to share information and get interviews conducted on all OFR cases.

Center for Health Affairs (CHA)

CHA closed its physical office and OD2A staff started working remotely on March 16, 2020, continuing to do so through the end of August. Collaboration on shared deliverables has been a challenge with no in-person meetings to involve new staff and create a team dynamic. Several COVID-19 related delays were reported in Year One:

- a provider education seminar, scheduled for March 25, was canceled due to providers needing to address emergencies caused by the pandemic;
- in-person academic detailing training (AD) was postponed indefinitely; and
- planning and implementation of grant-related trainings were put on hold due to shifting hospital priorities.

CHA's partners for this grant are hospital systems, and there were general delays in communication and program implementation as COVID-19 took priority and systems began re-organizing around it. CHA overcame these barriers in part by continuing to meet with MetroHealth remotely and scheduling webinars pertaining to academic detailing to replace the in-person training.

Circle Health Services (CHS)

COVID-19 impacted CHS in two major ways. Beginning in March, CHS restricted the SSP primarily to its Uptown location (with limited hours of operation) and suspended van services from March through June. During that time period, feedback from clients indicated

they would like to see the van services resume, as travel from the west side to the east side of the city was problematic. In July van services resumed. Originally scheduled for June but delayed by COVID-19, in July CHS was able to open the west side Rocky River location. Since the onset of COVID-19, there has been a decline in services provided at the Uptown location which is where most referrals to treatment occur.

The pandemic also impacted the ability of Project DAWN (Deaths Avoided with Naloxone) to provide Narcan (naloxone) kits on-site due to staffing limitations. To address this barrier CHS created printed materials for clients, informing them about safe drug use and directions to locations where Project DAWN kits could be accessed during COVID-19.

Cleveland State University (CSU)

CSU has consistently reported since the start of the pandemic that contacting treatment agencies has become difficult due to COVID-19. Many agency phone numbers went directly to voicemail due to agencies being closed or their staff working remotely. Additionally, CSU staff reports that *drughelp.care* is not a priority for agencies right now as many of them are healthcare facilities and have shifted their focus to COVID-19. If this continues to be an issue going forward, CSU will develop a structure to manage follow-up with agencies.

One additional challenge has been engaging student employees as remote work continues. The number of hours worked by students typically declines in the summer months, but this year the decline has been even more drastic as students navigate these challenging circumstances.

Educational Service Center of Northeast Ohio (ESC-NEO) & The PAXIS Institute (PAXIS)

Both ESC-NEO and PAXIS have been impacted by school closings due to the pandemic. Trainings were delayed or canceled in the spring when the school year ended early. While some PAX trainings were offered virtually, they saw decreased enrollment as districts focused on training for and transitioning to online learning, prioritizing student engagement during this time. For several months some districts did not permit training even if the course was offered virtually, also making registration a challenge. Trainings have been scheduled for grant Year Two and despite delays and barriers, trainings from Year One also were able to be rescheduled to occur early in Year Two.

MetroHealth

For MetroHealth many services were delayed, agencies closed, and remote working environments mandated. Due to COVID-19 impacts, the scope of work OD2A program staff could accomplish was adjusted and staff prioritized many community-based activities that could be accomplished in the new operating environment. Although the Quick Response Teams (QRT) were unable to go out into the community for outreach due to the pandemic, focus shifted to the

Mobile Project DAWN (Deaths Avoided with Naloxone) unit to provide naloxone in the community while maintaining social distancing. The QRT is now set to launch in October 2020. Many meetings also were cancelled due to COVID-19, therefore limiting trainings and other interactions. However, services continued to be provided including Medication Assistance Treatment (MAT). Staff reported that they continued to provide the best service possible as challenges continued.

St. Vincent Charity Medical Center (SVCMC)

COVID-19 impacted the ability of SVCMC to initiate its Screening, Brief Intervention and Referral to Treatment (SBIRT) program. Early in the year, the dedicated project manager handling the planning and roll-out of SBIRT was furloughed, which delayed the start of the program. Although that project manager was brought back in May they returned to manage a different project. This staffing change limited SBIRT project management resources available at SVCMC. A ban on elective surgeries in the state also led to a reduction in patients available for SBIRT screenings. Similarly, safety measures put in place at the hospital made group training difficult. Getting patients into residential Substance Use Disorder (SUD) treatment also was a challenge. After facing these series of barriers in spring and early summer due to COVID-19, SVCMC did not report any delays or concerns in July or August.

Thrive

Thrive works in the SVCMC ED and in response to COVID-19 the hospital initiated significant policy and procedural changes. The SVCMC ED identified peer supporters as essential staff and Thrive workers continued to provide in-person service. The team was supplied with personal protective equipment (PPE), including N95 masks, face shields, and gloves. SVCMC implemented health screenings, including temperature checks, which are performed before entrance is granted to the ED. In an effort to protect Thrive staff who were at higher risk of complications from COVID-19, some staffing changes were made internally.

Thrive also identified several changes in their operating environment that created barriers and impacted their referral processes after client contact in the ED. While the volume of clients potentially seeking peer support decreased drastically during the month of April, significant changes in availability of and access to treatment centers emerged as an issue for those clients seeking services. Many treatment centers in Cuyahoga County no longer accepted referrals for service, closed, or instituted COVID-19 testing requirements that could not feasibly be met due to testing limitations. While some centers did standard symptom and temperature checks, Matt Talbot (men and women) and The Lantern (men) required a documented negative COVID-19 swab test prior to admission. Thrive peer supporters continued to remain up to date on these constantly changing policies and procedures for treatment and detox centers. Thrive identified treatment centers in other counties and worked with clients to resolve transportation issues to

reach those centers. Thrive staff also reported a notable increase in domestic violence-related ED visits in April.

Woodrow

Woodrow provides peer support for both Lakewood Hospital and Lutheran Hospital EDs. After much discussion and planning, Project SOAR (Supporting Opiate Addiction Recovery) went virtual. Both Lakewood and Lutheran EDs were provided with iPads. The iPad is set to call the SOAR phone which is covered 24 hours per day, 7 days per week. Participants in need of detox and treatment have been able to obtain needed services immediately, and peer support services continue to be provided with participants transferred to treatment providers. Since the onset of the COVID-19 pandemic, both Lakewood and Lutheran have reported fewer people coming into the ED, resulting in fewer requests for support. However, Woodrow reported that ED staff appreciate the continued services in helping patients during this difficult time. The program is working very well by virtual peer support, and the hospital staff have continued to thank the peer supporters for the remote support provided to their patients.

X. OD2A Project Performance Assessment

The purpose of OD2A is to obtain high quality, comprehensive and timely data on overdose morbidity and mortality and to use those data to inform prevention and response efforts. This programmatic evaluation provides a third-party assessment of OD2A's implementation progress as reflected in the key themes discerned from analysis of the ***qualitative*** data collected from participating agencies between September 1, 2019 and August 31, 2020.

Programmatic surveys are administrated quarterly by The Begun Center to the OD2A participating agencies to facilitate identification of challenges and facilitators impacting OD2A success. Data from the surveys are presented from each quarter to document how challenges changed over time or were addressed. Survey questions inquire about program successes and challenges, dissemination of knowledge gained from program activities, unexpected outcomes, and innovative ideas that developed out of project activities. Focus groups also were held at the end of the year with staff from the participating agencies to gather more insight into the day-to-day activities surrounding the OD2A Initiative. Eleven focus group discussions with 46 staff from 12 OD2A partner agencies were conducted during August and September 2020. Focus group discussions centered on ten questions that explored Year One in terms of five topical areas: (1) project implementation, (2) lessons learned, (3) data, (4) understanding the opioid epidemic, and (5) "other points of discussion."

The qualitative data collected provided opportunities to explore descriptions of agency staff members' experiences, perceptions and opinions of planning and implementation that were offered in their own words and were outside The Begun Center evaluators' knowledge. In addition to the Cuyahoga County Board of Health (CCBH), the other OD2A agencies that participated included: The Alcohol, Drug Addiction and Mental Health Services Board of Cuyahoga County (ADAMHSB); Center for Health Affairs (CHA); Circle Health Services (CHS); Cleveland State University (CSU); Cuyahoga County Medical Examiner's Office (CCMEO); MetroHealth Medical Center; Educational Services Center of Northeast Ohio (ESC-NEO); PAXIS Institute (PAXIS); St. Vincent Charity Medical Center (SVCMC); Thrive; and The Woodrow Project.

For the quarterly programmatic surveys, two members of The Begun Center evaluation team discussed the data collected with one another throughout the duration of data collection and developed working hypotheses to interpret what was reported. One Begun Center evaluator directed the audio-recorded focus groups over Zoom and transcribed the audio recordings. At the conclusion of data collection, the qualitative data were analyzed and re-analyzed by one of the evaluators using the Systematic Text Condensation method (see Malterud, 2012, DOI: 10.1177/1403494812465030). The evaluator read and re-read the data, pulling preliminary and subsequently emerging themes from the broader context of the individual agencies' results and

grouping them together into discrete meaning units related to OD2A planning and implementation. The two evaluators who analyzed this data further assessed and revised iteratively these discrete meaning units to create consistent statements about partner members' experiences, perceptions and opinions as they related to various themes. The interpretation of these two evaluators' analysis was cross-checked by a third evaluator and together all three evaluators delineated a resulting list of key themes.

The primary findings from the programmatic qualitative data collected quarterly from the OD2A participating agencies is arranged below divided among six key themes (see Table 50). The primary findings from the focus group qualitative data collected annually are presented below following the programmatic data as divided among the six key themes. The most compelling focus group findings are presented as direct quotes to further enhance one's understanding of the programmatic data. The direct quotes also are arranged beneath relevant sub-headings. The direct quotes contain very minor edits, such as deletions marked by ellipses and points of clarification appearing in brackets.

Table 50

Key Themes of the Qualitative Data

Key Themes	Details
Developing Organizational Capabilities for Quality Implementation	Agencies defined outcomes in alignment with the program strategies and identified potential resources for improving the quality of the program.
Improvements	Agencies identified improvement in their activities and/or outcomes.
Leveraging Resources	Agencies recognized and/or leveraged resources.
Identifying Challenges	Agencies identified challenges to program implementation and explored possible ways to overcome them.
Exploring Innovative Ideas	Agencies explored innovative ideas to overcome challenges and build their programs.
Dissemination and Data Sharing Strategies	Agencies developed strategies for sharing knowledge gained and lessons learned through education, conference attendance, and meetings/interviews with collaborating partners.

Theme 1: Developing Organizational Capabilities for Quality Implementation

Q1 – September 1, 2019 through December 31, 2019

During this reporting period, agencies strategized to refine their OD2A implementation plans and develop their organizational capabilities, which for many included hiring new staff. Several agencies reported early implementation successes in this area. For example, MetroHealth hired five new staff this quarter and was in the process of hiring three more. Though not originally planned and not supported directly by this grant, as part of a new behavioral health and addiction medicine service line at the hospital, SVCMC hired a *Chief of Clinical Operations for Behavioral Health* and Rosary Hall. Located within SVCMC, Rosary Hall is a Level 4 medically supervised detox center with very specific entry criteria.

Others saw additional early implementation successes beyond getting the right staff in the right place. MetroHealth's Project DAWN (Deaths Avoided with Naloxone) distributed 1,294 naloxone kits through training and outreach activities. SVCMC described information-technology improvements resulting in more comprehensive in-patient and outpatient pre-screening forms, screening forms, and workflow documentation in the electronic medical record (EMR) system.

Thrive reported the successful implementation of their peer support service program for high-risk peers at SVCMC. Peer supporters connected with 94 peers in the SVCMC ED for a total of 6,225 minutes. Of these 94 patients, 69 (73%) engaged further with the peer supporters. As a result, wrote Thrive, "26 referrals were made to detox, 25 to inpatient treatment, 12 to outpatient treatment, 5 to medication assisted treatment, and 1 to nonprofessional treatment. At the same time, 60 individuals were referred for additional peer support in the community. [Thirteen] individuals were directly transported from St. Vincent to a treatment center." Woodrow peer supporters also witnessed positive treatment referral rates in support of high-risk individuals.

While already an existing program, it is reported by MetroHealth that their QRT is finalizing a Memorandum of Understanding (MOU)/Protocol with the Cuyahoga County Sheriff's Department (CCSD) to help gain access to zip codes with high overdose patients' statistics.

Q2 – January 1, 2020 through March 31, 2020

During this reporting period, agencies continued to strategize to refine their OD2A implementation plans and develop their organizational capabilities, which for a few continued to include hiring new staff. The ADAMHSB hired its full-time *OUD Specialist*, and CHA hired a new *Project Manager for Health System Education/OD2A*. SVCMC approved and posted two SBIRT positions and interviews were scheduled. Thrive hired one new peer supporter and CSU hired a graduate student to facilitate improvements to the *drughelp.care* website.

Others saw additional early implementation successes. CCBH conducted the first state-level roundtable meeting with three other CDC-funded entities in Ohio (Franklin and Hamilton County Boards of Health and the Ohio Department of Health), as well as experienced greater coordination with REDCap data collection from participating agencies. CHA and MetroHealth met to develop procedures around best practices for their peer-review model process, as well as document the implementation of AD at MetroHealth.

CHS reported initiation of testing at the Lesbian, Gay, Bi, Trans, Queer (LGBTQ) Community Center of Greater Cleveland to increase safe-sex practices and Sexually Transmitted Disease/Human Immunodeficiency Virus (STD/HIV) prevention education. CHS also reached out to additional community contacts and resources to find sites for outreach and additional STD/HIV testing.

CSU successfully launched the latest version of *drughelp.care* with a plan to transfer from the old to the new website in a way that would maintain existing connections with registered agencies, as well as bolster their participation.

CCMEO made quality improvements to their Overdose Fatality Review (OFR) by structuring meetings around both monthly and quarterly gatherings, as well as refining how they share decedent data with OFR committee members.

MetroHealth saw the quality of implementation improve through the redesign of their provider report cards. Using Ohio Automated Rx Reporting System (OARRS) data, each provider is reviewed in comparison with others in the same MetroHealth department/specialty area.

While already an existing program, it is reported by **MetroHealth that their QRT has finalized a new contract and protocol with the Cuyahoga County Sheriff's Department** to further prevention, intervention and referrals in the community. MetroHealth also ordered two new simulator synthetic cadavers for training of alternative pain management modalities.

ESC-NEO has successfully scheduled PAXIS trainings (14 participants from two districts) and this success informs how they approach other school districts in the future.

Q3 – April 1, 2020 through June 30, 2020

Agencies continued to strategize to refine their OD2A implementation plans and develop their organizational capabilities. SVCMC hired a team lead for the SBIRT program, who worked closely with administrative staff to get the program fully functional. The social worker hired in April met with any patient identified through chart review as having a possible Substance Use

Disorder (SUD) and/or mental health need, with the objective of engaging them with treatment. SVCMC reports seeing an increase in the number of patients identified with such needs.

Some agencies reported COVID-19 stay-at-home order trade-offs that have benefitted their staff and programmatic outreach. The pandemic restricted in-person outreach of the ADAMHSB's Opioid Use Disorder (*OUD) specialist*, but also freed up time for the specialist to benefit from additional online trainings on mediation, trauma-informed care, and self-care that will enhance the specialist's interview capabilities. In a similar way, the initial challenges of moving LE trainings from in-person to online appeared to allow the Board to not only expand course enrollment, but also increase educational capacity by more easily engaging regional and national experts as guest speakers.

Others saw additional implementation successes. CSU successfully completed the launch of the latest version of *drughelp.care*, as well as bolstered participation via registration of nine new agencies and 26 new treatment services. CSU also added 170 telehealth services and added a "telehealth services" filter to the website.

Q4 – July 1, 2020 through August 31, 2020

CCBH's Strategy 3 surveillance capabilities increased this quarter in the following ways:

- CCBH data analysts were able to link a total of three datasets, Vital Statistics (VS) data with EpiCenter data, and VS data with CCMEO data, both linkages using probabilistic matching methodology at the record level. The latter established a proof-of-concept model for linkage to the expanded coding dataset once available (currently underway by partners at The Begun Center and CCMEO); the former has facilitated longitudinal data analyses of persons visiting the ED for suspected overdoses.
- Multiple EpiCenter alerts for Cuyahoga County also were received this quarter, and CCBH was able to rapidly analyze these data for trends and provide data reports to inform our stakeholders of nonfatal overdose spikes within one business day. Additionally, CCBH was able to respond to overdose-related data requests in a timely manner. For example, CCBH provided a map of nonfatal overdose incidents to identify high-burden areas. CCBH also was able to create multiple maps of EMS naloxone administrations using the Ohio Emergency Medical Services (EMS) Incidence Reporting System data
- **CCBH completed a working draft of the Drug Overdose Integrated Epidemiologic Profile (DOIEP),** which is planned for release to OD2A partners in the next quarter. The DOIEP describes the burden of drug overdoses on the population of Cuyahoga County in terms of sociodemographic, geographic, behavioral, and clinical characteristics of persons affected by this epidemic. The profile will provide state, regional, and local partners and community members a tool to inform recommendations for allocating drug-overdose prevention resources, planning programs, and evaluating programs and policies.

In partnership with The Begun Center, a data dashboard also is underway including PDMP data, naloxone administration data, CCMEO drug-overdose death data, and EpiCenter data.

CCBH planned to build on these strategy successes by:

- Building the capability to present on its DOIEP report findings in October to two local task forces: U.S. Attorney's Office for the Northern District of Ohio Heroin and Opioid Task Force (Data Subcommittee) and the Cuyahoga County Opiate Task Force. These presentations informed stakeholders that this comprehensive data product exists, identifies at-risk groups, high-burden areas, and emerging trends, and that it can be used to inform prevention programming.
- Planning to release data products based on analyses of the VS and EpiCenter linked dataset focusing on multiple (repeat) ED visits for suspected drug overdose and suspected opioid/heroin overdose and whether or not that individual died, as well as other novel analyses. For example, CCBH planned to continue surveillance of drug overdose incidents to see if the COVID-19 pandemic had any effect on the opioid epidemic. The agency also plans to overlay the EMS naloxone administration maps with other drug-overdose incident-related data that is available at the zip code level.
- Releasing quarterly infographics including nonfatal and fatal overdose statistics to stakeholders also was planned by CCBH to help inform prevention strategies.

The other OD2A participating agencies also continued to develop their organizational capabilities. Thrive included a focus on hiring a new peer supporter to be on staff during the day. SVCMC continued to establish the SBIRT screening protocol for inpatient populations (using a floor by floor rollout) and discussed ways to implement it for the outpatient population.
Some agencies continued to report that COVID-19 prevention measures have benefitted their programmatic implementation and outreach. In this quarter Woodrow continued their new ED-based peer-to-peer telehealth services with great success. Woodrow believed this telehealth success—wherein clients in the ED connect via iPad with peer supporters working remotely—also will allow Woodrow to overcome in the future the objection given by many currently non-participating EDs that they do not have the physical space for peer supporters. The virtual approach also has allowed peer supporters to begin referral processes more quickly.

PAXIS continues to develop its organizational capacity and refine its virtual training methods being used in trainings across the country and internationally, as a result of COVID-19. This has allowed PAXIS to ensure high-quality implementation of PAX training for teachers in Cuyahoga County. Their team was able to develop new resources and supportive tools for classroom teachers to utilize PAXGBG in these new situations. PAXIS also implemented weekly PAX Chats for teachers to speak with a National PAX Trainer and troubleshoot any issues they were experiencing as a result of working and teaching from home.

While the ADAMHSB was forced to continue postponing decedent-related interviews with surviving family members due to COVID-19 prevention measures, their *OUD Specialist* refined the interview tool via virtual mock interviews with a qualitative data collection specialist and other volunteers.

The CCMEO is pushing to turn OFR data into action by holding a bi-weekly meeting to develop recommendations, identify follow-up action items, and assign an OFR committee member to lead implementation of certain recommended activities that fit with their agency. Moreover, the OFR committee sought to build-on the limitations of ADAMHSB (Medicare/Medicaid) detox and treatment data by using an in-house CCMEO medico-legal investigator to explore detox and treatment episodes not captured by the ADAMHSB.

During the focus groups, staff were asked the two following questions about program implementation and whether any changes were needed to ensure top quality implementation:

Focus Group Question 1. How closely have your implemented activities matched your originally planned activities?

a. Implementation Matched Original Plans

1. "I think that we've done a pretty good job on what we had proposed to do. I think the areas that we have had some hurdles in—and some of those things are consistent with other grants that we have internally or even with our partners—[were] related to the hiring process. And then with the onset of the restrictions for the epidemic, I think it really impacted some of our agencies. I think that the few agencies that were capable to shift here have done a good job" (Cuyahoga County Board of Health).

2. "I mean, really, as far as implementation, it's gone very smoothly. And we dropped drastically, I want to say, in March we had maybe four calls, somewhere around there, and we've steadily gone back up. But as far as implementation, I would say there haven't been any real struggles. I mean we've had, I feel, great success. I mean, obviously, our numbers speak to that. And everything's really been smooth, all things considered" (The Woodrow Project).

3. "I'm looking at the [CDC grant application] narrative and for the list of things we proposed to do, we have done [them]. We have made significant improvements to the website. I think at the end of the year, we can probably compile a list of all the improvements we made over the year" (Cleveland State University).

b. COVID-19 Pandemic as a Primary Catalyst for Implementation Changes.

1. “Because of COVID, we've had to really kind of revamp how we rolled out our initiatives and strategize, and we hit a couple bumps in the road in regard to academic detailing. We originally were working with NARCAD [National Association for Academic Detailing]. Then COVID hit and we were no longer allowed to go to Boston for the training. So, we're in the process of determining another company to work with for the academic detailing strategy. That's been kind of a big hurdle. And, you know, partners have closed down because of COVID, so we’re just continually building work arounds to make sure that we can still drive these initiatives. Maintaining progress with all of our initiatives is our focus at the moment” (MetroHealth).

Focus Group Question 2. What changes have you made to your activities and why did you make them?

1. “We were going to try to implement this in the entire hospital including outpatient [divisions], but it is taking a little bit longer than expected just with glitches in our medical record system and just getting all the nurses trained and on the same page. And COVID-19 has impacted this, as well, and made it more difficult. We can't really gather a lot of people together and do one mass teaching, because the of system regulations...” (St. Vincent Charity Medical Center).

Theme 2. Improvements

This theme first emerged during the second quarter programmatic assessment.

Q2 – January 1, 2020 through March 31, 2020

CCBH reported project implementation improvements, emphasizing that staff were in constant communication with all participating agencies. According to them, the learning process was rapid and successful, and they felt on track to achieve their OD2A objectives. CCBH also felt that they had made improvements in the way they are approaching the opioid epidemic by quickly sharing information with participating agencies who, in turn, share it more widely through their collaborative coalitions. CSU had expanded the resources presented in *drughelp.care* to include services providing peer and family support, as well as harm reduction services. Another key upgrade made to the website’s functionality for community end-users now allows it to works well with any version of Internet Explorer. PAXIS also noted implementation advancements that resulted in the scheduling of teacher training sessions.

CCMEO made progress in expanding OFR data collection to gather more detailed social history data through interviews with decedents’ family members. This data collection was done by an investigator, but the CCMEO planned to hire a social worker and formalize their data collection protocol.

Sub-awardees providing healthcare also reported improvements in service provision and planning. Forty-seven percent of MetroHealth providers noted in the EMR that they reviewed their patient's OARRS record prior to prescribing medication. The ExAM (Expanding Access to Medical Assisted Treatment) team at MetroHealth received 251 MAT referrals, 170 peer support services were provided and 57 individuals continued to receive linkages to care. SVCMC revised, improved and expanded their SBIRT plans. Their new *Chief of Behavioral Health* facilitated these improvements while fostering greater buy-in from caregivers at all levels. The workflow was solidified for the initial and secondary screenings within SVCMC's Health Care Center and the inpatient medical-surgical units. A new peer supporter is excelling in the role at Thrive, and the agency also has made improvements to their data collection tool. Additionally, Woodrow made strides in providing services to Spanish-speaking clients during the day, and had begun seeking overnight Spanish language support.

CHA reported dissemination improvements wherein the *Project Manager* coordinates with the internal marketing team to use CHA social media to increase community awareness of OD2A-related information.

Q3 – April 1, 2020 through June 30, 2020

Some OD2A partnering agencies established programming improvements. For example, **Thrive has expanded its peer support program to cover one ED 24/7**. CCMEO has identified those working in the construction industry as at high-risk for opioid overdose. Persons experiencing homelessness are a sub-population also at high-risk of experiencing an opioid overdose. CCMEO looks to build recommendations around these identifications and work with OFR attendees to build actionable stakeholder and public education to address these risks.

The ADAMHSB has developed virtual LE trainings and expanded their content to include information about the COVID-19 pandemic's impact on opioid misuse. The Board also has developed an interview guide for family members who have lost a relative to an opioid overdose, and is ready to implement it in collaboration with the CCMEO. CHS has improved sanitation protocols for its Syringe Services Program (SSP) vans and mobile staff to guard against COVID-19 transmission during the provision of services (e.g. staff temperature screenings, staff mask and glove requirements, generous availability of hand sanitizer, plexiglass dividers between staff and clients, cones to demarcate social distancing arrangements).

The MetroHealth Project DAWN team is using a mobile unit in an attempt to address health disparities associated with OUD, SUD and access to treatment in the midst of the pandemic. The team has launched "a mobile unit to provide Project DAWN [naloxone] kits and other required supplies within the community during the pandemic crisis and when access to OUD related services were/are unavailable.... Personnel are educating themselves in preparation to provide complete services, when/where the opportunity is available."

Thrive peer support specialists have been considered ED essential staff throughout the pandemic. The agency obtained appropriate PPE and provided it to all staff working both in the community and in the EDs. Thrive reports the peer support specialists did a fantastic job of keeping up to date with available resources and admission criteria for each treatment center. Staff at MetroHealth, University Hospitals, and SVCMC EDs kept Thrive staff in the loop with all changes as they learned of them.

Q4 – July 1, 2020 through August 31, 2020

OD2A participating agencies continue to report key programming improvements. CHA—in particular—saw many improvements and successes this quarter. CHA installed the cloud-based version of the online course authoring tool and the CHA graphic designer began coding for the seminars page on the educational portal. CHA also made significant advancements with the online provider (i.e., physicians, nurse practitioners, and dentists) Toolkit containing: a peer-review model prototype from MetroHealth; Academic Detailing (AD) (and explanations of what is it, how it works, ways to implement, best practices); and other opioid-epidemic mitigation resources. Additionally, CHA developed a timeline for delivery of online provider courses (over the next two quarters) and MetroHealth's clinical coordinator has approved the timeline. CHA also has received permission, and has requested files, from MetroHealth to post the *Residency Information Session on Opioids* on the CHA Seminar page on the educational portal. CHA has also requested the files to post the *MAT in the ED* 12- week seminar hosted and recorded by MetroHealth.

Woodrow reported that their new virtual platform for providing peer support has improved the immediacy of client referrals to treatment. Thrive has increased staffing at the SVCMC ED to be 20 hours daily and is now covering both the SVMC Psychiatric ED and Medical ED. CSU has updated their *drughelp.care* app to be more user friendly.

Theme 3. Leveraging Resources

This theme first emerged during the second quarter programmatic assessment.

Q2 – January 1, 2020 through March 31, 2020

CCBH describes how discussions with non-funded entities participating in OD2A activities have shown CCBH how to identify additional agencies that need to be included in ameliorating the opioid crisis in Cuyahoga County. CCBH also seeks to leverage partnerships with the other county- and state-level funded entities in Ohio to access data that will enhance the EPI-Profile of the individuals and families they are trying to reach, as well as improve linkages to care.
CHA's Project Manager leveraged a CHA Opioid Consortium Pharmacy Subcommittee resource to gain quick access to the National Clinical Program Manager at the Veterans Administration Academic Detailing Service to explore possibilities of a local AD event.

Q3 – April 1, 2020 through June 30, 2020
None of the OD2A partnering agencies reported leveraging resources during this quarter.

Q4 – July 1, 2020 through August 31, 2020
None of the OD2A participating agencies reported leveraging resources during this quarter, although the CCMEO was able to leverage its status as a participating agency in the CDC OD2A project to garner a Bureau of Justice Assistance OFR Database Pilot Site Grant award, which will support further OFR data coding and analysis. The grant also provides a framework for organizing, tracking, developing and implementing OFR recommendations.

Theme 4. Identifying Challenges

Q1 – September 1, 2019 through December 31, 2019
The primary barriers identified by agencies initiating new programs or extending/enhancing existing services consisted of hiring new staff and/or rearranging existing staff structures. Another identified barrier was the difficulty of building collaborative relationships between agencies quickly enough to support high-risk individuals in a timely manner. Although the agencies reported adequately addressing their new hiring and cross-agency communication challenges, additional implementation barriers emerged.

CCBH has reported a variety of barriers, some more easily overcome than others. CCBH conveyed that their own agency was undergoing staffing changes, and that they were still facilitating work relationships between two partnering agencies (Beech Brook and the Cleveland Division of Police). These are challenges that can be remedied in the short-term. **More long-term challenges are a) building a collaborative system for gathering and processing data originating from different entities; b) accessing data from some agencies that remain hesitant to share basic programmatic data, as well as protected health information; c) the increase in overdose incidents in the county caused by new drug combinations (e.g., cocaine/opioids and methamphetamine/opioids); and d) stigma toward those who misuse drugs.**

Thrive conveyed that there were initial challenges with data collection and analysis across their peer support programs at different hospitals, as well as with their referrals to detox facilities outside of these facilities' intake hours. Thrive also faced challenges referring persons from SVCMC ED to Rosary Hall for treatment. Rosary Hall is located within SVCMC, yet it is a Level 4 medically supervised detox center with very specific entry criteria. Quite often those who find themselves in the ED—and subsequently seeking treatment—do not meet these criteria.

Woodrow described three primary challenges: a) a need for Spanish language translators to support Spanish-speaking persons; b) patients without personal resources or insurance to cover

treatment expenses; and c) a lack of public resources to support those without the personal means or insurance to pay for treatment expenses.

Q2 – January 1, 2020 through March 31, 2020

The primary barriers identified by agencies were administrative and social. At the administrative level, CCBH reports that one participating agency discontinued participation in the grant effort due to uncertainty of its data collection capabilities. CCBH also met obstacles while completing the evaluation plan for the CDC because the Begun Center lead evaluator did not have direct access to the CDC's Partners Portal. ADAMHS ran up against a hiring barrier due to a lack of clarity about the interview and selection process for the OUD Specialist. CHA did not foresee the continuing need for a graphic designer during the development of the educational portal, but are now preparing a budget revision to address this ongoing need. CHS had staffing changes, and the CCMEO was experiencing too many participants at their monthly OFR meetings. CSU continued to run up against barriers to the smooth functioning of the *drughelp.care* website, including (a) agencies' inability to access the site, (b) data update reminders being identified by email servers as "spam" and going unseen by agencies, and (c) agencies using older versions of Internet Explorer that were incompatible with the site.

Some participating agencies experienced social barriers in their work. For example, ESC-NEO is facing resistance to implementation of PAX Good Behavior Game (GBG) training for teachers because districts are adopting other programs or they lack teacher buy-in. Teacher unions also are resistant to an additional training program.

Q3 – April 1, 2020 through June 30, 2020

The primary barriers identified by agencies were administrative ones as they transitioned at least some staff to a remote working environment. Hospital-based partnering agencies' staff (e.g. MetroHealth, SVCMC, Thrive and Woodrow) also experienced hindered accessibility to patients/clients because of quarantine measures and broad suspension of service availability. **ED admissions have increased more recently, particularly for domestic violence related presentations.** Woodrow is working to reduce the fear people are expressing with going to the hospital by sharing information provided to their organization by the hospital system. The hospital system has reassured Woodrow that it is safe for people to access help when needed at EDs. Woodrow will continue to help people work through these fears as they encounter those who are struggling. These ED-based agencies report that outcomes are undeterminable due to COVID-19-related mandates and fluctuating service barriers.

Additionally, CCMEO had to cancel an OFR meeting due to COVID-19. National Resource Center for Academic Detailing (NaRCAD) trainings for now have been canceled and MetroHealth is working to reschedule them. CSU faced challenges keeping student assistants engaged with the website work, as well as training new employees whom leadership had never

met in person. CSU also has faced barriers to dissemination because in-person meetings they were scheduled to attend have now been cancelled. **ESC-NEO and PAXIS acknowledge that they are concerned about educator buy-in to PAX when future school plans are unknown and teachers/administrators are under such pressure to produce positive educational outcomes with students and families under extreme stress.** The PAXIS team is working to meet these challenges by developing new ways for teachers to utilize PAXGBG in these new educational situations and settings.

Q4 – July 1, 2020 through August 31, 2020

The primary barriers identified by agencies this quarter were administrative ones as they continued to maintain at least some staff in remote working environments. Two agencies, CCBH and CCMEO, have experienced limited access to services, hiring freezes, and furloughed staff. For example, while CCBH onboarded two data analysts in Year One, the Strategy 3 team is still not yet fully staffed. As the County health department, CCBH's emergency response plans have been activated since March, and CCBH's COVID-19 response needs have taken precedence over other staffing.

CCBH also emphasized that communication with sub-grantees, such as ESC-NEO, has been key in creating work-arounds for some barriers faced during this quarter. Thrive, too, has experienced obstacles this quarter, this time around client transport. Previously Thrive relied on Uber to move clients from EDs to treatment agencies, but Uber has not been as reliable during the pandemic so other transport services are being explored.

CSU has been faced this quarter with website challenges and is in the process of creating a replica site to serve two roles: (a) as a test site to test all new codes to ensure that they do not create unintended problems on the live site; and (b) as a backup site in case something happens to the live site.

CCMEO continues to see challenges in obtaining decedent medical histories. **CCMEO currently has a Data Use Agreement (DUA) in place with MetroHealth, but still struggles to find appropriate points of contact with all hospital systems in the County.**

Theme 5. Exploring Innovative Ideas

Q1 – September 1, 2019 through December 31, 2019

Even at this early stage of implementation, many of the partnering agencies recognized administrative and/or activity areas in which they could innovatively expand their OD2A efforts beyond their original plans. For example, both Thrive and CHS conveyed their ideas to expand and streamline operations within their site portfolios. "Instead of operating our hospital programs as separate entities," wrote Thrive, "we have decided to streamline our models and develop one workflow to be utilized in all hospital systems that employ peer supporters." CHS found that

through their relationship with The Centers they "are able to leverage the good work that has been done there at the Uptown location, learn from it, train a new team, and begin providing the same services in a Centers-owned location in Kamms Corners."

Others found opportunities to innovate across existing structures and agencies. **SVCMC has discovered that the ED "may be a better location to start for patients to receive pre-screenings for opioid [misuse], rather than the inpatient medical-surgical units."** Additionally, MetroHealth conveyed that they are now responding to an unanticipated barrier by instituting a clinic day, partnering with CHS, and providing telephone call follow-up in an attempt to connect with individuals who have experienced an opioid overdose who are not home at the time of the QRT visit. MetroHealth also is exploring collaborations with lawyers and judges to facilitate deferral of charges and to qualify some individuals with opioid-related apprehensions for treatment.

Beech Brook reported exploring ways to learn how opioid misuse impacts family members and how the agency can collect such data. Both Woodrow and MetroHealth stated that they are working to transform and/or further develop resources for those impacted by opioid misuse. MetroHealth identified additional needs for their ExAM (Expanding Access to Medication Assisted Treatment) Program and is exploring the provision of additional community supports associated with housing, transportation, legal aid, employment and job placement. Woodrow plans to write a resource guide for participants that will address child support, child care, as well as education and employment services.

Q2 – January 1, 2020 through March 31, 2020

CCBH continues to identify additional data variables, agencies that need to be included in ameliorating the opioid epidemic, and resources to further build the plan to address the epidemic—and is pursuing access and linkage to all of these. CSU is building on lessons learned from *drughelp.care* registered agencies during the revamp of the website by pursuing additional outreach to agencies via email, print and social media.

Additionally, even though CCMEO found that too many participants were attending OFR meetings, the participants helped to identify new intervention points to prevent opioid overdose. CCMEO also has created a training for lawyers, prosecutors and others to increase awareness and understanding of drug court proceedings—and is working to schedule it.

Medical providers also have identified innovative plans and practices. MetroHealth's OD2A programming has led to the use of Ohio Automated Rx Reporting System (OARRS) to withdraw patients who have received concurrent opioid prescriptions. MetroHealth also is working with the Cuyahoga County Sheriff's Department (CCSD) to establish another QRT supporting those who have experienced an opioid overdose. Moreover, SVCMC is expanding the standard of care

for SBIRT to include screening for trauma in their SBIRT protocol. Thrive continues to work innovatively to meet different health system needs and expand peer support to other EDs, including those in the University Hospitals system.

Q3 – April 1, 2020 through June 30, 2020

Even at this early stage of implementation, and in the midst of the global pandemic, CCBH and many of its partnering agencies continue to recognize administrative and/or activity areas in which they could innovatively expand their OD2A efforts beyond their original plans. **CHS is seeing greater efforts among clients to promote hygienic practices and social distancing, and some clients are participating in SSP to collect clean needles on behalf of other clients.** CHS is hoping to further encourage these practices and is working with a marketing team to get the word out about the SSP.

CSU found it challenging as an educational institution to register for and develop web-based app accounts, which are usually associated with a single person. CSU has worked with others at the university to obtain access to a dedicated credit card for online developer accounts, and is continuing to work through the processes of establishing and streamlining these accounts. CSU staff also are "working on virtual training materials, including simple guides and a video." They are making the best of work environment changes around the COVID-19 pandemic and argue that

> *…these tools will not only serve a good purpose while we work remotely, but will be useful in the future as well, enabling us to train a single or small group of people at an organization, and then giving them the tools to pass on this information to the rest of their staff.*

Woodrow has seen excellent results providing virtual peer support. The agency believes they can bring virtual peer support to areas that typically do not provide consistent and quality peer support, such as prisons, jails and remote areas.

Q4 – July 1, 2020 through August 31, 2020

Even at this early stage of implementation, and continued global pandemic and civil protests, CCBH and many of its participating agencies continued to recognize administrative and/or activity areas in which they could innovatively expand their OD2A efforts beyond their original plans. For example, the CCBH OD2A Strategy 3 group began working on a communications plan to better inform local stakeholders and prevention strategies of surveillance data insights. **A recent idea of a quarterly infographic is taking shape; this will include key data points and interesting findings from CCBH data analyses, and be provided to partners routinely.** Additionally, participating agencies' peer-support strategies and behavioral health screenings continued to evolve and grew quickly. Thrive worked to expand services to include warm

handoffs to community-based peers to further facilitate connection of clients with treatment services, and The Begun Center also worked to expand evaluation to better understand linkages to treatment using peer supporters. SVCMC sought how to screen all patients for SUD and mental health issues, which is a complete hospital-system change for both inpatient and outpatient clients.

CSU added the "distance from you" sort feature on the *drughelp.care* website that allows people to figure out how far they are from each treatment service, an innovation fueled by feedback received while training service providers. CSU added the ability for users to enter a specific address (using Google maps) and sort the results by distance from an address. This is especially helpful for social workers/case managers working virtually and in a different location from the clients they serve.

In other areas, the ADAMHSB explored ways to include national experts in their public-safety forces trainings. CCBH reported that they were striving to support this and all such innovations by working with OD2A participating agencies to understand unobligated funds and their use for those funds—as they fit in the scope of work and with what CCBH is learning from evaluation.

During the focus groups, staff also were asked a question about innovative ideas they were exploring and lessons learned from program activities.

Focus Group Question 3. Have you learned any lessons from your activities this year? If so, what?

a. COVID-19 Pandemic Data Sharing vs. Opioid Epidemic Data Sharing

1. “I was just going to add to [X’s] point that the stigma of this kind of [substance use] really played out as soon as COVID hit. Just watching the community, you know, really rally around that pandemic. Getting resources together to share data and spitting out numbers like crazy when, you know, we're still struggling to get and share [opioid epidemic] information. To see it play out at the same time has been a little disheartening” (Cuyahoga County Board of Health).

b. Co-occurring Medical and Behavioral Health Challenges

1. “I would say one lesson that I've learned is just how many patients we have in this hospital that have mental health and substance abuse issues and needs that have not been addressed, and how important it is for the entire medical team to know the importance of this and how it's all interrelated” (St. Vincent Charity Medical Center).

c. Hospital Process

1. “My comment is the insurance companies only pay for so many days for the patients to be here. And it is the nature of the insurance company ... that they want patients out as quickly as possible. So, sometimes like I'm working on a patient and I go down and see them—and they're already gone before I can completely finish the link while they're still here. Now, of course, I follow them out in the community and stuff, but then, you know, phones are disconnected. All those kinds of things. It's not always easy to follow up with someone. Sometimes that's a pretty big struggle, and that's been a huge adjustment for myself that I've had to make—the rapid pace at which patients are discharged...” (St. Vincent Charity Medical Center).

d. Engaging People with Treatment

1. “It's never really so cut and dry where, you know, someone comes in and they have SUD [Substance Use Disorder]. There [are] always other circumstances that come into play as far as why they are there. There may be domestic violence involved or they may have a medical issue, you know, and all these different resources, whether [they] are insulin dependent, or [they] are on oxygen, or you know, so ... all these other barriers, complications can come up. You think, ‘Well, I never even thought of that.’ You know, what if someone appears in a wheelchair? ‘Well, let me think what places don’t have stairs?’ It's kind of things like that. When you are peer supporting and the peer’s asking for help, you're also assessing their needs in your head as you're kind of going along, because you want to know what the best fit for that peer is. So again, if he's on oxygen, that takes care of X, Y and Z treatment centers because they don't accept peers with medical issues like that. It's almost, you know, just trying to figure out what all is out there and what's the best fit for this year. Obviously, with their input, I mean, where they want to go, what we're gonna try to do, but there's always certain things that come up that just keep complicating things” (Thrive).

2. “I think it also helps with having a cap [on number of syringes distributed at one time]. It increases the frequency of the clients who are coming in to the site. So that way, it increases our chances of talking to them and offering services to them. So, they might come in more often than they were before. They're no longer able to get 50, 100 or 200 [syringes]. Putting on the cap also serves as a benefit where, since we're seeing them more often, you're building that relationship, increasing the trust. We have increased referrals for services that we offer here for the MAT program and primary care. Many lack primary care or dental or even insurance, and so we're able to speak with them more often. And, you know, they might not accept it, you know, at least we can plant the seeds or say like, “Hey, whenever you're ready to get care, whenever you're ready, or you need anything you can come in” (Circle Health Services).

3. “One of those silver linings that's come out of this [pandemic] is one of the biggest push backs we've gotten from other ERs [emergency rooms] when we've talked to them [is] about not having a dedicated space for a peer supporter to work with a person. ...Now we can say we can do this

just the same [via video conference], and it really wouldn't cost any more to do it outside of purchasing the iPad. I mean, it's really kind of exciting! ... You know, [even videoconferencing with peers on an iPad] we're still getting about 80% of the people that we see into their chosen treatment" (The Woodrow Project).

4. "I think we've expanded our training in terms of who to train. So, I think when we thought about service providers, originally, we were really thinking service providers within the drug treatment world. But as we've reached out to ... case managers and social workers who are doing more general referrals, so far, I'm getting a really, really warm reception, which is telling me that there's a need there. So, I think this has been a good lesson learned" (Cleveland State University).

5. "I think that the thing that I've learned is the more that you dig in, the more you find unique opportunities to help people. A perfect example is some of the information that came out of [the Cleveland Municipal Drug Court] as far as that target population of women that have been impacted by trauma, and how they don't follow-up on treatment related to substance abuse. I thought that was something that was interesting and I think that we need to really do more with supportive recovery housing. And then we still are struggling with looking at this [opioid epidemic] from a comprehensive view. We have a tendency, from an historical perspective, to piecemeal substance abuse and treat it individually for that specific [substance], as we see it—instead of really standing back and looking at it from a view that would include alcohol and tobacco, and maybe really trying to identify some of those underlying issues, why people use that as a mechanism for coping, in addition to understanding that, you know, sometimes people make bad choices.... I want to find where we may be able to do a better job" (Cuyahoga County Board of Health).

<u>e. Harm Reduction</u>

1. "I learned that a pandemic is not going to keep our [syringe exchange] clients away, which is a good thing, because we do want to limit the spread of Hepatitis, as well as HIV.... So, the fact that our clients still trust us to come in during a pandemic is very enlightening" (Circle Health Services).

2. "And I actually had quite a lot more clients interested in getting into the detox and or the MAT [Medication Assisted Treatment] program because they wanted to be clean, just in case they wouldn't be able to get any [drugs]. They were trying to get into detox or the MAT program to prevent themselves from [suffering withdrawal] during the quarantine, in case the city shut down and they were unable to get to their dealers or something. Or they themselves would report back that a lot of people they knew were overdosing" (Circle Health Services).

f. Public Safety Trainings

1. “A lot of times when we talk about [training] public safety, we limit ourselves to corrections and law enforcement. Some pieces of this could be good for dispatch. Some pieces of this could be good for other departments” (ADAMHSB).

g. Community Awareness

1. “I've heard [police] officers comment ... that “The community knows less about these resources than we do.” And a lot of times the community is relying upon law enforcement to be their social workers to tell them about referrals. ...The example [a police officer suggested] was, ‘Can't you do this kind of training for faith-based groups? Can't you do it for community organizations?’ Because the family members or significant others are more likely to be involved in that way than they are with public safety after the event.” But I think it's the perception of the role of law enforcement across the country in terms of being the de facto social worker. And that's the reason why they are incorporated so often in these types of grants, because they would [seem to] be the source of referral” (ADAMHSB).

2. “...One of the nuances is that when [police] intervene, they're intervening at the time of crisis. They're not going to be the one to make referrals at all. I wonder whether or not we hit the right target in education for them, but they're not going to go back to ‘Suzy Smith.’ Whoever is working with ‘Suzy Smith,’ would be doing that. ...Some of the comments that have been made are that, you know, ‘This is good information, but we're not gonna be there to make those kinds of referrals. That's not what our role is.’ ...How do we fit [our trainings] into how they actually intervene, so that the information is useful?” (ADAMHSB).

h. School Programs

1. “[For school programs] it really takes buy-in. You've got to get the administrative staff involved. To train just a teacher is not helpful. You have to have some administrative supports on understanding what [the program] is and how to implement it” (Northeast Ohio Educational Service Center/PAXIS).

i. Virtual Learning

1. “Going online hasn't been bad. Actually, we are adapting. Our first training actually went really well, so you know, this is not a bad thing, maybe even when we can see people face-to-face, we may continue doing online training, because that's really convenient. We are showing our website and we need the computers to be able to do it that anyway. So, like in the area of sort of unexpected benefits of all of this, I would say ... that training online is actually really, really helpful because we training about a website. They are already on their computers. It takes them less time to learn” (Cleveland State University).

Theme 6. Dissemination and Data Sharing Strategies

Q1 – September 1, 2019 through December 31, 2019

Agencies reported disseminating knowledge gained and lessons learned during this reporting period primarily to internal staff and partner agencies via internal one-on-one discussions, team meetings, and education sessions. Some agencies engaged in broader dissemination of their OD2A activities, such as Woodrow who participated in a panel presentation at the ADAMHSB and a Safe Passages meeting with 10 county Police Departments (PDs). CHA spread the word about their OD2A efforts via their media channels, as well as by "notifying [Health and Human Services (HHS)] through an HHS Opioid Roundtable in Washington, DC, with secretary Azar and other key officials." Other agencies remained reluctant to disseminate news of their activities at this early stage. For instance, SVCMC "want[s] to be sure that our execution of the project is well-thought out before sharing plans externally."

Q2 – January 1, 2020 through March 31, 2020

Many participating agencies reported disseminating knowledge gained and lessons learned during this reporting period via internal opioid-related updates to staff and collaborating agencies, as well as to the public via social media. Additional dissemination activities included ADAMHS distributing to City of Cleveland EMS an opioid-misuse family resource guide, CCMEO using fatal overdose data related to specific county hotels and motels to inform QRTs and Project DAWN naloxone kit distribution, and NEOESC presented their OD2A-related program activities to Pupil Services Directors of 16 school districts at a First Ring Collaborative Meeting.

Q3 – April 1, 2020 through June 30, 2020

Many participating agencies continued to report the dissemination of knowledge gained and lessons learned during this reporting period via internal opioid-related updates to staff and collaborating agencies, as well as to the public via social media. Additional dissemination activities include CHS staff distributing educational materials to clients regarding safe injection practices during the COVID-19 pandemic, and the CCMEO disseminating OFR identifications of opioid overdose at-risk occupations and subpopulations.

Thrive has been covered by several media outlets in the past few months as they continued their peer support program expansion to EDs countywide. Six informal education opportunities occurred this quarter, resulting in four physicians, one resident, and one nurse learning more about peer support services and the work that Thrive does.

Woodrow continues to have regular contact with their primary referrals. They report keeping open lines of communication with a variety of funding sources including the courts, Mobile Crisis and the ADAMHSB. Woodrow also met with the Ohio Recovery Center, a provider in

Franklin County. The Woodrow director presented a webinar for the GAINS Center for Behavioral Health and Justice Transformation as part of a re-entry program series through the Substance Abuse and Mental Health Services Administration (SAMHSA). The presentation addressed the benefits, solutions and challenges with making the change from in-person to virtual peer support.

Q4 – July 1, 2020 through August 31, 2020

Many participating agencies continued to report the dissemination of knowledge gained and lessons learned during this reporting period via internal opioid-related updates to staff, collaborating agencies, and the U.S. Attorney's Office of the Northern District of Ohio Heroin and Opioid Task Force Data Subcommittee, as well as to the public via social media.

CCBH staff have shared Strategy 3 data updates, including updated nonfatal overdose data numbers with the participating agencies who work on different strategies of the grant. Data requests also have been fulfilled as previously discussed. New data source opportunities and caveats continue to be communicated though team meetings. The Drug Overdose Integrated Epidemiological Profile (DOEIP) release should occur in the next quarter; presentations are already planned. A webpage also is under development by CCBH to host the data dashboard and serve as a report repository. The CCBH-driven opioid-awareness campaign was successfully conducted through Radio One in July and iHeart Radio in August. The metrics have been reported to the Begun Center and will be shared with CDC.

The CCMEO reports that multiple OFR committee members have been working with the City of Middleburg Heights to make naloxone available to the public at area hotels/motels. Dr. Thomas Gilson, Cuyahoga County Medical Examiner, worked with the police chief and city council members to discuss and disseminate information on this issue, and MetroHealth conducted outreach to provide the naloxone. CCBH also led a Zoom call with all sub-grantees on August 19, 2020, to provide greater understanding and cohesion of OD2A participating agencies' efforts.

During the focus groups staff were asked six questions about activities and agency processes that either facilitated or hindered access to sharing of data related to the opioid epidemic.

Focus Group Question 4. How have your activities generated opioid-related information or "data?"

1. "We have a lot of [Screening, Brief Intervention and Referral to Treatment (SBIRT)] screening data, specifically, if you're looking whether or not these patients need a link to some form of community—potentially a residential service for substance use. So, we're looking at what type of use, because that's going to determine what type of treatment they're receiving, as

well. I know that [we have been] doing several chemical dependency assessments just based off of our workflow here, on whether or not the patient needs residential treatment, at which point they would need to complete a chemical dependency assessment to get them into that facility. When [we are] completing that [we are] seeing what type of substance, one or more substances, that they're using and then what type of treatment they would need based off of what they're using. I do see some opiate use, but it's not just strictly opiate use. Along with it I see a lot of alcohol, cocaine, marijuana substance abuse. It's not just strictly opiates. People are using opiates mixed with cocaine and alcohol and all that" (St. Vincent Charity Medical Center).

Focus Group Question 5. Have your activities improved access to and sharing of data across different agencies? If so, in what ways?

1. "I think since we first began last summer, we definitely have more data. We have a DUA setup with MetroHealth. So, they do share now. That took like, I think, about six months to put together, but now we do get their records if they [decedent] went for mental health treatment. Then also like law enforcement data. We have a representative from the heroin and opioid team at CDP, as needed, to share law enforcement data with us. All of that took a while to kind of put together, but I feel like we're in a good place now" (Cuyahoga County Medical Examiner's Office).

2. "For Strategy 8, we've been able to build a partnership with the Cuyahoga County Sheriff's Department. We have that MOU signed and in-progress. And we also just recently gained access to the CPD RMS [Cleveland Division of Police Response Management System] data. The kinks are being worked out to obtain that data. The kinks are access, training on the system, things like that, but we've been given the approval from the higher-ups that we do have access to that data" (MetroHealth).

3. "...This grant, in particular, has completely restructured the way we collect our hospital data. You know, the CDC was requiring so many data points we weren't collecting at all, that we pretty much took what they required and mimicked that across every ED program we have. And we're in nine different EDs at this time. It really has served as a model for all for how we're collecting data in the hospital setting. It has been awesome! Again, it's allowed us to, you know, expand [peer support] into six UH EDs [University Hospital emergency departments] at this point, and that having that data and the way we were collecting it, lets us kind of tell our success story and allowed it to be duplicated from there. So, it's been huge" (Thrive).

Focus Group Question 6. What policies or practices support your access to and sharing of data?

1. “So initially, when we started rolling these out, we didn't have actual, you know, hard data. It was more of progress summary because we were kind of building the foundation and infrastructure to get these programs up and running. And then COVID hit, so I anticipate we're going to start seeing some good numbers soon because, as on Strategies 4, 5, 6, 7 and 8, while COVID was going on, we've been really working on the back end to kind of get everything in place, workflows, processes, ways we're gonna collect this data. And so now that piece is built and so moving forward, we anticipate we're gonna pull in some really good data” (MetroHealth).

2. “We have our peer supporters complete what we call a hospital data tracking form for every single peer who presents in the ED regardless of whether or not they engage with our services. So now that allows us to capture some of what I find it to be very interesting information. You know, how long they spent with the peer. And to me, that's a particular area of interest, because we'll see frequently that they spend an hour with that peer and the peer still declines to engage in any type of treatment service. And to me, that's really interesting, because they can document the reason why and I think it's valuable information, you know, you can kind of see why people can be there and appear to be engaged, but ultimately say, “No, I'm not ready,” and that's good information. They also collect things like ‘Where are what types of services they'd like to receive?’ which I think is helpful. You’re in the ED, but talking about detox, inpatient [treatment], that type of thing, as well as linkages to social services, and other community resources” [Thrive].

3. “As part of my registration process with agencies ... I do a little training with them. I always go behind the scenes and answer all the questions to get them on the site. But then I always take them to the ‘front’ [of the website] and show them how the ‘Search’ works and where [their agency] appears. And ... the truth is that the vast majority of treatment providers are also referring their patients to other levels of care that they don't provide. So, I think in that sense we are [sharing data across agencies], because once they're connected, they're getting referrals, but they're also getting a tool to be able to know information about other people doing the work. They're getting a better sense of the networks that are out there. It's also open and free to use so they get connected and they can see what other people are doing” (Cleveland State University).

Focus Group Question 7. What policies or practices limit your access to or sharing of data?

1. “It'll depend on what data you're asking for, and actually which direction it's going. So, I think the reason that we've become such a hub is we can share our information with just about anybody we want. And by the law, almost nobody can refuse to give us information that we need to complete our investigation. But outside of that, you have everybody's hospital system. And

when trying to get nonfatal data, the Health Insurance Portability and Accountability Act (HIPAA) still applies. When people are dead it doesn't apply anymore. So that's why we have an overabundance of decedent information and a dearth of nonfatal overdose data. Then again, law enforcement and health care share with us, and they won't share with each other, because of HIPAA, or, you know, whatever law enforcement feels is 'law enforcement.' They don't want to lose control of their cases. And then there's, I think, there's just an overall misinterpretation and misunderstanding of what the law says about what you can and can't share. Instead, the hospitals will immediately go to HIPAA, even though it may not even apply. They just fall back into their comfort zone and say, "No, you don't get this. It's HIPAA." Police will do the same thing even though you know, they'll say it's "sensitive law enforcement" information. Not everything is covered. Those are not blanket or umbrella prohibitions. You have to have somebody who's willing to take that extra step and kind of narrow the focus. What it is that we're trying to accomplish? What it is that we're trying to ask for? Whether or not they can make those exceptions within their own institutions? And not just shielding themselves with broad interpretations of the law. We've been finding that forever" (Cuyahoga County Medical Examiner's Office).

2. "It's really difficult because different institutions and different partners seem to be really reluctant to sharing data. So, that's been one of our biggest barriers, gaining the approval to actually share data, because no one wants to share their data. ...The partnership with the sheriff's department is close to a year in progress. And we finally just received the approval and got the MOU you signed and executed. But that's our biggest barriers. Nobody wants to share data. And here at MetroHealth we've got our own policies and procedures with compliance and what we can share. ...There [are] just a lot of walls up with sharing helpful data" (MetroHealth).

Focus Group Question 8. Have you successfully changed any policies or practices that were limiting your access to or sharing of data? If so, please explain.

1. "Well, the whole thing with when we realized we were becoming [email] spam. I mean, that was limiting, like people weren't getting our communications, so they were dropping away from their involvement. They weren't getting our communications and they weren't able to share their data with us. And so that was a big issue that we resolved" (Cleveland State University).

Focus Group Question 9. How can your activities and the data you collect contribute to a bird's-eye-view, real-time understanding of the county's opioid epidemic?

<u>a. Factors Contributing to the Development of a Bird's-eye, Real-time Understanding</u>
1. "I think [SBIRT is] helping to capture those who are not seeking substance use services. A similar population is coming in, but they're seeking help for these acute medical needs. So, typically that's not going to be seen within the opioid epidemic as a patient who is struggling

with opioid use. That's going to be documented as somebody coming in for an acute medical need, whatever it may be, and, your doctor, your resident, even your medical social worker is not going to assess that and they're not going to even really consider it, especially with the short turnaround time of admission to discharge for our medical unit. So SBIRT is really able to identify what we're not capturing, because they're not coming in, like if somebody's coming in for mental health services or they're coming in, specifically for substance use services, we're clearly documenting that. We're seeing that they're linked, but when [patients] come in for medical need without [extra] effort that [need] is not being identified" (St. Vincent Charity Medical Hospital).

2. "In regard to the quarterly OFR [Overdose Fatality Review] meeting, I think it'll help to disseminate what we review with more community partners and find new avenues to implement our recommendations" (Cuyahoga County Medical Examiner's Office).

3. "We also we collect zip codes. We have geospatial information, which is what I'm most interested in. 'Where are these people coming from?' And it shows where people come from, but also where the gaps are. Which, if you're like servicing the whole county, but we're only pulling from hospitals that are downtown, you know, like, [you can see] how far are people coming in [and determine if it is] valuable to reach out to the suburb areas and things like that? So, it just gives us more places to look into and just a better idea of where our clients are coming from" (Thrive).

<u>b. Factors Contributing to the Development of a Bird's-eye, Real-time Understanding</u>

1. "[There are delays in producing bird's-eye-view, real-time data] because of the investigative process. Reports finalized and complete here takes 60 to 90 days. Police investigations can go anywhere from, you know, 24 hours on to work your way through the court system" (Cuyahoga County Medical Examiner's Office).

2. "And a lot of the PAXIS data, as far as opioid use goes, is going to end up being longitudinal, like, way out. We're not really going to be seeing an impact on first graders' opioid use immediately. So, a lot of that is kind of secondary. Much further out. It's building blocks for later on" (PAXIS).

Other Points of Discussion

During the focus groups agency staff also were given the opportunity to discuss additional thoughts or points of interest that were not yet explored by the focus group.

Focus Group Question 10. What other information would you like to share with us?

a. Future Treatment Opportunities

1. “We are creating a second website for mental health and substance use. In the future, we're going to bring treatment resources about these two [conditions] together. There's so much crossover. [Agencies] say they have treatment to stabilize mental health, but not substance use. Yes, they have to stabilize these patients first, but then the patient just sits in the middle with no place to go. We are going to bring these together” (Cleveland State University).

b. Grant Project Administration

1. “I think my only comment, maybe a recommendation, for Year Two, would be that the [Cuyahoga County] Board of Health have at least quarterly meetings with all sub-recipients, because we have yet to have a sub-recipient meeting with all of us together—that I'm aware of. We don’t have the big picture of this grant” (Center for Health Affairs).

2. “I always try to reinforce that when we go down through these different ventures, even though we're the lead on a grant, I mean, [sub-grantees] are the experts in the field. For us to tell Circle Health Services how to do something, well, that is not the way that works. I'm really glad to see that there seems to be good collaboration with [the evaluators] and our office moving forward, as it relates to going out into the community talking to these agencies that are instrumental to what we're hoping to gather and, you know, giving them the opportunity to tell us what works, what doesn't work, and then coming back and looking at it. It’s been helpful” (Cuyahoga County Board of Health).

XI. Dissemination

Presentations

Karns, B. & Vince, A (2020). *Overdose to Action – Overview*. Presentation to the Data Subcommittee of the Northern District of Ohio Heroin Opioid Task Force.

Kavadas, A. & McMaster, R (2020) *Pilot Projects – Data Dashboard Example*. Presentation to the Data Subcommittee of the Northern District of Ohio Heroin Opioid Task Force.

Riske-Morris, M. (2020) *Cuyahoga County OD2A Linkage to Care Overview*. Presentation to the Innovative Surveillance CoP Linkage to Care Workgroup.

Kavadas, A. & McMaster, R (2020) *Overdose Data to Action – Public Health Surveillance Data Sources*. Presentation to the Data Subcommittee of the Northern District of Ohio Heroin Opioid Task Force.

Kavadas, A. & McMaster, R (2020) *Family and Children First Council: Drug Overdose Special Request*. Begun Center for Violence Prevention Research and Education, Case Western Reserve University.

Committee Attendance

US Attorney's Office of Northern District of Ohio's Heroin and Opioid Task Force

- Daniel Flannery, Ph.D. (The Begun Center) participates in these monthly meetings and provides updates on the OD2A project. These meetings were cancelled in March-June due to COVID-19 health restrictions, but virtual meetings started in July.
- Vince Caraffi and Becky Karns (CCBH) attend these meetings and also provide updates on the OD2A project.
- Manreet Bhullar (CCMEO) attends these meetings and provides fatal overdose data updates to the committee.

US Attorney's Office of Northern District of Ohio's Heroin and Opioid Task Force Data Subcommittee

- Daniel Flannery, Ph.D., and either Michelle Riske-Morris, Ph.D., J.D., Vince Caraffi, MPH, Becky Karns, MPH, or April Vince, MSSA, LSW attend the HOTF data subcommittee meetings and provide updates on the OD2A project. These meetings were not held in the months of March-April, but began remotely again in May.

US Attorney's Office of Northern District of Ohio's Heroin and Opioid Task Force Treatment and Healthcare Policy Subcommittee

- Michelle Riske-Morris, Ph.D., J.D., Angela Kavadas, MPH, and Ryan McMaster (The Begun Center) participate in these monthly meetings to discuss access to and sharing of data from healthcare providers.

XII. Appendix 1: Hiring and Changes in Personnel

Hiring and Changes in Personnel for OD2A Partners (September 2019 to August 2020)

The hiring of specific personnel for some agencies was built into the logic model for OD2A, this included the hiring of a full-time OUD specialist for the ADAMHSB (onboarded in February, 2020) and increasing the number of peer supporters for both Thrive (three peer supporters) and Woodrow (six peer supporters).

In addition to those outlined by the grant, most agencies added other staff in Year One to in order to meet outcomes:

- CHA: December, 2019 – Project Manager in Health System Education
- CHS:
    - HIV Outreach and Prevention Manager
    - Outreach Worker Supervisor
    - HIV Nurse
    - HIV Outreach Workers to assist with SSP (8)
- MetroHealth:
    - APRN ED Case Manager
    - Project DAWN Program Specialist
    - LISW-S for the ED
    - Business Data Analyst
    - Clinical Education Specialists (2)
    - Addiction Recovery Specialist
    - Intern to support the QRT and Project DAWN Team
- SVCMC: 2020 –
    - Team Lead Social Worker/SBIRT Team Lead
    - Full-time LSW
- Thrive:
    - Project Manager

CSU hired one part-time Community Outreach Consultant, unlike the other partner agencies, CSU has seen a high turnover in employees working on OD2A, this is because they employ a number of part-time student workers to assist with development and upkeep of the *drughelp.care* website.

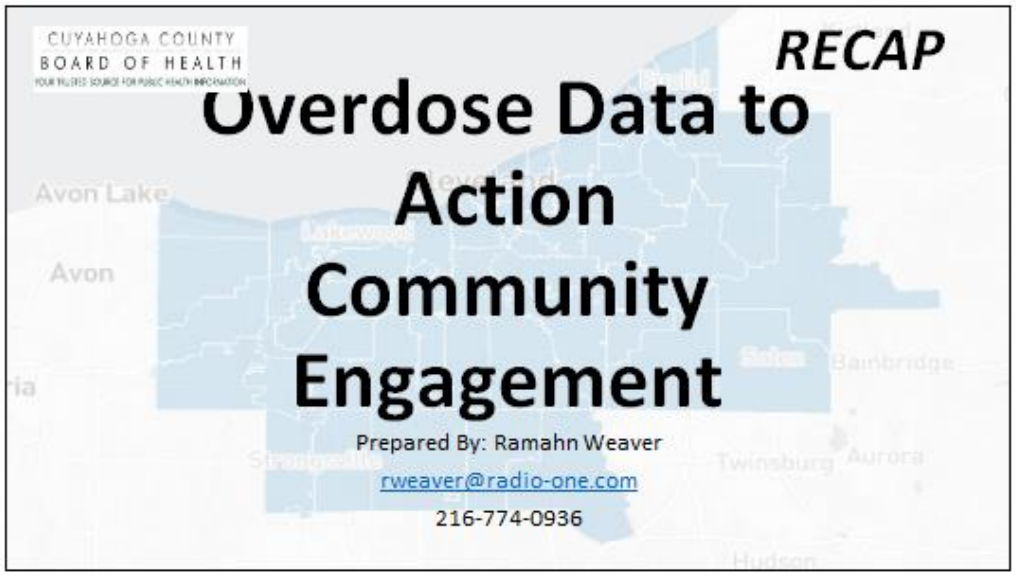
Student Job Title	**Total Hired**	**Number Lost (graduated, resigned, or fired)**
Graphic Design	5	2
Engineering	8	3
Registration	11	0

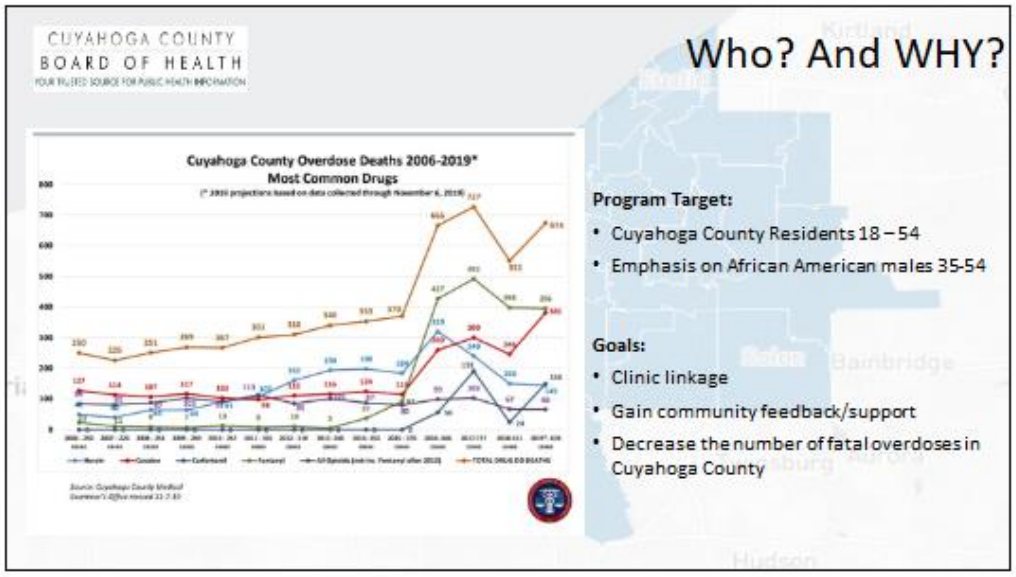
XIII. Appendix 2: Abbreviations

AA	Alcoholics Anonymous
ACES	Adverse Childhood Experiences
AD	Academic Detailing
ADC/TANF	Aid to Dependent Children/Temporary Assistance for Needy Families
APRN-CNP	Advanced Practice Nurse - Certified Nurse Practitioner
CAD	Computer Aided Dispatch
CCRFSL	Cuyahoga County Forensics Science Lab
CCSD	Cuyahoga County Sheriff's Department
CDC	Centers for Disease Control and Prevention
CEMS	Cuyahoga Emergency Medical Services
CPD RMS	Cleveland Division of Police Response Management System
CWRU	Case Western Reserve University
DEA	Drug Enforcement Administration
DO	Doctor of Osteopathic Medicine
DOIEP	Drug Overdose Integrated Epidemiologic Profile
DUA	Data Use Agreement
DW	Data Warehouse
EBP	Evidence Based Practice/Program
EBT	Electronic Benefit Transfer
ED	Emergency Department
EHR	Electronic Health Records
EMR	Electronic Medical Records
EMS	Emergency Medical Services
ER	Emergency Room
ExAM	Expanding Access to Medication Assisted Treatment
FCFC	Family and Children First Council
FTE	Full Time Equivalent
GPS	Global Positioning System
HCC	Health Care Center
HHS	Health and Human Services
HIDI	Heroin Involved Death Investigation
HIDTA	High-Intensity Drug Trafficking Area
HIPAA	Health Insurance Portability and Accountability Act
HIV	Human Immunodeficiency Virus
HUMADAOP	Hispanic Urban Minority Alcoholism Drug Abuse Outreach Program

ICD	International Classification for Diseases
IT	Information Technology
LE	Law Enforcement
LGBTQ	Lesbian, Gay, Bi, Trans, Queer
MAT	Medication Assisted Treatment
MD	Medical Doctor
MOU	Memorandum of Understanding
NEON	Northeast Ohio Neighborhood Health Centers
NEORFC	Northeast Ohio Regional Fusion Center
OARRS	Ohio Automated Rx Reporting System
OFR	Overdose Fatality Review
ODH	Ohio Department of Health
OSTF	Opioid Safety Task Force
OD2A	Opioid Data to Action
OUD	Opioid Use Disorder
PA	Physician's Assistant
PAR Card	Police Assisted Referral Card
PAXGBG	PAX Good Behavior Game
PD	Police Department
PDMP	Prescription Drug Monitoring Program
PPE	Personal Protective Equipment
Project DAWN	Deaths Avoided with Naloxone
PSPD	Public Safety Pilot Data
QIR	Quarterly Implementation Roundtable
QRT	Quick Response Team
SAMHSA	Substance Abuse and Mental Health Services Administration
SBIRT	Screening Brief Intervention Referral and Treatment
SOAR	Supporting Opiate Addiction Recovery
SSI/SSD	Social Security Disability Insurance
SSP	Syringe Services Program
STD	Sexually Transmitted Disease
SUD	Substance Use Disorder
UH	University Hospitals
USANDO	U.S. Attorney of the North District of Ohio
VA	United States Department of Veterans Affairs
VS	Vital Statistics
YMCA	Young Men's Christian Association
YWCA	Young Women's Christian Association

XIV. Appendix 3: CCBH Social Awareness Campaign





CUYAHOGA COUNTY BOARD OF HEALTH

Radio Reach

Research shows that 80% of respondents report the same, or more time with radio as a result of COVID-19 (**Nielsen** https://www.nielsen.com/us/en/insights/article/2020/radio-is-comforting-food-as-media-consumption-rises-amid-covid-19-concerns/)

Station: WENZ 107.9
Station Target Demographics: 18-35
Commercial Totals: (265) :60 second commercials
Campaign Dates: 6/15-7/24/2020
Campaign Reach: 426,400+ listeners

Station: WZAK 93.1
Station Target Demographics: 25-54
Commercial Totals: (265) :60 second commercials
Campaign Dates: 6/15-7/24/2020
Campaign Reach: 617,200+ listeners

Z107.9 ZHipHopCleveland.com

93.1 FM WZAK Cleveland's R&B Leader

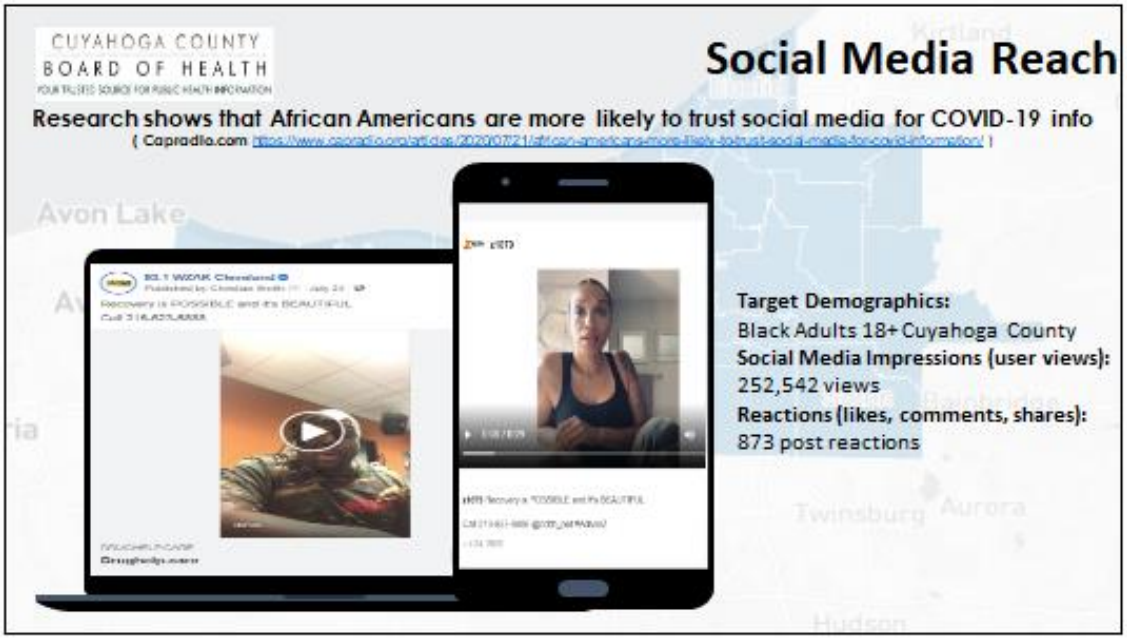
CUYAHOGA COUNTY BOARD OF HEALTH

Digital Reach

Use digital targeting and Radio display System Ads to reach residents while they're on the go.

Mobile Targeting Metric
Mobile Target Demographics:
AA Adults 18+ in Cuyahoga County
Impression (people reached):
252,555
Ad Engagements (extended views):
5,035
Website Visits:
147

Radio Display System Ads (Mobile Billboard)
Stations:
107.9FM and 93.1 WZAK
Vehicle Displays :
76,759 message displays


CUYAHOGA COUNTY
BOARD OF HEALTH
Social Media Reach
Research shows that African Americans are more likely to trust social media for COVID-19 info
(Capradio.com
Target Demographics:
Black Adults 18+ Cuyahoga County
Social Media Impressions (user views):
252,542 views
Reactions (likes, comments, shares):
873 post reactions

In the summer of 2020, The Cuyahoga County Board of Health (CCBH) partnered with 2 Radio companies to uplift the message of recovery. In July, we partnered with Radio One. Radio One encompasses more urban radio stations. Specifically, the stations where the radio spots aired were 93.1 WZAK and Z107.9

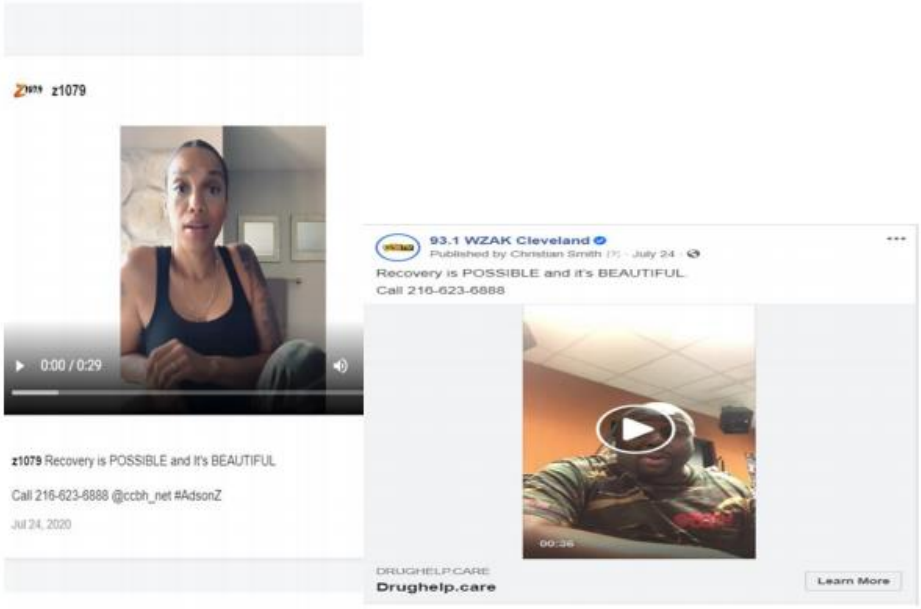
This is just one of the many images created in partnership with Radio One. The images were shared on both their Instagram and Facebook pages.

The purpose of partnering with Radio One is due to the African American (AA) community being hit hard by this opioid epidemic.

Within the past year, the Medical Examiner has reported an increase in the deaths of middle-aged AA males due to fentanyl being found in cocaine without the person being aware. We at CCBH are committed to spreading awareness, decreasing stigma, and bringing hope to those in need. As the ad says, Recovery is possible, and it's beautiful!

According to the report created by Radio One, through their social media outreach using both radio stations, they had 252,555 impressions (people reached) with 5,035 viewing the ad for a longer time, and 147 people actually visiting the recovery site provided. According to their radio display system ads, there were 76,769 people who viewed the ad.

Radio One also recorded 2 radio spots to be aired on both stations and on all of the social media platforms.



According to the videos, there were 252,542 Social Media Impressions (user views) and

873 post reactions (likes, comments, shares).

The campaign directed each person to either the mobile crisis hotline number at our local Alcohol, Drug Addiction and Mental Health Services board (ADAMHS) or to drughelp.care. Drughelp.care is a resource for the community to access real time treatment services that are available. This chart shows the uptick in visits to their site during the Radio One media campaign.

The creators and managers of the site said there was increased activity and a noticeable jump in the amount of people accessing their site.

The second radio station we partnered with was iHeart Radio. iHeart radio's weekly reach is over 1 million people across Northeastern Ohio. This campaign began on August 3, 2020 and ended August 28, 2020 running a total of 4 weeks.

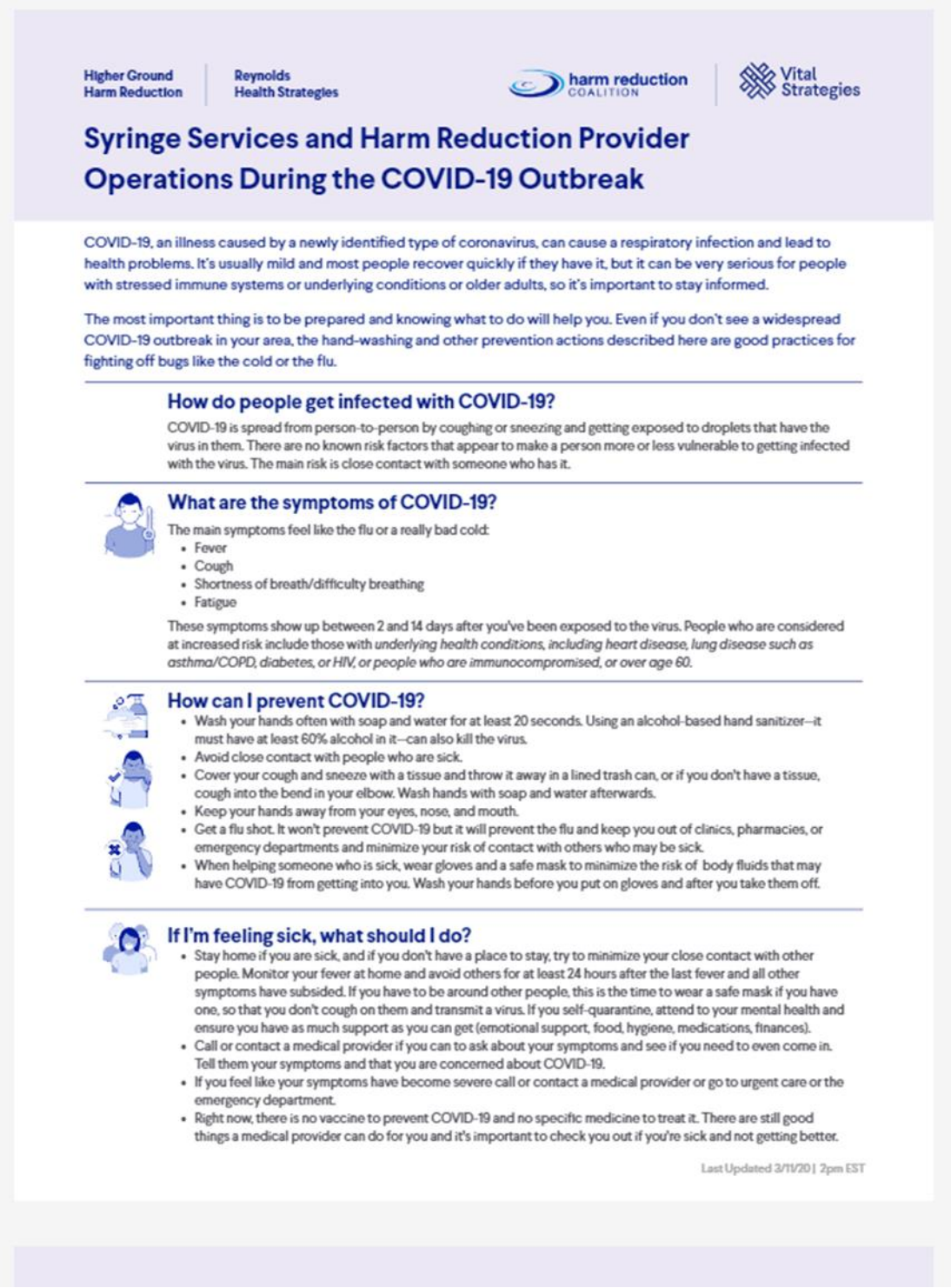
Within those four weeks, iHeart reported that there have been 458 active web sessions, 206 of the active web sessions were directly attributed to RADIO! This represents a 81.7% Web LIFT.

This campaign reached 45.8% of the Northeast Ohio market adults age 25-54. This is a net reach of 345,200 people. We consider this to be a huge success! The partners at iHeart are thrilled with the numbers, and look forward to next steps.

Closing out year one, there have been some lessons learned throughout the campaign. Such as, defining the target audience is and determining what is the correct message for each audience for the different radio stations. We did find that social media was one of the most successful venues for awareness. Moving into year, we will take these lessons and apply them to future awareness campaigns.

XV. Appendix 4: CHS Marketing Materials

1. *Syringe Services and Harm Reduction Provider Operations During the COVID-19 Outbreak*



Higher Ground Harm Reduction | Reynolds Health Strategies | harm reduction COALITION | Vital Strategies

Syringe Services and Harm Reduction Provider Operations During the COVID-19 Outbreak

COVID-19, an illness caused by a newly identified type of coronavirus, can cause a respiratory infection and lead to health problems. It's usually mild and most people recover quickly if they have it, but it can be very serious for people with stressed immune systems or underlying conditions or older adults, so it's important to stay informed.

The most important thing is to be prepared and knowing what to do will help you. Even if you don't see a widespread COVID-19 outbreak in your area, the hand-washing and other prevention actions described here are good practices for fighting off bugs like the cold or the flu.

How do people get infected with COVID-19?

COVID-19 is spread from person-to-person by coughing or sneezing and getting exposed to droplets that have the virus in them. There are no known risk factors that appear to make a person more or less vulnerable to getting infected with the virus. The main risk is close contact with someone who has it.

What are the symptoms of COVID-19?

The main symptoms feel like the flu or a really bad cold:

- Fever
- Cough
- Shortness of breath/difficulty breathing
- Fatigue

These symptoms show up between 2 and 14 days after you've been exposed to the virus. People who are considered at increased risk include those with *underlying health conditions, including heart disease, lung disease such as asthma/COPD, diabetes, or HIV, or people who are immunocompromised, or over age 60.*

How can I prevent COVID-19?

- Wash your hands often with soap and water for at least 20 seconds. Using an alcohol-based hand sanitizer—it must have at least 60% alcohol in it—can also kill the virus.
- Avoid close contact with people who are sick.
- Cover your cough and sneeze with a tissue and throw it away in a lined trash can, or if you don't have a tissue, cough into the bend in your elbow. Wash hands with soap and water afterwards.
- Keep your hands away from your eyes, nose, and mouth.
- Get a flu shot. It won't prevent COVID-19 but it will prevent the flu and keep you out of clinics, pharmacies, or emergency departments and minimize your risk of contact with others who may be sick.
- When helping someone who is sick, wear gloves and a safe mask to minimize the risk of body fluids that may have COVID-19 from getting into you. Wash your hands before you put on gloves and after you take them off.

If I'm feeling sick, what should I do?

- Stay home if you are sick, and if you don't have a place to stay, try to minimize your close contact with other people. Monitor your fever at home and avoid others for at least 24 hours after the last fever and all other symptoms have subsided. If you have to be around other people, this is the time to wear a safe mask if you have one, so that you don't cough on them and transmit a virus. If you self-quarantine, attend to your mental health and ensure you have as much support as you can get (emotional support, food, hygiene, medications, finances).
- Call or contact a medical provider if you can to ask about your symptoms and see if you need to even come in. Tell them your symptoms and that you are concerned about COVID-19.
- If you feel like your symptoms have become severe call or contact a medical provider or go to urgent care or the emergency department.
- Right now, there is no vaccine to prevent COVID-19 and no specific medicine to treat it. There are still good things a medical provider can do for you and it's important to check you out if you're sick and not getting better.

Last Updated 3/11/20 | 2pm EST

Tips for Community-based Syringe Services and Harm Reduction Providers

Prioritize & Prepare Your People

PRIORITIZE STAFF & PARTICIPANT SAFETY.
Provide ample supplies for participant preparedness whenever possible. Send sick employees home (yourself included!), and be mindful of the work done by peers. Provide access to vaccinations to prevent immune systems from becoming more compromised—consider flu, hepatitis A, and hepatitis B vaccines, and partnering with your local pharmacy or health department. Encourage and promote hand washing/sanitizing, and coughing/sneezing into tissues or elbow. Consider limiting program access for non-essential visitors.

SANITIZE SURFACES.
Regularly clean commonly touched surfaces in all service delivery spaces before, during, and after services are being provided. Clean with household cleaners, bleach, and other microbicides.

OFFER EXTRA SUPPLIES.
As possible, offer extra and ample supplies for participants in case of service closures, including syringes and harm reduction equipment for safer smoking, snorting, and injecting drug use. Take inventory of your stock and discuss with all staff what is the maximum allowance for each item. If you are not already giving out harm reduction supplies for safer smoking and snorting, make arrangements to do so. Whenever possible, stock up on latex gloves, safe masks, and hand sanitizer for distribution to participants, including instructions for how and when to use them. Remind your staff to equip participants with ample supplies of naloxone kits including breathing masks. Discuss if you have capacity to deliver supplies.

Plan Ahead

TAKE STOCK OF YOUR ESSENTIAL SERVICES.
Which program services are essential and must be provided even at reduced operations? Which activities can be postponed or canceled (including groups)? When are those services delivered, how and by whom, and could they incorporate creative flexibility?

REVIEW/CREATE COMMUNICATION PLAN.
Make and revisit the plan for communicating upcoming or ongoing service disruption information with staff and participants. Consider and plan for overcoming barriers – such as language, cultural, technological, disability—to reach the people you serve with timely and accurate service disruption information, such as through social media, email, word-of-mouth, text, etc. Ensure all staff/volunteers understand the communication plan and their roles.

STAY INFORMED AND CONNECTED.
Monitor your state and local health department website and the CDC COVID-19 website for the latest information. Communicate and cooperate with your local health department in the case of suspected exposure.

PLAN FOR EMPLOYEE ABSENCE.
At the height of the outbreak, anticipate 10% to 20% staff absence. Prepare for absence by cross-training staff, and planning for skeleton operations. Allow for flexible work attendance and sick leave wherever possible. Track flu-related absences. Use phone, video, and app technology to replace in-person meetings. Review and/or create service/program and organizational contingency plans, including with staff. Ensure all staff have access to and understand organizational contingency plans.

MEDICATION CONTINUITY.
Access to prescription medicines could be limited in a COVID-19 outbreak. Ensure the medical providers serving participants have emergency plans in place, and clear processes and criteria for patients to receive extra refills / doses of their HIV, HCV, psychiatric, and other chronic condition medications. Ensure methadone and buprenorphine providers have emergency plans to preserve low-threshold continuity for participants, including extra take-home doses. Consider one-month scripts of buprenorphine, with possibilities for telehealth or refills by phone as needed.

WHEN TO USE FACEMASKS AND GLOVES.
Facemasks are not recommended at this time for those who are well. In fact, they may add a sense of apprehension and stigma among participants. Masks may be used by people who are ill, to prevent transmission to others. Gloves are not necessary, however, if you are touching people or bodily fluids (such as when drawing blood), wear gloves and wash hands frequently.

STAND AGAINST RACISM.
There have been reports of anti-Chinese or anti-Asian racism and discrimination, including avoidance of Asian American folks, as a shameful byproduct of the COVID-19 outbreak. The first known cases of COVID-19 were reported from China, and the largest burden remains there. It is critical to fight this simultaneously lazy and aggressive racism and stigma in our communities. There is a long history in the United States of targeting and demonizing specific populations, including Chinese and Chinese-Americans.

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2. Safe Drug Use During the COVID-19 Outbreak

Higher Ground Harm Reduction | Reynolds Health Strategies | harm reduction COALITION | Vital Strategies

Safer Drug Use During the COVID-19 Outbreak

COVID-19, an illness caused by a newly identified type of coronavirus, can cause a respiratory infection and lead to health problems. It's usually mild and most people recover quickly if they have it, but it can be very serious for people with stressed immune systems or underlying conditions or older adults, so it's important to stay informed.

The most important thing is to be prepared and knowing what to do will help you. Even if you don't see a widespread COVID-19 outbreak in your area, the hand-washing and other prevention actions described here are good practices for fighting off bugs like the cold or the flu.

How do people get infected with COVID-19?

COVID-19 is spread from person-to-person by coughing or sneezing and getting exposed to droplets that have the virus in them. There are no known risk factors that appear to make a person more or less vulnerable to getting infected with the virus. The main risk is close contact with someone who has it.

What are the symptoms of COVID-19?

The main symptoms feel like the flu or a really bad cold:

- Fever
- Cough
- Shortness of breath/difficulty breathing
- Fatigue

These symptoms show up between 2 and 14 days after you've been exposed to the virus. People who are considered at increased risk include those with *underlying health conditions, including heart disease, lung disease such as asthma/COPD, diabetes, or HIV, or people who are immunocompromised, or over age 60.*

How can I prevent COVID-19?

- Wash your hands often with soap and water for at least 20 seconds. Using an alcohol-based hand sanitizer—it must have at least 60% alcohol in it—can also kill the virus.
- Avoid close contact with people who are sick.
- Cover your cough and sneeze with a tissue and throw it away in a lined trash can, or if you don't have a tissue, cough into the bend in your elbow. Wash hands with soap and water afterwards.
- Keep your hands away from your eyes, nose, and mouth.
- Get a flu shot. It won't prevent COVID-19 but it will prevent the flu and keep you out of clinics, pharmacies, or emergency departments and minimize your risk of contact with others who may be sick.
- When helping someone who is sick, wear gloves and a safe mask to minimize the risk of body fluids that may have COVID-19 from getting into you. Wash your hands before you put on gloves and after you take them off.

If I'm feeling sick, what should I do?

- Stay home if you are sick, and if you don't have a place to stay, try to minimize your close contact with other people. Monitor your fever at home and avoid others for at least 24 hours after the last fever and all other symptoms have subsided. If you have to be around other people, this is the time to wear a safe mask if you have one, so that you don't cough on them and transmit a virus. If you self-quarantine, attend to your mental health and ensure you have as much support as you can get (emotional support, food, hygiene, medications, finances).
- Call or contact a medical provider if you can to ask about your symptoms and see if you need to even come in. Tell them your symptoms and that you are concerned about COVID-19.
- If you feel like your symptoms have become severe call or contact a medical provider or go to urgent care or the emergency department.
- Right now, there is no vaccine to prevent COVID-19 and no specific medicine to treat it. There are still good things a medical provider can do for you and it's important to check you out if you're sick and not getting better.

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Harm Reduction TIps

Some of these are easier to do than others, and some may seem impossible depending on your current situation. Do the best you can. Reach out to friends, harm reduction, syringe service providers (SSP), and other health or social service providers to plan for what to do to so you can stay safe and take care of one another.

Practice Safer Drug Use

MINIMIZE THE NEED TO SHARE YOUR SUPPLIES.
Don't share e-cigs/cigarettes, pipes, bongs or joints, or nasal tubes such as straws. If you have to share, practice harm reduction with your supplies (wipe down the mouthpieces with an alcohol swab before sharing or use separate mouthpieces). Put used smoking, snorting, and injecting equipment in a bio-bucket so people know they are used.

MINIMIZE CONTACT.
If you are having sex or doing sex work, COVID-19 can be transmitted by close contact like coughing, kissing, or direct contact with bodily fluids. Try to minimize close contact and ensure condom use.

PREPARE YOUR DRUGS YOURSELF.
Wash your hands thoroughly for 20 seconds with soap and water and prepare your own drugs. Keep your surfaces clean and wipe them down before and after use, with microbial wipes, alcohol (at least 60%), or bleach. If you can't prepare your own drugs, stay with the person who is. Get them to wash their hands thoroughly, and to clean up before and after.

PLAN & PREPARE FOR OVERDOSE.
Emergency services might be stretched in a COVID-19 outbreak, and slow to respond to 911 calls. Load up on naloxone and fentanyl testing strips. If you are alone, experiment with using less to lower your risk of OD, and go slowly. If you are using with others, make an OD plan with them and stagger use if possible. Store a breathing mask for use in case rescue breathing is needed.

Keep Clean & Practice Hygiene

KEEP YOUR SPACE CLEAN.
Wipe down surfaces where you prepare drugs, before and after use, with antimicrobial wipes, alcohol (at least 60%), or bleach. Before and after handling drugs, wash your hands with soap and water, or use alcohol-based hand sanitizer, including after you purchase the drugs. Wipe down drug packages. Wipe down countertops, sinks, doorknobs, and any other surfaces that hands can touch.

WASH YOUR HANDS.
If you have access to clean water, wash your hands with soap for 20 seconds. (Sing the "Happy Birthday" song twice or the "ABC Song" once.) If you don't have soap and water, use an alcohol-based hand sanitizer (at least 60%). Wash after every time you are around other people, such as on public transportation, after purchasing drug packages, etc.

STAY CLEAR IF YOU'RE SICK.
If you have symptoms or think you're getting sick, don't go to your local SSP. Hopefully you have enough of a stash to get through, but if not, does your SSP deliver? Are there secondary exchangers who can come by? If you have symptoms of COVID-19, get checked out by a doctor. If you have HIV or have a weakened immune system, it is particularly critical to remember to take all your medications daily.

Stock up on Supplies

STOCK UP ON SUPPLIES.
Work with your local SSP to get enough syringes and injecting equipment to last you 2 to 4 weeks. Note: Your local SSP may have syringe and supply shortages, so they may not be able to do this.

STOCK UP ON DRUGS.
If possible, try to stock up on your drug of choice. Be safe: Having larger amounts of drugs can be dangerous if you are stopped by police or someone desperate enough to target you for them

STOCK UP ON MEDICATIONS.
Access to prescription meds may be limited in an outbreak. Ask your medical provider about getting a full month's supply if possible. If you take methadone/buprenorphine, ask your clinic or doctor to make a plan to prevent disruptions to your dose. Ask about their emergency plans for patients (refills over the phone, telehealth visits, etc.).

PREPARE FOR A DRUG SHORTAGE
You might lose access to your drug of choice in an outbreak. Consider alternative drugs or medications that could help take the edge off. If facing potential opioid withdrawal, consider buying over the counter medications to make it less difficult (ibuprofen, Pepto-Bismol, Imodium). For opioid dependence, you can work with your local SSP to enroll with a local provider for buprenorphine or methadone.

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XVI. Appendix 5: Link2Care Card