

# **Cuyahoga County Overdose Data to Action Initiative (OD2A)**



## **Year Two Summary Evaluation Report September 1, 2020 – August 31, 2021**



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## Acknowledgements

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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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.

This report covers activities for the OD2A Initiative during Year Two (September 1, 2020 - August 31, 2021) and summarizes the outcomes and achievements of twelve partner agencies. Activities are centered on six consecutively numbered strategies identified by the CDC. Strategy Three focuses on surveillance and Strategies Four through Eight address prevention and intervention efforts.

Major accomplishments and findings from the evaluation are summarized in this report. Outcome measures associated with each activity provide quantitative data measuring the success of each strategy. Qualitative data is also collected via partner agencies' self-reports to document and evaluate their implementation progress, barriers encountered, and innovative ideas. As the data collected for this evaluation is quite extensive, a companion to this report is a comprehensive report which provides a more thorough analysis for each strategy.



Although the Cuyahoga County OD2A Initiative originally included 14 partner agencies, in Year Two the Northeast Ohio Educational Services Center and PAXIS ceased participation indefinitely due to continued barriers around COVID-19. For example, expansion into and monitoring of the PAX Good Behavior Game in high-risk neighborhoods was not feasible as some schools remained remote or hybrid.

As the Initiative evolves each year, the large number of lives touched by the opioid epidemic in Cuyahoga County becomes increasingly evident. In addition to those who have suffered from an overdose as well as those afflicted with opioid use disorder, the epidemic impacts the lives of the family and friends of these loved ones, first responders, and the many other workers who provide assistance and treatment. The evaluation expanded in Year Two to examine how these individuals play a role in combatting the rise of fatal and nonfatal overdoses.

## Surveillance Strategy Three – Implementing Innovative Surveillance to Support Interventions

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The OD2A surveillance team is composed of staff from CCBH, the Cuyahoga County Medical Examiner’s Office (CCMEO) and the Begun Center. In Year Two the OD2A surveillance team continued efforts to identify and link data across platforms and agencies. In addition to identifying patterns of opioid overdose death and nonfatal incidents, these accomplishments also help to inform countywide intervention and prevention efforts.

### 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

For this activity surveillance questions 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*. As the team gains access to additional sources of data that track fatal and nonfatal overdose incidents, we are gaining more insight into patterns of opioid overdose, including where overdoses are most likely to occur, characteristics of the locations where overdoses occur, and what members of the community are affected most. This in turn enables us to explore how the data can be used to inform prevention and intervention efforts, such as where they are needed the most and how best to tailor the interventions to meet the needs of those served.

CCBH published the first annual “Drug Overdose Integrated Epidemiological Profile” (DOIEP) in March 2021 to support targeted outreach. The DOIEP is a comprehensive analysis of (a) detailed demographic comparisons and drug types causing overdose death and (b) a thorough review of nonfatal incident data reported by EpiCenter. These overdose-related datasets allow the surveillance team to identify demographic patterns and determine areas facing the most significant burden in the county.

Males were consistently more likely to die from an unintentional drug overdose death (UDOD) than females and [more likely to] visit the ED for a suspected drug overdose. In 2019, Black males had higher ED visit rates for suspected drug overdose and UDODs than white males. White males between 25-34 consistently had high rates of ED visits for suspected drug overdose and UDODs. Zip codes 44109 and 44102 are the geographic areas that account for the highest number of ED visits and highest number of naloxone doses administered. – *DOIEP excerpt*

The Surveillance Team also linked data from the EpiCenter and Vital Statistics to analyze subjects presenting multiple times to EDs due to suspected drug overdose and eventually

succumbing to drug-related death. During a three-and-a-half-year period, from July 2016 to December 2019, 2,238 individuals presented in Cuyahoga County EDs two or more times, and more than 300 individuals did so four or more times. **Of the 2,238 persons presenting multiple times for overdose, 8% experienced a fatal drug-related overdose (n=168).** A data brief more fully describing these findings was widely disseminated to stakeholders and is available on the [Cuyahoga County Board of Health website](#).

In Year Two, the surveillance team also coordinated access to public safety incident data for the top four cities experiencing drug-related overdose death: Cleveland, Parma, Lakewood and Euclid. Although these drug overdose incidents are not yet available for real-time monitoring purposes, the analyses help to: (a) identify community-level drug trends; (b) identify geographic hot spots; and (c) provide needed information to harm reduction partners, including Quick Response Teams. This novel approach to accessing and using public safety pilot data to understand high burden areas experiencing drug overdoses was presented by CCBH and the Begun Center at the national CDC OD2A conference this past summer.

### **Identify trends and patterns of additional risk factors, based on interviews**

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.*** The OFR is currently under the purview of the CCMEO and is co-coordinated with the CCBH. Progress on answering these two surveillance questions began in Year Two. The OUD Specialist at the ADAMHSB was able to start interviewing next-of-kin (NOK) of individuals who died as a result of an opioid-related overdose. Interview summaries are examined for common patterns and risk factors, more fully described in Strategy 5. In Year Three the CCMEO will also hire a program officer who will assist in the NOK interviews. As more interviews are conducted, trends and patterns of additional risk factors will be communicated to the surveillance team and the Overdose Fatality Review (OFR) committee.

### **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 service.*** Surveillance data from a number of databases continues to be analyzed to identify high burden areas.

- Drug-related overdose fatality data from CCMEO and ODH vital statistics provide overdose incident injury location (if available), residential address of the decedent, and the location of death.

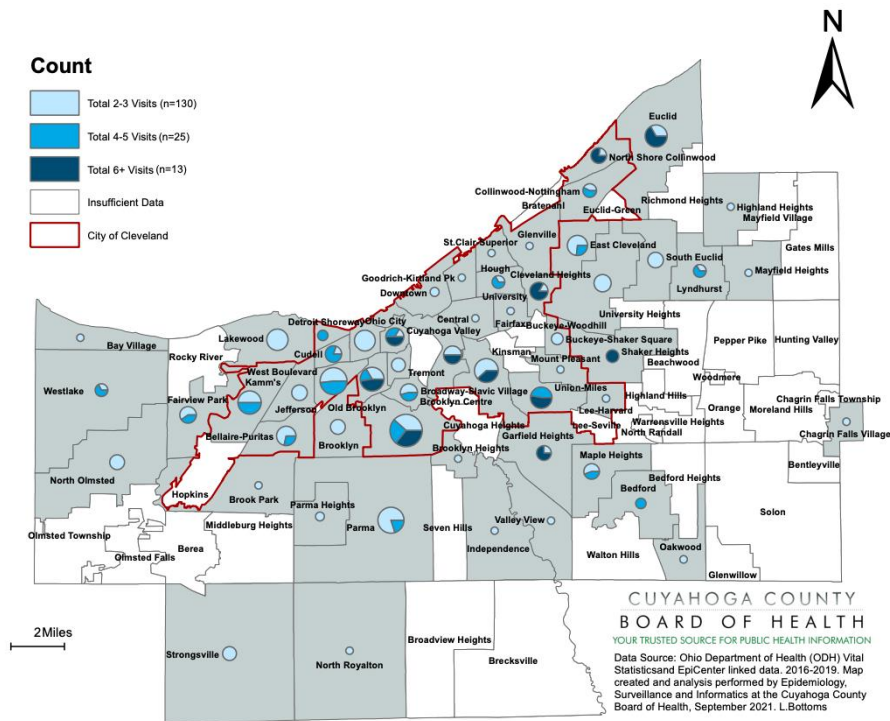
- Syndromic surveillance data from EpiCenter tracks drug-related overdose incidents for persons presenting in hospital EDs. Data contains patient zip codes which can be used to identify locations where substance use may be more prevalent.
- The Ohio EMS collects naloxone administration data from a majority of EMS agencies across Ohio (~85%). Data is available at the zip code level and includes the number of naloxone doses administered by EMS.
- Cleveland Public Safety Pilot Data (PSPD) is used to identify high burden areas within the City of Cleveland, including address locations where overdoses repeatedly occur, such as homeless shelters or recovery housing.

These data sources provide insight into the characteristics of the neighborhoods where overdoses are occurring, thereby improving our understanding of which individuals are in need of treatment and services. Figure 1 is taken from the CCBH data brief *Recurring Emergency Department Visits for Suspected Drug Overdoses and Drug Poisoning Deaths: Linking EpiCenter and Vital Statistics data for Cuyahoga County, OH 2016-2019*. The map displays county neighborhoods or cities by the number of persons presenting multiple times to EDs for a suspected drug overdose. Locations identified as the highest-burden in this analysis align with the surveillance team's efforts to identify hot spots, which can be used to coordinate specific neighborhoods, census tracts, or zip codes with harm reduction activities.



**Figure 1**

*Linked ED Suspected Overdose Incident Records by Cuyahoga Neighborhood (2016-2019)*



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

During Year Two, the Cuyahoga County Prosecutor's Office (CCPO) Crime Strategies Unit used sudden illness reports filed by the Cleveland Division of Police (CDP) to provide data for use by MetroHealth's QRT for targeted outreach. These efforts also provide additional insight into the surveillance question *how can existing data sources be linked to identify individuals in need of treatment and services*. Identification, review, and data collection of information contained in the CDP reports is initially done by the CCPO Crime Strategies Unit staff and then shared with the Cuyahoga County Sheriff's Office (CCSO) analyst who further reviews the data and adds information based on additional queries of available databases. The CCSO analyst then forwards names and addresses of possible overdose victims to the MetroHealth QRT for potential outreach. This process is discussed in more detail in Strategy Eight of this report.

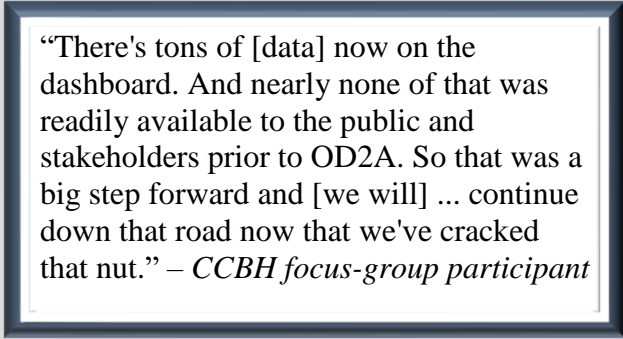
### Use of data to identify education and training needs for medical providers – MetroHealth and CHA

During Year Two MetroHealth used data reported to Ohio's PDMP and MetroHealth's electronic health records (EHR) system to identify and track patients at risk for opioid misuse and identify high-volume prescribers. This data helps to answer the surveillance question *to what extent can*

*existing data sources be linked to identify education and training needs for medical providers on opioid-related trends.* MetroHealth is using this data to identify prescribers who would benefit from peer review and Academic Detailing. MetroHealth is also sharing their process with the Center for Health Affairs (CHA) who uses the information to enhance its toolkit for other hospitals and nontraditional medical settings.

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

*What data sources can be linked and/or combined to better inform stakeholders and the public on opioid-related trends* is the surveillance question tied to these activities. One of the most notable accomplishments this year has been the publication of the Cuyahoga County Overdose Data Dashboard. During its first six months it had approximately 3000 views.



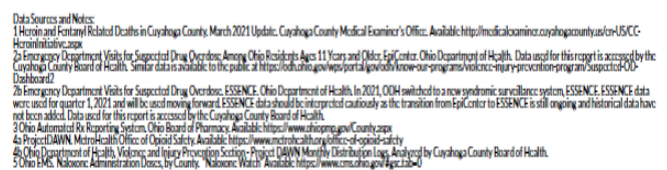
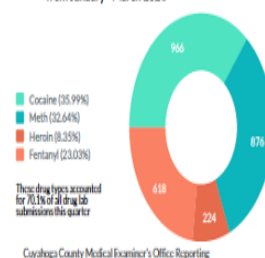
“There's tons of [data] now on the dashboard. And nearly none of that was readily available to the public and stakeholders prior to OD2A. So that was a big step forward and [we will] ... continue down that road now that we've cracked that nut.” – *CCBH focus-group participant*

The dashboard presents data from a number of 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.

In addition to the dashboard, the surveillance team publishes a “Surveillance Bulletin” which is a quarterly data brief (Figure 2).



***Overdose Surveillance Quarterly Bulletin*** (Available at <https://www.ccbh.net/overdose-data-dashboard/>)



## Prevention Strategy Four – Prescription Drug Monitoring Program (PDMP)

In Year Two MetroHealth Medical Center (MetroHealth) continued to collaborate with the Centers for Health Affairs (CHA) to increase utilization of Ohio’s PDMP, the Automated Rx Reporting System (OARRS).

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

MetroHealth is using OARRS data and its electronic health records management system (Epic®) to identify high-volume prescribing activity to trigger proactive reports to providers. The OD2A evaluators are examining to *what extent an increase in the implementation and use of the PDMP in healthcare settings decrease the number of opioids dispensed*. Data collected through Year Two suggests there has not been an increase in the use of OARRS by MetroHealth providers. However, there have been decreases in the number of opioid prescriptions and the number of co-occurring opioid and benzodiazepine prescriptions issued by MetroHealth providers.

**Table 1**

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

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Develop algorithms to identify high-volume prescribing activity and protocols to notify providers</b>	Data not previously collected.	2	N/A	N/A	In progress: MetroHealth is refining their algorithms
<b>Increase number of opioid prescriptions where providers checked the PDMP prior to issuing the prescription</b>	47%	↑10%	47% <sup>a</sup>	44%	6% decrease from Year One to Year Two and 6% decrease from baseline
<b>Increase the use of PDMP by providers by 10% (pre/post)</b>	30% <sup>b</sup>	↑10%	31% <sup>c</sup>	28%	7% decrease from baseline to Year Two
<b>Decrease number of co-occurring prescriptions of opioids and benzodiazepines</b>	6614	↓10%	4033	3,055	Decrease of 54% from baseline
<b>Decrease number of prescriptions each year greater than 50 Morphine Milligram Equivalents (MME)</b>	Data not previously collected	↓10%	N/A	16,893	MetroHealth began collecting data in Year Two for baseline purposes.

<sup>a</sup> In the Year One report it was reported as 48%

<sup>b</sup> In the Year One report it was reported as 28%

<sup>c</sup> In the Year One report it was reported as 30%

Providers are required by Ohio law to review OARRS prior to prescribing opioids. This allows MetroHealth to identify and educate outlying high-volume prescribers. MetroHealth provides data on the number of its providers that issued an opioid prescription each month and whether OARRS was checked. The data is not broken down by department or specialty. In Year Two MetroHealth revised what is categorized as an opioid prescription to ensure that all medications that are identified in Epic® as opioids are reported. While MetroHealth's attention to ensuring opioid prescriptions issued by its providers are reviewed is a notable accomplishment, it did cause some previously reported data for baseline and Year One to change. Those changes are noted in Table 1.

A short-term outcome for this strategy seeks a 10% increase in the number of providers utilizing OARRS. Baseline covers the period of September 1, 2018 through August 31, 2019, wherein 47% of the providers recorded that they checked OARRS ( $n = 50,773$ ) prior to issuing an opioid prescription ( $n = 107,037$ ) through use of a "dot phrase" in Epic®. During the next year (Year One), from 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 (47%). During Year Two, from September 1, 2020 to August 31, 2021, there were 97,820 opioid prescriptions issued by MetroHealth providers of which 43,264 had a notation in Epic® that OARRS was checked. This was a decline of approximately 6% when compared with Year One results as well as a 6% decrease from baseline. **Although the expected decrease in PDMP checks was not found, the number of opioid prescriptions issued by MetroHealth providers decreased by 9% from baseline to Year Two.**

Another objective is to increase the use of the 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 Years One and Two were included in the analysis. Baseline covers the period of September 1, 2018 through August 31, 2019 wherein the providers ( $n = 705$ ) checked OARRS 30% of the time 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 31% of the time, an increase of 3%. In Year Two which covers the period from September 1, 2020 to August 31, 2021 the same providers checked OARRS 28% of the time, a decrease of 7% from baseline.

Possible reasons for the decreases rather than increases could be how providers report checking the OARRS in MetroHealth's Epic® system. The procedure at MetroHealth for physicians who are recording whether they checked OARRS when writing a prescription is for them to enter a "dot phrase" (.OARRS) which automatically populates fields in the Epic® record. When determining whether a provider has checked OARRS prior to issuing an opioid prescription, MetroHealth pulls data from these populated fields. However, if a physician just writes that they checked OARRS in their notes, these fields are not populated, and thus not reflected in the data.

MetroHealth intends to educate providers on the importance of appropriately documenting in Epic® that OARRS was checked.

Another intermediate outcome is to reduce by 10% the number of co-occurring prescriptions of opioids and benzodiazepines. MetroHealth created an internal dashboard to identify patients using an opioid with an active benzodiazepine prescription. From the period of September 1, 2018 through August 31, 2019, 6,614 co-occurring prescriptions were issued by a MetroHealth provider, an average of 551 prescriptions each month. In Year One the number of co-occurring prescriptions decreased to 4,033, an average of 336 per month. **MetroHealth reported 3,055 patients who had prescriptions for both opioids and benzodiazepines in Year Two, an average of 225 per month and a 54% decrease from baseline.** MetroHealth is also seeking to reduce by 10% the number of unique patients with opioid prescriptions greater than 50 MME. Data for this outcome was collected initially in Year Two which will be the baseline. MetroHealth reported 16,893 unique patients having an opioid prescription totaling more than 50 MME in Year Two.

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

The evaluation question associated with this activity is *what additional tools can be used to supplement the PDMP to enhance provider adherence to best prescribing practices*. The Center for Health Affairs (CHA) developed a toolkit of best practice information that has been made available to other healthcare settings in Cuyahoga County. MetroHealth has been providing technical assistance to CHA on the toolkit design to enhance utilization of OARRS data based on best practices that can be replicated in other health systems.

**Table 2**

#### *Short-Term and Intermediate Outcomes for Developing Toolkit*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Identify ways collaboration &amp; communication among medical providers can be improved to increase use of PDMP</b>	Data not previously collected.	2	N/A	N/A	Peer review, chart review and Stewardship Report Card
<b>Increase the number of reviews of providers for high volume prescribing</b>	Data not previously collected	100	62 <sup>a</sup>	331	Achieved
<b>Decrease high volume prescribing behaviors</b>	Data not previously collected	↓10%	67%	66%	No decrease reported

<sup>a</sup>In the Year One report it was noted as 59.

A focus group was convened with MetroHealth staff this year. Staff were asked to identify ways of increasing the use of OARRS among providers. Participants noted that in addition to MetroHealth's peer review and chart review, the hospital developed a Stewardship Report Card, all of which help to increase use.

"Because when [X] would pull the data for me to be able to do the reviews in the chart, it pulls everything from OARRS that's reported: opioid and stimulant. And there were some physicians that actually had absolutely no opioids, but they really did have a lot of stimulants. I think there's just a need to make sure that these guys, just like with opioids, are educated on how they should be prescribing." - *MetroHealth focus-group participant*

A best practice model currently being incorporated into the toolkit is MetroHealth's peer review model. All providers at MetroHealth can be involved in the peer review process; however, MetroHealth conducts a more detailed examination for patients who have chronic opioid prescriptions and providers with chronic prescriptions. The Utilization Review Nurse will review the provider's documentation for 10 client files to determine if the provider is following CDC guidelines. Stewardship Report Cards are then sent to these providers who prescribe chronic opioids and have had a more detailed review completed. In Year Two, 43 Stewardship Report Cards were issued to providers, 22 provider reports for Family Medicine and 21 provider reports for Internal Medicine.

In addition to peer review, MetroHealth engages in additional measures to identify and address possible high volume prescribing behavior. One intermediate outcome is to increase reviews of providers for high volume prescribing and to provide them with guidance and educational resource information regarding their prescribing behavior. In Year Two MetroHealth issued 331 Narcotic Report Cards, a total of 393 issued through this Initiative. An additional outcome measure is to examine their prescribing behavior each year with a goal of a decrease by 10%. In Year One, the first cohort had 62 providers who received Narcotics Report Cards. Baseline covers the period of September 1, 2019 through August 31, 2020 wherein 66.5% of the providers ( $n = 62$ ) checked OARRS prior to issuing an opioid prescription (total prescriptions issued = 2,611). One year later, which covers the period of time from September 1, 2020 through August 31, 2021, these same providers checked OARRS 65.6% (total prescriptions = 2,877). A t-test between baseline and one year later did not reveal any statistical significance ( $t=0.74$ ,  $p=0.46$ ).

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

For this activity the evaluation examines *to what extent the peer review model is effective in reducing high-volume prescribing behavior within the healthcare setting and to what extent does an increase in the implementation and use of PDMP in healthcare settings decrease the number of opioid doses dispensed*. MetroHealth is assisting CHA in incorporating its peer review model practice into the Opioid Management Toolkit. In Year

Two the toolkit was finalized and CHA posted toolkit resources to their website [www.opioidconsortium-education.org](http://www.opioidconsortium-education.org).

**Table 3**

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

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the number of providers involved in the peer review process</b>	Data not previously collected	↑10%	0	334	Achieved: Since data was not previously collected any reviews would represent an increase.
<b>Increase the number of hospitals trained on best practice model</b>	Data not previously collected	5	N/A	20	In Progress
<b>Increase the number of hospitals adopting the best practice model (peer review)</b>	Data not previously collected	3	N/A	1	In Progress
<b>Increase number of non-traditional healthcare settings adopting PDMP review</b>	Data not previously collected	1	N/A	CCBH is working with CWRU School of Dentistry	In Progress

**During Year Two, 334 providers were involved in the MetroHealth’s Peer Review Process. CHA’s information technology department is adopting MetroHealth’s peer review model into its toolkit so that it can be adopted by other health systems.** This was challenging given the complexity of designing documents and ways of developing peer review content that can be adopted seamlessly across different health systems. CHA is exploring the idea that doing so may involve surfacing high-volume providers via electronic medical record review. Other systems may not be able to follow the MetroHealth model precisely, because not all Opioid Consortium hospitals use Epic® software to house their electronic medical records. The peer review process model was published as part of the toolkit in March 2021 and several hospital systems downloaded and trained on the best practice model (n=20). Discussions also began with St. Vincent Charity Medical Center (SVCMC) to expand the peer model into their hospital. However, expansion is currently on hold due to funding issues. During this last quarter, MetroHealth and CHA were also given permission to adapt a 35-hour opioid course developed at Northeast Ohio Medical University (NEOMED) to 8 one-hour modules that could be delivered to providers and would be enough for providers to obtain or maintain a Drug Enforcement Administration (DEA) waiver.



Collaborating with CHA, CCBH also is working to enhance the utilization of OARRS data in non-traditional settings such as dental, private medical, and veterinary practices. CCBH is working with Dr. Roger Hess, a practicing periodontist in Cuyahoga County. Dr. Hess will serve as the OD2A contact for the CWRU school of dentistry. He has offered to research current curriculum and assist with education and utilization of PDMP data in non-traditional settings.

## Prevention Strategy Five - Integration of State and Local Prevention and Response Efforts

Prevention Strategy Five focuses on enhancing prevention and response efforts by identifying opportunities for linking state and local resources and entities. Previously, the Northeast Ohio Educational Services Center and PAXIS were also involved in this strategy. Unfortunately, due to continuing barriers around COVID-19, including some schools remaining remote or hybrid, the activity to expand the PAX evidence-based Good Behavior Game into schools in high-risk neighborhoods has been put on hold indefinitely.

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

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 (CCMEC) to reestablish Overdose Fatality Reviews (OFRs). The evaluation question for this activity assesses *the impact of linking datasets across platforms and agencies, and how this information enhances the OFRs*. During Year Two, the OFR has gained access to additional datasets and agency representation which has helped to expand the information gained about each case reviewed. **The target number of OFRs to complete in Year Two was eight and the committee completed 17.**

**Table 4**

#### *Short-Term and Intermediate Outcomes for Enhancing OFRs*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Number of OFRs completed each year</b>	0	8/yr.	14	17	Achieved
<b>Number of families of decedents interviewed by OUD specialist</b>	0	24	N/A	16 <sup>a</sup>	67% complete
<b>Identification of intervention points for treatment</b>	0	2/yr.	7	0	Achieved
<b>Increase in the number of OFR reports completed each year</b>	0	8/yr.	NA	17	Achieved

<sup>a</sup>16 Next of kin (NOK) interviews were completed in Year Two, one of the deaths was ruled a non-opiate suicide. The data from the interview, while included in the total, was not incorporated into the findings.



The OFR was able to incorporate new nonfatal overdose incident data from the Drug Enforcement Administration (DEA) and the Cleveland Division of Police (CDP). Additionally, the OFR was able to gain access to rehabilitation histories for some fatalities through the efforts of a CCMEO medicolegal death investigator. Additional stakeholders were invited to the case reviews, some permanently and others as guests due to them having relevant information for a specific case being reviewed. These newly added members and visiting stakeholders provided data sources that would not have been otherwise available.

“The OFR helps us to generate more detailed or in-depth information on what trends we are seeing in Cuyahoga County.” *CCMEO focus-group participant*

The OUD Specialist from the ADAMHSB began interviewing decedents’ next-of-kin (NOK). To increase outreach to NOK, the ADAMHSB OUD Specialist began interviewing family and friends from non-OFR cases. In Year Two 79 individuals were approached for interviews, 20 consented, and 16 were completed; a success rate just over 20%. **The ADAMHSB OUD Specialist was able to complete 16 interviews in Year Two, reaching 67% of the target of 24 in three years.**

A total of seven recommendations came out of OFR activities in Year One. Although no new recommendations were identified this past year, objectives were further defined and additional supporting activities added.

#### Goal 1: Harm Reduction

*Objective 1.1* Increase knowledge and awareness of harm reduction efforts

*Objective 1.2* Increase availability of harm reduction tools (naloxone, fentanyl test strips, syringes, Naloxbox, etc.)

*Objective.1.3* Support the Implementation of the Naloxbox program in Cuyahoga County

#### Goal 2: Medical Prevention and Treatment

*Objective 2.1* Increase the number of Medication Assisted Treatment (MAT) providers

*Objective 2.3* Support education and training of medical providers on the illicit use of prescription medications

#### Goal 3: Linkage to Care

*Objective 3.1* Advocate for increased availability for peer support programs to provide outreach to high-risk populations (e.g., individuals experiencing a nonfatal overdose, diagnosed with SUD, or at risk for substance use disorder)

*Objective 3.2* Encourage collaborations among first responders and treatment providers to improve linkages to treatment for individuals experiencing a nonfatal overdose

#### Goal 4: Education

*Objective 4.1* Advocate for increased eligibility for drug court and diversionary programs (referrals and eligibility)

*Objective 4.2* Support the enhancement of substance use education, including the progression of addiction and polysubstance use, at intervention programs

*Objective 4.3* Promote appropriate and targeted communication efforts to increase public awareness of existing and emerging substances

#### Goal 5: Building System Capacities

*Objective 5.1* Promote timely communication system to notify appropriate agencies of nonfatal overdose events

*Objective 5.2* Advocate for uniform practices and policies for providing individuals upon release from incarceration at both private and public facilities with treatment resources, naloxone/fentanyl test strips, etc.

#### Goal 6: Community Outreach

*Objective 6.1* Promote outreach to community agencies regarding the importance of relapse and recovery plan review, wrap around services, and accessibility for support group meetings.

#### Goal 7: Surveillance and Dissemination

*Objective 7.1* Routinely disseminate trends identified from the OFR along with supporting data.

*Objective 7.2* Convene quarterly stakeholder meetings to review recommendations and call for action.

*Objective 7.3* Enhance case review process by identifying new/relevant OFR participants and data sources (e.g., drug testing companies, hospital partners, law enforcement)

#### **Rapid Response Lay Responder Narcan® Distribution Protocol, Responder Training and Naloxone Distributions - MetroHealth & Cuyahoga County Board of Health – CCBH**

MetroHealth and CCBH developed a Rapid Response Lay Responder Narcan® distribution protocol for overdose spikes which includes identifying potential hotspots of overdose activity.

The evaluation question tied to this activity is ***in what ways does the implementation of naloxone education and distribution programs increase participant access to naloxone.***

MetroHealth is providing overdose response trainings to lay responders, law enforcement (LE), and community agencies. During these trainings information on where to access Project DAWN (Deaths Avoided with Naloxone) kits is provided. **In Year Two, the number of Project Dawn kits distributed has increased by 71%.**

**Table 5***Short-Term and Intermediate Outcomes for Overdose Response Training and Naloxone Distribution*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Number of lay responders trained on overdose response</b>	Data not previously tracked	200	955	3,970	Achieved
<b>Number of LE trained on overdose response</b>	0	100	48	26	74%
<b>Number of community agency staff trained on overdose response</b>	615	600	202	352	92%
<b>Identify through focus groups provider barriers to distributing naloxone at discharge at ED and Inpatient Units</b>	Data not previously tracked	2	N/A	0	Data for this outcome will be collected via focus groups. Focus groups will begin in Year 3
<b>Increase knowledge gained from overdose response training (pre/post)</b>	Data not previously tracked	10%	0	85%	Survey Data Collection Began July 2021
<b>Increase in naloxone distributions</b>	3,375	3,975	4,804	5,761	Achieved – increase of 53% from baseline

Lay responder training provides free education on opioid overdose risks, how to recognize the signs and symptoms of an opioid overdose and how to respond to an opioid overdose and use of naloxone. In Year Two 3,970 lay responders received training. One law enforcement training was completed with 26 attendees. Forty service entities also received training, with 352 service entity staff.

In July 2021, MetroHealth began using a survey tool developed by the Begun Center to capture the knowledge gained from the naloxone training delivered by MetroHealth. Between July 21, 2021 and August 31, 2021, 146 surveys were completed by individuals who received naloxone training. Of those surveyed who identified their role, 48% were Community Agency Staff (n=64), 22% were Lay Responders (n=30), 14% were Law Enforcement (n=19), 12% identified as Health Care Counselors (n=16), and 3% were Public Health Hospital employees (n=4). Individuals were asked to assess their level of knowledge across nine topics covered during the training including: signs and symptoms of an opioid overdose, different methods used to administer naloxone, role/use of rescue breathing when responding to a suspected opioid overdose, etc. At the conclusion of the training, participants were then asked to assess whether the training had “Increased Knowledge” or if there was “No Change” across those 9 topics.

Consistently 85% or more of respondents indicated “Increased Knowledge” in each area of the training.

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), CHS, CCBH, Cleveland Department of Public Health’s Thomas McCafferty Health Center, and Project DAWN Expanded Mobile Unit. There was a decrease in overall distribution in the spring due to COVID-19 related delays, but kit distribution increased again in quarter four. The target is to distribute 3975 Project DAWN kits each year. This year 5761 kits were distributed, a 71% increase from baseline.

### **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. The evaluation question examines ***how Ohio can improve upon state and local efforts to impact surveillance, prevention, and evaluation of opioid prescribing, morbidity and mortality***. 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 continued to impact the ability of the leadership to meet. In Year Two, one meeting was held in February and another in June. Both meetings were virtual.

**Table 6***Short-Term and Intermediate Outcomes for OD2A QIR*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the collective impact of OD2A QIR participants</b>	Data not previously collected	10%	N/A	Collective impact survey	In progress
<b>Identification of barriers to sharing and integration of state and local surveillance data</b>	Data not previously collected	TBD	N/A	Identified	In progress
<b>Increase training and technical assistance provided to Partner agencies to assist them in their efforts to address the opioid epidemic.</b>	Data not previously collected	TBD	41	126 TA sessions	In progress
<b>Increase involvement in state and local prevention efforts through OD2A Roundtable meetings</b>	Data not previously collected	TBD	1	2	In progress
<b>Increase preparedness and response at the state and county level, as measured by reports from the data surveillance dashboard</b>	Data not previously collected	4/year	N/A	6	Achieved
<b>Number of common data dashboards identified by the OD2A roundtable</b>	Data not previously collected	TBD	N/A	0	In progress

Agency partnerships developed via OD2A are promoting a broader culture change around data sharing.

“I feel like agencies are starting to reach out a little bit now that they ... are starting to understand the data we have, the analyses we are capable of doing, the potential support we could provide to their work.” – *CCBH focus-group participant*

Evaluators from the Begun Center and the Ohio University Voinovich School of Leadership and Public Service are interested in gaining insight from members about their experiences in this statewide initiative, including collective impact of the QIR and identification of barriers and difficulties that impede the ability of the project to fully understand the needs of individuals affected by the opioid epidemic. A collective impact survey adapted from Collective Impact for Public Health Practice, Global Health and Education Projects Inc. (2018) was administered to members of the QIR (n=11) and six individuals responded. Overall, survey respondents agreed that the collaborative is highly functioning (members support each other, are committed to problem-solving, and using technology for data collection) with only a couple of exceptions. The

exceptions were the development of an action plan to outline how identified problems within communities will be addressed and results being measured using the same metrics or indicators. There was also indication from some members that the collaborative fails to involve community members when identifying priority areas of need.

Additional data around integration of state and local surveillance data and the number of common data dashboards identified by the QIR was also examined via the survey. Sixty-six percent (n=4) of the respondents believed the OD2A Initiative has led to the identification and use of data dashboards, while half (n=3) said the Initiative led to the development of data dashboards, including their own agency creating a dashboard. Two respondents shared the types of data included in their dashboard; Syringe Services Program, emergency department (ED), overdose, 911 dispatches and medical examiner's data. Two agencies reported they update their dashboards daily while one said they do so quarterly. Although QIR members reported identifying and utilizing data dashboards, zero common dashboards were identified.

The Begun Center also administered a survey to gain insight from partner agency staff about their experiences working with various partners involved in OD2A. Members were asked to consider their experiences working with the different partners involved in this Initiative. The survey was adapted from the Internal Collaborative Functioning Scales assessment.<sup>1</sup> A total of 28 survey responses were received (77% response rate) and of those, 19 were complete, representing an overall response rate of 53%. While most members agreed that the membership was highly functioning, particularly when it came to clearly stated goals and objectives, there were some areas where partners indicated a need for improvement. These areas included, procedures for changing membership, the development and implementation of action plans, and internal performance evaluation.

Partners also were asked a series of open-ended questions to gauge their views on the impact that the OD2A Initiative has had on the opioid epidemic in Cuyahoga County, including any changes in members' access to and sharing of data. Most respondents indicated a general increase in overall collaboration among County stakeholders, others stated the increase in access to data has had a positive impact on services. Many staff also agreed that the OD2A Initiative was having a positive impact on the community.

### **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.

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<sup>1</sup> Based on Internal Collaborative Functioning Scales, p. 89, in Evaluating Collaboratives: Reaching the Potential (G3658-8). Ellen Taylor- Powell, Boyd Rossing and Jean Geran. 1998. University of Wisconsin-Extension.

**Table 7***Short-Term and Intermediate Outcomes for Media Campaigns*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Create awareness and education campaign for populations at risk of overdose</b>	Data not previously tracked	2	2	0	Achieved
<b>Increase outreach through social media campaign and radio spots</b>	Data not previously tracked	↑10%	Radio One reported 252,542 social media views and iHeart radio reported 345,200 people reached	Twitter campaign produced 14 Tweets and 2,916 Tweet Impressions	Unable to compare as outreach efforts changed in Year Two

In Year Two the media focus shifted to social media and leveraging Twitter to increase outreach and awareness of the opioid epidemic. The Cuyahoga County Opiate Task Force Twitter account had a total of 839 total followers at the end of Year Two, 14 tweets, 373 profile visits, and 2,916 Tweet Impressions (the total number of times a Tweet has been seen).

## Prevention Strategy 6 – Linkage to Care

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Strategy 6 seeks to establish linkages to care. In Year Two, Thrive Behavioral Health Center (Thrive) and The Woodrow Project (Woodrow) continued to provide evidence-based peer support services in Cuyahoga County emergency departments (ED). Saint Vincent Charity Medical Center (SVCMC) was able to expand implementation of the Screening, Brief Intervention, and Referral to Treatment (SBIRT) tool to their Outpatient Primary Care Clinic. MetroHealth continues connecting inmates to Medication Assisted Treatment (MAT) via the ExAM Program. Despite the loss of their mobile syringe exchange unit, Circle Health Services (CHS) opened a new location in Rocky River and was able to continue providing harm reduction services and referrals for clients.

Through this Initiative data is collected regarding the processes to link individuals in need of treatment. To examine how partner agencies facilitate linkage to treatment, the Begun Center collects data on the number of individuals the agencies encounter, how many engage in discussions about treatment, number of referrals for treatment and the number of individuals linked to treatment. This year the Begun Center worked closely with these agencies to determine how the agencies define ‘encounter,’ ‘engage,’ ‘refer,’ and ‘link’ as each agency has different ways of measuring these outcomes (Table 8). It is important to note that not all individuals encountered will be referred or linked to treatment which could be due to a variety of reasons. If possible, partner agencies gather additional data regarding reasons and/or barriers for not linking with treatment.



“I think that we now have information on where clients are going after they're in the ED. Are they linking? What are the percentages of people who link to care? If they don't link to care, we're asking, “Why?” ...And I think that's really important, because you can't get to the *how*, and *the helping*, when you don't know *the why*, which are a lot of the questions that we ask.

We ask our peer supporters to be very detailed. We want a story. We want to know what each one of these people is experiencing, so we can bring that back. A lot of them have similar experiences, but a lot of them are different, too. So, it's nice to see where everybody's coming from. And so, we can get this huge view of like, “Oh, well, maybe we're missing this population over here.” This is what we need, like for our homeless population. We've learned a lot about them through asking these questions.” – *Thrive focus-group participant*

**Table 8**

*Agency Definition of Encounter, Engage, Refer, and Link*

Agency	Encounter	Engage	Refer	Link
CHS	Total encounters with Syringe Services Program participants and engage with outreach workers		Clients referred to any treatment services	Referred clients who attended their MAT appointment
MetroHealth - ExAM	Inmates identified/ approached for participation in the ExAM Program	Inmates who participate in the ExAM program	Inmates referred to community-based MAT programs (inpatient/ outpatient) when released	Clients (former inmates) who attend treatment appointments once released
SVCMC	Clients screened positive on SBIRT for SUD and approached for a secondary screen	Clients who received a secondary SBIRT screen (Drug Abuse Screening Tool = DAST) for Drug Use Disorder (DUD)	Clients referred for treatment services for DUD	Clients who attended their referred appointment as confirmed by a social worker
Thrive	Notifications to peer recovery supporters of potential clients	Clients who agreed to participate in the peer recovery program	Clients referred to treatment services by peer recovery supporters	Clients who are known to have linked with treatment services, usually inpatient
Woodrow	Clients who agreed to speak to a peer recovery supporter about options	Clients who agreed to participate in the peer recovery program	Clients referred to treatment services by peer recovery supporters	Clients known to have linked with treatment services, usually inpatient

Overall characteristics of the clients served by the OD2A Initiative Strategy 6 is provided. This report includes separate sections for each agency as there are differences in activities and primary indicators across agencies.

**Table 9**

*Key Demographics for Clients from September 2020 to August 2021*

		Peer Support Services Program		ExAM Program	SSP Care Coordination Program	SBIRT Program
		Thrive	Woodrow	MetroHealth	CHS	SVCMC
<b>N</b>		878	158	583	2332	302
<b>Age (average yrs, SD)</b>		40.84 (12.37)	36.82(11.89)	35.2(9.6)	39.0(10.7)	51.5(13.4)
<b>Race</b>	White	412	130	416	2174	60
	Black	221	24	119	144	234
	Other	9	3	48	14	8
<b>Ethnicity</b>	Hispanic	51	26	41	193	2
	Non-Hispanic	588	112	541	2139	83
<b>Gender</b>	Male	478	102	441	1572	181
	Female	196	53	142	755	116
	Other	0	0		5	2
<b>Homelessness</b>		108	24	N/A	N/A	N/A
<b>Time spent with Client (average, std)</b>		51.45(59.69)	121.9(80.4)	N/A	N/A	N/A
<b>Encounter</b>		878	158	583	2332	302
<b>Engage (Agree to Participate)</b>		674	157	580	2332	301
<b>Referred to Community Treatment Services</b>		571	152	87	998	115
<b>Linked with Community Treatment Services</b>		436	138	81	N/R except MAT = 57	40

*Note.* Race, Ethnicity, and Gender have some missing data for Thrive, CHS & SVCMC.

*Note.* SVCMC data collection since April 2020. Data may include duplicated clients.

*Note.* ExAM referrals for community treatment represent individuals released from jail, not representative of all clients in the program.

*Note.* CHS data includes individuals counted only once. Individuals can participate in the SSP Care Coordination more than once.

*Note.* NA: Not Applicable vs. NR: Not Reported.

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

The OD2A Initiative seeks to expand peer recovery supporters to assist individuals in need of treatment services and link them to care. The evaluation examines *how the expansion and enhancement of peer recovery supporters (PRS) in local hospitals increases the ability to engage and link clients who have experienced a nonfatal overdose into treatment*. In Year Two the OD2A Initiative provided supplemental funding for Thrive peer support services in two additional outpatient settings, MetroHealth Parma and MetroHealth Broadway. Data was also collected for peer support services within these hospitals.<sup>2</sup> Woodrow continued Project SOAR at Lutheran and Lakewood Hospitals. **During the last two years, Thrive and Woodrow have been able to link with treatment 50% and 85%, respectively, of the individuals they have encountered in the ED.**

### Thrive Key Indicators

Thrive peer recovery supporters connect directly with individuals (or their family or friends) with a behavioral health diagnosis (particularly OUD), if they agree to speak with the peer recovery supporter in the ED at SVC MC, MHP and MHB (regular and psychiatric) to ensure awareness of and connection to treatment and other medical and/or social services in the community. When peer support is required, Thrive on-call staff is notified and arrive at the ED within 30 minutes to meet with the patient.

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<sup>2</sup> Funding for these specific locations was only available in Year Two. In Year Three reporting will only be for services provided at SVC MC along with community peer support that is being provided outside of the ED setting.

**Table 10***Short-Term and Intermediate Outcomes for Thrive Peer Recovery Support Services*

Description	Measure	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the number of support personnel trained on linkage programs and services</b>	Short Term	0	↑10%	43*	51	Achieved
<b>Increase the average time spent by peer recovery supporters with clients</b>	Short Term	0	↑10%	65 mins (average)	51 mins (average)	22% decrease from Year One to Year Two which is likely due to COVID as most communication was done by phone/Zoom
<b>Increase notifications to peer recovery supporters of potential clients (Encounter)</b>	Intermediate	0	↑10%	230	878	Over 100% increase in Year Two due to additional hospitals included in the reporting. However, the addition of these hospitals will not occur in subsequent years.
<b>Increase the number of clients who agreed to participate in the peer recovery program (Engage)</b>	Intermediate	0	↑10%	197	674	In Year Two 77% of the clients encountered by Thrive PRS were engaged compared to 86% in Year One, a 9% decrease.
<b>Increase the number of clients referred to treatment services by peer recovery supporters (Refer)</b>	Intermediate	0	↑30%	132	571	Achieved: In Year Two 65% of the clients encountered were referred for services, compared to 57% in Year One, a 14% increase.
<b>Increase the number of clients linked with treatment (Link)</b>	Long Term	0	↑10%	63	436	Achieved: In Year Two 50% of the clients encountered were linked with treatment, compared to 27% in Year One, an 85% increase.

<sup>a</sup>Incorrectly reported as 75 in the Year One Report.

Thrive had 24-hour coverage in Year Two, up from 12 hours during Year One. **Of those individuals encountered by Thrive peer support staff, 77% agreed to participate in peer support services (n = 674).** From September 1, 2020 to August 31, 2021, 85% of the individuals engaged with Thrive Peer Recovery Supporters were referred for treatment services (n = 571), 65% of all individuals encountered by Thrive. Of those individuals referred to care, the majority were referred to detox (75%, n = 430) or Inpatient treatment (34%, n = 192). **In addition to referrals for treatment services, many Thrive clients (94%, n=635) were referred for other services, including community peer support, housing and shelters, and food pantries/food**

**stamps.** Of those clients who were referred to treatment (n = 571), 76% (n = 436) were known to have linked with treatment services, that is 50% of all clients encountered by Thrive.

**Of those individuals linking to care, 82% were linked to detox (n = 371), 16% to Inpatient (n = 73), 1% to Outpatient (n= 5), and 1% to Medication Assisted Treatment (n = 5).** Clients cited varied reasons for not linking with a referred treatment service; unavailability of beds (n=8), client's unwillingness to engage into treatment (n=4), and lack of ID or insurance (n=4) were the most common reasons.

"We have been meeting weekly with different treatment centers to ask questions and get education on what their requirements are for admission. Our staff have been working hard to find immediate solutions for admission for after-hours treatment, and when this has not been possible have been advocating for the patient to stay in the emergency room until a more suitable option is available. If the peer has been discharged from the emergency department, we will continue to support them and assist with recovery resources in the lobby. " – *Thrive focus-group participant*

As part of an additional evaluation component in Year Two, Thrive contacted clients participating in Thrive's community peer support program, 30 and 90 days after initial entrance into the program. The purpose of the survey was to gather information on services provided, examine social behavior, and understand client concerns. Thrive contacted 523 clients for their 30-day follow-up and 31% responded (n=163). For their 90-day follow-up survey, 57 out of the 265 clients (21.5%) provided responses. Of these 57 clients, 16 also completed the 30-day follow-up survey. **Findings from both the 30-day and 90-day surveys indicate that most clients maintained a relationship with their peer recovery supporter (PRS), and the majority met with their PRS regularly.** The clients expressed satisfaction in meetings with their PRS, treatment goals outlined, access to services, and overall support and assistance provided by Thrive. Clients found peer support to be helpful in their recovery.

"I would have had a much better life, I have many regrets, but there is still hope." – *Thrive client*

Personal relationships, health and well-being, and leaving their old life were the most common reasons to continue recovery.

Clients were asked about concerns or barriers related to engaging or maintaining treatment. While many clients did not express any concerns about engaging in treatment at follow-up (44% at 30 days and 62% at 90 days), a number of clients did not feel the need to engage in treatment as they had a PRS (19.5% at 30 days and 7% at 90 days).

Some clients feared losing friends, embarrassing family or being stigmatized if they engaged in treatment for their drug use.

"I will lose my friends if I go to treatment, people will stigmatize or stereotype me if I go to treatment". – *Thrive client*

Other concerns related to physical and mental health issues or prior unpleasant experiences. A majority of clients at 90 days and approximately 37% at 30 days did not experience any barriers related to treatment. About 5% of the clients at 30 days indicated they did not want to discuss their personal lives with others. Of those barriers noted, transportation, mental and physical health issues, child care/after care, and legal issues were common. Unfortunately, some clients continued to use illicit drugs, 19 clients (11.6%) in the past 30 days and 2 clients (3.5%) in past 90 days. Prescription medication use was reported by 59 clients (35%) at 30 days and 25 clients (43.8%) at 90 days. Hospitalization due to substance use was reported by 3 clients at 30 days and 2 clients at 90 days. Only one client reported being jailed in past 30 days. **A majority of the clients also believed that the people using drugs are treated differently by society (68% at 30 days and 67% at 90 days) and are stigmatized because of their drug use (66% at 30 days and 63% at 90 days).**

### Woodrow Key Indicators

Woodrow uses a PRS on-call model called Project SOAR. Project SOAR provides services in the Cleveland Clinic's Lakewood and Lutheran Hospital EDs. Although Woodrow continued to expand Project SOAR and provide peer support services, it has been doing so virtually in Year Two due to COVID-19. The hospitals received iPads programmed to call a Project SOAR phone that is in service 24 hours, seven days per week. Individuals who agree to speak to Woodrow staff are then connected directly with a peer recovery supporter.

**Table 11***Short-Term and Intermediate Outcomes for Woodrow Peer Recovery Services*

Description	Measure Type	Baseline	Target	Y1 Data	Y2 Data	Outcome Status
<b>Increase the number of support personnel trained on linkage programs and services</b>	Short-Term	0	↑10%	30	1	Achieved as all support personnel have been trained
<b>Increase the average time spent by peer recovery supporters with clients</b>	Short-Term	0	↑10%	117 mins (average)	122 mins (average)	4% increase from Year One
<b>Increase notifications to peer recovery supporters of potential clients (Encounter)</b>	Intermediate	0	↑10%	178	158	11% decrease from Year One
<b>Increase the number of clients who agreed to participate in the peer recovery program (Engage)</b>	Intermediate	0	↑10%	178	157	In Year Two 99% of clients encountered by Woodrow PRS were engaged, compared to 100% in Year One.
<b>Increase the number of clients referred to treatment services by peer recovery supporters (Refer)</b>	Intermediate	102	192	174	152	In Year Two 96% of the clients encountered were referred by Woodrow PRS for services compared to 98% in Year One.
<b>Number of clients linked with treatment (Link)</b>	Long Term	0	↑10%	150	138	In Year Two 87% of the clients encountered were linked with treatment services compared to 84% in Year One, a 4% increase.

During this last year Woodrow encountered 158 individuals who presented at the ED, compared to 178 in Year One. **Since September 2020, 157 out of 158 (99%) clients agreed to participate in peer support services, compared to 100% in Year One.** Of those clients who agreed to participate 97% (n=152) were referred for treatment services, 96% of all clients encountered by Woodrow. The majority (82%) were referred to detox (n = 124), 56% were referred to Inpatient (n = 85), 8% to Outpatient (n=12), and 3.3% to other treatments such as halfway houses and mental health facilities (n=5). **Of those clients referred to treatment (n = 152), the majority were linked with treatment services, an overall success rate of 91% (n = 138), 87% of the clients encountered by Woodrow.** The majority of Woodrow clients were linked with Detox (83%) (n = 115), 58% were linked to Inpatient (n = 80) and other services. Reasons why clients did not link with treatment services varied. The majority of clients left the ED before Woodrow staff could link them with or transport them to treatment services (n = 5).



Other reasons included clients not wanting to wait for linkage (n = 2), not having insurance (n = 2), or not cooperating (n = 2).

Woodrow also collects information from clients on their past drug use. Over 99% of Woodrow clients (157 out of 158) admitted to using alcohol and/or drugs (either prescription or non-prescription) in the past 30 days. Street opioids were the most commonly used drugs (31%), followed by prescription opioids (17%). Commonly misused prescription opioids were fentanyl (49%, n= 36), oxycodone (27%, n=20), buprenorphine (19%, n=14) and hydrocodone (19%, n=14). **Of the 158 clients encountered by Woodrow PRS, 40% (n=64) had never experienced an overdose and 53% (n=84) never visited the ED to treat an overdose.** The most common places clients reported experiencing an overdose were someone else's house or a public place. About half (49%, n=78) did not receive naloxone for their overdose.

To increase our understanding of the impact of Woodrow's Project SOAR peer support in the hospital EDs, the evaluation team interviewed a hospital representative who directs both EDs. The director detailed the beneficial role played by peer recovery supporters in:

"Getting [patients] directly from the ED to the place of rehab, which is a big change than what we were practicing before because I've been practicing for about 20 years and up until Project SOAR all we would do is to say, 'Here's your [Cuyahoga County] Street Card [with a list of treatment centers].'" – *Hospital focus-group participant*

The only concern surfaced during the interview was that the COVID-19 pandemic forced the once in-person peer support services to move to an online platform via ED-based iPads. The director saw this as a potential drawback to rapport-building between patients and PRS. Yet the director also recognized positive impacts resulting from the immediacy of virtual peer support service delivery because peer support was only a call away.

As part of an additional evaluation component in Year Two, Woodrow contacted clients who engaged with a Woodrow PRS in the hospital ED 30 days and 90 days after release. Clients were asked questions about their living conditions, treatment, services received, previous overdoses, and concerns about drug use and treatment. Woodrow reached out to 144 clients for their 30-day follow-up, and received 24 responses (17%). For their 90-day follow-up, 15 out of 120 clients completed the survey, a response rate of 12%.

At the time of the 30-day follow-up, one third of the clients, who completed the survey (n=8, 33%), were engaged in treatment (inpatient, detox, etc.), 20 (83%) found their PRS helpful in their drug treatment, and 21 (88%) said they would continue working on their recovery. The 90-day follow-up response showed similar results with 33% (n=5) clients engaged in treatment, 87% (n=13) finding their PRS helpful with their recovery, and an equal number (n=13, 88%) planning to continue with their recovery. Homelessness was reported by over 30% of the clients at 30 days and 20% at 90 days. About 70% of the clients reported being arrested or jailed at 30 days, and

87% at 90-day follow-up.

In both the 30-day and 90-day surveys, the clients identified factors keeping them in recovery as well as reasons that could make them go back to their drug use.

Reasons clients stayed in recovery focused on family, wanting a better life, treatment and sponsors.

“Better at everything, Mom, partner, employee, of course a better 'me'.” Another indicated “I don’t want to live the old way.” – *Woodrow clients*

**Associating with old friends or being in the wrong company were the most common reasons cited for relapse.** One client noted stress could cause them to go back to using drugs, “I have fallen off the wagon before.” Many of the clients at 30 days (83.3%) and 90 days (68.8%) did not express any concerns about engaging in treatment. For those who did, COVID-19 infection, using drugs again, embarrassment to family and friends, stigma, work and pain medication issues were some of the concerns expressed by the clients. Similarly, a majority of the clients did not report any barriers related to engaging in treatment (88% at 30 days and 69% at 90 days). For those who did, reluctance to talk about their personal life, lack of insurance, COVID-19 infection, transportation, and work-related issues were noted as barriers.

### **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 two of their medical-surgical units and outpatient health center to increase the identification of patients with substance use disorders (SUD) needing treatment services. The evaluation question for this activity is ***how does the use of SBIRT increase the identification of patients with SUD in need of treatment services***. In Year Two SVCMC identified several patients in need of treatment services as identified by a secondary screen, the Drug Alcohol Screening Tool (DAST) and 97% of these patients (n=302) were referred for general treatment services.

Table 12

*Short-Term and Intermediate Outcomes for SBIRT Program*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the number of support personnel trained on linkage programs and services</b>	Data not previously collected	↑10%	55	2	57 support personnel trained
<b>Increase the number of facilities adopting the SBIRT as a means to link patients with treatment services</b>	Data not previously collected	↑10%	2	1	One additional medical unit adopted the SBIRT screener.
<b>Increase the number of patients who are given initial SBIRT screening</b>	Data not previously collected	2,175/yr.	362	3,973	Achieved
<b>Increase number of patients with substance use disorder approached for a secondary screen (Encounter)</b>	Data not previously collected	↑10%	50 <sup>a</sup>	302	All patients identified for secondary screen for substance use disorder are approached.
<b>Increase the number of patients with substance use disorder who are given the secondary SBIRT Screening (Engage)</b>	Data not previously collected	↑10%	50 <sup>a</sup>	301	In Year Two, 99% of the patients encountered agreed to the screen, as compared to 100% in Year One. <sup>b</sup>
<b>Number of patients referred for treatment services after SBIRT screening (Referred)</b>	Data not previously collected	↑50%	23 <sup>a</sup>	291	In Year Two, 96% of the patients encountered were referred for services, over 48% increase from the previous year. <sup>b</sup>
<b>Number of patients with drug use disorder (DUD) linked with treatment (Link)</b>	Data not previously collected	↑10%	16 <sup>a</sup>	40	In Year Two 13% of patients encountered were linked with treatment compared to 32% in Year One, a substantial decrease. <sup>b</sup>

<sup>a</sup>The SVCMC Year One Data (April 1, 2020 – August 31, 2021) was updated to only reflect patients who had screened positive for DUD.

<sup>b</sup>SVCMC Year One Data collected data was for four months, while Year Two Data collected data was for a total of 12 months.

The SBIRT screens patients for Substance Use Disorder (Drug Use Disorder and Alcohol Use Disorder), Anxiety, Depression, and Trauma. Year Two was the first full year for the SBIRT program being implemented at SVCMC. Although challenges from the COVID-19 pandemic persisted into Year Two, the SVCMC's SBIRT program was on track. The SVCMC SBIRT team succeeded in furthering quality program implementation by continuing to reach out to, educate, and collaborate with other departments and disciplines throughout the health system. These actions resulted in more providers relying on SBIRT throughout the system as a conduit for more holistic and integrated care.

The program definitions of encounter, engage, refer and link in the evaluation were updated to focus on DUD-specific patients. During the last year, SVCMC SBIRT Team screened a total of 3,973 patients using the SBIRT primary screen, with 302 patients screening positive for DUD.

**Of the 302 patients with DUD encountered, (99%) agreed to the secondary screen (n = 301).**

In Year Two, additional analysis focused on the drug types and drug combinations reported by patients with DUD. After completing their primary SBIRT screen, patients who completed the secondary screening for DUD were prompted to report the drug types they engaged in using. This list includes Cannabis, Opioids, Sedatives, Stimulants, Amphetamines, Cocaine, Other drug types/Unspecified drug types, Hallucinogens, and Inhalants. **Of those patients who received a secondary screen, and spoke with a social worker, 291 out of 296 patients were referred for general treatment services (99%).** Many of the patients, however, refused the referral. The reason provided by the majority of patients who did not accept the referral was not interested in treatment (90%, n=159). For those who accepted the referral, patients were linked with various forms of treatment, the most common being Crisis/Inpatient treatment (30%), Outpatient (11%), and Detox (11%).

#### **Increase Warm Handoff to MAT for At-Risk Populations (ExAM Program) – MetroHealth**

As part of the ExAM Program MetroHealth seeks to increase warm handoffs to Medication Assisted Treatment (MAT) for at-risk persons. The program provides MAT to persons incarcerated in the Cuyahoga County Corrections Center. The evaluation question examines *how can Cuyahoga County increase MAT services for at-risk populations*. Warm handoffs to community-based MAT will occur upon the inmates' release from the jail. MetroHealth is able to link many ExAM clients to community MAT.<sup>3</sup>

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<sup>3</sup> Please note that Year One and Two data contain duplicate participants entered under different IDs for multiple referrals. Although these participants are entering the program based on a new referral following a subsequent incarceration, the numbers overestimate the number of individuals engaged in the program. This issue was recently identified and will be corrected in Year Three.

**Table 13***Short-Term and Intermediate Outcomes for MetroHealth ExAM Program*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the number of inmates identified for ExAM Program (Encounter)</b>	414	10%	517	583	Achieved
<b>Increase the number of inmates who participate in the ExAM program (Engage)</b>	414	10%	489	580	Achieved
<b>Increase the number of warm-handoffs to community-based MAT (Refer)</b>	63	10%	209	87	Achieved
<b>Increase the number of clients linked with treatment (Link)</b>	Data not previously collected	10%	206	81	Accurate number of clients linked is unknown. See discussion in report.

During Year Two, from September 2020 through August 2021, 583 inmates at the Cuyahoga County Corrections Center were assessed and approached for participation in the MetroHealth ExAM program. **Almost all of the inmates (n=580) agreed to participate in the MetroHealth ExAM program.** Once released from incarceration, former ExAM clients are referred to community-based MAT treatment services. The MetroHealth ExAM program is designed to refer and link all clients who participate in the program for community treatment services. During Year Two, 236 inmates were released from jail and of those, 87 were referred to community-based MAT. When MetroHealth is notified about an impending release of a client, they reach out to ensure they still have the contact information. However, when the ExAM team is not notified of a release until after the release, establishing contact in the community is more difficult, making the hand-off to community care more difficult, as the clients often do not respond, or may change their phone number or address after being released. During the COVID-19 pandemic, compassionate releases increased the number of clients with whom contact in the community was lost. Of the 87 clients for whom referral information is available, 57% of referrals for community-based MAT were for outpatient treatment ( $n = 57$ ), and 46% ( $n = 37$ ) were for inpatient treatment services. Inmates were referred for other community-based services ( $n = 84$ ) in addition to treatment services. The majority of other services were for Medicaid/Medicare, Housing/Shelter, and Transportation ( $n = 75$ ). **In the last year, nearly all of the 87 clients who were referred for community-based MAT services were linked (93%,  $n = 81$ ).**

## 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 Syringe Services Program (SSP). CHS has expanded its outreach services by providing better linkages to care for the drug-using community. 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 *to what extent does the enhancement of care coordinators involved with SSP in Cuyahoga County increase 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. Although CHS is not able to verify whether all clients referred for treatment are linked, all of those engaged clients who were interested in services are referred for treatment services. **In Year Two, 998 clients expressed interest and were referred (43% of encountered), compared to 40% in year 1, which is an increase of 8%.**

**Table 14**

*Short-Term and Intermediate Outcomes for CHS SSP Care Coordination from September 2020 to August 2021*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase number of agencies referring clients to SSP</b>	10	11	Data currently not available	1	
<b>Number of clients who were approached about SSP Care Coordination (Encounter)</b>	707	↑10%	2,057	2,332	Achieved: 13% increase.
<b>Number of clients who engage with the SSP Care Coordinator (Engage)</b>	707	↑10%	1,135	2332	Achieved. In Year Two 275 more clients were encountered and engaged than in Year One, an increase of 13%, and a 230% increase from baseline.
<b>Increase number of clients referred to treatment services by SSP Care Coordinator (Referred)</b>	Data not previously collected	↑30%	453	998	In Year Two 43% of the clients encountered were referred for services compared to 40% in Year One, an 8% increase.
<b>Number of clients linked with MAT (Link)</b>	Data not previously collected	↑10%	28	57	Reporting is only able to track clients linked to MAT and not all services, 57% of those referred linked with MAT.
<i>*Note.</i> Year One Engage data has been updated to reflect a corrected description of how all clients are engaged (asked) about their interest in other services.					

During Year Two, the SSP served a total of 2,332 unique individuals, totaling 15,429 encounters. Of these unique individuals encountered and engaged, 43% (n=998) expressed interest in, and were referred to, other services, an increase of 8% from the 40% (n=453) in Year One. The

majority of CHS clients were referred to detox (43.4%, n = 941) and primary health services (42.2%, n = 914). For the OD2A Initiative, CHS does not have the ability to track all linkages to services, except for linkages with community-based MAT. Of those individuals involved in SSP's Care Coordination 57 linked with MAT.

As part of the SSP, individuals are asked if they have a Project DAWN kit. The following data includes all individuals encountered by the SSP and not just 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 (87%, n = 13,465). When examining each client individually (n = 2,332), 83% (n = 1,936) of the clients possessed a DAWN Kit. During Year Two, 9,634 individuals (1,836 unique individuals, 76%) reported that they had used naloxone to reverse an overdose. The majority of the clients encountered by the SSP care coordinators received a referral to Project DAWN (71%, n = 11,027), representing 1,940 unique clients (83%). Project DAWN provides prevention and educational information to clients as well as naloxone.

New this year, a survey was conducted with clients who visit any CHS syringe exchange location at least twice. Clients could only complete the survey once. The survey consists of questions regarding clients' attitudes toward treatment (including engagement and barriers), overdose history, Project DAWN kit distribution, perceptions of drug use, and motivation for change. The survey included 5 questions from the Motivation section for Substance Abuse Treatment, CMR Factor Scales Intake Version the Circumstances, Motivation, and Readiness Scales for Substance Abuse Treatment.<sup>4</sup> A gift card was provided to clients who completed the survey. Data presented in this Year Two report should be considered preliminary as the survey is ongoing into Year Three, 468 surveys were completed this reporting period.

Clients were asked to respond to statements about substance use on a five-point Likert Scale, data was analyzed by combining the agree/strongly agree responses and combining the disagree/strongly disagree responses to create three categories of responses. While most of the statements focused on the impact of drug use on the clients' lives, the first statement, "People without a history of substance use could never really understand me," asked clients to consider the perceptions of others (Figure 3).

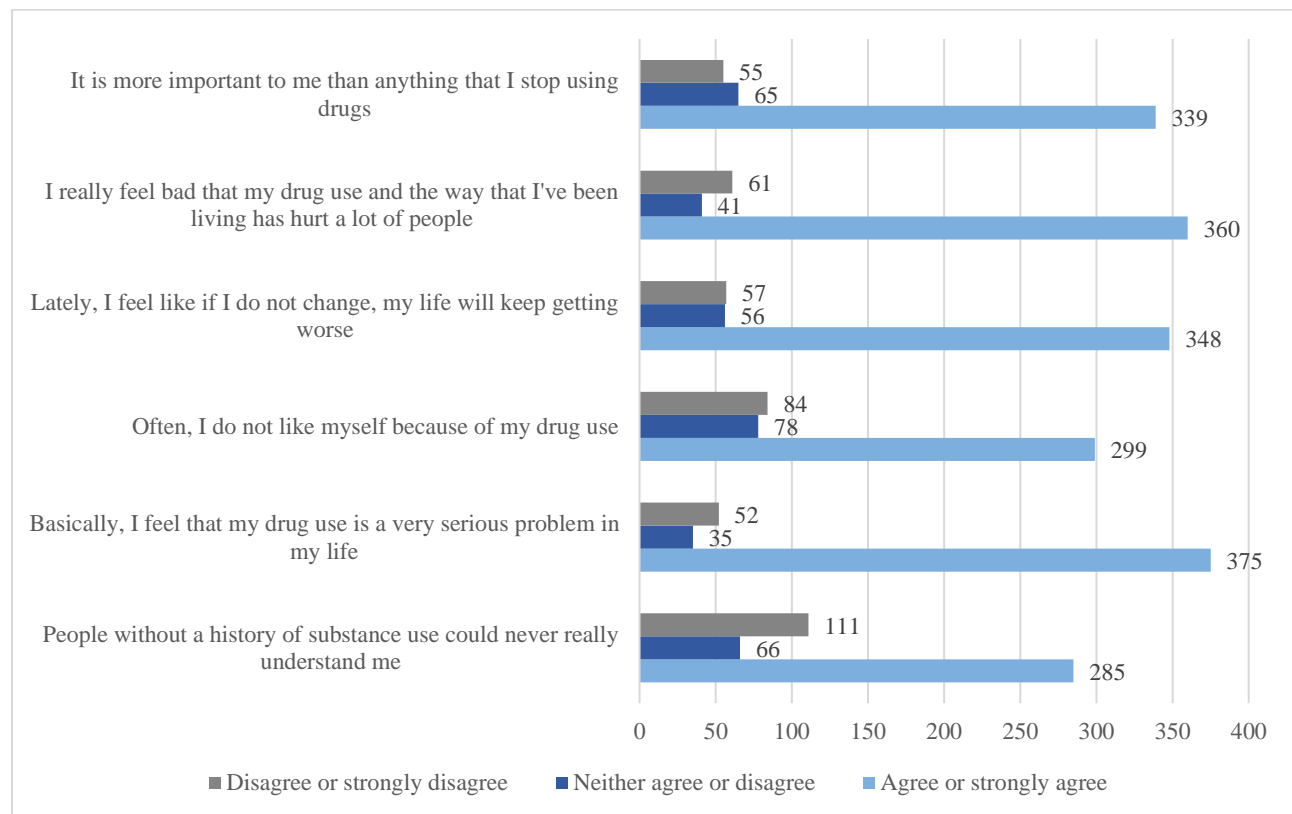
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<sup>4</sup> Melnick, G, Hawke, J and De Leon, G. Motivation and Readiness for Drug Treatment: Differences by Modality and Special Populations. *J Addict Dis.* 2014; 33(2): 134–147. Used with permission of Dr. De Leon on 2/13/2020.



**Figure 3**

*CHS Client Survey – Perceptions and Feelings about Drug Use*

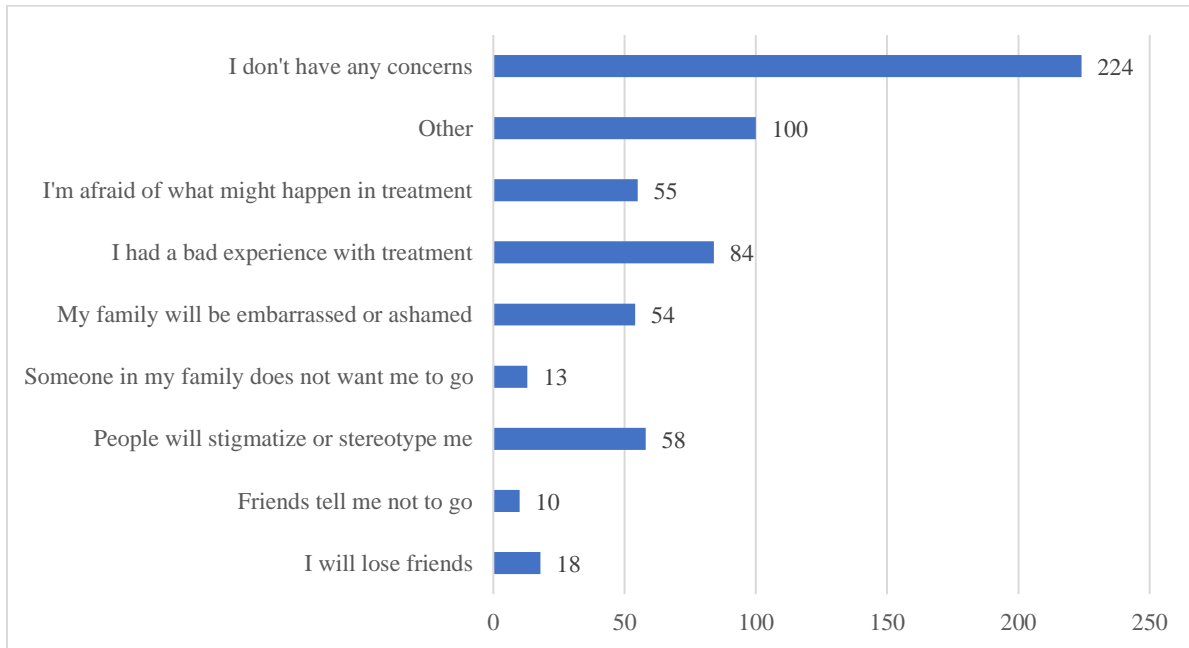


The majority (n=464) responded that they have not experienced an overdose, but for those who had an overdose, most indicated their last overdose occurred at home (n=107). Other locations of overdose included a family member's home, a nursing home, and Burger King. Clients were also asked whether or not they are currently engaged in treatment or had been engaged in treatment in the last year, more than half responded "no" to having engaged in treatment (n=304). Treatment types for those who responded "yes" included inpatient (n=52), outpatient (n=54), MAT (n=51), detox (n=40) and other (n=7).

Despite fewer than half of clients saying they were currently in or had recently engaged in treatment, few reported concerns around entering treatment (Figure 4) or barriers, except to note that they did not like to talk to others about their personal life (Figure 5).

**Figure 4**

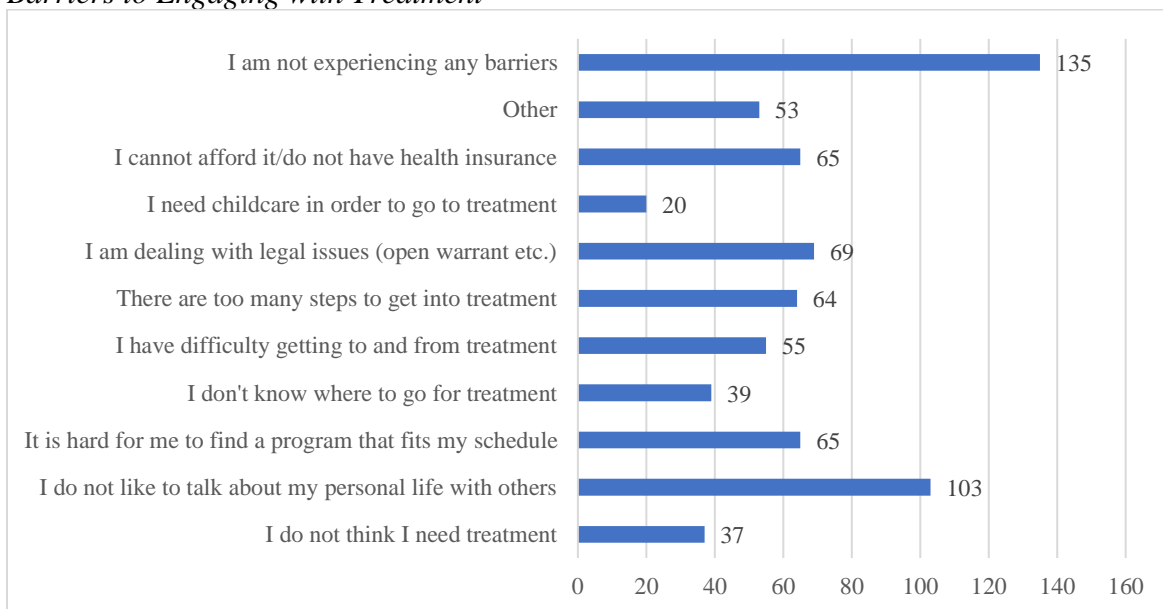
*CHS Client Survey – Concerns About Engaging with Treatment*



*Note.* Clients could indicate more than concern.

**Figure 5**

*Barriers to Engaging with Treatment*



*Note.* Clients could indicate more than concern.

## 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 ***in what ways is web-based technology effective in reaching and linking clients 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 15**

### *Short-Term and Intermediate Outcomes for drughelp.care*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the number of new agencies registered on the web app</b>	46	96	31	24	Achieved: number of total agencies =98*
<b>Increase the number of agencies inputting information on web-app</b>	25	↑10%	31/month	41/month	Achieved: 64% increase in number agencies from baseline
<b>Increase the number of clients using the web-based app</b>	2,265	↑20%	4,332	12,273	Achieved: over 100% increase in number clients using the web-based app from baseline
<b>Increase # of new treatment services included on the web-app</b>	293	↑5%	103	116	Achieved: over 100% increase in number of new treatment services included on web-app from baseline
<b>Increase provision of EBPs for OUD</b>	Data Not Previously Collected	↑10%	1280	2208	72% increase

*Note.* 100 registered agencies include two that were closed within the past year.

A number of enhancements continued to be made to *drughelp.care* in Year Two: including, but not limited to, GUI (graphical user interface) improvements for consistency and professionalism; stylistic aesthetics were corrected; simplified and refined the website's functionality; showing the text "0 services available" when the selected filters do not produce any results; adding an educational video on treatment types for substance use; users may now sort by a zip code of their choice, results will be sorted by the distance from that zip code in miles; added new filters for agencies that work with Autism Spectrum Disorder, ADHD, and PTSD; and added a new intervention filter for Contingency Management Therapy. One particularly useful feature that was added to the website toward the end of Year Two is the integration of a treatment services map utilizing Google. The map requests access to the end-users' location and then allows them to filter services based on needs to view services available in their area.

In Year Two, *drughelp.care* continued to register new agencies and update new services on its web app. By the end of Year Two, there were 98 registered agencies, despite two agencies permanently closing in September and another agency permanently closing in November, 2020.

**One unique feature of *drughelp.care* is to provide agencies and clients with close to real-time information regarding treatment availability by number of open slots, treatment type, and location.** Year Two saw a slight decline in the percentage of agencies making updates, dropping from 56% in September 2020 to 40% in August 2021. However, the number of agencies making updates each month averages 41 which exceeds the target outcome of a 10% increase in the number of agencies making updates from baseline (n=25).

In Year Two, CSU made steps toward tracking data for the long-term outcome of **increasing the provision of evidence-based treatment for opioid use disorder.** To do so, they examined the number of registered services utilizing evidence-based practices (EBPs) from 2019 to 2021. Ten different EBPs were identified. Over the last two years, CSU has been able to increase knowledge in the community about EBPs available in Cuyahoga County, registering information about 928 additional treatment services. Educating clients and providers about these services further assists in reaching and linking clients to treatment.

## **Prevention Strategy Seven - Providers and Health Support Systems Support**

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Strategy Seven focuses on providers and health systems support especially in efforts to increase opioid safety prescriber practices

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

As part of Strategy 7, MetroHealth is working with CHA to develop: (1) an Academic Detailing (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, short term and intermediate outcomes. There is one evaluation question for these activities which examines ***how AD increases opioid safety prescriber practices; i.e., reduce the number of opioid prescriptions and increase referrals for alternative pain management.***

MetroHealth continues to facilitate the development of AD processes including implementation at its MetroHealth Medical Center and training other organizations to replicate new processes within their facilities. During Year Two, 3 people received “train the trainer” training to provide Academic Detailing, two from MetroHealth and one from CHA. CHA also has been working toward the development of the program, developing stages regarding AD strategies and alternative pain management educational resources, as well as countywide provider training to increase utilization of evidence-based approaches involving Opioid Use Disorder (OUD)

prevention and intervention. **Since going live in April 2021, CHA has reported nine hospitals have downloaded and begun adoption of the toolkit.**

**Table 16**

*Short-Term and Intermediate Outcomes for AD Program*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase # of providers receiving training related to AD</b>	Data not previously collected	30	31	21	Achieved
<b>Increase in # of providers receiving AD</b>	Data not previously collected	30	0	102	Achieved
<b>Increase in # of providers receiving training on alternative pain management</b>	Data not previously collected	↑10%	12	5	Although new providers are receiving training, the number trained was not the projected increase.
<b>Increase number of hospitals and non-traditional systems using toolkit</b>	Data not previously collected	4	0	6	Achieved
<b>Increase use of non-opioid medications and non-pharmacological treatments for pain management</b>	Data not previously collected	↑10%	36	26	Although providers are increasing use of non-opioid medications and non-pharmacological treatments, the number was not the projected increase.
<b>Increase in knowledge gained by providers from training on AD and alternative pain management</b>	Data not previously collected	↑10%	0	In Progress	MetroHealth AD Program currently testing survey tools to measure this outcome
<b>Decrease in high risk prescribing behaviors for medical providers who received AD</b>	Data not previously collected	↓10%	0	In Progress	MetroHealth AD Program currently testing survey tools to measure this outcome

CHA launched the Opioid Management Toolkit in April 2021, which aimed to assist providers with improving their opioid prescribing practices (see <https://opioidconsortium-education.org/od2a/index>). Additionally, CHA created short academic-detailing videos for their Opioid Management Toolkit. **In collaboration with the MetroHealth Academic Detailing Lead, CHA also created an academic detailing course based on the Veteran's Health Administration, NaRCAD, and MetroHealth models.** This course will be used to train academic detailers in other health systems.

Although MetroHealth began providing AD training to providers in Year Two, MetroHealth continues to also provide additional training to providers relating to academic detailing. During MetroHealth's new hire training the Office of Opioid Safety presents overall Opioid Use Disorder/Substance Use Disorder (OUS/SUD) education and resources surrounding MetroHealth policies and information about the state of Ohio's current laws and regulations regarding OUD/SUD. The presentation provides best practice and guidelines that all providers must follow. Networking also allows for MetroHealth to initiate and introduce AD to providers, a positive approach when caring for a patient on long term opioid therapy. During Year Two, 21 new hires received this training. **New in Year Two MetroHealth initiated its AD program and 102 providers received training on AD, exceeding the target.**

Through this project MetroHealth also seeks to identify types of alternative treatment to opioid prescribing. Two treatments that emerged in Year One were Nitrous Oxide and pain blockers. **In Year Two, 26 ED clients were linked to alternative pain management.**

### Expand MAT capacity in ED – MetroHealth

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. During Year Two, MetroHealth developed and distributed an ED MAT guide for provider education/reference, as well as a Teams site with ED MAT resources for providers. MetroHealth is also working to incorporate treatment for opioid, alcohol and nicotine addiction into its MAT ED protocol.

**Table 17**

#### *Short-Term and Intermediate Outcomes for ED MAT Referrals*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase the number of providers receiving training on MAT</b>	6	↑10%	25	4	Achieved
<b>Increase the number of providers with a DEA waiver</b>	70	↑10%	25	1	33% achieved
<b>Increase the number of clients linked to MAT</b>	90	↑10%	89	72	Achieved

Despite COVID-19, MetroHealth has facilitated training for its providers on MAT. **In Year Two 4 ED providers completed training on MAT and one provider has applied and is waiting on their DEA Waiver.** In addition to ED providers receiving training on MAT, MetroHealth is also delivering the training to other providers within the hospital system, a total of 63 additional providers received training on MAT in Year Two. MetroHealth is continuing to refer clients to

MAT from the ED. In Year Two, to facilitate clients' linkage to MAT, MetroHealth collaborated with the MAT clinic to create "bridge" clinic appointments for ED MAT patients which are scheduled prior to discharge from ED. The program team developed standardized discharge instructions, standardized documentation and a calculator for addiction assessments. The team also developed a reporting dashboard in Epic® for providers to track their patients on MAT and other compliance metrics (toxicology screens, labs, PDMP checks etc.) **MetroHealth reported referring 83 ED patients to MAT and 87% (n=72) were linked to care.**

## Prevention Strategy Eight – Partnerships with Public Safety and First Responders

Strategy Eight focuses on developing and enhancing partnerships across public safety and first responders who respond to calls for service associated with opioid overdoses.

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

For this activity the evaluation seeks to examine *how law enforcement improve the tracking and notification of nonfatal opioid-related overdose incidents*. As previously discussed in Strategy 3, the use of law enforcement data regarding nonfatal overdoses provides a wealth of information, including identification of where overdoses are occurring in Cleveland.

**Table 18**

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

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Improve coordination of Public Health and Public Safety Efforts with DUAs for sharing and integration of nonfatal overdose</b>	0	2	0	Although data is received from CDP and CCMEQ, no DUA is in place as data is public record	DUA with Euclid Police Department in Progress
<b>Improve 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</b>	0	2	0	CDP CEMS CCMEQ	In Progress
<b>Increase data reports of nonfatal overdose data available from LE</b>	0	↑10%	0	1	In Progress

To supplement the data received from Cleveland Division of Police (CDP) and Cleveland EMS (CEMS) in Year One, the Begun Center received additional data covering the period of May 1, 2019 to February 12, 2021. Begun Center staff analyzed the data to monitor general trends and



provide awareness of where overdoses are occurring in Cleveland. The surveillance team also merged CEMS and Police Department (PD) incident data with drug-related overdose death reports provided by the CCMEQ. The analysis identified locations with multiple overdose incidents being reported by CEMS, law enforcement and/or CCMEQ. For example, several apartment complexes across Cleveland experienced high numbers of both fatal and nonfatal overdose responses. The analysis also identified single-family residences experiencing as many as ten overdose incidents and multiple fatal overdose incidents within the last few years. Identification of locations, which have experienced high volumes of incident responses, can be used by stakeholders to prioritize intervention, harm reduction, and other activities.

In Year Two the CDP was able to move forward with hiring an Intelligence Analyst housed in the Northeast Ohio Regional Fusion Center. The Intelligence Analyst will be instrumental in gathering, cleaning, analyzing, and disseminating overdose and other substance use data. In addition, the Intelligence Analyst will develop geospatial maps containing overdose data and overlaying layers related to such variables as calls for service, nonfatal overdoses, fatal overdoses, and other data points from systems such as Ohio Automated Rx Reporting System (OARRS) and the Overdose Fatality Review (OFR).

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

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

**Table 19***Short-Term and Intermediate Outcomes for Outreach to Victims of Nonfatal Overdose*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Improve our understanding of the processes to link nonfatal overdose victims to care by first responders/case workers</b>	0	2	0	5	<ol style="list-style-type: none"> <li>1. Collaboration between CCSO and CDP are important for data collection.</li> <li>2. Follow up with clients at 90 days.</li> <li>3. Contact at incident location in addition to residential address.</li> <li>4. Outreach to family and friends is an additional way to connect with clients.</li> <li>5. Reduce time from overdose incident to notification to QRT.</li> </ol>
<b>Increase number of clients, family members or other who were contacted by MetroHealth QRT (Encounter)</b>	0	↑10%	0	225	Achieved: Since data was not previously collected, any encounters would represent an increase.
<b>Increase number of clients who agree to talk MetroHealth QRT (Engage)</b>	0	↑10%	0	60	Achieved: Since data was not previously collected, any participation would represent an increase.
<b>Increase number of clients referred for treatment by MetroHealth QRT (Referred)</b>	0	300	0	46	15% achieved
<b>Increase number of clients linked with treatment after QRT referral</b>	0	↑10%	0	7	Achieved: Since data was not previously collected, any linkages would represent an increase.

During Year Two, the MetroHealth QRT began outreach activities. The QRT team proactively identifies and approaches overdose victims in their residential environment and outside of a clinical or medical setting. QRT outreach is determined from data identified by the Cuyahoga County Prosecutor's Office (CCPO) Crime Strategies Unit (CSU) Crime Analysts. MetroHealth noted that they are also in the process of finalizing agreement with CEMS to receive identified data from opioid overdose incidents and that this would be added to the current data received.

A 90-day follow-up with clients was not initially part of the QRT procedures. However, as a result of interactions with the families and the clients, it became apparent that identifying individuals/locations for 90-day follow-up is an important element. MetroHealth staff also noted that they are seeing people on the QRT overdose list who are also showing up in the ExAM program from the jail. MetroHealth QRT is working to coordinate their data with the ExAM program.

Contacting individuals at the incident address has been more successful than attempting to make contact at the residence address listed in the incident information (if the two are different).

**MetroHealth staff believe that the most effective aspect of the QRT program is the provision of resources to the families of the overdose victims.** Family members are receptive to discussion, receive resource information, and are motivated to work with getting the overdose victim linked to care, but they often lack the knowledge of available resources. MetroHealth noted that they typically receive overdose incident data approximately 7 to 10 days after the incident. **They believe interaction with the opioid victims in the first 24 hours would likely achieve improved interactions and outcomes than the current model.**

The QRT encountered 225 individuals, of which 27% (n=60) were the overdose victim and 73% (n=165) were family members, partners, or roommates of the overdose victim. Reasons for not reaching the overdose victim were usually due to no one answering the door (81%) or no access to the house or apartment (16%). Client referral includes QRT left materials with the clients with whom they engaged (77%, n=46) and 55% (n=91) with the family members, partners, or roommates of the client. Of the 46 clients with whom MetroHealth QRT engaged and left materials, 15% (n=7) of those clients reported linkages to care. For MetroHealth QRT, linkage to care is defined as the number of clients who are receiving treatment. The MetroHealth QRT process also includes 90-day follow-up with clients who had received materials, and it was during that 90-day follow-up activity that MetroHealth QRT learned of 5 clients who had been linked to care.

### **Expand PAR Card, Enhance Self Care (Compassion Fatigue) Awareness and Training, Cross Train Public Safety Forces to Raise Awareness of New Partnerships, Programs, and Challenges Regarding the Local Opioid Epidemic**

Several activities are associated with the evaluation which examines *how Cuyahoga County can improve and enhance partnerships with public safety and first responders to reduce opioid overdose related deaths and nonfatal incidents.*

**Table 20***Short-Term and Intermediate Outcomes on Enhancing Partnerships with Public Safety and First Responders*

Description	Baseline	Target	YR 1 Data	YR 2 Data	Outcome Status
<b>Increase number of Link2Care cards distributed to agencies</b>	0	400	Link2Care Card Developed	6500	Achieved
<b>Trainings on “self-care (compassion fatigue)” awareness &amp; on local opioid related efforts.</b>	0	8	3	17	Achieved
<b>Enhance efforts to address needs of first and secondary responders through self-care/compassion fatigue training</b>	0	50/yr.	0	12	In Progress
<b>Increase jurisdictional awareness of opioid overdose epidemic and evidence-based approaches (including ACEs related risk factors) by public safety and first responder partners</b>	0	50/yr.	43	427	Achieved

Although the PAR card has not been utilized by CDP HIDI detectives as they are not routinely interacting with nonfatal overdose persons, the utilization of these cards has expanded to other providers who routinely interact with individuals in need of services. In Year Two Link2Care cards were distributed by CCBH to a number of agencies, including the Parma Police Department, the MetroHealth QRT, Relink, Project White Butterfly, and Lutheran Metropolitan Ministries. OD2A subgrantees also received Link2Care cards to distribute to clients and first responders. **In Year Two, CCBH distributed 6500 cards to these agencies.**

During Year One scheduling of the Compassion Fatigue Awareness training for HIDI detectives and LE/first responders was delayed due to COVID-19. In Year Two, scheduling issues and COVID-19 continued to impact the ability to deliver this training in person. After additional discussions, Begun Center staff expanded the definition and scope of potential recipients of this training to include community agency staff and peer support personnel who engage on a regular basis with opioid overdose victims, referred to as “secondary first responders.” Two virtual sessions were scheduled in May and June 2021 with 38 individuals registering for the training. **A total of 12 individuals attended the training.**

The ADAMHSB and the County Board of Health are tasked with linking law enforcement, EMS, and emergency department 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 started Year Two by continuing to offer the *Caring for People in Crisis* training that was used to raise awareness about the opioid

epidemic in the County. This training was offered in November and had 24 participants. After experiencing barriers to training, the ADMAHSB was able to incorporate the training into its Crisis Intervention Training (CIT) for Cuyahoga County law enforcement, increasing engagement significantly and achieving their three-year targets for number of trainings and number of officers trained. This training covers both OUD and ACES factors, including the impact of COVID-19, recognizing an overdose, treatment options (such as MAT, peer support, residential, etc.), trauma-informed care, and the lasting effects of adverse childhood experiences. This training is held twice monthly for a total of 14 CIT sessions in Year Two with 427 law enforcement officers trained.

## **OD2A Project Performance Assessment**

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In addition to the outcome evaluation, a programmatic evaluation is done to assess Cuyahoga County's OD2A implementation progress as reflected in the key themes and sub-themes discerned from analysis of the *qualitative* data collected from participating agencies between September 1, 2020, and August 31, 2021. Programmatic surveys are administered quarterly by The Begun Center to the OD2A participating agencies to facilitate identification of challenges and facilitators impacting OD2A success. 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 and individual interviews also were held at the end of the year with staff from the participating agencies and one community stakeholder to gather more insight into the day-to-day activities surrounding the OD2A Initiative.

**Table 21***Key Themes of the Qualitative Data*

Key Themes	Details
<b>1. Developing Organizational Capabilities for Quality Implementation</b>	Agencies defined outcomes in alignment with the program strategies and identified potential resources for improving the quality of the program.
<b>2. COVID-19 Pandemic Impacts and Adaptations</b>	Agencies described challenging impacts of and key adaptations to the global pandemic.
<b>3. Improvements</b>	Agencies identified improvement in their activities and/or outcomes.
<b>4. Leveraging Resources</b>	Agencies recognized and/or leveraged resources.
<b>5. Identifying Challenges</b>	Agencies identified challenges to program implementation and explored possible ways to overcome them.
<b>6. Exploring Innovative Ideas</b>	Agencies explored innovative ideas to overcome challenges and build their programs.
<b>7. Dissemination and Data Sharing Strategies</b>	Agencies developed strategies for sharing knowledge gained and lessons learned through education, conference attendance, and meetings/interviews with collaborating partners.

***Developing Organizational Capabilities for Quality Implementation***

While pandemic-related implementation barriers forced ESC-NEO and PAXIS Institute to pause participation in the OD2A project beginning in Quarter 2 of this year, the other OD2A participating agencies continued to develop organizational capabilities. For example, CCBH developed the Cuyahoga County Overdose Data Dashboard, released its first Data Bulletin, and instituted the use of Tableau® to develop higher quality products for data dissemination.

***COVID-19 Pandemic Impacts and Adaptations***

The COVID-19 global pandemic continued to impact OD2A activities in Cuyahoga in wide-ranging ways. Many OD2A agencies continued to use restricted in-person or fully remote work environments, continuing to make adaptations as required by the regional trajectory of the pandemic. While the pandemic has affected some agencies more severely than others, many established effective virtual meetings and program management, as well as digital training methods and distribution of prevention/educational materials that may continue post-pandemic.

### ***Improvements***

All OD2A participating agencies initiated programming improvements this year, ranging from CCBH (1) accessing new sources of opioid-epidemic related data, (2) broadening the scope of data integration and analysis to include among other things Project DAWN and National Forensic Laboratory Information System (NFLSI) data, and (3) more widely disseminating findings to other stakeholders and the public at-large via the CCBH website to Thrive's service expansion to new locations, SVCMC's construction of additional continuum of care connections, and CHA and MetroHealth's launch of provider opioid-prescribing trainings.

### ***Leveraging Resources***

Two OD2A agencies successfully leveraged resources this year. CHA identified the existence of, acquired permission to use, and adapted into an online course the Northeast Ohio Medical University's All-Ohio Opioid Education curriculum. Via CHA's online platform, providers now may acquire continuing medical education (CME) credits at no cost for the duration of the OD2A initiative. Thrive also leveraged resources by instituting new community outreach and harm reduction campaigns with the support of OD2A and other funding.

### ***Identifying Challenges***

Ongoing program implementation and expansion challenges were identified this year in the areas of subgrantee contract execution, budgetary concerns, agency staffing, data collection and reporting, technological difficulties, hospital system institutional change, increasing opportunities to engage people with treatment, and transportation for individuals seeking treatment.

### ***Exploring Innovative Ideas***

CCBH and many of its participating agencies continued to recognize administrative and activity areas in which they could innovatively expand their OD2A efforts beyond their original plans. New ideas pursued by the participating agencies run the spectrum from ways to design peer review programming for different hospital EMR systems and joint medical examiner, court, and jail/prison system discussions around avoiding overdose deaths among individuals after incarceration to ways to further stakeholder and community opioid education and prevention efforts through data briefs and more effective visual media.



## *Dissemination and Data Sharing Strategies*

Throughout the year many participating agencies continued to report the dissemination of knowledge gained and lessons learned 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 (HOTF) meetings, HOTF Data Subcommittee meetings, and Cuyahoga County Opiate Task Force (CCOTF) meetings—providing fruitful opportunities for regional stakeholder discussion and feedback. CHA hosted a webinar attended by participants from more than 10 states and Thrive staff participated in the OD2A peer to peer learning collaborative in Kansas City, Missouri. Regular dissemination to the public occurred via the data dashboard on the CCBH website, data bulletins, and participating agencies' social media platforms.

## **Conclusion**

Despite difficulties posed by the COVID-19 pandemic, the Cuyahoga County OD2A Initiative made progress toward meeting its objectives within each strategy. The surveillance team continues to identify and gain access to databases that provide insight into patterns and trends affecting the opioid epidemic, especially with respect to incident locations for fatal and nonfatal overdoses. Partner agencies are increasing training, education and resource materials for medical providers on best practices for opioid prescribing and alternative pain management. Most importantly those partner agencies providing service programs are connecting individuals with suspected opioid use or substance use disorder to treatment. These programs reach clients at different touch points: their residence following a suspected nonfatal overdose, in the emergency department, while visiting a Syringe Service Program, during incarceration in the county jail, or while visiting a hospital for a medical procedure. Additionally, the Initiative has increased training and education on the administration of naloxone and distribution of Project DAWN kits to residents and services providers in Cuyahoga County. Although evaluation efforts have just started in Year Two to interview individuals with opioid or substance use disorders, initial findings suggest more attention needs to be directed at understanding why individuals do not feel the need for treatment or do not want to engage in treatment when offered. Being connected with a peer recovery supporter is not the same as being in treatment for an opioid or substance use disorder. While much work has been accomplished, there is still more to do.

“I think until other issues and areas are addressed as well—the social determinants of health, trauma, socioeconomic differences, access to healthcare, there's so many other areas that in addition to addiction need to be addressed—that addiction is going to keep going on until the foundation of what... really drives addiction is addressed. Healthcare systems and communities ... need to focus on not only prevention, and linkage to care, but the root cause of addiction and why this is happening in the first place and really addressing the disparities that we find in certain areas around us.... Until those items are addressed, and programs are strong and robust and implemented and incorporated within the communities that are suffering, it's just like kind of kicking the can down the street.... It's heroin or fentanyl right now, but maybe in 2030 it's the new drug that can be manufactured in someone's home.... There're so many areas that need to be addressed, aside from just providing someone MAT and linkage to care or harm reduction.” – *MetroHealth focus-group participant*