

Connecticut State Targeted Response to the Opioid Crisis TI 17-014

Final Evaluation Report

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The views, opinions, and content expressed in this presentation do not necessarily reflect the views, opinions, or policies of the Substance Abuse and Mental Health Services Administration (SAMHSA), or the U.S. Department of Health and Human Services (HHS), or DMHAS.

State Targeted Response (STR) Final Report

I. Introduction and Program Overview

This study was an evaluation of the State Targeted Response (STR) project. STR was a two-year, federally-funded program through a grant from SAMHSA, the Substance Abuse and Mental Health Services Administration, to the Connecticut Department of Mental Health and Addiction Services (DMHAS). The purpose of the CT STR program was to combat the opioid epidemic through various treatment and recovery support programs, prevention initiatives, training, workforce development, and Narcan purchase and distribution. The grant ran from January 1st, 2017 to April 30th, 2019 with the goal of serving 40,384 unduplicated clients. There was a no-cost extension period that ended on October 31st, 2019.

A. Research Division and Evaluation Team Description

DMHAS contracted with the UConn/DMHAS Research Division (RD) to conduct the STR program evaluation. The DMHAS RD was created almost 30 years ago through a unique arrangement with the University of Connecticut (UConn). RD personnel are hired through UConn as research faculty and professional staff in the School of Social Work, and collectively serve as a DMHAS unit under a Memorandum of Agreement. The lead evaluator for STR was Eleni Rodis, MS, Acting Director of Research for DMHAS, and Research Associate in the School of Social Work at UConn. Ms. Rodis has extensive experience with successful evaluations for similar projects, and has been a researcher for over 25 years, including being lead evaluator for multiple SAMHSA projects. Dr. Kate Parr was the co-lead evaluator on this project. She has her PhD in Economics, is an Assistant Research Professor at the UConn School of Social Work and an investigator at the DMHAS RD. Dr. Parr works routinely to link, analyze and estimate outcomes from large administrative databases. The RD as a team is experienced in conducting evaluation projects, with staff that can design databases, create automated reports, conduct the highest quality interviews, surveys and focus groups, and to identify the best data collection and tracking methodology. The research team is proficient in entering data into multiple data platforms and performing diverse analyses.

The research team worked with DMHAS and the other involved agencies and programs in order to identify specific data sources and data collection procedures that would work best for this project. Multiple data sources and methodologies were utilized in order to gather all required and other relevant data on both implementation activities and outcome measures. In concert with DMHAS, the UConn evaluation team was responsible for collecting, organizing and reporting on the data for this project. For this study, the evaluation team generated regular reports in order to track what data was received and to identify incomplete and approaching data needs.

A great deal of activity in the first year of the grant focused on start-up and implementation. As DMHAS created contracts and distributed funding to various providers, the DMHAS/UConn evaluation team participated in implementation meetings and collaborated with DMHAS staff in order to plan data collection strategies. The evaluators developed several tools to help track what

data was needed from the different agencies, and provided tools for them to use on an on-going basis. The main data points were required to be entered on Web/BGAS, SAMHSA's website where states already enter data on their block grants. After Web/BGAS data tables were established, the evaluators developed instructions and templates for the providers to use to report their service data to DMHAS. The evaluators assisted DMHAS in compiling, cleaning and entering the semi-annual report data into Web/BGAS. Monthly data collection procedures were established in order to collect required data from the program sites. Collecting data on a regular basis allowed the evaluators and DMHAS leadership to proactively identify any issues that occurred, as well as providing on-going progress reports.

Monthly STR Evaluation meetings were established, which were attended by the evaluators, several DMHAS project leaders, and a representative from the Yale evaluation team. (Yale evaluators were responsible for separate ancillary project evaluations which will not be included in this report.)

Given the multiple aspects of the project, the UConn evaluators submitted three different IRB applications in the first year. (These were submitted to the DMHAS IRB. There is a reciprocal arrangement whereby the UConn IRB accepts the determination of the DMHAS board.) For the original overall program evaluation, a non-research determination with a HIPAA waiver was received. For the national evaluation, staff surveys/interviews and site-visit activities, an exemption was received. (This report will not contain any further information about the national survey and site visit activities. The local evaluation team was not directly involved in this component, and the findings have not been shared by SAMHSA.) For the GPRA interview component, an IRB approval was received without a HIPAA waiver.

B. Project Aims

Under the STR grant, DMHAS launched a series of targeted responses intended to reduce the negative impact of opioid use on Connecticut citizens and communities. These targeted responses built on, and were implemented within, the context of the state's evolving recovery-oriented system of care. This system of care helps to continue to shift the focus of care from responding to acute episodes to a prevention and recovery management framework. This framework spans prevention, pre-recovery outreach and engagement, recovery initiation through active treatment and recovery support services, to long-term recovery maintenance.

Utilizing SAMHSA-created categories, the STR-funded initiatives were initially divided into three types: 1. Treatment; 2. Recovery Support; and 3. Prevention and Training. In the second year, four categories were created by DMHAS project leadership: 1. Treatment; 2. Recovery Support; 3. Prevention; and 4. Training and Workforce Development. However, the required reporting for SAMHSA remained in the three original categories.

See Table 1 below for a detailed list of the programs included in the STR project.

Table 1: Connecticut STR Program List

Treatment Initiatives	Provider(s)
Develop medication assisted opioid treatment in outpatient clinics; a sub-set of those will also have employment services, a recovery coach and case management (CB-Enhanced MAT).	CB-Enhanced: The Village, Hill Health, CNV Help; others: CHR (Bloomfield), CT Counseling (Stamford, Meriden), CASA (Bridgeport), and Connection (New Haven).
Vouchers for substance use disorder residential treatment in conjunction with MAT for people un-insured or under-insured.	Advanced Behavioral Health > numerous residential treatment providers
DOC’s re-entry initiative: in-reach pre-release, followed by treatment post-release: “Step Forward”.	CT Department of Correction (DOC) > Community Mental Health Affiliates
Medication assisted treatment at DOC Osborne Correctional Center.	DOC > Community Health Resources
Purchase methadone dispensing equipment for York Correctional Center	DOC
Recovery Support Initiatives	Provider(s)
On-call CCAR Recovery Coaches for hospital Emergency Departments.	Danbury, MidState, St. Francis, Day Kimball, Charlotte Hungerford
Judicial Branch “Treatment Program Pathway”: clinician evaluates in court, and then recommends treatment to judge.	SCADD, New London court; MCCA, Torrington and Waterbury courts
“Law Enforcement Assisted Diversion” (LEAD) initiative in New Haven and Hartford police departments	Cornell Scott, New Haven; Inter-Community, Hartford
Recovery Coaches at methadone clinics.	CASA, New Haven; CHR, Putnam; CT Counseling, Waterbury; Cornell Scott, New Haven).
Opioid Use Disorder outreach and engagement activities at Hartford “drop-in center	Greater Hartford Harm Reduction Coalition
Transportation for individuals seeking detox or residential rehab.	Columbus House; InterCommunity
Services for young adults with or at risk for opioid use disorders.	DCF > Wheeler Clinic
Prevention Initiatives	Provider(s)
Support Narcan training as well as overdose awareness statewide. (admin only)	“Regional Behavioral Health Action Organizations” (RBHAO’s),
Develop an Opioid Education and	Cross Sector Consulting - Training & Technical Assistance Service

Awareness interactive web based training and a webinar along with an accompanying users guide; provide training to colleges for customizing “Change the Script” campaign materials. (development)	Center
Training and education sessions to major corporations, utilizing the Opioid Education and Awareness materials. (pending)	Governors Prevention Partnership
Provide mini-grants to 17 college campuses under the Connecticut Healthy Campus Initiative (CHCI); update www.drugfreect.org website; promote the “Change the Script” campaign. (admin only)	CT Clearinghouse
Provide mini-grants to local community coalitions for Narcan training and other opioid use relevant training and educational events.	Seventy five community prevention coalitions
Train parents in both English and Spanish on communicating effectively with children on the dangers of drug use.	“Courage to Speak”
Weekly opioid education and family support meetings in six locations statewide.	Clifford Beers, New Haven; CRT, Hartford (Spanish); McCall, Torrington; NAMI, Hartford; Sound, New London; Wheeler Clinic, Plainville
Training and Workforce Development	Provider(s)
Continue to support substance abuse residential programs to be “MAT-friendly”	SCADD, Wellmore (2)
Conduct provider Learning Collaboratives on “Auricular Acupuncture” for opioid recovery and a “Women and Opioids” Conference	CT Women’s Consortium
Provide clergy training in 5 African American churches: “Imani Breakthrough	Yale/PRCH
Provide education and crisis de-briefings for clinicians who lose clients to overdoses.	UConn Health Center
Provide training to professionals to support clinicians working with individuals with OUDs	Private contracts
Provide OUD specific pastoral counseling training	InterCommunity
Narcan Purchases	Department of Correction
	Regional Behavioral Health Action Organizations

1. Treatment Initiatives

STR was utilized to fund various opioid treatment programs, including both outpatient and residential. One of the main focuses of the treatment initiatives was to increase the number of outpatient clinics where Medication Assisted Treatment was available, as well as increasing the prescribing capacity at the clinics. Most of the MAT programs utilized buprenorphine and naltrexone. All of these clinics also provided evidence-based screening and prescribing, strength-based case management, motivational interviewing, Cognitive Behavioral Therapy, and naloxone kits. Some of the MAT clinics also provided enhanced program components, including employment services and a peer recovery coach.

The initiative also supported substance abuse residential programs to be “MAT-friendly.” These residential programs and providers were SCADD, Perception, McCall, Wellmore, CNV Help, and CT Renaissance. In addition, vouchers were provided for residential treatment at various programs for people un-insured or under-insured.

The grant also allowed the Department of Correction to further expand the “Living Free” re-entry initiative that involved extensive in-reach and MAT induction pre-release, followed by continuing treatment post-release. The “Treatment Program Pathway” (TPP) also allowed for the expansion of treatment in the judicial system. This program advocated for a clinical evaluation in court, and gave treatment recommendations to the judge.

2. Recovery Support Initiatives

The STR recovery support initiatives were utilized to increase and enhance programs to assist opioid users to start and maintain treatment and recovery from opioid use disorders (OUDs). Many focused on increasing the use of peer recovery coaches in various settings. The recovery support initiatives aimed to increase the number of hospital emergency departments prescribing buprenorphine and extended to having on-call CT Community for Addiction Recovery (CCAR) recovery coaches for their emergency departments. CCAR recovery coaches are individuals with lived experience with substance use disorders (SUD) who have received recovery-specific coach training. Policies and procedures were developed and implemented and staff and doctors were given extensive training. STR also supported the hiring of recovery coaches at methadone clinics in four locations in the state. “Law Enforcement Assisted Diversion” (LEAD) was implemented in New Haven and Hartford.

The initiative facilitated the development of a statewide recovery support system for youth and the hiring of a statewide Youth Coordinator. Programs around family and education were implemented in several locations: New Haven, Hartford (both Spanish and English), Torrington and New London. These programs entailed weekly opioid education and family support meetings.

Further, the initiative expanded the existing “1-800 Access Line” statewide to a “warm-handoff” model to detox and add transportation through Advanced Behavioral Health (ABH): Road to Recovery, and the Inter-Community agency. Community outreach workers were given cultural competence training on providing opioid, MAT, and overdose prevention. In the second year,

the initiative also supported OUD outreach and engagement activities at the Hartford “drop-in center” through the Greater Hartford Harm Reduction Coalition.

3. Prevention Initiatives

The DMHAS Prevention unit, together with other state agencies and contractors, developed and implemented an opioid use targeted social media campaign, “Change the Script”. Communities utilized the developed materials, conducted events, put up a billboard on Interstate 91, and displayed signage/posters at shopping malls and other locations. In year two, the initiative further focused on utilizing five Regional Behavioral Health Action Organizations (RBHAO’s) to promote Narcan training and distribution. The development of a hybrid, interactive web-based training and a webinar, along with an accompanying user guide on Opioid Education and Awareness, was also promoted. In cooperation with the Governor’s Prevention Partnership, five training and education sessions were provided to major corporations using the Opioid Education and Awareness Hybrid.

Through the CT Clearinghouse, STR provided mini-grants to 13 college campuses under the “Healthy Campus” initiative with each campus receiving \$11,000 in year one and 16 college campuses receiving \$10,000 in year two. This funding was used for public awareness and education events, which turned out to be successful with good attendance. Through five Regional Action Councils, mini-grants were also provided to 65 Community Coalitions. The Local Prevention Councils were given preference. Those who received the grants implemented public awareness and education activities/events.

The grant also made the implementation of “Courage to Speak” possible. This project consisted of five programs across the state that trained parents in both English and Spanish on communicating effectively with children on the dangers of drug use. In year two, weekly opioid education and family support meetings took place in six locations in the state. Some locations were also able to implement the Encourage Empower Engage (E3) program, a peer to peer prevention program in which youth facilitators coach their peers on skills to make healthy life choices.

Medication disposal and take-back efforts were also increased throughout the state. The DrugFree.org website was revamped, and the Overdose Victim Memorial Quilts were displayed frequently in many locations across the state. A law enforcement and opioid conference was hosted in the state in April 2019, and was attended by 355 individuals.

4. Training and Workforce Development

Many training curricula were developed and/or funded through the STR grant. The CT Women’s Consortium held monthly training on alternatives to opioids for pain management over the period of eight months. In year 2, a provider Learning Collaborative on “Auricular Acupuncture” for opioid recovery, and a “Women and Opioids” conference were provided through the CT Women’s Consortium.

Faith-based recovery services were expanded by clergy training in five different churches which incorporated components on opioid use, MAT, and overdose prevention. The initiative continued

to provide faith-based education and clergy training in five churches, and held “Imani Breakthrough” groups. These groups were sponsored through the Yale Program Recovery and Community Health (PRCH).

In addition, education and crisis de-briefings for clinicians who lost clients to overdose were provided through UConn and DBHRN teams, and trainings for professionals to support clinicians working with individuals with OUD continued to be supported.

II. Overall Data Collection/Evaluation Components

While UConn had proposed certain evaluation plans in the grant application, different requirements were communicated by SAMHSA after the funding was awarded. Given the federal limits on funding for the evaluation, the decision was made to focus on the national requirements rather than pursuing the proposed plans. The main evaluation requirements were to collect total numbers and demographics characteristics of clients served by program type. Program types included treatment services, recovery support services, prevention, training, and workforce development. Midway through the first year of the grant, Connecticut was one of ten states invited to participate in a sub-study of Medication Assisted Treatment (MAT) programs which involved collecting outcome data directly from clients and program staff under the Government Performance and Review Act (GPRA). This part of the study required the administration of a standardized interview to collect client level information at baseline and follow-up. The main evaluation methods and results will be presented first in this report, while the GPRA sub-study will be presented separately.

Per national guidance, data collection was initially divided into three distinct types of programs: 1. treatment, 2. recovery services, and 3. prevention and training. In the second year, four components were created: 1. treatment; 2. recovery support; 3. prevention; and 4. training and workforce development, although the required data reporting requirements did not change. The requirements for data collection differed by program type. To capture this, an Excel template was created. The web version of BGAS, the Web/BGAS system, was used to provide biennial reports to SAMHSA. These reports included information on obligations, expenditures, number of persons served in OUD treatment and recovery support services, allotment breakdown, training outcomes, and recovery/continuing care services, etc. Examples of the data collection tools can be seen in the Appendices. These tools were used by DMHAS and the evaluation team to collect data from the agencies and to compile tables to report to SAMHSA semi-annually.

Treatment services required unique counts of individuals receiving treatment broken out by age, race, gender, and ethnicity. Data on pregnant women was requested as a separate category as well. Initially, the data collection templates were sent to providers and they were asked to manually fill them in and to return them on a monthly basis so that data could be compiled quarterly. Confidentiality was not a concern as only aggregate data was collected with no identifying information included. (See treatment template in Appendix A.)

Recovery services used the same template as treatment services to collect information on the number of clients served. This template also included information about age, race, gender, and ethnicity. In addition, SAMHSA required information about the type of recovery supports offered, received, and completed in a separate table. The national template listed common types of recovery supports: relapse prevention; recovery coaching, peer coaching or mentoring; self-help and support groups; and recovery housing. (See templates in Appendices B and C).

For prevention and training services, rather than traditional demographics, SAMHSA asked for information on the types of individuals participating, such as whether they were physicians, nurses, social workers, peers, counselors or prevention workers. In addition to these worker types, Connecticut added different types of community members such as law enforcement, schools, EMT, family, etc. This approach was taken because Connecticut's prevention and training activities were focused on the broader community rather than just OUD treatment providers.

SAMHSA required two tables for training and preventive services. The first table recorded the numbers trained by quarter and type. The second table broke these trainings into the categories: overdose education and naloxone distribution; prescribing guidelines; and other. (See appendices D and E for these templates). Each of these approaches focused on collecting numbers of people trained by role.

In the first year, data was collected primarily manually using these templates. As new programs were brought online, the templates were distributed to the programs. Each month or quarter, programs filled them out and submitted them back to DMHAS. Information was then collated by UConn staff. UConn staff then submitted the semi-annual reports to SAMHSA via BGAS.

This process of collecting data from each provider via spreadsheets had mixed results. Most of the programs were able to submit their data, but the timeline for reporting was inconsistent. Also, some programs submitted only part of the data required. For instance, recovery service providers would fill out the first table with respect to who was served but did not report data on the types of recovery services. In particular, programs found it difficult to track the differences between who was offered services, who received them, and who completed them. By the end of the second year, only two programs consistently reported this data. This created a limitation when submitting this portion of the SAMHSA report.

Another challenge for the sites was in reporting the person's role or profession for those receiving prevention or training services. For events requiring registration, it was possible to collect this data. However, Connecticut's prevention events were often community-based, open to the public, and where people could drop in briefly. For example, these events included public presentations, safe drug disposal events, tables at health fairs, etc. In this kind of environment, it was impossible to collect this kind of information on attendees. As a result, most of the programs reported serving a 'prevention' population. This outcome is reflective of Connecticut's emphasis on community-oriented programming.

Because of the extra burden on programs and the mixed results of collecting manual reports, a concerted effort was made to move to electronic reporting through the state's central database in

the second year. DMHAS maintains an electronic data warehouse that includes service and outcome data for all DMHAS-funded mental health services and all SUD services at free-standing clinics. Data from SUD treatment providers, who are mandated to report to DMHAS, are uploaded monthly and integrated into the state central database. This upload includes dates of service, who was served, type of service, demographics, and some outcomes. In the second year, STR recovery and treatment programs were entered into the state database and data on who was served was automatically uploaded. The UConn evaluation staff extracted this data and performed relevant analyses to meet reporting requirements. In addition, data was extracted routinely to assess the ongoing program performance as well as troubleshoot any providers who were not uploading data. These extracts were in addition to the biennial reports.

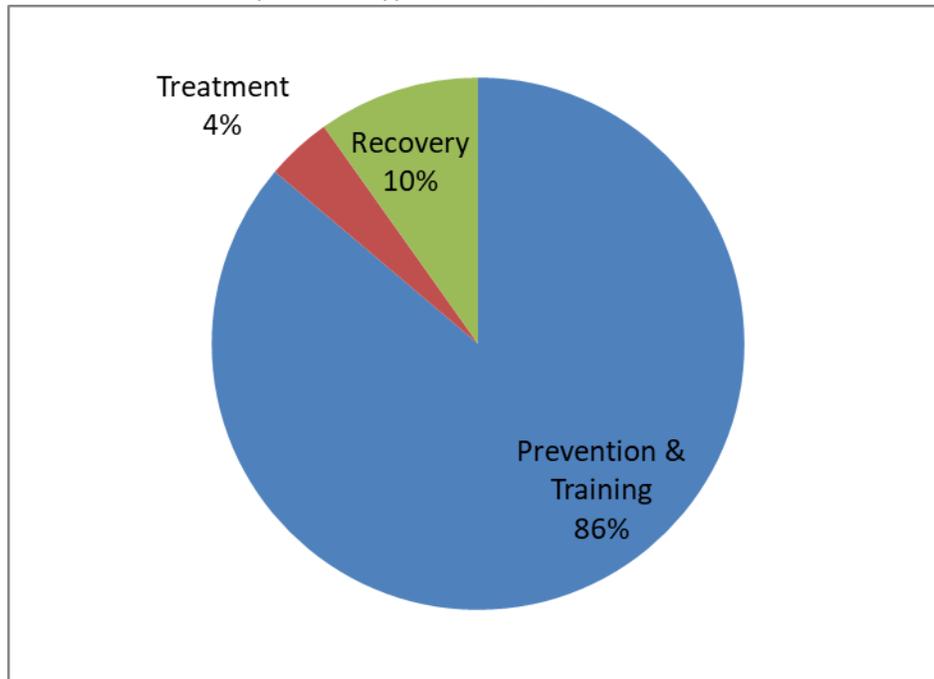
In parallel with this change, some programs were re-classified in the second year. For instance, staff felt that the Opioid Education Family Groups were better classified as prevention and training instead of recovery. These groups focused primarily on family members and significant others, rather than people with OUD. In addition, this type of program was not suited to entry into the state database. While programs collected data on attendance, the very nature of the group required anonymity. Data was not collected through the electronic database for these programs. Instead, numbers were reported through the prevention worksheet.

III. Overall Evaluation Findings

In the final count, Connecticut's STR grant served a total of 40,384 people statewide. Of these, 17,852 individuals were served in year 1 and 22,532 were served in year 2. The first year's number reflects a start-up period needed to select providers and establish contracts. Despite this, these numbers reflect a substantial footprint in Connecticut's OUD community, and it should be noted that CT DMHAS managed to put through contracts much more quickly than usual and as compared to many other states.

The largest number of individuals served participated in prevention and training events. In part, this was a result of the re-categorization of programs described in the previous section, but also because Connecticut held a large number of community-based events. A total of 34,805 or 86% of individuals who were "touched" through the STR grant were those who participated in prevention and training services. Approximately 3,967 (10%) of the individuals reported as having been impacted by the grant participated in Recovery Support Services. Finally, 1,612 (4%) of individuals participated in treatment programs. Please see Figure 1 for the participant percentages by intervention type.

Figure 1: Percent of STR Clients by Service Type (Year 1-2)



This division in service types reflects the relative needs and costs of the programs. Treatment is the most intensive and expensive service. Consequently, it has the lowest numbers of unique individuals, but these individuals are engaged intensively and over a longer period of time. Recovery services are somewhat less intensive and lighter touch than treatment. While some programs, such as recovery coaches in methadone clinics, involved longer-term services, other programs, such as recovery coaches in the emergency department, are usually 1-3 contacts and last a few weeks at most. Prevention and training reached the greatest number of individuals but generally had the lightest touch, and were often one-time events.

A. Treatment and Recovery Supports

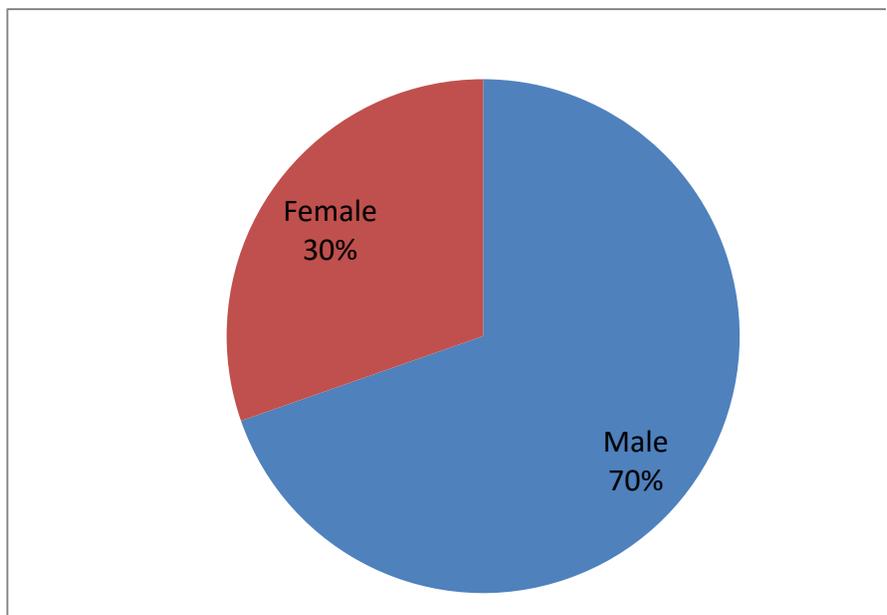
1. Service Client Demographics

This section reviews the client demographics for those participating in the treatment and recovery services portion of the grant. Following the national evaluation requirements, demographic data was collected for these two service categories only. Demographic data was collected on a total of 5579 individuals, with 29% receiving treatment and 71% receiving recovery services.

Clients receiving STR treatment and recovery services were mostly male (73%). See Figure 2 below. This gender percentage is consistent with some other reports of OUD treatment, but SAMHSA's National Survey on Drug Use and Health (NSDUH) reports different findings. NSDUH is a phone survey of a nationally representative sample of the population. It asks about illicit drug use in the past year, month and day by drug type. In this survey, males and females

in Connecticut reported opioid misuse at about the same rate for 2015-2016.¹ One possibility to explain the discrepancy is that a phone survey may not reach marginalized populations such as those with acute OUD. Overall DMHAS substance use treatment data also reflects that women are underrepresented in substance use disorder treatment as compared to men. This may be due to women hesitating to seek out treatment due to greater stigma and/or fear of losing their children. It also could be due to more difficulty in maintaining treatment participation due to greater barriers, e.g., needing child care. Another potential source of local data is from the Connecticut Office of the Medical Examiner (OME). OME data reports gender, race, ethnicity and age ranges for all deaths caused by opioids. This data has its limitations as well. It reflects the experience of individuals who have had severe consequences from their OUD. However, it is possible that this population is more reflective of those who might seek treatment for OUD because of their disease progression. For 2018, the OME data finds that 27% of opioid overdose deaths occurred in people who were female and 73% in people who were male.² This ratio is similar to that in the population served by STR. This finding suggests that STR funds were appropriately targeted toward the population segment with the greatest needs.

Figure 2: Gender of STR Treatment and Recovery Services Clients (Year 1-2)



The racial breakdown of those served by STR is roughly consistent with both the state population and OME statistics.³ Of those served by STR, 69.8% were white and 10.9% were

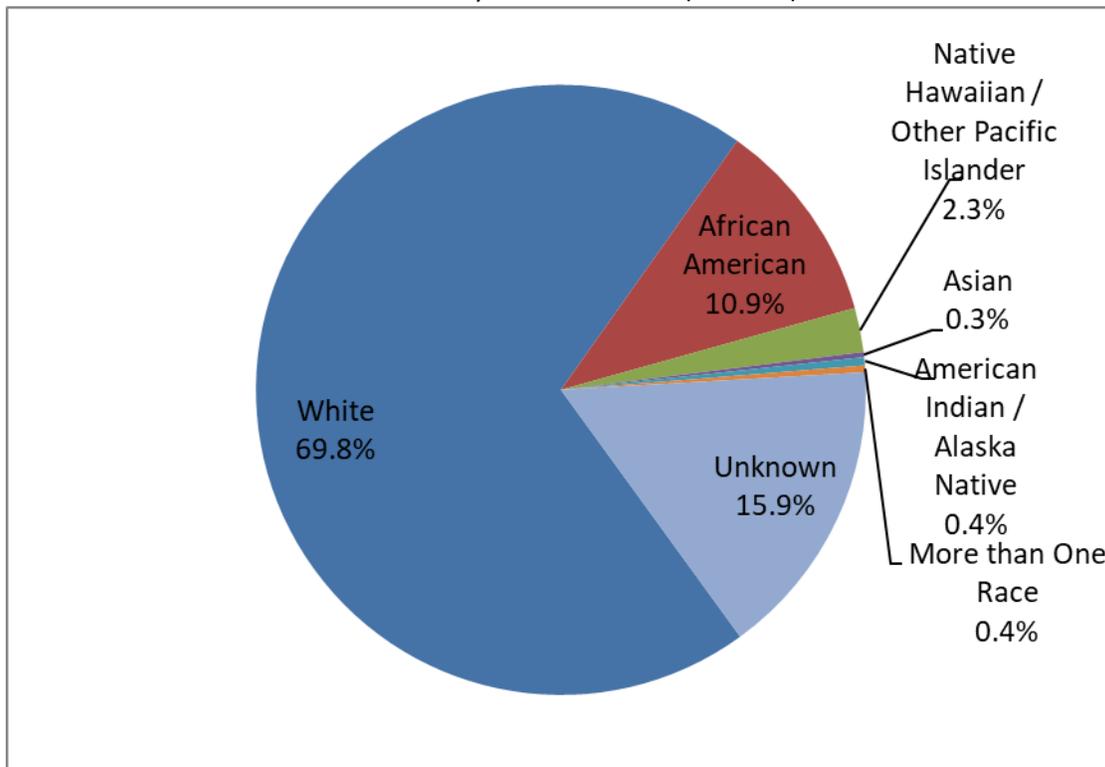
¹ SAMSHA (2018) NSDUH Supplemental Tables <http://www.samhsa.gov/data/report/supplemental-nsduh-opioid-tables> (access Jan 11, 2020).

² CT DPH (2018) Drug Overdose Deaths in Connecticut June 2012-June 2018. <https://public.tableau.com/profile/shobha.thangada?publish=yes#!/vizhome/ConnecticutDrugoverdosedeadths-2012-June2018-uploadedon4-3-2019/OpioidsinConnecticut> (accessed Jan 10, 2020).

³ SAMHSAs NSDUH reports race and ethnicity differently from the STR requirements and is not comparable.

African-American. In Connecticut, 80.0% of the population is white⁴ and 87.5% of people who died from an opioid overdose were white.⁵ African-American people make up 12.0% of the general population and 10.3% of people who died from an opioid overdose. These numbers need to be considered in light of the fact that 15.9% of the STR clients had an unknown race. So, although white clients were slightly underrepresented in the STR programming, there is a significant margin of error.

Figure 3: Race of STR Treatment and Recovery Services Clients (Year 1-2)



Among other races, Asian individuals are slightly underrepresented compared to the population as a whole, while Native Hawaiian and Pacific Islanders are slightly overrepresented in the STR population. Asians represent 4.9% of Connecticut’s population⁶ and 0.3% of STR clients. However, the lower number of clients may be consistent with OUD rates for the Asian population based on national findings. Native Hawaiian and Pacific Islander represent 2.3% of the STR clients and only 0.1% of the state’s population. The other categories are about on par with expectations. The OME opioid overdose data does not break out the smaller categories but reports ‘other’ as roughly 2.1% of the population as a whole.⁷

⁴ Census (2019) Quick Facts <https://www.census.gov/quickfacts/CT> (accessed Jan 11, 2020)

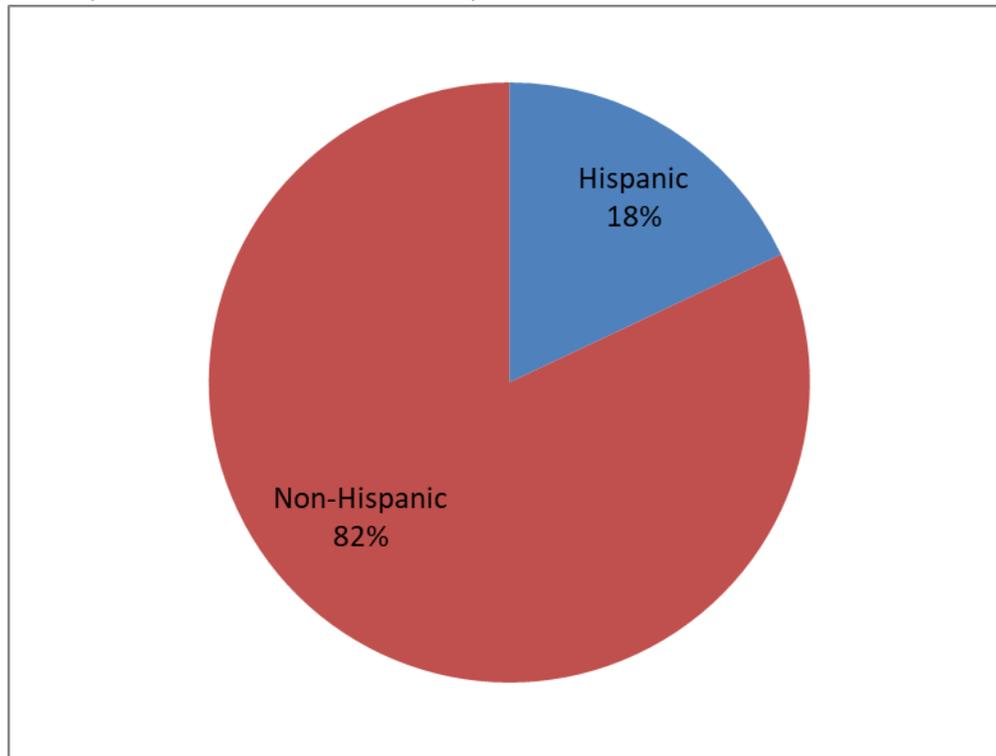
⁵ CT DPH (2018) Drug Overdose Deaths in Connecticut June 2012-June 2018. <https://public.tableau.com/profile/shobha.thangada?publish=yes#!/vizhome/ConnecticutDrugoverdosedeads-2012-June2018-uploadedon4-3-2019/OpioidsinConnecticut> (accessed Jan 10,2020).

⁶ Census (2019) Quick Facts <https://www.census.gov/quickfacts/CT> (accessed Jan 11, 2020)

⁷ CT DPH (2018) Drug Overdose Deaths in Connecticut June 2012-June 2018. <https://public.tableau.com/profile/shobha.thangada?publish=yes#!/vizhome/ConnecticutDrugoverdosedeads-2012-June2018-uploadedon4-3-2019/OpioidsinConnecticut> (accessed Jan 10,2020).

STR clients reported Hispanic ethnicity 18.0% of the time. Census reports indicate that 16.5% of Connecticut residents endorsed Hispanic ethnicity.⁸ Connecticut’s OME found that 13.4% of people who died from opioid overdoses had Hispanic ethnicity.⁹ These findings suggest that Hispanic people were slightly overrepresented in the population served by STR.

Figure 4: Ethnicity of STR Treatment and Recovery Services Clients (Year 1-2)



In terms of age, the largest group served by STR was 25-44 year olds (53.4% of clients). The second largest age group was 45-64 (35%). These two age groups are the two largest age groups in the OME overdose data¹⁰ and the national age detail from NSDUH¹¹ as well. Of the overdose victims, the OME reports that 46.3% were between the ages of 25-44 and 43.6% were between the ages of 45-64. The NSDUH survey finds that 44% of individuals reporting misusing opioids during the last month were aged 26-44 and 27% were 45-64. This suggests that STR services generally served the target population. The smallest age group served by STR was clients under the age of 17. This finding may be because the DMHAS treatment system focuses on adults 18 and older. There were other prevention and training programs aimed specifically at this younger population and their families. These programs were administered in partnership with the

⁸ Census (2019) Quick Facts <https://www.census.gov/quickfacts/CT> (accessed Jan 11, 2020)

⁹ CT DPH (2018) Drug Overdose Deaths in Connecticut June 2012-June 2018.

<https://public.tableau.com/profile/shobha.thangada?publish=yes#!/vizhome/ConnecticutDrugoverdosedeadths-2012-June2018-uploadedon4-3-2019/OpioidsinConnecticut> (accessed Jan 10,2020).

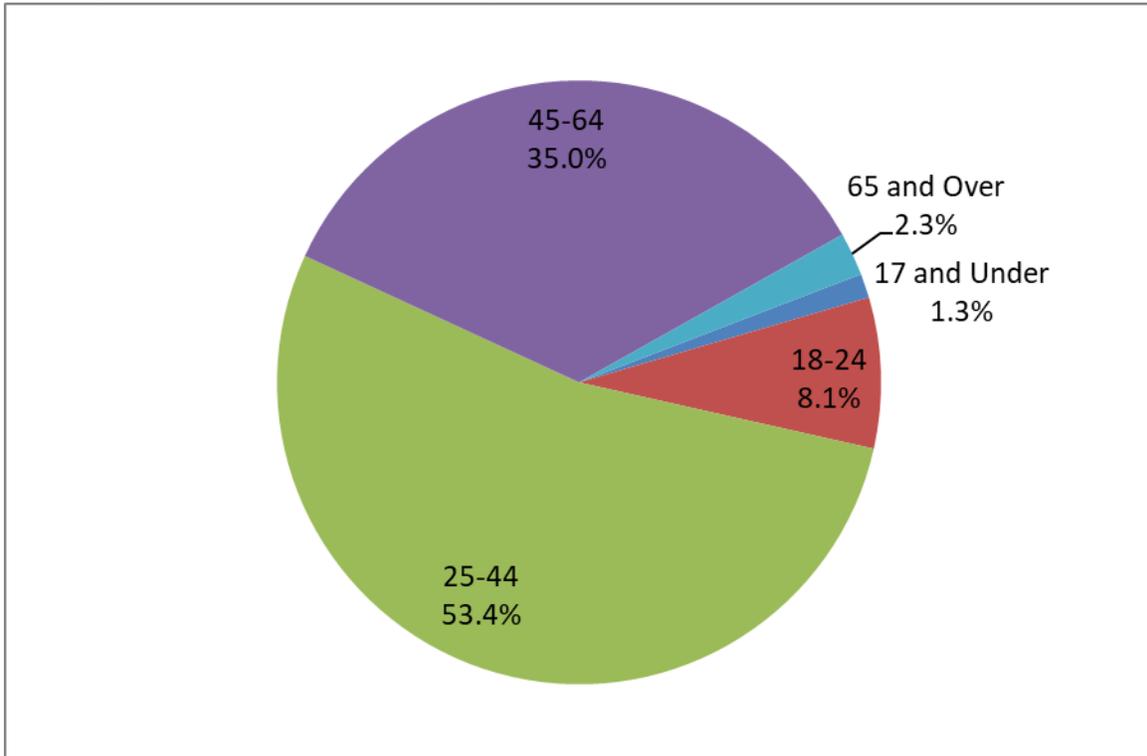
¹⁰ CT DPH (2018) Drug Overdose Deaths in Connecticut June 2012-June 2018.

<https://public.tableau.com/profile/shobha.thangada?publish=yes#!/vizhome/ConnecticutDrugoverdosedeadths-2012-June2018-uploadedon4-3-2019/OpioidsinConnecticut> (accessed Jan 10,2020).

¹¹ SAMHSA (2018) NSDUH Supplemental Tables <http://www.samhsa.gov/data/report/supplemental-nsduh-opioid-tables> (access Jan 11, 2020).

Connecticut Department of Children and Families (DCF). They included programs such as ‘Smart Recovery’ and ‘Courage to Speak’. These programs were classified as prevention programs and are not reflected in this demographic data.

Figure 5: Age of STR Treatment and Recovery Services Clients (Year 1-2)



2. Treatment and Recovery Support Findings

In general, the STR funds served the key adult demographics in the state of Connecticut. In terms of gender, men were most likely to receive services. This finding is consistent with OME data in which men were three times as likely to die from an opioid overdose as women.

In terms of race and ethnicity, the STR services did a good job of reaching often underrepresented populations. For instance, those of Hispanic ethnicity and Native Hawaiian or Pacific Islander descent were slightly overrepresented as compared to overall CT population statistics. The white population was slightly underrepresented compared to both census data and data on opioid overdoses. The Asian population was underrepresented compared to the general population but not compared to estimates of those experiencing opioid overdose. However, these results need to be interpreted in light of a wide margin of unknown race reported. Comparisons to SAMHSA’s NSDUH survey results on race and ethnicity could not be made because they used different categories.

Client ages were generally consistent with both the national NSDUH data and the opioid overdose data. Adults aged 25-44 were most likely to report misuse and to die of an overdose. This population was most likely to receive STR services. It is unclear, however, what the impact

was on younger populations. This data focused primarily on clients 17 or older because this is the primary demographic served by the DMHAS service system.

The primary finding from this analysis is that Connecticut's STR funds were spent in a way that met needs appropriately for different racial, gender, ethnic and age groups. This analysis does not identify any healthcare equity concerns in Treatment and Recovery services.

B. Prevention, Training and Workforce Development Services

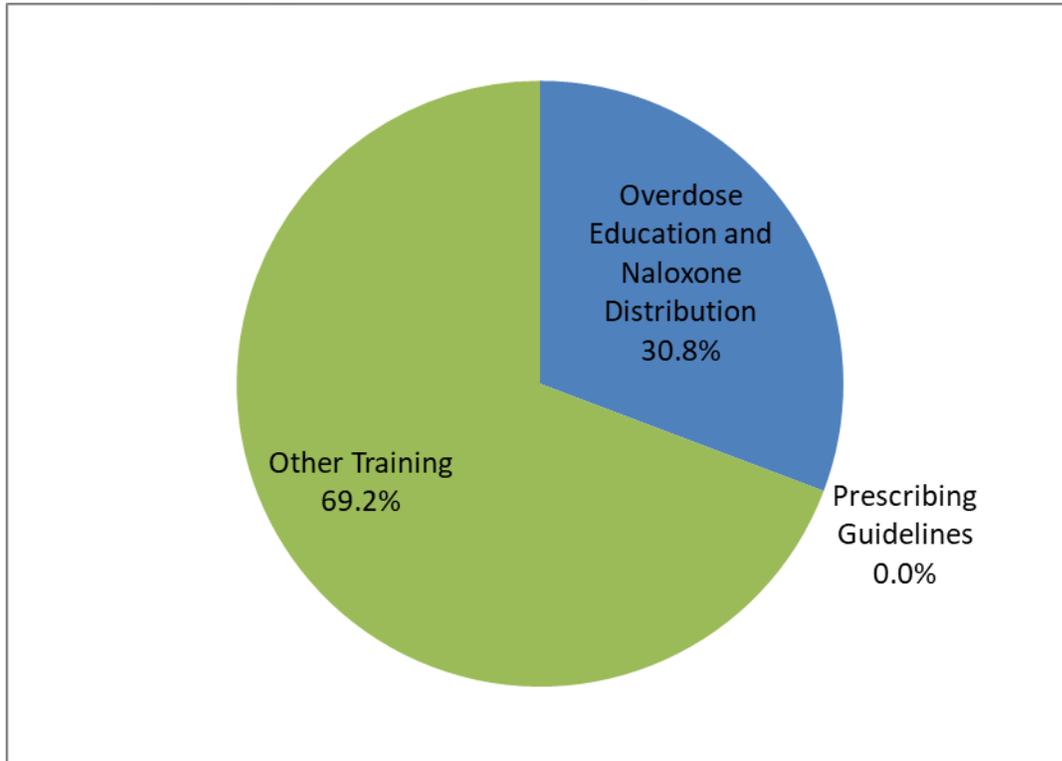
A total of 34,806 individuals participated in STR-funded prevention and training services. In the first year, 15,867 individuals participated and 18,939 participated in the second year. These events ranged from naloxone distribution and overdose education; to family education and support groups; to trainings in evidence-based practices for clinical staff. A special effort was made to reach out to the child and adolescent system through collaboration with the Connecticut Department of Children and Families (DCF). Trainings were offered to DCF staff and providers in evidence-based practices such as Multi-Dimensional Family Therapy (MDFT) and Recovery Check-ups. There were also programs to support adolescents in recovery, such as peer recovery groups. In addition, the STR funding was used to support naloxone distribution, overdose education, and other awareness events at community colleges throughout the state. Although demographics were not tracked for these services, they did serve a broad range of ages with an emphasis on younger cohorts throughout the state.

SAMHSA divided potential trainings into three areas: overdose education and naloxone distribution; prescribing guidelines; and other training. Consequently, training figures were divided into these three main categories. In addition, SAMHSA wanted to know the profession of those receiving training. The required categories were largely focused on OUD service providers including: physicians, physician's assistants, nurse practitioners, nurses (RN, LPN), social workers, addiction counselors, peer recovery support positions, prevention, and other. This section summarizes these findings.

Of the three national areas of focus, Connecticut provided only overdose education/naloxone distribution and 'other'. Prescribing guidelines may not have been seen as a priority in Connecticut because of the fact that DMHAS has been offering these trainings anyway (prior to STR funding). In 2017, Connecticut doctors wrote 48.0 opioid prescriptions per 100 residents.¹² This figure represents a 30% decline in prescription writing in Connecticut since 2012. Also, the 2017 rate is substantially below the national average, which saw doctors writing 58.7 opioid prescriptions per 100 residents. Figure 6 provides a breakdown of the types of prevention and training services provided.

¹² NIDA (2019) 'CT Opioid Summary' <https://www.drugabuse.gov/node/pdf/21950/connecticut-opioid-summary> (accessed Jan 9, 2020)

Figure 6: STR Participants by Types of Prevention and Training Services Received (Year 1-2)



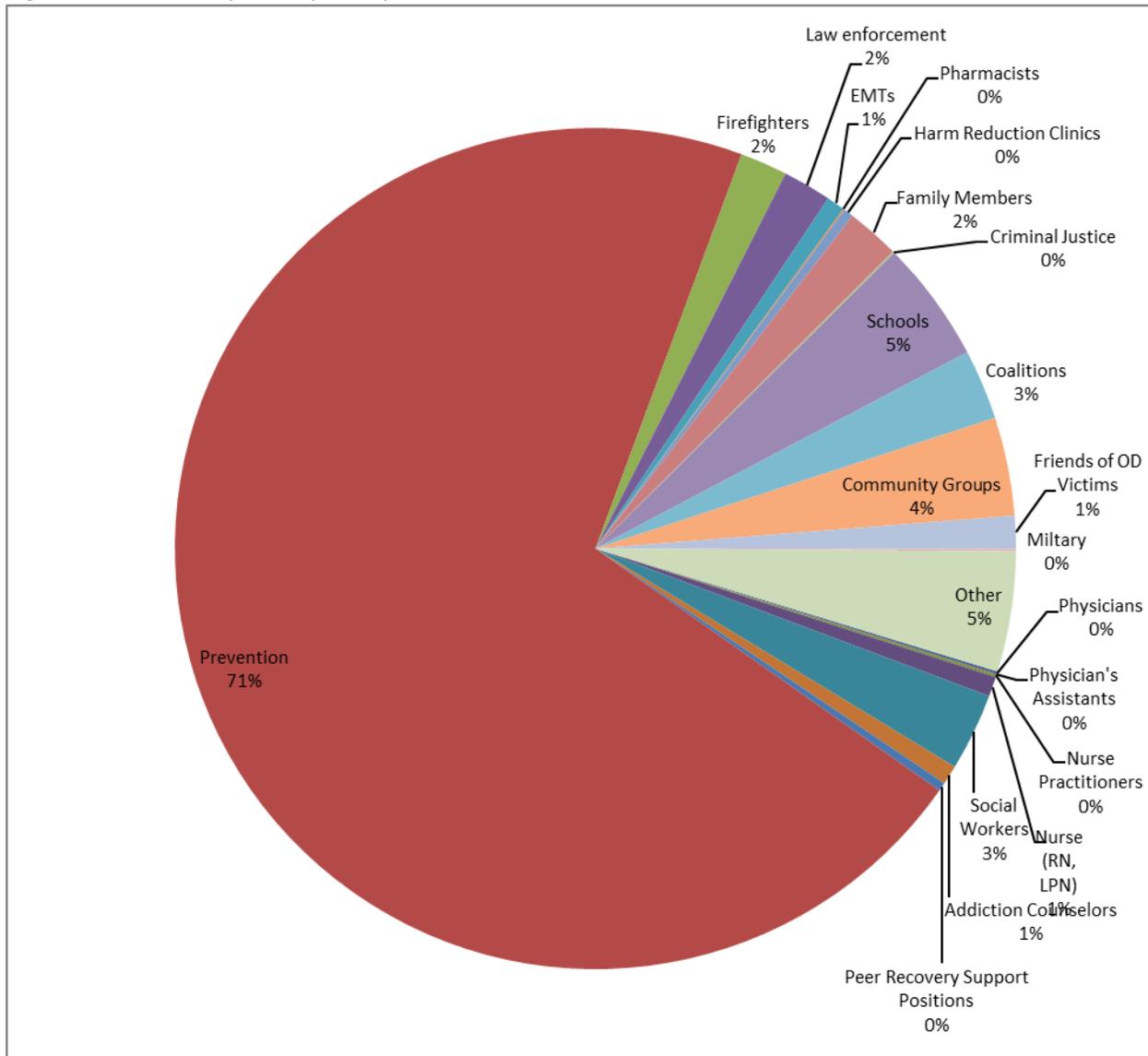
Connecticut provided naloxone and overdose training to 10,705 individuals and entities over the course of the grant. An additional 24,100 individuals participated in other trainings. These trainings reflect Connecticut’s emphasis on a balance between community outreach and provider trainings.

1. Roles of Prevention and Training Participants

The evaluation also tracked the types of people who received the various trainings. Based on the professional categories asked about by SAMHSA, it would seem the expectation was that trainings would focus primarily on a narrow list of SUD treatment providers. In Connecticut, prevention and training efforts reached the broader community. This included high school-aged children and their families, college students, law enforcement, EMTs, friends of users, community groups, etc. To get a better understanding of who was served, the Connecticut evaluation added several categories. The breakout of who received preventive services and trainings is shown in Figure 7 below.

The largest group identified was ‘prevention’ at 71% of those receiving prevention and training services. This category reflects a broad outreach to promote community awareness and prevent OUD. This group is composed of the public at large rather than OUD professionals or people with OUD. Of the professionals identified by the national evaluation, social workers (3%) were the largest group. The programs also reached out to community groups (3.8%), schools (4.7%), law enforcement (1.9%) and fire fighters (1.8%).

Figure 7: STR Participants by Occupation or Role (Year 1-2)



2. NARCAN Reversals

The Connecticut Department of Public Health Office of Emergency Medical Services (OEMS), in collaboration with the Connecticut Poison Control Center (CPCC) at UConn Health, and pursuant to Public Act No. 18-166, Sec. 5, now require Emergency Medical Services to report opioid overdoses. As part of this regulation, in June 2019, the state as a whole was required to report incidences where NARCAN was administered. This reporting initiative is called the Statewide Opioid Reporting Directive (SWORD). Available data is reported in Figure 8 below.

Figure 8: NARCAN Reversals 2019¹³

County	Q1 2019	Q2 2019	Q3 2019	Q4 2019
Fairfield	5	80	196	177
Hartford	81	326	365	285
Litchfield	1	30	62	48
Middlesex	1	34	39	28
New Haven	1	131	265	179
New London	0	36	67	66
Tolland	3	11	15	11
Windham	0	14	13	21
Total	92	662	1022	815

The SWORD initiative is new, and was only fully implemented statewide in the third quarter of 2019. Although a breakout of cities is not available, the counties with the greatest concentration of administrations are consistent with large urban centers. Fairfield county contains both Stamford and Bridgeport. Hartford and New Haven counties also have high rates of people with OUD.

These figures do not include NARCAN administrations that might have occurred by non-EMS personnel. For instance, NARCAN kits were distributed through the Regional Behavioral Health Action Organizations (RBHAOs) to families and individuals with OUD. These reversals would not be included. Despite the limitations of the data, what is reported suggests that there were 2519 NARCAN overdose reversals administered in 2019. Not all of these are necessarily related to the STR initiative, but the initiative did distribute NARCAN widely throughout the state.

3.Prevention and Training Findings

In Connecticut, the data suggests funds used for prevention and training included the broader community beyond OUD service providers. It should be noted that these provider categories relied on self-report. Unless it was an event for which clients registered, it may have been beyond the ability of the organizers to collect this information. As a result, the percent in ‘prevention’ may be overstated. Nevertheless, broad community intervention was a focus of this grant. In addition, CT did not use STR funds to provide trainings on prescription guidelines. As discussed above, this choice may be because Connecticut has made significant progress in this area over the past 5 years. Instead, resources were deployed to naloxone distribution, overdose education, and other training types.

In addition, the SWORD initiative suggests that NARCAN administration has become routine throughout the state. EMS administered NARCAN 2591 times in 2019. The geographical distribution of NARCAN administrations is consistent with large urban centers.

¹³ <https://portal.ct.gov/DPH/Emergency-Medical-Services/EMS/OEMS---SWORD>

C. Mapping Analysis -- Overdose and Drug Arrest Data

1. Methods

In order to understand the geospatial distribution of the opioid crisis within the state, this report provides town-level mapping. At this time, there is limited opioid data available publically at the town level for the state of Connecticut. There were three available datasets that were plotted on a CT town-level map. Two data points (Arrests and Overdose) were available for 2017 and 2018. This allowed for comparison over the period of the grant. The third dataset (Opioid Prescriptions) was available only for 2017.

The first data series was location of deaths by opioid overdose.¹⁴ The CT Office of the Chief Medical Examiner (OCME) reports this data. It is important to note that opioid overdose deaths were reported by town in which the death occurred. The location of where the death occurred may not have been the individual's town of residence. For instance, if the individual was transported to a major hospital and pronounced dead there, their overdose would be attributed to the location of the hospital. This may overstate the number of deaths in major metropolitan areas, in which most hospitals are located. Color-coding is attributed by town without an adjustment for town population size. Maps iii and iv include an overlay of the major routes and highways in CT. These routes can reflect areas of higher drug sales.

The second data set reports the number of drug arrests by town per 10,000 residents. This crime data is from "Crime in Connecticut" reports published by The CT Department of Emergency Services and Public Protection (DESPP)^{15 16} as part of their annual reporting to the FBI in participation with the federal Uniform Crime Reporting Program. Individual police departments at the municipal, state and tribal levels report all arrests to the federal system. The federal reporting system does not differentiate between different types of drugs or the different types of crime (selling vs. buying). Despite this, drug crimes are a general indicator of drug activities. This data was population-adjusted and reported by crimes per 10,000 residents. Municipal level population estimates were accessed through the CT Data Collaborative, which provides yearly estimates from the US Census Bureau.¹⁷

The final dataset is the number of opioid prescriptions filled by town of patient residence. The Connecticut Department of Consumer Protection (DCP) collects this information in their

¹⁴CT Office of Chief Medical Examiner 2017-2018 Opioid Overdose by Town (Provided through contact with the Center for Prevention, Evaluation, and Statistics at the University of Connecticut Health Center).

¹⁵ Department of Emergency Services and Public Protection. Crime In Connecticut 2017, Crime In Connecticut 20171-435 (2018). Middletown, CT. Retrieved from [https://www.dpsdata.ct.gov/dps/ucr/data/2017/Crime in Connecticut 2017.pdf](https://www.dpsdata.ct.gov/dps/ucr/data/2017/Crime%20in%20Connecticut%202017.pdf)

¹⁶ Department of Emergency Services and Public Protection. Crime In Connecticut 2018, Crime In Connecticut 20171-435 (2018). Middletown, CT.

¹⁷ Annual Census Bureau Population Projections by town (2017) (accessed Jan 26, 2020 at <http://data.ctdata.org/dataset/census-annual-population-estimates-by-town>)

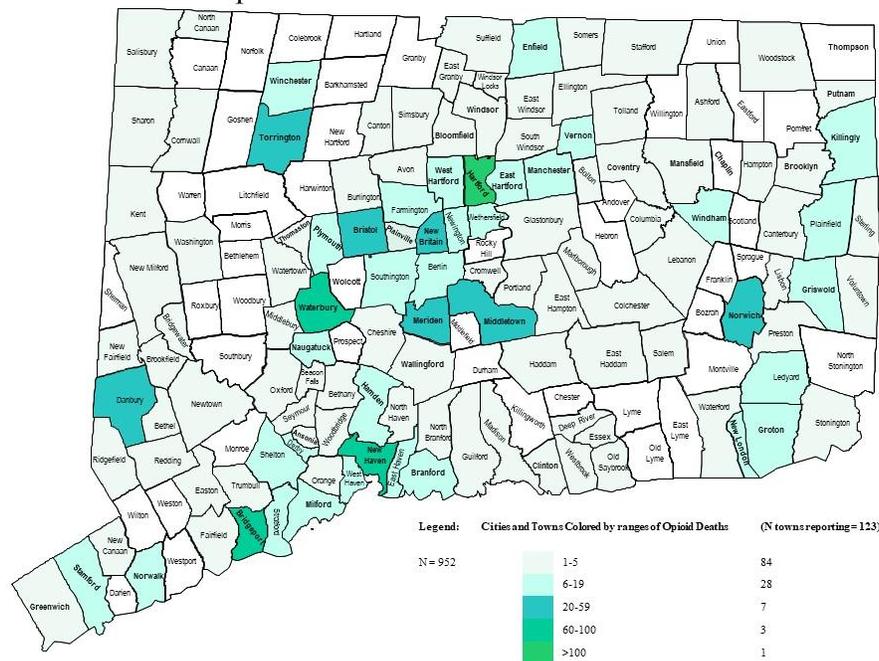
Prescription Monitoring Program.¹⁸ This program tracks the number and strength of prescriptions for schedule II through schedule V drugs. This information is available by town only for 2017.

2. Opioid Overdoses

Accidental opioid-related deaths were steady between 2017 (955 deaths) and 2018 (946 deaths). The 2017 figure translated to 27.7 deaths per 100,000, which is twice the national average (14.6). At least some of this can be accounted for by the rise in fentanyl related deaths from 79 in 2012 to 686 in 2017. Fentanyl has been found to be involved in over 80% of overdose deaths in CT in 2018.¹⁹ Several hotspots through the state can be identified through the maps. Hartford had the highest number of deaths related to opioids (126) in the state. Secondary sites in 2017 included Torrington-Winchester, New Britain, Bristol, Waterbury, Danbury, Bridgeport, New Haven, and Norwich.

In 2018, there were small shifts in these hubs. Manchester increased the number of deaths by 28%, emphasizing the corridor between West Hartford, Hartford, East Hartford and, now, Manchester. New London and Meriden also increased their share of deaths. Danbury decreased the number of overdoses by 22%, reducing its role as a hub. Maps iii and iv were created to examine the correlation between drug overdoses and proximity to major routes and highways. High concentrations of deaths appear to be along the I-95 and I-91 corridors, with additional regional tracking along Route 8 and I-395.

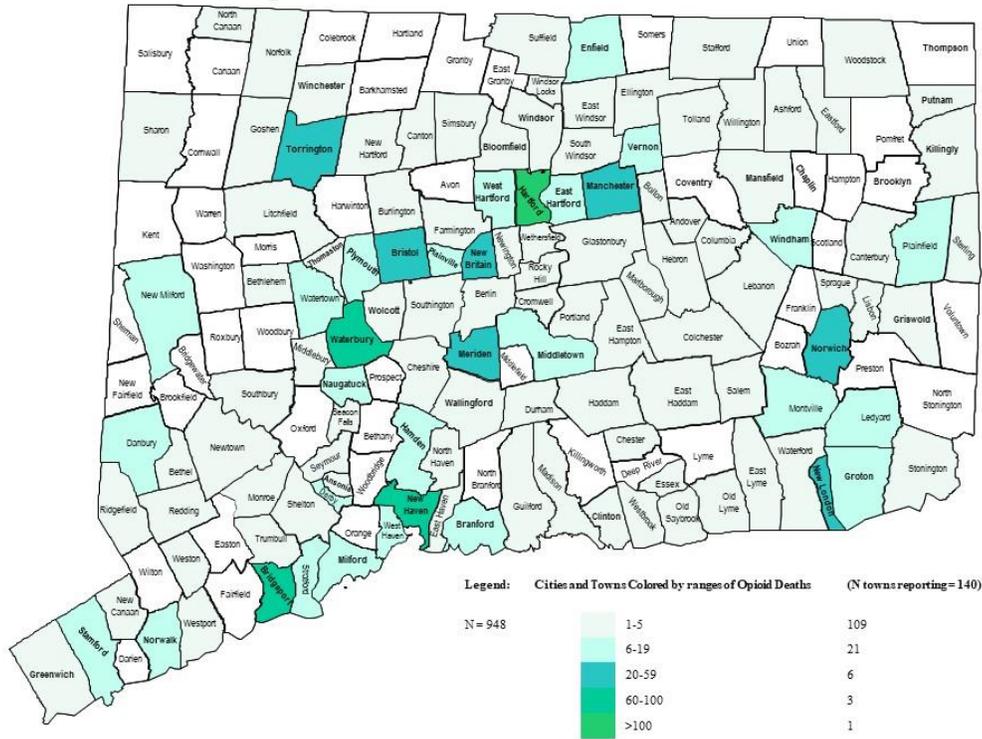
i. 2017 Opioid Overdose Deaths in CT. Via OCME



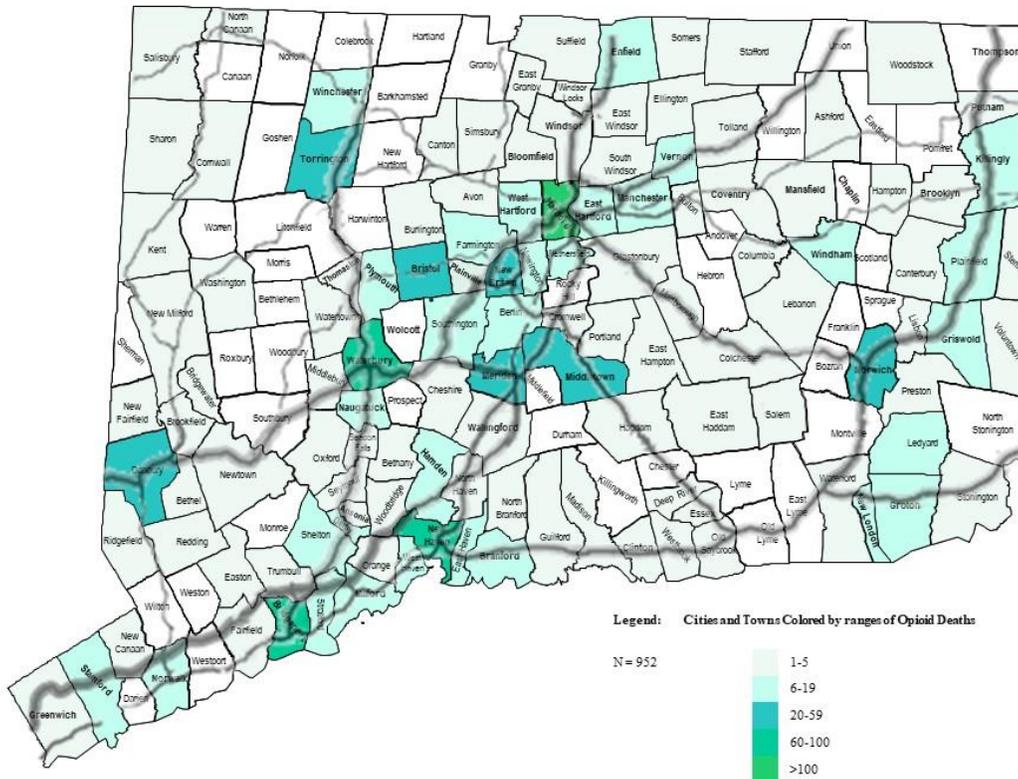
¹⁸ Connecticut Department of Consumer Protection (2017). Snap Shot of Legal Controlled Substance Prescription Usage throughout Connecticut. (accessed Jan 26, 2020 at https://portal.ct.gov/-/media/DCP/drug_control/PMP/Statistics/2017-stats_FINAL_updated_09-2018.pdf?la=en)

¹⁹ www.ncbi.nlm.nih.gov/pubmed/31706248.

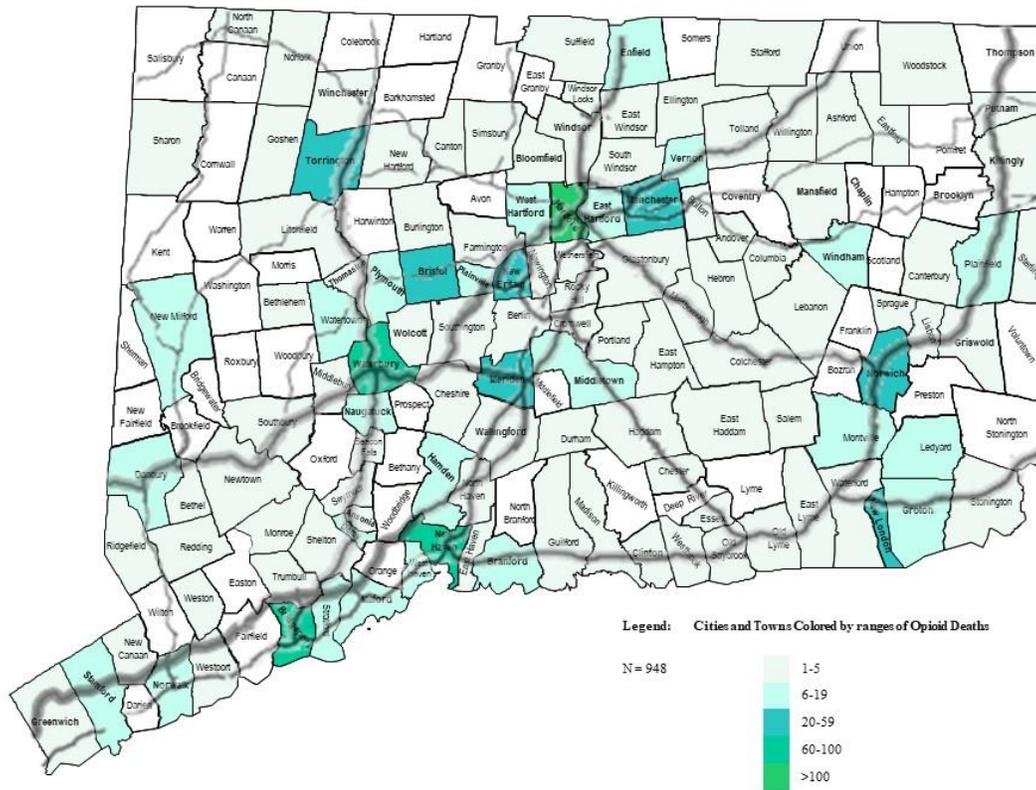
ii. 2018 Opioid Overdose Deaths in CT. Via OCME



iii. 2017 Opioid Overdose Deaths in CT. (Major routes and Highways)



iv. 2018 Opioid Overdose Deaths in CT. (Major routes and Highways)



3. Drug Arrests

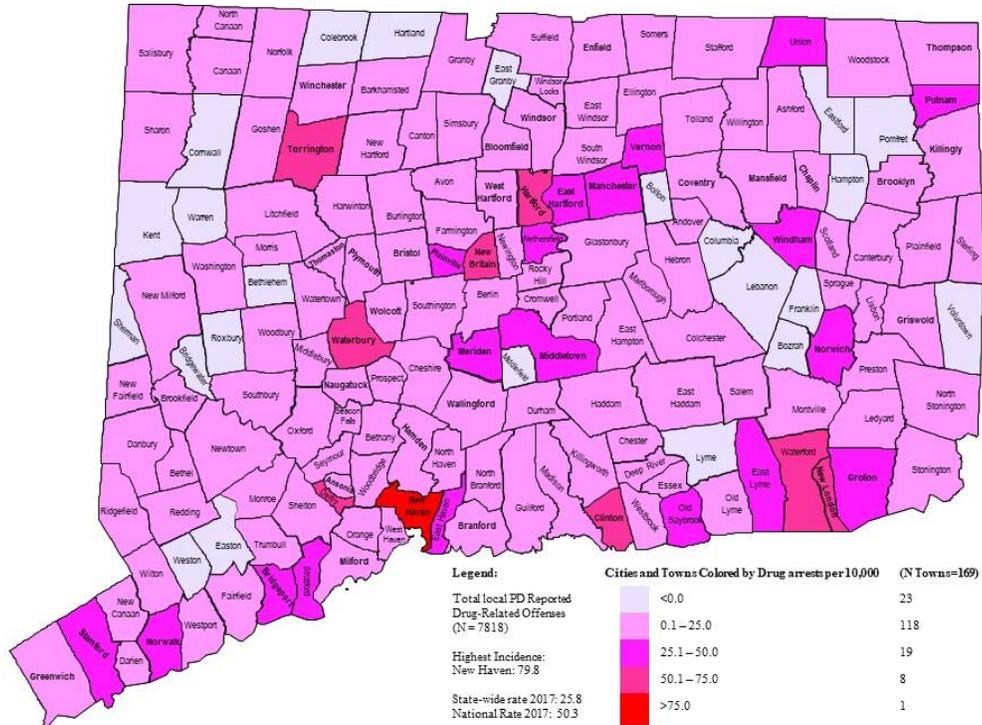
Overall there was a 74% reduction in drug arrests from 2017 to 2018 (9,264 drug arrests of 101,700 total arrests vs. 8,362 drug arrests of 98,106 total arrests). Local police departments may place different levels of effort on drug arrests as compared to other crimes, which may be reflected in these numbers. In 2017, drug arrests made up 9.11% of all arrests made, and in 2018, the percentage was 8.52%. These arrests are not broken out by drug type. There are several areas with high rates of drug arrests that reported few opioid deaths. These include towns like Old Saybrook, Clinton, and East Lyme. Despite this, there are several overlapping areas such as the I-84 corridor through Hartford, Manchester and Vernon, New Haven, Bridgeport, Waterbury, New London and Torrington.

Some areas displayed significant differences from one year to the other. In 2017, New Haven came in as having the highest number of drug arrests. They had 1,045 drug arrests with an incidence-rate of 79.8 per 10,000 residents. In 2018, New Haven reported 702 drug arrests with an incidence-rate of 53.6 per 10,000 residents, resulting in it moving from the highest incidence-rate to the 6th highest. It's possible that the drop in drug-related arrests in New Haven was a result of changes that were instituted following a high number of overdoses that occurred on the town green in that time period. It is difficult to know whether this reduction will be an ongoing trend due to limited data periods.

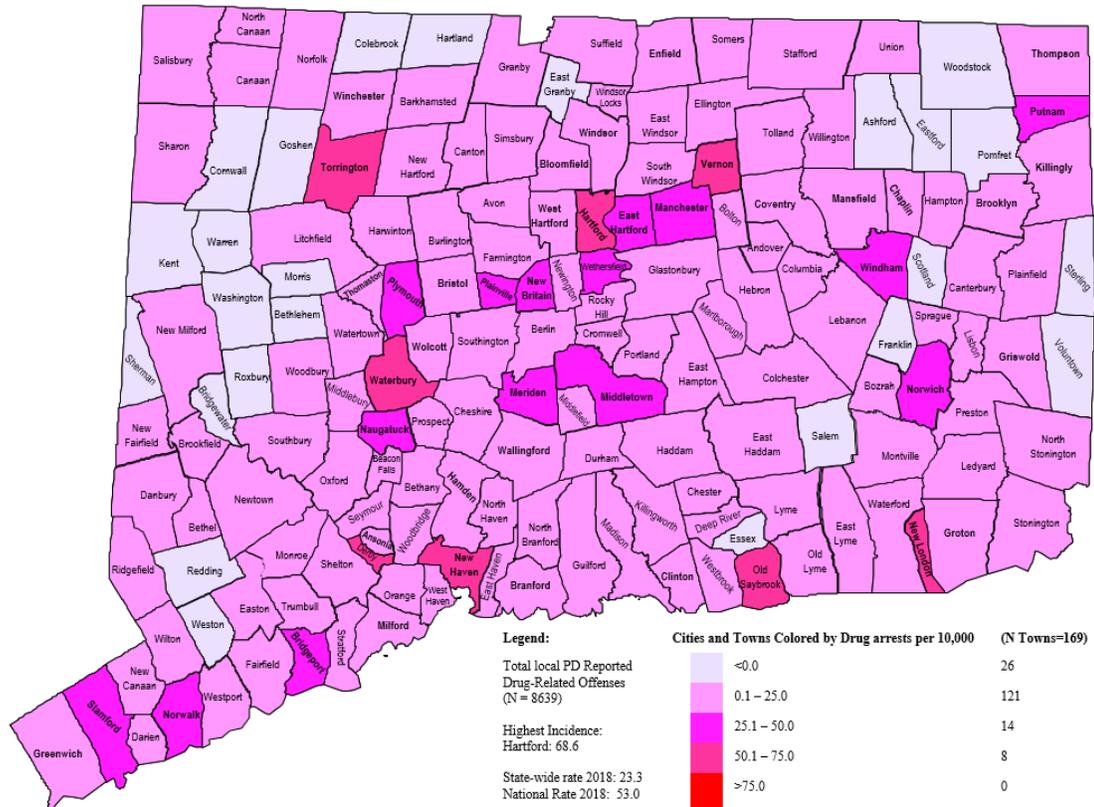
Hartford's drug arrest rate increased from 55.7 in 2017 to 68.6 in 2018, moving it from the 7th highest in 2017 to the highest in 2018. Other towns went from 'hotspots' in 2017 to not being hotspots in 2018, including: Groton, East Lyme, Wethersfield, Union, East Haven, and

Waterford. However, these are in close proximity to continuing hotspots such as Wethersfield adjacent to Hartford, East Haven adjacent to New Haven and Groton/East Lyme/ Waterford close to Norwich and New London. It should also be noted that limitations to this methodology are based in how smaller towns may be disproportionately affected by single changes in arrests. For example, with 4 arrests in 2017 and 1 arrest in 2018, Union, CT went from a 47.7 to 11.9 per 10,000 incidence rate, moving from the 11th to the 55th highest rate.

v. 2017 Drug Arrests in CT. Per 10000 Residents

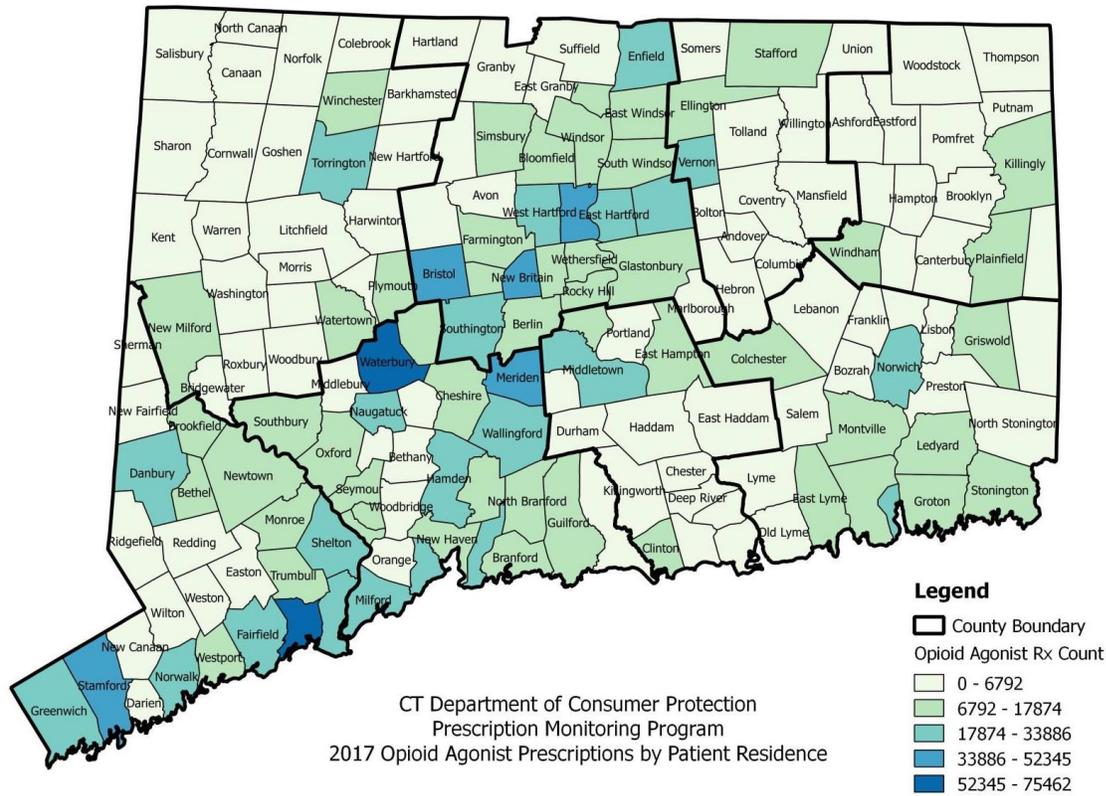


v. 2018 Drug Arrests in CT. Per 10000 Residents



4. Opioid Prescriptions

Finally, this report examines the rate at which legal opioid prescriptions are filled. Overall, Connecticut’s rate of opioid prescriptions written per 100 people was 48.0 in 2017, 18.2% less than the national average of 58.7. Reviewing the Connecticut town-level data from 2017, Bridgeport and Waterbury residents had the greatest number of opioid scripts filled. Other regions, with slightly fewer prescriptions, echo the areas with drug overdoses and arrests. New London, Norwich, Torrington, Hartford, Meriden, Bristol, and New Britain had between 33,886 to 52,345 prescriptions written in 2017. Other areas, such as Enfield, Vernon, and Manchester, represent emerging areas of interest. At this time, prescription data from years after 2017 on the town level has not been made available.



5. Geospatial Findings Summary

The geospatial information can be especially helpful if it is possible to review trends over time. Much of the opioid overdose death data mirror areas of higher poverty rates in the state. However, this is not always the case. This data shows the emergence of Meriden, Vernon and the Enfield areas as towns of concern. Drug arrests also single out Windham, Derby, and Old Saybrook as areas of persistent drug activity not indicated by other data sets.

Overall, both drug arrests and number of opioid prescriptions filled showed positive signs of change. Drug arrests decreased on a year-to-year basis. The rate of opioid prescriptions is 18.2% less than the national average. Despite this, Connecticut continues to have alarming rates of accidental opioid-related overdoses.

IV.GPRA Sub-Study

A.Overview

1. GPRA Description and Administration

In the course of the first year, plans for the national evaluation became known, including that client interviews that would be added on to 10 states' overall evaluation of the grant, including Connecticut. It was decided that the three CT STR-funded enhanced MAT program sites would participate in the Government Performance and Results Act (GPRA) interview study component.

Client interviews consisted of the GPRA instrument, which is SAMHSA's required standard data collection tool. The Government Performance and Results Modernization Act of 2010 updated some aspects of the Government Performance and Results Act of 1993. One of the act's goals is to report on performance and progress of federal agencies in fulfilling their missions. As part of this federal mandate, all SAMHSA programs, including the Center for Substance Abuse Treatment (CSAT) grantees, must collect and report performance data. The CSAT-GPRA data collection tool consists of client-level data items that have been selected from widely-used data collection instruments (e.g., the Addiction Severity Index and the McKinney Homeless Program reporting system). STR GPRA outcome measures included items regarding substance use, criminal activity, mental and physical health, family and living conditions, education/employment status and social connectedness. The STR GPRA was an abbreviated version of the original interview, with many questions omitted specifically for the STR study.

Since no additional funding was provided by SAMHSA for the GPRA component, it was decided that it would be most efficient for the program staff at the three selected MAT sites to conduct the baseline GPRA interviews, fill out study paperwork, and fax the forms to the RD. In addition to checking the baseline materials for completeness and accuracy and doing data entry into the required SAMHSA-provided database (SPARS), the UConn evaluation team also conducted the 6-month and discharge follow-up interviews with participants. The research team also created and maintained a separate tracking database in order to keep track of participants with baselines completed, their contact information, when they were due for follow-up interviews, etc. The UConn evaluators designed a study training protocol for the program staff, and conducted trainings with the program sites. All program staff and research staff who conducted any study interviews or consents were required to pass an on-line human subjects training. Certificates reflecting passage of the human subjects training were sent to the RD and passed on to the DMHAS IRB chair.

Original Procedure: Upon induction to MAT, each participant enrolled in the program was asked to voluntarily participate in the study, and if they agreed, an informed consent was performed before the GPRA was administered by program staff at the program site. The program staff conducted the baseline GPRA, whereas the RD was responsible for conducting follow-up and discharge interviews. The IRB-approved consent document included a description of procedures, risks and inconveniences, benefits, confidentiality information and voluntary status. Participants were also asked to give permission to the program sites to send identifiable information to the DMHAS RD. In addition, participants were asked to fill out and sign a future contact form which provided the researchers with permission to contact them directly or through the contact persons that they provided. Participants were not given any economic consideration for their baseline interviews. Clients were asked to do a phone check-in with research staff at 3 months and were eligible for a \$5 payment at that time, and for any additional check-ins they made. The 3-month check-in served as a way for research staff to make sure their contact information was current and working. During the 3-month check-in, participants could also schedule their 6-month follow-up interview. They received an incentive of \$15 plus a \$5 bonus for keeping their first scheduled appointment for their 6-month follow-up and for their discharge interview when they met with the researchers. Baseline GPRAs and other forms were either

faxed to the RD or were picked up by the researchers in person. Every participant was given a study ID in lieu of other identifiers, and their GPRA data was entered into the SAMHSA Performance Accountability and Reporting System (SPARS). Program staff conducted baseline GPRAs from January 2018 until January 2019.

Revised Procedure: Beginning in January 2019, the RD received IRB approval to conduct all three interviews (baseline, 6-month follow-up and discharge) due to poor data quality and low follow-up using the method described above. Starting at this time, participants were paid \$20 each time they met with the researchers, including the baseline interview. They were still paid \$5 for a 3-month check-in. When a baseline interview could not be conducted, administrative data (such as demographics, education, employment status and services planned or received) was collected from the program. To protect confidentiality of clients who hadn't completed an informed consent, program staff used a client ID to identify GPRA forms rather than names or other identifiable information.

2. Training

The evaluation team developed a training component on research interviewing and tracking methods for the program staff who would need to do the intake GPRAs, as well as providing links to SAMHSA materials and training videos about the GPRA. At least one training session was held at each program site by the research staff, and if new staff were hired, the research staff provided additional training. Tools such as the GPRA Question-by-Question Guide, Frequently Asked Questions guide, and training presentations were also shared with the program sites. Initial trainings took place in person. On-going questions from the program staff were addressed on a bi-weekly basis or as needed, usually via phone and email. Program staff and research staff who were to administer informed consent and GPRA interviews had to show proof of their successful completion of the NIH on-line Human Subjects Training course. Certificates were sent to the RD and approved by the IRB before staff could start conducting GPRAs.

3. Challenges

Due to the inconsistent availability of prescribers in certain sites, the numbers recruited into the study were somewhat lower than expected. Of the referrals that were sent to the RD for inclusion in the evaluation, some participants were hard to reach, either because they did not own a phone or did not return the voicemails and text messages sent to them in order to schedule a baseline appointment.

The challenges to completing the follow-up interviews included the above and also additional difficulties due to changes that may have occurred since intake. Many participants changed phone numbers, moved, were busy at work, or were incarcerated at follow-up. Some participants would schedule multiple appointments, but did not show up, even after reminder messages and 3-month check-ins. Baselines completed by program staff sometimes did not have enough contact people listed or forms were missing participants' or contacts' addresses, phone numbers, etc. The evaluators recommended that at least two contacts be listed who could help locate the participant if the participant moved, changed phone number, etc. The interviewers used a variety

of tracking techniques in order to try to secure interviews, such as making phone calls, sending text messages, sending letters, contacting the persons listed on the future contact forms, reaching out to providers, probation and parole officers, meeting participants where and when was most convenient for them, and conducting phone interviews (only at follow-up and discharge). Some study participants were incarcerated after being recruited into the study. As there was no permission to conduct interviews in jail/prison settings, therefore, interview data for incarcerated participants was not collected. Due to the difficulties in conducting interviews with the clients, as previously mentioned, sometimes administrative and demographic data was collected from the program sites and entered on SPARS for a partial GPRA.

B. GPRA- Related Results

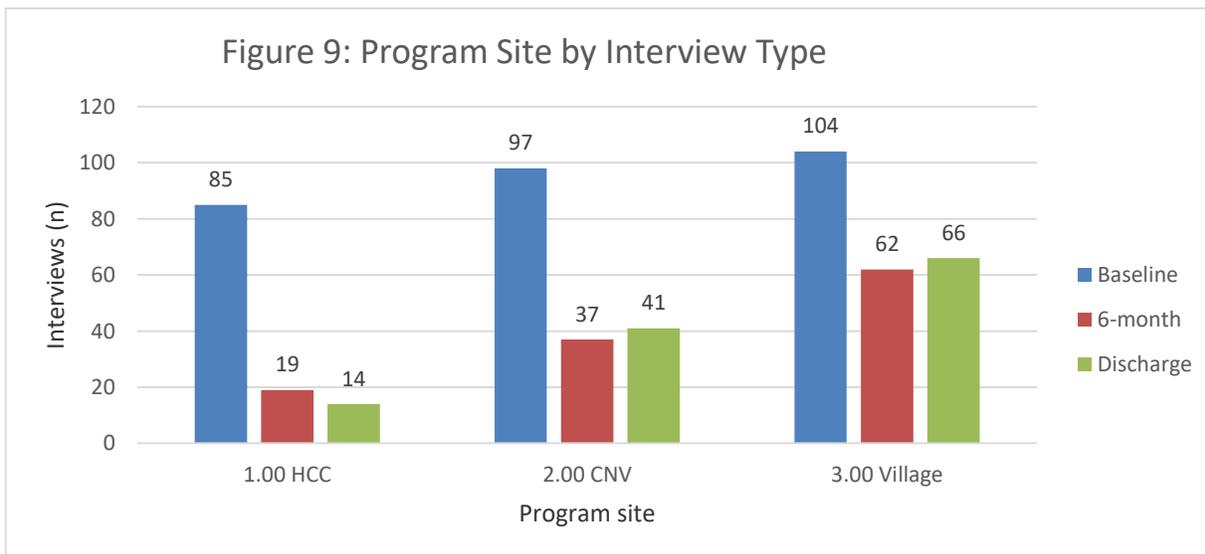
1. Recruitment and Follow Up

Recruitment: Program participant recruitment for the GPRA evaluation started in May 2018 and ended in April 2019. In this time period, 286 intakes were completed, including 125 administrative baselines. As calculated by SPARS, the CT intake rate was 59.3% of its goal, while the average rate for all grantees was 67.3%. During the study period, 118 six-month post-intake interviews and 121 discharge interviews were conducted (including 32 administrative discharges). It should be noted that administrative data was entered for participants who missed the baseline interview window. Administrative data on program participation and follow-up status was also entered for participants who could not be interviewed for their 6-month follow-ups. Data on services received and reasons for discharge was entered for additional participants who could not be interviewed at discharge.

Follow-Up Rates: The 6-month follow-up rate calculated automatically via the SPARS online database for CT was 17.3% while the average for all grantees was 44.5% as of April 30th, 2019. From 286 baselines completed, 120 cases were due for 6-month follow-up interviews by the end of the study period. From these 120 cases due, 118 were entered on SPARS. The follow-up interviews consisted of 34 actual interviews and 84 administrative interviews. As calculated by the evaluation team, the follow-up rate when including every case entered on SPARS was 98.3%. This means that there was some sort of follow-up information entered on SPARS for 98.3% of the follow-ups that were due. The follow-up rate excluding administrative interviews was 29.7%. This rate, although very low, is still well above the SPARS-calculated rate, but we don't the reason for the discrepancy.

Follow-up challenges were noted above. If there had been a longer period where the researchers conducted the baselines as well as the follow-ups, we speculate, based on other studies, that the follow-up rate would have been much higher. Due to the low follow-up rates, statistical analyses of change over time could not be reliably conducted. Even presenting descriptive 6-month data might encourage misleading observations of trends that did not truly exist. Therefore, most of the data we will present in this report is focused on baseline data. Follow-up data is only reported on the status of completion and the reasons for non-completion of the 6-month follow-up interview.

Summary of Interviews by Site: Figure 9 summarizes the overall distribution of GPRA interviews by program site and by interval. Out of the 525 interviews entered in SPARS, 286 (54.5%) were intake interviews, including 125 administrative baseline interviews (43.7%), 118 (22.5%) were 6-month interviews, and 121 (23.0%) were discharge interviews. Cornell Scott Hill Health Center generated 118 interviews (22.5%), CNV Help generated 175 interviews (33.3%), and the Village generated 232 interviews total (44.2%).



2. Demographic and Background Data

Table 2. Table 2 breaks down the demographic characteristics of the sample by treatment site for all baseline interviews (n=286). Of the 286 enrollees at baseline, 85 (29.7%) were from Cornell Scott Hill Health Center, 97 (33.9%) were from CNV Help, and 104 (36.4%) were from the Village.

Over two-thirds of clients who had intakes were male (n=201; 70.3%), and about one-third were female (n=86; 29.9%). Although Hill Health Center had the highest percentage of female clients, the percentage of male recruitment was higher for all three sites.

With respect to race/ethnicity, almost two-thirds of the participants were white (n=198; 69.2%). Ninety-one participants recruited were Hispanic (31.8%), 24 participants were Black (8.7%) and the remainder were classified as “other” (n=7; 2.4%). Out of the 286 intakes, 17 interviews were missing data on race/ethnicity (5.9%). As Table 2 indicates, the sites differed with respect to their race/ethnicity distribution. The Village had the most diversity with respect to race/ethnicity: Hispanic clients comprised over half of the clients at the Village but less than 20% of the clients in each of the other sites. The other sites’ ethnic distribution is more similar to overall treatment data in the state.

We examined two categories of education, comparing those with an education less than high school/GED (n=92; 32.1%) with those completing high school/GED or beyond (n=195; 67.9%). High school completion or higher was the most common category for every site.

Table 2: Background Characteristics by Treatment Site				
Variable	HHC N=85	CNV Help N=97	The Village N=104	Total N=286
Gender				
Male	54 (64%)	67 (69.1%)	79 (75%)	201 (70.3%)
Race/Ethnicity				
White (non-Hisp)	73 (86%)	68 (71%)	57 (54%)	198 (69.2%)
Black (non-Hisp)	2 (2.4%)	8 (2.8%)	14 (13%)	24 (8.7%)
Any Hispanic	14 (16%)	23 (24%)	54 (51%)	91 (31.8%)
Other	2 (2.4%)	4 (4.1%)	1 (1.0%)	7 (2.4%)
*Missing 17 (5.9%)				
Education				
<HS/GED	20(23.5%)	27 (27.6%)	45 (43.3%)	92 (32.1%)
=/>HS/GED	65 (77%)	71 (74%)	59 (56.7%)	195 (67.9%)
Age				
18-34	46 (54%)	41 (42.3%)	34 (32%)	122 (42.7%)
35-44	20 (24%)	36 (38%)	22 (21%)	78 (27.3%)
>=45	19 (22%)	19 (20%)	48 (46%)	86 (30.15%)
*Missing 1 (0.3%)				
Employment				
Employed	32(37.6%)	60 (61.2%)	58 (55.8%)	150 (52.3%)
Unemployed	37(43.5%)	27 (27.6%)	28 (26.9%)	92 (32.1%)
*Missing 45 (15.7%)				

Overall, the common age group for the sample of clients was the 18-34-year old group, the youngest age category. The 18-34-year old group comprised over 40% of the sample (n=122; 42.7%). Just over 27% were in the 35-44-year old age group (n=78; 27.3%). Over a quarter of the sample was 45 years and older (n=86; 30.1 %). One interview was missing data on age. There were some age category variations by site. While over half of the clients enrolled in HHC and the CNV Help programs were in the youngest age group, this group comprised only 34% of the clients at the Village. Almost half of the clients at the Village were in the oldest age category (n=48; 46%) of 45 and older. In contrast, the oldest age group comprised less than one quarter of the clients at CNV Help (n=19; 20%), and Hill Health (n=19; 22%).

Out of the 286 intakes, 150 participants (52.3%) reported being employed at the time of the interview, while 92 participants reported being unemployed (32.1%). Data on employment was missing for 45 participants (15.7%). A more detailed breakout of employment and unemployment categories is provided in Section E below.

Program staff was asked to report on participants’ co-occurring mental health and substance use disorders at intake. The question asked the program staff if the client was screened by the program for co-occurring mental health and substance use disorder. From 286 intakes, 221 reported “Yes” to screening for co-occurring disorders. The staff who reported screening by the program were then asked if the client screened positive for co-occurring mental health and substance use disorders. From 221 screens, 170 were positive for co-occurring disorders (Table 3).

Table 3. Co-occurring Screen

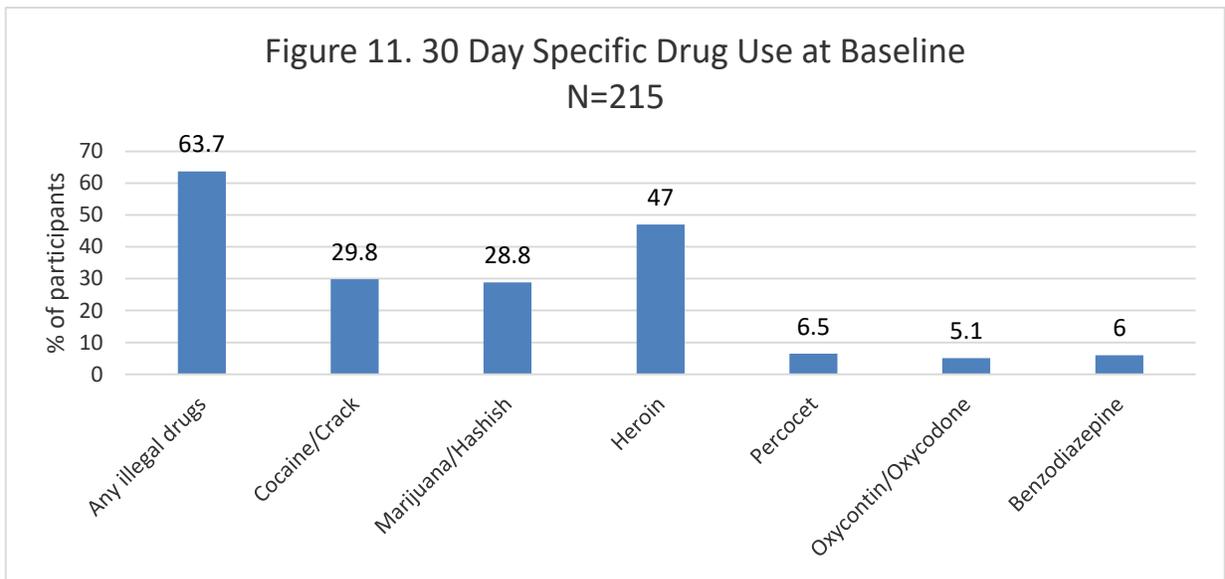
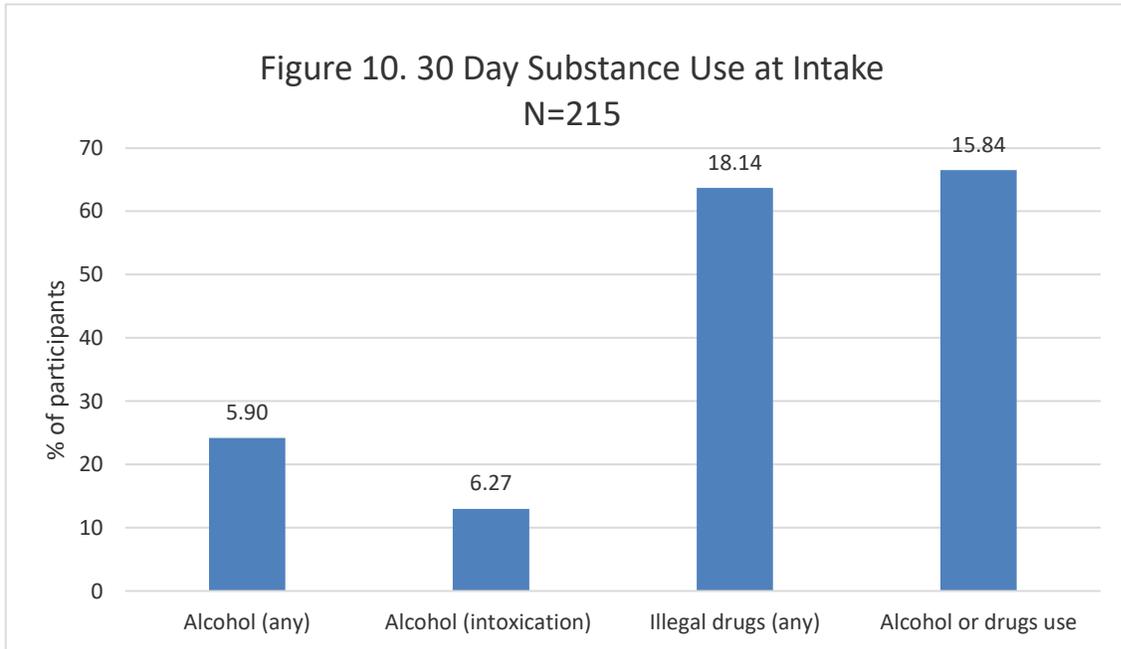
N=286	n	%
The client was screened by program for co-occurring mental health and substance use disorder (N=286)	221	77.0
Client screened positive for co-occurring mental health and substance use disorder (N=221)	170	76.9

3. Substance Use Reporting at Baseline

The GPRA asks respondents to report on the number of days of use for alcohol and any illegal substances during the past 30 days. In these analyses if a respondent reported at least one day of use during that 30-day period, they were counted as using a substance (i.e., as having “any” 30 day use). Analyses looked at both “any” use of alcohol or illegal drugs as well as the number of days use reported for alcohol and illegal drugs (coding those who indicate no use as 0 days of use for that 30-day period). Figure 10 provides a visual summary of the overall rates of self-reported past 30-day drug and alcohol use on the GPRA at intake. Figure 11 provides a visual summary of overall rates of self-reported past 30-day drug use by type. Table 4 shows the percentage of participants with “any” use and the mean numbers of days of use for alcohol and illegal substances at the baseline interview. While only 24.2% of those interviewed reported alcohol use in the past 30 days from the day of the baseline, 63.7% reported illegal drug use. The most commonly used illegal drugs are reported here: heroin (47.0%), cocaine/crack (29.8%), and marijuana (28.8%). Out of the 286 intakes only 215 reported data on substance use (75.2%), while 71 intakes were missing data on these questions (24.8%). It should be noted that SAMHSA requires that any marijuana/cannabis use be counted as illegal, even if it was prescribed as medical marijuana. This is consistent with federal guidelines which don’t acknowledge state laws that have legalized marijuana in any context.

Table 4: Number of Days Substance Use in Past 30 Days

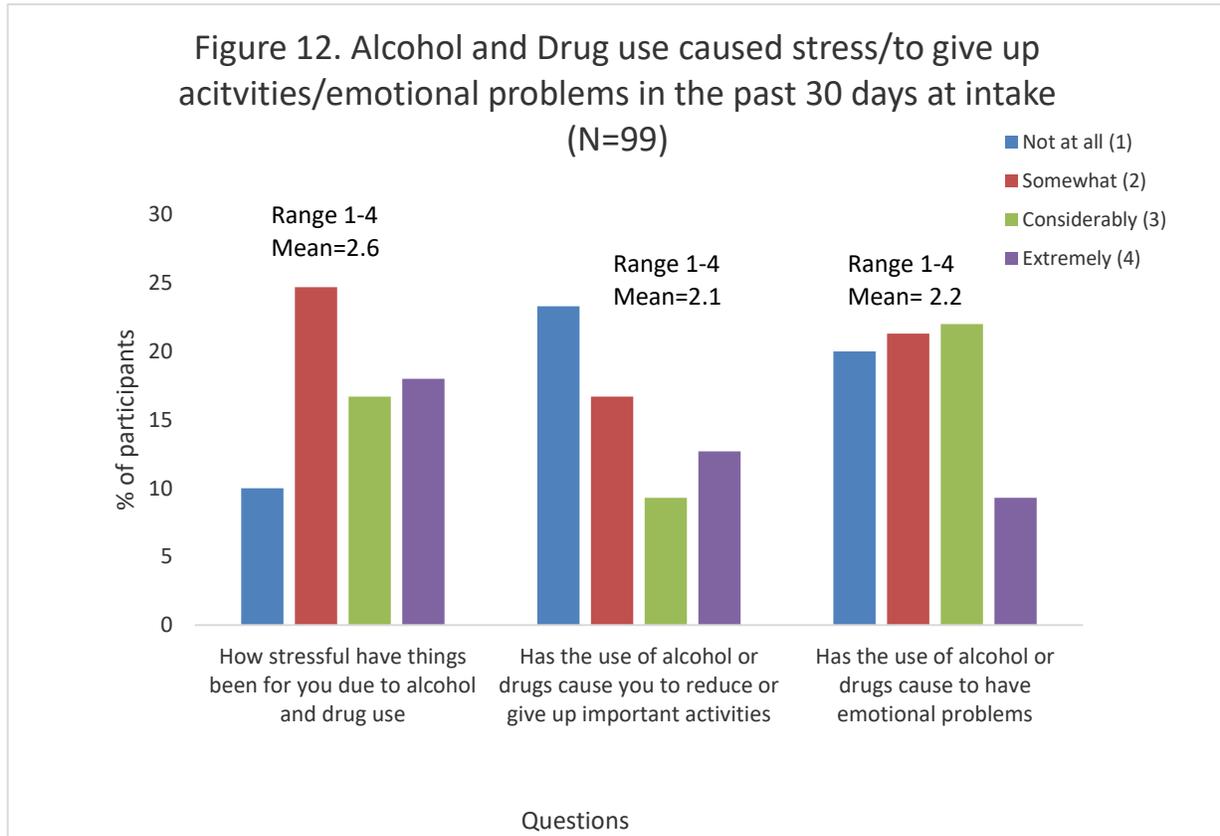
Substance Use	Baseline N = 215 (people who responded)	
Any alcohol <i># of days using any alcohol</i>	52 (24.2%) <i>Range 1-30</i>	<i>Average Days</i> 5.90
Alcohol to intoxication (5+ drinks in one sitting) of the people who used any alcohol <i># of days drink alcohol to intoxication (5+ drinks in one sitting)</i>	18 (8.4%) <i>Range 1-30</i>	<i>Average Days</i> 8.33
Alcohol to intoxication (4 or fewer drinks and felt high) of the people who used any alcohol <i># of days drink alcohol to intoxication (4 or fewer drinks and felt high)</i>	15 (7.0%) <i>Range 1-15</i>	<i>Average Days</i> 3.80
Illegal drugs <i># of days using Illegal drugs</i>	137 (63.7%) <i>Range 1-30</i>	<i>Average Days</i> 18.1
Cocaine/crack <i># of days using Cocaine/crack</i>	64 (29.8%) <i>Range 1-30</i>	<i>Average Days</i> 11.7
Marijuana/hashish <i># of days using Marijuana/hashish</i>	62 (28.8%) <i>Range 1-30</i>	<i>Average Days</i> 15.58
Heroin <i># of days using Heroin</i>	101 (47.0%) <i>Range 1-30</i>	<i>Average Days</i> 17.21
Benzodiazepines <i># of days using Benzodiazepines</i>	13 (6.0%) <i>Range 1-30</i>	<i>Average Days</i> 7.85
Percocet <i># of days using Percocet</i>	14 (6.5%) <i>Range 1-29</i>	<i>Average Days</i> 10.86
Oxycontin/Oxycodone <i># of days using</i>	11 (5.1%) <i>Range 1-29</i>	<i>Average Days</i> 12.91



During the interview, participants were asked if they had injected drugs in the past 30 days. From 286 baselines, only 215 participants had responses for this question. Out of the 215, 33 participants (15.1%) responded “Yes” to drug injection in the past 30 days (Table 4).

Participants who reported any alcohol or drug use in the past 30 days, were asked questions about the impact of their use. See Figure 12 below. They were asked (1) how stressful things had been for them, (2) whether their use caused them to give up important activities, and (3) whether their use caused them any emotional problems. The response options for these questions

were: “Not at all (1)”, “Somewhat (2)”, “Considerably (3)”, and “Extremely (4)”. Participants who responded 0 days of use of alcohol or other drugs were counted as “Not applicable” for these questions, and were not asked the impact questions. Out of 286 baselines, only 99 participants were asked to answer these questions. For question 1, the average response was 2.6 (Considerably); for question 2, the average response was 2.1 (Somewhat); and for question 3, the average response was 2.2 (Somewhat).



4. Family and Living Conditions

Participants were asked where they were living for most of the time (15+ days) in the 30 days prior to their baseline interview. The options consisted of various housed options, homeless options, or institutional options (Table 5). From 286 baselines, 252 reported on living conditions. The majority of participants were housed, although only 38.3% in their own place. Only a little over 4% would be considered technically homeless (on the street or in shelters), although it’s possible that some of the people living with others (25.1%) or in controlled settings, would not have had the resources to obtain their own housing.

Table 5. Living Situation (N=252)

Living Situation	n	%
Where have you been living most of the time, in the past 30 days?		
Shelter	10	3.5
Street/Outdoors	2	0.7
Institution	2	0.7
Housed: Own/Rent apartment, room, or house	110	38.3
Housed: Someone else's apartment, room or house	72	25.1
Housed: Halfway house	16	5.6
Housed: Residential treatment	29	10.1
Housed: other	10	3.5
Missing	36	12.5

Respondents were asked whether they had children and how many if so. Female participants were also asked about current pregnancy. From 86 women, only 42 responded to the question “Are you currently pregnant?” From these 42, only 1 responded “Yes” to being currently pregnant. From 155 participants with answers for the child questions, 100 responded “Yes” to having children. From 100 participants who answered “Yes” to having children, 36 participants (36%) reported to have only 1 child, 27 participants (27%) reported to have two children, 23 participants (23%) reported to have 3 children, and 14 participants (14%) reported to have 4 or more children. See Figures 13 and 14 below.

Figure 13. Have Children
N=155

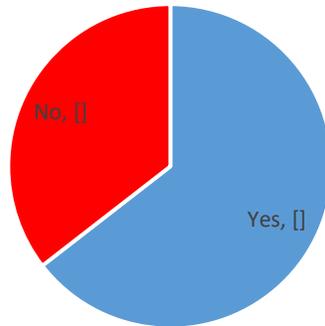
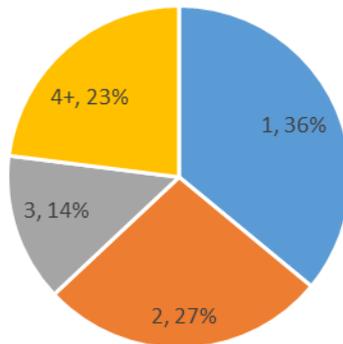


Figure 14. Number of Children
N=100



5. Employment

Participants were asked about their current employment status. From 286 intakes, 248 interviews reported on the status of employment. Employment was categorized into (1) full-time (35+ hours per week) and (2) part-time. Unemployment was categorized into (1) looking for work, (2) disabled, (3) volunteer work, (4) retired, and (5) not looking for work. From the total number of participants who answered this question, 69 participants (27.8%) were employed full-time, 23 participants (9.3%) were employed part-time, 76 participants (30.6%) were unemployed and looking for work, 18 participants (7.3%) were unemployed disabled, 3 participants (1.2%) were unemployed and doing volunteer work, 1 participant (0.4%) was retired, 52 participants (21%) were unemployed and not looking for work, and 6 participants (2.4%) were unemployed and had a status/reason not listed in the categories (Table 6).

Table 6. Employment N=248

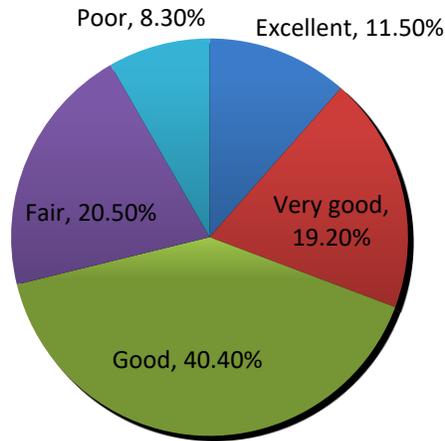
Status of Employment		n	%
Employed, full time	Full Time (35+ hours per week)	69	27.8
	Part time	23	9.3
Unemployed	Looking for work	76	30.6
	Disabled	18	7.3
	Volunteer work	3	1.2
	Retired	1	0.4
	Not looking for work	52	21.0
Other		6	2.4

6. *Health and Service Utilization

Participants were asked to rate their current overall health. From 156 participants that answered this question, 18 participants (11.5%) rated their overall health as “Excellent”, 30 participants (19.2%) rated it as “Very good”, 63 participants (40.4%) rated it as “Good”, 32 participants (20.5%) rated it as fair, and 13 participants (8.3%) rated it as poor (Figure 15).

Figure 15. Health Status

N=156

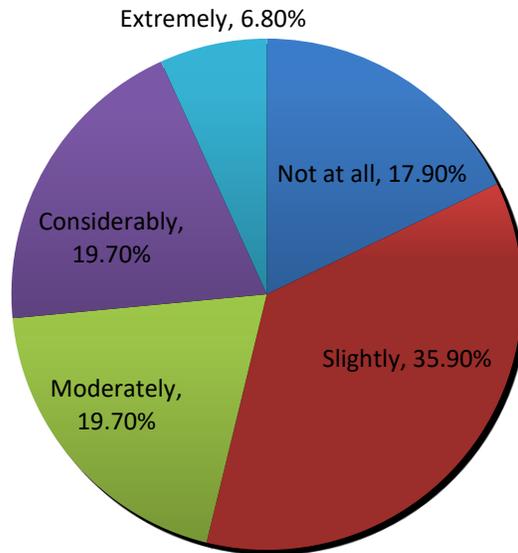


The interview included questions on the number of days respondents experienced psychological and emotional problems in the past 30 days. They were asked whether they experienced the following, not due to use of alcohol or drugs: (1) serious depression; (2) serious anxiety or tension; (3) hallucinations; (4) trouble understanding, concentrating, or remembering; (5) trouble controlling violent behavior; (6) attempted suicide; and (7) been prescribed medication for psychological/emotional problem.” The definition of “serious” was left to participants’ interpretation, while the prescribed medication was clarified to be the number of days participants were taking medication for a psychological or emotional problem. (See Table 7.) From 154 interviews with responses to these questions, the most common psychological problems experienced were serious anxiety/tension, serious depression, trouble understanding, concentrating, or remembering, and having been prescribed medication. 117 of 154 respondents reported having experienced any of the symptoms in the past 30 days. Participants were also asked how much they were bothered by these psychological or emotional problems in the past 30 days. The options were “Not at all”, “Slightly”, “Moderately”, “Considerably”, or “Extremely”. For those who reported no symptoms, the answer was recorded as “Not applicable” and was excluded from reporting. The most common response for this question was “Slightly” (Figure 16).

Table 7. Mental and Psychological Health Symptoms N= 122

In the Past 30 days not due to alcohol or drugs, how many days have you experienced..?	n	% of those who experienced at least one mental health symptom	Range # of days experienced mental health symptoms	Average # of days of those who experienced this mental health symptoms	Average # of days of those who experienced any mental health symptoms
Serious depression	71	58.2	1-30	10.68	6.21
Serious anxiety/tension	107	87.7	1-30	14.59	12.80
Hallucinations	11	9.0	2-30	8.45	.76
Trouble concentrating/ understanding/ remembering	60	49.2	1-30	13.18	6.48
Trouble controlling violent behavior	14	11.5	1-30	8.62	.99
Suicide attempts	4	3.3	1-1	1	.03
Prescribed medications for emotional or psychological problem	60	49.2	1-30	11.5	5.66

Figure 16. Severity of emotional/psychological problems N=117



The GPRA included questions about the number of days participants received any type of physical health, mental health, and substance use treatment services in the past 30 days. The types of services included inpatient (# of nights), outpatient, (# of days), and emergency room visits (# of days). The most frequent type of services received was reported to be substance use treatment (combining inpatient, outpatient, and emergency room services). The lowest frequency of services utilized by the participants was for physical health problems/concerns (Table 8). The most common type of any treatment reported was outpatient and the least treatment reported was emergency room treatment (Table 9).

Table 8. Physical, mental and substance use treatment

Services used in the past 30 days	Number of participants	%	Range of days	Average number of days
Any physical health treatment (Inpatient/OP/ER)	36	23.4	1-21	3.44
Any mental health treatment (Inpatient/OP/ER)	42	27.3	1-34	8.86
Any substance abuse treatment (Inpatient/OP/ER)	130	84.4	1-60	11.28

Table 9. Inpatient, outpatient and emergency room services

Services used in the past 30 days (N=154)	Number of participants	%	Range of days	Average number of days
Any inpatient health treatment (mental/physical/substance)	49	31.8	1-60	21.20
Any outpatient health treatment (mental/physical/substance)	116	75.3	1-63	7.21
Any ER treatment (mental/physical/substance)	30	19.5	1-34	2.93

7. Social Connectedness

The interview asked participants to report on the number of days they attended meetings of organizations that support recovery in the past 30 days. These organizations included non-professional, peer-operated organizations that are devoted to helping individuals who have addiction-related problems, any voluntary self-help groups for recovery that were not affiliated with a religious or faith-based organization, any religious/faith-affiliated recovery self-help groups, and any meetings of organizations that support recovery other than the previous two.

From 286 intakes, only 154 interviews responded to these questions. The number of participants attending and the average number of days are reported (Table 10).

Table 10. Attendance in Recovery Groups N=154

Attendance (N=154)	Number of participants	% of participants	Range of days	Average # of days
Voluntary self-help groups that were not affiliated with a religious or faith-based organization	56	36.4	1-30	9.20
Religious or faith-affiliated recovery self-help groups	14	9.1	1-30	6.43
Other organizations that support recovery	31	20.1	1-1	1.00
Any of the above 3 types of groups	73	47.4	1-61	8.62

Participants were asked to report if they had interaction with family and/or friends that were supportive of their recovery in the past 30 days. From 154 participants that responded to the question, 140 participants (90.9%) reported “Yes” to interacting with family and/or friends (Figure 17). The following question asked participants about whom they turn to when they are having trouble. The options were “Clergy Member”, “Family Member”, “Friends”, and “Other”. From 149 participants who responded to the question, the most common answer was “Family Member” (61.10%). See Figure 18.

Figure 17. Interact with Family & Friends

N=154

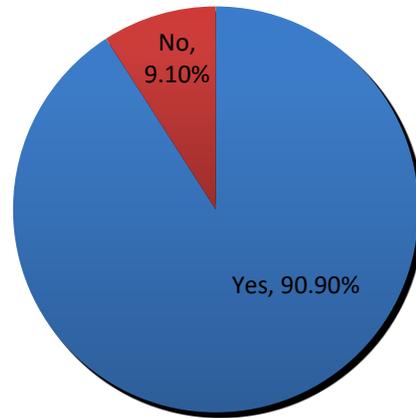
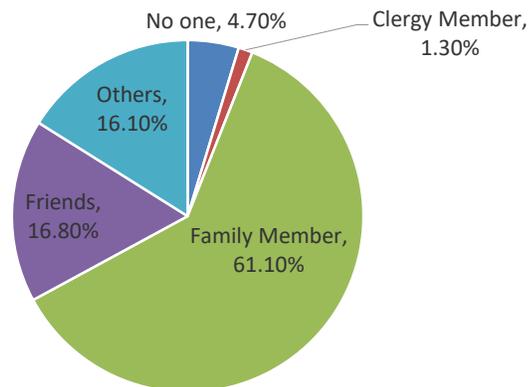


Figure 18. To whom do you turn when you are having trouble?

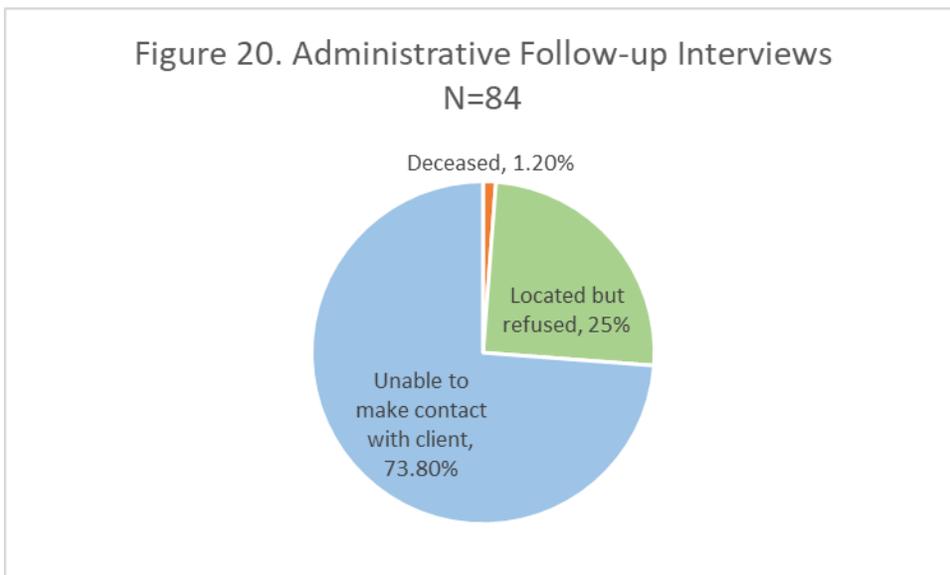
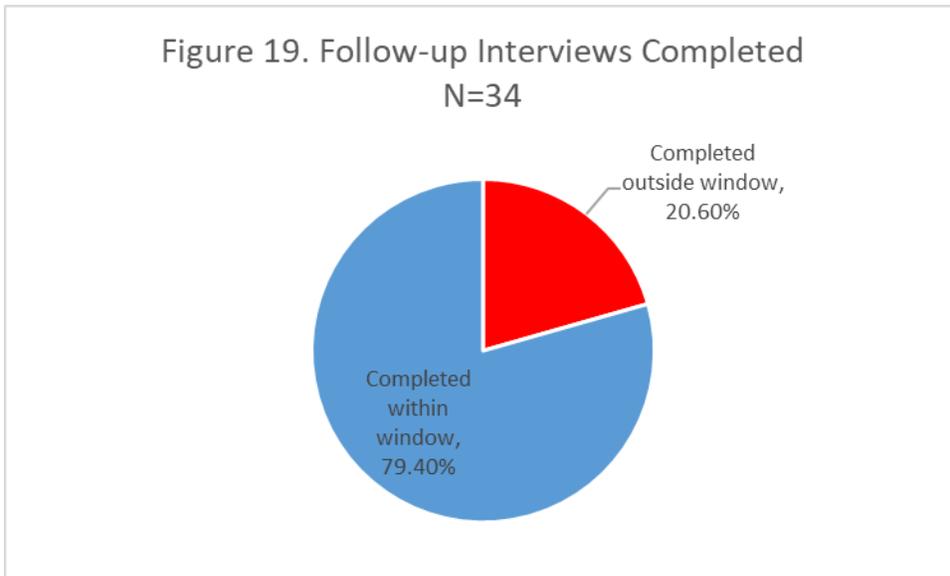
(N=149)



8. Completion and Discharge Data

Follow-up Completion Rate: Figure 19 illustrates the percentages of completion and refusal for the 6-month follow-up interviews. No follow-up data was entered for cases where an administrative baseline occurred (n=125). From 161 baseline interviews, 118 follow-ups

were entered on SPARS, with 34 being completed participant interviews and 84 being entered as administrative follow-ups. Out of the 34 follow-up interviews completed, 27 (79.4%) were completed within the interview window, and 7 (20.6%) were completed outside the interview window (Figure 19). Reasons for administrative follow-ups included: death at time of follow-up (1.2%), located participants but they refused the interview (25%), and the evaluation team was not able to make contact with the client (73.8%) (Figure 20). The high percentage of “unable to make contact with client category” could be due to changes of participants’ phone numbers and addresses and lack of future contact information collected at time of intake.



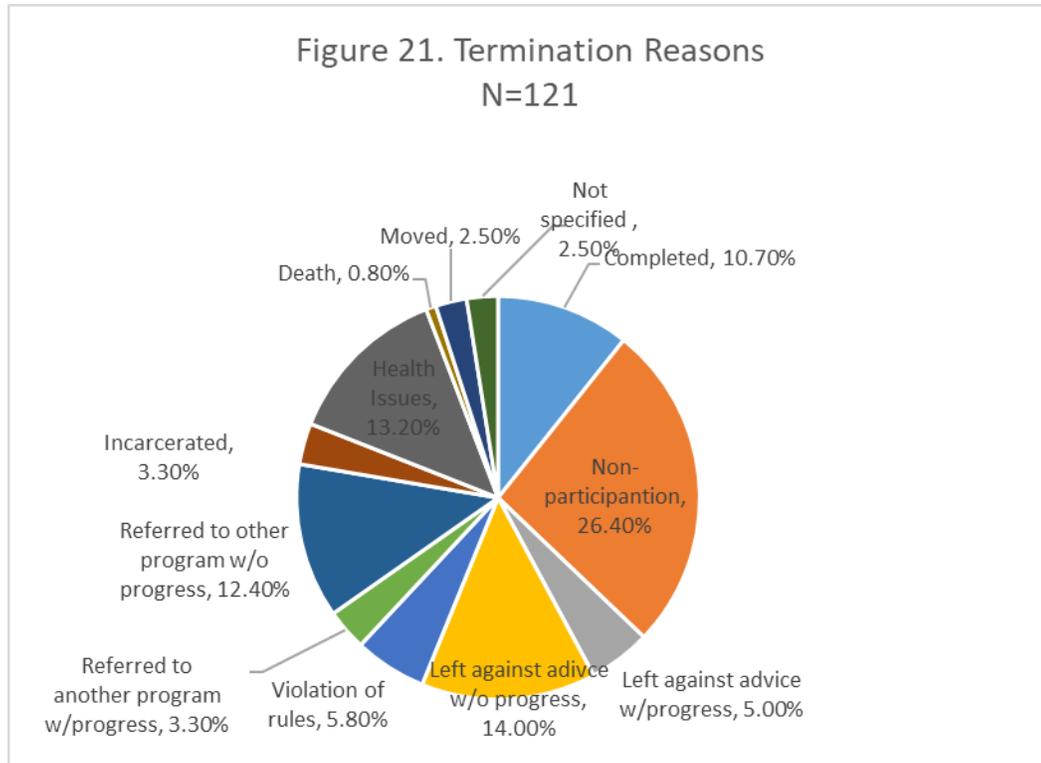
The length of stay for each participant interviewed at each program site was calculated by comparing the intake interview date and the discharge interview date. This is an estimate since the actual program intake date would have been earlier than the baseline interview date, but the program start date was not included in the interview data. Hill Health Center had an average 110.50 days length of stay, with a maximum of slightly under a full year (363 days). The Village had a high maximum number of days (329 days) and on average, 70.85 days of stay. CNV Help had a maximum of 366 days length of stay and an average of 71.34 days. On average, all the sites' average length of stay was 73.59 days (Table 11). However, people who were still in the program at the end of the project did not have a discharge interview, and length of stay was not calculated for these cases. It is therefore likely that the mean length of stay would be higher for all programs if all clients had been included.

Table 11. Days from Intake Interview to Discharge

Program Code	Mean # of days	Number of Participants	Std. Deviation	Minimum # of days	Maximum # of days	Median
HCC	110.57	14	98.62	1	363	80
CNV	71.34	41	72.93	3	366	50
Village	67.15	66	70.85	4	329	41.5
Total	73.60	121	75.70	1	366	48

9. Discharge Status

Figure 21 demonstrates the discharge status as reported by program sites. Discharge was considered the day the client stopped receiving medication assisted treatment. From the 121 discharges received, only 13 participants (10.7%) were reported as having completed the program successfully. Of the 108 participants (89.3%) who were terminated, reasons included: client left against staff advice with (5.0%) or without (14.0%) satisfactory progress, client involuntarily discharged due to non-participation (26.4%) or violation of rules (5.8%), client referred to another program with (3.3%) or without (12.4%) satisfactory progress, client incarcerated (3.3%), client had health issues (13.2%), client died (0.8%), or client moved (2.5%). Another 2.5% of the discharges did not specify the reason for discharge, only that the clients were terminated before completion. It should be noted that the discharge status does not include clients who were still participating in the program.



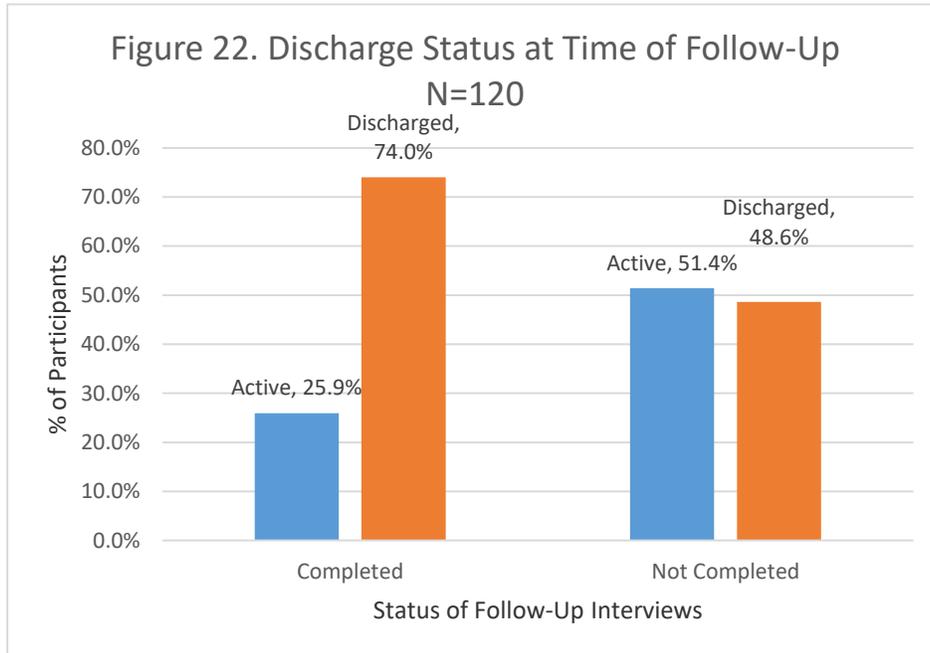
In addition to reporting the reason for discharge, program staff were asked to report on the number of days clients had received different services during their time in the program. Details on services from 278 discharges (121 interviews and 157 administrative discharges) are shown in Table 12. The most common services received were assessment, alcohol and drug testing, and treatment planning, respectively.

Table 12. Services Provided, reported at discharge (N=121)

Services Received	Number of participants who received this service	Percentage	Range of days received	Average # of days received
Assessment	120	99	1-1	1.0
Alcohol & Drug Testing	119	98	1-54	7.66
Treatment Planning	119	98	1-6	1.07
Screening	107	88	1-11	1.09

Group Counseling	97	80	1-221	25.48
Referral Treatment	91	75	1-1	1.0
Substance Abuse Education	91	75	1-221	26.81
Intensive outpatient	83	69	1-221	25.31
Case management	81	67	1-13	2.64
Pharmacological	77	64	1-27	6.06
Brief Treatment	76	63	1-31	2.96
Individual Counseling	75	62	1-12	2.68
Brief Intervention	68	56	1-1	1.0
Peer Coaching	37	31	1-7	2.89
Outpatient	36	30	1-221	29.28
Pre-Employment	29	24	1-11	2.62
Employment Coaching	27	22	1-11	2.85
Recovery Support	22	18	1-18	7.09
Relapse Prevention	16	13	1-23	5.94
Co-occurring	14	12	1-14	2.64
Information Referral	14	12	1-6	2.50
After Care	13	11	1-23	5.31
Medical Care	12	10	1-18	7.83
Recovery Coaching	12	10	1-6	3.42
Individual Coordination	11	9	1-9	2.09

Discharge Status at Time of 6-Month Follow-up: Figure 22 illustrates the discharge status at the time of follow-up. Participants were contacted for a 6-month interview whether they were still active in the program or not. From those who completed the follow-up interviews, 51.4% of participants were still receiving services, while 48.6% had been discharged. Among those who did not have a 6-month follow-up interview, 74.1% had been discharged from the programs, while 25.9% were still receiving services at the time of follow-up.



V. Conclusions

It is clear that the STR grant impacted many people in the state of Connecticut through the myriad programs it funded, ranging from increasing access to Medication Assisted Treatment, providing training to professionals and community members, supporting recovery efforts, expanding the availability of overdose reversal kits, and a large multi-media awareness campaign. The goals of the project were clearly met in terms of expanding all opioid-related service availability, with the goals of numbers of individuals served being met or exceeded. The demographic characteristics of the people served in treatment and recovery support programs generally reflected the characteristics of the overall state population and/or the substance use treatment population in CT. Some traditionally underrepresented groups (e.g. Hispanics) had larger than expected representation as service participants under STR, which is a welcome development in terms of healthcare access.

There were challenges to obtaining complete and accurate data collection, which is not unexpected for a complex project with so many different programs and agencies needing to report their activities and numbers served. In terms of the overall evaluation, systems were developed which provided a foundation for future programs and on-going data collection. There were particular challenges related to the additional GPRA interview sub-study. It was very difficult to implement an unexpected in-depth client interview protocol, especially without additional funding. Although it seemed that it would be most expedient to have the program staff conduct the baseline interviews, there were significant problems with data quality and completeness; especially in terms of having enough information for the evaluators to be able to reach clients for follow-up interviews. By the time the procedures were revised to have the research team conduct all the interviews and other study paperwork,

there was not enough time left in the project for the follow-up rate to be much improved. SAMHSA seems to generally require and appreciate the benefits of good data, but there is often a dearth of funding allocated to making it feasible to obtain high quality data.

STR funding did provide an excellent foundation for further interventions, and DMHAS was able to seamlessly transition many of the STR-funded programs into the next phase of federal opioid funding under the State Opioid Response (SOR) grant. SOR also has allowed for the continued expansion of services from prevention to recovery support to treatment in the state. Under STR, DMHAS was able to modify its databases to be able to better track opioid-related programs and client data on an on-going basis.

Despite the impact of the STR and SOR grants and all the programs funded under them, there is still a serious and even devastating need for more. Recently released data on overdoses in the state show an alarming increase in overdose deaths, the great majority seemingly due to fentanyl.²⁰ One can only wonder how much worse these numbers would have been without the programs that STR supported. Despite the increase in overdose deaths, the STR data seems to provide evidence of the beginning of a culture shift that has developed over the project period. Opioid prescriptions are down, there has been a large increase in Naloxone distribution, there have been many successful interventions through the burgeoning use of peer recovery support and coaching, the utilization of innovative approaches to reach people where they are, the dissemination of cutting edge trainings, as well as the state-level multimedia prevention efforts are all evidence of how the culture is shifting towards greater understanding, more availability of services, and fewer obstacles to getting help. The fact that many relevant data variables are now routinely being tracked by different agencies and shared with the public on a regular basis is also a very positive step. This helps to identify problems and patterns earlier, and makes it possible for DMHAS and others in the state to allocate their resources in an increasingly targeted way.

²⁰ National Institute on Drug Abuse (2019). Connecticut Opioid Summary (accessed Feb 25, 2020 at <https://www.drugabuse.gov/node/pdf/21950/connecticut-opioid-summary>)

Appendices

A.BGAS Treatment Template

III. Opioid STR Progress Reporting

Table III.B1: Number of Persons Served (Unduplicated count) for Opioid Use Disorder **Treatment Services**

Date:
 Provider:
 Provider Site:

Number of Persons Served (Unduplicated Count) for Opioid Use Disorder Treatment Services by Age, Sex and Race/Ethnicity																			
Age	Total	White		African American		Native Hawaiian / Other Pacific Islander		Asian		American Indian / Alaska Native		More than One Race		Unknown		Not Hispanic or Latino		Hispanic or Latino	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
17 and Under																			
18-24																			
25-44																			
45-64																			
65 and Over																			
Total																			
Pregnant Women																			

B.BGAS Recovery Services Template

III. Opioid STR Progress Reporting

Table III.B2: Number of Persons Served (Unduplicated count) for Opioid Use Disorder **Recovery Support Services**

Date:
 Provider:
 Provider Site:

Number of Persons Served (Unduplicated Count) for Opioid Use Disorder Recovery Services by Age, Sex and Race/Ethnicity																			
Age	Total	White		African American		Native Hawaiian / Other Pacific Islander		Asian		American Indian / Alaska Native		More than One Race		Unknown		Not Hispanic or Latino		Hispanic or Latino	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
17 and Under																			
18-24																			
25-44																			
45-64																			
65 and Over																			
Total																			
Pregnant Women																			

IV Recovery and Continuing Care

Table IV: Recovery / Continuing Care

Instructions

This table should be returned to DMHAS on the 10th of every month.
This table reflects the number of clients who were offered, received, and/or completed recovery and continuing services. If the provider provides services other than those listed, please indicate by selecting the "other" option, entering the # of clients, and defining the other recovery and continuing care services in a footnote below the table.
Providers should identify the number of clients who were offered, received, and/or completed recovery/continuing services for the current funding period.
Please report only new clients.
Please enter any descriptions or comments in a footnote below the table.

IV. Recovery / Continuing Care Services			
Table IV: Recovery / Continuing Care Services			
Date:			
	# of clients offered recovery / continuing care services	# of clients currently receiving recovery / continuing care services	# of clients who have completed recovery / continuing care services
Relapse Prevention			
Recovery Coaching, Peer Coaching or Mentoring			
Self-Help and Support Groups			
Recovery Housing			
Continuing Care			
Other (specify)*			
* Enter Source Name/s			
Case Management			

C.BGAS Prevention and Training Template

III. Opioid STR Progress Reporting			
Table III.D3: Non-Direct State Targeted Response to the Opioid Crisis-Training & Education Outcomes			
Instructions			
	Please return form to DMHAS by the 10th of each month.		
	Please list each training, it's title, it's date and the numbers of individuals trained separately.		
	This table identifies the types of training provided to professionals, peers, clinical personnel and prevention specialists involved in addressing the opioid crisis. Two categories of training are listed: Overdose Education and Naloxone Distribution and Prescribing Guidelines.		
	If the provider has done other types of trainings, please indicate by inputting data in the "All other training" button and provide a description of the other types of trainings provided in a footnote below the table.		
	Also, if there are other audiences for whom training of these types have been provided, please indicate this by listing the other audiences in the footnote text box below the table.		
	For Narcan/Naloxone distribution, also report number of overdose reversals at bottom of table, if known.		

III. Opioid STR Progress Reporting

Table III.D3: Non-Direct State Target Response to the Opioid Crisis-Training Outcomes

Date:

Agency:

Activity	Number of Individuals Trained		
	Overdose Education and Naloxone Distribution	Prescribing Guidelines	Other Training Describe in Footnote
8. Training and Education			
a. Physicians			
b. Physician's Assistants			
c. Nurse Practitioners			
d. Nurse (RN, LPN)			
e. Social Workers			
f. Addiction Counselors			
g. Peer Recovery Support Positions			
h. Prevention			
i. Other (describe)			
i.1 Firefighters			
i.2 Law enforcement			
i.3 Paramedic			
i.4 EMTs			
i.5 Emergency Medical Staff			
i.6 Pharmacists			
i.7 Harm Reduction Clinics			
i.8 Family Members			
i.9 Criminal Justice			
i.10 Schools			
i.10 Coalitions			
i.11 Community Groups			
i.12 Friends of OD Victims			
i.13 Military			
i.14 Train the Trainer			
i. 15 Other			

D. Interview and GPRA Training

State Targeted Response to the Opioid Crisis (STR) Program Client Interview Protocols/Data Entry Training For Program Staff

DMHAS Research Division



Welcome

Introductions

- ⦿ Name
- ⦿ Agency/Organization
- ⦿ Role/Responsibility within STR or agency

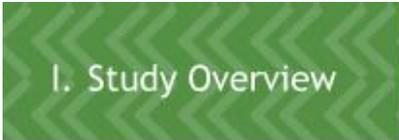
Overview of Evaluation Interviewer Training

- I. Study Overview
- II. Informed Consent Process
- III. Interviewer Expectations
- IV. Interviewer Guidelines
- V. Data Entry and Storage
- VI. Tracking

I. Study Overview

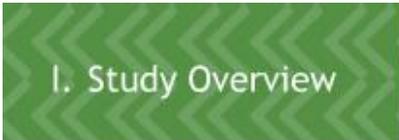
STR Study Overview

- ⦿ SAMHSA funding to support expansion of Medication Assisted Treatment (MAT) for 2 years
- ⦿ Three Program sites (CNV Help-Torrington, Hill Health Center- Ansonia, The Village-Hartford)
- ⦿ Total of 150 clients- 50 clients in Year 1, and 100 clients in Year 2



Purpose of STR Evaluation

This evaluation will help SAMHSA understand the types of services that are being supported using Opioid STR funding, the client-level impact from these services, and the successes and challenges that programs encounter in their efforts to combat the opioid epidemic.



Roles and Responsibilities

DMHAS Research Team

- ⦿ Provide general interviewing and GPRA support to provider sites
- ⦿ Upload GPRA interview data to SPARS online data platform
- ⦿ Enter and Store additional research forms
- ⦿ Year 2 Plan:
 - ⦿ Track participants and conduct follow-up interviews
 - ⦿ Enter GPRA data



Roles and Responsibilities

Program Staff

- ⦿ Human Subjects training
- ⦿ Contact and interact with study participants
- ⦿ Informed consent, including related forms
- ⦿ Conduct baseline (GPRA) interviews
- ⦿ Send study materials to Research Division



Informed Consent Process

- ⦿ Begin by introducing self and purpose of interview
- ⦿ Participation is voluntary and will not affect access to services
- ⦿ Separate release of information
- ⦿ Describe procedures—three interviews and sharing program data with evaluators
- ⦿ Give the participants the Research Division contact information for check-in calls after baseline.

II. Informed Consent Process



Informed Consent Process

- ⊙ Risks and Inconvenience—Minor. Questions may cause discomfort; privacy and confidentiality risks
- ⊙ Privacy and Confidentiality—Information will be protected & de-identified, but required to report imminent risk of harm to self or others
- ⊙ Ask if they have any questions
- ⊙ Signature and date
- ⊙ Give them a copy

II. Informed Consent Process



Study Forms -- Release of Information

- ⊙ The State of Connecticut/DMHAS Release of Protected Health Information Form allows researchers to access protected information for study
- ⊙ Express importance of this information for evaluation
- ⊙ Review each section
- ⊙ Initials, signature and date



Study Forms -- Referral form

- ⊙ Allows the UCONN/DMHAS Research Division staff to contact program participants for their follow-up appointments
- ⊙ If they decline, please note the reason and assess if they might be willing to be re-approached at a later time
- ⊙ If this permission is not received, program staff will be required to do the follow-up interviews



Study Forms -- Future Contact Form

- ⊙ An important part of the STR project is continued participation and future interviews
- ⊙ Future Contact Form (FCF)—helps us locate and contact participants
- ⊙ All info is kept confidential. GPRA data will be stored separately from personal information
- ⊙ It's very important to try to obtain as much information as possible- at least 2 personal contacts.



Interviewer Expectations

Expected Behavior	Guidelines
Professionalism	Maintain courteous and professional manner at all times
Preparation	Prepare well! Your preparation for the interview directly impacts the data's quality
Privacy	Make every effort to conduct interviews in private locations
Respect Confidentiality	Do not disclose information about the interview or the participant



Interviewer Expectations

Expected Behavior	Guidelines
Respect Participant's Time	You are asking participants for their time so be polite and prepared to explain
Tact	If you feel that a person is not ready to assist you, do not force them; offer to come back later
Friendly Disposition	Act as though you expect to receive friendly cooperation, open to all responses
Body Language	Maintain good eye contact and adopt appropriate body language



Interviewer Expectations

Expected Behavior	Guidelines
Pace of Interview	Don't rush the interview. Allow participant time to understand and answer each question
Patience	Be patient and polite at all times
Acceptance	No judgment of each participant's lifestyle and presentation of self
Appreciation	Thank each participant for their help and cooperation



Activity: Ethical Interactions

Read the case study presented

1. How would you address this situation?
2. Should you continue with the interview?
3. Should you act on your suspicion that Janice is under the influence of drugs or alcohol?
4. Should you report what Janice has shared about her suicidal ideations?

III. Interviewer Expectations



Activity: Ethical Interactions

Janice is an STR participant and has been receiving support for both her housing situation and her heroin addiction. You have scheduled an appointment with Janice and are meeting her at a public library to conduct an interview. As you begin describing the study to Janice, she begins to cry and tell you about her depression and thoughts of suicide. You also suspect Janice may be under the influence of drugs or alcohol.

How do you respond?

III. Interviewer Expectations



Data Collection

Scheduling a Participant Interview

- Ⓞ Schedule interview as soon as possible. Baseline GPRA interviews should be completed within 4 days of program enrollment/intake*
- Ⓞ Introduce yourself, explain why you are contacting the participant, answer any questions they may have
- Ⓞ Leave an appointment card with participant with date and time of interview
- Ⓞ **Confidentiality:** Do not state study name/purpose on phone call if someone other than participant answers
- Ⓞ **Be Persistent!** Leave a message (name/contact #), vary time & day of calling

III. Interviewer Expectations

Data Collection

Scheduling a Participant Interview

- ⊙ Schedule interview at a convenient time and location:
 - ⊙ Interview in a safe, comfortable, private setting (office, participant's home, local libraries, or elsewhere in the community)
 - ⊙ Less private locations (restaurants) may be used if no other option but try to optimize privacy
 - ⊙ If in a hospital or institutional setting, interview in participant's room (if staff allows) or ask for another available location where you can maintain privacy
- ⊙ A co-worker can accompany you to locations/situations you feel unsafe going into alone (Check on participant's past/current behavior prior to interview date)
- ⊙ Check for timeframe to complete interviews

III. Interviewer Expectations

Data Collection

What to bring to an interview

- ⊙ Complete interview packet
- ⊙ Response cards
- ⊙ Pens/pencils
- ⊙ Refreshments as needed
- ⊙ Cell phone (in case of emergency)
- ⊙ Clinical Supervisor Coverage Plan, or other crisis plan

III. Interviewer Expectations

Data Collection

Conducting the Interview

- ⦿ Follow interview guide
- ⦿ Be familiar with data collection form prior to beginning interview
- ⦿ Ensure participant understands what each question is asking
- ⦿ Encourage participant to ask questions if they are unsure
- ⦿ If you must stop to allow participant a break, try to stop at a section ending

III. Interviewer Expectations

Data Collection

Encouraging Participation in the Interview

- ⦿ Remind Participants:
 - ⦿ The interview may be completed at any time or place convenient for them
 - ⦿ Participation helps us know whether services they are receiving are really helping
 - ⦿ Project results will help in planning future services for persons with similar needs
 - ⦿ Most respondents enjoy doing this interview
 - ⦿ It is very important that we get this information

Data Collection

Encouraging Participation in the Interview

- ⦿ If participant is still hesitant to participate...
 - ⦿ Try to terminate conversation before he or she adamantly refuses
 - ⦿ Say you will call him/her back another time that is more convenient
- ⦿ If participant says that he or she is too tired or busy for an interview...
 - ⦿ Suggest starting the interview and stopping when participant says so

Activity: Data Collection

Read the case study presented

1. How would you address this situation?
2. What would you say to Joe?
3. Should you continue to encourage him to participate?
4. What new approaches would you take to try to include Joe in the evaluation?

Activity: Data Collection

You have contacted Joe, a 55-year-old man who is an armed forces veteran and has been staying between emergency shelters and a residential substance abuse treatment program for the last three years. Joe is very private and likes to keep to himself. When you ask Joe if he would be willing to participate in an interview, he starts to become angry with you and questions why you have contacted him.

How do you respond?

Study Data Collection

What to Do About “No Shows” and Refusals to Participate

- Ⓞ Contact participant if he/she hasn't arrived after a reasonable amount of time
- Ⓞ If you are unable to contact participant, wait as long as you can
- Ⓞ If participant cannot complete the interview at the scheduled time, try to reschedule within the interview window period

Study Data Collection

What to Do About “No Shows” and Refusals to Participate

- ⦿ Participants have the right to refuse an interview
- ⦿ When a participant refuses, record a concise statement with details about refusal
- ⦿ Bring refusals to the attention of the evaluation coordinator
- ⦿ Except for adamant refusals, attempts should be made to encourage participation

Data Collection

Maintaining Confidentiality During Interview

- ⦿ Maintaining confidentiality in less private locations
 - ⦿ Allow participants to respond with numbers corresponding to their choices (1=strongly agree)
 - ⦿ Read question and allow participants to circle their answer

III. Interviewer Expectations



Data Collection

Maintaining Confidentiality During Interview

- ⦿ For family members/friends/guests who insist on joining the interview:
 - ⦿ Explain study protocol for private interviews
 - ⦿ Ask them to return after the interview, mentioning about how long the interview will take
 - ⦿ If participant or family member feels help may be needed during interview, suggest an accessible location for family member to wait

IV. Interviewer Guidelines



Interview Guidelines: Data Quality Depends On YOU

Topic	Guidelines
Reading Questions	Questions should be read: <ul style="list-style-type: none">• As they are written• Slowly and clearly, emphasizing key words in bold• In a pleasant voice that conveys interest and professionalism• Entirely to make sure the participant has heard it completely
Read All Options	All options must be read to the participant except for Don't Know/Don't Remember, Refused, or Other
Clarifying Questions	Clarify questions for participants and probe for responses when information is unclear or incomplete
Self-Reporting Responses	All responses are self-reported, and accepted, even if you have official documentation that states otherwise



Interview Guidelines: Data Quality Depends On YOU

Topic	Guidelines
Avoid Biasing Responses	Ask questions according to guidelines given to avoid biased answers and ensure comparability
Right or Wrong Responses	Point out that there are no right or wrong answers; the interview is not a test
Making Assumptions	Do not make assumptions about the participants' answers with comments such as "I know this probably doesn't apply to you, but..." This practice may prevent accurate and unbiased information



Overview of the GPRA Data Collection Instrument

- ⦿ Data collection starts at entry into service
- ⦿ Standardized method of data entry and reporting
- ⦿ Used to track performance measures
- ⦿ GPRA covers several client measures by presenting questions answered by clients in an interview
- ⦿ GPRA interview must be completed same day and should be conducted face-to-face with client



GPRA Data Collection

Guidelines and Data Collection Points

- ⦿ GPRA Instrument should be administered to clients receiving SAMHSA-funded services at:
 - ⦿ Baseline
 - ⦿ Six-months
 - ⦿ Discharge

Target baseline and
reassessment rate = 100%

Minimum reassessment
rate = 80%



GPRA Data Collection

GPRA Reassessment Window Period

- ⦿ Reassessment window period is one month before and two months after the 6-month anniversary of the baseline interview date
- ⦿ If interview is not completed successfully within the window period, it will not count towards program's reassessment rate



IV. Interviewer
Guidelines



GPRA Data Collection Instrument

SAMHSA's GPRA Section Guide for Data Collection

- ⦿ Section A: Record Management, Planned Services, Demographics
- ⦿ Section B: Drug and Alcohol Use
- ⦿ Section C: Family and Living Conditions
- ⦿ Section D: Education and Employment
- ⦿ Section E: Omitted



IV. Interviewer
Guidelines



GPRA Data Collection Instrument

SAMHSA's GPRA Section Guide for Data Collection

- ⦿ Section F: Mental and Physical Health Problems and Treatment/Recovery
- ⦿ Section G: Social Connectedness
- ⦿ Section I: Follow-up Status
- ⦿ Section J: Discharge Status
- ⦿ Section K: Services Received
- ⦿ Additional information:
<https://spars.samhsa.gov/content/data-collection-tool-resources>



Data Entry and Storage Protocol Options

- ⦿ Data entry options: Paper, Excel spreadsheet, online database, other?
- ⦿ Send paperwork to Research Division: fax, mail, other?
- ⦿ Assigning participant ID codes



Tracking Strategies

- ⦿ The Future Contact Form is the most important tool in our tracking success!



Data Entry and Storage Protocol Options

- ⦿ Data entry options: Paper, Excel spreadsheet, online database, other?
- ⦿ Send paperwork to Research Division: fax, mail, other?
- ⦿ Assigning participant ID codes



Contact Sheet

CABHI/CTIP CONTACT SHEET

Participant name: _____ Study: _____ Study ID: _____
 Month/Year: _____ Current Interview Window: _____

Participant #	Phone#1	Date & Time	Remarks/Outcome
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	

Designer/Date: 1 Participant phone# 2 Participant date 3 Participant notes 4 Contact #11
 5 Contact#2 phone# 6 Contact#3 date 7 Contact#4 notes 8 Contact#5 notes
 9 Agency web 10 CCR# Records 11 Date entered 12 LITH/MLC
 13 Modified date 14 Version 15 Study ID 16 Study ID# 17 Study ID# 18

CABHI/CTIP CONTACT SHEET

Participant name: _____ Study: _____ Study ID: _____
 Month/Year: _____ Current Interview Window: _____

Participant #	Phone#1	Date & Time	Remarks/Outcome
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	
1 2 3 4	1 2 3 4 5 6	m t w t f s sun	
1 2 3 4	1 2 3 4 5 6	am/pm	



Questions or Comments?

Thank you for your time!