2021

RCORP Planning Project Needs Assessment & Gap Analysis Report

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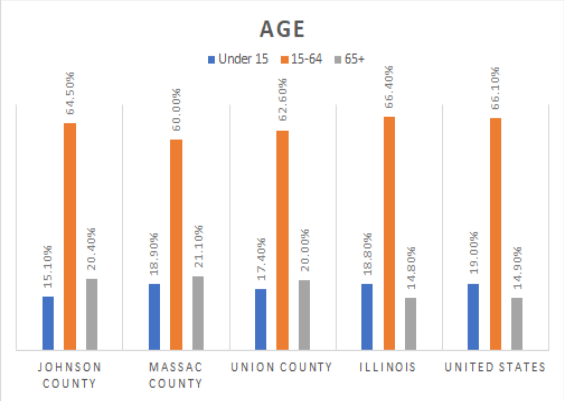
Introduction/Background Information

The Union, Massac and Johnson counties are in the southern third of the state of Illinois also known as “Little Egypt”, bordered by the Mississippi river and its connecting Missouri river to the west, and the Ohio river to the east and south with the Wabash as tributary. Rural Health Inc. (RHI) is in Anna, IL 120 miles northwest of St. Louis, MO. The geographical areas addressed in the need assessment/gap analysis were Union, Johnson, and Massac counties in extreme southern Illinois. The Consortium aims to develop a plan to reduce morbidity and mortality resulting from Substance Use Disorder (SUD) and Opioid Use Disorder (OUD).

The area is made up of rolling hills, two-lane highways and gravel roads, farmland, lakes, forest, wetlands, and rivers. This is a socioeconomic depressed region, and transportation difficulties arise for many people. There is no mass public transportation system such as busses or trains due to the rural nature of the region. Primary sources of income for the population include vocational jobs, construction trades, agriculture, education, healthcare, and social security secondary to disability.

As per the 2019 census, the three counties consisted of a population of approximately 43,000 people. The three above counties are primarily in rural areas characterized by low population densities, isolated households, and income and educational levels below the state and national average. The area is a medically underserved area and a designated health provider shortage area for mental health workforce. OUD and methamphetamine use have been steadily increasing in the three counties impeding its growth and compounding its existing problem of poverty, lack of opportunities and high incidences of child abuse. The communities have not always struggled economically. The 1980s brought regulation on the coal industry and industrialization of our country to move toward cleaner energy courses. Eventually, the closing of many local coal mines contributed to economic struggles. In the 1930’s, the communities experienced devastating floods from the Wabash and Ohio Rivers. During the Great Depression, many farmers and citizens lost everything. However, the population remained resilient.

Important Demographics: Union County consists of 91% non-Hispanic white population, followed by Hispanic or Latino 5.1%, and African American 1.4%. 62.2% of the Union County population falls in the age range of 15-64, the most vulnerable subgroup to opioid and other addictions. 20% of the population is 65+ and 17.4% are below 15.



bachelor's degree and reported to have some college experiences. 16% of the residents have a reported disability compared to 8.5% in the state and 10.3% in the nation. Massac County consists of majority non-Hispanic white (88.6%), followed by African American (6.2%), Hispanic (3.2%). 60% of Massac County's population falls between the age group of 15-64, most vulnerable for opioid overdose as per literature.

22% of the population has received a 21.1% of the population is 65 and older and 18.9% is under 15 years old. Johnson County - Johnson County has 84.5% non-Hispanic white population, 11.6% African Americans, and 3.2% Hispanic, and 0.4% others. 64.5% of Johnson County's population belong to the age group of 15-64. While 20.4% are 65 and older and 15.1% are under 15 years old. 82.2% of Johnson County's population has high school diploma while 16.5% received a bachelor's degree and above which is lower than the state of Illinois (34%) and the U.S. (31%).

Overdose Deaths in the Project Area: The Illinois Department of Public Health (IDPH) reports that overdose deaths attributed to opioid use have steadily increased since 2012 accounting for a larger proportion of total drug abuse deaths. The opioid overdose deaths in Johnson County are 29/100000 people between the ages of 15-64 which is higher than the state (20.6) and the nation (18.3). The drug overdose mortality rate in Massac County between the age group of 15-64 is 27.1 deaths per 100000 population which is higher than the state at 26/100000. Drug overdose mortality rate in Union County is 22.5 deaths per 100000 population for those age 15-64. Union County is considered a health professional shortage area for both mental health and primary care providers. The IDPH further reports that a majority of the reported drug and heroin overdose in Illinois are male, white and middle-aged (25-64) individuals. More than half of the reported overdose fatalities were in the age group of 25-44. The IDPH data further show that the southern region consists of almost 20% of the state's overdose deaths and 50% of the overdose deaths in southern Illinois has been attributed to opioid abuse. The Table 1 below show the crude death rate for drug poisoning by the county.

Table. 1 Crude Death Rates for Drug Poisoning by County 2018

County	Model-based Death Rate	Lower	Upper	Year	Population
Massac County, IL	24.48	16.95	35.12	2018	14,080
Johnson County, IL	23.54	16.22	33.97	2018	12,456
Union County, IL	21.09	14.63	30.20	2018	16,841

Prevalence of Drug Abuse in the Project Area: Inpatient hospitalizations for SUD/OUD are 78 per 100000 for Union, 50 per 100000 for Johnson, and 32 per 100000 for Massac County. As the Table 3 below shows, the baseline data for alcohol abuse in the 3 counties are 64% for Union,

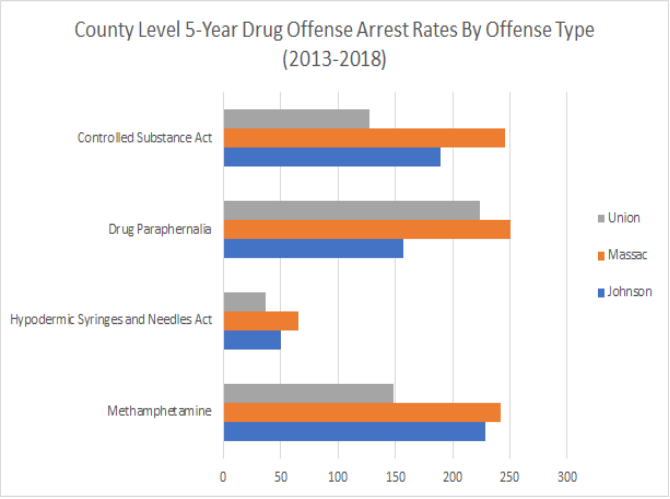
73% for Johnson, and 83% for Massac which are significantly higher than the state of Illinois (54%). The baseline data for psychostimulants are 1.5 for Union 1.8 for Johnson and 1.1 Massac which are in the ballpark of the state of Illinois (1.1%). However, the baseline data for opioids abuse that include heroin, prescription opioid, and synthetic opioids such as fentanyl and its analogs, is significantly high Union 23 Johnson 21 Massac 19 compared to the state of Illinois which is 16%. Methamphetamine abuse in the project area are Union 4.5, Johnson 3.5, and Massac 3.7% which are higher than the state of Illinois at 3.2%. In this application, we have identified methamphetamine as an additional SUD that we will focus on as we plan to develop a community wide responsive infrastructure to address OUD.

Table 3. SUD/OUD Prevalence

Measure	Data for Target Population			Comparative Data	
	Union County	Johnson County	Massac County	State	Data Source
SUD/OUD Hospitalizations (Inpatient)	78	50	32		IDPH, 2014
Prevalence or incidence of SUD by type					
Alcohol	64%	73%	83.0%	54%	
Psychostimulants	1.5%	1.8%	1.1%	1.4%	
Opioids	23%	21%	19	16	IDASA, 2018
Methamphetamine	4.5	3.5	3.7	3.2	

*Illinois division of Alcohol and Substance Abuse

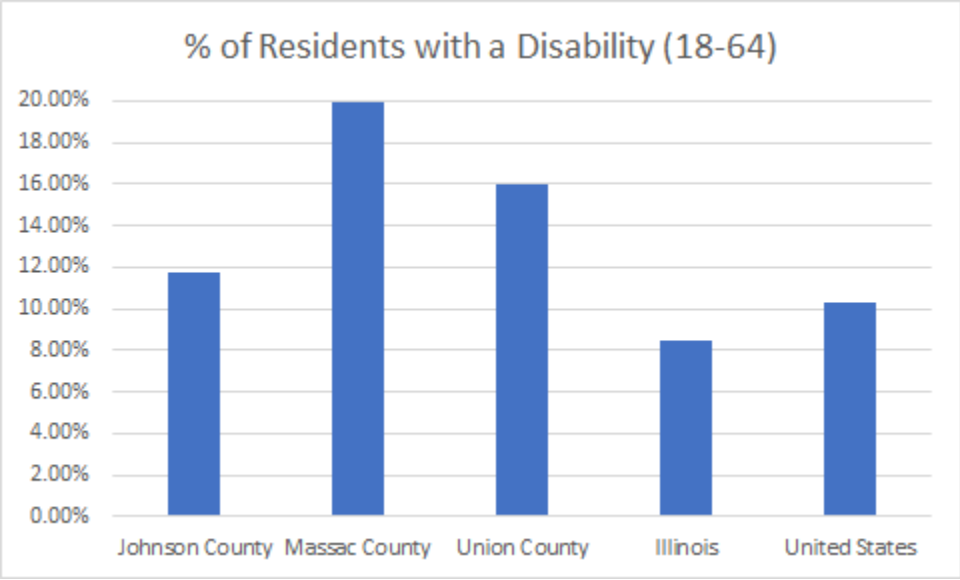
Drug Related Arrest The project area experiences higher rates of all crime including violent crime than the rest of the state. The 2018 arrest rates for sexual assault, aggravated assault, arson, burglary, larceny, theft, motor vehicle theft, and robbery had the Union and Massac Counties with higher arrest rates than the state of Illinois and the region. The project area communities have experiences violence over a decade of higher-than-average rates of direct or/and indirect forms of abuse and neglect in multiple generations of families.



The OUD and methamphetamine crisis, however, posed new challenges to the population of these counties facing significant odds and limited resources to overcome them. The arrest rates for methamphetamine in Massac and Union Counties are above the state and regional averages (2018), while Johnson is below. In 2018, arrest rates for possession for

drug paraphernalia were above the state and regional averages for Massac and Union Counties, but below for Johnson County.

Health in the Project Area: Data from the county health ranking and roadmaps (2020) reveal that residents may have an inaccurate perception of their community's health status. County health outcome rankings indicate that all the 3 counties rank in the lowest 3rd of Illinois's 102 counties: Johnson county 76, Union County 84, and Massac County 95 (SIH, 2018). The health factor ranking of the counties indicate Massac County to be at 102, Johnson at 55, and Union at 74 (Southern 7, 2020). According to a Healthy Southern Illinois Delta Network assessment of Behavioral Risk Factor Surveillance (BRFS) Data, the 3 counties rank high in risk factors attributed to chronic illnesses and have high rates of substance use disorder, including misuse of tobacco consumption (Southern 7, 2020). The service area has high incidence rates of overweight/obesity, diabetes, and cardiovascular disease. These issues cause multiple co-morbidities when they couple with OUD-SUD issues. The community needs assessment report acknowledges that rural geography, socioeconomic status, and educational attainment play a major role in determining health status of the three counties. The Illinois Behavioral Risk Factor Surveillance System Data (2018) show that even if physical (23%) and mental (22%) health of the population is compromised, 43.7% of the study participants reported excellent to good outlook to their general health which can be a protective factor. The population still perceives access to healthcare to be a challenge despite the local Department of Health Services (DHS) offices linking more clientele to medical providers. The project area has 1 Federally Qualified Health Center (FQHC): Rural Health, Inc. (RHI) a current recipient of the RCORP planning grant having clinics in Union, Johnson, and Massac Counties. The local health department data also show that there is a high rate of pregnant women (60% and above) in their first trimester availing the benefits of the Women Infant and Children (WIC) program (2018). Almost 20% of Massac County's population has reported disability status which is much higher than the state of Illinois (8.5) and the U.S. (10.3). Only 13.2% of the population has bachelor's degree or some college experience.



A. Vision/Mission/Planning Values

Rural Health's mission is to provide quality services to all patients in need of health care while being committed to the overall health and well-being of the underserved. Rural Health's vision is to be viewed as the premier health care leader in southern Illinois through the quality of care, the comprehensiveness of services, and through a caring environment. Rural Health values services free of discrimination, the privacy/security of patients, caring for the unserved and underserved populations, loyal, caring staff, governance support, growth of the service delivery system, improvement of health care, patient responsibilities, and affordable health care.

Although not currently formal consortium members, community stakeholders (i.e. Sheriff's Department, State's Attorney, First Responders, county commissioners, etc.) have provided their support and been given opportunities to provide input to address the mission. Likewise, Rural Health, Inc. and its consortium have recognized the need for local data tracking in order to develop specific, data-informed strategic, workforce, and sustainability plans. As a whole, the consortium aimed to give the community an opportunity to provide their input in the needs assessment. Throughout this process, the community has been informed of the purpose of the data-gathering and how it will be utilized to demonstrate the need for resources and services brought to the area. Rural Health, Inc. and its consortium values transparency with the community in order to demonstrate integrity as well as build buy-in and understanding of the efforts being put forth to build strategic systems to address community needs. Additionally, there is a value of equal distribution of resources in that everyone in the county should be provided the opportunity for adequate education and SUD/OUD treatment

As lead agency and the primary community behavioral health agency, Rural Health, Inc.'s vision is to set into motion a systematic change within the county that will create a solid foundation and culture of recovery. In order to achieve the fundamental internal changes within multiple entities, open communication and education on being trauma-informed and reducing SUD/OUD related stigma are essential elements to fulfill the mission. With the consortium and community stakeholders' support, expertise, and participation, Rural Health, Inc. hopes to build a strong sense of community that will empower the residents to seek out treatment and recovery from SUD/OUD. Lastly, excellence is valued through the building of skills and the commitment in accomplishing the RCORP mission through the successful completion of set benchmarks

B. Needs Assessment Methodologies

The methodology of this needs assessment study relies on a unified public health framework known as a Cascade of Care that could use feedback from various stakeholders from a project area and improve system level practice and treatment outcomes in response to addressing the opioid use disorder (OUD). The Cascade of Care framework informs the methodology to focus on collecting data based on the progressive stages that a typical PWUD undergo a recovery process. A PWUD usually come across prevention efforts, get engage in care, initiate medication for OUD, find behavioral health support and other peer support to keep receiving

services (retention) and finally, over a period of time, experience remission (recovery). This trajectory is often compromised by confounding variables like existence of other drugs along with opioid, in the case of this project, meth has been identified as a polydrug along with opioid among the PWUD. The Cascade of Care framework informed what data would be collected and focused on so that interrelation of the stages of a recovery focused community response could be developed. Data for this needs assessment report has been gathered using the following means: a) reviewing existing community resources, b) repurposed secondary data from national, regional and local sources, c) purposed quantitative survey data collected from the providers of treatment and recovery services in the project area, d) purposed quantitative survey data collected from persons in recovery, persons who use drugs and their family members residing in the project area, e) key informant interviews with a person in remission, two MAT medical providers, child welfare administrators serving the counties in the project area, and finally Five focus groups were conducted from different stakeholders to capture multiple perspectives regarding the relationship between barriers and challenges to receiving treatment for substance use disorder (SUD) and the supposed solution to the problem. The details about the focus groups are given below.

I. Focus group with 2 individuals in recovery
II. Focus group with a multidisciplinary group of providers to persons with opioid and meth addiction
III. Focus group with child welfare workforce working with families in the project area
IV. Focus group with child protective services administrators working in the project area
V. Focus group with the representatives of neighboring Kentucky's Targeted Assessment Program (TAP) that work with substance use issues of parents whose children have been referred to the child protective services

Table 3 Provider Focus Group Participant Description:

Provider's Profession	Gender	County Served	Years of Experience
Nurse Practitioner in Behavioral Health	Male	Union	4 years
Nurse Practitioner in Behavioral Health	Female	Massac, Johnson, Union	2 years
Physician's Assistant in Behavioral Health	Male	Union, Johnson	1 year
Masters in Social Work and CADC-MAT Program	Male	Massac, Union	2 years, 8 yrs previous experience at Gateway
LCSW-individual counseling	Female	Union	2 years

Both the provider survey and the focus group had representation from primary health providers, substance use providers, recovery providers, and prevention providers. Community Health Assessment data has been used from the public health department serving the three counties in the project area knowns as Southern 7. Similarly, a non-profit hospital chain serving the project area known as Southern Illinois Healthcare (SIH). Focus group and keynote interview data was collected from local child welfare representatives and support groups ran by the local faith-based initiatives. The study had IRB approval from the Southern Illinois University Carbondale. Table 4 below lists all the organizations in the consortiums that helped recruit participants for the data collection.

Table 4. Community Members and Stakeholders Participated in Data Collection

	Organization Name or Individual Descriptor
1.	Rural Health Inc. Anna
2.	The Centerstone Fellowship House, Union County, IL
3.	3 Person in Recovery residing in the project area
4.	The Sheriff's office in Union County
5.	Center for Rural Health and Social Development, Southern Illinois University, School of Medicine, Carbondale, IL
6.	Children Mental Health Resource Network, Anna IL
7.	Stress and Trauma Treatment Center, Eldorado, IL
8.	Arrowleaf, Johnson County, IL
9.	3 Physicians providing harm reduction services
10.	Union County Counseling
11.	Local Faith-Based Group
12.	Southern 7, Public Health Department
13.	Persons in Recovery from the project area
14.	Person Who Use Drugs from the project area

`Since stigma related to opioid and meth used disorders run high in the project area, an effort has been made to include voices from stakeholders who are both champions and skeptics of harm reduction treatment approaches. These multiple voices have added to the rich tapestry to information to identify strengths, weaknesses, trends and opportunities regarding the intersections of opioid and meth addiction and also their impact on the family and children in particular. A pathway to explore the relationship of parental substance use on children, when it came to them being referred to the child protective services and placed in the state's custody has been explored in this report.

The survey to the persons in recovery, PWUD and their family had 76 items and asking questions about drug choices, their usage patterns, impact on children and road to recovery. The first survey would take about 15 minutes to complete. A non-probability purposive sample was used to recruit about 110 respondents to fill out the survey. A majority of the respondents to the survey had self-described themselves as person in recovery. Due to COVID 19, all the data has been collected online using online survey tools such as Qualtrics for the quantitative part of the survey and Zoom for qualitative surveys. The Table 2 below provides an outline of

the demographics of the participants to the survey. A majority of the respondents fall in the age group (25-45) that correspond with the literature to be the most vulnerable to drug abuse in the rural settings. The racial configuration also reflects the racial configuration of the project area. 7% of respondents became pregnant in the past 12 months. 29% of respondents are currently receiving counseling services. 53% of respondents have children under the age of 18 living in their home. 85% of respondents were either concerned or very concerned about opioid use in their community, and the same was true regarding meth use for 89% of respondents. A majority of the respondents are persons in recovery and family members of persons with SUD.

Table 5. PWUD/PIR Survey

Demographics		
	Percentage	**Count**
Gender (104)		
Female	30.77%	32
Male	69.23%	72
Age (104)		
12-24	5.77%	6
25-45	63.46%	66
46-65	26.92%	28
65+	3.85%	4
Race/Ethnicity (104)		
White	92.31%	96
Black/African American	3.85%	4
Hispanic/Latinx	3.85%	4
Education Completed (104)		
Some high school	2.88%	3
Completed high school/GED	44.23%	46
Business/Technical certificate degree	10.58%	11
Associate degree	14.42%	15
Bachelor's degree	15.38%	16
Master's degree	12.50%	13

A second survey were mostly from the substance use providers located in the project area three counties. The second survey also employed a purposive sampling technique to recruit respondents. The consortium members had used their own organizational network to reach out to providers, finally about 43 providers had responded to the survey.

Table 6. Provider Survey Demographics		
	Percentage	**Count**
Gender (43)		
Male	9.30%	4
Female	88.37%	38
Transgender	2.33%	1
Age (42)		
18-24	4.76%	2
25-45	64.29%	27
46-65	26.19%	11
65+	4.76%	2
Education Completed (42)		
Some high school	0.00%	0
Completed high school/GED	7.14%	3
Business/Technical certificate degree	16.67%	7
Associate degree	16.67%	7
Bachelor's degree	4.76%	2
Master's degree	33.33%	14
Doctoral degree	7.14%	3
Professional Degree	14.29%	6
Occupation (41)		
Medical healthcare provider (non-physician)	9.76%	4
Behavioral or mental healthcare provider	2.44%	1
Social service provider	2.44%	1
Physician	9.76%	4
Substance use treatment provider	4.88%	2
Substance use prevention provider	0.00%	0
Public health or health department professional	0.00%	0
Social Worker	17.07%	7
Nurse	48.78%	20
Other	4.88%	2

Quantitative data from the two surveys were analyzed using Microsoft Excel, and key descriptive and explanatory analysis have informed this report. Moreover, the qualitative data has been scanned for both content and thematic analysis. Both the quantitative and qualitative

data from both purposed and repurposed sources have been triangulated to find unison voices when it came to identifying assets, gaps, trends and opportunities in the project area. Both the primary and secondary data have been reported below in the results section below spread across in different subheading catering to the various stages of services as specified by the Cascade of Care framework. The qualitative surveys were not recorded on Zoom, rather manual note taking was employed to gather relevant information and quotations for the qualitative data. Thematic and content analysis had been carried out of the discussion transcripts.

D. Overview of Results/Findings

Polysubstance of Opioid and Meth use in the Project Area

As noted above, the morbidity and mortality resulting from Opioid Use Disorder (OUD) is on the rise in the project area. Methamphetamine has seen a steady increase in rural southern Illinois. In a 2017 National Drug Threat Assessment Survey (NDTAS) almost 30% of responding law enforcement agencies in the project area reported methamphetamine as the greatest drug threat second to heroin. This claim was supported by Illinois Criminal Justice Information Authority (ICJIA) in 2017 which found that heroin, prescription drugs, and methamphetamine were the top drug threats in the project area as well as the rural southern Illinois region. According to recent ICJIA report, methamphetamine lab seizures by law enforcement in the project area have begun to increase since 2018. An analysis of 2018 Adult Redeploy Illinois (ARI) data found indications of methamphetamine use have increased 26%. The emphasis of existing federal funding in the region focused on OUD and not on additional SUDs such as methamphetamine. Therefore, it is important to include other SUDs and their moderating effect in amplifying the negative impact of OUD in a certain area. This planning grant provides the opportunity to include the meth phenomena in the future response to address the OUD problem.

33% of the respondents of the PWUD/PIR survey said they would inject drugs every 1-4 days. 50% of respondents said they would use 3 or more times a day. The most common drugs used by respondents in the past 3 months were meth by itself (5), opiate medications (5), benzodiazepines (4), and heroin by itself (3). The following substances were reportedly used by 2 respondents each within the past 3 months: meth and heroin together (goofball), fentanyl, fentanyl contaminated meth, and cocaine. A few others reported marijuana use. Opiate medication was the drug of choice among 30% of respondents. 94% reported that it is easy to obtain drugs in the project area, and 17 respondents reported they had been prescribed opioid medication in the past 3 years that they didn't feel they needed.

About 28% believed that people mix opioid and meth to help themselves better deal with withdrawal symptoms. 24% believed people use prescription opioid/heroin/fentanyl to feel good and get high, while 22% believed these substances were used primarily to relieve pain. As for reasons why people use methamphetamine, 34% believed it was to feel good and get high, 20% thought it was to avoid the feeling one feels if it is not taken, 17% felt methamphetamine is used to experiment and see what it is like, and 10% believed it was to increase or decrease the effects of another drug. As for drug use in general, 65 respondents thought people used drugs because they want to get high, 60 thought it was because people hang out in bad circles and because of influence from friends, 52 thought it was to help cope

with depression, 47 believed it was to help cope with anxiety, and 38 thought it was because they grow up with a family member using.

Polysubstance use is a common phenomenon in the project area. In the provider survey conducted for this need assessment. A majority of the providers (65%) were most concerned with the mixing of opioid and meth in the communities they serve, followed by the 20% whose primary concern was meth misuse and the 7% with a primary concern of opioid misuse. 85% of the providers surveyed had come across clients taking opioid and meth together, and 84% thought the patients they treat for opioid addiction also have cooccurring disorder of meth misuse. 57% believed mixing the two substances is very common, and 25% felt it was somewhat common. 25% of the providers reported withholding services from opioid clients that also misuse methamphetamine. 74% of providers believe that meth misuse pose the greatest threat to the health of people within the project area, and only 26% believe that opioids pose the greatest threat to people's health.

Outbreaks of HIV, HCV and other sexually transmitted diseases (STD) in rural areas of the Midwest have been associated with syringe-sharing among people who inject drugs such as heroin and other opioids (PWID). Illinois is the third highest state in percent increase in death rates involving synthetic opiates. The southernmost 16 counties of Illinois comprise the Illinois Delta Region (IDR) and share many of the characteristics of rural areas that have experienced recent HIV epidemics. In order to develop effective means of disease prevention and treatment we need a deeper understanding of the context of injection drug use in rural southern IL, including community characteristics, circumstances for high-risk injection practices, and accessibility to health-related resources. No project specific data is currently available on the injection drug use.

Accessibility and Availability of Services

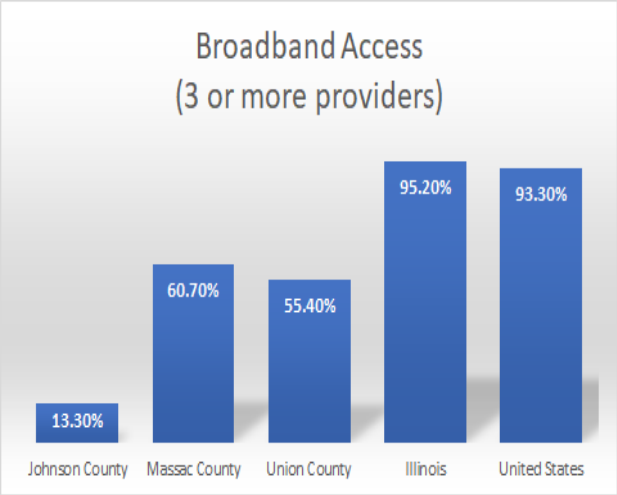
Access to services in the project area come with challenges. PWUD/PIR survey show 40% of respondents in the project area reported food insecurity (worried food would run out before they got money to buy more) for at least some of the time over the past year. About 52% reported at least some difficulty paying for the basics like food, housing, medical care, and heating. About 87% of respondents reported having internet connection at home, and 98% reported internet access from their phones. 38% reported completing doctor appointments through their computer or phone, 31% had used said technology to get a prescription filled, and 15% had talked to a therapist or counselor over computer or phone. Health insurance plays an important role in access to treatment services. Due to poverty and unemployment PWUD often have no insurance or are under-insured. 5 respondents developed an abscess or skin infection/cellulitis over the past year, and 4 had been diagnosed at some point with Hepatitis C. 48% of respondents had private insurance, and 32% had Medicaid. 72% had doctors they could go to more medical care over the past 12 months. 96% Provider Survey respondents reported that patients seeking services from their organizations experience short wait times, if any at all, and 89% thought their organizations had good referral networks

A local hospital community assessment (SIH, 2018) report reflecting the healthcare needs of the three counties, Union, Johnson, and Massac between 2015 and 2018 show that these three counties fall under the region's top four health problem areas with highest risk factors for substance use disorders. The community needs assessment study of SIH further

show that about 17.8% of the adult population in the region are not able to fill a prescription due to cost, about 15% report not being able to go to a doctor due to cost concerns, and around 14.8% reported that they have difficulty in making healthcare decisions.

Covid-19 Impact on Accessibility: The onset of the Covid 19 pandemic has resulted in a new accessibility challenge for the residents of the project area. Telehealth services and telecommute became the overnight norm for receiving services and participate in treatment groups. Accessing to the internet through either a broadband connected phone or computer devices became an overnight norm. Broadband connectivity as defined by a region having 3 or more internet service providers is much lower (13.3%) compared to the state of Illinois (95.2%) and the U.S. (93.3%). Since the beginning of the pandemic, telehealth services have been relied to provide prevention, treatment and recovery services to PWUD in the project area. Internet broadband connectivity became in important infrastructure to provide services. 60.7% for Massac County compared to 95.2% for the state and 93.3% for the nation. Due to low connectivity, Massac County is known as a digital distress area. Union County falls in the digital distress category and broadband accessibility in the area, which is defined by the presence of 3 or more providers in the region, is only 55.4% which is significantly lower than the state 95.2% and the nation 93.3%.

Figure 12. Broadband Connectivity in the Project Area



Johnson County falls under a health professional shortage area for both primary care and mental health care. There is no community mental health center located in the county. There is only 1 mental health facility and 3 substance use facilities.

Prevention

Preventing disease before it starts is an important part of helping people live longer, healthier and better quality lives. Improved preventative care also helps avoid unnecessary healthcare and helps reduce costs. Prevention, however, goes beyond providing people with information about health behaviors. The project area is part of the Illinois prescription drug monitoring program. This statewide registry allows hospitals and health clinics to access what drugs patients have been

prescribed at other healthcare facilities. Local organization such as Arrowleaf, Union County Counseling, and Stress and Trauma Treatment Center provide substance use prevention services that help students 11-18 years old to learn about substance use and misuse through a prevention oriented curriculum to help spread community wide awareness and aims to reduce substance misuse in our communities. RHI, Union County Counseling, local schools, Aarowleaf and other organizations provides various SUD prevention services in the project area. The services, however, are not coordinated, and get executed in silos.

- Comprehensive Community Based Youth Services which helps people from the age of 11 to 17 years old and their families by minimizing involvement in child welfare services and/or juvenile justice systems through support services and stabilization.
- Projects for assistance and Transition from homelessness – helps those who are homeless or living in marginalized housing or with severe mental illness transition to more stable housing by coordinating services that help address their individual needs.
- Intensive Placement services that help youth involved in the DCFS system to reduce the number of children involved in the foster care system.
- supportive housing services for adults with moderate mental illness or disabilities with 24/7 services with the goal of assisting in the transition to a less restrictive living environment
- transitional community care and support programs that provide all necessary services and support for individuals transitioning from a state operated psychiatric hospital to a lower level of care.
- Drug Take Back Program - individuals can go to Johnson County police departments or any pharmacy to forfeit unused or unneeded medications to be properly disposed of.

71% of the Provider Survey respondents felt their organizations focus the most attention on treatment of opioid and meth patients compared to recovery (13%) and prevention (3%). When asked to identify the types of prevention efforts the providers felt were missing or needed in the project area to counter opioid and meth misuse, respondents reported the following: community education (29), school-based programs (27), support groups/counseling/therapy (21%), increased access to employment opportunities (16%, and enhanced prescription monitoring (15%). When asked if providers thought a well-planned prevention program would help reduce the number of people that become addicted to opioid/meth, only 43% said yes, and 57% said maybe. 31% of providers surveyed are currently involved in community-wide initiatives to address opioid and meth addiction.

COVID19 Impact on Prevention: COVID19 impacted prevention programs in the project area. One of the providers focus group participant commented that, “I was working on a family education program before COVID 19 but had to stop due to the pandemic. I hope to start working on it again once COVID is under control.

Prevention Education. The Provider’s Survey respondents emphasized the need to bolster prevention education in the project area. Law enforcements needs to be trained on the purpose of the harm reduction treatments and also on substance misuse prevention language and communication. Inclusion of jails to prevention education so that they also can refer people

under their care for services could be a welcome step.

The available OUD prevention services consists of early intervention for at-risk individuals, youth prevention education, overdose prevention and naloxone distribution (OEND), and drug disposal programs. Early intervention can be utilized to a greater capacity with an improved screening/referral system and readily available, trained workforce that collaborates within the stakeholders' organizations. SBIRT screening is sporadically available in the project area. RHI also screens patients for Adverse Childhood Experiences (ACE) a predictor for traumatic stress and substance use disorders among adults. K-12 School with the primary goal to teach life skills (e.g. decision making, media influence, managing anxiety and depression, etc.) for grades 6th through 9th in order to equip youth with the abilities to evade substance use. However, in order to cultivate a whole-family approach for early intervention, Southern 7 Health Department has determined the need to expand youth prevention to include parent education.

Drug Testing Services. Community Action Place provides mobile drug testing services in the project area. It is part of the "Delta Rural Health Study" to study the prevalence and patterns of intra-venous administration of drugs in the project area. The study is funded by the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Substance Abuse and Mental Health Services Administration (SAMHSA). The drug testing services provides an opportunity to get more accurate information and help spread awareness about the pharmacological awareness about the drugs on the street. Focus group data with PWUD suggested that many users do not necessarily realize what is that they are intaking often the meth on the street are laced with Fentanyl causing extended high and often a source of overdose.

Treatment:

The health care system in the project area of Union, Johnson, and Massac counties consists of a handful of small private hysical practices largely not accepting Medicaid. The local health care system also includes Union County Hospital (UCH) The three counties are marked by a fragmentation of behavioral health services forcing individuals attempting to access services to have to locate and contact multiple agencies. RHI though attempts at community collaboration with law enforcement, clinical staff, and local drug rehabilitation centers to provide quality of care to the patients and families affected by OU/SUD, the issue of fragmentation of services between medical and behavioral health looms over. Two recent studies found a significant gap between the need and treatment capacity in the project area when it comes to OUD. The availability of MAT in Illinois is a dismal 2.2 per 1000 people leading a significant number of opioid abusers without any remedy. Moreover, the Illinois Consortium of Drug Policy (2019) found that Illinois ranked first in the US for the decline in the treatment capacity with state funded treatment capacity being the 3rd worst.

Treatment Infrastructure. The number of physicians per 10000 people who have buprenorphine-waiver is 2.3 compared to the state 2.95 and the nation 4.06. Johnson County has only 2 facilities that provide medically assisted treatment (MAT) or medically assisted recovery (MAR). The MAT/MAR facilities only came about in 2018. Before that, Johnson County had no facilities. Massac County is also a designated health professional shortage area for both mental health and primary care workforce. There is no presence of buprenorphine-waivered

physicians per 10000 population compared to 2.95 in the state and 4.06 in the nation. There is no community mental health facility in the area, and only 2 substance use facilities that came up 2 years ago. There are 8 physicians that are buprenorphine-waivered in the region that makes the availability of such providers as 4.63 per 10000 population which is higher than the state 2.95 and the nation 4.06. There is one community mental health center in Union County as well as 3 for substance use and 3 for mental health. Union County has 23.2 primary care providers per 10000 population which is significantly higher than the state 16.2 and the nation 21.5.

Medically Assisted Treatment. The RHI has implemented a medically assisted treatment services on April 3, 2017. This allowed primary care providers that have their Drug Addiction Treatment Act (DATA, 2000) waivers to prescribe buprenorphine (suboxone) to patients diagnosed with OUD. RHI has received the level 1 SUD treatment license from the state of Illinois Substance Use Prevention and Recovery on May 25, 2018. This license enables RHI to establish and expand MAT services for individuals diagnosed with OUD. RHI used this supplemental grant opportunity to recruit and train professionals to deliver needed treatment to a vulnerable population. In the same year, RHI participated in a joint application with the Southern Illinois University's School of Medicine's Center for Rural Health to successfully receive a supplementary BHWET (behavioral health workforce education and training) grant from HRSA to prepare graduate students of various behavioral health disciplines through an internship-based training in MAT. Currently, in the project area, there are 167 MAT patients, and 292 patients who have undergone treatment in the MAT program. The number of current MAT patients with both opioid and methampthetamine consisted of 48.63% of total MAT patients, in the past the percentage of MAT patients with similar poly-substance use was much lower (25.14%). Historically about 40.8% of patients with opioid use disorder (OUD) had also reported meth misuse.

Table 7. Opioid and Meth Patients who received MAT treatment

	#	%
Past Opioid and Meth Patients	42	25.14
Current Opioid and Meth Patients	48	48.63

Currently, RHI has undertaken a holistic MAT approach that includes interdisciplinary treatment teams, treatment planning, individual therapy, group therapy, building strong support systems, and encouraging patients to attend self-help groups. The interdisciplinary treatment team consists of the patient, a provider (MD, PA, or NP), social worker, and nurse. This team formulates a treatment plan with patients input to best support their journey to recovery. The patient receives buprenorphine as well as individual /group counseling from a licensed clinical social worker simultaneously. Thus, patients of OUD receive both medication and complimentary counseling together in an evidence based integrative approach. Since rural areas are all spread out and public transport is not easily available, RHI under the MAT program also supports limited transportation service. A case manager coordinates transportation needs, addresses any specialty services requires, and collaborates with any community entities to

address factors that may impede this therapeutic approach and result in recurrence of SUD/OUD.

Treatment Facilities. Rural Health Inc.I has immersed itself not only in the counties it serves, but also in contiguous counties which has led RHI to become a respected healthcare entity as supported by the extensive number of patients that RHI serves, being 14487 patients for 2019. RHI's mission is to provide affordable, quality primary and preventative health care to those patient's populations who are underserved in our service area and beyond. The applicant has five clinical sites in Union, Johnson and Massac counties. The administrative/main site is located in Anna, IL, a town with a population of approximately 4442 according to 2010 US Census. RHI offers medical, behavioral health, dental, OBGYN services and MAT services. Referral system, CLEAN group, great working with other agencies in our project area such as the Centerstone Fellowship House Campus, Union County Counseling Services, Family Counseling Center, Massac Mental Health, and Egyptian Mental Health. Rural Health, Inc. and shall continue to grow, with HRSA's guidance and funding. Centerstone Fellowship House, is a consortium member located in the Union County. Centerstone Fellowship House provides services to people from Southern Illinois who suffer with substance use disorders and co-occurring problems and has a prevention program serving Union and Massac Counties' schools. It provides medically-monitored detox program, inpatient rehabilitation, adult outpatient program, family program, youth outpatient program and aftercare. Aarowleaf in the project area provides outpatient mental health services such as individual and group counseling. 24/7 crisis intervention, response screening, community stabilization, Youth outpatient mental health counseling, Community youth services that help people from the age of 11 to 24 to reach their full potential by providing life skills training, career readiness, community resource projects, etc, Supportive living programs for adults ages 65+ to live independently in apartment style living as well as providing services that support their health and well-being, and DUI evaluation and risk education to assess a person's alcohol and drug use and risk to current or future public safety.

Ending transmission of HIV, HCV, and STDs and overdose in rural communities of people who inject drugs (ETHIC)

The ETHIC program is led by two co-Principal Investigators, Mai Pho, MD, MPH (at the University of Chicago) and Wiley D. Jenkins, PhD, MPH (at Southern Illinois University School of Medicine) in partnership with other academic, private, and government organizations. The program mechanism consists of a 2-year research and development phase followed by a 3-year implementation phase. There are two overall goals to be completed by the program. One is to investigate and understand how factors such as place of residence and local culture impact infectious disease spread and treatment among PWIDs. *This answers the question "What new services are needed to reduce diseases among PWIDs, and how to increase use of those already in place*?" Two is to then develop interventions to expand services designed to reduce disease transmission, identify and treat those infected, and increase linkage to and use of addiction treatment and medical care. *This takes the data and transforms it into action at the community level.*

Table 8. Treatment Facilities in the Project Area			
County	**Type**	**Site Name**	**Address**
Johnson	SU	Family Counseling Center Inc	406 East Vine Street, Vienna, IL, 62995
Johnson	SU	Rural Health Inc	803 North 1st Street, Vienna, IL, 62995
Johnson	SU	Rural Health Inc	400 South Broadway, Goreville, IL, 62939
Johnson	MH	Family Counseling Center Inc: Heritage House	904 West Vine Street, Vienna, IL, 62995
Massac	SU	Rural Health Inc	1003 East 5th St., Metropolis, IL, 62960
Massac	SU	MASSAC County Mental Health	206 West 5th St., Metropolis, IL, 62960
Union	Comm. MH	Union County Counseling Services, Inc.	204 South St, Anna, 62906-1549
Union	SU	Rural Health Inc	318 U.S. Highway 51 North, Dongola, IL, 62926
Union	SU	Fellowship House/Detox/Rehab: OP/IOP/Prev/MISA	800 North Main Street, Anna, IL, 62906
Union	SU	Rural Health Inc	513 North Main Street, Anna, IL, 62906
Union	MH	Union Cnty Counseling Servs Inc:	Manion Building 202 South Street, Anna, IL, 62906
Union	MH	Union Cnty Counseling Servs Inc:	204 South Street, Anna, IL, 62906
Union	MH	Union Cnty Counseling Servs Inc: Community Support Residential	311 West Vienna Street, Anna, IL, 62906
https://opioidmisusetool.norc.org/#			

In the Provider Survey data 51% of providers believe prescription opioids are an effective way to address pain management, and 23% were unsure. As for contributing factors to opioid/meth misuse in the project area, providers identified the following: ease of access (35), family history or opioid and meth addiction (33), poverty (30), low educational attainment (29), high-risk behavior (27), isolation/loneliness (22), and 2 reported other which was clarified as meaning "trauma, either as a child or an adult, that has gone undiagnosed & untreated with counseling or other emotional supports". The PWUD/PIR survey's open ended comments revealed that either they have heard of substance use services in the neighborhood in a negative way or they did not hear it at all. They also felt that medical, law-enforcement and other providers of the

communities are more interested in punishment model than a treatment model, and thus they skip mentioning the services available.

Overdose Reversal (Narcan) Treatment. Almost 74.9% of the respondents in the Provider's Survey believed that overdose reversal treatment is useful. In the open-ended part of the questionnaire commented that "ambulance workers, first responders and policy officers help prevent overdoses using Narcan. A majority of the providers surveyed (68.7%) reported that they have personally worked on individuals who have reported to have used Narcan or have administered it to someone to prevent an overdose. In the open-ended section of the survey providers believed that if family members had access to Narcan it would reduce overdose rate and the strain on EMS and law enforcement personnel.

Referral Network. In the Provider's Survey 88.5% of the respondents agreed that their organizations have a good referral network. However, in the comment section they alluded that because of workforce shortage and other barriers it is difficult to refer clients without the clients experiencing delay in services because of long wait list.

No Treatment for Meth Addiction

The available workforce and treatment provisions for meth and opioid misuse struggle to meet the rising tide of demands for services. The providers pointed out that there is no protocol of treatment regarding clients who have polyaddiction with both meth and opioid. The Medically Assisted Treatment (MAT) has been design to address opioid addiction, but the opioid and meth are increasingly becoming inseparable putting a treatment dilemma for the providers. There is no evidence-based pharmacological or behavioral intervention known to the providers to treat meth addiction. In the words of one participant provider

""We cannot do MAT for meth addiction, the best we can offer is behavioral health interventions. Everywhere there is a waitlist, we try to treat underlying issues, but we cannot do much more"

They aver that for the polysubstance a higher level of residential care residential treatment is more appropriate However, residential treatment in the project area is buffeted with an "extraordinary long waitlist". There are services available across the border in the state of Kentucky that persons in addiction from the project area cannot avail because of the "out of state" jurisdictional issues for those with insurance. The residents of Massac county, which borders the state of Kentucky and Tennessee, often encounter insurance denial because of "out of the state" jurisdictional issues.

Providers also felt that because of the wide spread prevalence of meth addiction in the project area persons with Attention Deficit Hyperactivity Disorders (ADHD) trouble finding medication because no provider wants to prescribe stimulants to person addicted to meth. COVID 19 Impact on Treatment Covid19 had a deleterious impact on the prevention and treatment activities in the region. Relapse rates to treatment participation has jumped by at least 30%. According to provider focus group participants for this needs assessment its common that they had not seen many patients for many months since the onset of COVID 19. Harm reduction treatment like MAT relies heavily on accountability between the patients and

the providers meeting regularly in a face-to-face environment. COVID19 and the several iterations of lockdowns and mobility restriction in the state of Illinois had weakened the infrastructure to maintain accountability from a distance. This is evident from the following verbatim statement from one of the providers, "I've had a number of patients that seem to be making excuses so they do not have to come in for a few weeks. I think some people are taking advantage of the situation. I've been told I can't come in because I have a cough or I can't come because I might have been exposed.

Treatment for Polysubstance Use of Meth and Opioid Poly-substance Use Treatment. Responding to the open-ended questions of the Provider's Survey, participating providers said they did not think patients should be discharged from the MAT services when their UDS is inconsistent with their prescriptions. They thought they should be referred to more intensive treatment or detox, then to be brought back the MAT program. It would be a therapeutic detour. They also alluded that the said intensive treatment or detox should also include additional counseling. There is a system of strikes dismisses patients from the MAT program when they fail UDS test for three times.

Harm Reduction Treatments

The PWUD/PIR survey data show 54% of respondents felt that suboxone (medically monitored dosage), paired with counseling, was an appropriate treatment for opioid addiction. About 16% felt that suboxone without counseling was appropriate, and about 10% considered AA an appropriate treatment option. 34% (24) of respondents had received buprenorphine in the past 12 months. Outpatient treatment was utilized by 3 respondents in the past 12 months, and 12-step recovery groups were utilized by another 3. 52% of respondents received no treatment in the past 12 months. Only 10% of respondents had owned a naloxone kit in the past 3 months, and 51% were interested in reducing drug use. 29 respondents felt that obtaining treatment for opioid and meth addiction was easy, but 14 respondents believed obtaining treatment was not easy at all.

In the Provider Survey data show 36% reported that they continue to provide medically assisted treatment (MAT) to opioid clients that also misuse meth, 33% said they send them for additional substance use counseling, 5% said they send them for Narcotics Anonymous, and almost 5% said they stop providing MAT services. 21 of the 41 providers were licensed professionals, all of them were familiar with opioids, 95% were familiar with suboxone or methadone, and 97% were familiar with medically assisted treatment (MAT). All providers that were surveyed felt it was easy for clients to obtain drugs in the project area. 73% of the providers believed that suboxone/methadone is helpful to clients with opioid use disorder (OUD), and 27% thought they were somewhat helpful. 74% believed the overdose reversal program (Narcan) is or may be effective in the project area. 49% reported significant community support in the project area for treating substance use with medication such as methadone or suboxone, but 28% felt there was not significant community support, and 23% were unsure. The lack of community support for harm reduction approaches in the rural areas has been a deterrent to its effectiveness. 17% thought needle exchange programs are or may be well received among people in the project area, 54% said maybe, and 29% did not think needle exchange programs are or would be well received. 68% of the providers surveyed

believe that MAT is effective in addressing opioid use disorder (OUD), and 32% believe it is somewhat effective. 94% thought counseling is important for success of MAT.

Substance-use Counseling to address Underlying Cause

Providers also reported that the patients are required to attend substance use counseling. Some of them felt that patients must address the underlying cause to their own addiction to embark on a true journey to recovery. Providers of MAT program check on their clients on a monthly basis on their perception on if they think counseling is helping them.

Attitude towards Harm Reduction

Providers also mentioned that assigning a timeline to the harm reduction treatment like the MAT could cause long-term harm. In the provider community there seemed to be a disagreement on harm reduction approaches like that of MAT. The provider, who participated in the focus group, seemed to acknowledge that there is a differentiation in opinion among different providers, however, their own experience had been that if an end date is assign to MAT services patients would lose motivation and more likely end up soliciting Subboxone from the street.

One provider commented the following:

"It will be easier to get them off Suboxone if they have already addressed the issues that caused them to start using it in the first place. I try to get started on that discussion early on"

The above comment suggests that there is a theory of source cause to addiction that this provider subscribe to, upon inquiry, it turned out that provider believe that childhood traumatic stress, and issues related to the social determinants of health if addressed through counseling and case management then MAT and Suboxone dependency could be avoided in the long-run. The providers attested that in the project area there exist a good communication between the counselors and the medical providers working in partnership to implement MAT. The confusion in putting a timeline to Suboxone emerge from the understanding that it is the patients who could express interest to get off Suboxone and come up with a plan with their providers to do so, however, counselors on the matter of getting of Suboxone seem to be limited. There needs to be training on the goals and mechanisms of the harm reduction approaches.

To understanding this lack of understanding of true harm reduction philosophy among the providers, the following comment is revealing.

" Most clients that are trying to get rid of Suboxone have already gone through and completed counseling and are no longer seeing a counselor. So the counselors don't have much say about the readiness to get off Suboxone"

Providers felt there is a need increase awareness about harm reduction philosophies among both medical and behavioral health workforce.

The gaps in awareness, perception and information in the community is exemplified by a comment from a key-informant interview with a person who run a faith-based recovery support group in Union County, "People shouldn't require a substance to get them through the day. People need a perspective change. Drugs were comforting. Addicts are accepting and kind

people, and the drugs give needed comfort. When you can learn that unconditional love and acceptance is possible, you don't have a reason to use."

A focus group deliberation for this need assessment with Child Welfare administration in the project area elicited the following comment that also show the negative attitude towards Suboxone and harm reduction approaches in generation,

> "Not a fan of Suboxone. People abusing, selling, and stealing Suboxone. It has become currency. They can go in and get it from Rural Health, Inc., then trade it on the street. There are no good treatment options for DV, mental health, or substance use. Even clients that are seeking treatment can't find it. Those that are ready to quit have trouble finding treatment. It is even harder for those that aren't ready."

Table 9. Opinion on Treatment

What would be most useful to you?		
Treatment type	**Percentage**	**Count**
Methadone, Buprenorphine, or Naltrexone	27.66%	13
Counseling/talking with someone	21.28%	10
Outpatient	14.89%	7
Mental health medications	14.89%	7

Stigma towards Harm Reduction

Open-ended comments from the Provider's Survey stated that the communities in the project area harbors a common attitude of scorn towards harm reduction programs involving needle exchange and Suboxone. A comment alluded that harm reduction "may be seen as justifying SUD." Substance use, in general, providers commented are seen more as a choice and a character flaw than a disorder. Existence of considerable stigma towards Suboxone use is also another area that is related to awareness and prejudice towards harm reduction programs in general and Suboxone in particular plague the project area discourses as per the focus group with the providers. To quote one of the providers, "People don't know what it is for, I think there is a concern that if Rural Health is known as a Suboxone Clinic, how could that affect the public image of the FQHC? We need to educate the public. We also found during interviews with providers of different disciplines including medical doctors, child welfare workers, MAT counselors that they harbor negative feelings towards Suboxone and antipathy towards harm reduction philosophy in particular. Therefore, awareness about harm reduction approaches such as MAT is not only needed at the community levels but is also essential for at the providers levels. Both medical and behavioral health providers of the integrated harm reduction workforce in rural areas need to undergo training on the harm reduction philosophy, so that they know it is grounded in evidence and did not stem from any toxic secularist politics that aimed to assail the rural faith-oriented worldview that conform to an abstinence-based approach to treating SUD. There needs to be training that would bring together both the abstinence-based and harm reduction presumptions and argue for an evidence-based space where both approaches are accommodated as tools in one's treatment shed. One of the

providers during focus group commented that, “Both AA and NA are very anti-MAT. They call it Suboxone-sober, but not real sober.” AA and NA are primary sources of support for many with addictions and their influences in perpetuating their perceptions on to persons with addiction often spreads the negativity towards harm reduction approaches. It is important to have a discussion with the faith-based AA and NA community in the project area and engage them in meaningful training and conversation to counter the existing stigma.

Providers participating in focus groups had suggested using radio station and social media to educate the community on the harm reduction idea. In one of the provider’s own words,” we need break the barriers and stereotypes and show that addiction comes from trauma. Our schools need to be more than trauma-informed, and Rural health has to be trauma-informed.”

Suboxone is all over the street

A provider serving in Massac county said that cash clinics contribute to the surfeit of Suboxone availability on the street by evading the prescription monitoring measures put up by the state. In the words of the provider,

“I am surrounded by cash clinics in Massac county, Suboxone is all over the street. I have not done an intake where a person hasn’t tried Suboxone illegally.”

People can purchase prescription drugs from the cash clinics bypassing drug testing. The providers reported that at the cost of $500 they can get a month of Suboxone supply from the cash clinic providers. A majority of the patients tried Suboxone before formally beginning the MAT treatment.

Providers often find that persons in recovery reporting improvements, with no appearance of struggle, would request for higher dosage, which, to the providers, is an indication that they are mostly likely to sell the obtained medication.

Gatekeeping Strategies for Suboxone: Checking Prescription Monitoring System (PMP)

More than one provider reported to check the prescription monitoring system (PMP) regularly. In their own comment they reported.

“I always check the PMP every time I see a patient”

Another reported. “ I always check before prescribing”

Providers also felt that the PMP of the state has cut down the number of patients jumping from doctor to doctor by increasing screening of the persons in recovery. If a patient shows up on the PMP system providers would discuss the matter with the patient before prescribing further medication. Providers also reported that they refer to the history from the previous provider, carry out a drug test, check PMP, and allow patients to provide an explanation on any the discrepancies, and offer behavioral health services. A provider further reported that

“I also pay attention to whether they get mad if they don’t get a prescription on the first visit”

Stigma towards Needle Exchange Programs. Respondents to the Provider's Survey's open-ended questions commented that, "Although I think they will likely not be widely accepted but people of these counties desperately needed testing services and needle exchange programs". Providers also commented that that they "heard opinions that providing needle exchanges just enables drug use. The community doesn't understand that harm reduction leads to recovery, and also prevents the spread of HIV and Hepatities etc." There seem to be an urgent need to educate the community about the harm reduction approaches that include all stakeholders.

Recovery

RHI, Centerstone Fellowship House, Aarrowleaf and Massac County Mental Health (MCMH) provide substance use prevention and recovery services that provide individuals and their families recovery support and treatment services that focus on their unique, individual needs. In the PWUD/PIR survey conducted for this needs assessment 65% of the respondents were undergoing recovery support groups run by the RHI, Centerstone Fellowship House and other organizations. Aaroleaf provides Celebrate Recovery, a Christ centered recovery program. 40% of the providers responded to the need assessment survey knew of faith-based organizations or churches that are active in opioid/meth prevention, treatment, and recovery work. The MCMH provides a NA/AA support group and the RHI does MAT-based support group in the area.

Focus group with the person in recovery elicited unique ways of arriving participants arrived to treatment services and embarked on their respective **road to recoveries**. A female respondent experienced a turning point in her life when her ex-boyfriend, her methamphetamine supplier, assaulted her in front of her children and DCFS and law enforcement had to be called. The departure of the supplier boyfriend led her to quit using methamphetamine. In her quest to cope with withdrawal symptoms, she came across Suboxone on the street. That worked out positively for her and helped her find her way to the Medically Assisted Treatment (MAT) program at Rural Health, Inc. The male respondent also acknowledged that his encounter with Suboxone off the street referred him to the recovery program at Rural Health. Illicit selling of harm reduction substances like suboxone is strictly prohibited and contributes to the stigmatization of all harm reduction approaches in conservative communities such as those within the project area. However, in this instance, the suboxone on the street helped both the respondents on their path to recovery. Both the respondents expressed doubt about the effectiveness of community awareness programs. Both felt that "an individual isn't ready until they are ready", suggesting that community awareness programs do not promote behavior change within the population of those addicted to substances.

Faith-Based Organizations for Recovery. In the Provider's Survey 60% of the respondents suggested that they do not know of any faith-based organization in the project area that is working towards opioid/meth recovery. This could be either an indication that most of the providers participated in the survey are working in the harm reduction initiative and faith-based organization usually engage in recovery efforts taking an abstinence-based approach. In the open-ended comment section of the survey the provider commented that " a few of the churches in the local area used to do AA/NA meetings before the pandemic, as as as celebrate

recovery and refuge recovery to persons with opioid/meth addiction issues", however, the pandemic and the social distancing guidelines of the State of Illinois has perversely affected such programs. One of the providers commented that they know of a church that had helped the patience.

Faith-Based Group Outside the Church Setting.

A key-informant interview with a social worker who runs a faith-based support group for the PWUD and person in recovery in the Union County revealed that faith-based support group that commences inside a Church building is not as effective as that of a similar group meeting in an architectural setting outside the Church. The key-informant was addicted to methamphetamine for 19 years. She was spiritually delivered from what she went through. She felt the Lord internally tell her it is time to go when she was high one night. She went to her parents' house, the only place she was welcome. She slept for 2 weeks and only got up to eat and use the bathroom. She woke up after 2 weeks and had no desire to ever do drugs again. It was God. She didn't do rehab or anything else. He just took it from her. She didn't do anything. She woke up one day and it was gone. She has never been the same since and has a heart for broken people. "We want unconditional love and acceptance, and it changes you to know you are unconditionally loved." That is what they want to communicate to people. The key informant along with a couple of her friends had converted a bar into a faith-based support group meeting venue, and kept the name the same as that of the bar, Depot. The Depot meets twice a week in the evening and provides a place to share inspiration of God and support for the persons in addiction and recovery and their families a sense of support, non-judgmental socialization and child development activities. The program is based on the abstinence-based model and are run by the persons who have had similar experiences with addiction and could achieve recovery through the power of their faith. Then motto of the program is to provide unconditional love and acceptance. The people who run the Depot feel that in churches persons in addiction and recovery feel judged and experience stigma from other church members. The center is informal at the moment, but they are trying to get 501c3 status. The friend that owns the building is switching from business registration to nonprofit registration. She is now reaching triple to quadruple the number of people that were coming to recovery group at the actual church. The informant mentioned,

"People have been coming out of the woodwork to donate. Law enforcement is on board. No one gets arrested for possession of drugs, and no one is going to jail unless they are a violent offender. Law enforcement is bringing them to us to see if we can reach them and connect."

In another Key-informant interview the policy chief of the Union county attested to this sentiment by commenting, ""I have been so hardened and desensitized to this issue in our community. This is changing my heart and how I see these people." The faith-based initiative runs completely on community support and donation. They were seeking to connect with the Rural Health Inc to streamline their services with the ongoing addiction treatment and recovery initiatives. The pastor of the church, from which the key-informant and her friends moved the support group the bar once came down and wanted to interject while she was leading. She was very real and transparent in the group. There isn't a pretty way to wrap up the truth, and the

pastor didn't like that kind of transparency in the church. Addiction is messy and raw and real. Group members would smoke outside the building, and that was a no-no. You don't smoke at church. Some of the addicts come into the church looking rough, and the sweet church lady is scared to death and clutching her purse. Also, there were a bunch of well-meaning church folk with their social medial posts. Addicts can read between the lines and can read people. Many in the church hadn't been exposed to the streets, trauma, and addiction. If they had been exposed to these things, they definitely wouldn't talk about it.

Workforce Needs

According to the Community Behavioral Healthcare Association of Illinois (CBHA) and SIU-med forum discussion, Southern Illinois has been referred to as a "service desert" by regional and state organizations. Although significant progress has been made regarding workforce development and training, a mental health workforce shortage continues in the region This underlines the importance of expanding access to MAT services in southern Illinois which is designated as Health Professional Shortage Area (HPSA) for Medical (low income population) and Mental health (geographic designation).

Workforce Inventory: Assets and Gaps in the Project Area

Rural Health Inc. (RHI) is a non-profit, a long-standing deemed Federally Qualified Health Center (FQHC) plays a pivotal role in providing MAT treatment and recruiting integrated and interdisciplinary healthcare workforce in the area. RHI has collaborated with the Stress and Trauma Treatment Center (SATTC) and Southern Illinois University to put together a Behavioral Health Workforce Education and Training (BHWET) supplementary funding to provide integrated care training to a multidisciplinary graduate level student from social work, counseling and rehabilitation counseling departments at SIU. The SIU is the key primary care and behavioral health workforce supplier in the region.

Southern Illinois University and its Center for Rural Health has been instrumental in providing continuing education to the local workforce. SIU's Project ECHO (Extension for Community Healthcare Outcomes) is a hub and spoke educational model that connects specialists in academic medical centers ("hubs") to primary care clinicians in rural and underserved communities ("spokes") via videoconferencing. The ECHO sessions involve a case-based earning approach that contains 15 minutes didactic lessons and patient case presentations by clinicians at participating spoke/community sites. The SIU School of Medicine offers Medication Assisted Recovery ECHO and the Co-Occurring Disorder ECHO. The ECHO program has been and if, awareness and community involvement could be increased, could turn into an important asset to the community. SIU Carbondale has been the workforce development production and training hub for both primary care and behavioral health.

The Centerstone Fellowship House is another key SUD provider with professional staff including a medical director, registered nurses, emergency medical technicians, direct care workers, technicians, and certified counselors/case managers. It employs bachelor level counselors requiring them to obtain Certified Alcohol Drug Counselor (CADC) credentials within 2 years. The bachelor level counselors require to be under supervision.

There is a noticeable absence of primary care physicians per 100,000 population in the project area. The ratio of population to primary care physicians in Illinois being 1240:1, in Union county 1340:1, in Johnson county 12600:1, and in Massac county 4970:1. The number of

mental health provides are also alarming in the state of IL 580:1, in Union county it is 920:1 (County Ranking and Roadmap, 2017).

All healthcare service providers agencies have reported to experience serious workforce development challenges including lack of formal and continuing education opportunities in the project area. The ECHO project opportunities provide by SIU is extremely under-utilized in the project area. The consortium formed as a part of the RCORP planning grants have initiated a dialogue to promote and leverage inter-agency information sharing and collaboration to mitigate the shortfall in the current workforce.

Worker Capacity/Skills

The high case load and high staff turn-over limits the capacity of the local SUD service providers to keep up with the high need of the client. Community awareness campaigns are limited but had it been more and had there been higher demand for services the waiting period would have been longer. The continuing education challenges and lack of integrated settings also compromises the fidelity of the harm reduction approaches.

In the need assessment survey, the providers of substance use services in the project area believe that the project area's health care workforce suffer from lack of trauma-informed behavioral health providers (18), substance use providers (17) peer support specialists (16), integrated health workers (16), and social workers (12). According to respondents, providers treating opioid and/or meth addiction need further training on countering stigma on suboxone/methadone treatment (23), trauma-focus attention (22), harm reduction approaches (21), cognitive behavior and exposure-based therapies (20), and working with child victims of parental drug use (20).

Recruitment and Retention.

Recruitment and retention of quality behavioral as well as primary care workforce is a major challenge in the area. The Provider Survey respondents of this need assessment identified several challenges to maintain and develop the healthcare workforce in the project area. The providers identified workforce issues to be the greatest challenge of healthcare organizations in the project area. The survey respondents identified workforce challenges such as retention of behavioral health workforce (18), retention of social workers (14), recruitment of behavioral health workforce (12), retention of clinicians (9), recruitment of MAT workforce (9), and recruitment of social workers (9) impacting quality of service delivery. Furthermore, respondents identified the following challenges healthcare organizations face while trying to improve workforce capacity: high case load (32%), lack of resources (31%), lack of training options (12%), lack of motivation (9%), and lack of leadership (9%).

Providers felt that to better attract and retain substance use workforce, greater attention should be given to the following: sufficient resources (34%), investment in general infrastructure in the project area (32%), better marketing of the assets that already exist in the area (23%), and better leadership (11%). When asked about any asset building initiatives that could make the region more attractive to future workforce, providers prioritized new jobs initiatives (26%), new investment in infrastructure (18%), growth in new business prospects (13%), and arrival of new industries (11%). Providers identified the following as Hardin County's greatest strengths or assets in addressing the opioid misuse health crisis: services offered by Family Counseling Center, Inc. (34%), support from local physicians (17%), support from Hardin County Sheriff's Department (11%), and strong, tightly-knit community environments (9%).

Providers also reported that counseling services in Massac county is extremely limited. Even if the services that are available did not have providers trained in trauma-informed interventions such as the EMDR. Most of the providers agree that counseling, instead of being a treatment, only could provide support services to clients. One of the providers described counseling in the following terms

> "It seems like more of a box to check than the true counseling they need"

Providers catering to the Massac county indicated to a "very high turnover" of mental health professionals in the Massac county. The medical provider commented that "I get someone new every time I call". High turnover of mental health counselors trained to work with multidisciplinary integrated settings is one of the major workforce need in the area. The COVID 19 has also impacted the recruitment and retention rate of mental health workforce in the region. The rickety telehealth infrastructure and lack of training on telehealth-mediated mental health intervention pose a serious challenge to behavioral health workforce development training in the area. One of the managerial provider further stated that the project region is marked by, " a lack of services, lack of jobs and a lack of people willing to take the jobs. The jobs offer low pay and come with a very high caseload." The provider assessed, "that's why the turnover is so high". Other providers attested to the high turnover explanation and claimed that the behavioral health workforce 'don't have the time to help half of the people on their caseload".

The Rural Health Inc. has been an early adopted of the MAT program. The project area is rural and qualifies for federal student loan forgiveness for recent graduates of primary care and behavioral health. The responses to the open-ended questions to the Provider Survey identified loan forgiveness provision as the chief motivation for healthcare professionals in general and primary care workforce in particular to work in the project area. Some of the provider respondents commended Rural Health to provide good administrative support to MAT program, a positive work environment and also the "beautiful natural surroundings" received a mention as positive points for workforce development. However, the turn-over of health care workforce in the area is high. A child welfare administrator, during the Child Welfare administrators focus group lamented the fact that the new behavioral health workforce from the "millennial" generation are not as invested in the community, they are more "careerist" and hop on from one employment to another causing much discontinuation and compromised quality of services. They commented the following,

> "The new workforce is frustrating. It isn't like it used to be. I don't know how to motivate the new young workers and new hires. Not just with DCFS, but the counselors too. This generation of workers aren't great. They don't want to work. Anything you ask them to do is too much. I don't know how to fix that. It is like a perfect storm. Is the problem getting worse because professions and agencies are getting weaker, or vice versa? It is pretty bad out here"

In the open-ended section of the Provider's Survey the respondents commented that often the pay is not equivalent to the amount of type of work. Most providers believe they can go to

other areas and make more money and have a better set up, working less hours and can work in better facilities with more space etc. A section of the providers also mentioned that they do not like to deal with so much stigma in the area and "being treated or called a drug dealer" for practicing harm-reduction services. Another provider, commented that, "the population dealing with substance abuse often has concurrent mental health problems and that make them a difficult population to treat" in absence of adequate and competent integrated mental health workforce. Other comments attributed to the nature of work in the field of substance use cause higher rates of burn-out especially in an area that is rural and lack much recreational and self-care services. Large caseload due to lack of workforce supply is another reason for burn out of healthcare workforce in the area. In fact, lack of resources (31%) and higher case load (32%) have been cited by the providers in their survey responses to be the top two reasons for burnout of the workforce in the project area.

On the question of retention of workforce in the project, focus group providers alluded to the fact that many of them found student debt forgiveness programs to be a great incentive for them to live and work in the primarily rural project area. Rural Health, Inc, is a Federally qualified health center that provides opportunities for load forgiveness to counselors. In a focus group discussion with the child welfare administrators, one of the administrators commented on one of the parents they encountered who uses meth and cocaine daily and opiates occasionally, and they couldn't get the parent into inpatient treatment. No services were available. They called 30 days later with an opening. "We don't need more assessors or case managers. We need trained clinicians. She doesn't need someone to tell her to refer to a clinician. There aren't providers available. You never deal with the same mental health person twice because turnover is so high."

Needs of Project Area Vulnerable Group: Children and Substance Use

The southern Illinois region has experienced a significant increase in drug-related deaths, arrests, hospitalizations, increase in opiate related child abuse and other family problems. According to the Illinois Department of Family and Child Welfare (DCFS) almost 10 million children living in Illinois have their primary caregivers addicted to a variety of substance use disorder and more than half a million children undergo a form of child abuse directly connected to the addiction of their caregivers. Adverse Childhood Experiences (ACE) studies have shown a strong link between traumatic childhood experience and substance use of primary caregivers. The project area experiences higher rates of all crime including violent crime than the rest of the state. The 2018 arrest rates for sexual assault, aggravated assault, arson, burglary, larceny, theft, motor vehicle theft, and robbery had the Union and Massac Counties with higher arrest rates than the state of Illinois and the region. The project area communities have experiences violence over a decade of higher than average rates of direct or/and indirect forms of abuse and neglect in multiple generations of families.

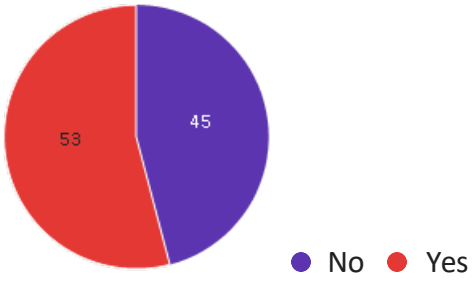
Children Impacted By Parental Addiction

The opioid epidemic along with the subsequent rise in methamphetamine use in the project area have exposed a lack of concerted and coordinated infrastructure to respond to these public health crises. Opioid/Meth addictions not only affects the individual addicts, but also negatively impacts their families – especially children. Parental opioid and meth use disorders (OUD-MUD) severely impact children, especially in rural areas with a compromised

access to transportation, support and recovery services. 90% of providers surveyed had come across children that had been adversely affected by parental addiction to opioids and meth. As for the kind of addiction most prevalent among children under the age of 18, 28% identified addiction to opioid, 23% identified meth, and 23% identified the combination of opioid and meth together. 97% of providers felt there is a need for more community education and awareness about opioids/meth and their impact on children. 86% of providers were unaware of any initiative trying to work with children specifically affected by parental opioid/meth addiction.

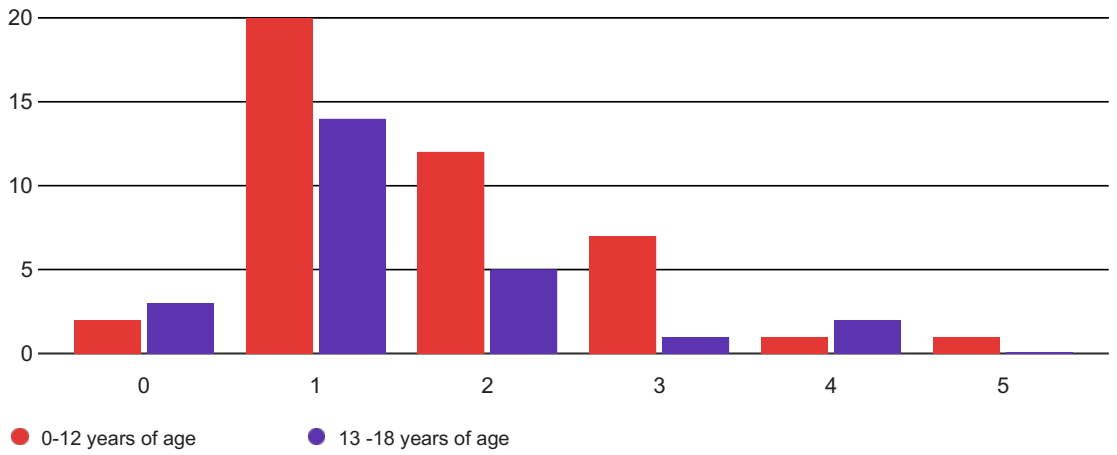
About 96% of respondents believed that children (under the age of 18) are affected by parental opioid/meth addiction, and 40% either called or knew someone that called child protective services because of addiction of parents. 99% of respondents believed that people ages 18-25 are affected by opioid/meth addiction. Over 50% of respondents knew people that have young children (age 0-12) and are addicted to opioid and meth. 8 respondents said they know 10 or more people with opioid and meth addiction that also have young children. 62% of respondents felt that parental misuse of opioid and meth together put children at the most risk compared to either opioid misuse alone (14%) or meth misuse alone (19%).

Respondents with children under the age of 18 living at home.



The PWUD/PIR survey results show that about 53% of the households of the sample reported to have children under 18 in their household. Among those who have children in their a household a majority of them had children who are between the age of 0-12, the most vulnerable group primed for abuse and neglect.

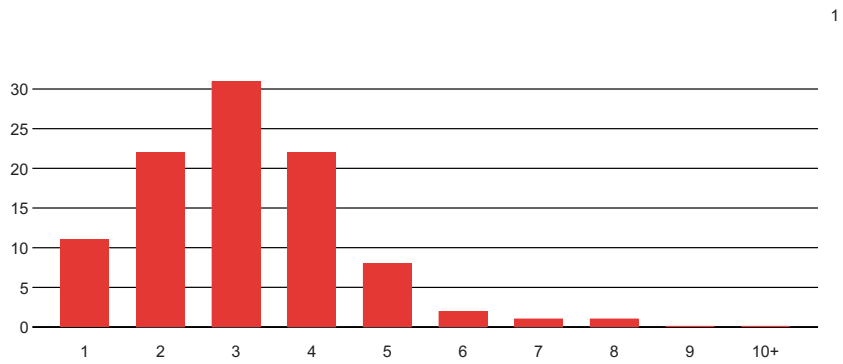
Number of children ages 0-12 and ages 13-18 that are living with respondents.



In those households where children live it shows that a majority of the children in the age-group of 0-12 were living in multigenerational households. Multi-generational households have been identified in the Provider's Survey and the PWUD/PIR focus groups to be a primed source of acculturation to the drug culture. Illinois only reports the screened-in referral counts. The U.S. had a rate of screened-in referrals for 2019 of 32.2 per 1,000 and Illinois' rate was 30.8 per 1,000.

The number of children who received an investigation can be displayed two ways: 5-year percent change and 2019 rate. The number of children is a duplicate number and does not represent unique children. Between 2015 and 2019, the U.S. saw a 3.5% increase in the number of children receiving an investigation. During this same time, Illinois saw an increase of 21.1%. In the year 2019, US children received investigations at a rate of 47.2 per 1,000 versus Illinois children whose rate was 53.8 per 1,000. In Illinois, substantiated claims were 19.2% of all 2019 responses as opposed to the national percentage of 16.0%. In 2019, there were 6.6 new victims per 1,000 children nationally. Illinois children were victims at a slightly higher rate of 7.8 per 1,000. Boys in Illinois were victims at a rate of 11.5 per 1,000 and girls at a rate of 12.1 per 1,000. Both are higher than the national rates, 8.4 and 9.4 per 1,000, respectively. The age of victims was also examined and compared with the national rates. At each year of age, with the exception of one year, Illinois children were victims at a higher rate than the national rate. Black, Asian, and White Illinois children experienced victimization at rates higher than the U.S., too. The percentage of children in Illinois. The percentage of victims in Illinois exposed to physical abuse and sexual abuse was higher in Illinois compared to the national percentage, with medical neglect and neglect being almost identical.

# of children living in each household. The majority of households have 3 people.



Exposure to caregiver risk factors such as substance abuse, domestic violence, inadequate housing, and disability was not included in this report for the state of Illinois. One interesting finding is the caseload of CPS workers. Nationally, each worker has 71 responses per year. In Illinois, that number is higher at 89 responses per worker.

Table 10. Investigation Information

	Report Rates per 1,000	Children receiving Investigation (Percent change 2015-2019)	Children Receiving Investigation (2019 rate per 1,000)	Substantiated Percent	First Time Victims (2019 rate per 1,000)	2019 CPS Responses per Worker
Nation	33.2	3.5%	47.2	16.0%	6.6	71
Illinois	30.8	21.1%*	53.8*	19.2%*	7.8*	89*

Note. *indicate rate or percentage higher than national.
Substantiated percent is duplicated children, not unique victims.

According to the Illinois Department of Health and Family Services data (2020), the rate of children under the care of the state is 20.3/1000 for Johnson County, 22.64/1000 for Massac County and 21.73/1000 for Union County which is 2.92 times (Johnson), 3.26 times (Massac), and 3.13 times (Union) higher than the state's rate. The above table suggests a disproportionately higher number of children being referred to the child protective services from the project area. Teen birth rate in Massac County is 36.3% (per 1000) compared to 23.8 for the state and 24.9 for the nation. The suicide deaths per 100 thousand people in the area are 16.4 which is higher than the Health People 2020 goal 10.2 per 100 thousand, the state rate of 9.7 and the U.S. rate of 12.5 (IDHF, 2020).

Provider's in their open-ended responses to the survey emphasized the role that school can play in identifying, preventing and protecting children from the adverse consequences of drug use. Children who are predisposed to drug abuse need counseling/therapy while growing up to help prevent future abuses. Providers emphasized community education initiatives while

the PWUD and Persons in Recovery thought education programs would not work till the person is ready. Moreover, there had been a concern that the content of the education program could reinforce stigma if harm reduction component is excluded.

Table 11. Youth in Care by County

	Population Under 18	# of Youth in Care	Rate per 1,000	Difference from State	Comparison with State (times higher)	Difference from Region	Comparison with Region (times higher)
Johnson	2315	47	20.3	13.35	2.92	5.5	1.37
Massac	3268	74	22.64	15.7	3.26	7.84	1.53
Union	3636	79	21.73	14.78	3.13	6.93	1.47

Data Sources: Illinois Department of Children and Family Services: Youth in Care by County 12/31/20; Voices for Illinois Children 2019 Kids Count County Fact Sheet

In the open-ended question of the PWUD/PIR survey respondents mentioned how commonplace it is for residents to watch children being neglected and referred to child protective services due to parental drugs abuse. There were respondents who stated that they had themselves reported incidents of child abuse occurring in their extended families and in their neighborhoods. One of the respondents commented who works in primary care commented that, “I have co-workers that have had to call the Child Protective Services, I work in a medical facility so the reasons is not always given”. Most respondents seem to know folks who had CPS called on them for drug related child endangerment.

In the open-ended questions of the Provider Survey the providers commented that parental meth and opioid addiction increase the risk of their children being physically and emotionally neglected. One of the providers reported that “I have seen several cases where children have been affected by the parental addiction. In most cases children are removed from their parents and suffered emotional distress, children are being born with fetal addiction symptoms which cause long term health issues for these children”. Another provider added that these often receive behavioral health diagnosis of depression, anxiety, conduct disorder and ADHD; they are more likely to perform poorly in school/academics, and would be called for poor hygiene due to parental poverty and neglect.

Lack of Child-Focused OUD Treatment Services. In the Provider’s Survey 85.7% of the providers reported not knowing any initiative in the project area or the surroundings that specifically focus on children affected by parental opioid/meth addiction.

Focus Group Deliberations with Child Welfare Administrators in the Project Area.
A focus group was conducted among three child welfare administrators in the project area. The administrators identified Allegation 60 and 65 of Illinois CPS codes that dealt with the collection of information involving referral of children to the Child Protective Services. The following themes emerged from the focus group deliberations of the child welfare administrators:

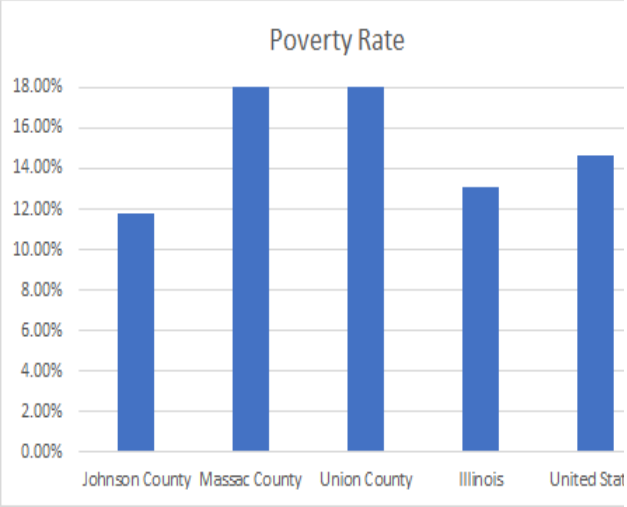
a) There are too many protective custodies in the area due to parental drug.
b) There is no coordinated data gathering efforts that are in place.
c) The likelihood of parents referred by the CPS to the local available addiction treatment services in the area is very slim. The CPS administrators felt that the responsiveness is very low in the addiction services system in the area.
d) There is a dearth of behavioral health providers in the area with skills to address parental substance use or even address children with trauma from parental substance use. This is elaborated in the following comment:

"They have no real treatment for the parents. They already know it is a problem. They need providers that can address SUD in parents. They need experienced professionals and a solid treatment program. Many years ago, SIU had a program for sexual abuse treatment. It offered grant funded therapy for parents, group/family, and children. Meth and opioids aren't easy to walk away from."

e) Domestic violence treatment option in the area are limited.
f) There has also been a significant increase in adolescents using opiates and meth.

Social Determinant of Health

The community health assessment data from Southern Illinois Health (SIH) that runs many nonprofit hospitals and clinics in the Southern Illinois region, has identified (2018) mental health and substance use as their top 5 priority health concerns for the region. The SIH study has identified several social determinants of health including lack of access to transportation, low education, high level exposure to violence, lack of social support, unemployment, and risky health behavior as the barriers to better health in the region. Behavioral health, defined as a combination of mental health and substance misuse, has been identified by the community as the top health issues in the region.



and the nation 14.6%. Pre COVID-19 unemployment rate in Union County was 6.6% with is similar to the state and nation, however there has been almost 150% increase across the board almost a year after the outbreak of the pandemic. Almost 30% of the Union County workforce work in the injury prone sectors, construction, mining and natural resources, manufacturing, trade, transportation, and utilities. Net migration per 100 people is in the negative for Union County -1.3 which is significantly higher than the state 0.4. Only 5 out of 100 workers in Union County work in business establishments.

Poverty rate in the Union County (18.1%) is significantly higher than the state 13.1%,
The poverty rate is very high (18.4%) compared to the state (13.5) and the U.S. (14.6). The median household income in Massac County is 42,168 which is significantly lower than 61,229 for the state, and the nation 57,652. Median annual household income in Johnson County is $45,743 which is lower than the state of Illinois (61,223) and the U.S. (57,652). Poverty rates however, in Johnson County, are lower (11.8%) compared to the state of Illinois (13.1%) and the U.S. (14.6%). Similarly, unemployment rate in Johnson County is 5.7% compared to the state of Illinois which is 6.6% and the U.S. at 6.6%. Almost 19% of Johnson County's population work in more physically strenuous and injury prone sectors such as construction, mining and natural resources, manufacturing, trade, transportation, and utilities. The number of industry dependencies in Johnson County is 0 compared to the state 0.38 and the country at 0.5. The number of business establishments per 100 workers is 4 compared to 5 for the state of Illinois and 5.5 for the country. High poverty rate and lack of employment made people to leave the county as the net migration rate per 100 people for Johnson County is in the negative (-2.7) compared to the state (0.4) which is terrible and the country (2.9). Almost 26% of the population work in injury prone professions such as construction, mining and natural resources, trade, transportation, and utilities. The industry dependence status of Massac County is low (only 1).

<u>Feeling "Stuck"</u>

The providers also pointed out that many of the patients they came across feel "stuck" due to financial stressors, lack of social mobility and employment opportunity in the area coupled with their own low level of educational attainments make it hard for them to feel hopeful. The range of personal, social, economic and environmental factors that influence health often fall outside the hospital or clinic walls, yet their inter-relationship affects individual and community health. These factors disproportionately affect vulnerable and underrepresented populations and adversely affect quality of life and health for all of us. Because of this, interventions that are community-based and target multiple determinants of health are most likely to be effective. Engaging allies from outside the traditional boundaries of healthcare facilities and the public health sector such as education, social work, legal aid, housing, transportation and agriculture is essential to improving

population health.

Future Economic Development Prospects. In the Provider's Survey the respondents have identified new job initiatives (27%) to improve the lack of employment situation in the area could be helpful. Investment in infrastructure (20%) have been cited by the healthcare providers that could improve the condition of the people in the project area. In the open-ended section of the survey the providers commented that they are not aware of any industrial or other initiatives being taken place in the project area. COVID-19 has further restricted the few service related jobs that existed in the area. Coal mining and the other mining associated job prospects have dried up a decade ago causing long-term unemployment to the population.

Opportunities and Trends

Different Substances Dominate Different Counties

Different counties in the project area show different trends when it comes to drug use. According to the providers, opioid addiction is more prominent in the Johnson and Union counties while meth addiction exceeds that of the opioid in the Massac county. Addiction to pain pills is more wide spread in the Union county, according to the providers, than that of other counties. In the Union and Johnson counties OUD prevalent, however, in Massac county meth use and the usage of Fentanyl-laced meth have been widely reported.

Telecommute, Telehealth Impetus: In rural areas transportation can be a persistent challenge to ferry patience, stakeholders, and others in locations to meet. However, the Corona virus outbreak has sped up the process of telecommuting. Though Internet infrastructure is not very steady in the project area, however, new impetus towards improving the Internet infrastructure could provide a better telecommunicating solution to the transportation problem.

Mixing Uppers and Downers: In the focus group with persons in recovery the respondents have pointed out that they suspect the methamphetamine they buy from the street were laced with fentanyl. Both of them conceded that mixing stimulants like methamphetamines (uppers) with opioid like fentanyl (downers) helped them extend the addictive effects of the stimulant longer than usual. The female respondent reported experiencing visual hallucination (she saw monkeys changing her car tires and clowns climbing out of the trashcan). The respondents did not know any particulars about what dosage of fentanyl added to the long-lasting effects. They were not even sure if other chemical substances were present in the drugs they bought in the streets. The open-ended comments in the Providers Survey attested to this trend as well. Providers found in their experiences with patients that most of the time PWUD do not know that their meth is laced with Fentanyl. A keynote interview with the one of the testing services in the area also confirmed that many users who volunteer to testing for the study express "surprise" when they discover the "meth" they were intaking was laced with Fentanyl.

The Ease of Access to Drugs. Participants of the focus groups of persons in recovery had described the easiness of obtaining opioid and meth in the project area. The female respondent mentioned that she could text from her phone to multiple numbers to individuals that would promptly provide her with heroin and other opioid and psychoactive drugs. This ease to access,

earlier from the legitimate provider and later from the illegitimate social networks, perpetuated the use of psychoactive substances. Both the respondents also acknowledged that they had relations with people who would encourage and affirm their addiction. Moreover, in the Provider's focus group there had been mentions of the so-called "Cash Clinics" in the project area, especially in the Massac county that fall outside the State's prescription monitoring system and have widely enhanced supply of the prescription drugs in the area. The problem with cash clinic issue also emerged during the focus group with the child welfare administrators.

The Addiction-friendly Acculturation in the Project Area. One of the themes that emerged from the analysis of the focus group deliberations of the persons in recovery is that substance misuse is very much predominant in the socialized life of the communities in the project area. Both the participants referred to their initiation to misusing opioids and eventually meth from 2 different vantage points; the male participant had been acculturated in his multi-generational family where he has observed multiple members misusing heroin and methamphetamines obtained from the street. The female respondent reported that she had a chronic condition called endometriosis for which she was hospitalized and given morphine and dilaudid intravenously and oxycontin orally for pain relief. She was sent home with 20mg of oxycontin and once that was over, her provider didn't prescribe more and that led her to find pain pills on the street which led to xanax and methamphetamine. She mentioned that she has never taken an intravenous route of administration because she has seen close friends try to attempt suicidy by taking heroin by the needle. The male respondent, however, was initiated at the age of 18 with tramadol. He reported to have watched his mom addicted to tramadol, and in his multi-generational family he found easy access to these pain meds. In his neighborhood, tramadol could be found for less than $1/pill. He became addicted to it and eventually began using hydrocodone followed by ecstasy (Molly). All the above experiences with controlled substances took place after completion of high school. He lost 2 friends to heroin, and the mother of his son is in prison due to heroin as well. The access and the motivation to both heroin and methamphetamine came naturally to this male respondent, the female respondent on the other hand was initiated to prescription opioid by her physician due to a chronic pain that she had experienced. Eventually, due to heightened awareness about rampant prescribing tendencies by physicians and implementation of the Illinois prescription monitoring program, her physician stopped prescribing the oxycodone that she used to get. As a patient of chronic pain, she had no other choice but to resort to heroin and fentanyl she found in the streets. By the time she realized that she was not necessarily using the drug to relieve her chronic pain but to feed her addiction.

Gaps in Local Systems:

The Providers Survey responders identified areas in need of improvement within their organizations' substance use programs as follows: the current screening practices (25%), current treatment practices (23%), and current practices in quality control (15%). 94% think there is need for further expansion of MAT programs in the project area. Regarding the opioid misuse health crisis, providers identified the biggest challenges the project area faces as follows: poverty/unemployment (32), lack of education (28), intergenerational drug use among

family members (28), ease of access to opioids (27), lack of funding for prevention and treatment services (21), over-prescribing methods (19), and lack of law enforcement (6).

In spite of an apparent ubiquity of children put into a vulnerable position for parental drug use; there is a disconnect in information gathering and sharing between the local child welfare system and the local substance use providers. This need assessment study did not find any information from the national, state, regional and local sources in the state of Illinois that actually collected county level referral of cases to the Child Protective Services that are linked to parental substance use. In the focus group discussion with the child welfare administrators they reported that frustration with the local substance use providers who they think "too easy to prescribe substances in the Massac county and does not employ enough screening to detect plausible abuse". The child welfare administrators also reported that making calls to substance use providers in the area sometimes do not receive any response. Hence even if there were parents who come in contact with the child welfare system does not get a referral for substance use services.

MAT Treatment Gaps: The open-ended qualitative section of the Provider' Survey respondents suggested that the MAT treatment currently refer clients to regional treatment and recovery organizations like the Gateway (20 miles from the project area) and Centerstone, however there has not been any integration between the substance use counselors in those agencies and the primary care MAT providers at the Rural Health Inc. There are occasionally some phone conversations but the treatment is not currently integrated in the close proximity between the behavioral and primary care components of the treatment forging an integration of the services. There is no coordination between what kind of therapies the counselors are providing and the continuation of Suboxone prescription. There seem to be a generalized idea about the role and the nature of intervention that the counselors contribute to the overall harm reduction treatment. Even key-informant interviews with physicians specializing in addiction in the area show lack of understanding of the interventions that counselors bring to the fore. Training on MAT for staff members from the medical and behavioral health side of the workforce would be helpful in generating better awareness about the role that both play in treating the opioid use disorder (OUD).

Higher Case Load. As stated earlier in the needs assessment report that higher caseload has been cited by the providers (32%) as one of the main reasons for burnout in the project area followed by lack of resources in the settings of their work (31%). In the Provider's Survey providers called for more investment in the general infrastructure in the area (31%) and increase in resources so that better pay and effective training and retention of the healthcare workforce could be done.

Law Enforcement Gap. In a focus group deliberation with Child Welfare Administrators in the area they CPS administrators complained the law enforcement of lax in addressing addiction related matters. One of the administrators commented that, "One thing I've noticed is that the law enforcement presence is terrible. I don't know if it is the society thing we have going on with law enforcement. People aren't getting arrested. Police refused to field test drugs or take

them into evidence. Police officers will throw drugs away and refuse to put it in evidence. There was a situation where dad was informant for the police, so police were fighting DCFS (CPS) to let dad keep custody of his kids. Police are refusing to do anything about methamphetamine, and this started way before COVID. She has no idea why. Years ago, a guy in town was gang involved and dealing cocaine in Union County. She told the drug agent and they didn't do anything, but the guy was dealing cocaine. Another time, she found an active meth lab in a shed and called the police. Children were there and police said they would go by in a few days. A stronger law enforcement presence would help get it off the street." There needs to be better assimilation of the goal between the law enforcement and the child protective services in the area. The law enforcement has been identified as a "weak link" when it comes to connecting children affected by drug use and brining about a therapeutic and corrective response.

Lack of a System of Care. During the Focus Group deliberation with the Child Welfare Administrators, it became it emerged that there is no system of care with all stake holding agencies working together. The common excuse that is shown for non-coordination is the HIPPA guidelines. An child protective services administrator commented,

> "They will call Rural Health to find out about MAT and a particular client. If a HIPPA release is not signed, they won't talk. CPS has a HIPPA exception by the state. CPS investigator can go to a parent's home and count pills to see if they are abusing it or selling it. The way the local MAT provider keeps track of things, it isn't effective. If Suboxone is given in a 1-month supply, there is currently not enough oversight. Drug testing is always scheduled on the same day. They know how to pass the drug test."

Community Engagement

In the open-ended section of the Provider's Survey the respondents mentioned that prevention awareness campaigns "must include drug education" and "Benzos need to be in the conversation too". Discouraging abstinence-based messaging in drug awareness campaigns, providers felt, had been traditionally been less effective. Education abuse drugs, dosages, implications about methods of administration, information risks involving intravenous administration and awareness about the rationale and the availability of the harm reduction services should be part of the prevention awareness. This thought resonated among the persons in recovery participants of the focus group as well. One of the participants in the focus group had responded "you are ready when you are ready" to the question about the effectiveness of the community drug awareness campaigns. However, the persons in recovery participants felt that when one is ready they should be able to obtain the information about available services. A comprehensive consortium involving stakeholders who vouch for both abstinence-based model as well harm-reduction model could bring together an inclusive messaging with appropriate training and education.

Engagement of communities needs to be done in a strategic manner. Since different counties have different types of substance use patterns and the response system, a system of care approach through the consortium needs to be build up. There are two barriers to engaging the PWUD, a) lack of funding to do enough outreach, recruit and train competent workforce,

and b) lack of consensus in the community about the different approaches to drug treatment practices that create silos the provision of services. In order to engage the community around prevention, treatment and recovery goals of the project area there needs to be provider education followed by community education and dialogue on the harm reduction approaches. There is a great distrust about any services in the region that has anything to do with the government. Collating MAT services with drug dealing causes further misunderstanding. Often the providers themselves perpetrates such prejudices. Moreover, the overwhelming of the substance use response system due to high case load, inadequate workforce and lack of resources and training opportunities are essential barriers to community engagement. Finally, Covid 19 pandemic and the social restrictions led to the shrinking of services and mobilities would create additional challenges to PWUD outreach. The telehealth and telecommuting infrastructure too are crucial to maintaining the effectiveness of the consortium, and connecting services and messages to their targets.

The system of care approach will involve various stakeholders, screening and testing services need to expand and be more available. The pattern of substance use trajectory in the area appears to follow the national patterns plotted in the pathway below:

Pain meds and opioids always precedes the stimulants for many users who add stimulants like that of the meth as an enhancer to manage withdrawal from opioid, as some persons in recovery explained during the focus group. Understanding the profiles of people who use drugs and go to recovery have different profiles, some respond well to complete cessation from usage and some don't, if stigma education and education about harm reduction could blend well with the religious approach, the community could be better engaged.

E. Priority Settings

Based on the substance use need assessment data there are several lessons from the needs assessment that that would informs strategic planning to address the presenting problem. They are listed below:

1. Coordination of Prevention, Treatment and Recovery Services: Better integration of substance use disorder prevention, treatment, and recovery services across all the providers of substance use, child welfare, law enforcement, health centers schools and faith-based services creating a system of care type in the project area would maximize resources, help monitor quality, reduce redundancy and improve outcome in spite of the resource crunches.
2. Promoting Prevention Education in a New Way: Ensuring that prevention education takes a bottom up approach, taking, also an informal route, through snowballing recovery groups, prompting word of mouth, beyond social institutions like the churches to the other faith-based platforms like the Depot, Bible study group, youth groups, fellowships and retreats, and schools, maintaining the colloquiality of the method of communication as much as could be possible.
3. Promoting Screening and Testing Services based Discourse: Screening services of traumatic stress and other brief substance use screening tools need to be implemented

across the healthcare system. Screening should not only refer but could also inform serving prevention purposes. Recovery support groups, school groups and informal church groups can have events discussing screening and testing data creating a culture of evidence-based awareness about mental health substance issues, their interrelations and the stigmas that are associated with them.

4. Harm Reduction Education. Harm reduction education purposefully involving materials that share the concerns of the community, present data, literature, case studies and weave them into customize narratives to engage communities in thinking and asking questions about their presumptions. Harm reduction education need to begin with the providers of both primary and behavioral healthcare stripes followed by PWUD, person in recovery, their families and other stakeholders in the community**.** Promotion of SIU's ECHO program in the community also needs to be a part of the strategy.
5. Child Impact Data Collection: Data connecting children impacted by substance use and parental addiction needs to be collected Involving local administration of child protective services, local court system, law enforcement, public health centers and substance use providers. A system of local data accessible and stored needs to be conceived as a pilot project.
6. Telehealth Infrastructure and Best Practices: Strategies regarding creation of telehealth infrastructure and training involving best practices need to be strategized. A strategic decision on telehealth and telecommuting would determine outreach and access to services.
7. The Long-term Impact of the Pandemic: Prevention, treatment and recovery strategies must take into consideration the impact of the pandemic. The need assessment provided a bleak picture on how the pandemic is negatively impacting treatment and recovery of persons who use substances, affecting children who are having to stay home, causing income losses for a services and manufacture-based local economy compounding the factors associated the social determinants of health widening health disparities.
8. Involvement of Law Enforcement: The needs assessment study shows that law enforcement's involvement in prevention, treatment and recovery efforts including inclusion of child welfare systems need to be strategize. Law enforcement's role in collecting data ground level data involving overdose deaths, drug arrests and child impact is paramount.
9. Drug Education**:** One element of spreading awareness is creating focus groups among behavioral health practitioners, PWUD, person in recovery, and different targeted groups about drug education, in a lucid simple basic manner. A broad-stroke campaign about the abstinence-based drug education only reinforces stigma. Drug education related to component, mixing of drugs, dosage awareness and methods of administration need to be part of the prevention, treatment and recovery methods. The relations between drug abuse and infectious diseases also need to be part of that plan.
10. Intra-venous Consumption Data and Strategy: Partnership with the Delta Study Group to consult with their data on drug testing and health impact of IV usage in the area needs to be part of the strategic plan. The members of the Delta Study group need to be a part of the strategic plan.

11. Integrated Care Training**:** Consultation and education on different levels of integrated health care while implementing MAT to the local service provider would help bring more awareness on how MAT is implemented.
12. Behavioral Health Intervention Training: Training on what behavioral health interventions are effective with OUD-SUD, what is theory of practice of those interventions, and what is the best way to implement them? Awareness about the effectiveness of behavioral health interventions by itself and conjunction with MAT may target the primary and behavioral health service providers as well as PWUD and PIR and their families. Stigma about behavioral health interventions can reduce more psychoeducation about its mechanisms in the community.
13. Workforce Development Strategies: Workforce shortage, high case overload and compromised competencies have been often cited challenges in the need assessment. Recruitment and retention of the workforce is very important. Strategies around workforce development, training, recruitment and retention need to be a part of the strategic plan.
14. Granting Writing and Funding Collaborations: A strategy about writing grant in collaboration with the local and regional partners to bring about strategic federal, state and regional dollars in the region is very important.
15. Strategies to Address the negative Social Determinants of Health: An understanding of the sociocultural factors, impact risk and health seeking behaviors, social networks, and disease transmission is important to bring involve local businesses, chamber of commerce and other entities to improve the socio-economic outlook of the region.

F. Citations

Banta-Green, C., et al. Washington State Syringe Exchange Health Survey: 2019 Results. Seattle: Alcohol & Drug Abuse Institute, University of Washington, April 2020. https://adai.uw.edu/wa-state-syringe-exchange-health-survey-2019-results/

Betty Ford Institute Consensus Panel. Journal of Substance Abuse Treatment. 2007 Oct; 33(3):221-8.

CDC. (2020, December 07). U.S. County Opioid Dispensing Rates, 2019. Retrieved from https://www.cdc.gov/drugoverdose/maps/rxcounty2019.html

CDC. (2020, August 25). NCHS Data Visualization Gallery - Drug Poisoning Mortality. Retrieved from https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/

Children's Bureau, Administration on Children, Youth and Families, U. S. Department of Health and Human Services (2019). *National Child Abuse and Neglect Data System (NCANDS) Agency File FFY 2018* [Dataset]. National Data Archive on Child Abuse and Neglect. https://doi.org/10.34681/k017-9a81

Gagne, C., White, W., Anthony, W. A. Psychiatric Rehabilitation Journal. 2007 Summer; 31(1):32-

7.

Hart, C. (2021). Drug Use for Grown-Ups. Penguin Press.

HRSA. (n.d.). Data by Geography. Retrieved from https://data.hrsa.gov/geo

IDPH. (n.d.). Pregnancy Risk Assessment Monitoring System. Retrieved from http://dph.illinois.gov/data-statistics/prams

Mary B. Kleinman, Kelly Doran, Julia W. Felton, Emily N. Satinsky, Dwayne Dean, Valerie Bradley, Jessica F. Magidson. (2020) Implementing a peer recovery coach model to reach low-income, minority individuals not engaged in substance use treatment. *Substance Abuse* 0:0, pages 1-15.

NORC. (n.d.). Understanding the Opioid Crisis in the United States. Retrieved from https://opioidmisusetool.norc.org/

O'Connell, M., Tondora, J., Croog, G., Evans, A., Davidson, L. (2005). Psychiatric Rehabilitation Journal. Spring; 28(4):378-86.

SAMHSA. (n.d.). Behavioral Health Treatment Services Locator. Retrieved from https://findtreatment.samhsa.gov/locator

SAMHSA. (n.d.). Substance Abuse Confidentiality Regulations. Retrieved from https://www.samhsa.gov/about-us/who-we-are/laws-regulations/confidentiality-regulations-faqs

Substance Abuse and Mental Health Services Administration (SAMHSA)2012[updated March 23, 2012; cited Oct 2012]. Available from: http://blog.samhsa.gov/2012/03/23/defntion-of-recovery-updated/Accessed November 2, 2012

Trivedi, M. H., Walker, R., Ling, W., de la Cruz, A., Sharma, G., Carmody, T., Shoptaw, S. (2021). Bupropion and naltrexone in methamphetamine use disorder. *New England Journal of Medicine, 384*(2), 140-153. doi:10.1056/NEJMoa2020214

Tsui J. I., Mayfield, J., Speaker, E. C., Yakup, S., Ries, R., Funai, H., Leroux, B. G., Merrill, J. O. Association between methamphetamine use and retention among patients with opioid use disorders treated with buprenorphine. Journal of Substance Abuse Treatment. 2020 Feb; 109:80-85.

Williams, A. R., Nunes, E. V., Bisaga, A., Levin, F. R., & Olfson, M. (2019). Development of a cascade of care for responding to the opioid epidemic. *Null, 45*(1), 1-10.

Appendix A

Prospective Consortium Partners				
	County	**Organization**	**Address**	**Phone Number**
EMS				
	Johnson	Cypress Fire Department	7790 Main St., Cypress, IL 62923	618-657-2906
	Johnson	Johnson County Ambulance	155 Industrial Dr., Vienna, IL 62995	618-658-2131
	Massac	Memorial Ambulance Service	1017 N. Ave., Metropolis, IL 62960	618-524-2176
	Massac	Brookport Fire Department Non-Emergency	108 W. 3rd St., Brookport, IL 62910	618-564-2351
	Union	Union County Ambulance	301 W. Mississippi St., Jonesboro, IL 62952	618-833-2871
	Union	Anna Fire Department Non-Emergency	101 E. Market St., Anna, IL 62906	618-833-2231
Law Enforcement				
	Johnson	Vienna Police Department	205 N. 4th St., Vienna, IL 62995	618-658-8264
	Massac	Massac County Sheriff Department	515 Market St., Metropolis, IL 62960	618-524-2912
	Massac	Metropolis Police Department Non-Emergency	1020 Broadway St., Metropolis, IL 62960	618-524-2310

	Union	Anna Police Department Non-Emergency	201 E. Vienna St., Anna, IL 62906	618-833-8571
	Union	Union County Sheriff's Office	308 W. Mississippi St., Jonesboro, IL 62952	618-833-5500
Schools				
	Johnson	Regional Office of Education #21 (Johnson County)	407 N. Monroe St., Ste. 300, Marion, IL 62959	618-998-1283
	Massac	Regional Office of Education #21 (Massac County)	1102 W. 10th St., Metropolis, IL	618-524-3736
	Union	Regional Office of Education #30 (Union County)	Shawnee Community College - Anna Extension, 1150 E. Vienna St., Anna, IL 62906	618-634-3458
	Union	Anna Community Consolidated School District #37	301 S. Green St., Anna, IL 62906	618-833-6812
Faith-based Organizations				
	Johnson	First Baptist Church (Alcoholics Anonymous)	608 W. Main St., Goreville, IL 62939	618-995-2127
	Massac	Grace Church (Feed my Lambs Ministry)	818 W. 10th St., Metropolis, IL 62960	618-309-2427
	Union	First United Methodist (Gamblers Anonymous)	100 E. 5th St., Metropolis, IL 62960	

Health Departments				
	Johnson	Johnson County Health Department	513-1/2 E. Vine St., Vienna, IL 62995	618-658-5011
	Johnson	Head Start: Cairo Early Learning Center	4115 Sycamore St., Bldg. B, Cairo, IL 62914	618-734-4220
	Massac	Massac County Health Department	1230 Commercial Park Rd., Metropolis, IL 62960	618-524-2657
	Massac	Head Start: Metropolis Early Learning Center	416 E. Ninth St., Metropolis, IL 62960	618-524-5222
	Union	Union County Health Department	260 Lick Creek Rd., Anna, IL 62906	618-833-6393
	Union	Head Start: Anna Early Learning Center	Barnes Hall, 1000 N. Main St., Anna, IL 62906	618-833-8932
Child Welfare Organizations				
	Johnson	DCFS Office - Johnson County	1315 Washington Ave., Cairo, IL 62914	618-734-0861
	Massac	DCFS Office - Massac County	200 W. 5th St., Metropolis, IL 62960	618-524-2428
	Union	DCFS Office - Union County	108 Denny Industrial Dr., Anna, IL 62906	618-833-4449

Appendix B

Rural Health Inc.'s needs assessment and gap analysis framework

1. Gaps, Assets, trends and opportunities
2. Services related to prevention, treatment and recovery services
3. Infrastructure stands for
    a. Governance infrastructure
    b. Financial infrastructure
    c. Partnership infrastructure
4. Community Health Assessment Data from the local hospital: Cindy
5. Accessing data from other sources

Accessing other data	Current source
Law Enforcement	• Got data on drug related arrests for last 5 years
Schools	•
EMS	•
Primary Health Providers	• Planning on a workforce survey
Substance Use Providers	• Planning on a workforce survey
Recovery Providers	• Planning on a workforce survey
Prevention Providers	• Planning on a workforce survey
Person in recovery	• Two interviews conducted • More data?
Health Departments	• Community Health Assessment Data (Cindy and Ali) • Two goods for drugs • Beth Bernham SIU • Needs assessment data
Child Welfare	• Focus group Planned • Pursuing leads through Ginger
Gap: What is missing that should be available?	• Child welfare impact data • Opioid and Meth overlap data

	• Waiting time for treatment • Need more community education awareness • Expansion of MAT • Need of more trauma focused attention • Provider education • Lack of primary care providers • Lack of mental and behavioral health providers
	•
Service recipients - Prevention - Treatment - Recovery	• Mental health • Substance use • Perceptions about service gaps and assets • Challenges to accessibility of service • Kerry's questionnaire
Service Provider Focus Group	• Weaknesses and gaps • Strengths and Assets • Threats and trends • Opportunities
Reviewing Existing Community Resources	• Treatment providers facilities
Key Informant Interview	•
Data Collectors	• Individual descriptors (person in recovery) • Organization name
Availability to services (Assets) Assets What is going on and going well that can be built upon?	• List of prevention recovery and treatment services • Harm reduction services • HIV.HCV Hepatitis C Services • Prevention: Naloxone distribution, medication disposal, school programs, community coalitions, other prevention activities (???) • Treatment: Outpatient, Residential, Detox • Recovery: AA, Faith-based groups

	• Melanie Morrison Ginger mentioned has a faith-based group • MAT program • Ali mentioned about a group • Human resources • Physical resources • Information resources • Political resources • Existing intervention resources
Access to services	• What assets exist that can be built upon? • Are there unmet needs where more people seeking services than can access them? • Are there barriers to accessibility?
Opportunities and Gaps in local systems	• Difficulty in engaging people use drugs • Screening issues • Diagnosing issues • Referral to treatment issues • Other support services issues
OUD-SUD Workforce	• Recruitment Retention (Interview/Focus group) • Worker capacity and skills (existing data) • Is there shortage of workforce? • Are there DATA waivered physicians in our area? • Are there credentialed individuals? • What are workforce training needs? •
Needs of special and vulnerable group	• Children • What are the trends? Are there cooridnations between child welfare and other agencies?
Social Determinant of Health	• Individual • Interpersonal (friends, family, social groups) • Community

	• Societal
OUD SUD Stigma	• Physician interviews • Social Worker interviews • Questionnaire
Existing Funding	• HRSA grants in the area • SAMHSA grant in the area • State Licensing website • Coalitions and collaboratives that exists • Any efforts to get synergy?
Opportunities and Challenges to maintaining consortium	• 8 Sustainability domains • Environmental support • Partnerships • Funding stability • Organizational Capacity • Program Evaluation • Program Adaptation • Communications • Strategic Planning
Description and methods of how to engage community member	• Description to be written • Surveys • Key informants • Focus Groups • Priority Setting Sessions
A description of a good-faith effort to engage directly impacted individuals	• Participate in data collection • Participate in community health data review and health needs prioritization • Serve in the steering committee
	•
Workforce needs	• An Online survey to determine workforce needs

	• An online survey of consortium members and other constituents to identify general needs for opioid related services and programs • Medical providers focus groups • A medical provider online survey • Recovery community focus groups • Quantifying employer demand • Mapping existing resources • Appling national benchmarks/recommended provider ratios • Assessing patient access factors • Do providers get enough training and certification on job? • What are the feeder schools/institutions that supply the workforce? • What are the reasonable commuting distance? • What are the social impediments to building workforce capacity? • What are the selling points of assets that can attract new workers? • Are there additional partners? (Area Health Education Centers, Government agencies, Provider association? • What existing initiatives and available resources that addressing the workforce needs? • Strategies about engage, recruit, train, retain and advance and expand.