REPORT ON THE NEEDS OF PEOPLE WHO USE DRUGS IN PIMA COUNTY

By

ARIEL TIANA HAYES

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Approved by:

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Dr. Patrick Wightman
College of Public Health

TABLE OF CONTENTS

ABSTRACT

The purpose of this report was to identify key unmet needs of people who use drugs (PWUD) in Pima County. Barriers may be identified in the context of achieving a goal of sobriety, or simply improving the overall health and wellbeing of PWUD without requiring abstinence. These recommendations are intended to be taken into consideration as the *Pima County Health Department* and *Healthy Pima* conduct their next Community Health Needs Assessment. Drug use is highly stigmatized and traditional public health approaches to identify, engage with, and respond to the health needs of this population are often insufficient.

A review of literature and a series of key informant interviews resulted in the following three recommendations. (1) To educate healthcare personnel on stigma reduction and harm reduction practices and consider establishing programming in these setting to serve the health needs of PWUD; (2) To increase public health surveillance of drug use and broaden health promotion services for PWUD; and (3) To work towards restorative public health based responses to drug use while providing PWUD with alternatives to incarceration. The recommendations set forth are understood to be realistic and achievable measures that could be instituted at a county level.

INTRODUCTION

Substance use is an issue of significant public health concern throughout Pima County, Arizona, and the United States. Between the years of 2012 and 2016 Arizona experienced a 74% increase in opioid deaths and a "state of public health emergency" was declared through May 2018 (Arizona Department of Health Services[AZDHS], 2019). The Community Health Needs Assessment for Pima County reports statistically higher drug induced death rates when compared to the state of Arizona (Coyle, Drummond, & Breedlove, 2018). These include deaths from opioid, heroin, and pharmaceutical use (Coyle et al., 2018, p. 6). The 2nd, 4th, and 8th respective leading causes of morbidity in the county are reported as "alcohol use," "opium use," and "unspecified drug use" (Coyle et al., 2018, p. 6).

The continuing criminalization of drug use in Arizona and Pima County, as well as the stigma that surrounds the topic, prevents many PWUD from coming forward to voice and advocate for their needs through the traditional avenues. The findings outlined in the following literature review, summary of key informant interviews, and resulting recommendations are intended to be taken into consideration as the *Pima County Health Department* and *Healthy Pima* conduct their next Community Health Needs Assessment.

LITERATURE REVIEW

This section will review the literature pertaining to drug use in Pima County, Arizona, the United States, and Canada, and identify themes concerning the unmet needs of people who are actively using drugs (PWUD). Subsections will include a discussion of disparities concerning resources for diverse substance use and methods of use, barriers that PWUD face when attempting to access resources, and a need for better informed care in healthcare settings. For the purposes of this literature review, the term "harm reduction" may be understood as public health based approaches which attempt to provide health-promoting services to PWUD without requiring that the person undergo treatment or otherwise limit their consumption of drugs.

SUBSTANCES AND METHODS OF USE

Prescription and non-prescription opioid dependance is widespread and particularly deadly. The high number of opioid-related deaths across the United States have forced governments to take action. In Arizona increased surveillance, greater access to the lifesaving medication naloxone, training of prescribers, regulation of opioid prescriptions, and other measures have been put in place to help reduce mortality rates and prevent further dependency (AZDHS, 2019). Pharmacotherapy or medication assisted treatment (MAT) for opioid use disorder is also available to Arizona's Medicare (AHCCCS) participants (Arizona Health Care Cost Containment System [AHCCCS], 2017, p. 126). However, resources available to those using non-opioid drugs or a combination of different varieties of drugs is limited.

Non-opioid medications pose a significant risk to health and, like opioids, can be deadly. Commonly misused non-opioid drugs include central nervous system (CNS) depressants such as benzodiazepines and barbiturates, stimulants like methamphetamine and cocaine, and alcohol ("Misuse of Prescription Drugs", 2018). These non-opioid drugs can be addictive, have a variety of short and long term health complications, cause deadly overdoses, and can be dangerous to detox from when done without medical supervision (Gunja, 2013; Ciccarone, 2011). When non-opioid drugs are used in combination with opioids they are especially dangerous. Additionally, many non-opioid drugs are testing positive for fentanyl, a particularly deadly synthetic opioid (Kingston, Newman, & Banta-Green, 2017). People who are using these non-opioids are often not aware of the presence of fentanyl in their drugs and may not have a tolerance for the strong opioid (Kingston et al., 2017).

Currently there is limited statistical evidence available related to non-opioid drug use in Pima County and Arizona. Some data is available on a federal level: the National Vital Statistics Report on drug overdose reports 11,316 drug related deaths from the stimulant drug cocaine and 6,762 deaths from stimulant methamphetamine in 2016 (Hedegaard, Bastian, Trinidad, Spencer, & Warner, 2018). These statistics represent 17.8% and 10.6% of drug related deaths respectively, and a steady and significant increase in stimulant-related deaths since 2011

(Hedegaard et al., 2018). Benzodiazepine and barbiturate drugs also represent a significant portion of drug-related deaths. These CNS depressants were involved in 9,887 or 15% of drug related deaths in 2016 (Hedegaard et al., 2018). Such findings urge better public health surveillance of non-opioid drug related morbidity and mortality rates, and indicate a need for harm reduction and treatment resources for people with non-opioid dependance and/or poly substance use.

The Pima County Community Health Needs Assessment identifies “alcohol use” as the second leading cause of morbidity in the county with 496 attributable deaths between 2012 and 2016 (Coyle et al., 2018). A participatory needs assessment conducted in British Columbia, Canada uncovered a presence of underserved “illicit drinkers” in communities facilitated by PWUD such as drug users unions and harm reduction based spaces (Crabtree, Latham, & Buxton, 2016). Illicit drinkers are defined as those who “drink non-beverage alcohol (e.g. mouthwash, rubbing alcohol) and those who drink beverage alcohol in criminalized way” such as people who are homeless (Crabtree et al., 2016). These findings suggest a need for harm reduction based services for people with alcohol use disorder and those who illicitly drink. Programming could be integrated into existing spaces and/or public health programming. The harm reduction services available in Pima County are administered in the form of syringe service programs and naloxone or Narcan distribution. These programs are designed to meet the needs of people who inject drugs and tend to focus on opioids. Those who illicitly drink, or smoke or snort drugs have access to few public health based harm reduction services.

Increased surveillance of drug related morbidity and mortality may uncover a need for a public health response to stimulant and other non-opioid drug use in Pima County. Additionally, Pima County residents would likely benefit from expansion of harm reduction and treatment services. This expansion should include resources for people who engage in non-opioid or poly substance use, as well as those who choose to drink, smoke, or snort drugs.

BARRIERS TO CARE

The criminalization and stigma that surrounds drug use prevents PWUD from accessing services to care for their health. Services may be treatment related or utilize other approaches such as harm reduction to minimize the negative health effects of drug use. Two focus groups conducted in Ontario, Canada with mothers undergoing treatment for substance use disorder (SUD) found that many avoided accessing treatment services because they feared that disclosing their use of drugs would result in child custody loss (Elms, Link, Newman, & Brogly, 2018). Other identified barriers to treatment included admission requirements, wait times, fear, safety, and stigma (Elms et al., 2018). Another study lists "fears about stigmatizing attitudes of neighbors and community," as a barrier to accessing mental health and SUD treatment (Mojtabai, Chen, Kaufmann, & Crum, 2014). In Arizona PWUD that are not interested in SUD treatment face further barriers when attempting to access health promoting services.

Syringe service programs (SSPs) in the state still occupy a legal grey area which prevents many non-profits and other organizations from providing harm reduction services (Innes, 2019). There are efforts to pass HB 2148 in the Arizona legislature which would legalize SSPs in the state (Innes, 2019). The Pima County Health Department runs one of the only SSPs in Arizona where clients are provided with a limited quantity of sterile injection equipment and eduction concerning safer drug use ("Lifepoint," n.d.). As earlier discussed, these programs tend to best serve the needs of people who inject opioids. Pima County also operates a highly successful Drug Court Program which provides alternatives to incarceration for those charged with drug related offenses ("Alternatives to incarceration," n.d.). The literature reviewed highlights the ways in which social and governmental responses to SUD may impede PWUD from accessing services ("Alternatives to incarceration," n.d.). Pima County has taken some positive steps to address this issue and should continue to use and build upon the programs mentioned.

Co-occurring health problems and/or disorders pose an additional barrier for PWUD. A study of people with SUD and co-occurring 12-month major depressive episodes identified

barriers to accessing treatment resources for both disorders (Mojtabai, 2014). Barriers included “cost,” “not wanting to stop the use of drugs or alcohol,” “fears about stigmatizing attitudes of neighbors and community,” and a “lack of knowledge about where to go to receive treatment” (Mojtabai, 2014). Another study examined SUD treatment for those with “ability issues.” Recommendations included population specific screening and assessment, tailored treatment methods and individualized treatment plans, readily accessible facilities, and population specific service provider training (Novotna et al., 2017). The literature expresses a need for healthcare services that collaboratively address patients’ unique needs while minimizing barriers such as transportation, distance, and cost.

Two separate academic studies highlighted the value of hospital settings as a point of contact when promoting the health of PWUD. A prospective observational study of patients with severe infections due to injection drug use found hospitalization to be a “reachable moment” (Fanucchi, Lofwall, Nuzzo, & Walsh, 2018). A second study identified changes that could be made in a hospital setting to improve patient outcomes and avoid re-hospitalizations (McNeil, Kerr, Pauly, Wood, & Samll, 2016). The recommendations included "(1) prioritizing hospital care access and risk reduction over the enforcement of abstinence-based drug policies; (2) increasing responsiveness to subjective health needs (e.g., pain and withdrawal symptoms); and, (3) fostering ‘culturally safe’ care” (McNeil et al., 2016). The changes outlined in these studies represent a realistic starting point when attempting to improve healthcare services for PWUD in Pima County.

BETTER INFORMED CARE

The literature indicates a need for better informed healthcare and treatment services for PWUDs. Substance use disorder is complex with a wide range of contributing factors and health implications. Services provided to PWUD or are seeking treatment for substance use disorder should be culturally competent, trauma informed, and provide wrap around services.

Substance use disorder(SUD) is typically viewed through a narrow lens which fails to conceptualize the diverse range of experiences and social factors which contribute to drug dependence. An academic article written by Yellow Horse Brave Heart outlines the “historical trauma response” (2003). This theory highlights experiences of massive group trauma and outlines how this trauma is passed down through generations to affect the wellbeing of populations today (Yellow Horse Brave Heart, 2003). In this context substance use is seen as a form of self-medication and “traditional culture” is recognized as a crucial component of recovery (Yellow Horse Brave Heart, 2003). Another study identifies a need for “cultural safety” in patient-provider relationships: emphasizing “non-judgment” and “refocusing attention on [the patient’s] ‘personhood’”(McNeil, Kerr, Pauly, Wood, & Samll, 2016). The literature suggests that providers and public health practitioners will be most effective when an effort is made to address preconceptions about drug use and provide the patient with culturally informed services.

Numerous research studies have indicated a strong relationship between the number of Adverse Childhood Experiences (ACEs) a person reports and their development of substance dependance and further health problems. One retrospective cohort study administered to over 8000 participants in California found that people with 5 or more ACEs on a 10 point scale were seven to ten times more likely to report illicit drug use problems (Dube, Felitti, Dong, Chapman, Giles, & Anda, 2002). The study also found that the number of ACEs an individual reported correlated strongly with the age of initiation, drug use problems, drug addiction, injection drug use, and lifetime drug use (Dube et al., 2002). Similar studies have found correlations between ACE scores and a variety of “health harming behaviors,” (Poorolajal, Haghtalab, Farhadi, & Darvishi, 2015). These findings suggest that substance use disorder should be treated as more than simply a harmful “health behavior,” but rather responded to in the context of the traumatic experiences which likely contributed to its emergence.

The prevalence of trauma, as well as diverse health needs among the population of PWUD indicate a need for wrap around services in treatment settings. These may include, but

are not limited to, mental health services, nutrition counseling, reproductive health services, case management for social services, and prevention of communicable diseases (Jeynes & Gibson, 2017; Hyshka, Anderson, & Wild, 2017; Anastario, FourStar, Ricker, Dick, Skewes, & Rink, 2017). A survey of 210 clients undergoing treatment for SUD identified barriers that the population faces when attempting to access reproductive as well as general healthcare services (Terplan, Lawental, Bryant Connah, & Eileen Martin, 2016). PWUD are at an increased risk for a number of poor health outcomes when compared to those who do not use drugs; this population is also more likely to have unstable living conditions and a potential for low health literacy. The researchers suggest that the treatment center already serves as a point of contact for these clients and should be utilized to address additional healthcare related needs (Terplan et al., 2016). The provision of wrap around services was found to be particularly lacking for clients referred from the criminal justice system (Paino, Aletraris, & Roman, 2015).

People who use drugs and those who are seeking out treatment are complex individuals with diverse experiences and healthcare needs. The literature testifies to a shared experience of trauma and requires an interdisciplinary healthcare response. The services provided to this population should seek to minimize barriers to care while providing patient centered and culturally competent services.

KEY INFORMANT INTERVIEWS

The interviews proposed received a University of Arizona IRB determination of: “Human Subjects Review not Required” on April 2nd, 2019.

Attempts were made to reach nine potential key informants from a variety of backgrounds working directly with PWUD in Pima County. The time constraints of the interview process made an interview with a tribal key informant not possible. Two potential key informants failed to reply to requests for an interview. One potential key informant was determined to be a poor fit for the research proposed following further inquiry. Full interviews were performed with five separate key informants working or volunteering in Tucson, Arizona.

Interviews lasted approximately 20-30 minutes and were conducted over the phone during the month of April 2019. All interviews followed the outline below and were recorded with participant consent for later reference by the researcher. All interviews are anonymous.

Interview Format is included in Appendix A.

INTERVIEW FINDINGS

Summary:

All five key informants worked with people who use drugs(PWUD) in a professional capacity. Three also engaged with this population through volunteer work. Four out of the five key informants identified as “in recovery” from chaotic drug use. A number of commonalities appeared throughout the interviews performed.

All five key informants discussed “stigma" as a barrier to the wellbeing of PWUD during their interview. Four of the five discussed stigma in healthcare facilities as an area of particular concern. Three informants discussed the importance of minimizing barriers when providing services to PWUD.

Four of the five key informants brought up a need for more easily accessible and widely available sterile syringes and other materials for safer drug use. Four brought up the importance of developing an ongoing relationship built on trust and support when engaging with clients. Two key informants emphasized the importance of peer led programming and encouraged greater use of the model.

Two of the key informants highlighted the ineffective nature and harmful consequences of incarceration as a response to substance use in the county.

Interview 1:

The top three identified barriers that PWUD face when attempting to care for their health are as follows.

1. “Syringes are not available for purchase.”
2. “There are no places where the use of drugs is in any way shape or form acceptable or safe.”
3. “The stigma around wound care is such that PWUD don’t go for any kind of medical checkup or any kind of healthcare when they have abscesses or they have infections.”

The key informant’s top concern of these three is the second listed barrier “because overdose deaths happen when PWUD are using by themselves.”

The key informant believes that the informal “decriminalized zone at certain parks” is an important step to address this issue and could be further expanded upon. These parks are described as spaces that are broadly known to have drug use activity and a potential for felony possession charges at any given time. However, they are also places that PWUD know that they can go for access to wound care, rapid HIV and Hepatitis C testing, outreach supplies, food, and more. Further informal protection of these spaces and expansion of access to harm reduction based services would be a positive step.

The informant also discussed the need for PWUD to undergo “internally motivated change” and the damage of “consecutively worse negative consequences” such as those seen in the criminal justice system. The key informant expressed a high opinion of the County’s Drug Court program and believes that “funding for the program should be top priority for addressing this issue [of incarceration].” Drug Court could be further improved upon were the symptoms of substance use disorder such as “positive urinalysis tests or lying to their probation officer” contextualized and participants allowed more freedom to be symptomatic of their disease.

Interview 2:

The top three identified barriers that PWUD face when attempting to care for their health are as follows.

1. “Living situation.”
2. “Healthy food.”
3. “Transportation.”

The top identified issue of these three is the first: the person’s living situation. This is because “most of the people we work with live with other people who are also using or involved in dangerous behavior.” If they go back to that dangerous living situation after undergoing treatment “the chance of them using are very high, if they are safe then they are not going to use again.” This barrier could be addressed through more affordable housing options in the County.

The key informant also cited stigma as a huge barrier that keeps people from getting better. In their experience many treatment models for substance use disorder base their strategy on shaming and employing stigma. These strategies “might work short term but they don’t work long term.”

The peer support model has worked really well for the KI and their organization. The idea that there are people in the community that have successfully gone through

recovery and are still going through it has been a powerful tool. The KI states that "[I] can see [the clients] bodies relax when [I] start to tell them that [I am] a peer and [I] understand and [I am] not going to shame them."

Lastly, the key informant discussed some barriers when attempting to distribute Narcan in Emergency Departments and other healthcare settings. Routine Narcan or naloxone distribution in an Emergency Department setting following an overdose or other drug related illness could be an actionable goal for healthcare facilities across the county.

Interview 3:

The top three identified barriers that PWUD face when attempting to care for their health are as follows.

1. "Fear of harassment at medical centers," specifically when seeking out services for drug related illness and wound care(abscess infections).
2. "Treatment of people who inject drugs(PWID) in hospital situations." The key informant states that their clients are often treated poorly in hospital situations where "nurses will tell clients that they will give them suboxone or naloxone," or won't let people go into the bathroom alone or have visitors.
3. "Lack of resources because the [diverse needs of the person are] not considered." PWUD have diverse healthcare and social service needs. The key informant would like to see more "wrap around services" in the county, and believes that this will also help PWUD be more successful when they choose to undergo treatment.

The key informant's top concern is the third one listed: "a lack of wrap around services." However, they believe that the second: "[fair] treatment of PWID in hospital situations" is the easiest to tackle through education that addresses drug use and stigma from a public health perspective. This could begin with a single hospital that has

made a commitment to educate their staff and treat PWUD with dignity. PWUD could then be referred to that location for services.

The key informant would also like to see the County work towards more upstream public health efforts that address drug users' health needs before and beyond overdose. These could include more overdose prevention and efforts to address other issues like abscess infections. They believe that it is very important that PWUD are included directly in these conversations.

Lastly, the key informant stresses the importance of building trust when working with PWUD and keeping barriers to accessing services as low as possible.

Interview 4:

The top three identified barriers that PWUD face when attempting to care for their health are as follows.

1. “Reliance on fixed sites,” because most people are using drugs in their homes or in public spaces and there is a lack of mobile units that physically meet people where they are located.
2. “Stigma.” This causes PWUD to avoid accessing healthcare facilities or any place where PWUD feel like they are going to be judged or asked personal questions.
3. “Programs aren’t diversified to meet the needs of anybody but those who are injecting opioids,” with a few exceptions for prescription opioids.

The key informant struggled to pick a top or most pressing barrier because “they all tie in with classism and racism.” However, they believe that barrier 3 is the most pressing because it “does so clearly discriminate on the basis of race.”

The key informant stands strongly behind peer-led programming stating that it is “what is going to ultimately work the most” and “should be the future of every program.” It is the way that we get programing to develop around PWUD. It is a “a

better way to get people to come to the services, [it] increases engagement, [and] tackles the stigma."

They state that "every program that ever exists ever is serving PWUD whether they are trying to or not." However, facilities that receive a high number of patients who use drugs, like the Pima County Health Department Clinics, should make an effort to "educate the staff [about drug use] and [provide them with] evidence based stigma training" as well as invest in materials like fentanyl test strips.

The key informant believes that "it is absolutely on the state to be providing something like [fentanyl test strips] in a crisis of poisoning."

Interview 5:

The top three identified barriers that PWUD face when attempting to care for their health are as follows.

1. "The ability [for PWUD] to practice their drug use in a safe way." This would apply to people who are not yet interested in treatment/recovery and include harm reduction based practices.
2. "Immediate access to treatment resources." The KI states that "people want help and are told that they need to wait a week or two" before accessing medication assisted treatment (MAT) services. This was identified as a "funding issue that depends upon people's access to financial resources like grants or AHCCCS(Arizona's Medicaid)."
3. "Stigma" affects PWUD's access to treatment for diseases like Hepatitis C and sterile syringes. Even once a person has "recovered" they are treated differently and have fewer opportunities for career advancement.

The key informant's top concern is "stigma," however they believe that this will take generations to truly change. While some progress has been made towards an understanding of substance use disorder as a disease, PWUD still face many forms of

structural and social stigma that affect their ability to access services and advance in life.

The key informant emphasized the importance of ongoing support for PWUD. These individuals need to know that “someone cares for them, they are not just another number” and they “are not going to just die and have no one care about [them].”

The key informant also believes that incarceration is “absolutely ineffective” it is “not a method of treatment.” Incarceration brings people “to the edge of [their] life” while doing nothing to address the causes of their drug use. The key informant believes that the county should provide MAT services for those in jail and routinely distribute naloxone immediately when PWUD are released and at a high risk of overdosing.

RECOMMENDATIONS

RECOMMENDATION 1: Educate healthcare personnel on stigma reduction and harm reduction practices and consider establishing programming in these setting to serve the health needs of PWUD.

Four of the five key informants interviewed identified stigma in healthcare facilities as one of the top three barriers that PWUD face when attempting to care for their health. The literature also suggests that these settings could be a valuable point of contact for this population.

Key informant #1's concern related to stigma in regard to wound care specifically. Key Informant #3 built upon this idea during their interview, explaining how their clients typically have AHCCCS and will go to their primary care provider for non-drug related health issues, but will avoid going for abscess infections and other drug-use-related health concerns. Key informant #3 also discussed "treatment of PWID in hospital situations" specifically. They explain that the "nurses will tell clients that they will give them suboxone or naloxone," or won't let people go into the bathroom alone or have visitors. It is important to understand that threatening to put PWUD into withdrawal is comparable to threatening physical harm (Key Informant 1, 2019).

Key informant #4 expressed similar concern, outlining the ways in which PWUD feel as though they are being judged in healthcare setting where they are often asked personal information concerning their drug use on intake forms. This practice initiates feelings and stigma from the time patients initially enter the facility and often overshadows the health issues they desired to address during their visit. Additionally, the key informant #4 believes that most healthcare providers generally "don't know anything about harm reduction or much about people who use drugs in general," and there needs to be more peer lead programs in healthcare centers. Key informant #4 also brought up the structural stigma in healthcare, highlighting the requirement of sobriety for AHCCCS participants to access Hepatitis C treatment.

While never addressing stigma in healthcare centers specifically, key informant #2 brought up an issue concerning the availability of Narcan in Emergency Departments. Peer advocates and other non-healthcare professionals in Pima County are not permitted to distribute Narcan to patients while in the hospital, however distribution is generally not done by physicians or other healthcare professionals. Routine Narcan or naloxone distribution in an Emergency Department setting following an overdose or other drug related illness could be an actionable goal for healthcare facilities across Pima County.

The literature suggests that hospital settings, when properly utilized, may also serve as a valuable platform to reach the populations of PWUD and begin to address their health needs. A prospective observational study of patients with severe infections due to injection drug use found hospitalization to be a “reachable moment” (Fanucchi, Lofwall, Nuzzo, & Walsh, 2018). A second study identified changes that could be made in a hospital setting to improve patient outcomes and avoid re-hospitalizations (McNeil, Kerr, Pauly, Wood, & Samll, 2016). The recommendations included "(1) prioritizing hospital care access and risk reduction over the enforcement of abstinence-based drug policies; (2) increasing responsiveness to subjective health needs (e.g., pain and withdrawal symptoms); and, (3) fostering ‘culturally safe’ care” (McNeil et al., 2016). The changes outlined in these studies represent a realistic starting point when attempting to improve healthcare services for PWUD in Pima County.

As key informant #4 states: “every program that ever exists is serving PWUD whether they are trying to or not,” and healthcare facilities have a duty to care for their patients. Actionable steps to address this issue could begin with stigma reduction trainings for healthcare providers, education about substance use disorder(SUD), and the development of protocols to ensure patients are being connected to the resources that are appropriate for them at their respective stage of drug use.

RECOMMENDATION 2: Increase public health surveillance of drug use and broaden health promotion services for people who are actively using drugs.

This recommendation pertains to the lack of harm reduction and treatment services available to people who use non-opioid drugs and those who may drink, snort, smoke, or use drugs rectally. The majority of services available to PWUD in Pima County serve people who use opioids and those who inject drugs. Key informant #4 addresses this concern in their interview, stating that “programs aren’t diversified to meet the needs of anybody but those who are injecting opioids.” Some grass roots efforts have been made to address this disparity through fundraising for pipe mouth pieces and the distribution of paper materials (Key Informant 4, 2019). Key informant #4 also brought up a reliance on “fixed sites” as a barrier to accessing resources and achieving health among this population. They highlight the fact that most people are using drugs in their homes or in public space and believe that it is important to physically meet people where they are. One way to better promote health among this population is to physically bring resources to them.

National level data suggests a growing prevalence of stimulant, and central nervous system (CNS) depressant drugs (Hedegaard et al., 2018). Alcohol use also represents an area of concern though more data is available. There is limited statistical data tracking non-opioid morbidity and mortality rates in Pima County or the state of Arizona. Initiating public health surveillance may uncover an issue of increasing public heath concern and provide a basis for the provision funds to address the disparity. Resources for could be integrated into existing programs such as the SSPs in the county. Three of the five key informants identified SSPs as especially effective methods of reaching and engaging with PWUD. Four key informants endorsed the peer support model and all communicated a necessity for developing an ongoing relationship with PWUD that is not dependent on a commitment to abstinence.

RECOMMENDATION 3: Continue to work towards restorative public health based responses to drug use while providing PWUD with alternatives to incarceration.

Two of the key informants identified incarceration as a particularly ineffective way to improve the health of PWUD. Key informant #5 stated that incarceration is "absolutely ineffective" it is "not a method of treatment." They believe that it does not "teach you your lesson" and does nothing to address "anxiety, depression, or whatever it is that [PWUD] are running away from mentally or emotionally." Key informant #5 also brings up the fact that Pima County does not offer MAT services to people with SUD who go into the county jail. People are then "brought to the edge of [their] life" in a jail cell with little to no support. Detoxing in a jail cell also increases a person's risk of overdose as their tolerance is lowered. Key informant #5 believes that "MAT services [should be provided] in the jail," and Narcan/naloxone immediately after when PWUD are released and at a high risk of overdosing.

Key informant #1 also disapproves of the "consecutively worse negative consequences" that PWUD face as they go through the criminal justice system. However, key informant #1 believes that Pima County's Drug Court program is admirable and "funding for this program should be top priority for addressing this issue." Within the Drug Court program the key informant recommends that opportunities for PWUD in these programs to be "symptomatic of their disease" should be amplified. Symptoms may include relapse and positive urinalysis, and lying to their probation or direct supervising officer. These symptoms should be contextualized as symptoms of their disease and not violations their legal status or moral integrity. The key informant believes that the more that Pima County's Drug Court system does to understand the disease that they are dealing with, the more and more effective the program will be as an alternative to incarceration.

The criminalization of drug use is detrimental to the health of PWUD in other ways. The legal grey area of SSPs in Arizona limits the funding of harm reduction

programming— a model of programming backed by multiple research studies and cited as effective by three key informants. Additionally, it prevents people in fragile circumstances from accessing treatment services. One study conducted with mothers undergoing treatment for SUD found that many avoided accessing treatment services because they feared that disclosing their use of drugs would result in child custody loss (Elms, Link, Newman, & Brogly, 2018). Another study lists “fears about stigmatizing attitudes of neighbors and community,” as a barrier to accessing mental health and SUD treatment(Mojtabai, Chen, Kaufmann, & Crum, 2014).

The evidence suggests that Pima County has taken positive steps to reduce incarceration of PWUD and provide harm reduction based resources to this population. The county should continue to provide and direct resources towards this programming. Additionally, Pima County should explore providing MAT services in the jail setting for PWUD and become incarcerated.

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APPENDIX A: KEY INFORMANT INTERVIEW FORMAT

Introduction:

For my senior thesis project I am putting together a list of recommendations that I will submit to the *Pima County Health Department* and *Healthy Pima.* These recommendations are intended to be taken into consideration when the county conducts their next Community Health Needs Assessment. I am looking to identify barriers that people who use drugs face when seeking out resources and/or working to better care for their health.

- These may be treatment or non-treatment related.
- Your identity will be kept confidential.
- May I record you for my own research purposes? These recordings will not go beyond myself and my advisors.
- You may decline to answer any question or omit part of your answer to any question.
- Lastly, please keep the scale of this report in mind, these are changes that could theoretically be made at a county level.

Questions:

1. In what capacity do you work with people who use drugs in Pima County? Is it professional? Volunteer? If you are comfortable sharing, do you identify as a person in recovery?
2. What do you see as the top 3 barriers that people who use drugs face when attempting to care for their health?
    - What do you see as the top concern out of those three?
    - Why?
    - How would you address this concern?
3. From your knowledge and experience working with people who use drugs, what are some of the most effective strategies or programs you have heard of to reach, involve, and motivate people who use drugs to care for their health?
    - How about the least effective?

4. What recommendations would you give to Pima County for addressing the concerns you've identified and/or adopting strategies you've found to be effective?