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Albuquerque Peer to Peer: Opioid Coordination and Outreach Project

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INTRODUCTION

Opioid use disorder (OUD), or opioid addiction, is a major public health problem in the City of Albuquerque and nationally. In 2013, there were 43,982 drug overdoses in the U.S (CDC, 2023b), surpassing motor vehicle accidents as the leading cause of accidental death for the first time in history (CDC-WISQARS, 2020). Since then, the problem has only gotten worse. In 2021, there were 106,699 drug overdose deaths in the country, 75.4% of which were due to opioids (NIDA, 2023). This translates to an age-adjusted death rate of 32.4 drug overdose deaths per 100,000 population. In New Mexico for the same year, the drug overdose death rate was 39.7 per 100,000 and in Bernalillo County, which includes the City of Albuquerque and one third of New Mexico's total population (U.S. Census, 2021), the overdose rate was higher still, at 53.2 per 100,000 (NM-IBIS, 2022).

To counter this problem, numerous opioid treatment and support services are offered in the Albuquerque area. However, many individuals who need these services do not engage with them. Nationally, it was estimated that less than 35% of those suffering from OUD received any treatment (Mauro et al., 2022). Low enrollment in existing services is likely due to several factors, including the stigma associated with opioid use, lack of knowledge about existing services, health insurance barriers, and fear of the treatment process (Bremer et al., 2023; National Academies of Sciences et al., 2019). The Albuquerque Peer to Peer: Opioid Coordination and Outreach Project is an attempt to help vulnerable individuals suffering from OUD to overcome these barriers and get the treatment they need.

The Albuquerque Peer to Peer project is run by the City of Albuquerque department of Health, Housing, and Homelessness (HHH) (formerly the department of Family and Community Services (FCS)). The project began in September 2017 when the Office of Justice Programs of the U.S. Department of Justice awarded the City of Albuquerque $294,994 to pilot the program. These funds were made available by congress through the Comprehensive Addiction and Recovery Act, signed into law on July 22, 2016, and were awarded to the City of Albuquerque through the Comprehensive Opioid Abuse Site-based Program (COAP) grant of the Bureau of Justice Assistance (BJA) for FY 2017, under category 1: Overdose Outreach Projects.

The long-term goal of the Peer to Peer project is "… to reduce the incidence of opioid overdoses in Albuquerque" (BJA, 2017). To accomplish this, the City of Albuquerque proposed employing peer engagement specialists to conduct outreach among opioid users who recently came into contact with emergency medical services for a non-fatal overdose or other medical complication. Peer engagement specialists have personal experience with successful long-term recovery from substance abuse and are trained to use that experience to help others struggling with similar issues (NMCBBHP, n.d.; SAMHSA, 2023).

Studies of similar programs elsewhere in the country suggest peer outreach may be effective for increasing engagement in opioid treatment services (Beaudoin et al., 2022; Pecoraro et al., 2012; Samuels et al., 2018). However, these results are preliminary, and it is unclear to what

extent they generalize across contexts. The Peer to Peer project represents an extension of the peer outreach model to a new cultural context and uses a somewhat novel program design. To evaluate the Peer to Peer project in terms of its design, implementation, and outcomes, the City of Albuquerque contracted with the Center for Applied Research and Analysis (CARA) within the Institute for Social Research at the University of New Mexico (UNM) to act as a research partner on the project.

The Peer to Peer project grant was planned to last for a period of three years from October 1, 2017 to September 30, 2020. However, 3 successive one-year extensions pushed the end-date to September 30, 2023. CARA was contracted on July 17, 2023 to conduct an evaluation of the Peer to Peer program by this end-date. The results of this evaluation are reported herein.

Based on review of program documents and discussions with program providers, CARA identified 3 research questions to guide the evaluation:

1. Is the Albuquerque Peer to Peer project designed in a way that is likely to achieve its goals of reducing opioid misuse, overdose, and death in the Albuquerque area?
2. Has the project been implemented in accordance with the outlined plan and with established best practices?
3. Has the program improved client outcomes?

To address these questions, we collected and analyzed data from a range of sources including the scientific literature on opioid problems and interventions, project planning and design documents, and quarterly reports on program activities.

The remainder of this report presents the results of this research and is broken into five sections: (1) a literature review where we summarize what is known about the problem of opioids, a survey of available programs to address the problem, and an analysis of previous peer outreach projects in emergency medical settings, (2) a review of Peer to Peer program documents to identify and evaluate the stated goals and processes of the project, (3) an analysis of service data from Quarterly Reports to assess the extent to which the program has followed its plan and achieved its goals, (4) a summary of our main findings and conclusions, and finally, (5) a brief set of recommendations for the future implementation of the program.

LITERATURE REVIEW

The Problem of Opioids

Opioid refers to a category of chemical compounds that attach to opioid receptors on nerve cells causing a release of dopamine, which produces euphoria, drowsiness, slowed breathing, and reduced pain signaling (SAMHSA & Office of the Surgeon General, 2016). Common drugs that belong to this category include natural opioids like morphine, codeine, and heroin, which are derived from the opium poppy; semi-synthetic opioids like oxycodone, hydrocodone,

hydromorphone, and oxymorphone; and synthetic opioids like methadone, tramadol, and fentanyl (CDC, 2022a).

Prolonged opioid use leads to tolerance, increased use, and powerful withdrawal symptoms. This leads to a condition known as opioid use disorder (OUD), in which one finds it difficult to quit using opioids despite the negative consequences on one's health and wellbeing (ABCT, 2021; Azadfard et al., 2023). At high enough doses, opioids can cause a decrease in breathing that can lead to unconsciousness and death (Schiller et al., 2023). Apart from overdose death, comorbidities associated with prolonged opioid use include mental illnesses (NIDA, 2020) and infectious diseases like HIV and hepatitis (Peters et al., 2016; Zibbell et al., 2018).

Opioid use has become a major public health problem. In 2021, 3.3 % of Americans, or 9.2 million people, age 12 or older reported misusing opioids in the past year, making it the second most used illicit substance after cannabis (SAMHSA, 2022, pp. 20–22). The majority of these, 8.7 million people, reported misusing prescription painkillers. The second most misused opioid was heroin, reported by 1.1 million people. A significant fraction of those who occasionally misuse opioids go on to develop OUD. In 2021, an estimated 5.6 million Americans, or 2.0% of the population had experienced OUD in the past year (SAMHSA, 2022, p. 35). These rates are similar in New Mexico and have generally remained stable at both the state and national level in recent years (SAMHSA, 2020, p. 23). However, the rates of medical complications from opioid use have been on the rise.

One indicator of this increase comes from data on *opioid-related hospitalizations*, which refers to any admission or diagnosis related to opioid use, including opioid dependence, opioid abuse, adverse effects from opioid detox medications, and emergency department visits for non-fatal overdoses (Weiss et al., 2016, p. 11). The rate of these hospitalizations has increased substantially in the U.S. in recent years from 166 per 100,000 population in 2008 to 297 per 100,000 in 2016 (Owens et al., 2020). A similar trend was observed in New Mexico, with 124 opioid related hospitalizations per 100,000 in 2008 compared to 314 per 100,000 by in 2016 (AHRQ, 2019). Of these, emergency department admissions for non-fatal overdose are the most serious. In 2018 in New Mexico, emergency department visits for non-fatal opioid overdose occurred at a rate of 50.5 per 100,000 (NMDOH, 2022). This was higher than the average rate of 45.3 for 21 other states that report such data (CDC, 2023a). Bernalillo county was higher still with a rate of 82.7 per 100,000, the sixth highest rate for all counties in the state (NMDOH, 2022, p. 47). In 2020, Albuquerque Fire and Rescue responded to 4,885 calls for overdose and poisoning, making it the 7th most common medical call type in the city (Albuquerque Fire Rescue, 2020, p. 22).

The most significant indicator of the scale of the opioid problem in terms of public health is the number of drug overdose deaths. Nationally, the number of drug overdose deaths increased dramatically over the past 20 years. In 2001, the age adjusted rate of overdose deaths in the US was 6.8 per 100,000 (19,394 deaths total) (Spencer et al., 2022). By 2017, this rate had increased over threefold to 21.7 per 100,000 (70,237 total deaths). The rate then held steady

until 2019 when it began to rise dramatically. By 2021, the rate of overdose deaths in the U.S. was 32.4 per 100,000 with 106,699 total drug overdose deaths. Of these deaths, 75% were caused by opioids (NIDA, 2023).

The drug overdose rates in New Mexico for this same period have consistently been higher than the national average and, within New Mexico, Bernalillo has been among the counties with the highest rates. In 2001 the age-adjusted rate of overdose deaths was 14.4 per 100,000 in New Mexico and 20.6 in Bernalillo County (NM-IBIS, 2022). By 2017, these rates had increased moderately to 24.6 for New Mexico and 23.9 for Bernalillo County. Since then, the rates increased dramatically to 50.6 for the state and 66.3 for Bernalillo County by 2021. That same year, New Mexico had the 6th highest drug overdose death rate of any state in the nation. Approximately 73% of those overdose deaths were caused by opioids (CDC, 2023c).

A large part of this recent increase in overdose deaths is likely attributable to a shift in the types of opioids being consumed (Rudd, 2016). Whereas in the 2000s most individuals with OUD began with prescription painkillers, currently a plurality of users start with heroin (Cicero et al., 2014, 2017). While the number of Americans age 12 and over who reported misusing painkillers in the previous year went down between 2016 and 2021, the number reporting heroin use increased from 948,000 individuals in 2016 to 1.1 million in 2021 (SAMHSA, 2022). This shift may be due to decreased availability of prescriptions, as indicated by decreasing trends in opioid prescription rates (CDC, 2021). As more users shift to illegal street opioids, like heroin, the risk of overdose increases due to the irregular purities of these drugs, which make accurate dosing difficult. This problem has been further compounded by the recent proliferation of fentanyl in illicit drug markets.

Fentanyl is a synthetic opioid, meaning it recreates the properties of natural opioids using industrial chemical processes. Fentanyl has become popular in the illicit drug trade due to its cheapness to produce and transport. It is often combined, unbeknownst to consumers, with heroin, pills, and other substances. It is also 50x more potent than heroin and likely a major contributor to the recent increase in overdose deaths. In 2021, there were 70,601 overdose deaths involving synthetic opioids (primarily fentanyl) representing 87.8% of all opioid overdose deaths (NIDA, 2023). In New Mexico the rate of overdose deaths involving fentanyl increased nearly 7-fold from 2016 to 2020 and Bernalillo county had the 4th highest fentanyl death rate in the state (NMDOH, 2022, pp. 41–43).

In addition to the devastation opioids wreak on the lives of individuals and their families, they also impose massive costs on the broader society. In 2017, estimated total costs from opioids nationally were $1.02 Trillion, or $3,134 per capita (CDC, 2017). This estimate represents an aggregate of estimated healthcare costs, criminal justice costs, and economic costs from lost productivity, and reduced quality of life. The estimated costs for NM for the same year were $6.49 B, or $3,107 per capita.

Addressing the Problem of Opioids

Programs that seek to address the opioid crisis from a public health perspective fall broadly into two categories: (1) *harm reduction* programs, which seek to mitigate the negative consequences of using opioids, and (2) the co*ntinuum of care for OUD*, which encompasses a range of programs aimed at preventing or reducing opioid misuse.

The most widespread harm reduction programs for opioid use are syringe exchange services to reduce the transmission of diseases like HIV and Hepatitis, and the distribution of naloxone. Naloxone (brand name: Narcan) is an opioid antagonist, meaning it prevents opioids from stimulating opioid receptors on nerve cells and is used as an emergency medicine to reverse opioid overdoses. An internet search yielded ten providers of opioid harm reduction services in the Albuquerque area operating out of 15 separate locations (Appendix A). All ten providers offered syringe exchange services, four provided HIV and Hepatitis services, and four distributed naloxone. Naloxone is also frequently offered alongside opioid prescriptions in pharmacies throughout the state (Bernalillo County, 2021). According to the New Mexico Department of Health, there were 4,144 overdose reversals from the use of naloxone for the entire state in 2019 and 1,927 reversals in Bernalillo County alone (NMDOH, 2020).

The continuum of care for OUD includes programs aimed at prevention, early intervention, treatment, and recovery (U.S. Department of Health and Human Services, 2018). Prevention programs target risk factors associated with opiate use such as delinquency, certain psychiatric conditions, violence, and school dropouts. Early intervention programs, like prescription drug monitoring programs (PDMPs) aim to identify people who may be misusing opiates and intervene when possible (CDC, 2022b). Treatment and recovery programs target individuals who have moved past opioid misuse to opioid use disorder (OUD) and thus require more intensive interventions. Albuquerque Peer to Peer can be situated on this continuum as an outreach service for connecting individuals with OUD to appropriate treatment and recovery supports.

The goal of treatment and recovery programs is to reduce opioid use, manage the risk of future relapses, and generally improve the health and social functioning of individuals with OUD. OUD treatment can be usefully divided into two phases: detoxification and maintenance. Detoxification refers to the period immediately following a reduction in opioid intake, which is often accompanied by intense withdrawal symptoms. These symptoms typically last 1-2 weeks and can include agitation, anxiety, tremors, sweating, chills, muscle aches, light sensitivity, insomnia, nausea, and diarrhea (SAMHSA, 2015a; Shah & Huecker, 2023). Maintenance refers to maintaining a reduction or total elimination in opioid use in the medium to long-term, such that one can lead a productive and meaningful life, also known as being in recovery.

Medication-Assisted Treatment (MAT), in combination with therapy and counseling, is considered the most effective treatment for facilitating detoxification and maintenance (Carroll et al., 2018; National Institute on Drug Abuse et al., 2016; U.S. Department of Health and

Human Services, 2018). MAT involves replacing opioids with medications that lessen withdrawal symptoms and cravings, which has been shown to be more effective than treatments based on abstinence at reducing harms and achieving lasting recovery (Busch et al., 2007). The most common medications used for MAT are methadone, buprenorphine, and naltrexone. Methadone and buprenorphine are agonists, meaning they bind to opioid receptors in nerve cells and produce many of the same effects as other opioids, minus the euphoria. Naltrexone, by contrast, is an antagonist, meaning it inhibits the opioid receptors from producing any effect.

Different individuals will benefit more from different medication options (Nordt et al., 2019). Determining which is best for a given individual depends on the severity of their OUD, the frequency with which the medication must be taken, and the preferred method of administration (Carroll et al., 2018; U.S. Department of Health and Human Services, 2018). Methadone is recommended for individuals who have used opiates for a year or more. It should be administered daily by mouth in the form of liquid, tablet, or powder. Buprenorphine is recommended for individuals with a shorter and/or less extensive history of opiate use, or for individuals switching away from methadone. The method of administration can vary from a tablet or film taken daily, an injection taken monthly, or a subdermal implant every six months. Naltrexone should only be administered after withdrawal has been completed and can be administered monthly through an extended-release intramuscular injection or a tablet that is taken daily.

Using the New Mexico Substance Abuse Resource Directory published by the New Mexico Department of Health (NMDOH) (Roth, 2019), we were able to identify 18 providers in Bernalillo County who offer opioid-specific treatment and recovery support services. Of these, 17 provide MAT, 16 provide counseling and/or therapy services, and 2 provide peer support services (Appendix B).

It is not enough to merely offer OUD treatment programs that are effective. To effectively address the broader opioid problem, it is critical that the individuals engage the appropriate services when they need them. In 2019, less than 35% of adults suffering from OUD received any type of opioid use treatment (Jones & McCance-Katz, 2019). Moreover, while MAT is generally accepted to be the most effective treatment option, only 27.8% of people suffering from OUD received medication (Mauro et al., 2022). Low engagement in available treatment services is explained by a range of factors, including:

- Fear of the symptoms of opioid withdrawal
- Fear of the social stigma of identifying oneself as an opioid user
- Lack of knowledge about available services
- Insurance barriers and other financial concerns
  (Bremer et al., 2023; National Academies of Sciences et al., 2019).

One strategy for improving service engagement is to conduct outreach in emergency medical contexts (Larochelle et al., 2019). This strategy makes sense because those suffering from OUD are very likely to utilize emergency medical services and are easy to identify and approach in such contexts (John & Wu, 2019). Moreover, these individuals have the greatest need for support. Opioid users are statistically at the highest risk for a fatal overdose within the first two days following a non-fatal overdose (Weiner et al., 2020). However, unlike with criminal justice system interactions where authorities can compel treatment (Munetz & Griffin, 2006), in emergency medical contexts outreach workers must rely on interpersonal skills and trust to effectively engage individuals in treatment and recovery services. The peer outreach model is designed to improve rapport and trust between outreach workers and those suffering from OUD and thus maximize service engagement.

The Peer Outreach Model

Peer engagement specialists are individuals who have achieved long-term recovery from substance use and/or mental health issues and are trained to use their experience to help others struggling with similar issues (SAMHSA, 2023). SAMHSA (2015b) recognizes twelve core competencies peer support workers should have, including the abilities to…

1. Form relationships with clients suffering from behavioral health conditions.
2. Provide them support.
3. Recount their personal experiences of recovery to inspire clients.
4. Personalize support to the needs of each client.
5. Support recovery planning.
6. Help link clients to appropriate services.
7. Teach clients useful skills that enhance recovery.
8. Manage crisis situations to minimize harms.
9. Be effective and respectful communicators.
10. Work collaboratively and on teams.
11. Advocate for the rights of those with behavioral health conditions.
12. Be willing to seek support from others when needed.

The Office of Peer Recovery and Engagement and the New Mexico Credentialing Board for Behavioral Health Professionals offer a training program and exam to become a Certified Peer Support Worker (CPSW) in the state of New Mexico (NMCBBHP, n.d.; OPRE, 2022). To be eligible for the program, one must be at least 18 years of age, have a high school diploma or GED, have 40 hours of volunteer or work experience in a behavioral health agency engaging directly with clients, and have a minimum of 3 years of successful recovery.

Peer support workers, also known as peer engagement specialists, have been shown to be effective in a broad range of treatment and recovery support contexts (Bassuk et al., 2016; Eddie et al., 2019; Reif et al., 2014; Stanojlović & Davidson, 2021). This is likely because those suffering from substance use disorders find them easier to relate to and trust their guidance

given that they successfully achieved recovery. More recently, there have been calls to use peers for outreach in emergency medical contexts (SAMHSA, 2023, p. 23).

To understand the evidence behind this approach and established best practices in how to implement it, we conducted a literature search for studies of peer outreach programs in emergency medical contexts using the University of New Mexico Libraries online catalogue database and Web of Science, which is an online platform that provides access to peer-reviewed journal articles and documents across a range of academic disciplines (Clarivate.com). To find relevant studies, we searched combinations of the following keywords: "peer recovery," "opioid," "outcome," and "emergency." We then filtered search results to include only those that (1) studied peer outreach programs in emergency medical settings, and (2) measured and analyzed outcomes using scientifically rigorous, quantitative methods. Studies on the use of peers for treatment and recovery outside of emergency medical contexts were excluded, as were studies that examined the need, feasibility and implementation of peer outreach programs but did not assess client outcomes.

Ultimately, only two studies met these criteria: one by Samuels et al., (2018) and another by Beaudoin et al., (2022). The small number of rigorous outcome studies is surprising given the growing popularity of such programs. As the authors of one of these studies observed, "in recent years, many EDs [emergency departments] have implemented… peer recovery coach programs, but associated patient outcomes have yet to be assessed." One additional study by Pecoraro et al., (2012) was also included in our analysis, as this study was mentioned in the original Peer to Peer grant proposal as the inspiration for the project (City of Albuquerque, 2016).

Evidence of Effectiveness

All three studies examined peer outreach programs implemented in hospital emergency departments (EDs). The specific hospitals were in Rhode Island (Beaudoin et al., 2022; Samuels et al., 2018) and Delaware (Pecoraro et al., 2012). Each study assessed the effectiveness of peer outreach using three categories of outcomes: (1) level of engagement in OUD treatment and recovery services, (2) amount of utilization of emergency medical and other healthcare services due to complications from OUD, and (3) death from overdose. The studies' authors reasoned that, if peer outreach is an effective intervention, then individuals who receive peer outreach should experience an increase in category 1 outcomes and a decrease in categories 2 and 3. Pecoraro et al., (2012) tested this hypothesis using a pre- post- design, in which they compared clients' rates of SUD treatment engagement and healthcare utilization before and after receiving the treatment. Samuels et al., (2018) used a quasi-experimental design in which they compared outcomes of those who received peer outreach with similar individuals who did not. Beaudoin et al., (2022) conducted a randomized controlled trial (RCT) in which they randomly assigned subjects to either receive outreach by a peer or by a hospital employed social worker.

The results of these three studies were mixed. Pecoraro et al., (2012) and Samuels et al., (2018) found that receiving peer outreach was associated with positive client outcomes, although many of these effects were not statistically significant. Beaudoin et al., (2022) found no meaningful difference between clients who received peer outreach and those who received outreach from a social worker, at least in terms of the short-term outcome of 30-day SUD treatment engagement. They have not yet published data on the other outcomes of healthcare utilization and death from overdose. Of the three studies, Beaudoin et al., (2022) had the most rigorous research design in that an RCT controls for the effects of both known and unknown confounding variables. By contrast, confounding variables could explain the positive results observed in the other two studies. For example, because all subjects in the Pecoraro et al., (2012) study received peer outreach after experiencing an acute medical emergency, we cannot rule out the possibility that client improvements were caused by their experiences of the medical emergency itself, and not the peer outreach intervention. However, caution should also be used in interpreting the results of Beaudoin et al., (2022), as the most important outcomes have yet to be reported. Additionally, because the study compared peer outreach with another form of intensive outreach by hospital professionals, the fact that neither intervention performed better than the other could be because both worked.

In sum, these results point to a need for further research regarding the effectiveness of the peer outreach model in emergency medical settings.

Best Practices

Apart from providing a picture of the evidence behind the peer outreach approach, the above studies are also instructive for establishing a set of best practices for the design and implementation of such programs.

With regards to peer workers qualifications and trainings, all three programs had similar standards, like that peers must have at least 2 years of stable recovery from SUD as well as training in motivational interviewing. Two programs additionally required peers to either have prior supervised work experience in SUD treatment and recovery support (Beaudoin et al., 2022; Samuels et al., 2018). Only one (Beaudoin et al., 2022) required that they have an official certification.

With regards to the eligibility requirements for participants, Project Engage accepted any individual suffering from problematic drug or alcohol use (i.e., SUD) (Pecoraro et al., 2012), whereas the programs Samuels et al., (2018) and Beaudoin et al., (2022) examined were restricted to individuals suffering from OUD. The methods for screening individuals also varied across programs. Project Engage was the only program to use a formal assessment tool, the AUDIT-PC (Alcohol Use Disorders Identification Test - Primary Care) (Pecoraro et al., 2012, p. 3). The other two programs screened participants primarily by whether they were admitted to the emergency department for an opioid overdose. Both also accepted participants receiving treatment for OUD, though it is unclear how OUD was assessed. Once identified as eligible,

potential participants in the different programs were asked by hospital staff if they wanted to receive a consultation or visit from a peer specialist. If they agreed, a peer was called and would visit them soon after (<30 minutes later for two of the programs (Beaudoin et al., 2022; Samuels et al., 2018)).

With regards to the peer outreach intervention itself, in all three programs the peer specialist would engage the client in conversation to build rapport, identify their needs and risk factors, and use motivational interviewing to reinforce the client's desire to change. Motivational interviewing is an evidence-based technique for motivating ambivalent individuals to change problematic behaviors and has been shown effective across a range of behavioral contexts (Bischof et al., 2021). If successful, the peer would then guide the client in navigating the list of available services to one that was appropriate to their needs. Project Engage had the most structured procedure to determine client needs and match them with an appropriate program. This involved administering two formal assessments: the Delaware Division of Substance Abuse and Mental Health (DSAMH) Co-Occurring Conditions Screening Instrument and the DSAMH/American Society of Addiction Medicine (ASAM) Crosswalk instrument. The procedure for recommending appropriate services was less clear for the other two programs.

After agreeing on a service, the peers in all three programs would offer individualized support to facilitate their client's engagement in that service. Pecoraro et al., (2012) described this process in the most detail for Project Engage, which involved calling the service provider on the client's behalf to schedule an appointment. During this call they would verify that their client qualified, that there was availability in the program, and that their client's insurance was accepted. They would then work with their client to identify and problem-solve any barriers that might prevent them from attending the appointment, such as issues with housing, clothing, and transportation. Lastly, they would follow up with their client within 48 hours after the scheduled appointment to confirm they had attended and assist in further problem-solving if they had not.

The program described by Beaudoin et al., (2022) was less explicit regarding whether and how peers would contact the service provider on the client's behalf, simply stating that they provided electronic referrals. However, they did specify that they would offer clients help with housing and transport, would offer clients take-home naloxone, and would follow up with clients for three months after the ED visit on a set schedule (Beaudoin et al., 2022, p. 13). The program studied by Samuels et al., (2018, p. 30) offered take home naloxone as well, and provided follow ups as long as 90 days after the initial contact.

Though the above programs vary in specific details, they all include a set of minimum features, or best practices, that a peer outreach program should have, such as:

- Peer workers should have lived experience with SUD, have at least two years of stable recovery, be trained in motivational interviewing techniques, and have sufficient knowledge of OUD treatments to assist clients in navigating available options.

- Clients should be screened based on whether they recently suffered a non-fatal overdose or other acute medical emergency associated with OUD.
- Programs should have established procedures for assessing an individual client's risk factors and needs and matching them with an appropriate service provider.
- A facilitated referral process is necessary to promote service engagement, such as navigating issues around insurance, transportation, housing, etc.
- Multiple follow-up attempts should be made after referral to confirm whether clients engaged services and to problem-solve barriers if not.
- It may be prudent to offer all clients take-home naloxone during the first contact, whether or not clients agree to receive a referral.

STUDY DESIGN & METHODOLOGY

To assist in our evaluation of the Peer to Peer program, we solicited program documents and service data from two sources: the City of Albuquerque Health, Housing, and Homelessness (HHH) and Albuquerque Community Safety (ACS).

We analyzed program documents with the aim of (1) assessing whether the program's logic, meaning its goals and strategy for achieving those goals, makes sense, and (2) evaluating whether the program's intended implementation plan follows established best practices. Because the program has changed significantly over time, it was also necessary to analyze program documents to understand how and why the program changed, what the different iterations of the project were, and which iteration the evaluation should focus on.

Program service data provides information on what activities were performed with clients and what the outcomes of those activities were. These data come primarily from Quarterly Reports, which HHH submits to the Bureau of Justice Assistance (BJA) as part of their reporting requirements for the COSSAP (formerly COAP) grant. These reports provide data in summary form, meaning there is no data on individual clients. We analyzed these data in order to (1) assess whether the implementation plan was being followed in practice, and (2) evaluate client outcomes.

LIMITATIONS

Our ability to evaluate the design, implementation, and outcomes of the Peer to Peer project are limited due to the many changes to the program design and the fact that the latest iteration of the program was only recently implemented. These program changes and delays in implementation are likely largely attributable to events outside of the control of the City of Albuquerque (e.g., the COVID-19 pandemic). Nevertheless, because CARA's contract to evaluate Peer to Peer was signed on July 17, 2023, we had less than three months to acquire and review

program documents, collect, and analyze service data, and submit a final report by September 30th, 2023. Due to this tight timeframe, we were unable to seek human subjects' approval from the UNM Institutional Review Board (IRB), which has a typical processing time of 3-4 weeks. Without this approval, we could not collect identified client level data, which provides much greater detail on program processes and outcomes than the summary data we ultimately collected.

PROGRAM & DOCUMENT REVIEW

We ultimately received 13 documents from the City of Albuququerque HHH and ACS staff, which provided useful information about the project's goals and the plan for achieving those goals. These documents included the Comprehensive Opioid Abuse Site-based Program FY 2017 Competitive Grant Announcement, the original Grant Proposal, the Award Report from U.S. Department of Justice approving the Albuquerque Peer to Peer project for funding, a PMT Report Instructions for reporting program activities to BJA, a blank BJA Performance Measures form, three Extension Justification documents, an AFR Referral form, an ACS Intake form, an ACS Release of Information (ROI) form, an ACS Resources list of services that they refer clients to, the ACS Opioid Education & Prevention Program (OEP) Flyer, and an ACS Process Map. We analyzed these documents with the goal of understanding (1) the different iterations of the program, (2) the logic of the program, and (3) the intended processes for implementing the program.

Program Iterations

Extension justification documents were analyzed to understand how the program has changed through time and why. The program is best understood as occurring in three iterations, marked by different primary partner organizations (see Appendix C for a detailed Program Timeline).

The Albuquerque Peer to Peer project had originally partnered with the University of New Mexico Hospital (UNMH). The plan was to use BJA funding over a period of three years from October 1, 2017 to September 30, 2020 to employ two part-time peer engagement specialists to work within the UNMH emergency department. However, in August of 2020, the City of Albuquerque requested a 1-year extension due to delays pertaining to Covid-19 and the inability to sign a contract with UNMH due to data sharing concerns over patient confidentiality.

In the subsequent extension period, the project shifted from attempting to place peer workers in UNMH to placing them within Albuquerque Fire and Rescue's Home Engagement and Alternative Response Team (AFR HEART). These peer workers were tasked with conducting home visits with individuals identified as high risk for opioid overdose based on past utilization of emergency services, such as having recently survived an overdose. In August 2021 the City of Albuquerque requested a second 1-year extension to utilize remaining funds, to further refine

peer support and service coordination procedures, and to contract with a single, full-time peer worker with the intention of making the position permanent.

In August 2022 the City of Albuquerque requested a third and final 1-year extension pushing the final end-date of the COSSAP (formerly COAP) grant back to September 30, 2023. A primary justification for the extension was that the Peer to Peer program had again shifted partners, this time from AFR HEART to the newly founded Albuquerque Community Safety (ACS) department. In this final iteration, a single peer recovery specialist would work on an ACS team conducting site visits to individuals identified by AFR as high risk for opioid overdose based on recent emergency medical encounters (primarily for non-fatal overdose). It is this final iteration partnering with ACS which we will be focusing on throughout the remainder of this report, unless otherwise indicated.

Program Logic

According to the original grant proposal and award documents, the long-term goal of the Peer to Peer project is to prevent opioid misuse, overdose, and death in the Albuquerque area. Broadly, the strategy for accomplishing this is to use a peer worker to connect opioid overdose survivors to appropriate treatment and recovery supports. To understand and evaluate the program design in detail, it is useful to break it down according to program inputs, outputs, and outcomes (Eberhart et al., 2017).

Inputs refer to the resources that go into a project. The feasibility of a given program design depends critically on having the necessary infrastructure in place to effectively carry out proposed activities. For Peer to Peer, critical inputs include the $294,994 of funding from the BJA COAP (now COSSAP) grant, as well as key personnel, like a project manager, a project coordinator, and a peer engagement specialist. Additional resources include whatever infrastructure already exists at HHH and ACS that can be leveraged by the peer engagement specialist to perform their tasks effectively. The original grant proposal also cites critical secondary partnerships with the Albuquerque Police Department (APD), the Bernalillo County Community Health Council, UNMH, and community-based providers like New Mexico Solutions and St. Martin's Hospitality Center, as key to achieving their goals. Presumably, some of these organizations are intended to provide referrals of at-risk individuals to the Peer to Peer program and others are intended to offer treatment and recovery support options that peer specialists can refer their clients to. However, what other roles might be envisioned as well as which organization is intended to perform which roles remains unclear in program documents. Overall, the critical inputs needed for Peer to Peer to effectively operate appear to have been worked into the program's design at an early stage, however, the roles of partnering organizations could not be clarified.

Outputs refer to the activities the program performs with the resources it has at its disposal. The primary outputs for Peer to Peer include conducting site visits and referring clients to treatment and recovery supports. As discussed in the Literature Review, this intervention

strategy is broadly logical based on what is known about the risk profile of recent overdose survivors, the barriers to receiving necessary supports, and the benefits of peer specialists in other treatment and recovery contexts. Secondary, administrative outputs identified in the proposal and award documents focus on the role of the project coordinator, and include things like

> …inventory and map current treatment services to determine gaps in capacity and levels of care as basis for an effective, coordinated system; develop current, consistently updated database of services accessible to providers and community (including eligibility criteria and program capacity); … and track quarterly performance measures… (City of Albuquerque, 2016).

Many of these administrative activities are clearly critical to the success of the program, such as compiling a current list of opioid treatment providers in the area to refer clients to. Overall, Peer to Peer program documents reveal a clear and logical design with regards to what activities must be performed for the project to succeed.

Program outcomes refer to measurable changes in the client population that program activities are designed to produce. These are defined by the goals, or objectives of the project. Unfortunately, the goals and outcomes identified in program documents are not always clear or appropriately defined. For instance, three goals are identified in the original grant proposal:

> Goal 1: Initiate a cross-system planning, collaboration and implementation process that coordinates County and City officials; first responders and law enforcement; emergency medical services and health treatment providers; public health partners and advocates; and agencies that provide substance abuse treatment and recovery support services to align opioid crisis response and prevention activities.
>
> Goal 2: Identify and engage high-risk individuals who have a history of opioid misuse and are high utilizers of emergency services, especially overdose survivors, to become engaged with treatment and services, and break the cycle of addiction.
>
> Goal 3: Engage with existing state and local funded projects that are aimed at increasing access to treatment and leveraging key data sets, including PDMP data, Naloxone administrations, fatal and non-fatal overdose data, drug arrest, etc., to develop targeted and sustainable intervention and to more holistically and effectively evaluate project outcomes (City of Albuquerque, 2016, p. 9).

These goals describe the envisioned activities, or outputs, of project administrators, rather than desired changes in the client population. This lack of clarity around program goals likely contributed to confusion around relevant outcome measures. Four outcome measures are identified in the proposal: “(1) Number of individuals admitted to the emergency room and/or inpatient facilities for an opioid related overdose, (2) Number of individuals who have contact with a peer engagement specialist, (3) Number of individuals that receive services from the

peer engagement specialist, and (4) Number and type of follow-up's and outcomes from the peer engagement specialist" (City of Albuquerque, 2016, p. 18). Again, these describe outputs, not outcomes. However, this time they are the outputs of the peer support workers in contacting and referring clients.

As discussed in the Literature Review section on the Peer Outreach Model, more appropriate outcome measures are:

1. Clients' future level of engagement in OUD treatment and recovery services.
2. Future utilization of emergency medical and other healthcare services due to complications from OUD.
3. Death from overdose.

Interestingly, under the section titled "Potential project implementation barriers and how they will be overcome," the proposal mentions, "It is anticipated that impact of the peer involvement will prove to be an effective investment through an increase in treatment engagement; increased treatment compliance; and reduction of repeat Narcan use…" (emphasis added). While they are not identified as such, these are appropriate outcome measures, similar to the ones suggested by the scientific literature.

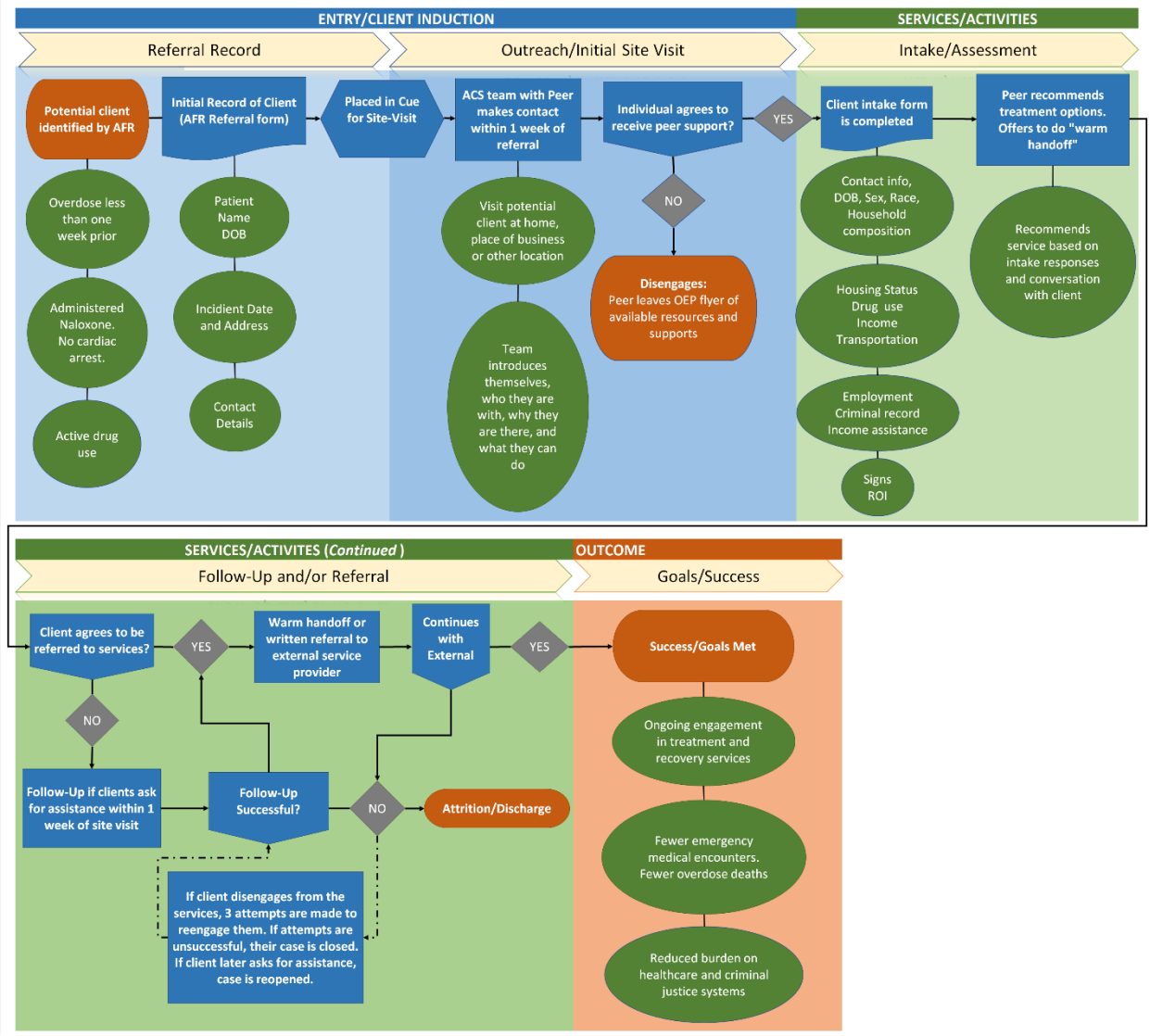
Overall, the Peer to Peer project has a logical design in terms of the identified inputs and outputs and the overall strategy of peer outreach. However, program objectives and outcomes need to be reformulated such that they specify desired changes in the primary clients. Clarifying these outcomes is especially important for knowing what to measure to determine whether the program is accomplishing its intended purpose.

Program Processes

Using the program documents we were provided, we created a schematic of intended program processes, known as a process map. A process map describes the specific plans for delivering services to individual clients. We sent this document to ACS for comment and incorporated their feedback in the version displayed below (Figure 1).

Figure 1.

Process Map of the Peer to Peer program.



The process map is broken into 3 overarching phases: (1) Entry/Client Induction, (2) Services/Activities, and (3) Outcomes. Entry into the program begins with a referral from AFR. AFR primarily identifies eligible individuals based on whether they experienced an overdose that was reversed by the administration of naloxone, however, individuals encountered during EMS calls for other opioid-use related conditions, including mere intoxication, can lead to a referral. Next, the ACS team conducts a site visit to make contact with the individual. Based on conversations with ACS, this is intended to occur within one week of the initial emergency medical encounter. During this site visit, the ACS team introduces themselves and the peer

engagement specialist offers her services to help connect the client to treatment and recovery supports. If necessary, the peer may conduct multiple site visits to the same individual to build rapport, perhaps helping with other issues, like acquiring food boxes or clothing. If the individual agrees to enter treatment, the peer provides a referral to an agreed upon service provider and offers to introduce the client to the service provider by phone or in person (referred to as a "warm handoff"). If a client fails to engage in services or disengages later, three attempts are made to reengage them before their case is closed.

While the process map adequately identifies all of the key steps for implementing the Peer to Peer program, certain processes within these steps lack specificity. Most notably, the procedures for identifying appropriate supports and facilitating a client's engagement in the program requires further clarification. While the ACS Resources list includes 20 programs for "Substance Use" and 16 programs for "Mental and Behavioral Health," it is unclear which of these services offer which opioid treatment and recovery support services. Additionally, it is unclear what criteria peers use to match individuals to a service they deem appropriate. For example, is a program selected based on its geographic proximity to a client, based on whether it accepts a clients health insurance, or based on whether the specific treatment regime they offer is indicated by the clients use history and current treatment needs? Similarly, the process map could use greater specificity in describing how peers work with clients to identify and overcome barriers to engaging in services (e.g., transportation and housing), as well as the follow up procedures for checking in on clients after they have been referred to treatment.

Current providers at ACS may have considerable on the ground experience and expertise in matching clients with services, facilitating their access to services, and following up with clients after they are referred. However, this knowledge and expertise is not instantiated in existing program documents. Formalizing these procedures will be critical to training future staff and making incremental improvements in program design. It is important to note that ACS has communicated to us that they are currently in the process of creating formal procedures for outreach and referral to guide future operations and policy planning.

SERVICE DATA

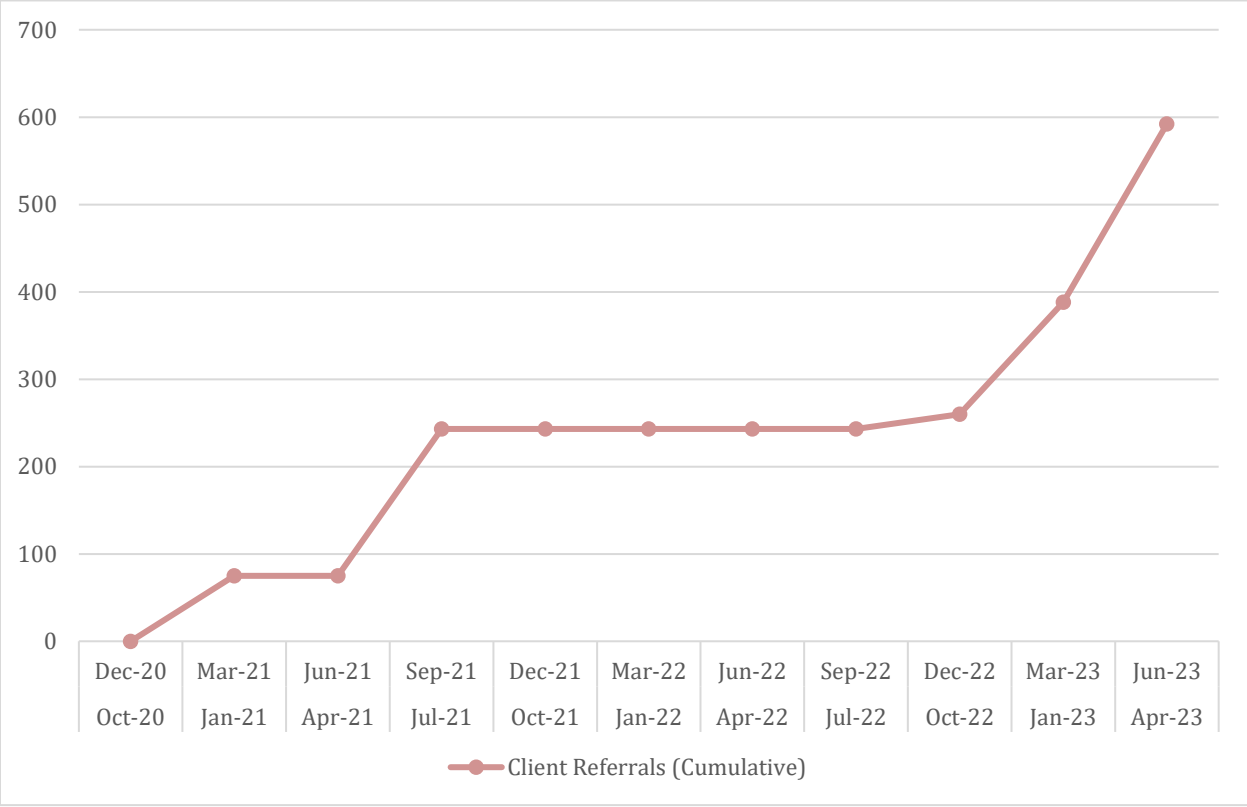
As explained in the Study Design and Methods section, we collected program service data in the form of Quarterly Reports, which HHH submits to BJA as part of their reporting requirements. There are several versions of the quarterly reports with slight differences between them and some duplicate information. In total, we received 54 quarterly reports covering the period from January 2017 to June 2023 (77 months total). Additionally, we received data tables from ACS on client demographics. We analyzed these data with the goal of comparing actual program activities and outcomes to the intended goals and implementation plan as laid out in program documents.

Program Implementation

The most relevant data in the Quarterly Reports regarding program implementation is the counts of how many individuals were referred by peer engagement specialists to external treatment and recovery support services. For the first 3 years of the project, no clients were referred, which is explained by contracting issues with UNMH and alterations in program design, as described earlier. The first referrals occurred during the period from January-March 2021, after shifting the project to AFR HEART (Figure 2). Rates of referrals remained variable thereafter at both AFR and ACS, with many quarters seeing no new referrals due to staffing issues. However, the last three quarters at ACS saw a dramatic increase in referral rates. In fact, there were more referrals in the last three quarters than the rest of the quarters combined.

Figure 2.

Client Referrals by Quarter



Note. This figure depicts cumulative referrals through time. The timeline begins with the implementation of Peer to Peer at AFR HEART in October 2020.

When Peer to Peer operated out of AFR HEART (October 2020 – December 2021), 243 clients were referred by peers to treatment and recovery support services (Table 1). Of these, 44

(18.1%) went on to engage in the services to which they were referred. Later, when operating out of ACS (January 2022 to June 2023), 349 clients were referred, with 101 (28.9%) of those receiving services. Through the entire 6.5-year project from January 2017 to June 2023 592 individuals were referred with 145 (24.5%) receiving services.

Table 1.

Number of Referrals and Services Received.

Period Start	Period End	Lead Program	Referred to Services	Received Services	% Receiving Services
Jan-17	Dec-17	UNMH	0	0	0
Jan-18	Mar-18	UNMH	0	0	0
Apr-18	Jun-18	UNMH	0	0	0
Jul-18	Sep-18	UNMH	0	0	0
Oct-18	Dec-18	UNMH	0	0	0
Jan-19	Mar-19	UNMH	0	0	0
Apr-19	Jun-19	UNMH	0	0	0
Jul-20	Sep-20	UNMH	0	0	0
UNMH Totals			0	0	0
Oct-20	Dec-20	AFR HEART	0	0	0
Jan-21	Mar-21	AFR HEART	75	23	30.7%
Apr-21	Jun-21	AFR HEART	0	0	0
Jul-21	Sep-21	AFR HEART	168	21	12.5%
Oct-21	Dec-21	AFR HEART	0	0	0
AFR Totals			243	44	18.1%
Jan-22	Mar-22	ACS	0	0	0
Apr-22	Jun-22	ACS	0	0	0
Jul-22	Sep-22	ACS	0	0	0
Oct-22	Dec-22	ACS	17	4	23.5%
Jan-23	Mar-23	ACS	128	28	21.9%
Apr-23	Jun-23	ACS	204	69	33.8%
ACS Totals			349	101	28.9%
Total			592	145	24.5%

These data illustrate the difficult start to the Peer to Peer program due to delays, design changes, and staffing issues. However, the relatively large and consistent client numbers for the most recent three quarters suggest the program is operating at a high capacity. While we cannot say much from these data about specific peer activities, the fact that referrals are being made and that clients are engaging in services indicates the project is functioning, broadly, according to the current plan.

Client Demographics

ACS also provided us with client demographic data. There is some discrepancy in the client numbers, as the demographic data only shows 218 clients, whereas the Quarterly Reports show 349 total clients for ACS. Still, these data are illuminating in providing a glimpse at the type of clientele they are providing services to.

Around half of their clients (50.5%) are 19-44 years old and around 30% are over 55 (Table 2). Interestingly, at least 5 of their clients are reportedly underage (0-5 years old). (It is unclear why they would be referring 0–5-year-olds to opioid treatment and recovery supports, and it is possible that these data are an error). Around two thirds of clients are male (67.4%), which is consistent with gender asymmetries in national overdose statistics (NIDA, 2023). In terms of race/ethnicity, most clients are Hispanic (54.1%), followed by White (29.4%), American Indian (9.6%), African American (5.5%), and Asian (1.4%). Lastly, clients seem to be of a lower socio-economic class, with over half (54.1%) having an annual income of less than $23,000 and 72.5% having no High School diploma or GED.

Table 2.

ACS Client Demographics

	Count	Percent
Age Range		
0-5	5	2.3%
6-19	6	2.8%
19-24	23	10.8%
25-36	55	25.7%
37-44	30	14.0%
45-55	30	14.0%
Over 55	65	30.4%
Total	214	100%
Gender		
Male	147	67.4%
Female	71	32.6%
Total	218	100%
Race		
Hispanic	118	54.1%
African American	12	5.5%
White	64	29.4%
Native	21	9.6%
Asian	3	1.4%
Total	218	100%
Marital Status		
Single	110	50.5%
Married	108	49.5%
Total	218	100%
Have Children?		
Yes	76	34.9%
No	142	65.1%
Total	218	100%
Income over $23,000?		
Yes	100	45.9%
No	118	54.1%
Total	218	100%
High School Graduate or GED?		
Yes	60	27.5%
No	158	72.5%
Total	218	100%

Client Outcomes

The only outcome measures present in the Quarterly Reports are the counts of referred individuals who went on to engage in services. This is essentially the same short-term outcome measure used by Beaudoin et al., (2022) and Samuels et al., (2018). The fact that 145 clients engaged in the treatment and recovery services to which Peer to Peer referred them is an encouraging sign. However, caution should be exercised in inferring from these numbers that peer outreach is working. It could be that these individuals would have engaged in services with or without peer support. A comparison case is needed to assess whether the program is producing these effects.

Unfortunately, no clear comparison case exists for these data. The only option currently available is to compare the proportion of service engagements to total number of referrals at Peer to Peer with similar outcomes reported by other peer outreach programs. Samuels et al., (2018, p. 31) reported that 28.5% of the patients who received peer support engaged in MAT treatment services within one year of their ED visit, and Beaudoin et al., (2022, p. 7) reported that 32% of the patients receiving peer support engaged in SUD treatment within 30 days of their ED visit. These numbers are similar to the 28.9% of clients at ACS who went on to engage in treatment services. This suggests that the Peer to Peer project may be achieving similar results with regards to short-term outcomes as comparable, state-of-the-art programs.

CONCLUSIONS

Albuquerque Peer to Peer experienced numerous delays and logistical challenges early on in its implementation due to COVID-19, contracting issues with UNMH, and other external factors. To adapt to these challenges, Peer to Peer was forced to make significant changes in the program design, most notably with regards to changing its primary partner organization from UNMH to AFR HEART and then, finally, to ACS. The project currently operates at ACS by placing a peer worker on an ACS team that conducts site visits to individuals who were referred by AFR for having recently survived an opioid overdose or other OUD-related medical condition. It is this most recent iteration at ACS that the present evaluation primarily focuses on.

An analysis of program documents indicates the Peer to Peer program at ACS has a logical program design. Namely it has clear long-term goals (to reduce opioid misuse, overdose, and death in the Albuquerque area) and a logical strategy for achieving those goals (peer outreach following emergency medical encounters). Nevertheless, several key components of the program design remain unclear, such as what outcomes to measure and what role secondary partner organizations are expected to play.

The processes for implementing the Peer to Peer program, as outlined in the ACS Process Map and other program documents, broadly follow best practices for this type of program. This includes having clear procedures for (1) screening and intake, (2) service provisioning

(conducting site visits, referring clients to services, following up to see if they engage in services, etc.), and (3) discharge. However, three key components in the program process map lack specificity: (1) the procedure for assessing client needs to match them with appropriate services, (2) the facilitated referral process for identifying and problem-solving potential barriers to client engagement in services, and (3) the procedures for following up with clients after they engage in services.

Our analysis of program service data was limited by time constraints and the fact that we only had access to data in summary form. However, it is apparent from these data that the program is generally being implemented according to plan. Peers are receiving referrals from AFR, conducting site visits, and referring clients to external treatment and recovery support services. In fact, more clients have been referred in the last three quarters at ACS than during the rest of the 6.5-year project combined.

We were unable to confidently assess outcomes due to limited outcome measures and the lack of an equivalent comparison group. The one viable outcome measure we had was the proportion of clients who engaged in the treatment and recovery support services to which they were referred. Because we did not have data on service engagement rates for similar individuals who did not receive peer outreach, we could not assess whether Peer to Peer clients had improved outcomes. However, we were able to compare Peer to Peer client outcomes with those reported by other peer outreach programs. These comparisons reveal that Peer to Peer clients have a similar rate of service engagement as clients in comparable programs. This provides low confidence, but suggestive evidence that the program may be working as intended. However, further research is needed.

RECOMMENDATIONS

1. **Clarify the role of identified partner organizations.**

   The success of the Peer to Peer project rests on strong collaborative relationships with partner organizations in the public and private sector, both to identify at risk individuals and to link them to appropriate treatment and recovery support services. Program documents list multiple such partners, but do not identify what their role is in the project. Clarifying the role each organization plays will help maximize the benefits derived from these partnerships.

2. **Clarify program objectives and outcomes.**

   Currently, program documents mention various objectives, and outcomes, many of which are incongruent with each other and with the broader program design. Clarifying objectives and outcomes is critical to understanding the overall design of the program and to being able to assess whether the program is achieving its goals. While one short-term outcome measure is currently in use (rates of service engagement), we

recommend also measuring middle to long-term outcomes, like (1) healthcare utilization rates for OUD complications, and (2) death due to overdose.

3. **Specify the procedures for assessing client needs.**

   Peer to Peer identifies a range of treatment and recovery resources in the Albuquerque area that clients can be referred to. However, it is unclear from program documents how peers determine which services to recommend. Presumably, recommendations are based on perceived client needs and the specific attributes of different programs. We recommend the procedure for assessing client needs and matching them to available services is clarified, as this will facilitate future staff training and promote incremental improvement in referral processes.

4. **Specify how peers facilitate service engagement.**

   While program documents say that peer workers should offer to personally introduce clients to service providers (i.e., provide a warm-handoff), it is unclear what additional procedures peers use to identify barriers to engaging in services and to assist clients in overcoming these barriers. We recommend such procedures be specified, as a facilitated referral process is a key component of comparable peer outreach programs and is likely critical to improving client service engagement.

5. **Select a comparison group.**

   To conduct a comprehensive outcome evaluation in the future it will be necessary to compare outcome measures of Peer to Peer clients with the same measures in a comparison group. The simplest and least resource intensive approach would be to compare data for the same clients pre- and post- their involvement in the Peer to Peer program. However, a more rigorous design would compare Peer to Peer clients with a similar group of individuals who recently suffered a non-fatal overdose, but who did not receive peer outreach.

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Appendix A.

Harm Reduction Programs in the Albuquerque Area.

Provider	Location(s)	Services
Transgender Resource Center NM	4100 Silver Ave SE, Ste E Albuquerque, NM 87108	Syringe services
South Valley Public Health Office	2001 Centro Familiar SW Albuquerque, NM 87501	Syringe services HIV and Hepatitis services Naloxone
Midtown Public Health Office	2400 Wellesley dr NE Albuquerque, NM 87107	Syringe services HIV and Hepatitis services Naloxone
Casa De Salud	1608 Isleta Blvd NW Albuquerque, NM 87501	Syringe Services
Albuquerque Health Care for the Homeless	PO Box 25445 Albuquerque, NM 87125-0445	Syringe Services Naloxone
Topahkal Family Practice	1608 Isleta Blvd NW Albuquerque, NM 87106	Syringe Services
North Valley Public Health Office	7704 2nd St NW Albuquerque, NM 87107	Syringe services HIV and Hepatitis services Naloxone
BEHRS Syringe Exchange	625 Truman NE Albuquerque, NM 87110	Syringe Services
First Nations Community Health Source	5608 Zuni SE, Albuquerque, NM 87108	Syringe services HIV and Hepatitis services
Albuquerque – Public Syringe Dropbox (6 different locations)	7605 Central Ave NE, Albuquerque, NM 87108 700 82nd Street NW, Albuquerque, NM 87121 1099 San Pedro Drive SE, Albuquerque, NM 87108 Central and Coors SW - at bus stop, Albuquerque, NM 87121 3901 Phoenix NE, Albuquerque, NM 87110 433 Arizona Street SE, Albuquerque, NM 87108	Syringe services

Note. Sites located from a needle exchange location website (DetoxLocal, 2023), an HIV and Hepatitis resource guide (*The New Mexico HIV-Hepatitis-STD Online Resource Guide*, 2023), and Bernalillo County online pharmacy locator for Naloxone ("How to Administer Narcan | MAT for Opioids," 2021).

Appendix B.

Treatment and Recovery Programs in the Albuquerque Area.

Provider	Address	Intervention Type
Albuquerque Health Care for the Homeless	1217 1st Street N.W., ABQ, NM 87102	MAT Counseling/Therapy
Albuquerque Health Services	172 Montano Rd NW, ABQ, NM 112 Monroe Street S.E., ABQ, NM 87108	Counseling/Therapy MAT
Albuquerque Treatment Center WCHS	123 Madera Drive S.E., ABQ, NM 87108	MAT
Anna Kaseman Hospital – Detox	8312 Kaseman Court, ABQ, NM 87110	Counseling/Therapy
ASAP Opioid Treatment Program – UNMH	2600 Yale Boulevard S. E., ABQ, NM 87106	MAT Counseling/Therapy
Courageous Transformations	3301 Los Arboles Avenue N.E., ABQ, NM 87107	MAT Counseling/Therapy Peer Support Services
Duke City Recovery Toolbox	912 1st Street N.W., ABQ, NM 87102	MAT Counseling/Therapy Peer Support Services
Focused Recovery of New Mexico	3939 San Pedro Road, Suite D1, ABQ, NM 87110	MAT Counseling/Therapy
First Nations Behavioral Health	5608 Zuni Road S.E., ABQ, NM 87108	MAT Counseling/Therapy
G.R.A.C.E. Program – Lovelace Health System	4701 Montgomery Boulevard, N.E., ABQ, NM 87109	MAT
Milagro Outpatient Clinic – UNMH	2600 Yale Boulevard S.E., ABQ, NM 87106	MAT Counseling/Therapy
Recovery Services of New Mexico	1528 Five Points Road S.W., ABQ, NM 87105 100 Deputy Dean Miera Drive S.W., ABQ, NM	MAT Counseling/Therapy
Rio Grande Counseling Services	1010 Las Lomas Rd. N.E., Suite 4, ABQ, NM 87102	MAT Counseling/Therapy
Sage Neuroscience Center	7850 Jefferson Street, N.E., Suite 300, ABQ, NM 87109	MAT Counseling/Therapy
Shadow Mountain Recovery	5400 Gibson Boulevard S.E., ABQ, NM 87108	MAT Counseling/Therapy
Turquoise Lodge Hospital	5901 Zuni Road S.E., ABQ, NM 87108	MAT Counseling/Therapy
Casa de Salud	1608 Isleta Boulevard S.W., ABQ, NM 87105	Counseling/Therapy MAT
Central NM Treatment Center - New Season	630 Haines Avenue N.W., ABQ, NM 87102	Counseling/Therapy MAT

Note. Includes only providers listed on the New Mexico Substance Abuse Resource Directory (Roth, 2019) as OUD treatment and recovery services. Does not include generic SUD treatment providers.

Appendix C.

Timeline describing the different iterations of the Peer to Peer Project.

Project Iteration	Partner Program	Success and Challenges
Original project 10/2017 to 09/2020	UNMH	October 2017 – Proposed project start date. Planned to employ two part-time peer engagement specialists to work within the University of New Mexico Hospital (UNMH). Delays in receiving budget approval and release of funds due to contractual issues with University of New Mexico (UNMH). June 2019 - Program received budget approval and funds were released. Delays in implementing the program due to data sharing and patient confidentiality concerns of UNMH Internal Review Board (IRB). August 2020 - Requested 1-year extension to transition project to work with Albuquerque Fire Rescue's (AFR) due to unresolvable UNMH IRB concerns.
Extension year 1: 10/2020 to 09/2021	AFR HEART	December 2020 - First year extension request accepted. Project shifted to integrating peer engagement specialists on AFR Home Engagement and Alternative Response Team (HEART). Peers were tasked with conducting home visits with these teams to contact individuals identified as high risk for opioid overdose by emergency first responders. August 2021- Second year extension requested to utilize remaining funds, to further refine peer support and service coordination procedures, and to contract with a single, full-time peer with the intention of making the position permanent.
Extension year 2: 10/2021 to 9/2022	AFR HEART ACS	December 2021- Second year extension request accepted. Limitations with staffing and working hours persisted. The remaining contracted peer worker resigned. Program continued to build collaborative infrastructure with AFR HEART and opioid treatment and harm reduction providers in Albuquerque. January 2022 - Transitioned project to newly formed Albuquerque Community Safety (ACS) department. June 2022 - Shortly after hiring, the new peer engagement specialized relapsed. ACS created a safety plan to support the peer and limit any direct contact with clients. September 2022 – Requested third and final 1-year extension to utilize remaining funds, citing delays due to the termination of the contracted peer worker and the shift to ACS.
Extension year 3: 10/2022 to 9/2023	ACS	December 2022 - Final extension request accepted. A new peer support worker was contracted, trained, and began outreach efforts. July 2023 - The Center for Applied Research and Analysis (CARA) of the Institute for Social Research at UNM was contracted to evaluate project. September 2023 – Final end date of COSSAP grant funding.