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# A community outreach intervention to link individuals with opioid use disorders to medication-assisted treatment

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A B S T R A C T

Individuals with opioid use disorders (OUD) face significant barriers to accessing medication-assisted treatment (MAT), yet access to MAT is critical to reducing opioid-related fatality. This study evaluated a peer outreach and treatment linkage intervention in Chicago that is part of the Illinois Opioid State Targeted Response (STR) project to assist individuals with OUD in accessing MAT. The study uses the framework of the Opioid Use Disorder Cascade of Care to track progress through successive stages of the intervention and evaluated covariates of successful transitions across stages. Peer outreach workers contacted individuals in high-risk communities, conducted an eligibility screen, and scheduled eligible individuals to meet with project staff for treatment linkage. Over the 12-month study period (July 2017–June 2018), peer outreach workers conducted approximately 3308 encounters with individuals; 83% (n = 1638) were determined to be eligible for the intervention and agreed to an on-site linkage meeting. A majority of these (59%; n = 972) showed to the linkage meeting; most of these (92%, n = 890) were scheduled for a MAT intake appointment; and 86% (n = 765) of those scheduled showed to the MAT intake appointment. Most (91%; n = 696) of those who showed for treatment intake received a first dose, and 72% (n = 498) of these were in treatment at 30 days after their first dose. Several participant characteristics differentiated individuals that continued at each stage of the cascade model from those that did not. These findings demonstrate that the peer outreach and treatment linkage intervention may be successfully used to engage individuals with OUD into treatment.

## 1. Introduction

Individuals with opioid use disorders (OUD) face numerous challenges to accessing medication-assisted treatment (MAT) for these disorders. These include personal challenges related to stigma, negative attitudes or beliefs about treatment, and lack of motivation; logistical challenges related to financing, program location, and hours of operation; and systemic challenges related to limited MAT capacity (Jones, Campopiano, Baldwin, & McCance-Katz, 2015). Consequently, only a minority of individuals with OUD receive MAT. Based on the 2017 National Survey on Drug Use and Health (NSDUH; Substance Abuse and Mental Health Services Administration [SAMHSA], 2018), only 31% of adults in the U.S. who met criteria for OUD or who reported at least weekly opioid use in the past year received some type of substance use treatment. Further, less than 1% of these (0.6%) received methadone treatment or another type of MAT. The most common reasons given by those who did not receive treatment included: 17% did not perceive the need for treatment, 10% could not afford it/lacked insurance, 6% were not ready to stop using, 3% said their insurance did not cover it, 2% were worried treatment would negatively impact their job, and 1% were worried that it would negatively impact their neighbor's opinions of them (SAMHSA, 2018). Clearly there is a need to find ways to identify people with OUD who are not currently in treatment, address their motivational issues/logistical barriers, and assist them to enter and stay in treatment.

Cook County (which includes Chicago) has been significantly impacted by the current opioid crisis. In 2017, there were 1056 opioid-overdose deaths in Cook County, which is a significantly higher rate of death per 100,000 people than in the U.S. as a whole (20.3 vs. 14.9; Centers for Disease Control, [CDC], 2018). Moreover, data from the Chicago Department of Public Health (CDPH, 2016 shows the number of opioid-related overdose reversals with naloxone in Chicago increased from 9297 to ~13,872 (+49%) from 2015 to 2016, and that the number of opioid-related deaths rose from 426 to 741 (+74%). Amid the escalating number of opioid-related overdoses and death, there is a critical need to implement effective strategies for engaging individuals with OUD who are not currently in treatment into MAT.

This study utilized peer outreach workers to make initial contacts with individuals who were currently using heroin or other opioids and not in treatment as a first step to engaging them into treatment. Dating

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to the 1980s, interventions using peer outreach workers have been widely used in projects that aim to make contact with "hidden populations," such as injection drug users or crack users who were not in treatment or other services, to engage them in brief informational interventions, and, if receptive, to refer them into treatment or other health and social services (Lambert, 1990). Most commonly, this approach has been used in harm reduction interventions that target individuals within communities that are at high risk for human immunodeficiency virus (HIV) and hepatitis C virus (HCV) infection and transmission through sharing of injection equipment and/or high-risk sexual activity (Marshall, Dechman, Minichiello, Alcock, & Harris, 2015). Peer outreach workers commonly distribute project flyers or brochures through peer networks, thus increasing access to the target population, as well as distribute clean needles, bleach, or condoms, and provide referrals to treatment, if desired. These interventions have proven to be effective in engaging high-risk individuals; of the injection drug users reached in a 12-site harm reduction study, 68% were referred to substance use treatment, and, of those, 41% showed to treatment (Needle, Burrows, Friedman, et al., 2005).

The outreach and linkage intervention used in the current study was initially tested in a successful pilot study with 70 participants (Scott, Grella, Dennis, & Nicholson, 2018), and was expanded in the current project within the context of the Illinois Opioid State Targeted Response (STR) project. The outreach component builds on earlier models of outreach for individuals at high-risk of HIV, as discussed above, and the linkage component builds on the authors' Recovery Management Checkup (RMC) intervention model (Scott & Dennis, 2003) that has proven effective in 3 prior clinical trials and a quasi-experiment trial (Dennis & Scott, 2012; Dennis, Scott, & Funk, 2003; Scott & Dennis, 2009, 2012; Scott, Dennis, & Foss, 2005; Scott, Dennis, & Lurigio, 2017).

This study uses the Opioid Use Disorder Cascade of Care (Socías et al., 2018; Williams, Nunes, Bisaga, et al., 2018; Williams, Nunes, & Olfson, 2017) as a framework for analysis. The "cascade of care" continuum was originally developed in the field of HIV treatment to describe the progression from HIV diagnosis to viral suppressions through adherence to antiretroviral medications (CDC, 2014). It has since been incorporated into the current policy recommendations on developing a national strategy to respond to the opioid crisis (Williams, Nunes, Bisaga, Levin, & Olfson, 2019). Within the broader OUD cascade of care, four successive stages pertain to treatment (in contrast with prevention); these include: engagement in care, initiation of treatment with MAT, retention in MAT, and remission (Fig. 1).

This study seeks to: a) demonstrate the feasibility of using a peer outreach intervention to identify individuals with OUD who are not currently in treatment and may be receptive to receiving MAT, b) evaluate the effectiveness of a modified version of RMC to engage them in care, and c) examine the predictors of movement through the successive stages of the intervention, i.e., the initial outreach contact, the linkage meeting, MAT intake, and retention in MAT over the 30 days post-initial dose. Although the linkage intervention assisted people in accessing a range of treatment options for OUD based on their preferences (which included inpatient treatment, residential treatment, and managed withdrawal), the analysis reported here focuses on linkage to MAT.

## 2. Materials and methods

### 2.1. Peer outreach intervention

Study team members worked with the STR state project officials to identify communities in Chicago, Illinois with high rates of opioid use, overdose and death. Peer outreach workers were recruited who had at least one year of stable recovery; random drug tests were conducted to verify their current drug use status. They received training from the study investigators on a) their role as peer outreach worker, b) ways to interact with prospective participants, c) boundaries between encouragement vs. coercion, d) safety procedures for working in the field, e) strategies to engage prospective participants, f) screening and documentation procedures, and g) targeted neighborhoods and venues for outreach. In addition, their own knowledge of the community, including the venues targeted for study recruitment and the local treatment/service system, was instrumental in establishing rapport with prospective participants based on common knowledge and understanding.

Within primarily nine high-risk communities on the west and south sides of Chicago, outreach workers went to multiple locations that are frequented by high-risk individuals, such as parks, streets, street corners, public transportation stations, mini-marts, and liquor stores. They approached individuals with a brief introduction, stating that they were working on a project to help link individuals to treatment for their heroin or opioid use, and inquired if they knew of anyone who might be interested in these kinds of services. If the individual responded affirmatively, the outreach workers explained the services, gave them fliers that advertise the availability of help in accessing services for heroin use and a project call-in number. When individuals expressed an interest in these services themselves, the outreach worker confirmed that the individual lived in the city (service catchment area) and were not already in treatment. Next, they connected the person by phone to staff at the project site who provided more details about the services, confirmed service eligibility, and scheduled transport for an in-person linkage meeting at the project office. In addition to the in-person outreach contacts, individuals who subsequently changed their minds about wanting treatment as well as those who had received a project

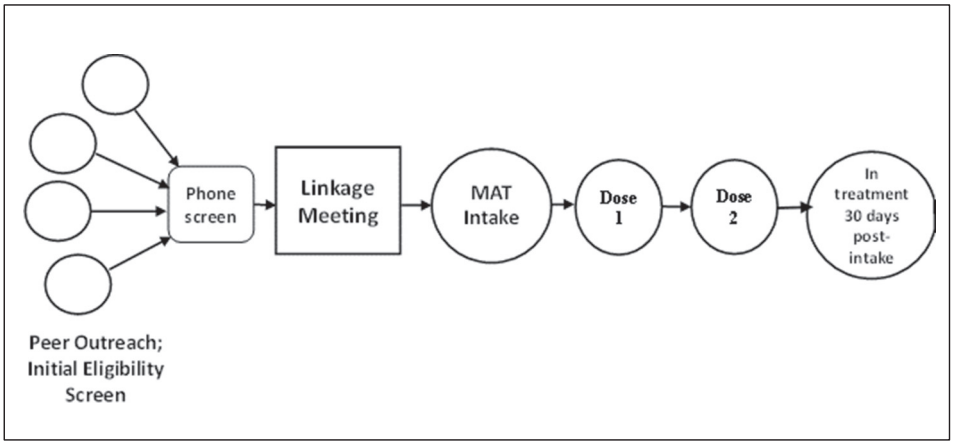


**Fig. 1.** Opioid use Disorder Cascade of Care used in peer outreach and treatment linkage intervention.