**Review Article**

**Outpatient Care Engagement for Substance Use Disorder Population: An Integrative Review**

**Nancy Goldstein, DNP, CRNP, RN-C, CNE#, Morgan Ward, BS**

#Johns Hopkins School of Nursing, Johns Hopkins University, Maryland, USA

**#Corresponding author:** Nancy Goldstein, DNP, CRNP, RN-C, CNE, Assistant Professor, Johns Hopkins School of Nursing, Johns Hopkins University, 525 N. Wolfe Street, Baltimore, Maryland 21205, USA

**How to cite this article:** Goldstein N and Ward M (2024) Outpatient Care Engagement for Substance Use Disorder Population: An Integrative Review. *Int J Nurs & Healt Car Scie* 04(01): 2024-305.

**Submission Date:** 10 January, 2024; **Accepted Date:** 23 January, 2024; **Published Online:** 26 January, 2024

**Abstract**

**Purpose:** The aim of this integrative review is to explore evidence-based practice methods for patient engagement through nursing interventions and the use of community resources while in treatment and post discharge.

**Method:** This literature review followed the Johns Hopkins Evidence-Based Practice for Nurses and Healthcare Professionals model to appraise the literature. MESH terminology was used in Scopus and PubMed databases. Two reviewers utilized the Covidence platform to review, accept or reject articles from the literature review, and create a PRISMA chart.

**Results:** A total of 144 articles met the initial criteria; after the removal of duplicates. There were 129 studies that remained, with 89 articles deemed irrelevant per Covidence, thus leaving 40 studies remaining. These remaining studies were reviewed for content and criteria, with the acceptance of 7 studies.

**Discussion:** There were 3 themes identified through this process. The themes were care management addressing barriers to care, peer support, and SUD community caret. The interprofessional healthcare team may include providers, nurses, social workers, therapists, and peer support specialists. The following may increase engagement: centering each patient's unique goals and needs, embedding peer support within treatment programs, utilizing technology/media, providing easily accessible treatment options, and building strong patient-provider relationships.

**Conclusion:** Retention in an office-based addiction treatment program for individuals experiencing substance use disorder and homelessness has been found to decrease mortality risk. Further research by nursing and the interprofessional healthcare team is needed to explore communication, media resources, and peer and community support.

**Keywords:** Care management; Community resources; Linkage to care; Outpatient treatment center; Substance use disorder

**Background**

The substance use disorder population (SUD) is considered vulnerable and tends to be excluded from conversations in healthcare and its delivery. Once individuals enroll, leave, or complete treatment, they may lose connections and access to community resources to help them thrive.

In 2019, the World Health Organization (WHO) reported 600,000 deaths related to opioid overdose [1]. Additionally, the United Nations Office on Drugs and Crime (UNDOC), stated that the majority of drug of choice for treatment is from opioid and fentanyl use [2]. Opiates and fentanyl are the leading drugs that bring the majority of people into treatment [2].

For some individuals with a substance use disorder (SUD) who receive treatment from a Substance Use Disorder Treatment Program (SUDTP) may lose connection and access to community resources. These resources aim to help them thrive with their treatment goals after completion or leaving SUDTP.

In March 2019, a SAMSHA survey found that there were 52,729 individuals receiving substance use treatment across 431 substances use treatment facilities in Maryland [3]. Retention in an office-based addiction treatment program for individuals experiencing SUD and homelessness has been found to decrease mortality risk [4].

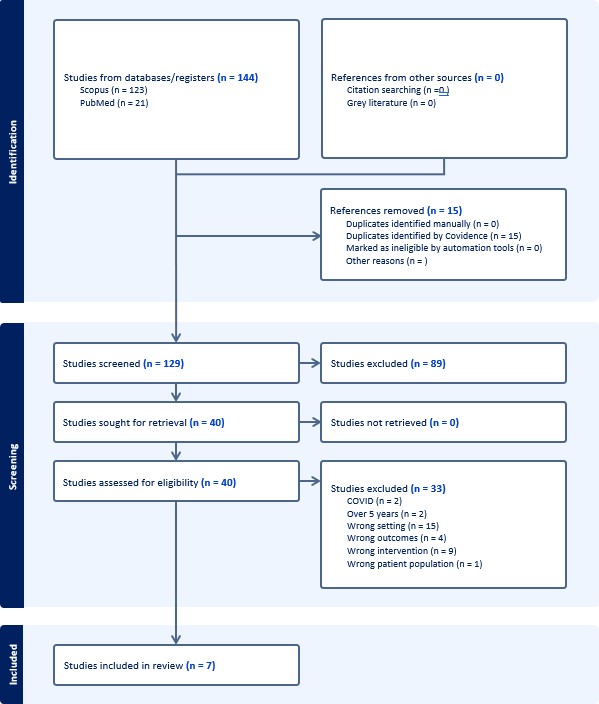
Globally, the World Health Organization [1] reported 600,000 deaths related to opioid overdose in 2019. In addition, the United Nations Office on Drugs and Crime [2], stated that the majority of drug of choice for treatment is from opioid and fentanyl use. Opiates and fentanyl are the leading drugs that bring most people into treatment [2].

Understanding the best ways to link patients to care in the community can enhance the patient’s recovery and ability to meet their SUD treatment goals. Kleinman’s [5] study found that patients identified the following barriers which impact their ability to be successful in SUD treatment: mental health, lack of social support, limited coordination of care, and environmental triggers to use substances [5,6].

This integrative review emerged from observations from staff and patients experiences in a Baltimore Based SUDTP. In this program, patients receive a list of community resources when starting at the SUDTP from their health care team. These resources include community programs, housing, behavioral health services and office based SUDTP to help them thrive on their recovery journey. This paper aims to identify evidence-based practice methods supporting navigation of SUD patient's care during and post-treatment.

**Methods**

An integrative review was conducted based on the guidelines from the Johns Hopkins Evidence-Based Practice Model [7] that focuses on the question “What evidence- based practices increase patient engagement during and post-treatment of a Substance Use Disorder Treatment Program?" MESH terminology was used in Scopus and PubMed databases in July 2023. The MESH terms used in the literature search are substance use disorder; Treatment; Technology; Outpatient; Retention; Community Health Center; Engagement in care; Linkage to care; and homelessness. Two reviewers utilized the Covidence platform to review, accept or reject articles from the literature review, and create the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) chart (Figure 1). Inclusion criteria were articles published in the last 5 years, setting in United States of America and Canada, outpatient SUDTP setting, patient population over 18 years old and older. Exclusion criteria included literature published greater that 5 years, inpatient SUDTP setting, patients under 18 years old and setting outside of United States and Canada.



**Figure 1:** PRISMA Flow Diagram.

**Results**

The literature search yielded 144 articles, 15 of which were duplicates and removed. The remaining 129 articles were screened for relevance and 89 articles were removed, the next 40 articles were assessed for eligibility, of these 33 articles were removed. The 33 studies were excluded for the following reasons: 15 were in the wrong setting, 9 did not have the proper intervention, 4 had wrong outcomes, 2 were focused on coronavirus pandemic, 2 were published greater than 5 years and 1 was the incorrect patient population [8]. After removal of ineligible articles, 7 were accepted to the literature review (Figure 1).

An analysis based on the Johns Hopkins Evidence-Based Practice Model was completed on seven articles that met inclusion criteria and published between 2019-2023 [7] (Table 1). One article was a level II quality A qualitative study [9], one article was a level II quality B post-hoc observational study [10], one article was a level III quality A qualitative study [11] and four were level III quality B qualitative studies [5,12-14].

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| --- | --- | --- | --- | --- | --- |
| Article #  Reviewer initials  Evidence level & quality | Article Title  Author | Evidence Type | Setting & Population | Findings | Limitations |
| 1    NSG/MW    IIIB | Implementing peer recovery  coaching and improving  outcomes for substance use  disorders in underserved  communities [12] | Observation  al study | Recovery centers in  Houston, TX low income community  (N=3)  N=155 peer recovery  coaches   N=180 clients  receiving care in a  recovery center | Statistically significant  improvement at post survey:  • SUD outcomes and  comorbidities  • Self-sufficiency  • Housing stability  • Employment (full time/part-time) | No control group    Limited  availability of  data |
| 2    NSG/MW    IIIA | A Mobile Health App to  Support Patients Receiving  Medication-Assisted  Treatment for Opioid Use  Disorder: Development and  Feasibility Study  [11] | Qualitative  Study | University of Virginia  MAT treatment  program   N=25 participants  (patients and  providers) enrolled in  MAT treatment | • Participants positive  perspectives about  mobile-based app for  SUD care. mobile app has potential to improve  relationships between  patients and providers. | Time limitations |
| 3    NSG/MW    IIIB | Transitions in care between  hospital and community  settings for individuals with  a substance use disorder: A  systematic review  [13] | Qualitative  Study | N=31 studies  evaluated interventions  towards SUD care pre-  and post-hospital stay | Patient engagement in SUD  treatment impacted by  following:  • peer recovery coaches -  guide patient through  addiction treatment  system  • healthcare system patient  navigation personalized  care | Minimal  discussion of  engagement in  care post  transition  Not experimental |
| 4    NSG/MW    IIIB | Implementing a peer  recovery coach model to  reach low-income, minority  individuals not engaged in  substance use treatment  [5] | Quantitative | Community resource  center in Baltimore,  MD      N=35 individuals with  SUD interested in  treatment | • 64% pts linked to  treatment  • 52% pts in treatment  remained >30 days of  linkage  • 77% pts did not want to be related to treatment  program, remained in  contact with peer recovery  coach | Non-randomized    Limited sample  size |
| 5    NSG/MW    IIIB | Racial disparities in linkage  to care among patients with  substance use disorders    [14] | Retrospective,  observational, cohort  study | ED or inpatient setting  in a medical center in  Louisville, KY  N=785 Total patients  N=168 Black  patients  N=617 White patients | • Black patients in ED less  likely transported to SUD  treatment when compared  to white counterparts  • No statistically significant difference in racial groups working with peer support specialists while inpatient | Limited  availability of  data |
| 6    NSG/MW    IIB | Patterns of Health Care Use  5 Years After an  Intervention Linking  Patients in Addiction  Treatment With a Primary  Care Practitioner    [10] | Post hoc  analysis of  non randomized  control trial | Kaiser Permanente of  Northern California,  outpatient substance  use disorder treatment  program in San  Francisco, CA  N=504 total  participants  N=252 LINKAGE  intervention group  N=251 non intervention | • LINKAGE intervention  increased likelihood of  discussing SUD with the  provider, navigating  electronic medical record,  and increasing annual  primary care visits.  • Patient-focused  intervention contribute to  increasing patient engagement in SUD care | Non-randomized  trial   Convivence  sampling |
| 7    NSG/MW    IIA | Challenges on the road to  recovery: Exploring  attitudes and experiences of  clients in a community based buprenorphine  program in Baltimore City  [9] | Qualitative  study | Baltimore, MD low  threshold peer  recovery support  buprenorphine  treatment program   N=9 staff and former  clients  N=7 current clients | Barriers to care identified by clients:  • Cravings and withdrawal  symptoms  • Mental health issues  • Criminal legal system  involvement  • Medication treatment  stigma  • Treatment schedule and  employment. | Small sample size   Not  generalizable   Responses may have influence of “social desirability  effects” |

**Table 1.** Summary of Findings.

After analysis of the articles, there were three themes identified: care management addressing barriers to care, peer support, and substance use disorder (SUD) community care. Care management and barriers to care is the connection between patient and their health care team to ensure that SUD treatment is inclusive of the patient’s background and social determinants of health to address their barriers to care. Peer support involves pairing SUD patients with peers who have been trained and adhere to SUDTP protocols and expectations [12]. SUD community care refers to the treatment program’s ability to connect patient to community resources including: housing, employment, and transportation service assistance needs to support the patient during their recovery.

**Care Management Addressing Barriers to Care**

Patients and their health care providers can work together to better understand the barriers to SUD treatment by incorporating questionnaires [12], utilizing technology such as a mobile health app [11], and patient focus groups [9]. Many barriers to care shared by patients include: cravings, mental health issues, criminal legal system involvement, stigma when initially attending treatment programs, health inequity and cultural disparities, and inflexibility of programs to accommodate employment scheduling [9]. Health inequity and disparities related to access to care and treatment programs may differ for black and white patients with SUD presenting to emergency departments [14].

**Peer Support**

Peer recovery coaches are instrumental members of the healthcare team since they share lived experiences with patients in the SUDTP [5,12-14]. Peer recovery coaches have an impact on patients by guiding them through SUDTP from start to completion [13]. Patients that have peer recovery coaches involved in their care have better outcomes related to their SUD treatment and other comorbidities [12].

**SUD Community Care**

Creating a care management plan that addresses barriers to treatment, utilizing peer support, and creating connections to community resources and services has been shown to increase patient engagement with SUDTPs [5,12,14]. Embedding peer support within community and treatment programs, and utilizing technology and media are effective tools [11]. Community based centers which provide walk-in community resources and services may utilize peer recovery coaches as a liaison between the patient with SUD and a treatment program [5].

**Discussion**

This integrative review explored the factors that contribute to ensuring patients in SUDTP meet their recovery goals. Individuals living with SUD are a unique and special population and creating a specific program for these patients increases patient engagement in an outpatient SUDTP [10].

These studies demonstrate the immense effort needed to consider each patient’s individual needs while in a treatment program. Interdisciplinary teams that promote evidence based decision making support the work of peer recovery coaches providing patient encouragement to stay engaged in care and focus on their recovery goals [5,12-14]. Interventions aimed at understanding patients' needs for healthcare, connection to community, and community resources showed the best outcomes for improving access to care [9,10,11].

Patients living with SUD also have intersectional identities that impact access to SUD treatment. Patients may feel inequities in healthcare and exclusion based on their race, gender and/or sexual orientation. The support a peer recovery coach provides a patient is considerable when navigating through barriers in their treatment journey [9]. Furthermore, peer recovery coaches may provide connections for patients, such as housing and employment opportunities, leading to increased self-sufficiency [12]. Those patients that value their coaches may develop a collaboration that goes beyond the treatment program.

Kleinman’s study [5] found over 70% of patients who did not want to remain in a SUDTP requested to stay in contact with the peer recovery coach.

Targeted interventions that address these barriers and issues can impact whether patients leave the program prematurely. Additionally, these interventions can promote successful outcomes for those who have completed the program. Improving the culture and inclusivity in More studies are needed, however, to evaluate the long-term patient outcomes associated with interventions that encourage engagement in care and PCP access.

Multiple factors contribute to the feasibility of patients in SUD treatment and their management of care. Identification of barriers is paramount to the success of patient focused outcomes. These barriers may include managing comorbidities such as mental health, physical health and cravings associated with substance use, lack of flexibility in treatment programs and employment, and relationships between law enforcement involvement and substance use disorder. It is vital that SUDTP’s takes these into consideration when planning interventions. The identification of such factors is important to the practice question not only because of their implications to help patients meet their recovery goals but also because they provide improved patient engagement. It is strongly recommended further research and/or quality improvement projects are conducted in the future to better assist patients with their outcomes and goals.

**Limitations**

Three overall limitations of the studies can be summarized within the review which decreases generalizability of data. These limitations includes: selection bias through convenience sampling [5,12], single site study, and lack of a control group in two studies impacts level and quality of the data [12,14], and limited data in three studies prompting the need for additional research [9,11,14]. Despite the limitations, these studies have valuable results that can be applied to the recovering SUD population.

**Recommendations**

This review found the incorporation of evidence-based interventions that focus on decreasing barriers to SUD treatment is both feasible and beneficial for the patient. Despite numerous barriers such as lack of access to community resources and stigma towards individuals with SUD, an interdisciplinary team is important when addressing each patient needs. The team should include medical providers, mental health providers, nurses, social workers/therapists/counselors, and peer recovery coaches working together to manage patient care needs.

It is recommended that further research of the SUDTPs interdisciplinary approach be evaluated as the next step to further improve evidence-based decision making and the culture and safety of access to care in this population. Research that focuses on addressing barriers to care, increasing peer support, and community involvement interventions will capture and support engagement in care for those SUD outpatients in their recovery journey.

**Conclusion**

The purpose of this review was to investigate the evidence of best practices to engage patients and increase access to care. By focusing on each patient’s goals and needs and providing easily accessible treatment options, patients are more likely to remain engaged with treatment programs. Redefining program culture, promoting inclusivity, and improving early access to resources and providers during the SUDTP process allows for a stronger patient- provider relationship that last both during and post treatment. These interventions can be effective in reducing relapse and homelessness when access to community resources and care management are considered.

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