Emergency Department-Based Medication for Opioid-Use Disorder Program - Addressing Gaps in Linkages to Care

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Abstract

Introduction:

This study examined the social determinants of health (SDOH) of patients entering an emergency department (ED)-based Medication for Opioid-Use Disorder (MOUD) program through individual and focus group surveys. Social determinants of health (SDOH) may impact treatment retention for current and future patients. This study aimed to examine SDOH of patients entering the program through individual and focus group surveys.

Methods:

A survey of patients entering our MOUD program at 2 hospital-based EDs and 2 free-standing EDs occurred from January to March 2022. Trained addiction care coordinators (ACCs) used a standardized form to examine the role of SDOH. Focused group surveys were also collected. The goal was to ascertain patients’ perspectives of the program and solicit feedback on SDOH and program barriers.

Results:

Of the 60 OUD patients induced during our survey period, 19 patients (32%) participated in an individual or focus group interview. 16 patients (27%) completed all survey questions. The mean age was 42 years old, with 94% identified as Caucasian and 65% male. 94% of subjects found the ACCs helpful in providing follow-up care. Nearly 40% experienced transportation and financial issues. The vast majority found the MOUD program beneficial in coping with withdrawal symptoms, dealing with their addiction, and supporting recovery.

Discussion:

The work of the ACCs helps OUD patients successfully enter the treatment stage of their disease. The MOUD program can improve some patients’ reluctance to engage with a healthcare system by addressing barriers related to transportation to appointments and financial issues.

Categories: Psychiatry, Emergency Medicine, Substance Use and Addiction
Keywords: addiction therapy, behavioral health, substance use disorder, adult emergency department, medication for opioid use disorder

Introduction

Introduction:

The United States has seen a significant increase in prescription drug misuse, leading to the opioid crisis.
2020, an estimated 2.7 million people in the United States had an opioid-use disorder (OUD)\[1\]. The annual OUD-related costs to the U.S. were $786.8 billion in 2018\[2\]. Despite the attention OUD has received, opioid deaths have significantly increased over the last 12 years\[3\].

Social determinants of health (SDOH) are critical elements related to OUD health outcomes. SDOH are non-clinical factors, including the conditions in which people are born, grow, live, work, and age\[4-5\]. Addressing SDOH and improving health care are often interrelated and conflicting priorities\[6-7\]. Difficulty procuring employment, transportation, or housing, for example, may pose immediate threats to well-being, making seeking healthcare a lower priority.

Given the substantial impact SDOH have on MOUD patient outcomes, this study sought to clarify which SDOH are most impactful in our OUD population utilizing individual and focus group surveys. Additionally, examination of the effectiveness of our addiction care coordinators (ACC) in improving SDOH and well-being was measured. The aim of this study was to examine SDOH of patients entering an emergency department (ED)-based Medication for Opioid Use Disorder (MOUD) program through individual and focus group surveys.

**Materials And Methods**

**Methods:**

**Context**

**Emergency Department (ED)-based MOUD program**

The MOUD program utilizes the Screening, Brief Intervention, Referral to Treatment (SBIRT) evidence-based model to provide treatment to patients. Addiction Care Coordinators (ACCs) guide patients through their recovery journeys. The ACCs provide traditional nursing services such as physical assessments, withdrawal screening, medication administration, and patient education. ACCs provide assessments based on a framework developed by the American Society of Addiction Medicine. The ACCs are essential in connecting the patient to recovery support services and internal/external referrals, referrals to needle exchange programs, and distributing naloxone kits. ACCs provide outreach calls to MOUD patients to discuss their progress, reduce recidivism, assist with psychosocial barriers to treatment, and provide encouragement to those who are on their path to recovery.

**Patients**

**Study Design/Intervention**

This was a prospective convenience sample of ED patients enrolled in a MOUD program between January and March 2022 at two hospital-based EDs and two free-standing EDs. Patients 18 years of age and older were eligible for enrollment into our MOUD program if they had OUD and a clinical opioid withdrawal score (COWS) greater than or equal to eight. The Institutional Review Board reviewed and approved this study.

**Measures**

Metrics from the Health Opportunity and Equity (HOPE) Initiative\[8\] and State Health Improvement Plan (SHIP)\[9\] were used to develop questions for the standardized survey for the individual interviews and focus group survey. The survey concentrated on mental health recovery questions, social and economic factors, as well as access to psychiatric care. Additionally, we inquired whether virtual services were helpful.

Using a standardized questionnaire process, patients were asked about their perspective on the program, SDOH barriers encountered, and constructive feedback to improve the program. Each patient was called and asked standardized questions about their experience. They were also invited to participate in a focus group interview and to offer non-scripted feedback.

**Analysis**
All responses were tabulated as counts and percentages.

**Results**

Results:

Of the 60 OUD patients initiated on MOUD during the study period, 19 (31.7%) were entered, of which 16 (84%) completed all the survey questions. Participants ranged in age from 30 to 64, with a mean age of 42. All but one identified as white ethnicity (94%). Eleven of the 16 patients identified as male (69%) and five as female (31%). A zip code analysis noted a higher median income in the study population compared to the surrounding county.

Survey results regarding the ACC were largely positive. Participants reported the ACCs to be especially helpful in coordinating post-ED addiction care, organizing peer coach involvement, prompting engagement and treatment during ED visits, and addressing and overcoming financial and social barriers to MOUD (see Table 1).

<table>
<thead>
<tr>
<th>ACC Usefulness</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating initial follow-up appt</td>
<td>6.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Connecting to community resources</td>
<td>6.3%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>12.5%</td>
<td>74.9%</td>
</tr>
<tr>
<td>Discuss overall recovery process</td>
<td>6.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Kept engaged in treatment program</td>
<td>12.5%</td>
<td>0.0%</td>
<td>12.5%</td>
<td>12.5%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Assisting with overcoming social barriers</td>
<td>6.3%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>12.5%</td>
<td>74.9%</td>
</tr>
<tr>
<td>Instructing on technology use</td>
<td>12.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>81.2%</td>
</tr>
</tbody>
</table>

**TABLE 1: Survey Results on ACC Utilization**

1 = Not helpful   5 = Very helpful

Over 90% felt comfortable with using telemedicine treatment for their OUD treatment. Survey respondents also felt the ACC helped them gain control of their lives (63% strongly agreed) and improved their overall health (57% agreed their health was better).

Respondents answered questions regarding barriers they experienced in obtaining care (see Table 2).

<table>
<thead>
<tr>
<th>SDOH Issues</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation issues</td>
<td>12.5%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>0.0%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Follow-up Appointments</td>
<td>0.0%</td>
<td>0.0%</td>
<td>18.8%</td>
<td>0.0%</td>
<td>81.2%</td>
</tr>
<tr>
<td>Technology use</td>
<td>12.5%</td>
<td>0.0%</td>
<td>12.5%</td>
<td>0.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Financial issues</td>
<td>12.5%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>12.5%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Ability to get prescriptions filled</td>
<td>6.3%</td>
<td>0.0%</td>
<td>6.3%</td>
<td>0.0%</td>
<td>87.4%</td>
</tr>
</tbody>
</table>

**TABLE 2: SDOH Survey**

1 = Almost always   5 = Almost never
Transportation, prescription, and financial issues were the most prevalent social barriers to remaining in treatment.

**Discussion**

**Discussion:**

Understanding the diverse influences underlying the onset and maintenance of OUD is necessary for effective prevention and intervention strategies. SDOH are the root cause of health disparities [10-11]. The SDOH framework aims to identify and address factors that impact health outcomes [12-13]. Evidence suggests that optimizing SDOH as part of effective treatment may positively impact the lives and health outcomes of some with OUD. Furthermore, in a large longitudinal prospective cohort study of 615 heroin users, greater time spent in treatment for OUD was associated with improvements in aspects of SDOH, such as criminality, psychopathology, and mental health [14].

This study found that our ACCs successfully improved patient care in our ED-based MOUD program. As OUD is a significant health concern, emergency departments must develop programs to help people recover. Those most impacted by health disparities also tend to have less access to resources. 10-11 The focus group survey concentrated on those SDOH that affected care, including mental health recovery questions and social and economic factors such as housing, education, transportation, employment, and access to psychiatric care. The study also ascertained whether virtual services were helpful. Providing virtual services could expand access and potentially reduce healthcare disparities if effective.

**Conclusions**

**Conclusions:**

This study demonstrated the importance of collecting data on patient perspectives to inform programmatic strategy. From the individual interviews and focus groups the study ascertained information related to a significant strength of the program and the value of the ACC role. Opportunities to improve the program included scheduling appointments and transportation. Evaluating SDOHs will allow us to design program changes and interventions that address barriers, improve patient experience, and help patients stay in recovery.

**Additional Information**

**Disclosures**

**Human subjects:** Consent was obtained or waived by all participants in this study. Summa Health IRB issued approval N/A. Was approved as exempt as it was a program evaluation. **Animal subjects:** All authors have confirmed that this study did not involve animal subjects or tissue. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** ED21 Grant from the Ohio Department of Mental Health and Addiction. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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**References**


