Spring 5-7-2021

Increasing Patient Access to Medication-Assisted Treatment Programs for Opioid Use Disorder

Matthew J. Bednarchik
Southern Illinois University Edwardsville

Executive Summary

Introduction to the Problem

According to The State of Illinois Comprehensive Opioid Data report (Illinois Department of Public Health [IDPH], 2017), Illinois has experienced an increase in opioid overdose deaths in recent years. Between 2013 and 2016, opioid overdose deaths increased by 82% to 1,946. Non-fatal opioid overdoses have increased in step with fatal overdoses. The highest number of opioid overdoses occur in Cook County, but the highest per population overdose rates often occur in rural counties.

Almost every state in the United States (U.S.) does not have enough treatment capacity to provide Medication-Assisted Treatment (MAT) services to people who suffer from opioid use disorder (OUD). As Cimaglio (2018) points out, 55 of 102 counties in Illinois have no MAT providers/programs, and forty-four Illinois counties, including Morgan County, a rural area, have no active buprenorphine providers. Jones et al. (2015) further clarify that state-level OUD treatment needs more often surpass treatment capacity, with most states experiencing past year rates of opioid misuse and dependence exceeding treatment capacity. Opioid treatment programs operate at 80% or more capacity, cannot handle large numbers of new patients, and often opioid overdose patients do not have access to referral to MAT programs.

Opioid substitution treatment is underutilized in many countries despite evidence of its efficacy in treating OUD (Sordo et al., 2017). Opposition to MAT and the political stigmatization of agonist therapies have led to the decrease of public funding over the past 30 years, with programs serving economically disadvantaged patients struggling to survive. Because of this decrease in funding, programs rely on less qualified providers, treat more patients, invest in fewer resources, and drastically cut costs to create a profit or remain open.

Clinician burnout frequently occurs, and staff turnover rates can reach 50% (Pecoraro, Ma, & Woody, 2012).

Literature Review

Keyes et al. (2014) hypothesize the following four factors as drivers in the differences of rural versus urban non-medical prescription opioid use and abuse: increased availability of opioids in rural areas, out-migration of young adults, social networks, and structural stressors of modern rural living. Residents of rural areas face shortages of mental health providers to deal with OUD and its mental health comorbidities. This low rate of OUD treatment and the increase of opioid overdose rates in rural areas point to the growing societal costs of untreated OUD. The worsening societal and economic burdens that untreated OUD places on the rural community underscore the need for education, research, prevention, and, more importantly, treatment for OUD (Wu et al., 2016).

Medication-Assisted Treatment is safe, cost-effective, and, most importantly, reduces the risk of overdose. Medication-Assisted Treatment also increases OUD treatment retention, improves social functioning, and reduces the prevalence of criminal activities and infectious disease transmission (Volkow, Frieden, Hyde, & Cha, 2014). Patients that participate in a detoxification/tapering program with only withdrawal management have relapse rates as high as 90%, with an almost 60% rate of relapse occurring the first week after discharge. Medication-Assisted therapy is superior to withdrawal management alone and decreases relapse rates (Dunlap & Cifu, 2016). For patients in active treatment, MAT is likely to decrease the likelihood of accidental opioid overdose deaths. By reducing opioid craving, illicit opioid use, and withdrawal symptoms, MAT augments OUD treatment retention and is indicated for adults presenting with the physiological dependence of OUD (Connery, 2015).

Off-site, unobserved induction with buprenorphine offers a less resource-intensive option for the treatment of OUD. Patients are evaluated for fitness of outpatient induction while still abusing opioids. If judged to be an appropriate candidate, the patient receives a prescription for buprenorphine and self-induction instructions. The patient will then decide when to begin treatment by discontinuing opioid use, entering withdrawal, and starting buprenorphine (Lee, Vocci, & Fiellin, 2014). Bruneau et al. (2018) list potential cost savings and increased patient autonomy/satisfaction as reasons for their endorsement of buprenorphine use in home induction. They point out that home induction under appropriate circumstances produces similar results in terms of safety, retention, and reductions of opioid misuse as office-based and inpatient buprenorphine inductions. Moreover, patients participating in buprenorphine MAT in the outpatient primary care office setting have lower rates of illicit opioid use as measured with urine drug screens compared to those in traditional drug treatment programs.

Project Methods

Southern Illinois University at Edwardsville School of Nursing approved the proposed DNP project as a quality improvement exempt from the institutional review board (IRB). No patients were engaged in this project, so no patient identifiers were included. Participant names or identifiers other than professional designation were not obtained. There were no conflicts of interest. This project's primary goal was to measure the prevalence of OUD in the community and the likelihood of primary care providers referring to an outpatient MAT program. A secondary goal was to utilize the results of the survey as a tool for the possible development of a MAT program in Morgan County.

The objectives of the DNP project were:

1. Determine if surveyed primary care providers thought OUD was a problem in Morgan County and if adequate outpatient MAT options were available.
2. Determine if surveyed Primary Care Providers treated patients with OUD that may benefit from outpatient MAT utilizing Buprenorphine.
3. Determine if surveyed primary care providers felt more options were needed to increase access to MAT in Morgan County.
4. Gauge the surveyed Primary Care Providers awareness of office-based Buprenorphine MAT and probability of referring to an outpatient, office-based Buprenorphine MAT program.
5. Determine if surveyed Primary Care Providers were aware of the waiver training to prescribe Buprenorphine for OUD and discover any differences in survey responses between types of Primary Care Providers.

The implementation site for the DNP project was the community hospital in Jacksonville, Illinois. The hospital is a 131-bed nonprofit community hospital affiliated with a larger health system in Springfield, Illinois. Jacksonville is a community of 18,729 located in Morgan County, Illinois. The estimated population of Morgan County was 34,377 in 2016. The median income in Morgan County is $47,760, and 14.8 percent of the population lives below the poverty line. Thirty-six percent of the county's population is rural residents (Passavant Area Hospital [PAH], 2018).

Evaluation

In this pilot quality improvement needs assessment project, a cohort of twenty-five primary care providers, including Medical Doctors (MDs), Family Nurse Practitioners (FNPs),

and Physician Assistants (PAs), were invited to participate in a survey to assess the perceived prevalence of Opioid Use Disorder as well as the need for increased access to outpatient MAT utilizing Buprenorphine

The initial phase consisted of meeting with primary stakeholders from the hospital's pain management center to discuss the need for outpatient Buprenorphine MAT for OUD in Morgan County, as well as the design, implementation, and distribution of the questionnaire to primary care providers. The questionnaire consisted of eight questions to gauge the participant's familiarity with MAT, OUD, and the probability of referral to outpatient MAT therapy utilizing Buprenorphine. The responses were provided via a 5-point Likert scale. The final two questions inquired if participants were MDs or FNPs/PAs with yes or no answers. Descriptive statistics, including mode and median for central tendency and frequencies for variability, were utilized to interpret this ordinal level data.

Of the providers who responded to the survey, most felt that OUD is a problem in Morgan County. As primary care providers in the county, the respondents are in a unique position to assess the needs of their patients who suffer from substance use disorders. Cole et al. (2017) point out, rural Medicaid enrollees with OUD have extensive contact with their primary care providers, so they are in a specific locus to evaluate for and refer to MAT services.

Interestingly, respondents were split in their knowledge of outpatient use of Buprenorphine for MAT, with one respondent (10%) indicating they strongly agreed and four respondents (40%) indicating they agreed, with the remainder disagreeing or remaining neutral. Also, the results were evenly split in responses to the question of being aware of the use of office-based buprenorphine treatment induction for OUD. Cole et al. (2017) postulate that when a primary care provider identifies OUD in a patient, they play a significant role in MAT

initiation. Their rationale is that in their survey of rural Medicaid enrollees, over half of patients diagnosed with OUD by a primary care provider receive MAT. For this reason, primary care providers should be informed and educated in the use of outpatient MAT for OUD.

The DNP project provides an opportunity to gauge the prevalence and likelihood of referral to an outpatient MAT program for OUD in Morgan county. Discovering the need affords an opportunity to move forward with a discussion regarding the development of a MAT program at Passavant Area Hospital to serve the community. The DNP project results provide an opportunity to potentially increase MAT services in this mostly rural county.

The study has several limitations. One limitation of the study is using a convenience sample of respondents and a single clinical site, whereas three other primary care provider clinics care for Morgan County patients. Additionally, the use of a small sample size presents a limitation for the broader generalization of the results among all primary care providers in Morgan County. Future studies would need to address these limitations.

Impact on Practice

The results of this project's survey indicate the perceived need for expanded MAT services in Morgan County, Illinois, a rural area. The expansion of MAT services is needed to meet the needs of the community. The expansion can be accomplished by either increasing services within a primary care provider's office or establishing a stand-alone Buprenorphine Medication-Assisted Treatment clinic. As Thomas et al. (2014) explain, the ability to prescribe buprenorphine in the office setting improves care access and the earlier commencement of OUD treatment. Moreover, patients participating in buprenorphine MAT in the outpatient primary care office setting have lower rates of illicit opioid use as measured with urine drug screens compared to those in traditional drug treatment programs.

Conclusion

The majority of respondents indicated that there are not adequate outpatient treatment options for OUD in Morgan County, and there needs to be more access to MAT for OUD. McLuckie et al. (2019) found that most rural counties in Illinois offered very little in the way of pre-exposure prophylaxis clinics, harm reduction services, or MAT and naloxone-related services. The respondents' answers validate the findings of McLuckie et al. in their survey of local rural health departments in Illinois, inquiring about the availability of MAT treatment. Community support will be a vital component of moving a MAT program forward, so an education plan to promote community engagement would be essential within the proposal and could be a continuance of this project. Nevertheless, another option for this project's extension would be to measure the community perceived need for such an endeavor. Lastly, an additional option for this project's continuation would be to perform a cost analysis and develop an outpatient MAT program to treat OUD using buprenorphine.

Contact Information

Matt Bednarchik DNP APRN CRNA

mabedna@siue.edu