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# Methadone, buprenorphine and preferences for opioid agonist treatment: A qualitative analysis

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ABSTRACT

*Background:* Patients and clinicians have begun to recognize the advantages and disadvantages of buprenorphine relative to methadone, but factors that influence choices between these two medications remain unclear. For example, we know little about how patients' preferences and previous experiences influence treatment decisions. Understanding these issues may enhance treatment engagement and retention.

*Methods:* Adults with opioid dependence ($n = 283$) were recruited from two integrated health systems to participate in interviews focused on prior experiences with treatment for opioid dependence, knowledge of medication options, preferences for treatment, and experiences with treatment for chronic pain in the context of problems with opioids. Interviews were audio-recorded, transcribed verbatim, and coded using Atlas.ti.

*Results:* Our analysis revealed seven areas of consideration for opioid agonist treatment decision-making: (1) awareness of treatment options; (2) expectations and goals for duration of treatment and abstinence; (3) prior experience with buprenorphine or methadone; (4) need for accountability and structured support; (5) preference to avoid methadone clinics or associated stigma; (6) fear of continued addiction and perceived difficulty of withdrawal; and (7) pain control.

*Conclusion:* The availability of medication options increases the need for clear communication between clinicians and patients, for additional patient education about these medications, and for collaboration and patient influence over choices in treatment decision-making. Our results suggest that access to both methadone and buprenorphine will increase treatment options and patient choice and may enhance treatment adherence and outcomes.



## 1. Introduction

In the United States, methadone is the opioid agonist most studied and most frequently used for agonist therapy of opioid use disorders (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014), and there is ample, longstanding evidence of its effectiveness (Bart, 2012; Mattick et al., 2008). Yet for some people with opioid dependence, there are substantial barriers to methadone treatment and premature discontinuation of treatment is common. Federal regulations restrict use of methadone for opioid dependence to federally approved opioid treatment programs that inhibit access to care, especially in rural communities (Deck and Carlson, 2004). In addition, barriers to engagement and retention in methadone treatment exist, including discordance between patients' goals and motivations for seeking treatment and those of treatment programs (e.g., abstinence), patients' disagreement with program rules, and inconvenient requirements for onsite dosing that interfere with family and work obligations (Reisinger et al., 2009).

The Drug Addiction Treatment Act of 2000 (United States Congress, 2000) allowed physicians to prescribe Schedule 3, 4, or 5 medications for opioid dependence if the Food and Drug

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Administration (FDA) specifically approved a medication for detoxification from or maintenance of opioid dependence. Buprenorphine (a partial opioid agonist), the only medication to meet the DATA 2000 requirements (SAMHSA, 2012), is available as a sublingual film or tablet in two formulations—buprenorphine (Subutex®) and a combination of buprenorphine and naloxone (Suboxone®). Generic versions of the medication are now available. Because buprenorphine can be prescribed in a variety of settings and taken daily at home, its introduction held promise as an alternative to methadone that could increase access to treatment and be more acceptable to patients (Gryczynski et al., 2013). Adoption of buprenorphine was slow, however, in part because its availability was hindered by limits imposed by DATA 2000 on the number of empaneled patients who could receive the medication (United States Congress, 2000) and the type of practitioners able to prescribe it (Fornili and Burda, 2012). In 2011, nearly 10 years after buprenorphine first became available, 43% of US counties had no buprenorphine-waivered physicians (Murphy et al., 2014). Organizational- and practitioner-level barriers also prevented diffusion (Gordon et al., 2011; Green et al., 2014; Hutchinson et al., 2014; Roman et al., 2011; Savage et al., 2012).

Despite these barriers, patients and clinicians have begun to recognize the advantages and disadvantages of buprenorphine relative to methadone, and as restrictions on buprenorphine have been relaxed, its use has spread (SAMHSA, 2014). Factors driving physicians' and patients' decisions between these two medications, however, remain unclear. Likewise, we know little about how opioid-dependent patients' preferences and previous experiences influence treatment decisions. What is known is based on studies of predominantly male heroin users; privately insured patients have been understudied. Understanding the factors that enhance treatment engagement and retention (Institute of Medicine, 2006), while identifying the factors that influence treatment preferences could lead to improved patient-centered treatment for substance use disorders.

As part of a larger study examining the adoption of buprenorphine, we conducted semi-structured interviews with a sample of individuals with opioid dependence. Using text from these interviews, we examined: (1) participants' comparisons of buprenorphine vs. methadone treatment; (2) interactions with clinicians about treatment options; and (3) choices participants made about opioid agonist therapy.

## 2. Methods

The Treatment Options Study (TOP) was a mixed-methods study of the adoption of buprenorphine in two health plans that provide integrated, comprehensive inpatient and outpatient care, including addiction and mental health treatment. This paper's qualitative analysis of patient interviews complements prior analyses of service use (McCarty et al., 2010), costs of care (Lynch et al., 2014), and clinician and health system administrator perspectives (Green et al., 2014).

### 2.1. Settings

Settings were Kaiser Permanente Northwest (KPNW), which served about 480,000 members in Northwest Oregon and Southwest Washington, and Kaiser Permanente Northern California (KPNC), which served about 3.2 million members in Northern California's San Francisco Bay and Central Valley Regions. The two settings differed in coverage of medication assisted treatment and rates and methods of adoption of buprenorphine (Green et al., 2014). Prior to FDA approval of buprenorphine, the standard of care at KPNW was to provide methadone treatment though local methadone clinics. At the time of the study, KPNW had one chief of addiction medicine who championed use of buprenorphine but only two of 11 addiction medicine clinics had physicians that held buprenorphine waivers. The region had participated in a clinical trial using buprenorphine. As a result of its smaller size, streamlined administration, and prior experience with buprenorphine, adoption at KPNW advanced more efficiently, and a greater proportion of opioid-dependent patients received buprenorphine earlier in the adoption process when compared with KPNC (Green et al., 2014). At KPNC, each of 27 clinics had its own chief of chemical dependency services, and the region had no prior experience with methadone or buprenorphine, so buprenorphine adoption proceeded slowly until a clinical leader promoted its diffusion. Methadone was not covered (though many patients in the sample had experience with the medication).

### 2.2. Eligibility

Eligible individuals were 18 years or older, and had two or more diagnoses of opioid dependence in the year prior to recruitment (2006–2009). Diagnoses were identified using electronic medical record (EMR) data. A minimum of two diagnoses, on two separate dates, was required for study inclusion. The goal of this strategy was to reduce risk of including individuals whose diagnoses resulted from coding errors. All participants provided informed consent prior to participation; the study was approved and monitored by the KPNW and KPNC Institutional Review Boards. We excluded individuals who were cognitively impaired or otherwise unable to provide consent.

### 2.3. Recruitment

We reviewed EMR data monthly to identify patients with opioid dependence diagnoses. We sent recruitment letters ($n = 965$) to the chiefs of addiction medicine/chemical dependency and asked them to sign and return letters for those patients deemed suitable for recruitment (examples of unsuitable patients were those who were unavailable, unable to consent, or whose present condition precluded study participation). We dropped 226 patients (23%) from the study at this stage. The recruitment letters invited patients to participate in a single 1-h in-person interview; a toll-free phone number was provided for scheduling an interview or declining participation. We telephoned patients who did not call us within one week to assess interest in the study and to schedule interviews. Thirty-two letters were never mailed because recruitment enrollment goals were met prior to sending them. Of the 707 letters mailed, 277 patients (39%) were never reached, 94 (13%) refused to participate, and 53 (7%) were ineligible (e.g., had moved out of area, were non-English speakers, were unable to provide consent). We enrolled 283 individuals (40% of the eligible sample).

### 2.4. Interview content

We used semi-structured interviews to understand participants' prior experiences with treatment for opioid dependence, knowledge of medication options, preferences for treatment (including medications for detoxification and for maintenance), experiences with treatment for chronic pain in the context of problems with opioids, barriers to obtaining addiction treatment, and costs of addiction treatment. Interviews were audio-recorded and transcribed verbatim.

### 2.5. Data analysis

Transcripts were coded using Atlas.ti software (Friese, 2011). After about 10 percent of the interviews were completed we developed a coding scheme. Investigators and interviewers began with an independent, systematic, reading and coding of a subset of tran-