

Envisioning Minimally Disruptive Opioid Use Disorder Care

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Most people who need and want treatment for opioid addiction cannot access it. Among those who do get treatment, only a fraction receive evidence-based, life-saving medications for opioid use disorder (MOUD). MOUD access is not simply a matter of needing more clinicians or expanding existing treatment capacity. Instead, many facets of our health systems and policies create unwarranted, inflexible, and punitive practices that create life-threatening barriers to care. In the USA, opioid use disorder care is maximally disruptive. Minimally disruptive medicine (MDM) is a framework that focuses on achieving patient goals while imposing the smallest possible burden on patients' lives. Using MDM framing, we highlight how current medical practices and policies worsen the burden of treatment and illness, compound life demands, and strain resources. We then offer suggestions for programmatic and policy changes that would reduce disruption to the lives of those seeking care, improve health care quality and delivery, begin to address disparities and inequities, and save lives.

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BACKGROUND

Americans are dying from opioid overdose and substance-related illnesses at unprecedented rates,¹ yet most people who need treatment for opioid addiction cannot access it. Among those who do get treatment, only a fraction receive evidence-based, life-saving medications for opioid use disorder (MOUD).^{2, 3} MOUD access is not simply a matter of needing more clinicians or expanding existing treatment capacity. Restrictive federal and state policies and inflexible and punitive practices within healthcare delivery systems create significant, unwarranted, life-threatening barriers to care. Furthermore, those barriers often require that patients structure their lives around efforts to access MOUD. This diminishes their ability to engage with other positive and health-enhancing elements of their lives that do not center on addiction.

People who use drugs have long called for reforms to make opioid use disorder (OUD) care more patient-centered and less disruptive.^{4, 5} Their calls align with broader healthcare transformation efforts, particularly to create “minimally disruptive” systems. Minimally disruptive medicine (MDM) is a “patient-centered and context-sensitive approach” focused on supporting patients' life goals and health “while imposing the smallest possible treatment burden on patients' lives.”⁶ The MDM framework recognizes the balance between patients' workload and capacity, allowing individualized consideration for patients' multiple health conditions, life demands, and available resources. MDM has been used to guide care redesign for specific diseases (e.g., diabetes management⁷) and populations (e.g., older adults,⁸ people at risk for readmissions⁹ or with multiple chronic conditions^{10, 11}). It has also been deployed as a framework to guide multiple aspects of care ranging from clinical care (e.g., shared decision making,¹² cancer screening¹³), implementation strategies (e.g., telehealth¹⁴), and program evaluation (e.g., assessing an HIV clinic model¹⁵). MDM can be cross-cutting and has implications for clinical practice, health system design, financing, policy, and evaluation.¹⁶

Here, we outline the myriad ways that the current OUD delivery system is maximally disruptive. Using MDM framing (Fig. 1), we highlight how current medical practices and policies worsen treatment and illness burdens, compound life demands, and strain resources. We then offer suggestions for programmatic and policy changes to reduce disruptions to the lives of those seeking care, improve health care quality and delivery, begin to address disparities and inequities, and save lives (Table 1).

MAXIMALLY DISRUPTIVE CARE

Methadone is a long-acting full agonist opioid that prevents withdrawal and reduces cravings. Methadone reduces opioid use, HIV, and hepatitis C transmission risk, and markedly reduces overdoses and death.¹⁷ Outside of hospitals and emergency departments,¹⁸ methadone for OUD must be dispensed through federally licensed opioid treatment programs (OTPs).¹⁹ To access methadone, patients must endure long intakes (often while experiencing acute opioid withdrawal as patients cannot get methadone dose until administrative intake

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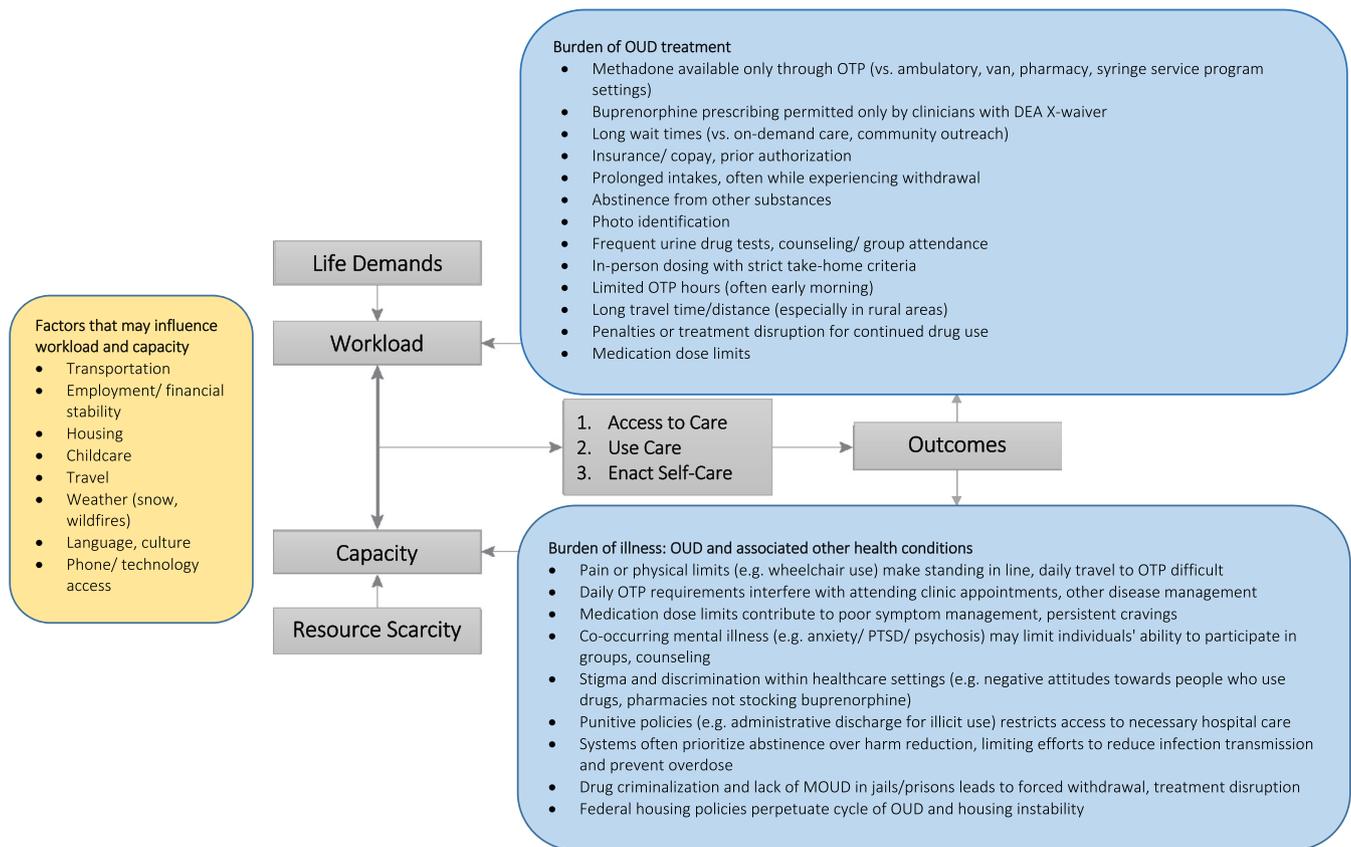


Figure 1 The cumulative complexity model, adapted for opioid use disorder. Minimally disruptive framework represents patient context as a balance between workload and capacity. This figure highlights factors that may influence workload and capacity among people with opioid use disorder (OUD), highlighting how OUD treatment burden and illness burden interact and feed back to further affect both workload and capacity. OTP, opioid treatment program; DEA, Drug Enforcement Agency; PTSD, post-traumatic stress disorder; MOUD, medication for opioid use disorder.

is completed); have photo identification; stand in line; and travel long distances, particularly if people reside in rural areas.²⁰ Most patients must present in-person to an OTP 6 days a week, take methadone under direct observation, submit frequent urine drug tests, remain abstinent from all substances, and participate in mandatory individual and group counseling. If patients falter on any requirements, they risk methadone dose reductions or treatment discontinuation, which in turn increases risk for withdrawal, cravings, overdose, and death.

Buprenorphine is a high-affinity partial opioid agonist. Like methadone, buprenorphine treats opioid withdrawal and cravings, and improves OUD-related and all-cause morbidity and mortality.¹⁷ Buprenorphine access is also unnecessarily limited. Patients must identify a clinician with a federal waiver to prescribe buprenorphine, lacking in many parts of the USA, particularly in rural and Black communities.²¹ Then, most patients have to undergo opioid withdrawal to avoid precipitated withdrawal. Alternative approaches — termed low-dose or Bernese inductions — bypass need for withdrawal,²² but most buprenorphine clinicians are unfamiliar with non-standard approaches.²³ Once on buprenorphine, patients may have to abstain from alcohol and other drugs, and attend counseling, and face dose and treatment duration limits.

OUD care, particularly for methadone, often exists outside of general healthcare settings. Siloed OUD care makes it even more difficult for patients with complex medical needs, who must navigate multiple inflexible, discordant, and convoluted systems.³ Take, for example, a hospitalized patient with OUD, diabetes, and chronic kidney disease on hemodialysis. After discharge they may need care at a hemodialysis center (3 h, three times/week), an OTP (daily, six times/week), and primary care. They will likely experience stigma and discrimination,^{24–26} and have multiple daily medications and disease self-management tasks. Add on unstable housing or transportation, parenting or work responsibilities, depression or anxiety, chronic pain, low health literacy, cognitive impairments, or limited social support, and the burden of being a patient and accessing OUD care seems near impossible. Moreover, despite going against the Americans with Disability and Fair Housing Acts, patients seeking stability through residential addiction treatment or housing programs may be required to taper off MOUD before admittance.^{3, 27, 28} If patients are incarcerated or hospitalized, many are forced to stop MOUD, leading to withdrawal and increasing risk for return to use, overdose, and death. Further compounding these challenges, the same individuals who face racism, incarceration, lack of

Table 1 Examples of Practice and Policy Alternatives to Change Current Maximally Disruptive Systems

	Maximally disruptive OUD care (current state)	Potential practice and policy alternatives
Enrolling	<ul style="list-style-type: none"> - Long wait times - Restricted intake hours - Long visits, often before dosing with methadone (and hence patients experience withdrawal); buprenorphine commonly not offered on first visit 	<ul style="list-style-type: none"> - Same day treatment access; expanded OTP hours - Same-day treatment entry with service delivery structured to avoid withdrawal - Buprenorphine prescription at first visit
Attendance	<ul style="list-style-type: none"> - Methadone typically requires daily in-person dosing at an OTP for at least the first 90 days of treatment 	<ul style="list-style-type: none"> - Telehealth, ambulatory clinic, and pharmacy-based methadone - OTPs adopt flexible rules (including durations) for take-home doses
Medication	<ul style="list-style-type: none"> - Limited patient choice for medication formulation (e.g., tablets, films, long-acting injectable) - Restrictions on medication dose and duration (e.g., not allowing more than 6 months of treatment, not increasing buprenorphine above 16 mg total daily dose, methadone titration schedules unresponsive to fentanyl era needs) 	<ul style="list-style-type: none"> - Patient preference drives medication formulation - Shared clinical decision-making drives dose and treatment duration - Update methadone consensus guidelines to account for changes in drug supply, including synthetic opioids/ fentanyl
Treatment requirement	<ul style="list-style-type: none"> - Medication treatment contingent on patient willingness to participate in Individual and group counseling 	<ul style="list-style-type: none"> - Counseling offered but not required
Urine drug testing (UDT)	<ul style="list-style-type: none"> - Treatment mandates or stresses abstinence from other substances, imposes requirements for frequent UDT with penalties for aberrant tests 	<ul style="list-style-type: none"> - Stop mandating routine UDT - Embrace medication-first strategies where medication not contingent on substance use
Fragmentation	<ul style="list-style-type: none"> - OUD care separated from general medical care; separated from community-based services, including harm reduction services 	<ul style="list-style-type: none"> - Integrate methadone and buprenorphine in all general medical settings including hospitals, EDs, ambulatory, and specialty addictions care and settings tailored to specific populations (e.g., pregnant persons, culturally specific) - Integrate MOUD in non-traditional settings (e.g., syringe service programs, housing programs)
Limited rural access	<ul style="list-style-type: none"> - Long drive-times to attend in-person OUD visits 	<ul style="list-style-type: none"> - Expand access to mobile methadone and buprenorphine - Expanded telehealth access

ODU, opioid use disorder; OTP, opioid treatment program; UDT, urine drug testing; ED, emergency department; MOUD, medication for opioid use disorder

housing, or other structural inequalities, are disproportionately harmed by barriers within the OUD care system.^{29–32}

MINIMALLY DISRUPTIVE CARE

A minimally disruptive OUD framework can inform improvements in clinical practice, health system redesign, payment reform, and policy change (Table 1). For example, policies that expand MOUD to all healthcare settings and to nontraditional settings where healthcare can be delivered would reduce treatment burden and dramatically increase access. Specifically, methadone and buprenorphine could be expanded to primary care,^{27, 28, 33} hospital,^{34, 35} emergency departments,³⁶ skilled nursing facilities (SNF)³⁷, carceral settings,³⁸ all specialty addiction settings, and community settings such as syringe service programs³⁹ and mobile vans.^{40, 41} COVID-19-related policy changes including take-home methadone and telemedicine-based buprenorphine are safe and effective, and promote treatment retention⁴² and patient satisfaction,^{43–45} yet they are not widely adopted.^{46, 47} Policy-makers must permanently codify these changes and promote their adoption through financial and quality incentives.⁴⁸ Minimally disruptive OUD systems could further reduce barriers by adopting no-wrong-door, on-demand, real-time treatment initiation approaches, and eliminate practices and policies that contribute to long wait times and care fragmentation.^{49–51} Access also requires coordination across multiple settings; however, bureaucratic obstacles currently impede care delivery. For example, patients who initiate methadone in hospital and are discharged to a skilled nursing facility

(SNF) rely on approval from state, SNF, and OTP authorities, and administrators' decisions supersede clinician and patient preferences. Further improvements include relinquishing cumbersome administrative and treatment requirements and stopping punitive, non-evidence-based policies.⁵² Finally, minimally disruptive OUD care should allow flexibility in medication choice and induction schedules. For example, clinicians, pharmacies, and the drug-enforcement agency could abandon blanket requirements that patients receive buprenorphine-naloxone (instead of buprenorphine monoprodukt), which is indicated as an abuse-deterrent but can have adverse effects and lead to mistrust between patient and provider.⁵³ Minimally disruptive OUD clinical practice would also allow clinicians to initiate methadone and buprenorphine at higher doses with more rapid dose escalation, and encourage clinicians to tailor dosing based on individual patient needs.⁵⁴

Stopping harmful policies that force people to choose between MOUD and other health and psychosocial needs will reduce illness burden.⁵⁵ Other supports such as navigators and peers can further reduce illness burden by helping patients manage OUD and other complex chronic illnesses, and by reducing stigma.^{56, 57} Broadly, most OUD-related harms are preventable. Safer drug supply and safe consumption spaces reduce overdose,⁵⁸ syringe service programs reduce infections.⁵⁹ Finally, other OUD-related harms such as incarceration may be a direct result of local, state, and federal laws criminalizing drug use.⁶⁰

Payers, clinicians, and health system leaders should consider cumulative and compounding demands of OUD and other conditions when designing care, and do what they can to

accommodate patients' needs, taking into account diverse factors including racism, housing, transportation, income, technology, and culture.

CONCLUSIONS

Maximally disruptive care for opioid addiction is not an accident. Rather, demands on patients are part of the treatment paradigm. Patients must "earn" methadone take-home doses or "work the steps" to be worthy of treatment. There is no evidence for the effectiveness of this approach, it is neither patient-centered nor effective, and it is particularly harmful for people with co-occurring medical or psychiatric illness and those from historically marginalized populations. Instead, an MDM framework can guide clinicians, delivery systems, and policy makers to create an OUD system that is flexible, adaptive, context-sensitive, individualized, coherent, and holistic.

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