ABSTRACT

Title of Thesis:	"IT'S MORE THAN JUST THE ACT OF NOT USING. IT'S A FEELING OF FINALLY COMPLETING SOMETHING.": PATIENT-CENTERED DEFINITIONS OF SUCCESSFUL TREATMENT OUTCOMES IN METHADONE TREATMENT IN BALTIMORE CITY
	Valerie Bradley, Master of Science, 2024
Thesis Directed By:	Professor Jessica F. Magidson Department of Psychology

Background. Successful outcomes in substance use disorder treatment are often narrowly defined as retention in care, substance use cessation, and the prevention of recurrent substance use. These widely utilized benchmarks may overlook key patient-centered indicators of success. Few studies have sought patient perspectives to establish a representative definition of successful treatment outcomes for opioid use disorder (OUD), with historically marginalized individuals facing the least representation and the largest inequities in care. With overdose-related deaths increasing to over 112,000 in the 12 months preceding May 2023 and a disproportionate impact on racially minoritized populations, understanding comprehensive patient-centered definitions of successful treatment in minoritized populations is an imperative endeavor for research, treatment planning, and policy. This study aimed to understand how patients and providers at an outpatient methadone treatment program in Baltimore City describe patient-centered successful treatment outcomes.

Methods. We conducted qualitative interviews and focus groups with 32 patients, staff, and peer recovery specialists (PRSs) at a Baltimore-based outpatient methadone treatment

program predominantly serving low-income, racially minoritized individuals with OUD. Semi-structured interview guides prompted patients (*n*=20) to describe success in methadone treatment and staff and PRSs (*n*=12) to describe their observations of patients' success in treatment. Qualitative data were transcribed, coded, and analyzed using thematic analysis. We utilized the Health Equity Implementation Framework to contextualize findings across multiple domains and explore potential influences on equitable outcomes of treatment success.

Results. Five key themes emerged to demonstrate how patients and their providers define patient-centered successful methadone treatment outcomes, including (1) improvements in general health, (2) productivity and accomplishment, (3) social improvements, (4) substance use changes, and (5) treatment engagement. Patients and providers were generally in agreement on these five overarching themes.

Conclusion: Findings suggest patient-centered definitions of success in methadone treatment span psychosocial, environmental, behavioral, health-related, and other factors beyond the traditionally measured outcomes of treatment retention and substance use abstinence. Working toward a more representative definition of methadone treatment success—integrating patient perspectives, particularly minoritized individuals who often face the greatest obstacles in care—may have significant clinical, research, and policy implications for improving the patient experience and outcomes in methadone treatment.

Keywords: Opioid use disorder, substance use, patient-centered, medication for opioid use disorder, treatment outcomes, treatment success

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by

Valerie D. Bradley

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Advisory Committee:
Professor Jessica F. Magidson, Chair
Professor Lea R. Dougherty
Professor Annabelle M. Belcher

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Chapter 1: Introduction

In the face of an increasingly lethal opioid overdose crisis, with largely opioid-driven overdose deaths surpassing 112,000 in the 12 months preceding May 2023 (Ahmad et al., 2024), medications for opioid use disorder (MOUD) such as methadone, buprenorphine, and naltrexone offer a highly effective means of treatment for individuals with OUD (Sofuoglu et al., 2019). Despite proven efficacy, maintaining patient engagement in care remains challenging (Morgan et al., 2018). Nationally, retention rates at six months post-intake stand below 50% (A. Williams et al., 2017; A. R. Williams et al., 2019), with even lower retention rates among low-income, racially minoritized individuals (Manhapra et al., 2017; Samples et al., 2018; Stahler & Mennis, 2018; Weinstein et al., 2017). Early treatment discontinuation presents a significant obstacle to MOUD treatment effectiveness and correlates with increased mortality rates (Degenhardt et al., 2009; Stafford et al., 2022). Research has pointed to discord between MOUD programs' policies and patients' perception of treatment gains, where patients observe successes in life areas peripheral to the traditional program goals. This discordance can divide patients and providers, contributing to treatment discontent, patient discontinuation, or early treatment discharge (Mitchell et al., 2011). To address this disconnect, this paper seeks to combine patient and provider experiences to develop a more patient-centered definition of success.

This manuscript presents the voices of historically marginalized individuals with opioid use disorder and treatment providers as they describe first-hand experiences and observations of patient-defined methadone treatment success. The traditional metrics of methadone treatment success identified by treatment providers, researchers, and policymakers—namely substance use abstinence, treatment retention, and the prevention of recurrent substance use often described as

relapse to craft treatment—fall short of capturing the full range of treatment successes as experienced by the patients themselves (Biondi et al., 2020; Fishman et al., 2020; A. R. Williams et al., 2018, 2019). Understanding and incorporating patients' perspectives in MOUD treatment may be vital to optimizing patient experiences and improving outcomes in MOUD care (Cernasev et al., 2021). Substance use and challenges in treatment adherence can often serve as the rationale for the administrative discharge of a patient (Mitchell et al., 2011). Further, patients who find treatment programs inflexible to their needs and unreceptive to their goals may initiate treatment discharge (Mitchell et al., 2011). As a result, researchers have begun to explore patients' goals in MOUD treatment (Cioe et al., 2020; Hooker et al., 2022; Sanger et al., 2022).

MOUD research has not yet codified a patient-centered conceptualization of treatment success and patient perspectives—particularly the perspectives of low-income, minoritized populations engaged in methadone treatment—remain largely unexplored. The stringent focus on substance use abstinence in treatment overlooks the importance of addressing patient-specific goals in treatment (Lopez et al., 2022). Shifting the focus from abstinence and treatment attendance to patient-defined indicators enables providers to more effectively align treatment planning with patient values and goals (Mitchell et al., 2011). MOUD programs may see greater engagement and retention when patients' goals are represented in treatment plans (Joseph et al., 2021), and researchers may be able to better measure the effectiveness of MOUD treatment by assessing the full range of treatment outcomes (Sanger et al., 2022).

Methadone treatment, a stringently supervised form of MOUD, traditionally requires patients to adhere to frequent in-person attendance at an opioid treatment program. Compared with longer-acting and more flexibly administered buprenorphine medication, methadone treatment consists of supervised dosing with limited take-home bottles allocated on the basis of

narrow benchmarks of success. Evidence suggests that the historically strict and highly regulated nature of methadone treatment resulted in increased treatment challenges for patients and higher mortality rates compared to less restrictive medications (Gottlieb et al., 2023). The need to improve patient-centered methadone treatment has been recognized at the federal level; in January of 2024, the Substance Abuse and Mental Health Services Administration (SAMHSA) made permanent the previously temporary reduction in methadone treatment restrictions during the COVID–19 Public Health Emergency. These newly codified measures reduce barriers to take-home methadone, emphasize collaborative patient-provider decision-making, and remove the restrictive timeframes dictating methadone treatment eligibility, such as length of opioid addiction history and number of prior treatment attempts (Substance Abuse and Mental Health Services Administration [SAMHSA], 2024). Understanding the perspectives and experiences of patients and providers in methadone treatment and establishing more patient-centered metrics of methadone treatment success are paramount to achieving SAMHSA's goal of providing patient-centered care.

While redefining success in MOUD based on patient-defined goals and experiences may improve patient experiences and outcomes in treatment, few studies have explored patient experiences of success in methadone treatment specifically (Goedel et al., 2020; Hansen et al., 2013; Madras et al., 2020). Further, to our knowledge, no studies have sought the perspectives of low-income, racially minoritized individuals engaged in methadone treatment. Methadone treatment must include the perspective of marginalized patients who face disproportionate harm in the opioid crisis, are the most likely to experience systemic inequalities in healthcare, and whose voices have been historically excluded from research in methadone treatment

administration (Burlew et al., 2011; Hollander et al., 2021; Hulsey, 2022; Jordan et al., 2021; Lagisetty et al., 2019; National Academies of Sciences et al., 2019; Priest et al., 2022).

Incorporating a multifaceted understanding of methadone treatment success from the perspectives of minoritized groups may have important implications for developing more equitable, patient-centered policies and treatment programs. As such, this study aimed to understand key stakeholders' perspectives on successful methadone treatment outcomes at a community-based methadone treatment program serving predominantly low-income, racially minoritized patients in Baltimore. Specifically, we sought to understand 1) patients' descriptions of successful methadone treatment outcomes, 2) providers' observations of how patients experience success in methadone treatment, and 3) overlap and divergence in how each group defines success in methadone treatment.

Chapter 2: Methods

All study procedures were reviewed and approved by the University of Maryland, College Park Institutional Review Board (IRB), which also approved an Interagency Agreement (IAA) with the University of Maryland, Baltimore.

Setting

This study was conducted at the University of Maryland Addiction Treatment Center, a large, community-based, outpatient opioid treatment program (OTP) in West Baltimore with an average daily census of over five hundred patients. Study activities took place from September through December 2019. At the time of this study, methadone treatment was dispensed daily, Monday through Saturday, with a take-home dose provided on Sunday. Following the pre-

COVID SAMHSA guidelines, providers prescribed take-home doses dependent on treatment adherence (i.e., 90 consecutive days of negative toxicology screens for alcohol and drug use).

Participants and Recruitment

Participants recruited for this study (*N*=32) included patients currently enrolled in the methadone treatment program (*n*=20) and two levels of providers: OTP staff (*n*=8) and peer recovery specialists (PRSs) working in this and other recovery programs in Baltimore City (*n*=4). Participants primarily identified as male (70%) and Black or African American (60%) [see Table 1 for sociodemographic characteristics of participants].

In addition to recruitment with flyers and word of mouth, treatment program counselors purposefully identified and referred patients who were both struggling with methadone treatment adherence and who exhibited consistent methadone treatment adherence. OTP staff (i.e., drug treatment counselors, case managers, and nurses) were recruited based on their roles in patient care and program administration. PRSs, individuals with lived experience of substance use and recovery, were recruited based on their work with patients in treatment and community settings across Baltimore City. PRS recruitment took place through networking with a peer research collaborator and community-based organizations.

Participants were offered the option to participate in either focus groups or individual interviews that aimed to capture the patient and provider perspectives as fully as possible and, recognizing that the two qualitative methodologies may elicit different responses, to accommodate varying work schedules and personal preferences. Three provider focus groups and two patient focus groups took place with a maximum of six participants in each. Participants chose to participate in a focus group (*n* = 22) or individual interview (*n* = 10) but could not engage in both. Focus groups were separated such that patients only participated with other

patients, and providers participated in focus groups together. Participants received a $25 gift card compensation for their participation in the interview or focus group.

As recommended in qualitative research, the number of individuals needed to reach theoretical saturation informed the sample size (Pope & Mays, 2006). After recruiting 32 participants, redundancy emerged and no new themes central to the study question arose, indicating theoretical saturation.

Procedures

The research team developed semi-structured guides for focus groups and individual interviews, informed by prior literature on defining substance use recovery (Ashford et al., 2019). The interview/focus group guide questions were intentionally broad and aimed to capture participants' conceptualization of success in methadone treatment. For example, interview/focus group guides prompted patients to describe their personal experiences with success in methadone treatment, including describing a time when they were successful in treatment, what success looked and felt like, and discussing the perceived rewards of treatment. Providers were asked to describe patients they have worked with who have discussed doing well in methadone treatment and what success looked like to those individuals. When participants expressed uncertainty, asked for clarification, or provided brief or unclear responses, interviewers or focus group leaders provided prompts based on prior literature suggesting three core elements of treatment success: sobriety, personal health, and seeking the betterment of one's community (Ashford et al., 2019; Inanlou et al., 2020) while emphasizing that the focus was on the individual's perception of treatment success. All individual interviews and focus groups were audio recorded with participant permission. All recordings were transcribed and reviewed for accuracy.

Data Analysis

Transcription and Coding

Transcripts were analyzed using codebook/template thematic analysis (Brooks et al., 2015), a deductive-inductive approach, by a team of trained coders. Coders included two undergraduate research assistants and one post-baccalaureate research assistant, with a graduate research assistant as trainer and arbiter. Coders developed a preliminary codebook by deductively coding themes from responses to the semi-structured interview guide questions, which asked about experiences and observations of successful methadone treatment outcomes based on three transcripts. Coders then iteratively developed two codebooks outlining themes, sub-themes, and definitions inductively identified in the transcripts based on participant responses. Further, using an inductive approach, related themes emerged outside of response to the specific successful outcomes question in the semi-structured guides. The codebooks (one for patient and one for provider responses) were modified as new concepts arose (Boyatzis, 1998). Teams of two researchers coded each transcript independently using NVivo Version 12. The coding teams met weekly to discuss and resolve discrepancies in coding. A third-person arbiter was involved in these weekly meetings, and the resolution of coding discrepancies brought to these meetings occurred through discussion and consensus.

Health Equity Implementation Framework

The Health Equity Implementation Framework (HEIF) guided data analysis and the interpretation of thematic findings. The HEIF explores determinants of equitable healthcare, such as access to, quality of, and outcomes of healthcare innovations, as well as the broader contexts influencing health equity (Woodward et al., 2019). The HEIF considers factors affecting health

equity implementation at multiple levels, including the innovation level (e.g., methadone treatment), recipient level (e.g., patients and providers), and the clinical encounter level (e.g., patient-provider interaction). The HEIF assesses influences on health equity implementation across multiple levels, such as the inner local context (e.g., a methadone treatment clinic), inner organizational context (e.g., a hospital system), outer healthcare context (e.g., the broader healthcare system), and societal influences (e.g., physical infrastructure, economy, sociopolitical forces; Woodward et al., 2019, 2021). We contextualized our findings within a HEIF framework by considering the factors involved in patient-centered definitions of methadone treatment success and the factors influencing equity in methadone treatment success.

Chapter 3: Results

Participants (patients and providers) discussed several key themes indicative of successful methadone treatment. In line with our study aims, we present two primary perspectives of successful treatment outcomes, including patients' definitions of successful treatment outcomes and providers' observations of patients' experiences of success in methadone treatment. Based on interview and focus group feedback, patient and provider participants agreed on five primary themes to define successful treatment outcomes: (1) improved health and wellbeing; (2) productivity and sense of accomplishment; (3) improved social relationships; (4) changes in substance use-related behaviors; and (5) increased treatment engagement.

Theme 1: Health Improvements

Patient Perspectives

Patient participants described improvements in mental and physical health as critical metrics of success in methadone treatment. Patients explained how succeeding in treatment consisted of being of "sound mind and body," "experiencing clarity," and being "as healthy and sustainable as possible." Patients discussed improved moods and mental states, increased motivation, positivity, focus, and an overall improvement in day-to-day affect as success metrics. When asked what success in a treatment program looked like, one patient detailed how they ″start[ed] to feel better about [themself] and look better.″ Participants described feeling "energized, motivated" and having "that energy where you weren't exhausted or mentally exhausted."

A renewed awareness of one's health challenges and focus on self-care also arose as indicators of success in treatment in the patient group. Patients described how the effects of substance use could not only bring about– but also mask– mental and physical ailments. Success in methadone treatment meant a renewed ability to identify and attend to these health-related issues. This increase in self-awareness resulted in improvements in health, such as eating habits, weight, energy levels, focus, and medical care when required. As one participant shared:

> *"I wasn't eating right at all, and now it's easier to focus on doing more of the right things ... rather than worrying about my next fix."* -(Interview, Patient, White, Male)

Another patient described:

> *"Now I'm getting done what I really need to get done as far as my health."* -(Interview, Patient, Black/African American, Female)

Most patients agreed that mental and physical health improvements and increased self-care and health awareness were core to their definition of treatment success.

Provider Perspectives

Providers also identified mental and physical health improvements regarding patients' methadone treatment success. Specifically, providers described physical health improvements such as healthier eating, purposeful exercise, and weight gain. Further, like patients, providers described patients' renewed ability to recognize and attend to health conditions no longer masked by the effects of substance use.

> *"A person will enter into an active state of recovery… they're going to have immediate concerns almost right away… people will start becoming more concerned with oral health when it comes time to start applying for jobs and re-engaging with intimate relationships."* -(FG, Peer, White, Male)

In addition to acute and immediate health needs, providers observed patients experiencing longer-term health benefits, such as regular exercise and engagement in comprehensive healthcare beyond the scope of the methadone treatment program.

> *"That's when those values really start coming back to the person…they start caring about themselves.* -(FG, Peer, White, Male)

Providers also identified the interplay between physical and mental health as indications of successful treatment endorsed by patients.

> *"I was speaking to a couple [of] patients earlier and one of them had said that he or she was able to recently stop taking their blood pressure medication, because he or she has reached a point of peace of mind or a certain level of mental health that they hadn't had before. They realized that it was through their commitment to mindfulness and those centering practices to not let the stress of daily life overwhelm them. That was really key."* -(Interview, Staff, White, Female)

Notably, providers described that patients' success in treatment included a renewed sense of value and self-worth, particularly for individuals who have experienced past traumas, racism, and stigma:

> *"Primarily, the theme that seems most predominant is when they describe value in their lives and no longer wanting to take risks with their lives… understanding that they matter... There are just so many layers of stigma that can be attached to basically being a poor person of color in Baltimore City with a heroin addiction. And if you add trauma, suffering any kind of violence or exposure to violence on top of that, it's a lot for any one person to handle."* (Interview, Staff, White, Female)

Theme 2: Productivity and Accomplishment

Patient Perspective

Succeeding in methadone treatment also included a sense of increased productivity among patient participants. Gaining and maintaining employment, working towards financial goals, and feeling busy and accomplished were cited as examples of successes.

In terms of employment and productivity, one participant described doing well in treatment as "[getting] my life back on track, becoming a productive member of society again, [and] working." Patients also described success as "doing something with my time…keeping myself busy."

Financial and housing stability also stood out to participants as significant successes:

> *"One of the best things is I have more money to do things, productive things, and also, I just started a new job."* (Interview, Patient, White, Male)

When asked what was important in treatment, this patient endorsed "keeping my job" and highlighted the importance of "[keeping] my place to stay." Other patients described success as "saving money instead of spending it" and "holding money a lot better". Patient participants also discussed success in terms of restoring their credit rating, paying down debts, and establishing newly attainable financial goals like buying a house:

"Instead of having to use the money for drugs, use the money for other things like clothes and food. It's doing positive things." -(Interview, Patient, White, Male)

Patients identified treatment success as "getting back on track" which included a return to prior values and goals established before active substance use and a return to a previous lifestyle perceived as less challenging and more desirable:

"Getting my life back together and getting back on the right track because I was clean for 11 years. So I know how it feels to live on the other side." -(Interview, Patient, Black/African American, Female)

"...the rewards you get as you go along in recovery. The positive benefits that come with recovery in sobriety. All the positive things that are better are going to come with it if you do what you're supposed to do. Life will be easier. The rewards of life being the way it's supposed to and just not hectic chaos." –(Interview, Patient, White, Male)

Along with productivity and financial rewards, patients cited a sense of accomplishment and progress in their recovery journey as success.

"It's more than just the act of not using. It's a feeling of finally completing something, accomplishing something good instead of something bad." –(Interview, Patient, Black/African American, Female)

"To me, it feels like I was in school and I got a good grade on a test like a[n] A plus." (FG, Patient, Native American, Male)

Patients perceived a sense of accomplishment derived from commitment and perseverance as gains in treatment.

Provider Perspectives

Like patients, provider participants observed patient success as getting back on track, including returning to old values, engaging in one's communities, achieving housing stability, and experiencing an increased sense of self-worth and accomplishment.

"They reach some point of gaining some stability, rather than being out there and constantly using and not having any place to go, whether or not they're in some kind of transitional recovery home or back with their family, you know, they've reached a level of stability." –(FG, Staff, Black/African American, Female)

Providers also described patients' treatment success in terms of employment and meeting financial goals, which, in turn, contributed to a sense of accomplishment and self-value.

"For some clients, their success is a job, a house, some type of income. That's usually what they think is gonna be successful. The more they start to realize their self-worth, the better they start to feel about themselves." –(FG, Staff, Black/African American, Male)

Theme 3: Social Improvements

Patient Perspectives

Improvements in personal relationships and social dynamics arose as integral components that defined treatment success for many patients. These included strengthened relationships with family, improved intimate relationships, increased engagement with community members,

positive changes to one's environment, helping others, and being around others who use substances without partaking in themselves.

Patients discussed successful treatment as engaging in quality time with family and being a stable figure in their families, exemplified by "being there for my kids, my grandkids, and my great-grandkids" and "calling home every day." This also included being accepted and welcomed by family, a stark contrast from the deterioration of close relationships because "nobody wants [s] you to be around if you [are] doing drugs."

Improvements in social relationships also included positive changes in how patients interact with others by engaging and communicating effectively:

> *"I can see the things that I missed and apply them to my life. Treatment] helped me to change for the better. Because I was the person that always had something [to] say. I just had to have the last word…. But since I've been back [in treatment]… it's helped me to deal with people in society, differently and better."* –(Interview, Patient, Black/African American, Female)

Patient participants discussed improvements in intimate relationships, such as creating "a better relationship with my girlfriend because she's a lot happier now since I started on [methadone medication]."

Reaching a recovery point whereby patients could help and inspire others to succeed embodied treatment success for many. Modifying one's social circles to "avoid those getting high" further signaled treatment success for many patients.

Provider Perspectives

Provider participants agreed that reestablishing social relationships, including renewing family ties, indicated patient treatment success.

"It's all about reconnecting and rebuilding of relationships, and generally what I've heard of a person that's successful in recovery regardless of methadone or not, they're getting reconnected back to work, they're getting reconnected back to their family, back to intimate relationships. That's when I hear the success." -(FG, Peer, White, Male)

Providers echoed treatment success as including environmental changes, such as "not associating with people who were their downfall in the past" and "re-engaging in the community."

Theme 4: Substance Use Changes

Patient Perspectives

Patients included reductions in or cessation of substance use, including decreased problems associated with substance use and changes in behaviors related to substance use, as part of treatment success.

Patients described persistence when reducing substance use as a key to success. Though abstinence was not the goal for all, it was for many; for instance, one patient outlined how "doing well" meant being "consistent, staying away from drugs." Another participant stated that treatment success meant they "still haven't been using."

Patients also described success as the ability to help others working towards the goal of substance use reduction or abstinence. The rewards of recovery included "sobriety and keeping clean and helping others do the same."

Patients explained how a reduction in their urge to use substances equated to treatment success for them: treatment succeeded when it "took away cravings." With the decrease in

cravings came the relief of no longer "being stressful, worrying about getting up, going out there, worrying about getting money, trying to get your blast" to ward off withdrawal symptoms.

"I just don't have to worry about looking for drugs every morning." (FG, Patient, White, Male)

Clinical indicators of reductions in substance use, including substance-free urinalysis test results, signaled treatment success to many.

When you get your results from taking a urine test or something and it's good, you feel good. (FG, Patient, Native American, Male)

Provider Perspectives

Provider participants observed patients' experience of success as extended reductions in or cessation of substance use, returning to treatment after substance use, and decreases in the urges to use, which also contributed to patients' pride in their recovery process:

"For a lot of my clients… they're more proud of themselves because they lasted that long. If you can just make it a week or two without even thinking about going out there and using and really acting on it- we all think about it sometimes, but just acting on it- I think it makes a difference. And I think that's the most successful part of methadone for them because they don't really have that urge anymore to go out there and just chase drugs all day. And I think that's the success part of it. I really do. I see it every day." –(FG, Peer, Black/African American, Female)

Providers also discussed patients' perception of a methadone treatment program as a harm reduction pathway, with a reduction of illicit substances serving as an indication of treatment success.

"I know for some of them it's if they cut back on one [substance] because even though it's some that are not using it's a lot that are using everything including opiates… when we talk about cutting back or stopping, even if they stop the marijuana or even if they at least stop the fentanyl, that's success if we're talking harm reduction… that's how they look at it… they don't want everything taken away like all at once and they just see sometimes gradual steps and that's fine." –(FG, Staff, Black/African American, Female)

Providers described incremental changes in substance use behaviors in the recovery process. They spoke of patients defining success as a long-term process that can include decreasing the frequency of substance use as well as returning to treatment after a lapse in recovery.

The person that's recovering, they're gonna have some setbacks and being able to see that they have reached some level of improvement, whether they used 10 weeks ago or yesterday and got back on track... That's success. -(FG, Staff, Black/African American, Female)

Theme 5: Treatment Engagement

Patient Perspectives

Patients identified an outcome of successful methadone treatment as the act of commitment and consistency in one's recovery. A high level of engagement with and commitment to methadone treatment included having a plan for treatment, goals for how long to be in treatment, and consistency in one's dosing schedule. Patients set goals and praised their successes when maintaining methadone dosing consistency and remaining in the methadone treatment program, particularly after prior treatment attempts.

"This is the third time I've been on the methadone program. The first two I walked off, because I really wasn't ready. But this time I think I'm actually doing wonderful because I stayed on for over a year." –(Interview, Patient, Black/African American, Female)

Some participants discussed successful methadone treatment as fully engaging in treatment to the point of no longer necessitating MOUD. For example, when asked what doing well in methadone treatment looked like, participants endorsed "walking away from it," "a slow detox and be out of here," and "hopefully, by next year, I won't even be on the program anymore."

Provider Perspectives

Providers observed patients describing successful methadone treatment as increased levels of engagement in one's treatment and recovery journey. According to providers, being proactive about treatment goals, maintaining dosing stability, regular treatment attendance, commitment to treatment, and future-oriented thinking factored into patients' perceptions of success.

"Success looks like a member who is stable in their doses, re-engaging in the community, not mixing or interacting [with] other drugs along with their medication, and has created a plan for their self on whether how long they're going to be on the methadone. They're looking for the future, where they're going with this treatment." –(FG, Peer, Black/African American, Male)

Engaging with methadone treatment as a form of treatment success meant not only following a prescribed dosing plan but also included involvement in comprehensive engagement in care, such as meeting with providers and becoming involved in programs available at the clinic.

"Success means that [the patient is] coming to treatment every day to get dosed, and getting dosed and participating in treatment as recommended… But just getting here and participating in not only your dosing, meeting with your counselor, meeting with the doctors, following through with the study programs that are here, just engaging in treatment altogether." –(FG, Staff, Black/African American, Female)

Rewards within methadone treatment stood out to providers as success, including gaining take-home bottle privileges and other milestones of achievement in treatment.

"With some, success could be getting a take-home bottle. Because that means that they've done something to earn it." –(FG, Staff, Black/African American, Female)

Providers also defined success as one's ability to maintain recovery if they disengaged from methadone treatment:

"When they start weaning off, start coming down to the realization that they can do what they need to do for themselves, for their family, without it. I've seen the process of individuals who weaned off of methadone and they got back to being [those] individuals without it. That was successful to me." –(FG, Peer, Black/African American, Male)

Further, success included learning from past experiences in methadone treatment, returning to treatment after prior attempts, and the ability to recognize which components of treatment work best in each unique recovery pathway.

"Part of the success story looks like to me is to see that a person may have tried one area of treatment and it didn't work… Maybe you did see something else that worked better for you and once you saw that, once you realized that, and once you continued with that and you stuck to it, that's part of a success story to me." –(FG, Staff, Black/African American, Female)

Chapter 4: Discussion

This study aimed to capture the voices of patients and providers (staff and PRSs) who defined treatment success at a Baltimore-based methadone treatment program. We examined the overlapping and diverging definitions provided by patient and provider groups and explored the level of congruence between patients' conceptualization of success and provider perspectives. We applied the findings of this study utilizing the HEIF to propose opportunities to implement patient-centered definitions of successful methadone treatment in order to improve health equity and treatment outcomes. To our knowledge, this is the first study to highlight the perspectives of patients of predominantly low-income, racially minoritized backgrounds and providers of a methadone treatment program, contributing to more representative definitions of patient-centered MOUD treatment success.

Patient and provider participants' conceptualizations of successful methadone treatment outcomes were generally aligned with some distinctions (see Table 2). Both patients and providers described success in methadone treatment across five overarching areas: improved health, productivity and a sense of accomplishment, social improvements, substance use changes, and treatment engagement. These findings align with research exploring wider MOUD treatment success as defined by patients and providers, where participants similarly endorsed health improvements, socialization, employment, treatment planning, and substance use changes as indicators of success (Hooker et al., 2022; Shadowen et al., 2022).

While patient and provider participants agreed on the five overarching themes of treatment success, some distinctions emerged in the subthemes identified by each group.

Discussing productivity, only patients offered "feeling busy" as an outcome of success, whereas only providers described patients' increased sense of self-value and, in turn, decreased risk-taking. Patients noted success as the ability to help others in treatment, as well as the ability to be around substance use without partaking. Meanwhile, only providers identified receiving positive recognition for treatment strides and community involvement as indicators of patient success. Providers exclusively described long-term reductions in substance use (and, in turn, experiencing fewer substance-related financial or legal consequences) and returning to methadone treatment following treatment discontinuation as successes. Regarding treatment engagement, only providers identified long-term recovery planning and future-oriented thinking.

Seeing such strong agreement between patients and providers in defining treatment success is encouraging. The converging definitions identified in this study, particularly from provider perspectives, may be attributable to the harm-reduction approach and policies adopted by the Baltimore-based study site clinic, where the first-line approach to supporting patients with continued substance use is to reevaluate a treatment plan. In contrast, many treatment programs initiate treatment termination and administrative discharge. Nonetheless, discrepancies in describing successful treatment arose between patient and provider participants, presenting the opportunity to fine-tune patient-centered care to be most responsive to patient goals.

Through the lens of the HEIF, the findings of this study point to a need to re-examine success in methadone treatment as defined by patients, particularly incorporating the underrepresented voices of low-income, marginalized individuals in care. Research, practice, and policy must account for patient-defined methadone experiences and goals at the individual, clinical, organizational, environmental, and sociopolitical levels. For example, individual patient factors such as personal goals, purpose, and circumstances should be considered by providers at

the outset of treatment planning and throughout treatment monitoring. The characteristics of methadone treatment itself, such as the demands and scheduling of treatment, should be evaluated to maximize the feasibility of patient success. The clinical encounter must be a collaborative effort where patients are empowered and engaged in treatment planning, and providers are responsive to patient-defined goals. Clinic, hospital, and healthcare policies must broaden traditional conceptualizations of success, examine patient experiences of meaningful treatment outcomes, address provider stigmas and misconceptions, and operationalize patient-centered MOUD in practice. Importantly, local, state, and federal policy must be responsive to the needs of patients in MOUD care, where stringent and exclusionary approaches to treatment can alienate patients, limit treatment access and patient engagement, and risk adverse health outcomes. While an in-depth analysis of implementing patient-centered definitions of methadone treatment success is beyond the scope of this work, we propose opportunities to integrate patient-centered definitions of success in research, policy, and practice, per the HEIF, as a means to improve treatment outcomes and offer more responsive, representative, and equitable treatment for patients engaged in MOUD care (see Figure 1).

Patient-centered definitions of successful treatment outcomes expressed by participants of this study may help inform future research seeking a more representative measurement of methadone treatment success. Incorporating the perspectives of low-income, marginalized patients in methadone treatment can offer a more representative and responsive measure of MOUD success. Such changes could result in enhanced treatment experiences, improved treatment engagements, and more equitable outcomes for patients in MOUD care (Baumann & Cabassa, 2020; Sanger et al., 2022). Understanding patient perspectives in MOUD has become a paramount issue at the federal level, with newly established SAMHSA regulations setting the

stage for patient-centered MOUD care. Future studies should explore patient-centered definitions of success across MOUD treatment types and propose a more representative measurement of treatment success to inform research, practice, and policy implementation. We hope the findings of this study present opportunities to continue such an effort.

Limitations

This study included methodological limitations that should be addressed in future research. Though we employed procedures to reach patients both consistently and inconsistently attending methadone dosing visits, enrollment at a treatment site meant that patient participants were all actively receiving treatment in the methadone treatment program. Therefore, we were unable to capture the perspectives of patients who discontinued and have not returned to methadone treatment. We also recognize the limitations of recruiting patients and staff from one treatment program and one MOUD modality (methadone treatment).

We also included different data collection methods (individual interviews and focus groups) based on stakeholder input to promote comfort and participation. However, we cannot guarantee that participants did not withhold information about their experiences and opinions in either the focus group or interview setting in light of the sensitive nature of the topics covered. Also, small sample sizes within each group (i.e., patients, providers) did not allow for formal comparisons across groups and within the provider group (PRSs versus different staff roles), which may have limited the scope of responses captured in this study. Though we asked providers to describe successful treatment outcomes based on patient perspectives, provider responses may be biased by personal perspectives on methadone treatment success.

Despite these limitations, we feel confident in the validity of our findings based on the indication of theoretical saturation and our ability to capture and integrate perspectives of

individuals often neglected in research participation (i.e., underserved, low-income, racially minoritized patients struggling with methadone treatment retention and peer providers whose perspectives are not frequently included as part of the care team). Investigations such as the present study, which focuses on this population as the predominant recipients of methadone treatment, offer opportunities for the methadone treatment research, provider, and policy communities to revisit how methadone treatment success is conceptualized, measured, and achieved. A more attuned understanding of the perspectives and experiences of the methadone treatment patient and provider population on the front lines of the opioid crisis could enhance the treatment experience, improve retention, and reinforce success.

Future studies should integrate quantitative assessments of the various conceptualizations of success presented in this study with larger sample sizes. Further, future research should also identify if and how the conceptualizations of treatment success presented in this study change over time spent in MOUD treatment. Further research should also examine the distinctions in success definitions across provider roles (physician, peer, counselor) and how these factors may converge or diverge with patient perspectives of treatment success. Despite these limitations, this study represents a first step in integrating patient and provider perspectives to enhance patient-centered care in methadone treatment.

Conclusion

The findings of this study reinforce and expand upon the existing literature on the topic of MOUD treatment outcomes outside of the traditionally held success markers of retention and abstinence, particularly for underrepresented and marginalized individuals engaged in methadone treatment. The patient and provider voices presented here suggest that various domains exist when observing "successful treatment" in MOUD. The broader clinical and public health

implications of these and similar findings are an integrated and more representative conceptualization of patient-centered success that can best serve patient interests in treatment. With more tailored treatment planning based on representative definitions of success, patient outcomes and treatment experiences may improve.

Appendices

Table 1. *Sociodemographic Characteristics of Participants*

	Patients (*n*=20)	**Providers (*n*=12)**
	Mean (SD)	Mean (SD)
Age	48.4 (10.0)	49.2 (0.7)
Age of first substance use	17.7 (5.1)	---
Years working in substance use treatment	---	9.6 (7.6)
	n (%)	*n* (%)
Race		
Black or African American	12 (60)	9 (75)
White	6 (30)	2 (17)
Other	2 (10)	1 (8)
Gender		
Male	14 (70)	5 (42)
Female	6 (30)	7 (38)
Education		
Less than high school	7 (35)	---
Completed high school	8 (40)	3 (25)
Some college	3 (15)	1 (8)
Associate's degree	2 (10)	3 (25)
Bachelor's degree	---	2 (17)
Master's degree	---	3 (25)
> 1 MOUD program enrollments	15 (79)	---
Any history of substance use and recovery	---	10 (83)

Table 2. Interview and Focus Group Themes and Subthemes.

Theme	Sub-theme	Patients	Providers
	Mental wellbeing	x	x
	Identifying/dealing with health problems	x	x
	Physical wellbeing	x	x
Productivity and accomplishment	Financial goals	x	x
	Sense of accomplishment	x	x
	Feeling busy	x	
	Working	x	x
	Stable housing	x	x
	Legal outcomes	x	x
	Back on track	x	x
	Sense of self-value		x
	Decreased risk-taking		x
	Autonomous decision-making	x	x
Social improvements	Helping others in treatment	x	
	Changing environment	x	x
	Receiving recognition for accomplishments		x
	Family relationships	x	x
	Ability to be around substance use	x	
	Community involvement		x
	Building/amending healthy relationships	x	x
Substance use changes	Abstinence	x	x
	Return to recovery		x
	Length of use and consequences		x
	Reduction in want or need of drugs	x	x
	Reduction in non-opioid substance use	x	x
	Reduction in cravings	x	x
Treatment engagement	Engagement with psychosocial services	x	x
	Treatment planning	x	x
	Adherence to dosing schedule	x	x
	Future-oriented thinking		x
	Maintaining stable dose	x	x

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