

Patient and Provider Perspectives on Benefits and Harms of Continuing, Tapering, and Discontinuing Long-Term Opioid Therapy



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BACKGROUND: Given efforts to taper patients off long-term opioid therapy (LTOT) because of known harms, it is important to understand if patients and providers align in LTOT treatment goals.

OBJECTIVE: To investigate patient and provider perceptions about the harms and benefits of continuing and discontinuing LTOT.

DESIGN: Qualitative study

PARTICIPANTS: Patients and providers with experiences with LTOT for pain in two Veterans Health Affairs regions.

APPROACH: We conducted semi-structured interviews and analyzed data using rapid qualitative analysis to describe patient and provider preferences about LTOT continuation and discontinuation and non-opioid pain treatments.

KEY RESULTS: Participants ($n=43$) included 28/67 patients and 15/17 providers. When discussing *continuing LTOT*, patients emphasized the benefits outweighed the harms, whereas providers emphasized the harms. Participants agreed on the benefits of continuing LTOT for improved physical functioning. Provider-reported benefits of continuing LTOT included maintaining the status quo for patients without opioid alternatives or who were at risk for illicit drug use. Participants were aligned regarding the harms of negative side-effects (e.g., constipation) from continued LTOT. In contrast, when discussing *LTOT tapering and discontinuation*, providers underscored how benefits outweighed the harms, citing patients' improved well-being and pain management with tapering or alternatives. Patients did not foresee benefits to potential LTOT tapers or discontinuation and were worried about pain management in the absence of LTOT. When discussing *non-opioid pain treatments*, participants emphasized that they were adjunctive to opioid therapy rather than a replacement (except for cannabis). Providers described the importance of mental health services to manage pain, which differed from patients who focused on treatments to improve strength and mobility and reduce pain.

CONCLUSIONS: Patients emphasized the benefits of continuing LTOT for pain management and well-being, which differed from providers' emphasis on the benefits of discontinuing LTOT. Patient and provider differences are important for informing patient-centered care and decisions around continuing, tapering, or discontinuing LTOT.

KEY WORDS: opioids; tapering; veterans; patients; providers; qualitative methods; long-term opioid therapy.

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INTRODUCTION

The opioid epidemic is a well-known, major public health problem.¹ Approximately 5.4% of adults in the United States are prescribed long-term opioid therapy (LTOT) (>90 days).^{2,3} In the Veterans Health Administration (VA), approximately 6% of patients receive LTOT and are mainly managed in primary care.^{4,5} Though LTOT is prescribed to provide pain relief, it is also associated with various harms. LTOT harms are described as the “5 As,” involving *Analgesia* (insufficient pain reduction), *Adverse effects* (e.g., constipation, falls, overdose), *Activities of daily living* (reduced functioning), *Absent behaviors* (e.g., increasing dose, requests from multiple doctors), and *Affect* (depression).⁶

Due to risks associated with LTOT, there have been policy shifts encouraging providers to monitor patients more closely, discourage LTOT to avoid potential harms, and identify alternative pain treatment options.^{7,8} Tapering or discontinuing LTOT is considered appropriate when benefits outweigh harms for individual patients and pain can be managed with alternatives.^{1,2,9} However, tapering or discontinuing LTOT may be harmful when patients are likely to experience worsened pain or mental health and likely to increase the use of street drugs to manage pain.^{1,2,9,10} Assessing the benefits and harms of continuing, tapering, and discontinuing LTOT is complex and requires patient input, which has been limited

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to date.^{10–12} As part of “learning health system” goals to improve patient care during the opioid crisis,^{13,14} it is important to understand the areas in which patients and providers agree or disagree about LTOT. Agreement between patients and providers around LTOT could impact clinical decisions, implementation of interventions to reduce opioids or pain, and patients’ satisfaction with care and health outcomes.

As part of a study to develop opioid-related screening tools,¹⁵ we interviewed patients and providers to understand the perceived benefits and harms of continuing, tapering, and discontinuing LTOT and preferences about non-opioid pain treatments.

METHODS

Study Design and Sample

Study methods are expanded in Appendix 1’s checklist.¹⁶ From March 2021 to March 2022, we used purposeful criterion sampling¹⁷ to recruit patients and providers from two VA facilities (West Coast and Midwest). These locations were selected to provide regional diversity of participants. The sample was informed by literature on purposive sample adequacy and data saturation using a benchmark of 6–12 participants per group and oversampling of patients, who have been less represented in LTOT research.^{17–19} Patient and provider sampling criteria were broad to enhance the transferability of findings to real-world settings (see below).

We used data from the VA Corporate Data Warehouse (CDW), a national-level database housing clinical, administrative, and financial information, to identify patients with an indication of LTOT (>90 days in the past year) for non-cancer pain. We selected patients with and without indication of an opioid dose reduction in the past year. Dose reduction was operationalized as pharmacy documentation of at least two dose reductions of at least 5% in the past year. From 3535 eligible patients, we generated a random list stratified by region and demographic characteristics, which included oversampling for non-white and women Veterans to diversify the sample. We sent advance notice letters to 300 patients and followed up by telephone with 154. Twenty-eight patients participated in an interview, 39 declined, 5 were ineligible, and 82 were not pursued due to reaching sample goals.

We emailed medical chiefs from Western and Midwestern VA primary care, pain, and specialty substance use disorder clinics to identify providers with experience in opioid prescribing or pain management. We invited all 22 referred providers to participate in the study via emails and instant messages.²⁰ Fifteen providers participated in an interview, 2 declined, and 5 were not pursued due to reaching sample goals.

Data Collection

Author 1, PhD, qualitative methodologist, and Author 3, MPH, qualitative analyst, conducted data collection and analysis. The research question was: What are patient and provider perceptions of the benefits and harms of continuing, tapering, and

discontinuing LTOT? Interview guides, based on an opioid and pain literature review to inform the development of opioid screening tools, focused on the following domains: (1) LTOT experiences; (2) LTOT continuation; (3) LTOT tapering and discontinuation; and (4) non-opioid pain treatments to facilitate LTOT tapering or discontinuation (Appendix 2). We piloted interview guides with VA’s Veteran and Family Advisory Council and the interdisciplinary clinical/research team.

Author 1 conducted semi-structured telephone interviews which lasted 30–60 minutes and were audio-recorded and transcribed professionally. Patients received \$20. Stanford University’s Institutional Review Board approval was obtained (Protocol #54167).

Data Analysis

Authors 1 and 3 performed rapid qualitative analysis, a systematic yet streamlined approach, using directed content analysis of interview guide domains.^{21–23} Author 1 took notes during the interview and then immediately coded them into a Microsoft Office Excel matrix (Appendix 3). The matrix was organized by interview guide domains and facilitated comparisons across participants and domains.²⁴ Author 1 used timestamps and comments to identify aspects of the summary that needed further clarification. Author 3 listened to audio recordings to verify accuracy and edit the summaries. Using a template for each domain, Author 1 analyzed summaries for salience, repetitions, and negative cases to inductively identify domains related to the benefits and harms of continuing, tapering, and discontinuing LTOT, and non-opioid pain treatments. The research team met weekly to review the matrix, resolve discrepancies, and finalize results.

RESULTS

Forty-two percent (28/67) of patients and 88% (15/17) of providers agreed to participate (Table 1). The following sections describe patient and provider similarities and differences in benefits and harms of continuing and tapering or discontinuing LTOT and non-opioid pain treatments (Figs. 1, 2, and 3). Quotation identifiers reflect Veteran patients (V) and providers (P).

Continuing LTOT

Benefits. Patients emphasized that the benefits of continuing LTOT far outweighed potential harms since it helped them “function as a human being” while living with pain. They described how opioids lessened pain and improved functioning, which positively impacted their mood, well-being, relationships with others, and social participation:

The advantages are—if you are in severe pain, you can take a 5–10mg of Hydrocodone, something lower level like that. It makes you feel a little better and takes the

Table 1 Characteristics of Patients and Providers with Long-term Opioid Experience (n=43)

	<i>n</i>	(%)
Patients	28	(65)
Gender		
Female	11	(39)
Age		
≥ 65	10	(36)
<65	18	(64)
Race*		
White	14	(50)
Black or African American	7	(25)
Native Hawaiian or other	1	(4)
Unknown	6	(21)
Geographic region		
Midwest	14	(50)
West	14	(50)
Opioid Type and Dose		
Buprenorphine 2 MG/Naloxone 0.5 MG	2	(7)
Hydrocodone 5 MG/Acetaminophen 325 MG	10	(36)
Hydrocodone 7.5 MG/APAP 325 MG	3	(11)
Hydrocodone 10 MG/Acetaminophen 325 MG	2	(7)
Methadone 10 MG	1	(3)
Morphine SO4 15 MG	2	(7)
Morphine SO4 30 MG	1	(3)
Oxycodone HCL 5 MG	3	(11)
Oxycodone HCL 15 MG	1	(3)
Oxycodone 5 MG/Acetaminophen 325 MG	3	(11)
Prescription count (range 3 to 15, median 11.5)		
10 or less	10	(36)
More than 10	18	(64)
Self-reported dose reduction†		
None	13‡	(46)
Discussing tapering with provider	3	(11)
Tapered	9	(32)
Discontinued	3§	(11)
Providers	15	(35)
Degree		
MD	10	(67)
MSW [¶]	1	(7)
PhD #	3	(20)
PharmD	1	(7)
VA clinic setting		
Primary care clinic**	10	(67)
Substance use disorder clinic	3	(20)
Pain clinic	2	(13)
Geographic region		
Midwest	7	(47)
West Coast	8	(53)
Gender		
Female	6	(40)

*Note: Ethnicity (Hispanic) had zero counts

†Note: We included patients with and without LTOT tapering/discontinuation to provide a more nuanced understanding of experiences with LTOT, including what patients anticipate when faced with tapering/discontinuing conversations with providers

‡Includes 3 patients who wanted to discuss tapering if surgery was an option

§Includes 1 patient who discontinued 1 type of LTOT but continued another type

||Note: Race/ethnicity was not collected for providers

¶Note: MSW and PhD non-prescribers were included in this study because in VA they are involved in LTOT decision-making through collaborative care with prescribers

#PhD in Clinical Psychology

**Includes a women's health physician

LTOT also helped patients participate in meaningful activities because it lessened their pain:

Opioids help me to have a life, to play with my grandkids. They are special to me. (C_V05_S1)

Providers also acknowledged the benefits of LTOT in improving patients' physical functioning; however (as described in the next section), these benefits did not always override potential harms.

I don't get so concerned about dosing, as I am about the goals of their care and overall level of functioning. I try to press them for specific examples... "What is it exactly that you're talking about?" "I like to golf and without my one Vicodin a day, I can play three holes and then my knee or back is killing me and I have to stop. Golfing is a huge part of my life." To me, it's more about a functional assessment, what they can and can't do and how those medicines help them. (P13-S1)

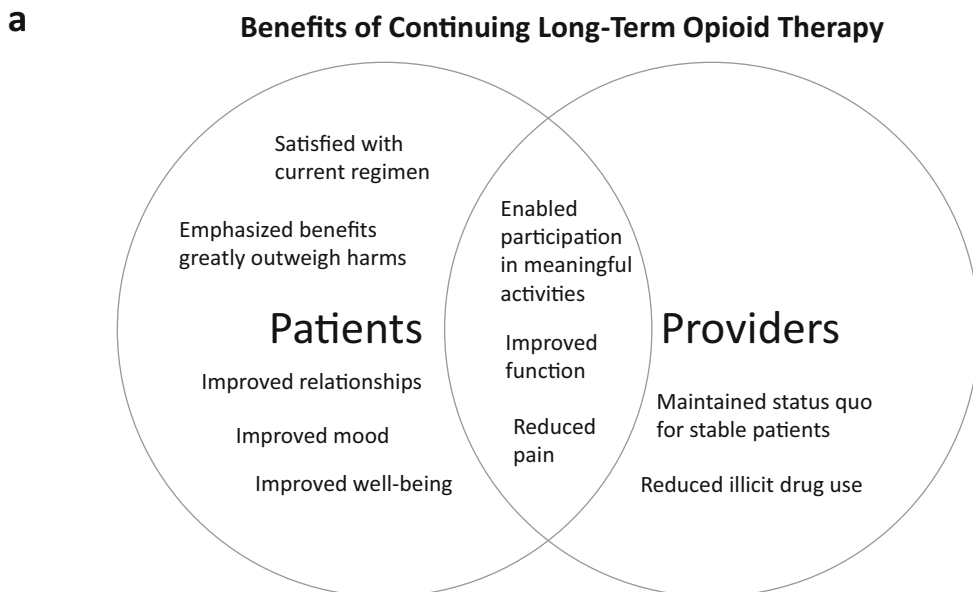
Providers also described how continuing LTOT or maintaining the status quo was beneficial for patients who were stable (i.e., maintained a similar dose over time without indication of harms or side effects). They considered how maintaining the status quo was beneficial for patients who did not have viable alternatives to opioids for pain management or as a harm reduction tool for patients who were physically dependent on opioids to avoid illicit drugs:

I think about the risk of injection drug use compared to long-term opiate prescription use is a conversation I think is important to have. (P09-S1)

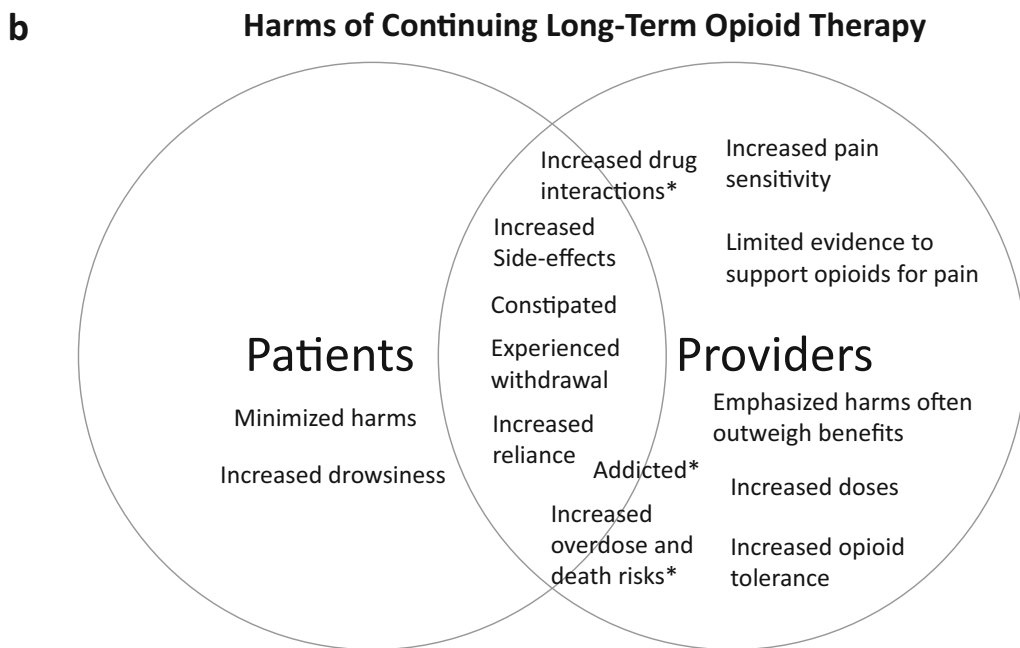
Harms. Patients emphasized that they did not experience or foresee serious harms of continuing LTOT since they described themselves as cautious with their opioid prescriptions. Conversely, providers were more concerned about the harms of continued LTOT than patients were, and providers emphasized the harms over benefits of continued LTOT. Patients reported experiencing some side effects from LTOT (e.g., constipation, treated with stool softeners; drowsiness, addressed by not taking medications when driving), but stated that these negative effects did not outweigh the benefits of continuing LTOT. Patients mentioned concerns about physical or psychological dependence on opioids ("Just being reliant on it, I don't like that." (V07-S2)), which was worrisome when experiencing withdrawal symptoms if medications were missed or taken late (forgotten or refills were delayed). Although patients were aware of opioid-related dangers, including overdose, addiction, and organ damage, they did not experience or expect serious adverse effects from LTOT:

A disadvantage I learned from my doctors, the medicine part of the hydrocodone is what causes liver damage. It was like 500mg in the past. It's now been

edge off pain. You're going to treat people better. You're going to get out there and do your job. (V10-S2)



Summary: Participants shared similarities regarding perceptions of the benefits of continuing long-term opioid therapy (LTOT). However, patients emphasized that the benefits of continuing LTOT far outweighed the harms.



Summary: Providers emphasized that the harms of continuing long-term opioid therapy often outweighed the benefits, which differed greatly from patients. *Illustrates more emphasis by providers than patients.

Figure 1 Comparing Patient and Provider Perceptions of the Benefits of Continuing Long-term Opioid Therapy (a). Comparing Patient and Provider Perceptions of the Harms of Continuing Long-term Opioid Therapy (b).

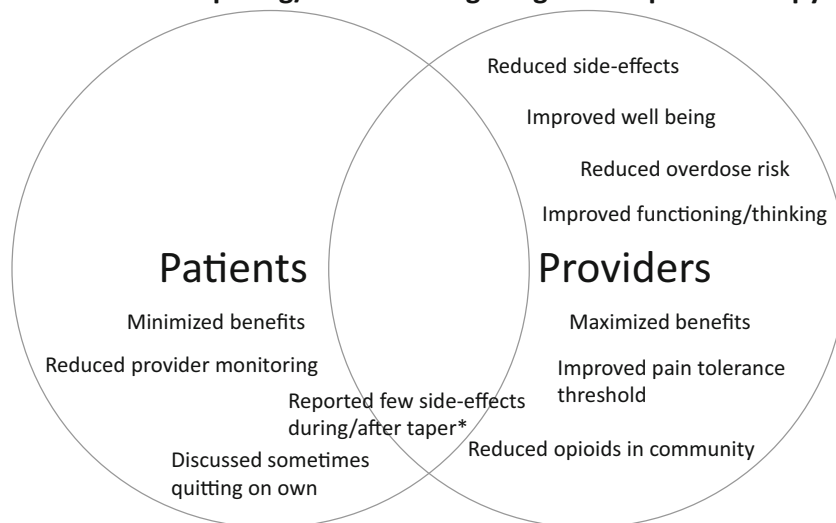
reduced to 325mg. Other than that, I'm okay with it. It doesn't affect me in any negative way. (V19_S1)

Conversely, providers emphasized that the potential harms of continuing LTOT could outweigh the benefits. Providers were concerned for patients developing opioid use disorder when their dose was increasing over time (due to poor pain control or opioid dependence) or they exhibited aberrant behaviors (requests for early refills or opioid misuse).

I think it is less safe to continue if we see patients requiring increasing doses. That's a sign that maybe we're no longer treating pain but we're treating opiate tolerance. From like a mental health standpoint, sometimes patients need their prescription because they've been on it for so long. (P09-S1)

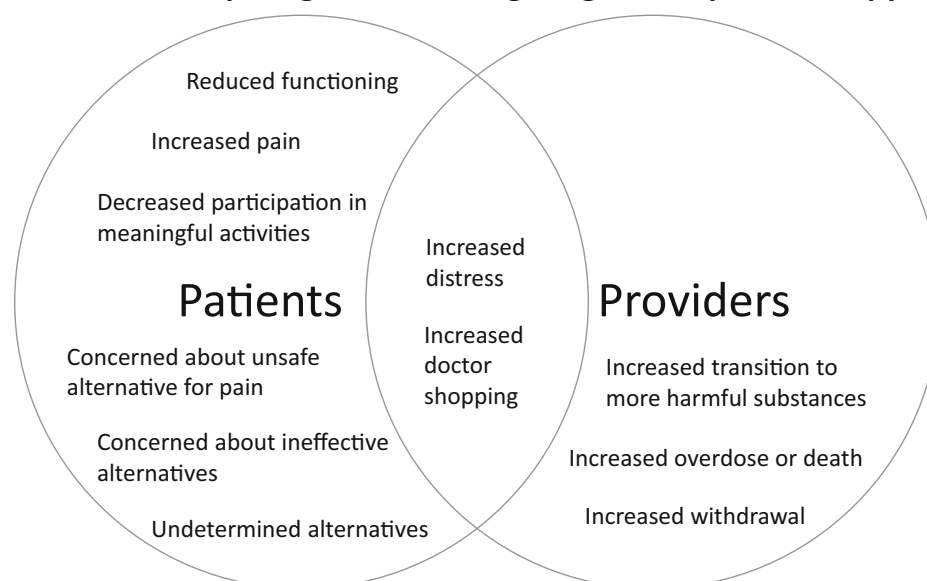
Providers were also worried about side effects (e.g., constipation, increased sensitivity to pain, and drug interactions). Overall,

a Benefits of Tapering/Discontinuing Long-Term Opioid Therapy



Summary: Providers emphasized how the benefits of discontinuing long-term opioid therapy outweighed the harms, which differed greatly from patients. *Illustrates more emphasis by patients than providers.

b Harms of Tapering/Discontinuing Long-Term Opioid Therapy



Summary: Patients emphasized that the harms of discontinuing long-term opioid therapy far outweighed the benefits and described a wider range of harms than providers.

Figure 2 Comparing Patient and Provider Perceptions of the Benefits of Discontinuing Long-term Opioid Therapy (a). Comparing Patient and Provider Perceptions of the Harms of Discontinuing Long-term Opioid Therapy (b).

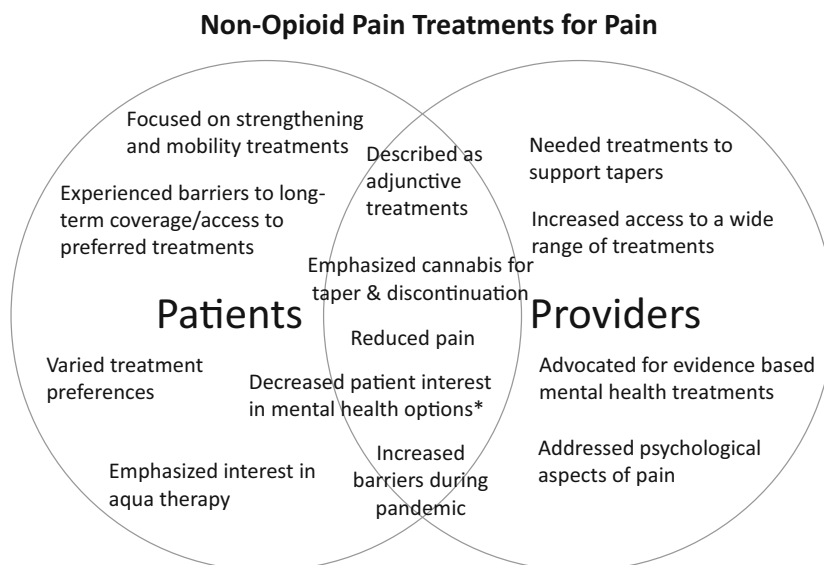
providers perceived LTOT as more problematic than did patients because of the risk of overdose or death and the literature recommending against opioids as first-line treatments for pain.

Tapering or Discontinuing LTOT

Benefits. The benefits of tapering or discontinuing LTOT were less salient among patients than providers. Patients were uncertain of these benefits (“He’d have to bring some hard evidence as to why [there are benefits]” (V04_S1)). Though less prominent, some patients expressed interest in stopping LTOT since they did not like taking pills or were impacted by

another’s opioid addiction (“They scare the daylights out of me. I have an ex-wife addicted to them. I take them only when I have to. I’ll be glad to be off them when I can” (V03_S1)). Some patients also thought it was beneficial to discontinue opioids to avoid the hassles of prescription drug monitoring:

He [provider] was more worried about the state because he kept saying that the state’s watching him. I get real pissed off and headstrong, so I said screw it. Don’t send me anymore. I’ll just quit. And that’s what we’ve done since then...It wasn’t bad. I felt like I had a mild hangover for a day. (V02-S2)



Summary: Participants perceived non-opioid pain treatments as adjunctive rather than replacements for long-term opioid therapy (except for cannabis). Providers advocated for mental health treatments, whereas patients preferred strengthening and mobility treatments. *Illustrates more emphasis by patients than providers.

Figure 3 Comparing Patient and Provider Perceptions of Non-Opioid Pain Treatments to Facilitate Long-term Opioid Therapy Tapering or Discontinuation.

In contrast, providers reported greater benefits than harms from tapering or discontinuing patients' opioids since long-term use was not aligned with clinical guidelines. Regarding tapering, providers described how reducing opioids (dose or number of pills) helped reset their patient's pain tolerance and often led to better pain management. Providers' additional advantages of discontinuing LTOT included reduced overdose risks, side effects, and opioids in the community:

Fewer side-effects is a benefit. A big benefit is having less opioid medication bottles in the community where they might get into the wrong hands. (P02_S2)

Harms. Patients stressed that the harms of discontinuing LTOT far outweighed the benefits, a less-common sentiment among providers. Patients' major concern about harms of tapering or discontinuing LTOT was not having safe and effective alternative treatments to manage pain. Thus, patients were worried that discontinuing LTOT would hinder overall functioning. Although often patients tried non-opioid treatments in the past, they emphasized that their current LTOT regimen was safely and adequately managing their pain. Therefore, patients were often reluctant to alter their LTOT regimen:

I do not want to be immobilized. I'm not interested in stopping and it would make me angry if they were trying to stop me. It's one thing for my body to feel old because of my problems. It's another thing to feel old because whatever doctor refused to give me anything to help me. (V15-S1)

Some patients reported that they would feel distressed if their provider were to reduce or discontinue LTOT without their input, which might prompt them to find a new provider who was more understanding of their preferences and pain concerns.

Patients who had tapered in the past reported varied experiences, ranging from improved well-being to worsened pain. Patients were reluctant about further tapering since their LTOT was reduced to a low dose and the regimen was working well:

I'd throw a fit. I have reduced it. What I'm taking now is very low on the totem pole, but it helps me the best. When they started talking about cutting things off, I'm about as cut off as you can get. If he was to come back to me again now, I wouldn't be very happy. V09-S1

Some providers also described the potential harms of discontinuing LTOT and discussed the important benefits of discontinuing LTOT for some patients. Providers explained how tapering or discontinuing opioids is often distressing and devastating for patients, especially those living with depression or posttraumatic stress disorder. Providers were concerned that patients would obtain opioids from other providers or transition to other harmful substances (heroin or alcohol) that could lead to overdose, death, or substance use disorder.

Sometimes patients will do other things when you taper their opioids, such as buy heroin or drink more alcohol, or do something that could pose more of an overdose or health risk than stable doses of chronic opioids. I don't think it's a reason not to taper, but it's a harm. (P02_S2)

Non-Opioid Pain Treatments

When discussing the role of non-opioid pain treatments in facilitating tapering or discontinuation, participants thought non-opioid treatments were adjunctive to opioid medications rather than replacements. Patients had diverse interests and individual needs that shaped their preferences, which were focused on non-opioid treatments that could build strength or lessen pain. The adjunctive treatments patients used depended on prior experience, injury, health status, physical functioning, cost, VA coverage, and access to their community.

I have my pool that I wade in. That helps me. If I could afford a massage a week, I would do it...When I'm aching and paining, I do everything I can because I don't want to be on more meds [or] be in pain to the point that it screws with my mental or emotional state. (V15-S1)

Patients expressed strong interest in and experienced benefits from heated therapy pools, massage, acupuncture, extended physical therapy, and yoga in helping to reduce pain.

The most beneficial thing for me that was offered through the VA was the therapy pool, 93-degree salt water where basically I'm weightless, which takes the strain off my injuries and allows me to exercise, build the muscle around the injured areas. If I keep that up, it lessens the possibility of further damage or more pain. (V01-S1)

Though there were benefits to adjunctive treatments, participants reported some service disruptions during the COVID-19 pandemic, and general access barriers involving insufficient coverage by VA, expensive out-of-pocket costs, or long travel times.

Some patients were not interested in non-opioid treatments, explaining that they were less effective (mental health treatment did not help pain), inappropriate (chiropractic care was unsuited for certain injuries), or increased side effects (scar tissue from injections).

I've tried a lot of things. They don't help or I got other problems that prevent me from doing it right now. They've offered a few things, but I can't get out. A lot of things require me to do more physical activity than I can do. (V09_S1)

Like patients, providers described non-opioid treatments as adjunctive pain management tools rather than LTOT replacements. However, providers also described a need for treatments that could support patients while tapering LTOT, even though they have access to different types of holistic pain treatments in VA, including chiropractic, cognitive behavioral therapy, therapy pools, pain clinics, acupuncture, physical therapy, Tai Chi, and healing touch.

I always consider complementary/alternative treatments and that's a privilege of being at VA because we have access to a lot. There's a lot of [non-opioid] resources, but I don't use it with respect to tapering. I think of [non-opioids] as adjunct. I haven't found many patients that used complementary/alternative sources to come off their opioids, more just like conjunctively benefit their pain. (P08-S2)

Unlike patients, providers were greater advocates of mental health treatment to improve pain management:

Cognitive behavioral therapy for chronic pain is empirically supported for management of chronic pain. We see some Veterans who are not willing to consider behavioral and specifically psychological interventions, don't like the implications that their pain is in their head, and they're focused on medication management of it. There's other therapies that can be useful, like ACT (Acceptance and Commitment Therapy) for chronic pain. (P14-S2)

Although cannabis was mentioned less often than other non-opioid pain treatments, participants emphasized its unique role in helping patients taper or discontinue LTOT. Some patients expressed interest in using cannabis as a pain management alternative to opioids since they perceived it to be safer and it was legal in their state. Patients appreciated providers who were willing to discuss cannabis as part of their pain management goals.

I like her because she supports what I want to do. She tries to work with me. In this state, marijuana is legal, so I would rather smoke that for pain than take the opioids. (C_V12_S1)

Similarly, providers described how some patients initiated using cannabis to taper off opioids:

I have had Vets who used CBD [cannabidiol] and cannabis-based products as a way of coming off opioids and that's usually self-initiated. They'll say, 'Since I've been using more cannabis I think I could use less opioid,' and they'll offer that up to me as information. I don't think the verdict is out about pros/cons, but I usually say, 'As long as you're getting your cannabis from a reputable source, you know exactly how much you're taking, and practice some harm-reduction to make sure that you're not getting tainted cannabis' and I leave it at that. (P08-S2)

Providers also reported some uncertainty about VA policy and whether it prohibited their involvement in prescribing cannabis ("I've had doctors asking, 'Can you give me the policy that we're not allowed to co-prescribe them?'" (P01_S1)).

DISCUSSION

To our knowledge, this is the first study to describe Veteran patient and provider perceptions of benefits and harms associated with continuing, tapering, or discontinuing LTOT. Results suggest that, although there were areas of overlap between patients and providers about the benefits and harms of LTOT, patients underscored those benefits far outweighed harms of continuing LTOT, whereas providers did not. Providers emphasized that the benefits of tapering or discontinuing LTOT often outweighed the harms. Patients and providers described non-opioid pain treatments as mainly adjunctive rather than LTOT replacements.

Patients were concerned about providers tapering or discontinuing LTOT against their will, which is important given the differences between participants' perceptions of benefits and harms. Prior studies report that even when providers want to incorporate shared decision-making, there are distinct caveats associated with opioids due to the opioid crisis, pressure to taper patients off opioids, and high potential for disagreement with patients.²⁵⁻²⁷ Our findings suggest a need for improved patient-centered care,^{28,29} especially regarding communication about LTOT treatment decisions so that patients and providers have better guidance on how to engage in shared decision-making when there may be disagreement about treatment goals or processes.^{30,31} Improving communication may help patients feel more empowered and in control of their care¹¹ and may require organizational change so providers have time to establish rapport with patients and discuss opioid use in a more nuanced way.³² Tools for communication and shared decision-making around LTOT should assess whether patients and providers are aligned regarding LTOT treatment goals and perceived risks and benefits, assess whether de-prescribing LTOT is appropriate, identify strategies for eliciting patient feedback and input on decisions, develop scripts for patients to convey LTOT benefits and pain management concerns to providers, and support best practices on how to resolve disagreements between patients and providers.

Improving communication efforts around LTOT might benefit from understanding patient perceptions of phrases providers use when de-prescribing LTOT since communication may impact satisfaction with care and decision-making.^{26,27,33-38} A study on general de-prescribing found that older patients preferred language about adverse effects of medications.³⁷ However, patients in the present study were concerned that providers focused too much on patient harms or how discontinuing LTOT benefited medical systems or monitoring requirements. Perhaps providers should focus on language that explains individual patient benefits from LTOT discontinuation, including improved pain management and functioning and what will replace opioids.

Participants generally thought of non-opioid treatments as adjunctive pain therapy, except for cannabis-related products, which were discussed as LTOT replacements. Some patients described prior helpful conversations with providers about

cannabis, whereas others wanted to discuss cannabis with their providers but had not yet done so. Though VA has enhanced policy supporting "the Veteran-provider relationship when discussing the use of marijuana and its impact on health," providers thought these conversations had to be patient-initiated and were unsure whether they should advocate for or against cannabis products.³⁹ These results point to ongoing ambiguity in VA guidelines because providers are encouraged to discuss cannabis with patients, yet cannot prescribe or recommend cannabis because it is classified as a Schedule I substance.^{39,40} Given growing patient interest in cannabis products, there is a need for improved guidance about how providers abiding by federal law may engage in beneficial conversations with patients about cannabis-related safety, pain management, and LTOT tapering or discontinuation.⁴⁰⁻⁴³ The Systematically Testing the Evidence of Marijuana online resource may help providers during conversations with patients since it offers up-to-date literature reviews and evidence on the effectiveness of cannabis for common indications (e.g., pain) and other topics (e.g., opioid replacements).⁴⁴

Patients reported barriers (long travel times, out-of-pocket costs, and insufficient coverage) to non-opioid treatments (e.g., physical therapy, acupuncture), which were covered only in the short-term (few sessions or months), leaving patients wondering how chronic pain would be managed if opioids were discontinued. These findings extend other research about access barriers to non-pharmacologic pain treatments and suggest an additional barrier related to limitations in the number of appointments or length of coverage for non-opioid-related therapies.^{45,46} To enhance uptake of non-opioid treatments, health care systems should consider improving patients' access to longer-term coverage for treatments (e.g., physical therapy, aqua therapy, massage), making the case for alternative treatments may require cost-effectiveness comparisons with current LTOT care that account for costs related to potential adverse consequences of LTOT.

Providers described maintaining the status quo for patients prescribed LTOT if they had improved functioning, reduced pain, and no serious side effects or aberrant behaviors. These results suggest that providers also saw benefits to continuing LTOT for some patients. However, given existing literature on provider bias and structural racism in prescribing opioids, an important area for future research is to understand if patients from under-represented racial/ethnic groups are given similar opportunities to continue opioids or if they are tapered or discontinued more often than white patients.⁴⁷⁻⁴⁹ Understanding bias and structural racism in how providers perceive benefits and harms associated with continuing, tapering, or discontinuing LTOT is critical for providing equitable pain management for diverse patients.

LIMITATIONS

This study focuses on the perspectives of VA patients and providers in two geographic regions. However, additional

research including non-VA participants or other key constituents would expand knowledge of the benefits and harms associated with continuing and discontinuing LTOT. Participants were not selected because patients were being treated by the providers interviewed. Investigations using patient-provider dyads could enhance the results from this study.

CONCLUSIONS

The study offers a nuanced understanding about perceptions of benefits and harms associated with LTOT and how perceptions align or diverge between patients and providers. Patients saw the benefits of continued LTOT while being cautious about it, and wanted more involvement in decision-making with their providers. Providers saw some of the same benefits of continued LTOT as patients but were more inclined to see the benefits of tapering or discontinuing opioids. As part of “learning health system” goals, this study’s results provide insight into future research and intervention opportunities to strengthen communication and the provision of LTOT continuation and discontinuation, which may empower patients and providers when navigating pain management.¹³

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Declarations:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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