

OPIOIDS & SUBSTANCE USE DISORDERS SECTION

Clinical Strategies for the Treatment and Management of Patients Prescribed Long-term Opioid Therapy

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Abstract

Objectives. Across diverse health care systems, growing recognition of the harms associated with long-term opioid therapy (LTOT) for chronic pain has catalyzed substantial changes to policy and practice designed to promote safer prescribing and patient care. Although clear goals have been defined, how clinics and providers should most effectively implement these changes has been less well defined, and facilities and providers have had substantial flexibility to innovate. **Methods.** Qualitative interviews were conducted with 24 Department of Veterans Affairs (VA) clinicians across the United States who prescribe LTOT for chronic pain. Interviews probed the practices and initiatives providers utilized to meet opioid safety requirements and address common challenges in caring for patients prescribed LTOT. **Results.** Innovative strategies in the design and organization of clinical practice (urine drug testing, informed consent, limiting transfer requests, specialty patient panel) and resources utilized (engaged pharmacists, non-opioid pain treatments, intra-organizational collaborations) are described. **Conclusions.** We conclude with recommendations designed to improve opioid prescribing practices, both within the VA and in other settings.

Key Words: Long-term Opioid Therapy; Veterans; Chronic Pain; Innovations; Qualitative Research

Introduction

Chronic pain is prevalent among US adults [1–3], and long-term opioid therapy (LTOT) remains a common treatment for this condition [1,4,5]. Yet growing evidence suggests that LTOT for the treatment of chronic pain comes with substantial risks, whereas limited evidence supports its long-term effectiveness [6]. Indeed, as the rate of opioid prescribing has increased markedly across US health care systems, there has been an accompanying sharp and persistent rise in opioid-related adverse events, most notably overdose and death [7].

Recognition of the harms associated with LTOT has catalyzed substantial changes to policy and practice designed to minimize the risks of opioid prescribing and patient care. Beginning in 2009, Clinical Practice Guidelines (CPGs) encouraged the use of opioid pain care agreements and informed consent procedures, urine drug testing (UDT), and regular queries of state prescription drug monitoring programs (PDMPs) for patients receiving LTOT [8–10]. Health care systems have also rolled out new tools, educational initiatives, and policies regarding the treatment and management of patients prescribed LTOT. Examples include screening tools to

identify patients with opioid use disorder, educational materials for providers, and data reporting tools that track patient, provider, and facility-level information regarding recommended opioid prescribing practices (e.g., the number of patients on high-dose opioids and receiving urine drug tests) [11–16].

Although clinical practice guidelines have defined recommended practices, it is less clear how providers should most effectively implement these goals and requirements within their clinics and with patients. In response, facilities and providers have developed their own strategies, processes, and approaches. We conducted qualitative interviews with 24 Department of Veterans Affairs (VA) providers across the United States who prescribe LTOT for chronic pain to learn about the methods they use to reduce aberrant opioid behaviors and misuse among their patients. This paper describes strategies providers have developed to meet new guidelines regarding opioid management and address common challenges they face in caring for patients prescribed LTOT. Findings may usefully inform others seeking to implement new guidelines around opioid management and minimize the potential for patients to experience opioid-related harms.

Methods

This study is part of a larger, mixed-methods project that aimed to investigate the use of, and response to, urine drug testing (UDT) among providers caring for patients prescribed LTOT for the treatment of chronic pain. Individual interviews were conducted with 24 primary care providers in VA medical centers across the United States. The Institutional Review Board at the VA Portland Health Care System approved all study materials and procedures, and all participants provided informed consent to participate.

Participant Recruitment

Eligible participants were VA providers who had one or more patients in their clinical panels prescribed LTOT for the treatment of chronic noncancer pain. We queried a national administrative database to identify eligible providers, who were then recruited via e-mail. A standard recruitment letter summarizing the purpose of the study, including details regarding participation, was e-mailed to potentially eligible providers; because of the qualitative design of the study, the exact number of providers e-mailed was not recorded. After agreeing to participate, a subset of the providers e-mailed returned the informed consent document and were scheduled for telephone interviews. We enrolled a total of 24 VA providers representing 22 VA Medical Centers from March 2015 through May 2016.

Data Collection

The primary goal of the interviews was to learn about the methods primary care providers used to address

prescription opioid misuse and aberrant opioid-related behaviors among their patients. All interviews were conducted by one of two project investigators, lasted 30–40 minutes, and were digitally recorded. Interviews were guided by a semistructured interview protocol, which probed the tools and strategies providers utilized to respond to new practice guidelines and address opioid misuse and aberrant behaviors, and the resources and constraints they faced in these processes. Participants were offered a \$50 store gift card for their time if the interview was completed outside their regular work hours. All qualitative data were transcribed verbatim by the project team.

Data Analysis

We employed qualitative content analysis to analyze the data [17]. As we began to analyze the data, we noted a pattern emerging—providers frequently described new clinical approaches, often developed locally and in response to clinical guidelines, intended to reduce the potential for patients to experience opioid-related harms. For analytic purposes, we characterized these locally developed responses as “innovative clinical strategies.” To verify the centrality of this key theme, each transcript was carefully read by three reviewers and independently confirmed. Six interviews were coded jointly to establish mutually agreed-upon codes and code definitions, which were then used to build a codebook. Following this group coding process, the remaining interviews were divided and first coded independently and then exchanged for secondary coding. Coders met to discuss areas of divergent coding and come to agreement. AtlasTI, version 7, a qualitative data management program, was used to organize and code the data. One coder has extensive qualitative methodological experience and training, including in graduate-level courses. The second coder, who is a doctorally trained, mixed-methods researcher, was supervised closely by the first. In analysis, quotes pertaining to the overarching theme of innovative clinical strategies were retrieved and, following careful review, subsequently sorted into categories, which were then categorized into subthemes. Finally, quotes that exemplified key strategies were selected for inclusion in the paper and summarized in the table. Interview participants are identified by a letter of the alphabet, which corresponds to interview numbers, not participants’ names. As the research aims to identify the diversity of strategies occurring across VA clinics, specific strategies described in the text may be present in a single clinic, a few, or many. In other words, this research aims to describe emergent clinical practices, rather than identify the frequency with which these practices are occurring.

Results

Participants

All of the 24 interview respondents were either physicians (75%), nurse practitioners (17%), or physician

assistants (4%), with most specializing in either internal medicine (46%) or family medicine (12.5%). Other clinicians represented included specialists in geriatrics, psychiatry, addiction medicine, and physical medicine/rehabilitation. The average number of years since completion of training (SD) was 17 (10), with a range of 2–37. On average, interview participants were age (SD) 49.5 (10) years, and 63% were female. Most participants identified as white (67%), with the next most common identification being Asian (21%). Eight percent of participants identified as biracial. Interviews were conducted with clinicians across the United States: two in the Northeast, four in the South/Mid-Atlantic, six in the Northwest, eight in the Southwest, and four in the Midwest.

Barriers to Minimizing the Risks of Opioid Prescribing

Clinicians identified numerous barriers to achieving compliance with the new policies and with minimizing the potential for opioid-related harm, which fell into the following broad categories: interpersonal constraints (patient complaint/aggression, fear of upsetting patient-provider relationship, lack of support from colleagues), resource constraints (lack of time/capacity, short-staffed, lack of pain alternatives, lack of buprenorphine/naloxone prescribing capacity), geographic constraints (patient travel time [for UDT or access to medical center pain clinics]), cultural constraints (“quick fix” mentality, lack of patient interest in addiction treatment and/or alternatives to opioids), and logistical constraints (UDT unreliable/not monitored, UDT results not timely, access to prescription state drug monitoring program is unwieldy/time-intensive).

Emerging Clinical Strategies

Interviews uncovered emerging strategies clinicians had developed to address these barriers, implement opioid safety requirements (e.g., informed consents and UDTs), and respond to pressing clinical problems (e.g., limiting patient transfer requests and the use of a buprenorphine/naloxone patient panel). Strategies are summarized in Table 1.

Strategies in the Use of Urine Drug Testing

All providers interviewed reported that they utilized UDT with their patients who were prescribed opioid therapy, and many described the substantial time investments UDT required. Nurse time was extensively utilized—tracking the dates UDT was required, monitoring patient behavior and clinical history to determine whether a test was needed, scheduling and administering the test, and, in some cases, calling patients to discuss aberrant results. Some clinics simplified the work processes surrounding UDT by routinizing it—by conducting UDT at specified time intervals or linking a template with date

Table 1. Clinical strategies utilized by providers to address common problems in caring for patients on LTOT

Problem	Solution
UDT results come back after prescription has been reissued	• Order UDT before appointment • Point-of-care lab located in the clinic • Refer UDT to patients' closest VA or non-VA facility
Difficult, conflictual, and emotional conversations with patients	• Redirect attention to expectations included in the signed informed consent • Refer to recommendations provided by Opioid Review Committee
Patients request a new doctor following disagreements over opioid prescribing	• Clinic does not allow patient transfer • Clinical warning or “flag” is placed in chart to signal concern to other providers and/or departments
Providers have limited knowledge of pain treatment, tapering schedules, UDT	• Pharmacists help staff patient visits, provide education as needed • Pain clinics “take over” complicated patients to taper or stabilize them • Facilities offer pain classes
Providers have limited capacity to monitor UDT results and prescription fill dates	• Pharmacists monitor fill dates, include prescription “last until” dates on the bottle, monitor UDT results, and alert providers to aberrant results
Gap between the treatments available within the VA to address aberrant behaviors and possible substance use disorder and patients' perceptions of their treatment needs	• Suboxone patient panel managed within the context of primary care • Short- or long-term referral to an integrated pain clinic

LTOT = long-term opioid therapy; UDT = urine drug testing; VA = Department of Veterans Affairs.

of last UDT in the medical record with prescription renewal. One provider described the process in her clinic: “Yeah, my nursing staff are really good. . . . Whenever it's time for every third refill, we do a PDMP report and have them come in for urine automatically” (V). Providers also developed methods for easily finding information about patients' past aberrant UDTs by keeping the information organized in a predetermined section of the electronic health record.

A frequently expressed concern regarding the UDT process was the timing of tests. Patients generally completed a UDT on the same day they came in for their prescription renewal appointment, and, as such, providers renewed the opioid prescription without knowing the UDT result. This meant that not only did the patient

already have a new monthly prescription at the time aberrant results were discovered, but providers might also need to schedule another patient visit or contact the patient by phone to discuss results in person and/or administer a confirmatory UDT. Scheduling a second visit was particularly burdensome if patients had traveled a significant distance to receive care; for instance, some prescribers whose catchment included rural areas described patients who lived five to six hours away by car. Providers described circumventing this issue by scheduling the patient UDT's several days before their scheduled prescription renewal visits, ensuring that laboratory results would be available by the time the provider saw the patient. Although this innovation solved the problem of not having results at the time of the visit, it remained potentially onerous for patients who needed to schedule and attend two clinic visits within just a few days.

Other providers described changes to their practice that resolved both the issue of multiple visits and burdensome travel. One clinic had created a point-of-care laboratory housed within the clinic itself, which allowed UDT results to be obtained immediately at the time of the patient visit. Another provider described a system wherein clinic staff could request a UDT at a smaller VA clinic that was closer to the patient, or even outside of the VA at a private testing center that the VA would pay for. This meant that UDT could be completed locally (for patients residing far from their prescriber's office) and results would be available before a scheduled visit. For this provider, such flexibility was important for meeting the needs of her geographically dispersed patients:

I think having patients do...urine drug testing at the closest VA to where...they're located is helpful. So...for these folks who are out in the...rural areas, having them do a urine at their local VA or even being able to...do it outside the VA, although then you run into issues of payment and...access to the results. And whether you trust that particular lab...is a whole other issue, but certainly...for folks who live...far away from our VA, going to their closest clinic and doing it...I'll often...encourage them to do that. (K)

Despite the potential challenges involved, this provider found this strategy to be an effective solution that was both straightforward and beneficial to patients. Indeed, she had even referred a "snow bird," a patient residing in a southern locale for the winter, for UDT in a VA facility located in a different state.

Informed Consent Procedures

Opioid agreements and informed consents for LTOT are intended to educate patients about opioid safety, familiarize them with standard monitoring practices, and communicate behavioral expectations for continued prescribing. Some providers described time constraints

and technological impediments to smoothly incorporating the consent process into their care practices. Time constraints were faced both because the consent procedure could be lengthy and because the consent was embedded within the electronic medical record, making it difficult to access. One clinic minimized the time required to obtain consent by initiating a group consent process, in which nurses and providers organized a patient group visit to review the risks of opioids and the consent requirements "so that it isn't a process we have to go through person by person, which is very time-consuming, and it eats up our access" (M). Another clinical group eased the somewhat clumsy process of retrieving consents and tracking the time to re-consent by developing an "Almanac" that reminded each provider before the patient's appointment that the new consent was required (the Almanac also included reminders about the UDT and PMDP). "We can actually pull the patients who are on the chronic opiates, and it will show us who has had their IMED consent done [standardized informed consent embedded in the EHR] and who's due for their urine drug screen. ... So I'm looking at my lists right now, and right now I have three people who haven't done their IMED consents, but the other 27 have" (L). Divisional chiefs had access to the Almanac and would contact providers who had missed the annual mark.

Strategies to Limit Patient Transfer Following Disagreements over Opioid Prescribing

Providers also faced challenges in attempting to limit patient transfer to another provider when the patient disagreed about the role of prescription opioids in their care. Providers frequently described this as a hazard of managing patients receiving LTOT and a significant drain on staff time. Providers explained that patients sought transfers in the hopes that the new provider would concur with the patient's wishes around opioid prescription. Providers described several strategies they had imposed to curb this practice. In the first, some clinics explicitly disallowed transfer to a new doctor if the motivation was an opioid prescription. In others, clinics instituted a system of including a "flag" or clinical warning in the medical record that, following a transfer, would alert the new prescriber to the patient's aberrant opioid behaviors and thus increase the likelihood that the new provider would maintain the past provider's prescribing course. As one provider described, "It's to prevent them from getting medications from our facility, whether it's the emergency room or urgent care.... I guess they could go outside and get medicines, but it prevents [the patient from procuring medicine] as far as getting it in our facility" (W). Other participants had attempted to institute similar strategies but were thwarted by centrally located schedulers who disregarded the policy or patients who, aware of the policy, would create alternative rationales for requesting a transfer.

Specialty Addictions

Across interviews, a recurrent theme mentioned was the mismatch between the needs of LTOT patients evidencing aberrant behaviors or symptoms of opioid use disorder and the substance use disorder treatment offerings that were available. Providers noted that patients—who often did not believe they suffered from an addiction—generally would not engage in substance use disorder treatment. In response to a question about how helpful substance use treatment had been for his patients, one provider responded, “I’m trying to think if I’ve had any patients recently, and, um, no. The only patients I’ve had recently that have gone for it are people who are abusing alcohol, but nobody that I know of who at least in the past three years that I personally referred for opioid abuse” (P). Another provider described how her own clinic addressed this treatment gap:

I do actually also have a panel of Suboxone patients who come to me addicted to opiates, and we offer them Suboxone. . . . It’s a touchy thing, where the substance use clinic can’t handle them because their pain is so awful and they don’t want to deal with the pain overlap with their addiction, and so I have about—I’m at my limit. I have about a hundred patients always pushing the limit who are on suboxone who we’re managing both their opiate addiction and their pain. . . . They’re getting their primary care elsewhere, but they see me regularly for their pain and their opiate addiction. (X)

This provider carved out a niche wherein she could simultaneously treat patients’ pain and addiction in a setting that patients would accept, that is, primary care. The fact that another provider was responsible for patients’ primary care made this solution less resource-intensive and potentially more sustainable. The patient demand that the provider describes also suggests that this specialty panel was filling an important gap, at least in this clinical setting.

Emerging Strategies: Resources

Providers described key resources—in the form of engaged pharmacists, pain clinics, alternative treatments for pain, and intra-organizational collaborations—that enhanced their ability to provide safe and effective care for patients prescribed LTOT.

Engaged Pharmacists

Pharmacists played multiple roles within clinics that strengthened the opioid-related care provided and helped providers overcome key barriers—in terms of time constraints and their own knowledge gaps. Clinical pharmacists helped organize classes that taught patients about the risks of opioid medications. Study participants described turning to the local pharmacist to help design an opioid taper, another received message alerts from a pharmacy highlighting aberrant UDT results, and others physically hosted a pharmacist within their clinic one or

more days per week who might co-staff patient visits or provide an educational or consulting role. Pharmacists would review primary care providers’ (PCPs’) panels for patients co-prescribed benzodiazepines, often prescribed by mental health, and opioids. In states that allowed this, pharmacists would run a PDMP inquiry “in bulk” daily for primary care clinics to save the prescribing clinician time in logging onto the PDMP to check each patient individually. Pharmacists also assisted with accessing the PDMP if the clinic was located near another state that had a separate PDMP. One participant described a very engaged pharmacist who served numerous roles within the clinic:

He’s actually very interested in chronic pain management, and he’s working with our opioid substance abuse team. . . . And so he’ll come in and we’ll do the whole visit. And part of that is making sure we address the chronic pain, what their current regimen is, what alternative modalities they’re using. And he’s been a really phenomenal resource. He actually sends me quite a few articles and things about making better use of the urine drug screen results. (C)

Bringing deep knowledge of chronic pain management, this pharmacist expanded upon and greatly enhanced the care this clinic could provide, from increasing knowledge of alternative pain treatment modalities to helping enhance the utility of the UDT. Another provider highlighted the role of the pharmacist in both improving care and efficiency “that gives [patients] a chance to be followed closely. And it takes a lot of work off of my [plate]. (B)”

Pharmacists were also active innovators. Providers described a pharmacy-initiated practice of including a prescription “end date” on every opioid bottle, and making a practice of not filling a prescription earlier than the date listed:

Our pharmacy is good at. . . track[ing] the dates and the pill counts and things like that. So they will have on the prescription, this bottle is to last until such and such date. So at the time that I’m renewing the prescription, I actually see those dates and make sure that it’s not out of line and. . . it’s self-reinforcing because it’s implicit in our system that they don’t release the next bottle until it is due. (Q)

Printing the date on the bottle clearly alerted all members of the care team, as well as the patient, not just of the earliest date that the prescription could be refilled, but also the clinic’s expectation regarding taking no more medication than prescribed. Further, this practice emphasized the standardization of the approach at the institutional level. Another provider commented on the importance of this pharmacy practice, calling it one of the core “checks and balances” that was contributing to a safer culture of opioid prescribing within the VA (N). Clinical pharmacists are often embedded within primary care in the VA, which may have facilitated these innovations.

Alternative Pain Treatments and Pain Clinics

The availability of additional nonopioid resources to treat pain helped lessen both providers' and patients' reliance on prescription opioids and address key barriers, particularly patient resistance. As one provider described, nonpharmacological treatments could be used not just to treat pain, as with opioids, but to actually improve patients' functional status:

I try and get them whatever I can, come to help them cope with the pain so they can move on with their lives, help them become more functional, and that might involve physical therapy, chiropractic care, acupuncture care, so I've pulled from all of them. (N)

The wide availability of resources available to this clinician allowed her to pursue not just pain management, but improved quality of life for her patients. Another clinician described the comprehensive range of pain treatment services she drew upon in her practice:

I offer education on the importance of regular exercise for well-being, endurance, improving flexibility...the importance of balance, diet, sleep, hygiene measures to help relax when they go to sleep. I offer to them heating pads. I offer to them TENS (transcutaneous electrical nerve stimulation) unit. I offer them biofeedback. I offer them acupuncture, yoga. I even offer physical therapy within the VA...tai chi, visualization of a calm scene, listening to soft music of their preference. (E)

This provider took a holistic approach to pain treatment, leveraging all resources available to help address patients' pain. There was great variety across interviews in the extent to which providers were either aware of, or had access to, nonopioid pain treatments, with some describing only a few resources and others describing multiple resources available.

Opioid Review Committees and Groups

An essential resource discussed in many of the interviews was reliance on within-facility collaboration to guide and support safe prescribing practices. A formal mechanism was that of an opioid review board/opioid safety committee, wherein providers drawn from diverse medical fields across a hospital would convene to perform tasks such as auditing charts, initiating specialized review of patients on high doses of opioids, reviewing patients at the behest of providers to "flag charts" (i.e., mark patients as not able to receive opioids), review flags already issued, and provide recommendations about opioid taper or discontinuation. Rather than relying on committees to guide their clinical decision-making, providers often turned to the committee to support their own decisions:

I think one of the nicest things that [the] committee provides is a way for the primary care physician who's prescribing to say to their patient, 'You know, this is a

committee of specialists. They've reviewed your case, and this is what they're telling me is recommended and I really need to follow these recommendations.' So I think it provides some sort of safety back-up for the primary care doctors to say, 'You know, these are the expert recommendations, and this is what we really need to do.' (X)

Citing the recommendation of the committee reinforced the provider's own clinical decision, while redirecting the patient's potential ire from the provider to the larger group. As another provider described:

Well, some of these patients are really aggressive in their behavior, and I think it kind of prevents maybe some—sometimes they can be threatening, so it can help smooth off some of that, so they know it's not just this clinic or it's not this provider that's giving you the flag. (V)

A flag in the medical record also was intended to discourage patients from seeking out a new provider or attempting to access opioids through other departments, such as the emergency department.

Informal collaborations also occurred, wherein a small group of providers and allied health staff would meet at regular intervals to discuss difficult patients and share advice and recommendations. One provider, whose facility hosted a multidisciplinary review board for the clinic, noted, "They've been a wonderful resource" (M). The provider had presented difficult cases to the group and come up with new ideas for working with these patients through group discussion.

Discussion

Growing recognition of the potential harms associated with opioid prescribing has led health systems to institute new policies and practices around LTOT prescribing and patient care. Providers are tasked with integrating these new goals and requirements into their clinical practice, yet often have little explicit guidance as to how to do so most effectively. Interviews with providers uncovered new and innovative approaches to clinical practices (processes for UDT and informed consents, specialty panel) and resources (engaged pharmacists, nonopioid pain treatments, collaborations) that bolstered their efforts to more effectively manage patients receiving LTOT for chronic pain. Although efforts were guided by VA directives and practice guidelines, practitioners described grassroots solutions to clinical problems they employed to implement these guidelines and policies. Some of the innovative strategies required individual changes, others required additional resources, and many required collaborative efforts—from clinic staff and beyond—to help address the complex care that patients often required.

Yet clear gaps also remain. Although providers described substantial system-level efforts to improve and diversify the treatment of pain, resources were not uniformly available across clinics, and this had important

implications for patients' treatment. Access to a pain clinic and a pain psychologist was particularly desired and was unavailable or inaccessible to many. This likely reflects geographic differences and differences in population size served by facilities (with small, rural clinics offering fewer resources than large urban hospital settings), at least in part. Increasing the use of tele-medicine is one strategy that may help improve access to pain treatment services offered in remote areas. Within the VA, passage of the Comprehensive Addiction and Recovery Act of 2016 [18], mandating that pain management teams be available at all medical facilities, is likely to increase the availability of pain services offered over time [5].

There also seems to be a clear gap between the treatment needs of patients evidencing aberrant behaviors and existing substance abuse and mental health treatment offerings. As multiple interview participants have described, patients prescribed LTOT evidencing aberrant behaviors often do not perceive themselves as having a substance use disorder (SUD) and are unwilling to engage in SUD specialty treatment. Treatment within mental health was often not an option either, from the perspective of our interview participants, as providers voiced the belief that patients' chronic pain and possible SUD required expertise that they simply did not have. A clinical innovation that could help to address this gap would be the inclusion of integrated treatment for pain and addiction housed within primary care. Such an intervention could help engage patients who require treatment for both pain and addiction in a setting in which they feel comfortable. Some research supports the potential benefits of such an integrated approach [19]. Ultimately, ensuring access to treatments that can meet the complex needs of patients prescribed LTOT who evidence aberrant behaviors and possible SUD remains an important area for future research and innovation.

A stubborn challenge voiced by providers was the view that some patients with chronic pain were simply uninterested in any pain treatment aside from opioid therapy. Yet, to increase functional status and safety, pain treatment guidelines recommend that patients explore nonpharmacologic pain treatments [20], and some complementary and integrated treatments are now recommended as a firstline intervention for chronic low back pain [21]. Exploring how to overcome patient reluctance and design interventions that are both accessible and acceptable to patients is crucial and may yield important benefits in reducing reliance on opioid prescribing and potentially increasing patients' quality of life and functional status.

Clinicians seeking to overcome patient reluctance may look to the growing literature addressing patient preference for communication regarding opioid prescribing, tapering, and discontinuation. For instance, in a study addressing communication processes related to opioid tapering, patients expressed a preference for communication that is personalized to the patient's unique

circumstances, collaborative, and based on shared understanding [22]. Clinician focus on patient safety, rather than rule-following, has also been identified as preferable by patients prescribed long-term opioid therapy for chronic pain [23]. Applied to the current study, these findings suggest that patients may be more receptive to communication regarding nonopioid pain treatment that is personalized (e.g., suggesting concrete ways in which the nonopioid pain treatment may help the patient achieve desired functional goals), collaborative (e.g., engaging with patients to set functional goals), and framed around safety concerns rather than rule-following messages.

Finally, the variation in clinical practice uncovered through this research points to a tension: the trade-off between flexibility and guidance provided to clinics regarding how to best implement new practices. Although the innovations described may not have developed without the flexibility facilities experienced in implementing new requirements, it is likely that many providers and facilities would benefit from additional guidance. Acknowledging that barriers encountered may be unique across settings and shift over time, future research might usefully evaluate the promising strategies described. Practices found to be beneficial could then be used more broadly by providers seeking to alter their care practices in ways that minimize the risks of opioid-related harms.

Limitations

This research was based on a small qualitative sample obtained through convenience sampling methods and is not intended to speak to either the frequency with which these innovations occur or how representative they are of the treatment of patients who are prescribed LTOT. Sampling utilizing an alternative methodology may have yielded a different set of results. Second, policy regarding the treatment of patients prescribed LTOT is rapidly evolving, and not all policies or approaches described here may be those currently in place. Third, policy regarding opioid prescriptions may differ in important ways at the state level, which would require specific innovative responses that may not be addressed here. Finally, all providers who participated in the study were currently employed within VA hospitals and clinics, and as such the findings may not inform the practices of clinics serving different populations within different systems of care.

Conclusions

Health systems have undertaken important initiatives to strengthen providers' ability to effectively manage patients receiving LTOT for chronic pain. This paper described innovations in clinical practices and resources utilized in response to opioid prescribing guidelines and initiatives. Although some of the challenges detailed may uniquely characterize the VA system and VA patients, given that providers across the United States are

struggling to find new, safer approaches to the treatment of chronic pain, the innovative strategies described are likely applicable to other systems of care and patient populations as well. Moving forward, providers should consider cultivating alternative resources for pain treatment, engaging in collaborative, interdisciplinary efforts, and, more broadly, seeking creative solutions to the difficult clinical challenges posed by patients with chronic pain.

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