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Treating Chronic Pain-Where We Have Been and Where We Are Going

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In the 1990s and early 2000s, there was an unprecedented increase in opioid prescribing for chronic non-cancer pain in the United States. Chronic pain management became [illegible]. The United States currently accounts for 70% of the world's opioid use but less than 5% of the world's population, suggesting that this is primarily an American issue (1). At the same time, overdose and opioid adverse events rose dramatically, nearly quadrupling from 1999 to 2011 (2). Every year since 2002, deaths attributable to controlled prescription medications outpaced those for people using cocaine and heroin combined. In addition, the number of people reporting the current use of controlled prescription drugs was higher than for those reporting the combined use of these illicit drugs (cocaine, heroin, methamphetamine, MDMA, and PCP) (3).

The potential genesis of this epidemic occurred with noble intentions, to improve patient care and decrease the burden of chronic pain. The phrase "pain as the 5th vital sign" was coined during the American Pain Society's 1995 Presidential Address (4). By 1999, large care organizations like the Department of Veterans' Affairs (VA) formally adopted pain as the "5th vital sign," requiring providers to enter a patient reported numerical value on a scale of 0 to 10, with a pain score of 4 or more requiring "comprehensive pain assessment and prompt intervention" (5). Shortly thereafter, the Joint Commission released new standards for the assessment and management of pain (6), with Congress declaring 2001 to 2010 the "decade of pain control and research." A number of societies, including those focusing on better pain management, end-of-life care, and cancer, sought to destigmatize the use of prescription opioids for use in patients with terminal illness.

Coincident with these education efforts, the U.S. Food and Drug Administration issued guidelines relaxing the restrictions on broadcast advertising of prescription drugs directly to consumers (7). Pharmaceutical companies started to aggressively market opioids (and other

interdisciplinary pain treatment programs. Schatman and Webster suggest that insurance companies declined to cover these programs in favor of opioids as first line treatment and "it may not be a coincidence that the opioid crisis in the USA began at about the same time that the number of interdisciplinary programs began to precipitously decrease" (9).

Despite the trend of prescribing opioids to treat chronic pain, there is little evidence in the literature to support that it is beneficial in the long term. In a comprehensive review, Chou and colleagues evaluated evidence on the effectiveness of long-term (greater than 3 months) opioid therapy for chronic non-cancer pain in adults. They found no studies of opioid therapy versus placebo or opioid therapy versus nonopioid therapy which evaluated long-term (greater than 1 year) outcomes related to pain, function, or quality of life (10). Indeed, in a small study of VA patients who underwent dose reduction of their chronic opioids, 44% of patients reported a decrease in their subjective pain score, with an additional 28% reporting no change in their pain, further calling into question the efficacy of LOT (11). Moreover, Chou found that opioid therapy for chronic pain was associated with increased risk of overdose, opioid abuse, and in one study, risk of myocardial infarction (10).

Several factors contribute to the potential harms of LOT. Substance use disorders (SUD) were four times higher in patients prescribed opioids than in the general population (12). Clinicians may also not be able to predict which patients on LOT are abusing, misusing, or diverting their medication (13). Further, while there is no "safe" level of opioid prescribing, the hazard ratio of overdose dramatically increases at 50 morphine equivalents (ME) (14).

In August 2012, due to growing concern over the safety of the nation's Veterans and the public, the former Undersecretary of Health for the VA chartered the Opioid Safety Initiative (OSI) Task Force. The VA embarked on a coordinated effort to decrease risk, improve safety, and treat SUDs as mandated by the VA's Initiative, which was released in August 2013. The OSI recommended utilization of opioid risk assessment tools, informed consent for opioid prescribing, toxicology screening, and periodic review of prescription drug monitoring program (PDMP) databases. The OSI further recommended distribution of naloxone rescue kits for patients on high dose or high risk LOT; decreasing maximal morphine equivalents (ME); and avoiding the combination of opioids and benzodiazepines. The VA also established use of electronic "clinical reminders" to assist providers with compliance with these requirements. Some sites implemented mandatory case reviews for patients above a set ME threshold (e.g., greater than 100 milligrams ME). From 2013 to 2016, the OSI demonstrated marked improvement in key clinical metrics, with a 25% reduction in patients receiving opioids overall; a 47% reduction in patients receiving a combination of opioid and benzodiazepines; and a 36% reduction in patients receiving high dose opioids (greater than 100 mg ME) (15).

of their pain and options for treatment, including potential risks and benefits. It includes "questions to ask your provider" which can provide a framework for developing non-opioid strategies for the treatment of chronic pain. The guideline will additionally assist providers in choosing the best approach for his or her particular patient. In an editorial, Alford commented, "…education can empower clinicians to make appropriate, well-informed decisions about whether to initiate, continue, modify, or discontinue opioid treatment for each individual patient at each clinical encounter" (17).

The goal to reduce LOT has been an impetus for VA to diversify treatment options for the management of chronic pain. The VA has expanded access to complementary and integrative healthcare (CIH), such as chiropractic care, acupuncture, yoga, and tai chi in order to reduce reliance on medications while improving physical function. There has also been a shift to employ the biopsychosocial model of pain care, which combines the interaction between biological, psychological, and social factors in managing chronic illness. In addition to physical and occupational therapy for rehabilitation, the VA has implemented programs in cognitive behavior therapy, mindfulness based stress reduction, and biofeedback. The VA continues to offer patients interventional pain relieving treatments such as nerve blocks, joint injections, and neuraxial pain therapies.

The advent of the recent guidelines to prevent opioid abuse, misuse and diversion does raise provider concerns with regards to the type (and intensity) of monitoring required, as well as the concern that "policing" of prescription utilization erodes the patient-provider relationship due to a perception of implied distrust. Alford points out that "patients with chronic pain are desperately seeking immediate relief from their suffering; they tend to have unrealistic expectations regarding the potential benefits of opioids and not to fully appreciate the degree of the risk" (17). The key to success for long-term chronic pain management is a comprehensive team approach. This is where full multidisciplinary engagement is necessary to ensure effective and efficient monitoring as we work to ensure the safety, appropriateness, and success of all treatments. Both provider and patient must understand the risks involved with LOT. Patients must be empowered to embrace self-management and to understand the many options to treat chronic pain, other than LOT. When there are no other options but LOT, patients must be educated why the provider needs to follow established guidelines for safety monitoring.

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Potential Conflicts of Interest

All authors declare no financial or personal conflicts of interest with respect to this commentary.

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