



Three Years Down the Road: The Aftermath of the CDC Guideline for Prescribing Opioids for Chronic Pain

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ABSTRACT

The 2016 CDC guidelines for opioid prescribing by primary care physicians have exposed some shortfalls in our thinking about opioid use and stranded many chronic pain patients with inadequate analgesia. Opioid prescribing rates started to decline in 2012, but still remain high. The response from providers to the 2016 guidelines have led to unintended consequences. Some of the CDC guidance seems arbitrary and not supported by evidence (the 90 MME per day cutoff). Patient and prescriber education, the role of buprenorphine (an atypical Schedule III opioid), and abuse-deterrent opioids are not mentioned at all but could play crucial roles in reducing abuse. Opioid use disorder (OUD) is not defined by the guidance which calls on primary care physicians to recognize and treat it. Opioid withdrawal syndrome is not mentioned and tapering plans,

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although advised, are not described in a practical way. While the morbidity and mortality associated with OUD are public health crises, so is untreated pain. Chronic pain patients deserve consideration, yet emerge as the silent epidemic within the opioid crisis. To be sure, there is much good in the CDC guidance or any guidelines that urge caution and care in opioid prescribing. Pain specialists must speak out to advocate for patients dealing with pain, to educate patients and prescribers about analgesic options, and to make sure that pain is adequately treated particularly in vulnerable populations.

Keywords: CDC guidelines for opioid prescribing; Opioid epidemic; Opioids

In March 2016, the Centers for Disease Control and Prevention (CDC) in Atlanta prepared a far-reaching guideline aimed at helping primary care physicians (PCP) better treat chronic pain [1]. Prescriptions for opioid analgesics rose consistently and at an alarming rate from 2006 to their peak in 2012; since then, the rate has declined every year; in 2017, the rate of opioid prescribing was lower than it was in 2006. In fact, from 2017 to 2006, the rate of opioid prescribing dropped 19% [2]. This is not to say that opioid prescribing has achieved reasonable limits; in 2017, there were nearly 58

prescriptions for opioid pain relievers written in the USA for every 100 residents [2]. However, rates of prescribing were starting to decrease markedly years before the CDC guideline was published. Although the guideline was written for primary care physicians (PCPs) and framed in the context of PCPs managing patients with chronic noncancer pain, the gravitas of the document and its issuing agency gave considerable weight to its principles. See Table 1.

At first glance, there were some omissions in these 12 points, at least as far as pain specialists were concerned. None of the guidance mentioned patient or provider education. Physicians have limited training in pain control in medical school. About half of the states in the US have no continuing education requirements involving pain management and prescribing controlled substances [3]. A 2018 survey of primary care physicians ($n = 300$, 16% response rate) in Pennsylvania discovered knowledge gaps in pain management, pain assessment, and pharmacologic options [4]. The guidance did not mention abuse-deterrent formulations (ADFs) of opioids, although the Food and Drug Administration was advocating for their wider use and continues to view them as an important weapon in the fight against opioid misuse [5]. The guidance also does not explain how to diagnose “opioid use disorder” and how physicians are to arrange for evidence-based treatment. Numerous rehabilitation programs for opioid use disorder exist but may not be accessible to all patients in all parts of the country. Many rehabilitation programs are expensive and financially out of reach of some of the patients who need them. Finally, the cutoff rate of 90 morphine milligram equivalents (MME) per day is challenging on three fronts. First, there may be situations (particularly with long-term use) where the patient has developed tolerance to the point that high doses of opioids are needed. This may also occur when a primary care physician “inherits” a long-term chronic pain patient from another practice. Second, an arbitrary dose limitation does not account for the clinical differences among patients that may have a profound effect on drug dosage, for example, patient weight, concomitant medications, individual metabolism, and comorbid

conditions. Finally and perhaps most importantly, while MME appears on the surface to be a useful metric in that all opioids can be converted to this denominator and thus easily compared, morphine equivalence is far from an exact science. In practice, equianalgesic conversions are estimates, and different physicians or clinics may arrive at different MME values for the same drugs. MME conversion tables may be described as being “in flux” right now, and atypical opioids, such as buprenorphine, are difficult to incorporate into the MME tables. To adhere to this guidance, clinicians must calculate the MME for each opioid as the MME is not stated on product labeling, although such a labeling change has been proposed in the literature [6]. In addition, policies for harm reduction (needle exchanges, wider access to over-the-counter naloxone) likewise go unmentioned.

There are other curious omissions in that the guidance seems to want to limit the dose but steers patients toward higher-risk products. For example, buprenorphine is an effective atypical opioid analgesic that is considered a Schedule III controlled substance on the Drug Enforcement Agency (DEA) schedules, meaning it is recognized as being a lower risk product compared with oxycodone and morphine, among others, which are rated Schedule II controlled substances. Since lower risk opioids are available and widely recognized as effective with less potential for abuse, buprenorphine should be mentioned as a preferred analgesic option for those cases where opioid pain relievers are appropriate. By not mentioning the availability of a Schedule III opioid, prescribers may be encouraged to use generic Schedule II products, which are often less expensive and more likely to be reimbursed. Likewise, there is no mention of abuse-deterrent formulations that have been shown to be safe, effective, and less appealing to those who want to tamper with the oral products. Since abuse-deterrent formulations are more expensive, this may again be an effort to find the least expensive opioid rather than the safest one.

In response to the CDC guideline, the Centers for Medicare and Medicaid Services (CMS) established new regulations as of 1 January 2019, which limit how opioids can be

Table 1 The CDC guideline was framed as principles, which are summarized here [1]

Short summary	Comment
1 Nonpharmacologic and nonopioid pharmacological therapies are preferred for chronic pain. When using opioids, combination therapy with a nonopioid analgesic is preferred	
2 Establish treatment goals and use of opioids only as long as improvements in pain and function outweigh the risks	Elevation of “functional improvement” to be the equivalent of pain control is not based on the evidence. Some patients, for example, the bedbound, may need pain relief but never achieve much functional benefit from pain control
3 Physicians should discuss risks and benefits of opioids with patients before starting opioids and periodically thereafter; there are patient and clinician responsibilities in opioid therapy	
4 Immediate-release opioids are preferred over extended-release or long-acting opioids	The CDC cautions that transdermal products require special patient education and are “often misunderstood.” However, there are reasons for the use of different opioid formulations that may override this blanket advice
5 Start with the lowest effective dosage and do not increase over 90 MME per day	Equianalgesic calculations (MME) are estimates and vary even among experts. Non-experts may have trouble establishing the MME for various opioid products. MME tables are in flux This cutoff rate does not appear to be supported by evidence but is an arbitrarily set value. It may not meet the needs of many long-term opioid patients
6 For acute pain, prescribe opioids for 3 days or fewer and rarely for over 7 days	While this may be true in many cases, there is no evidence that this is a good fit for all pain patients
7 Harms and benefits should be assessed within 1–4 weeks after starting opioids and at least quarterly thereafter	The CDC said that if benefits do not outweigh harms, patients should be tapered to lower doses or discontinued. Shared decision-making should be involved in discontinuing opioids and selecting other analgesic options
8 Risk factors should be assessed periodically and plans made to mitigate risk	
9 Prescription drug monitoring program (PDMP) data should be checked to be sure the patient is not taking too many opioid or dangerous drug combinations	The CDC advises that checks should be made every time a prescription is added and at least quarterly even if nothing new is added Note that not all states have a PDMP and few programs effectively share their data with other states

Table 1 continued

Short summary	Comment
10 Urine drug testing should be done at the outset of opioid therapy and at least annually	Urine drug testing is well established in this setting but it is unclear why urine screens could be limited to once a year
11 Opioids and benzodiazepines should not be taken concurrently	There may be cases where a patient taking opioids may require short-term benzodiazepine use
12 For patients who develop opioid use disorder, physicians should arrange for evidence-based treatment	The CDC does not define opioid use disorder, explain how it would be diagnosed, or advise as to what sort of treatments might be appropriate; this puts an undue burden on a primary care physician who is likely not equipped to manage this scenario. Opioid detoxification and rehabilitation are extremely challenging clinical situations that require significant expertise to manage effectively

prescribed and dispensed. For example, prescriptions over 90 MME will result in an automatic “safety edit” to red flag the patient and require the pharmacist to discuss the prescription with the patient. Patients prescribed ≥ 200 MME will trigger a “hard edit” that mandates involvement of the insurer. Pharmacists and insurance companies then have the right to reject certain opioid prescriptions. Apart from short-circuiting the role of the prescribing physician, these new rules may place an undue burden on pharmacists having to spend time consulting with the many CMS beneficiaries who may have prescriptions that fall outside the CDC guidance.

These guidelines have rightly caused PCPs and others involved in the treatment of chronic pain to think more carefully about opioids and prescribe them more prudently (if at all), although there is statistical evidence that prescribing rates had peaked in 2012, 4 years before the CDC guidelines were published [2]. Key stakeholders have just published an urgent plea to avoid “forced opioid tapering” in legacy chronic pain patients who take doses of opioids that exceed the CDC limit of 90 MME. Opioid tapering, when appropriate, should be carried out in a systematic way and, ideally, with the consent of the patient in a shared decision-

making paradigm [7, 8]. Forced tapering results not only in inadequate analgesia but can also precipitate withdrawal symptoms, exacerbate functional deficits, and alarm and confuse patients and their families [9]. Grave risks are associated with forced or mismanaged opioid tapering: patients may seek to get opioids from illegal sources to manage their pain or they may undergo debilitating and even potentially life-threatening withdrawal symptoms. Forced tapering may destabilize patients with concomitant mental health disorders. Suicide rates in much of the USA have increased over 30% since 1999, and the CDC has listed that one of the warning signs that a person may be at risk for suicidality is “unbearable pain” [10].

It is often tempting to view the public health crisis of widespread opioid misuse and abuse as the sole crisis faced by our healthcare system. In no way do we wish to trivialize or minimize the devastation caused by opioid misuse, which was involved in 47,600 deaths in 2017 alone [11]. There are many factors driving opioid overdose mortality, including the increasing incursion of illicit fentanyl into street opioids (particularly heroin) [12]. Behind the headline-making opioid crisis, there is the second and more silent public health crisis of untreated chronic pain. While it is difficult to get hard statistics to make

comparisons, it appears that physicians are increasingly unwilling to prescribe opioid analgesics, even in patients in whom they would be clearly indicated. A survey of 147 dialysis patients found 66% suffered significant chronic pain in the past 3 months (visual analog scale > 40) and only 33% received any type of analgesic. Perhaps most shocking is that 45.9% of patients who said that they had pain in the past 3 months described as “the worst pain imaginable” were prescribed no pain medication [13]. A qualitative study on 48 adults who had taken opioids for chronic pain reported stigmatization, loss of autonomy, and vulnerabilities regarding their opioid use, which were unintended consequences of the CDC opioid policies [14]. In Canada, British Columbia initially adopted the CDC guideline for its own physicians but has since decided to re-evaluate them because of their limitations, in particular in terms of how to manage patients taking higher doses of opioids for chronic pain [15].

There is much good in the CDC guideline, in particular in that it recommended using opioids in a more measured and careful way and seeking out nonpharmacologic and nonopioid pharmacologic therapies when workable. It serves as valuable guidance to PCPs that pain control for chronic noncancer pain can become complicated and referral to pain specialists may be appropriate in some cases. However, it is urgent that we deliver to all healthcare professionals more comprehensive education in pain therapy and pain medications, including but not limited to opioids, and that we continue to treat chronic pain patients with compassion and effective therapy rather than fear. Historically, opioids have been overprescribed and, in some instances, inappropriately prescribed, but the answer is not overcompensation in the opposite direction to the point that chronic pain patients (and indeed some acute pain patients and even postoperative patients) are denied pain control or are being forcibly discontinued from the analgesics on which they have come to depend. The answer is not a cookie-cutter solution as the CDC might like to see implemented (no doses > 90 MME, opioids prescribed for no more than 7 days, and so on) but comprehensive, evidence-based training and education so that

clinicians can make individualized decisions for each patient and deliver appropriate care.

Pain is a deeply personal experience. It has the power to jettison careers, destabilize families, and inflict tremendous functional and psychologic damage to those whose life it touches. It can be hard even for physicians to truly appreciate the overwhelming personal catastrophe that severe chronic pain represents to individuals. Chronic pain costs money, time, and productivity. It robs people of their autonomy, dignity, and personal power. We must not forget the chronic pain crisis in our efforts to better manage the opioid public health crisis. Even as we continue to confront the opioid crisis, we cannot abandon professional compassion and the alleviation of unnecessary suffering. As clinicians, our mission must be to serve patients, not causes.

In conclusion, there is evidence that suggests that opioid overprescribing was correcting itself, albeit slowly, as far back as 2012. While pockets of overprescribing still exist in many areas, physicians have become aware of misuse and abuse and adjusted prescribing accordingly. Today, there is greater scrutiny on the use of opioid therapy than before, and this will often benefit patients. Pain specialists can and must play a greater role in helping educate our colleagues in other specialties about pain control and analgesic options. Pain is an ancient medical complaint, but pain medicine is one of the newest specialties. As such, we pain specialists may feel that we lack the numbers, infrastructure, organization, and gravitas to bring our expertise to full measure in the wake of what could be called dual public health crises. This is a time for pain specialists to speak up and speak out. Greater education about opioids, pain management, and options in analgesia are urgently needed by clinicians in all specialties.

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