



Research Update is published by the Butler Center for Research to share significant scientific findings from the field of addiction treatment research.

## Prescription Rates of Opioid Analgesics in Medical Treatment Settings

Often described as “the opioid epidemic,” the emergent trend of opioid use disorders across broader-than-average populations has not gone unnoticed. However, the rates of abuse are often focused on illicit use of opioid drugs (such as heroin) or diversion of prescribed opioid pain medication. A number of addiction professionals have expressed concern over another, less prominent aspect of the rising use of opioids: prescription use of opioid analgesic medication as advised by medical providers.

### The Rising Frequency of Prescribed Opioid Painkillers

A study of opioid prescriptions in the United States determined that the percentage of Americans who had an active prescription for opioid analgesics rose from 7.4% in 2000 to 11.8% in 2010.<sup>1</sup> This translated to a 104% increase in the number of prescriptions over the same ten-year period.<sup>1</sup> A 2013 study of eight states (California, Delaware, Florida, Idaho, Louisiana, Maine, Ohio and West Virginia) found that opioid analgesics were prescribed by doctors about twice as often as stimulants or benzodiazepines (two other common classes of controlled medical substances).<sup>2</sup> In some states, patients were also often co-prescribed opioid painkillers along with benzodiazepines, despite the potential for adverse effects of taking both types of medication at the same time.<sup>2</sup> Despite these large increases, closer examination of prescription patterns has indicated that the majority of opioid prescriptions are written by a fairly small minority of providers who are most commonly general practice, family medicine, internal medicine or midlevel practitioners.<sup>2</sup> In some cases, these “high-risk prescribers” wrote as many as 16 times more monthly opioid prescriptions than their lower-risk colleagues.<sup>3</sup> While prescriptions written for adult patients has skyrocketed over the past 15 years, prescriptions written for children and adolescents have remained much more stable over time, increasing from 2.68% in 1996 to 2.91% in 2012; however, the increase in prescriptions written for adult family members of children and adolescents has been cited as a contributor to increased risk for opioid misuse among younger demographics.<sup>4</sup>

### Impacts on Substance Use Disorders

Concern about the rising frequency of opioid prescriptions comes as a result of significantly increased rates of opioid use disorders (OUDs) among individuals who have been prescribed opioid analgesics for chronic pain conditions.<sup>5</sup> In particular, the duration of opioid therapy has

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### THE HAZELDEN BETTY FORD FOUNDATION EXPERIENCE

The Hazelden Betty Ford Foundation has a number of educational program opportunities that allow health care providers to gain a more thorough and hands-on understanding of the substance abuse treatment and recovery process. The risks of high-volume opioid prescription are a major topic of focus for healthcare professionals in our professional education programs.

### SUMMER INSTITUTE FOR MEDICAL STUDENTS (SIMS)

The Summer Institute for Medical Students (SIMS) invites medical students to attend a week-long immersion experience on the treatment of addiction. SIMS participants shadow patients and family program participants at the Rancho Mirage or Center City campuses in order to gain perspective on the underlying aspects of addiction. In addition, SIMS offers classroom instruction by treatment professionals and through clinical observation opportunities that cover the bio/psycho/social/spiritual aspects of addiction, evidence-based and holistic approaches to care and Twelve Step recovery principles and practices.

### PROFESSIONALS IN RESIDENCE (PIR)

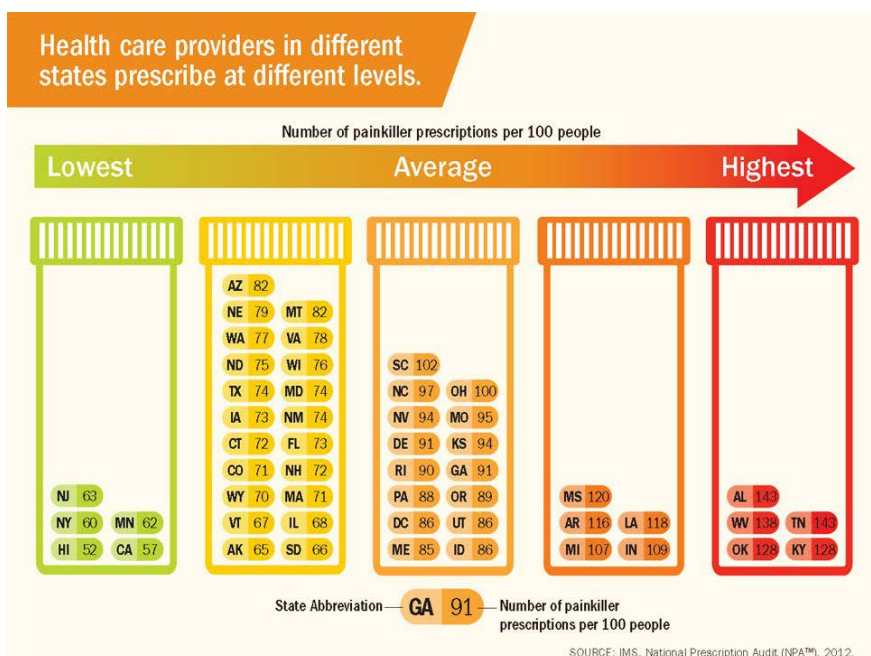
The five-day Professionals in Residence (PIR) program offers continuing education hours for various professionals who are interested in furthering their understanding of the treatment of substance use disorders, with health care providers representing a large proportion of program participants. Like the SIMS program, PIR gives in-depth perspective into addiction treatment by offering clinical shadowing opportunities with patients and staff. PIR also offers classroom instruction on topics that include (but are not limited to) the disease model of addiction, Twelve Step Facilitation, co-occurring disorders, neurobiology of addiction, and spirituality and recovery.

### QUESTIONS AND CONTROVERSIES

**Question:** What if the only option for patients is a prescription for opioid analgesics? Shouldn't health care providers have the opportunity to decide what is best for their patients?

**Response:** Certainly physicians and other prescribing professionals need to have the freedom to use their training and experience to assist their patients by whichever safe and effective means are available to them. While opioid painkillers may be a necessity in some patient cases, there are a number of instances where opioids may be improperly prescribed. “Doctor shopping” is the practice of patients who claim to have pain symptoms to multiple doctors in order to obtain opioid medication—without additional external information on patient behaviors (as provided by PDMPs) or specialized training, this practice can easily lead to unintentional high-volume opioid prescribing.<sup>9</sup> Additionally, a 2017 national survey revealed that some physicians have admitted to writing prescriptions

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been shown to have a very large effect—patients who receive long-term opioid prescriptions for chronic pain conditions were at extreme risk for developing a subsequent OUD (odds ratios were 14.92 for low-dose prescriptions, 28.69 for medium-dose prescriptions, and 122.45 for high-dose prescriptions), even in the absence of any opioid use in the six months prior to receiving the medication.<sup>4</sup> In addition to the direct correlation between long-term prescription opioid use and OUDs, longitudinal studies have found broad, multi-year patterns that suggest that as the number of opioid prescriptions has increased over recent years, so have incidents of abuse and opioid-related deaths from both prescription opioids and heroin.<sup>6, 7, 9</sup>

### Monitoring and Reducing Opioid Prescriptions

As the negative consequences of prescription opioids have become more apparent, health care professionals and legislative bodies have started to implement solutions for reducing harms associated with over-prescribing. Recently, states have created prescription drug monitoring programs (PDMPs) whose primary purpose is to carefully track individuals' prescriptions for potentially harmful controlled substances—especially opioid analgesics—over time and across multiple providers. As a result, providers can assess an additional source of objective data on patient risk for opioid misuse before writing prescriptions.<sup>9</sup> Participation in PDMPs can be voluntary or mandatory for prescribers to use, depending on the location and nature of the program. While available data are limited given the fairly small timeframe, evaluative studies of the efficacy of these programs in reducing high-risk opioid prescriptions have produced mixed results. An evaluation of PDMPs in Florida found that participation in the programs reduced opioid prescriptions among high-volume prescribers, but had no effect on the prescribing behaviors of health providers who were not categorized as high-volume.<sup>3</sup> The effect of prescription monitoring on opioid use among Medicare recipients found that PDMPs had much stronger positive outcomes when providers were required to access all of a patient's prescribing history before writing a new prescription for opioid analgesics (rather than only requiring providers to check PDMP data in cases where they were suspicious of patient claims).<sup>8</sup>

Variation in demonstrated efficacy is largely the result of inconsistent practices and priorities across states and programs.<sup>9</sup> Inconsistencies also present themselves in the rates of opioid prescribing practices across states, as some states prescribe vastly more painkillers on average than do others (see image on previous page). A meta-analysis of national programs identified possible areas for strengthening the impact of PDMPs, including mandatory use of PDMPs for all prescribers; development of long-term, multi-state evaluation designs for comparison of various programs; and incorporation of patient-level outcomes related to opioid use/misuse with regular PDMP evaluation.<sup>9</sup> Whether these recommendations will ultimately be nationally incorporated among legislative entities and health care providers, or whether researchers are able to identify concrete evidence of PDMP efficacy, remains to be seen, as programs are still being developed and implemented at fairly early stages.

### Summary

There is significant concern among health care providers, scientists and lawmakers that the rising rates of opioid abuse, dependence and mortality are strongly correlated with the rising number of prescriptions for opioid analgesics providers write for patients. Studies have shown that prescriptions for opioids are indeed tightly linked to negative outcomes, especially long-term prescriptions written for chronic pain. In order to combat this issue, lawmakers and health care organizations have partnered together to begin implementation of prescription drug monitoring programs that are intended to offer prescribers a broader view of patients' histories with opioid medication, allowing them to make more informed decisions about individual patient risk for opioid diversion or dependence. While these programs are still in their early stages of implementation, there is promise that they can evolve into a viable solution for combatting the national opioid epidemic.

for non-medical reasons, including expediting patient discharge from emergency rooms (16% of survey respondents) or improving patient satisfaction (12% of respondents).<sup>7</sup> Monitoring and education programs can assist in reducing these harmful behaviors.

### HOW TO USE THIS INFORMATION

**Health Care Providers:** Understand the risks associated with prescribing opioid analgesics, especially in cases of chronic pain where the drug may be taken for long periods of time. Even in low doses, long-term opioid prescriptions are significantly linked to the development of opioid use disorders. If your state offers a PDMP, check your patient records before writing any opioid prescription, even if it is not mandatory for you to do so. Learn about the signs of patients who may be doctor shopping if you haven't already; this practice is a large contributor to the rising rates of opioid misuse across the country.

**Patients:** Even when prescribed by a health care professional, patients should be wary of taking opioid painkiller medication over long periods of time, as there are high associated risks of developing a dependence. If your doctor recommends an opioid medication, speak up about any concerns you may have about developing an opioid use disorder—especially if you have a family history of substance use disorders or if you are currently taking other prescribed medication. It may be possible to explore alternatives for chronic pain management.

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The Butler Center for Research informs and improves recovery services and produces research that benefits the field of addiction treatment. We are dedicated to conducting clinical research, collaborating with external researchers and communicating scientific findings.

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