

# Thought Leadership Unit



## **A painful puzzle:** How to treat chronic pain without feeding addiction

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# Summary

The aim of this paper is to explore the ongoing opioid crisis in the United States and to discover what other nations can learn from the American experience so similar crises don't develop elsewhere.

While opioid abuse is not as large an issue outside the U.S., it could easily become a major problem without the right safeguards, medical controls and education programmes in place. There are countries where many of those guardrails are in place — what can we learn from them?

# Introduction

Ron Hiers' journey to social-media infamy began on a sunny October day in Memphis, Tennessee.

He didn't realise that at the time, however, having just overdosed on the heroin he had injected in a nearby store restroom. As passers-by gawked, Hiers lay sprawled across a bus-stop bench, a ringing mobile phone in his hand. His wife and fellow heroin user, Carla, knelt on the sidewalk nearby, her face pressed against the concrete. A Facebook Live video of the scene quickly went viral, garnering more than three million views and appearing on television news programs. Fortunately for the stricken couple, a bystander called for help, and emergency workers arrived in time to administer naloxone, a drug that can reverse the effects of a heroin overdose.<sup>1</sup>

## When medicine kills

Ron Hiers didn't set out to become a heroin addict, of course. At first, he simply wanted relief from the pain he suffered after breaking his heel on the job. But he soon developed a taste for the opioid pain relievers doctors prescribed and continued to seek them out long after his broken bone had healed. As he later told Time magazine, "They can take an X-ray but they don't know whether it bothers you or not, so I could always keep the pain meds going."

When Hiers couldn't get legitimate prescriptions, he and Carla took to forging prescriptions. From there, it was an easy transition to heroin, which he said was as easy to find as his shoes in the morning.

Despite their unsought and embarrassing notoriety, Ron and Carla Hiers were lucky. In 2016, the year their video went viral, more than 42,000 Americans died of opioid-related drug overdoses. That death toll represented a 40-percent year-over-year increase and a quadrupling since 1999, making the opioid epidemic deadlier than the AIDS crisis was at its peak.<sup>2,3</sup> In addition, the economic cost of the crisis in 2015 alone was \$504 billion U.S., or nearly 3 percent of the country's gross domestic product.<sup>4</sup> One 2018 study estimated

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1 <http://time.com/life-after-opioid-addiction/>

2 [https://www.washingtonpost.com/news/wonk/wp/2016/12/08/heroin-deaths-surpass-gun-homicides-for-the-first-time-cdc-data-show/?utm\\_term=.fb812c3b630d](https://www.washingtonpost.com/news/wonk/wp/2016/12/08/heroin-deaths-surpass-gun-homicides-for-the-first-time-cdc-data-show/?utm_term=.fb812c3b630d)

3 [https://www.washingtonpost.com/news/wonk/wp/2017/12/21/cdc-releases-grim-new-opioid-overdose-figures-were-talking-about-more-than-an-exponential-increase/?utm\\_term=.f564e8035f8b](https://www.washingtonpost.com/news/wonk/wp/2017/12/21/cdc-releases-grim-new-opioid-overdose-figures-were-talking-about-more-than-an-exponential-increase/?utm_term=.f564e8035f8b)

4 [https://www.brookings.edu/wp-content/uploads/2017/09/1\\_krueger.pdf](https://www.brookings.edu/wp-content/uploads/2017/09/1_krueger.pdf)

that 919,400 working-age individuals were not in the labour force in 2015 due to opioids.<sup>5</sup>

The crisis affected more than drug users. In 2013, 27 out of every 1,000 neonatal intensive care patients suffered from neonatal abstinence syndrome, nearly four times the rate of a decade earlier. And in 2018, biologists in the state of Washington found opioids in Puget Sound mussels for the first time, the result of the drugs passing through wastewater treatment plants. (As one researcher told USA Today, “Because we’re finding them in mussels, that means these chemicals are present in the water, and that means they’re likely affecting fish and other invertebrates in the water.”)<sup>6,7</sup>

Unlike the crack cocaine epidemic, which predominantly affected urban areas, the opioid epidemic largely affects rural and “micropolitan” areas with populations of less than 50,000. Moreover, according to The Hill, “The CDC data shows the counties where opioids are prescribed most often are those still suffering the effects of the great recession.”<sup>8</sup> That’s not to say other populations aren’t affected, however. As the father of one college-age victim wrote, “opioids are the unbiased killer of our most precious commodity, our children. Opioids kill athletes, straight-A students, white, Hispanic, black, rich, poor, gay, straight, girls and boys alike.”<sup>9</sup>

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5 <https://www.americanactionforum.org/research/labor-force-output-consequences-opioid-crisis/>

6 <https://www.nejm.org/doi/full/10.1056/NEJMsa1500439>

7 <https://www.usatoday.com/story/news/nation-now/2018/05/25/oxycodone-opioid-epidemic-seattle-mussels/644009002/>

8 <http://thehill.com/homenews/state-watch/341041-urban-rural-divide-exacerbates-opioid-crisis-despite-prescription-drop>

9 <https://www.cnn.com/2018/02/16/opinions/an-accidental-expert-opinion-bolling/index.html>

# Chapter I

... other countries aren't immune to the epidemic that continues to ravage the United States, where opioid-overdose deaths equate to "a 9/11-scale loss every three weeks."

## A cautionary tale

From a global perspective, it's easy to see the problem of opioid abuse as being limited to one drug and one country. After all, OxyContin doesn't dominate headlines in Europe, Asia or the Middle East the way it does in the United States, nor have older opioids like morphine generated such intense concern. In fact, far from calling for a ban on morphine, the Lancet Commission on Palliative Care and Pain Relief advocates for the drug's inclusion in its Essential Package of Palliative Care and Pain Relief Health Services.<sup>10</sup>

(One should remember, however, that older opioids can pose significant risks; in fact, during the late 19th century, 1 in 200 Americans was addicted to morphine. A key difference is that prescribers have long taken those risks into account in a way they haven't, until recently, with drugs like OxyContin.<sup>11</sup>)

But other countries aren't immune to the epidemic that continues to ravage the United States, where opioid-overdose deaths equate to "a 9/11-scale loss every three weeks."<sup>12</sup> According to the World Health Organization's 2014 information sheet, 69,000 people around the world die of opioid overdose each year, and another 15 million are addicted to opioids. Only 10 percent are receiving the treatment they need to overcome their addictions.<sup>13</sup>

Moreover, a focus on one drug and one country masks deeper truths about opioids, much as opioids mask the underlying causes of pain. It's important, therefore, to consider the lessons of the U.S. opioid crisis before other countries face their own epidemics.<sup>14</sup>

10 <http://www.thelancet.com/commissions/palliative-care>

11 <https://www.smithsonianmag.com/history/inside-story-americas-19th-century-opiate-addiction-180967673/>

12 <https://www.cnn.com/2017/07/31/politics/chris-christie-plea-report-opioid-commission-national-emergency/index.html>

13 [http://www.who.int/substance\\_abuse/information-sheet/en/](http://www.who.int/substance_abuse/information-sheet/en/)

14 <https://www.newyorker.com/magazine/2017/09/18/the-cost-of-the-opioid-crisis>

The problem is that opioids don't just block pain. They also trigger the release of endorphins; neurotransmitters that create a feeling of euphoria.

### What are opioids?

Opioids, also known as narcotics, are a class of drugs that attach to proteins called opioid receptors in the brain and other parts of the body. In doing so, they block pain signals, effectively relieving pain.<sup>15,16</sup> Examples include morphine, codeine, hydrocodone, oxycodone, meperidine, oxymorphone, heroin and fentanyl. Common brand names include OxyContin (oxycodone), Percocet (oxycodone), Vicodin (hydrocodone), MS Contin (morphine), Demerol (meperidine) and Opana (oxymorphone).<sup>17</sup>

A subset of opioids, called opiates, are derived from the poppy plant or are synthesised from a poppy-derived drug. In practical terms, however, this is a distinction without a difference because synthetic, semi-synthetic and naturally occurring opioids all work the same way. As an expert with the American Council on Science and Health has explained, "For example, heroin is not found in nature. It is synthesized from morphine. Yet it technically belongs in the opiate class simply because its synthetic precursor happened to come from poppy. Scientifically, this is nonsensical."<sup>18</sup>

Common side effects of opioid use includes sleepiness, nausea and constipation. Not surprisingly, there's a whole other group of drugs designed to treat opioid-induced constipation, or OIC, which affects from 41 to 81 percent of users.<sup>19</sup> But the more significant side effect is addiction.

The problem is that opioids don't just block pain. They also trigger the release of endorphins; neurotransmitters that create a feeling of euphoria. Users crave that feeling and can end up taking opioids more often and at higher doses than prescribed. In fact, the body slows production of endorphins as drug use continues, requiring the user to take higher doses to attain the same level of pleasure.<sup>20</sup> As a research review published in 2002 in the journal *Science & Practice Perspectives* explained, "Repeated exposure to escalating dosages of opioids alters the brain so that it functions more or less normally when the drugs are present and abnormally when they are not. Two clinically important results of this alteration are opioid tolerance (the need to take higher and higher dosages of drugs to achieve the same opioid effect) and drug dependence (susceptibility to withdrawal symptoms)."<sup>21</sup>

15 <https://www.asahq.org/whensecondscount/pain-management/opioid-treatment/what-are-opioids/>

16 [http://www.who.int/substance\\_abuse/information-sheet/en/](http://www.who.int/substance_abuse/information-sheet/en/)

17 <https://store.samhsa.gov/shin/content/SMA17-5053-12/SMA17-5053-12.pdf>

18 <https://www.acsh.org/news/2017/10/27/acsh-explains-whats-difference-between-opioids-and-opiates-12041>

19 <https://www.healthline.com/health/opioid-induced-constipation>

20 <https://www.mayoclinic.org/diseases-conditions/prescription-drug-abuse/in-depth/how-opioid-addiction-occurs/art-20360372>

21 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2851054/>

## The odds of addiction

Not everyone who receives an opioid prescription becomes addicted, but addiction is always a possibility, especially when opioids are used wrongly — for example, crushed and injected rather than taken orally — or are used for long periods of time (as is likely in the case of chronic pain). One study found that the risk of addiction begins as soon as the third day of usage and increases with each additional day of usage.<sup>28</sup>

A host of other genetic, psychological and environmental factors increase the odds of addiction, according to the Mayo Clinic. They include poverty, unemployment, youth, family or personal history of addiction, heavy tobacco use, a risk-taking personality, a history of depression or anxiety and stressful circumstances. The Mayo Clinic says the most important step to take in preventing addiction is to recognise that no one is immune.<sup>29</sup>

The rise in supply of medical-use opioids in the 1990s also fed high levels of diversion among an economically stressed and vulnerable population. To feed their habits, many users turn to “pill mills” staffed by unscrupulous physicians who are willing to write prescriptions for cash.<sup>22</sup> In less than seven months, one pain clinic in Florida recorded 4,715 visits by 1,906 patients from 24 U.S. states. For \$850,000 in fees, these patients received prescriptions for more than 1 million oxycodone pills during that period.<sup>23</sup>

In time, some users move from legal opioids like oxycodone to illegal drugs like heroin and non-pharmaceutical fentanyl, either because their prescriptions have run out or because they crave a more potent drug.<sup>24</sup> (Fentanyl, which is prescribed to treat severe pain in cancer patients, is up to 50 times more powerful than heroin and up to 100 times more powerful than morphine.<sup>25</sup>) Cost can also be a factor. One young addict switched from illicit OxyContin to heroin when he realised he could get half a gram for \$40 U.S. “That 40 bucks went way longer than like if I would have spent it on a pill, which would have lasted me like 25 minutes,” he told researchers. “It lasted me two days almost.”<sup>26</sup>

Besides being much more powerful, these illegal drugs are often adulterated, heightening the risk of overdose and death. For example, fentanyl is sometimes added to heroin to counteract the effect of the drug being cut with other substances earlier in the supply chain. “Heroin is bad enough, but when you lace it with fentanyl, it’s like dropping a nuclear bomb on the situation,” said Mary Lou Leery, deputy director of the White House’s Office of National Drug Control Policy in a 2015 NPR interview. Or, as overdose survivor Angelo Alonzo put it, “If you make that right mix, everyone loves your stuff. But, you know, that right mix might kill some people, too.”<sup>27</sup>

22 <http://www.globalcommissionondrugs.org/wp-content/uploads/2017/09/2017-GCDP-Position-Paper-Opioid-Crisis-ENG.pdf>

23 <http://www.tbo.com/news/crime/florida-heals-from-pill-mill-epidemic-20140830/>

24 <https://www.webmd.com/drugs/2/drug-6253/fentanyl-transdermal/details>

25 <https://drugabuse.com/library/is-fentanyl-more-deadly-than-heroin/>

26 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3961517/>

27 <https://www.npr.org/sections/health-shots/2015/08/26/434618809/illicit-version-of-painkiller-fentanyl-makes-heroin-deadlier>

28 <https://www.cdc.gov/mmwr/volumes/66/wr/mm6610a1.htm>

29 <https://www.mayoclinic.org/diseases-conditions/prescription-drug-abuse/in-depth/how-opioid-addiction-occurs/art-20360372>



## The seeds of an epidemic

### Timeline: The rise and fall? — of prescription opioids

<b>1860s – 1898</b>	Morphine is commonly used, and heroin and liquid cocaine are hailed as “wonder drugs.”
<b>1914</b>	The Harrison Narcotics Act is passed, requiring doctors to write prescriptions for narcotics.
<b>1924</b>	The Anti-Heroin Act is passed, banning the production and sale of heroin in the U.S.
<b>1970s</b>	The pharmaceutical industry begins implementing combination opioid drugs, such as Vicodin and Percocet.
<b>1980</b>	A letter in <i>The New England Journal of Medicine</i> argues that addiction is rare in patients treated with narcotics. It fuels the mistaken belief that opioid drugs are non-addictive and safe for consumption outside hospitals.
<b>1990s</b>	Pain is declared to be the “fifth vital sign,” and pain management becomes a hot topic. Pharmaceutical companies begin promoting opioids as a treatment for chronic pain, not just cancer pain.
<b>2003</b>	FDA begins warning drug manufacturers that their advertisements for opioids overstate the drugs’ efficacy and understate the inherent risks.
<b>2015</b>	The U.S. Drug Enforcement Agency (DEA) arrests 280 people — including health care providers — in response to increased trafficking and abuse of pharmaceutical drugs.
<b>2016</b>	The U.S. Centers for Disease Control and Prevention (CDC) publishes strict guidelines for prescribing opioids for chronic pain management. Over-the-counter painkillers are advocated as an alternative.
<b>2017</b>	President Donald J. Trump signs an executive order to establish the President’s Commission on Combatting Drug Addiction and the Opioid Crisis.
<b>2018</b>	Opioids begin appearing in the waters of Puget Sound in Washington state, the result of the drugs being passed through wastewater treatment plants.

30, 31, 32

Although drug traffickers, profit-focused drug makers and pill-mill doctors receive (and deserve) much of the blame for the opioid epidemic, the epidemic’s seeds were planted years earlier. The first of those seeds, surprisingly, was a letter printed in *The New England Journal of Medicine*.

In 1980, two researchers from Boston University Medical Center submitted a five-sentence letter which the journal published under the heading “Addiction Rare in Patients Treated with Narcotics.” In the letter, the researchers explained that they had examined the files of 39,946 hospitalised patients and come to a clear conclusion. “Although there were 11,992 patients who received at least one narcotic prescription, there were only four cases of reasonably well documented addiction in patients who had no history of addiction,” they wrote. Therefore, they concluded, “the development of addiction is rare in medical patients with no history of addiction.”<sup>33</sup>

30 <https://www.gao.gov/assets/250/240884.pdf>

31 <https://www.thetreatmentcenter.com/blog/comprehensive-timeline-opioid-crisis/>

32 <https://www.usatoday.com/story/news/nation-now/2018/05/25/oxycodone-opioid-epidemic-seattle-mussels/644009002/>

33 [https://www.nejm.org/doi/suppl/10.1056/NEJMc1700150/suppl\\_file/nejmc1700150\\_appendix.pdf](https://www.nejm.org/doi/suppl/10.1056/NEJMc1700150/suppl_file/nejmc1700150_appendix.pdf)

A second seed was planted in the early 1990s, when the American Pain Society began promoting the concept of pain as the “fifth vital sign” (after temperature, pulse rate, respiration rate and blood pressure).

By 2017, the letter — which included no data to support its claims and which didn't purport to be a rigorous research paper — had been cited an astonishing 608 times by other authors. (The mean number of citations of other contemporaneous letters was 11.) Few mentioned that the letter had only referred to hospital patients with no history of addiction, factors that should have limited the applicability of the authors' conclusion, and some exaggerated the claim the Boston University researchers were making.<sup>34</sup>

A second seed was planted in the early 1990s, when the American Pain Society began promoting the concept of pain as the “fifth vital sign” (after temperature, pulse rate, respiration rate and blood pressure). The group's stated goal was to call attention to the fact that patients' pain was often ignored and left untreated, but soon the Joint Commission, which accredits health care facilities, was mandating pain assessment for all patients. Patients were typically asked to rate their pain on a scale of 1 to 10, and self-reported severe pain was routinely treated with opioids.<sup>35</sup> Perhaps not surprisingly, one 2012 study found that health care facilities received higher patient satisfaction scores when they dispensed more drugs.<sup>36</sup> As the Joint Commission noted in a 2017 report on the evolution of pain standards, “Pain had become an enemy that needed to be eradicated.”<sup>37</sup>

Finally, in the late 1990s, barriers to prescribing opioids for chronic non-cancer pain (CNCN) began to fall across the United States. (Previously, opioids had been used primarily to treat cancer-related pain and acute post-surgical pain.) According to the journal *Neurology*, at least 20 states liberalised their laws using model guidelines from the Federation of State Medical Boards. One problematic phrase promised that “no disciplinary action will be taken against a practitioner based solely on the quantity and/or frequency of opioids prescribed.”<sup>38,39</sup> As the *Journal of American Public Health* noted, “This language, in a law since repealed, effectively opened the door to allowing opioid prescribing for CNCN without any restrictions or cautions.”<sup>40</sup>

But the blame doesn't lie solely at the feet of profligate prescribers. According to the Global Commission on Drug Policy's position paper on the opioid crisis, diverted supplies are the source of most addictions. Many of those supplies come from patients who've received opioid prescriptions for acute pain and end up with leftover pills. As the position paper notes, “Typically only one-third

34 <https://www.nejm.org/doi/full/10.1056/NEJMc1700150>

35 <https://www.mdedge.com/ccjm/article/109138/drug-therapy/fifth-vital-sign-complex-story-politics-and-patient-care>

36 <https://www.sciencedirect.com/science/article/pii/S0376871617300030>

37 [https://www.jointcommission.org/assets/1/6/Pain\\_Std\\_History\\_Web\\_Version\\_05122017.pdf](https://www.jointcommission.org/assets/1/6/Pain_Std_History_Web_Version_05122017.pdf)

38 <http://n.neurology.org/content/83/14/1277>

39 [https://www.ihs.gov/painmanagement/includes/themes/newihstheme/display\\_objects/documents/modelpolicytreatmentpain.pdf](https://www.ihs.gov/painmanagement/includes/themes/newihstheme/display_objects/documents/modelpolicytreatmentpain.pdf)

40 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4330848/>

## Dependence versus addiction

In popular culture, the term “addiction” is often casually and inaccurately used. People who binge-watch television say they’re addicted to their favourite shows. Terms like “chocoholics” and “shopaholics” refer to activities people have a hard time giving up (if indeed they want to give them up at all).<sup>43</sup>

Real addiction is different. It is, according to the U.S. National Institute on Drug Abuse (NIDA), “a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences.” Why a brain disease? Because drugs change the brain’s structure and function.<sup>44</sup>

Dependence is different. According to the Global Commission on Drug Policy, “dependence means relying on a substance to function and to avoid suffering withdrawal symptoms on abrupt cessation. It is a natural result of regularly taking certain medications (including opioids, some blood pressure medications and antidepressants). It will affect nearly all patients who take opioids daily for months.” By contrast, the commission says, “fewer than eight percent of chronic pain patients who have not previously suffered from an addiction and who take opioids long-term develop new addictions.”<sup>45</sup>

*(continued on following page)*

of a prescription for acute pain is used by the patient, and the unused pills have high monetary value,” up to \$30 U.S. per pill.<sup>41</sup>

When the opioid crisis hit, health systems were woefully unprepared to treat individuals suffering from opioid addiction. For example, the commission found that just eight to 10 percent of U.S. treatment programs were offering opioid substitution therapy (OST) as of 2015, despite the fact that OST, which usually involves methadone or buprenorphine, has been proven to reduce mortality. (For example, one study found that it cut the risk of death in half compared with psychological interventions.)<sup>42</sup>

## The economic cost of addiction

Opioid addiction doesn’t just affect individuals and families. It also affects the economy. According to the Pew Charitable Trusts, prescription opioid abuse, misuse and overdose account each year for \$28.9 billion U.S. in health care costs, \$76 billion U.S. in criminal justice costs and \$41.8 billion U.S. in lost productivity. And those statistics just relate to prescription opioids; the toll is even higher when illicit opioids like heroin and fentanyl are included.<sup>46</sup>

According to the National Safety Council, more than 70 percent of employers have been affected by prescription drug-related problems like absenteeism, reduced performance, injury and onsite overdose. Yet just 19 percent feel extremely prepared to deal with the issue and just 13 percent feel very confident their employees can identify abuse.<sup>47</sup>

And there’s plenty of abuse to identify on the job. A 2015 survey found that 75 percent of U.S. adults (ages 18 to 64) with substance misuse disorders are in the workforce.<sup>48</sup> Across all industries, more than nine percent of workers have substance abuse disorders (with alcohol being the drug of choice by far); in the construction, food and entertainment industries, the proportion is 15 percent or higher.<sup>49</sup>

41 <http://www.globalcommissionondrugs.org/wp-content/uploads/2017/09/2017-GCDP-Position-Paper-Opioid-Crisis-ENG.pdf>

42 <https://onlinelibrary.wiley.com/doi/full/10.1111/add.13193>

43 <https://www.psychologytoday.com/us/blog/inside-the-criminal-mind/201102/the-overuse-and-misuse-the-word-addiction>

44 <https://www.drugabuse.gov/publications/media-guide/science-drug-abuse-addiction-basics>

45 <http://www.globalcommissionondrugs.org/wp-content/uploads/2017/09/2017-GCDP-Position-Paper-Opioid-Crisis-ENG.pdf>

46 [http://www.pewtrusts.org/~media/assets/2017/07/highpriceofopioidcrisis\\_infographic\\_final.pdf?la=en](http://www.pewtrusts.org/~media/assets/2017/07/highpriceofopioidcrisis_infographic_final.pdf?la=en)

47 <https://www.nsc.org/Portals/0/Documents/NewsDocuments/2017/Media-Briefing-National-Employer-Drug-Survey-Results.pdf>

48 <http://www.safetyandhealthmagazine.com/articles/print/16129-opioids-and-the-workforce>

49 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5671784/>

Why is the distinction important? One key reason is that lumping together people who are dependent on drugs with those who are addicted makes opioid substitution therapy seem suspect (to both policy makers and drug users). Thus, addicts avoid or are prevented from receiving therapy that could save their lives.

As opioid deaths dominated headlines, government officials began taking action.

Economist Paul Krueger blames opioids in part for a decline in the percentage of Americans in the workforce. Barely 62 percent of working-age adults were working in 2015 — a nearly 40-year low — and Krueger notes that “labour force participation has fallen more in areas where relatively more opioid pain medication is prescribed, causing the problem of depressed labour force participation and the opioid crisis to become intertwined.”<sup>50</sup>

### Ending the epidemic

As opioid deaths dominated headlines, government officials began taking action. In 2016, for example, the CDC published strict guidelines on prescribing opioids. The next year, President Trump created the President’s Commission on Combating Drug Addiction and the Opioid Crisis, later declaring the opioid crisis to be a national public health emergency.<sup>51</sup>

Many states have gotten involved as well. Massachusetts passed the first state law on opioid prescribing in 2016, mandating a maximum seven-day supply for initial opioid prescriptions.<sup>52</sup> By April 2018 more than half the states had such laws. In addition, 49 states (all but Missouri) have created prescription drug monitoring programs (PDMPs). These require doctors and pharmacists to enter prescriptions into a database, thus limiting doctor shopping.<sup>53</sup> According to the CDC, PDMPs are “among the most promising state-level interventions to improve opioid prescribing, inform clinical practice and protect patients.”<sup>54</sup>

Despite significant progress, overdose deaths continue to rise, in part because of the transition from prescription opioids to heroin and fentanyl and in part because of the paucity of effective treatment programs. In its report on the North American opioid crisis, the Global Commission on Drug Policy made a number of recommendations including:

- Not cutting off patients’ supply of prescription opioids without offering alternatives
- Making harm-reduction measures and treatments widely available
- Developing regulations that balance the need for pain care with the need for adequate safeguards
- Investing in research on effective treatments and on how economic, physical and psychological problems have contribute to the opioid crisis
- Ending the criminalisation of drugs and incarceration of people who use them<sup>55</sup>

50 [https://www.brookings.edu/wp-content/uploads/2017/09/1\\_krueger.pdf](https://www.brookings.edu/wp-content/uploads/2017/09/1_krueger.pdf)

51 <https://www.thetreatmentcenter.com/blog/comprehensive-timeline-opioid-crisis/>

52 <http://www.ncsl.org/research/health/prescribing-policies-states-confront-opioid-overdose-epidemic.aspx>

53 <https://www.statnews.com/2017/03/07/missouri-prescription-drug-database/>

54 <https://www.cdc.gov/drugoverdose/pdmp/states.html>

55 <http://www.globalcommissionondrugs.org/wp-content/uploads/2017/09/2017-GCDP-Position-Paper-Opioid-Crisis-ENG.pdf>

Whether those or other measures are the right answer, it is clear that much more must be done to end the opioid crisis than simply limiting opioid prescriptions.

Also important is constant vigilance. After the U.S., the UK and other rich countries cracked down on tobacco use and marketing in recent decades, tobacco companies shifted their efforts to developing countries with less robust laws and fewer public health resources. They also introduced e-cigarettes, which — at least until laws catch up — give them another avenue for luring people into lifelong addictions. Will something similar happen with prescription opioids? Only time will tell.

# Chapter 2

## Other countries, other drugs

“At the moment, Europe, Australia and New Zealand are not seeing an opioid epidemic comparable to that in North America ... ”

In its position paper on the North American opioid crisis, the Global Commission on Drug Policy, noted that the crisis can seem unique to America: “At the moment, Europe, Australia and New Zealand are not seeing an opioid epidemic comparable to that in North America: prescribing rates are lower, universal health care is available in most countries and, while there has been recent economic distress in many places, it has largely occurred in the presence of a stronger social safety net.”<sup>56</sup>

The data bear out that assessment. The UN’s 2017 report on narcotic use reveal that the U.S., currently facing a crisis of opioid overuse, is an extreme outlier. U.S. opioid use is the highest of any country in the world, and more than 50% higher than Germany, the second-ranked country of the twenty most populous countries.<sup>57,58</sup> According to the United Nations Office on Drugs and Crime’s World Drug Report 2017, 70 percent of the global disease burden caused by addiction can be attributed to opioids. But prescription opioids like OxyContin have a relatively smaller impact in other countries than they do in the United States.<sup>59</sup>

One reason for the differences between countries is how opioids are distributed. U.S. physicians prescribed enough opioids in 2015 to keep every American medicated for three weeks, while in the Middle East legal and cultural limitations keep opioid prescribing at suboptimal levels.<sup>60,61</sup> (A survey of final-year medical students in Saudi Arabia conducted between 2008 and 2009 found that 46 percent considered cancer pain to be untreatable and 68 percent would only prescribe opioids for patients with a poor prognosis.<sup>62</sup>) As for morphine, the Lancet Commission on Palliative Care and Pain Relief has reported that “of the 298.5 metric tonnes of morphine-equivalent opioids distributed in the world

56 <http://www.globalcommissionondrugs.org/wp-content/uploads/2017/09/2017-GCDP-Position-Paper-Opioid-Crisis-ENG.pdf>

57 <https://qz.com/1198965/the-surprising-geography-of-opioid-use-around-the-world>

58 [https://www.incb.org/incb/en/narcotic-drugs/Technical\\_Reports/2016/narcotic-drugs-technical-report-2016.html](https://www.incb.org/incb/en/narcotic-drugs/Technical_Reports/2016/narcotic-drugs-technical-report-2016.html)

59 <http://www.unodc.org/wdr2017/>

60 <https://www.theguardian.com/us-news/2017/oct/25/americas-opioid-crisis-how-prescription-drugs-sparked-a-national-trauma>

61 <https://www.sciencedirect.com/science/article/pii/S1319016416000104>

62 <https://www.ncbi.nlm.nih.gov/pubmed/21666947>

Prescription opioid use is increasing in Europe, although much more slowly than it has in the U.S., and non-medical use of prescription opioids is rare.

per year (average distribution in 2010–13), only 0.1 metric tonne is distributed to low-income countries.”<sup>63</sup>

## Europe

In Europe, heroin remains the most commonly used opioid, although other drugs are making inroads. In Estonia, for example, fentanyl has entirely displaced heroin, while in Finland the drug of choice is buprenorphine.<sup>64</sup>

Prescription opioid use is increasing in Europe, although much more slowly than it has in the U.S., and non-medical use of prescription opioids is rare.<sup>65</sup> That’s partly because Europe has learned from America’s example. As Cathy Stannard, a consultant in pain medicine, said at the Lisbon Addictions 2017 conference, “We (in Europe) are mindful of all the facets of the U.S. conversation, but where we start on this is a very similar increase in prescription rates of opioid medicines.”<sup>66</sup>

In the UK, opioids are very strictly controlled, according to Dr Lori Stetz, Senior Medical Director, Aetna International. “GPs have brought diazepam misuse into line. These drugs need to be reviewed on a regular basis; they can’t be just be dished out in emergency situations,” she says.

At Lisbon Addictions 2017, Paul Griffiths, scientific director of the European Monitoring Centre for Drugs and Drug Addiction, sounded the alarm about illicit opioids. “We have seen in the last 18 months the rapid emergence of new highly potent synthetic opioids, mostly fentanyl derivatives,” he said. “Their potency means they pose a significant risk to those that consume them or are accidentally exposed to them.”

## Australia

In Australia, over-the-counter (OTC) codeine has been a major problem. A 2016 survey found that 75 percent of people misusing painkillers and opioids had misused OTC codeine within the past 12 months. (In response, Australia’s Therapeutic Goods Administration decreed that all drugs containing codeine would be available only by prescription beginning in February 2018.)<sup>67</sup>

## New Zealand

Despite the findings of the Global Commission on Drug Policy, health officials in New Zealand have described opioid overuse abuse in their country as “a

63 <https://www.thelancet.com/commissions/palliative-care>

64 <http://www.emcdda.europa.eu/system/files/publications/2373/TD0216072ENN.PDF>

65 <https://www.ncbi.nlm.nih.gov/pubmed/26084418>

66 <https://www.reuters.com/article/us-drugs-opioids/u-s-opioid-crisis-could-spread-to-europe-experts-say-idUSKBN1CV2A8>

67 <https://www.aihw.gov.au/reports/illicit-use-of-drugs/ndshs-2016-detailed/contents/table-of-contents>



In the United Arab Emirates, opioids are highly regulated at the health authority and government level. By contrast, certain southern African countries are not well regulated.

disaster in the making.” While drugs like oxycodone reached New Zealand later than other countries, physicians there have made many of the mistakes of their U.S. colleagues. For example, health authorities recommend that oxycodone only be used as a second-line treatment after morphine, but one study found that 80 percent of new oxycodone prescriptions in 2013 went to patients who didn’t have a previous prescription for morphine within the previous 12 months. In a 2014 interview with Best Practice Journal, the co-chair of New Zealand’s National Association of Opioid Treatment Providers, Dr Jeremy McMinn, said, “New Zealand’s problem prescribing pharmaceutical opioids, with the predictable onslaught of oxycodone, is a national scandal that should be stimulating profound professional soul-searching.” Some of that soul-searching may be occurring; as the Best Practice Advocacy Centre New Zealand has reported that as of 2018 oxycodone use has levelled out.<sup>68,69,70</sup>

### **Middle East & Africa**

In Africa and in the Near and Middle East, tramadol, an opioid that has been used to treat pain is an increasing problem. A 2015 study in the United Arab Emirates found that two-thirds of opioid users were using tramadol for non-medical purposes — and were averaging eight or nine 100 mg tablets per day.<sup>71</sup> (The maximum daily prescription limit is typically 400 mg per day.<sup>72</sup>)

Dr Charushila Thadani, Medical Director, Aetna International, says, “In the United Arab Emirates, opioids are highly regulated at the health authority and government level. By contrast, certain southern African countries are not well regulated. There’s a high usage of illegal medicines, which are below par in terms of quality. It all comes down to the wealth of the individual: low-income families often only have access to sub-par medication, which may not be as much of an issue for the more affluent.”

In the Middle East, pain is undertreated and is most often addressed with non-steroidal anti-inflammatory drugs (NSAIDs). (These drugs are readily available since they are not addictive like drugs that are heavily regulated.) Across the region, pharmaceutical management of pain is not often a primary treatment choice and many usually do not seek medical attention for pain unless severely impairing daily function.

Dr Thadani notes that if a patient is suffering pain, the preference would be to put the pain aside and focus on treating the underlying cause. “The upside is that you avoid overtreatment; the downside is that those who need medical attention don’t get it,” she says. “This in turn results in ‘sick care’ rather than pre-emptive health care.”

68 <https://bpac.org.nz/BPJ/2014/June/upfront.aspx>

69 <https://bpac.org.nz/BPJ/2014/July/oxycodone.aspx>

70 <https://bpac.org.nz/report/snippet/analgesic-update.aspx>

71 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4866416/>

72 <https://www.drugs.com/dosage/tramadol.html>



“A significant hurdle in improving the access to pain medications lies at the feet of the medical community in India.”

Another result of tight drug regulation in Middle Eastern countries is that expatriates who are accustomed to taking opioids for chronic pain may get into trouble when they can't easily access the drugs. “We had a member who was visiting every possible independent doctor with the same symptoms (psychological and physical) to get her hands on opioids,” Dr Thadani says. “We had to work with providers and family to bring her back from addiction.”

### Asia Pacific Region

Tramadol is also a problem in some Asian Pacific countries, but lack of access to opioids is also a serious concern. After a 1985 law in India sought to better control narcotics and psychotropic drugs, use of morphine plunged from 716 kg in 1985 to just 18 kg in 1997.<sup>73</sup> The reason? As the *Journal of Global Oncology* explained, “As many as six licenses were required for every consignment of morphine, and physicians possessing opiates after expiry of license could face arrest without bail and a jail term of up to 20 years.” The law was amended in 2014, after which it became possible to obtain the narcotics with a single licence, but access remains limited.<sup>74,75</sup>

Dr Prashant Dash, IHO by Aetna reports that India is the biggest supplier of tramadol to the Middle East and Africa. “Tramadol is prescribed as a pain medication, but because of tramadol's stimulant effects, it can allow people to feel high-functioning while taking dangerously high doses. One potential reason India does not regulate tramadol, or other opioids, is the lack of domestic concern about addiction. However, India does have addiction problems, and India's Home Minister Shri Rajnath Singh specifically acknowledged that tramadol addiction is a growing problem.<sup>76,77</sup>

A significant hurdle in improving the access to pain medications lies at the feet of the medical community in India. Dr Dash continues, “Physicians and medical professionals lack appropriate knowledge regarding opioid pain medications. For instance, a study found that nearly 90 percent of 326 medical students thought that morphine use in palliative care would result in drug addiction. It is important for medical students to understand that terms such as physiologic dependence and tolerance are obsolete in the case of end-stage palliative care treatment. Integration of palliative care as an academic discipline into the undergraduate medical curriculum and establishment of more postgraduate educational programs in palliative care would greatly improve provision of appropriate pain relief to thousands of patients suffering from cancer and other life-limiting illnesses.<sup>78</sup>

73 <https://www.wsj.com/articles/tramadol-the-opioid-crisis-for-the-rest-of-the-world-1476887401>

74 <http://ascopubs.org/doi/full/10.1200/JGO.2016.008490>

75 [https://www.eiuperspectives.economist.com/sites/default/files/images/2015%20Quality%20of%20Death%20Index%20Country%20Profiles\\_Oct%206%20FINAL.pdf](https://www.eiuperspectives.economist.com/sites/default/files/images/2015%20Quality%20of%20Death%20Index%20Country%20Profiles_Oct%206%20FINAL.pdf)

76 <http://pib.nic.in/newsite/PrintRelease.aspx?relid=146877>

77 <https://thediplomat.com/2018/01/tramadol-the-dangerous-opioid-from-india/>

78 <http://pib.nic.in/newsite/PrintRelease.aspx?relid=146877>

Legal opioid use per capita in the U.S. is more than 2,000 times higher than in India.

“Legal opioid use per capita in the U.S. is more than 2,000 times higher than in India. This is probably bad for both countries. In the U.S., far too many people are becoming addicted to opioids when they would be far better treated with other medicines or therapy. Yet, in India and other poor countries, many people are not being prescribed opioids when strong pain relief is necessary, such as the late stages of cancer. In many of these countries, there is still an unfortunate taboo around the use of these drugs. Doctors estimate that only 2% of patients who need palliative drugs actually receive them. The rest try to battle excruciating pain with less effective non-opioid painkillers.”

But prescription opioids are being misprescribed and misused in the region. Dr Mitesh Patel, Medical Director, Aetna International, cites an example of a patient in Indonesia. “The patient was being treated with opioids for a pulmonary embolism,” Dr Patel explains. “Only when AI got involved, by consulting on the case as a second opinion, did we collectively find out what was causing the problem.”

# Chapter 3

## The problem of pain

While opioids can mask pain, the opioid epidemic has masked the fact that millions of people are suffering pain, which the International Association for the Study of Pain defines as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.” Much pain is short-lived, but time can’t heal the wounds some people suffer.<sup>79</sup>

Nearly one in five Europeans faces chronic pain, according to a study published in 2006, and the toll is even higher in low- and middle-income countries.<sup>80</sup> In 2015 a systematic review of research studies found that 33 percent of people in those countries experience some form of chronic pain.<sup>81</sup>

In the U.S., media outlets commonly report that 100 million Americans — or some 40 percent of the adult population — suffer from chronic pain. However, as one 2014 investigative report pointed out, “The figure is problematic in part because it lumps together anyone who reports chronic pain, which is defined as lasting three to six months, from those with persistent but manageable back pain to those recovering from surgery or battling cancer. It includes those who may not even seek medical help, or treat their condition with over-the-counter products, with those who use prescription opioids.”<sup>82</sup> Perhaps a more reliable number comes from the 2012 National Health Interview Survey, which found that 11.2 percent of U.S. adults (25.3 million individuals) experience chronic pain, defined as pain every day for three months.<sup>83</sup>

Statistics on pain are inherently slippery because pain is subjective. One of the problems with the misguided attempt to declare pain the fifth vital sign was that pain is usually self-reported and can’t be measured with a thermometer or blood-pressure monitor.

Statistics on pain are inherently slippery because pain is subjective.

79 <https://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698>

80 <https://www.ncbi.nlm.nih.gov/pubmed/16095934?dopt=Abstract>

81 <https://www.ncbi.nlm.nih.gov/pubmed/26313056>

82 <https://www.medpagetoday.com/PainManagement/PainManagement/46482>

83 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4562413/>

Despite the attention opioid painkillers have long commanded, they are just one solution to chronic pain.

That said, using the right survey instrument can help clinicians accurately assess a patient's pain level. Perhaps the simplest instrument is the Wong-Baker FACES Pain Rating Scale, on which a child is asked to choose the face image — from smiling to vigorously crying — that best represents how he or she feels.<sup>84</sup> For adults, however, more valuable instruments look at multiple dimensions of pain. For example, the Indiana Polyclinic Combined Pain Scale (IPCPS) measures not only the level of pain (from “no pain” to “worst imaginable”) but also assesses the patient's ability to function and his or her levels of depression and anxiety. It also gives context to the numerical values patients assign to their pain. As the instrument's developers have noted, “a chronic pain patient may find it more relevant to be able to sit through a movie comfortably than to drop 1 point on a numeric rating scale.” Finally, the IPCPS offers concrete examples to guide patients to accurate responses. For example, level 3 (mild) pain is compared with a scraped knee or jammed finger, while level 7 (severe) pain is compared with suffering a broken leg or being stabbed with a knife.<sup>85</sup>

### Dealing with pain

So if pain is pervasive and opioids are potentially dangerous, does that mean individuals suffering chronic pain face a difficult choice between agony and addiction? Not at all. Despite the attention opioid painkillers have long commanded, they are just one solution to chronic pain. In fact, as guidelines from the U.S. Centers for Disease Control and Prevention clearly state, “Opioids are not first-line or routine therapy for chronic pain.”<sup>86</sup>

Moreover, they may not be the most effective choice. A recent randomised trial, conducted between 2013 to 2016, compared the use of opioid and non-opioid medication therapy over a 12-month period among two groups of patients who had moderate-to-severe low back pain or hip or knee pain caused by osteoarthritis. The opioid group received such drugs as immediate-release and sustained-action morphine, immediate-release and sustained-action oxycodone and transdermal fentanyl. The non-opioid group received such drugs as acetaminophen, NSAIDs and topical analgesics. At the end of the study, the groups didn't vary significantly on pain-related function, but the non-opioid group actually felt less pain intensity (an average score of 3.5 on a scale of 0 to 10 for the non-opioid group vs. an average score of 4.0 for the opioid group.) Moreover, medication-related symptoms were half as common in the non-opioid group.<sup>87</sup>

<sup>84</sup> <http://wongbakerfaces.org/>

<sup>85</sup> <https://www.practicalpainmanagement.com/resource-centers/opioid-prescribing-monitoring/pain-assessment-review-current-tools>

<sup>86</sup> [https://www.cdc.gov/drugoverdose/pdf/Guidelines\\_Factsheet-a.pdf](https://www.cdc.gov/drugoverdose/pdf/Guidelines_Factsheet-a.pdf)

<sup>87</sup> <https://www.ncbi.nlm.nih.gov/pubmed/29509867>

A second study published in May 2018 showed the benefit of trying physical therapy first.

Cognitive behavioural therapy (CBT) and mindfulness-based stress reduction (MBSR) can also offer hope to individuals suffering chronic pain.

A second study published in May 2018 showed the benefit of trying physical therapy first. When researchers reviewed 150,000 insurance claims for people with new diagnoses of low back pain, they found that patients who saw a physical therapist first were 89 percent less likely to receive an opioid prescription than patients who never saw a physical therapist or who saw one later in the treatment process. Although the study didn't explain why physical therapy made such a difference, the lead author, Bianca Frogner of the University of Washington, offered one possible reason in an interview with NPR: "People who get trained in physical therapy have very specialized knowledge about pain management, especially with the muscular skeletal system," she said. "They might actually understand this pain better than the average family physician."<sup>88</sup> In an interview with Science Daily, study co-author Dr Ken Harwood of the George Washington University, said, "This study shows the importance of inter-professional collaboration when studying complex problems such as low back pain. We found important relationships among physical therapy intervention, utilization and cost of services and the effect on opioid prescriptions."<sup>89</sup>

Cognitive behavioural therapy (CBT) and mindfulness-based stress reduction (MBSR) can also offer hope to individuals suffering chronic pain. One 2016 study randomly assigned sufferers of chronic low back pain into three groups: CBT, MBSR and usual care. The first two groups attended weekly two-hour sessions for eight weeks and did home practice; the third group pursued whatever care options they chose. The result? According to the U.S National Institutes of Health, "At six months, functional improvement — measured with an established questionnaire — was higher for 61 percent of those in the MBSR group and 58 percent of those in the CBT group, compared to 44 percent of those in the usual care group. The percentage of those with improvement in self-reported back pain was also greater with MBSR (44 percent) and CBT (45 percent) than usual care (27 percent)."<sup>90</sup>

(While studies such as this one pave the way for a change in attitudes about the efficacy of alternative therapies, individuals should check their plans carefully before seeking treatment, as benefits providers differ in their levels of cover for these types of outpatient services. It's wise to ask the question upfront and then make a personal decision based on circumstances. It's also worth bearing in mind that not all forms of alternative therapies will work for all individuals, whether the therapies are covered or not.)

<sup>88</sup> <https://www.npr.org/sections/health-shots/2018/05/23/613500084/trying-physical-therapy-first-for-low-back-pain-may-curb-use-of-opioids>

<sup>89</sup> <https://www.sciencedaily.com/releases/2018/05/180522225553.htm>

<sup>90</sup> <https://www.nih.gov/news-events/nih-research-matters/meditation-cognitive-behavioral-therapy-ease-low-back-pain>

Aetna International's Dr Lori Stetz believes some providers are too quick to provide long-term opioid prescriptions instead of considering other options.

Aetna International's Dr Lori Stetz believes some providers are too quick to provide long-term opioid prescriptions instead of considering other options. "Opioids are good for short-term management of acute pain and for longer-term management of pain in specific oncology situations," she says. "You don't need seven days of opioids to manage dental-surgery pain, for example — at most two days."

Stetz suggests that patients who are getting repeat prescriptions should ask why and should make sure the drugs are not masking underlying, untreated problems. "Question why you're on opioids; the vast majority of people don't actually need them," she says. "Everyone likes an easy answer, but for low back pain the effective treatments are long term, including exercise, physiotherapy and maintaining a healthy weight."

A decade ago, an article in the *Journal of the American Board of Family Medicine* reviewed the use and effectiveness of a variety of treatments for chronic back pain, including opioids, spinal injections and spine surgery. Its authors concluded that there are no "magic bullets" for chronic back pain and that it's wishful thinking to expect a cure from a drug, injection or operation. They also suggested that physicians "should fully inform patients about available treatment options, including the best available evidence for effectiveness, uncertainties and risks, and encourage them to play an expanded role in therapeutic decision making."<sup>91</sup>

That advice doesn't just apply to chronic back pain — or even to pain itself. While there's no magic bullet for fighting such scourges as the opioid epidemic, an important first step is for physicians to be honest with their patients — and themselves — about the promise and pitfalls of opioids.

### **A multipronged approach**

At Aetna International, we cover opioids because they offer clinical value. We also strive to balance the needs of members with acute or chronic pain to receive appropriate treatment with the risk of misuse or addiction that can result from such medications. We realize that many of our members suffer chronic and cancer-related pain and that opioids can be a good answer in some cases. But we also recognize that opioids are rarely the right first-line treatment and that alternatives should be considered.

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<sup>91</sup> <http://www.jabfm.org/content/22/1/62.full.pdf+html>

We find that we have more success with educating members before a problem becomes serious than with contacting providers to curb over-prescribing.

### Aetna in the U.S.

Our parent company, Aetna, is tackling the opioid problem through prevention, intervention and support. Here's an overview:

- **Prevention:** We have enacted a seven-day limit and other safety guardrails on opioid prescriptions and provide cover for a number of non-drug treatments, including chiropractic care, acupuncture, biofeedback and physical therapy. In 2018, we rolled out "Living with Chronic Pain," a mindfulness training program. In addition, Aetna Behavioral Health clinicians perform substance abuse screening, and we proactively reach out to "super-prescribers" to show them how to moderate their prescribing behaviour.
- **Intervention:** Through our Controlled Substances Program, we identify and intervene with at-risk members. We are also piloting a neonatal abstinence syndrome case management program to support women whose babies are at risk for opioid withdrawal. To improve access to naloxone, a drug that can instantly reverse the effects of an opioid overdose, we have waived copays and donated supplies of the drug to hard-hit communities.
- **Support:** Through the Aetna Foundation, we provide extensive support for substance abuse recovery programs. Aetna Behavioral Health is working with MAP Health Management and IBM Watson to develop better addiction treatment protocols. And we are piloting a Guardian Angel program that offers proactive nurse outreach to survivors of opioid overdoses.

We are proud that we saw an eight percent decrease in opioids prescribed between June 2017 and March 2018, although we realise more needs to be done.<sup>92</sup>

<sup>92</sup> Aetna claims data; represents the average number of opioids prescribed per month per 1,000 members.

At Aetna International, our Care and Response Excellence (CARE) team reviews prescription requests and care pathways.

## Aetna around the world

At Aetna International, we are:

- **Adopting value-based care principles that focus on health outcomes.** That means including prevention guardrails around opioid prescriptions, profiling populations and reaching out to at-risk individuals via our In Touch Care program.
- **Working cohesively for the benefit of the individual.** We are implementing an interoperable care platform that takes a 360° view of individuals' health and wellness and connects them to personalised prevention and intervention health care solutions.
- **Concentrating on the treatment of the condition as opposed to using pain medication to mask symptoms.** We advocate for alternatives to opioids, focus on providing access to treatment such as physical therapy and behavioural support for painful conditions and conduct a case-by-case analysis of addiction treatment options.
- **Educating individuals.** We are promoting responsible opioid use at health seminars and health fairs and using forums to raise awareness, demystify conditions and offer explanations about the health and wellness services available to support individuals.
- **Building plans for employee populations.** We are crafting plans that use co-pays, cover for alternative therapies and pre-authorisation removal to guide individuals to appropriate treatments.

At Aetna International, our Care and Response Excellence (CARE) team reviews prescription requests and care pathways. We become aware of potential problems via pre-authorisation requests, in reviewing hospital stay/inpatient treatment pathways, through being asked for second opinions and through reviewing treatment plans. We find that we have more success with educating members before a problem becomes serious than with contacting providers to curb over-prescribing. As is so often the case, an ounce of prevention is worth a pound of cure — especially when that cure can potentially cause more problems than it solves.



# Conclusion

We said at the outset of this paper that Ron and Carla Hiers, the Tennessee couple whose overdose video went viral, were lucky to survive. They were lucky in another way. Among the many people who saw their story on a Memphis television station was Ron's estranged daughter, Paris Hardee. Although she had been raised by grandparents and had shut him out of her life for more than a decade, Paris still wanted to help. She contacted a local drug-recovery centre, which agreed to waive its fee (up to \$25,000 US for a 30-day program). Carla eventually entered a similar program in another state.

Today, both of them are clean, and Ron hopes to someday become a recovery counsellor. If he does, he'll likely never run out of fellow sufferers to help.<sup>93</sup>

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<sup>93</sup> <http://time.com/life-after-opioid-addiction/>

# About the authors



## Dr Lori Stetz

As Senior Medical Director for Aetna International, Dr Lori Stetz, MHP, provides guidance, support, and medical leadership for all care management activities around the globe. Lori drives medical policy, and actively participates in strategic planning and program and product development in concurrence with changing markets and technologies. Lori also manages Aetna International's emergency evacuation program, helping to ensure appropriate health care delivery for our members around the globe.



## Dr Stella George

Dr George, MBBS, DPH, MBA, is the Head of Care Management (Americas) and is responsible for the delivery of all of our care management programs through her team's global clinical operations. She is responsible for driving the care management strategy. She has oversight on the clinical program design which is focussed on developing member-centric innovative programs focussed on increasing member engagement and improving health outcomes.



## Dr Mitesh Patel

As Medical Director for Aetna International, Dr Patel, MBA, provides guidance, support, and medical leadership for care management activities in Europe. Dr Patel also manages Aetna International's emergency evacuation program, helping to ensure appropriate health care delivery for our members around the globe. Dr Patel graduated from King's College University, London and also has a Healthcare Management degree from Imperial College, London. He is also a practicing physician in Emergency Medicine.

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# About Aetna International

Aetna International is committed to helping create a healthier global community. We offer large employers, health care systems and government entities customised technological and health management solutions to help improve health, enhance quality of care and contain costs. We provide international and national health benefits and services to more than 800,000 people worldwide, and our customers include expatriates, local nationals, the globally mobile and business travellers.

We offer comprehensive health care benefits, including medical, dental, vision and emergency medical assistance amongst others, along with preventative and condition management care programs. Aetna International's parent company, Aetna, is one of the leading health care benefits and services companies in the U.S., serving 46.5 million people with information and resources to help make better informed decisions about their health and wellness.

For more information, see [aetnainternational.com](https://aetnainternational.com) and [aetna.com](https://aetna.com), and discover how we are delivering the promise of healthy ... anytime, anywhere.



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Volume VII: Bending the curve: Addressing rising costs in health care

**2018** Volume VIII: Antibiotic resistance: Toward better stewardship of a precious medical resource

Case study 1.0: Bending the curve: Fraud, waste and abuse

Volume IX: A dignified death: Realising the promise of living wills and palliative care

Volume X: Personalised and protected: Health and wellness for the globally mobile

Case study 2.0: Bending the curve: Making networks work

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