A Prescription for Change

A unique approach to tackling the opioid epidemic

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Executive summary

Despite years of attempted interventions by the U.S. Surgeon General, Centers for Disease Control and Prevention (CDC), and other entities, deaths related to the opioid epidemic continue to increase. This is because these interventions have focused on asking physicians to “pledge” to reduce prescribing, rather than on providing education on appropriate, evidence-based pain management. Equally important has been our failure to educate physicians, dentists, and consumers of healthcare about evidence-based findings that show opioids are inferior to or at least no better than, carry a higher risk of addiction, and are accompanied by vastly more side effects than non-opioids for the treatment of pain. This lack of education has further fueled the myth perpetuated since 1980, that opioids are the best treatment for all but the most minor pain, and sets up for failure any reduction in their prescribing, motivated by legislation or otherwise.

This paper describes how the comprehensive initiative, A Prescription for Change, led by Mercy Care Plan/Mercy Maricopa Integrated Care of Arizona, is working to stem this epidemic. It describes a multi-pronged approach to educating providers, policy makers, and the public about evidence-based treatment of different types of pain through a coordinated series of programs including academic detailing, social media campaigns involving key influencers, and office-based collateral to consumers, to achieve success where others have failed.

“At the bottom of every person’s dependency, there is always pain. Discovering the pain and healing it is an essential step in ending dependency.”

Chris Prentiss, The Alcoholism and Addiction Cure
Opioid epidemic

The “opioid epidemic” is not a new problem. Similar epidemics predate the 1900s, however, the number of people dying as a result has more than quadrupled since 1999. On August 24, 2016, Surgeon General Vivek Murthy sent the well-known “Turn the Tide” letter urging healthcare practitioners to pledge their commitment to be part of the solution. In March of that same year, the CDC issued guidelines for the prescribing of opioids. Yet deaths continue to increase at an alarming rate. According to the most recent statistics, one person dies of an overdose every ten minutes, making opioids responsible for more deaths yearly in America than either guns or car accidents.¹ Four out of five heroin users abused prescription drugs first.² Guidelines and recommendations have not been enough. That’s because the root cause of the problem is still not being addressed.

¹ CDC data
It has been suggested that the index event in the current epidemic may have been a single paragraph letter to the editor written by Porter and Jick, printed in the January 10, 1980 issue of the New England Journal of Medicine, and entitled: Addiction Rare in Patients Treated With Narcotics. The 11-line paragraph consisted of an account of 11,882 patients hospitalized at Boston University Medical Center, who received at least one dose of opioids in the hospital for acute pain, and concluded that “less than 1% of opioid users become addicted to the drugs.” The letter has been said to have been used as the jumping off point by the American Pain Society and the American Pain Foundation to begin their now infamous call in 1996 to consider pain “the fifth vital sign.” This later led to the 2001 creation by the Joint Commission of a standard requirement that hospitals assess all patients for pain, with “requirements for improvement” if they fell short of meeting the standards, finally removed in 2009. Sam Quinones, in “Dreamland: The True Tale of America’s Opioid Epidemic,” points out that the Porter and Jick letter has been inaccurately referred to in multiple publications as “a landmark study,” and “an extensive study,” and, as of May 24, 2016, a Google search revealed that the letter had been cited 901 times in scholarly papers, not to mention being invoked by countless influential speakers on the topic of pain management, further perpetuating its flawed science.

The three most common causes of chronic pain in the U.S. are low back, neck, and headaches/migraines, with most people affected at multiple sites. There is overwhelming evidence that chronic opioids do not improve quality of life, pain control, or function for these people, compared to other treatments.

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3 Jacobs Harrison, “This One Paragraph Letter may have launched the Opioid epidemic,” Business Insider, 26 May 2016
5 CDC and NCHS data
6 Steinman MA, Komaiko KD, Fung KZ, Ritchie CS, “Use of Opioids and Other Analgesics by Older Adults in the United States, 1999-2010,” Pain Medicine, 2014
routinely used for a nonfatal condition that kills patients so frequently,”9 and yet they continue to be prescribed and consumed in massive quantities. In what other class of drugs would such a poor efficacy/safety profile be tolerated in the practice of evidence-based medicine?

The first completed, randomized, controlled trial (Strategies for Prescribing Analgesics Comparative Effectiveness, aka SPACE) proving the superiority of pain control by non-opioids over opioids for chronic back pain and osteoarthritis was done at the Minneapolis Veterans Administration during the period spanning June 1, 2013 through January 31, 2017, and presented at the annual meeting of the Society of General Internal Medicine in Washington, D.C. on April 21, 2017. The study concluded that, of 240 veterans treated over 12 months, pain intensity improved more in the non-opioid group, while those in the opioid group had more side effects.10

Even more recently, a randomized clinical trial in two urban Bronx Emergency Departments studied 411 patients, ages 21-64, presenting with moderate to severe acute pain. They found no difference in pain relief at two hours between the opioid group and the group who received ibuprofen plus acetaminophen—(jamanetwork.com/journals/jama/article-abstract/2661581). This same finding, differently illustrated, had been previously presented in Cochrane reviews11, 12, 13, 14, which reported that in order to see a 50% reduction in acute pain, one 15 mg. oxycodone was effective in only 20% of study participants, vs. 65% effectiveness in those given one Advil® plus one Tylenol®.

![Percent of People with 50% Pain Relief](image-url)

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A recent review in the Journal of the American Dental Association also concluded that ibuprofen and acetaminophen in combination is the best treatment for dental pain.\(^{15}\)

Despite all of this information, we continue to prescribe opioids first line for acute and chronic pain.

It is a fact, not generally known to the public, that doctors, nurse practitioners, and physician assistants—all now unfortunately equated under the umbrella term, “providers”—receive no formal training in pain management during medical school and residency. They have been left to “learn on the job” from other practitioners, and, for those motivated to do so, continuing medical education (CME), which, as we have just described, has itself been plagued by bias in this area. The result has been a vast array of competency in the management of pain, leaving providers susceptible to such non-evidence-based suggestions as those perpetuated by the Porter and Jick letter, as well as those who stand to profit from the sale of these drugs.

In the course of addressing this issue over the years, we have spent an enormous

\(^{15}\)Moore P.A., “Combining ibuprofen and acetaminophen for acute pain management after third-molar extractions,” Journal of the American Dental Association, 2013, 144 (8), 989-908

The problem is, that the average American does not look at Cochrane reviews, read medical journals, or attend the Society for General Internal Medicine conference. Therefore, we need a way to effectively and assertively market this information to them.
amount of time, money, and effort attempting to educate, suggest, and influence providers to prescribe opioids more safely, limit quantities, and check centralized prescription databases prior to prescribing, with little impact on the end result. Conversely, there has been no widely employed effort to re-educate providers—and just as, but perhaps even more importantly, the public—about the proper treatment of pain.

**Examples of the problem abound:**

- **Dentists and oral surgeons** who routinely prescribe 40 Vicodin to teenagers after wisdom teeth extraction. According to Dr. Robert K. Thielen, DDS, MBA, former National Dental Director for Aetna Medicaid, dentists are the highest prescribers of opioids for adolescents and young adults ages 10 to 19. In many cases, this represents their first exposure.

- **Surgeons** routinely ordering IV opioids post-operatively for pain without first asking the patient about a history of substance use disorder or discussing their possible preference for an alternative—and subsequently providing a prescription for opioids at discharge “just in case.”

- **Busy primary care, ED, or urgent care** providers, for whom time constraints and compensation are dependent on the results of patient satisfaction surveys make prescribing the drugs easier than having the conversation about why they’re not appropriate.

Americans—both healthcare providers and the public—have been acculturated to believe that opioids are the best treatment for all but the most minor pain. This is exemplified by the fact that, despite accounting for only 5% of the world’s population, the U.S. utilizes 99% of its hydrocodone and 80% of the global opioid supply.¹⁶

More recently, in an effort to step up our response to the problem through legislation, new requirements have been imposed by many states, among them, seven day or five day first fill limits for “opioid naïve individuals” (typically defined as those without a documented prescription claim in the prior 60 days). In March, 2016, the CDC first released recommendations for prescribers to voluntarily limit first prescriptions for acute pain to three days, though the final guideline settled on seven. The American Medical Association and others argue, not incorrectly, that the decision of how much to prescribe should be between doctors and their patients, not lawmakers, and call such legislation a “one size fits all, blunt approach.”¹⁷ It seems intuitive that quantity limits will likely do more to serve the important function of reducing the pill surplus contributing to intentional and unintentional diversion—since over half of people using prescription opioids for non-medical purposes got them

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¹⁷ Dr. Patrice Harris, chairwoman of AMA’s committee on opioid abuse, Stateline Legislative Review, 2016
from friends or family — than they will to prevent indoctrination, which we know requires significantly less than seven days of use. Either way, while the intention is admirable, the point is still being missed.

CDC studies show that the likelihood of dependence increases exponentially after only four to five days of opioid exposure, and as many as 6% of those who received only a single dose were still on the medication a year later.\(^{19}\) In addition, anecdotal reports show us that

in the face of first fill limits, some providers are citing the regulation as the reason for their reduced prescribing in a “good cop/ bad cop” (“I would, but I’m not allowed to…”) sort of scenario in their discussions with patients, rather than educating them on what the evidence shows us about their inferiority in treating pain. The ability to educate, of course, assumes that the providers are armed with the correct information and tools to help them guide the discussion.


The public interpretation of all this is likely to be that governmental and insurance company regulations are acting as a barrier to their getting the medication they still believe is the most effective treatment for their pain—because we have not done enough to educate them otherwise. This will do little to help the problem and will more likely only serve to further drive those already addicted to alternative sources (like heroin) while perpetuating the demonization of regulatory entities, despite our most noble intentions.

So, if sending messages about what NOT to do have been ineffective, what should we do instead? It is our responsibility as guardians of quality healthcare and the public interest to expose the truth about what the data shows us concerning the inferiority of opioids to non-opioids for the management of both acute and chronic pain. We must focus on educating both providers and the public regarding how to better manage pain, in an evidence-based manner, with the fewest possible risks. To do this, providers need an understanding of the different types of pain (e.g., nerve, bone, muscular, visceral, dental) and the best way to treat each, rather than a knee jerk response limited to minor (OTC pain meds and prescription NSAIDS) vs. moderate/severe (opioids). We must also address the problem of those already dependent on these drugs, regardless of whether their introduction was via prescribed medications or “street-obtained” from the start, making no judgment, but focusing on removal of the stigmata that stand in the way of their seeking treatment.

A single dose of liposomal bupivacaine (FDA approved October, 2011), when infiltrated into a surgical site at closure, is associated with both pain relief for 72 hours and a 45% reduction in total opioid consumption at 72 hours. This medication has the potential for great utility in the dental field for use in wisdom teeth extraction or root canals, as well as in the general surgical setting.

(Formulary, 2012; 47:212-226)
Three main scenarios must be considered when formulating potential solutions to this problem:

1. People initially treated for pain whose pain has now resolved, but who remain dependent/addicted.

2. Those addicted in the absence of preceding therapeutic use.

3. People treated with opioids who continue to have pain. This group requires a multi-disciplinary approach comprised of both holistic pain management and simultaneous substance abuse treatment.

Each of these scenarios could be the subject of its own paper, and so will not be the focus of this one, except to acknowledge the need to address them individually.

In response to the void we’ve identified above, left by previous organized responses to this issue, Mercy Maricopa Integrated Care and Mercy Care Plan of Arizona are proud to champion a unique approach in the form of a campaign combining academic detailing with market saturation, turning the principles used by Arthur Sackler—the psychiatrist who propelled Valium to the first billion-dollar drug in the 1960s-70s by pioneering the practices of drug detailing and direct marketing to the public, proving “that amazing things can be achieved with direct selling and intensive direct advertising” 21—on their ear, in a satisfyingly ironic twist.

If at First You Don’t Prescribe, and the companion booklet, Power Over Pain, are the centerpieces of a comprehensive strategy aimed at providing a different kind of education for both providers and the public on the treatment of pain. These documents challenge the only modestly effective “toolkit” and “guideline” approach with bite-sized, graphically-presented, myth-dispelling information about the lack of evidence-basis for management of most varieties of acute and chronic pain with opioids. In addition to background information on opioids and their mechanism of action, topics include:

- Why start opioids at all? When are they appropriate?
- The various types of pain, with information about why opioids are not effective for most, along with suggestions for more effective, non-opioid options.
- Non-drug alternatives.
- The importance of screening for and recognizing concomitant PTSD.
- Considerations for providers if opioids are chosen as the best option.
- Discussion of what NOT to do (e.g., abandon/"fire" patients, treat withdrawal with more opioids, etc.)


If At First is meant to be used as a framework for “detailing” during site visits with high opportunity medical practices by our medical directors and clinical pharmacists. We discuss and present evidence dispelling the common myths noted above. The booklet also serves as “leave behind” material, in true detailing fashion, along with other reminder items:

- Pill-shaped stress balls emblazoned with the message: “Think before you prescribe.”
- A magnet reminder of Do’s (Think before you prescribe, educate yourself, help patients wean safely and humanely, and partner with patients to explore self-management and options for support) and Don’ts (Don’t abandon/"fire" patients when they need you most and don’t refuse to accept new patients due to a chronic pain diagnosis).
- Information about subscribing to Project ECHO®, a national learning community of colleagues and peers that combines biweekly evidence-based videoconferencing with didactic and case presentations. This program is further enhanced by E-consult, which provides a secure platform whereby the provider can consult with a pain management specialist. E-consultation has been proven to improve healthcare outcomes, reduce the stigma of patients being referred to pain management, and improve access to specialty care for those in rural settings.

The first wave of targeted providers for If At First are dentists, oral surgeons, primary care, urgent care, emergency department, and general surgeons (targeting post-op pain management and prescribing at hospital discharge). In addition to face-to-face detailing, we intend to disseminate the booklets in partnership with agencies with regulatory power to effect change, such as specialty boards, Joint Commissions, state hospital and healthcare associations, professional associations, other health plans and health systems, and healthcare academia (in medical, nursing, dental, and pharmacy) for promotion of best practices.

Most critical to the success of these efforts is the heretofore missing link: an effective campaign to increase public awareness about the truth concerning treatment of pain with opioids. Power Over Pain was created to answer this current void. Like its provider-facing companion, this booklet is written in an easy to digest, user-friendly format that will not overwhelm the reader, but, rather, focuses on practical information.

22 According to Veterans Affairs, approximately 15-35% of people with chronic pain have PTSD and only 2% of those with PTSD do not have chronic pain. This population is largely under-identified, but would be picked up with proper screening (which should be done on ALL patients prior to initiating opioids). Helpful risk assessment tools are ACE, BPI, GAD 7, PHQ 9. These could be done by the patient with the help of a nurse or MA prior to the doctor entering the room.
Our goal is to make *Power Over Pain* a ubiquitous presence in waiting rooms in the ED, urgent care, hospital rooms, and doctors’ and dentists’ offices. In addition to being informative, *Power* serves the dual purpose of assisting busy providers by effectively beginning and supporting the conversation about why opioids are not the first line treatment for pain, in answer to the very real barrier of time management physicians often cite as a reason for not broaching the topic. The booklet could be given to the patient at check-in when pain is the presenting symptom, or by the physician prior to making treatment recommendations. The provider could begin the discussion, allow the nurse or medical assistant to go through the booklet with the patient while the provider moves on to the next appointment and returns if needed to answer questions.

Because repetition plays such an important role in education, a crucial element in this effort involves the support of a robust marketing campaign. The centerpiece of this involves social media saturation with a collection of 15-second videos recorded by individuals in recovery (i.e., key influencers). They will be combined in a loop that will be available to play in doctors’ and dentists’ waiting rooms, hospital EDs, urgent cares, and closed-circuit televisions in other settings.

The concept of disruption is widely known in the business community as the key to commanding the public’s attention in this era of sensory overload. It’s time we took advantage of this principle in the medical arena as well if we expect to move the needle (both literally and figuratively) in the right direction. We can never be too busy to do the right thing for our patients in pain, when we know the alternative potentially places them at risk for the devastating effects of substance abuse.

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Now, more than ever, education is power. Let the next prescription you write be one for change.