A Dose of Reality: The Need for Continuing Education to Combat Prescription Drug Overdose in New Mexico

EXECUTIVE SUMMARY

New Mexico (NM) is the fifth largest state in the United States (US), sharing borders with Texas, Colorado, and Arizona. NM’s population of approximately two million people is almost half Latino or Hispanic and about 40% Catholic. The state’s main income comes from producing minerals like uranium and manganese ore. The political climate has been routinely Democratic, though the leaders of the Health Committee in the House of Representatives are Republican.

Health insurance exchange programs for NM are found in the BeWellNM marketplace. NM has high rates of uninsured individuals and one of the highest poverty rates in the country. To qualify for Medicaid Expansion in NM under the Affordable Care Act (ACA), an individual must make under 139% of the federal poverty level.

NM is also struggling with increasing rates of prescription painkiller overdoses (Figure 1). This is a nationwide issue: The number of prescriptions for opioids in US quadrupled from 1999 to 2013, as did the number of overdose deaths (Figure 1). Each day, approximately 44 people die from opioid overdose in the U.S. (Figure 2). In 2013, more than 16,000 people died from prescription painkillers (Figure 3). Also in 2013, around two million Americans over the age of 12 reported opioid abuse or dependence on prescription painkillers. Each year, an estimated $72 billion is spent on medical costs related to opioid abuse, an amount similar to that of treating chronic conditions like HIV or diabetes (CDC, 2015).

Drug overdose death rates in NM have risen over the last decade, reaching #2 nationally in 2014 with 24.8 deaths per 100,000 people. Opioid sales increased by 131% within the state between 2001 and 2010. Prescription drug overdose has overtaken that of illicit drug overdose, with 54% of drug overdose deaths between 2009 and 2013 resulting from prescription drugs and 14% involving a mixture of prescription and illicit drugs. In NM, the age group with the highest percentage of nonmedical use of pain medicine is 18-25 years with 11.6%; however, the percentage among both the 12-17 and over 26 age groups were also above the national averages.
(8.5% and 4.2% respectively). In 2011, 11.3% of 9-12th graders in NM admitted to using
painkillers to get high, while 20.2% admitted to using prescription drugs without prescriptions.
In NM, $193 million is spent on hospital care costs from opioid abuse. (DrugFree, 2015).

Both federal and state governments are working to curtail this growing problem. In 2012,
NM received $150,896,974 in federal grants to reduce drug availability and misuse. In
September 2015, NM received CDC funding of $750,000 to $1 million over the next four years
to execute and evaluate prevention strategies to improve safe prescribing practices and prevent
prescription drug abuse. NM is one of many states with Prescription Drug Monitoring Programs
(PDMP). Though NM’s relatively high percent of uninsured individuals (21.9% in 2013,
compared to 16.8% in the US) may be falling with the ACA, it could be contributing to the
uncontrolled illegal prescription drugs trade. Additionally, NM shares 180 miles of Mexico’s
border and is vulnerable to international drug trafficking. Because prescription drugs in NM are
available through means other than a healthcare provider, a successful campaign cannot rely on
prescriber intervention alone. Comprehensive education for providers, teachers, and students will
be crucial in alleviating this epidemic.
Figure 1. http://www.cdc.gov/drugoverdose/data/index.html

Figure 2. http://www.cdc.gov/drugoverdose/epidemic/public.html
Figure 3: http://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates
SOLUTION: EDUCATION AT EVERY LEVEL

Our proposed policy consists of a set of interventions targeting education at six prevention levels. These interventions complement one another to achieve the common goal of decreasing prescription drug abuse and overdose in NM by targeting: individual knowledge and skills, the community, providers, coalition-building, organizational practice, and policy and legislation. Our six proposed interventions include:

1. Provide topic-specific continuing education for providers
2. Implement early and later prevention programs in middle and high schools
3. Provide patient-centered chronic pain tool-kits in multiple community settings
4. Increase the number and strength of Drug-Free Communities (DFC) coalitions
5. Institute Drug-Free Awareness Week via the New Mexico Public Education Department
6. Mandate provider education via the New Mexico Medical Board

Intervention #1: Continuing Education for Providers

Continuing education (CE) for healthcare providers, teachers, school nurses, and counselors will decrease prescription opioid-related deaths in NM by reinforcing safe prescribing practices. These mandatory CE courses can be modeled after similar programs in other states. In 2007, Utah implemented a two year program that focused on educating physicians on safe opioid prescribing practices (Cochella, 2011) with the goal of diminishing prescription overdose deaths in the state. Primary care physicians were educated on the recommended “six practices” for safe prescribing, including: 1) starting doses low and increasing slowly, 2) obtaining sleep studies for all patients on moderate/high doses of opioids, 3) obtaining EKGs for methadone dose increases, 4) avoiding sleep aids and benzodiazepines with opioids, 5) avoiding long-acting opioids in acute pain, and 6) educating patients and their families about risks. The number of unintentional prescription drug overdose deaths in Utah dropped 14.0% from 2007 to 2008 (Cochella, 2011). NM would benefit from a similar physician education program with similar goals.

New Mexico's CE curriculum should include assessing patients experiencing or at risk for prescription drug abuse, educating patients about alternative pain management, and effective
PCMP use and safe prescribing measures (Frank, 2015). Additionally, school nurses and counselors can be trained on presenting information to help prevent substance abuse in school-aged students (Kulis, 2005).

**Projected Outcomes**

In 2007 alone, New Mexico spent $890 million due to prescription opioid abuse, dependence, and misuse (New Mexico Department of Health, 2015). Mandating relevant CE for providers can address this epidemic and reduce excessive costs, while providers can benefit from CE that keeps them current on NM's trajectory and on best-practice addiction and prevention care.

**Strategies for Implementation**

In contemporary healthcare practice, there should be more required opportunities for healthcare providers to learn how to interview individuals regarding substance use history, and how to counsel patients who are prescribed opioid medications. The Office of National Drug Control Policy (ONDCP) and National Institute on Drug Abuse (NIDA) have launched an online learning tool to engage healthcare professionals in such education. NIDA has also developed products such as NIDAMED, which provides user-friendly educational materials to providers via mobile devices. The IHI Triple Aim framework can be used to evaluate the effectiveness of such educational resources according to these goals: 1) improvements in patient experience of care as a result of receiving care from providers who exhibit improved knowledge regarding risks of prescription drugs, 2) improvements in the health of the population in NM regarding reduction in prescription drug use and overdose, and 3) reduction in the cost of healthcare as a result of CE for healthcare providers as a preventive measure that has the potential to reduce healthcare costs (CDC, 2015).

**Intervention #2: Early and Later Prevention Programs in Middle and High Schools**

Both early and later prevention programs are key to combating prescription opioid misuse. The early prevention program will be implemented in schools as mandatory education
for ages 12-18. Education should focus on prevention, modifying risk factors, and establishing support. Targeting these areas at an early stage can provide an effective means of preventing prescription drug use and overdose (Sowa et al., 2014). One model for early prevention comes from The Good Behavior Game, a classroom behavior management method established in 1985-1986 that provided teachers' manuals with a variety of interventions ranging from displaying posters in classrooms with rules for student behavior to rewarding groups of students for exhibiting good behavior.

The later prevention program targets individuals at high risk for prescription drug abuse. High-risk groups would be selected using a screening form administered to all participants of the early prevention programs. Targeting high-risk groups requires collaboration among multiple parties, including parents, students, and their youth influencers (CDC, 2012).

**Projected Outcomes**

The Good Behavior Game has been associated with a significant decrease in drug and alcohol use among intervention groups when studied qualitatively in classrooms across the US and Europe (Kellam et al., 2011). Evidence for the effectiveness for later prevention programs can be seen in the Narcotics Overdose Prevention & Education (NOPE) program as well as in the Overdose Education and Naloxone Distribution (OEND). NOPE provides presentations to various groups in a community, including middle and high school students. It focuses on educating about the dangers of drug abuse and overdose. NOPE is found to have a positive impact on students' knowledge and attitudes (NOPE Task Force, 2011). OEND is a community-based program in Massachusetts that educates high-risk individuals on how to prevent and respond to an overdose and has shown to be cost-effective as well as associated with reduced mortality rates from opioid overdose (Davis et. al., 2014). This model also allows for anonymous participation (Harm Reduction Coalition, n.d).

According to the CDC, New Mexico has a persistently high rate of drug overdose deaths relative to the US average (Figure 4). Through the implementation of a mandatory drug education program in middle schools, NM could work to lower this number significantly. One longitudinal RCT of family- and school-based preventive interventions with Iowa and
Pennsylvania 6th graders showed significant decrease in prescription opioid misuse by the 12th grade compared to controls, 22.1% vs. 27.8%, respectively at p=0.019 (Spoth et. al., 2013). New Mexico can make use of evidence supporting success in other parts of the nation and aim for similar results.

![Drug Overdose Death Rates](source)

**Figure 4**

**Strategies for Implementation**

The following strategies are suggested for strengthening individual knowledge and skills:

- Request funding at a price quote similar to funding needed to implement and maintain programs such as N.O.P.E.
- Using these funds, establish the following programs:
  - Early prevention: Mandatory education program targeted at youth in middle and high school, focusing on identifying and coping with behaviors associated with prescription drug overdose.
Later prevention: Create a screening tool to identify the group of highest-risk individuals among those who received the early prevention intervention. These students will be placed in a 'high risk' group and must participate in mandatory education that focuses on consequences of prescription drug overdose and ways to seek assistance.

To evaluate the effectiveness of these programs, current prescription opioid users in each of these age groups interventions will be compared at set time intervals. Cost and funding sources are important components of implementation; to maximize efficiency, school staff will teach the program while additional costs will be used for training, materials, and student incentives. The initial five-day training for facilitators costs $500/day for six Promising Strategies to Reduce Substance Abuse trainers, plus trainer travel and expenses. A recommended one-day follow-up training every six months costs $750/day plus trainer expenses. The curriculum alone costs $139 (Reno, Holder, Marcus, & Leary, 2000). These estimates come from a similar program implemented in Texas called “Reconnecting Youth.”

**Intervention #3: Chronic Pain Tool-Kits to Promote Community Education**

Community education targeted at chronic pain patients can prevent accidental overdose in this population, the largest percentage of opioid users. To intervene at the community level, patient-centered chronic pain tool-kits should be introduced and distributed to healthcare providers, as well as other community organizations with which patients interact, including: community mental health services, libraries, AA and NA groups, needle exchange programs, and drug treatment facilities. Current research supports the efficacy of a multidimensional, alternative pain management approach in decreasing opioid use for chronic pain. These dimensions include interventions such as acupuncture, cognitive-behavioral therapy, meditation-relaxation, and twelve-step programs (Savage, 2013; Banth & Ardebil, 2015). In recent years, the American Chronic Pain Association (ACPA) has developed chronic pain awareness tool kits for nurses and pharmacists to better help patients manage chronic pain (American Chronic Pain Association, 2015) that include complementary and alternative therapies. Building on this model, these patient-centered tool kits will incorporate information
about chronic pain, opioid use and risks, Naloxone, and alternative pain management strategies, as well as referrals to locally accessible resources such as low-cost acupuncture and massage clinics, hotlines and chat lines, meditation and mindfulness training opportunities, research studies that offer treatment, low-cost therapy, and support groups.

**Projected Outcomes**

Using chronic pain tool-kits is consistent with the American College of Physicians’ key policy recommendations of expanding access to effective treatment options and reducing the risk of prescription drug overdose, and with the FDA opioid task force’s recommendation of patient education. It is also supported by evidence from successful community education program Project Lazarus, a program that incorporated chronic pain tool-kits designed in response to significant levels of drug overdose in North Carolina (Albert, 2011). This program’s tool-kits for chronic pain management included pain management guidelines, opioid risk assessment tools, sample patient-prescriber agreements, and patient education materials (Albert, 2011). In Wilkes, North Carolina, the community education efforts resulted in a 33% reduction in opioid overdose-related deaths from 2008 to 2009 (Albert, 2011). By implementing similar strategies, the use of patient-centered chronic pain tool-kits in NM can be expected to decrease the number of written prescriptions, the number of individuals dependent on opioid pain medications, and the number of overdose-related hospitalizations and deaths.

**Strategies for Implementation**

Encompassing both print and online materials, the tool-kits will be provided to healthcare providers to distribute to all patients with chronic pain during their healthcare visits and made available through select community resources. Through this initiative, patients will be educated on alternative ways to control their pain to prevent prescription drug overdose. Because the tool-kits include local resources, they also promote coalition-building between healthcare systems and organizations that offer counseling, acupuncture, movement classes, bodywork, and mind-body therapies. The goals of this policy are to help chronic pain patients manage their pain
safely and holistically, to increase the use of alternative pain relief methods, and to change medication-dependent behaviors to prevent opioid overdose.

To measure increased utilization of alternative pain relief services, surveys can be given to patients who seek alternative therapies from the referred organizations, asking about chronic pain, current and past opioid use, and point of referral. Data will be collected on opioid overdose rates in the state before and after the intervention. The number of tool-kits given out by the various service organizations will be tracked to determine how many patients have accessed each resource. These measures can be used as criteria to evaluate a positive impact of the policy.

**Intervention #4: Fostering Coalitions via Drug Free Communities**

Education can be further supported through increasing the number Drug Free Communities (DFC). DFCs are coalitions that provide resources and funding among public and private non-profit agencies. These agencies establish and strengthen ties between federal and state government to support community efforts to reduce substance abuse among youth. Over time, these coalitions will also be able to reduce rates of substance abuse among adults by promoting healthy lifestyles and minimizing factors that promote drug abuse. NM only has seven DFC coalitions. Local problems often require local interventions, and implementing more DFC coalitions across the state will help to alleviate the growing drug problem.

**Projected Outcomes**

Increasing the scope of DFC coalitions has shown significant decreases in prescription drug use according to the 2014 National Evaluations of DFC coalitions. The 2014 evaluation indicated a 21.4% decrease of illicit prescription drug use for middle school aged children and a 14.5%
reduction among high schoolers. Educating the community about prescription opioids helps change youth perceptions and make good decisions, decreasing the likelihood of future use. In these communities, past 30-day use is low, while perceptions of risk, parental and peer disapproval is high. Over the past several years, there has been a reduction nationwide on the use of marijuana, tobacco, and alcohol among high school students that are part of DFCs when compared to non-DFCs. The prevalence of prescription drug use in NM could also follow this pattern in communities with DFC coalitions (Drug-Free Communities Report Program, 2015).

**Strategies for Implementation**

Firstly, more DFC coalitions must be formed in NM. Funding needs to be provided for the teaching and training to make these communities as successful as possible. The Community Anti-Drug Coalitions of America are able to provide this training at the local level. The trainers travel to the community to work with leaders on topics such as strategic planning, evaluation,
cultural competence, and sustainability. Community stakeholders such as the media, religious organizations, business communities, law enforcement, and healthcare providers are required to collaborate in making the DFC coalition effective and operational. These training sessions will help to make both new and pre-existing DFC coalitions in NM more successful (CADCA NAntional Coalition Institute, 2012.)

**Intervention #5: New Mexico Department of Education’s Drug Awareness Week**

To influence change at the organizational level, the New Mexico Department of Education will require that all schools from grade six to undergraduate education will create a drug awareness week each year. The objective of this policy is to interactively educate students about the dangers of prescription drug use to reduce prescription drug use by 15%, based on Utah’s “Use As Directed” program which resulted in a 14% reduction in opioid-related deaths from 2007-2008 (Johnson et. al. 2011). Drug awareness week will incorporate the following criteria:

1. Students will create signs and posters to be hung throughout individual campuses for the remainder of the school year.
2. Interactive lecture led by drug educators on the dangers of illicit and prescription drugs at a school-wide assembly.
3. Students will be assigned to work in groups to manifest creative projects (e.g. arts, humanities, theater) related to opioid drug use.
4. Teachers will facilitate an open discussion with students about drugs with abuse potential.

**Projected Outcomes**

There is much evidence to support the effectiveness of this proposed solution. The partnership for Drug Free Kids found that students that participated in an educational substance abuse training program in middle school were 20-65% less likely to abuse prescription drugs from ages 17-25 than students that did not participate in the program (Drug-Free Kids, 2015).
Educational programs in a peer-based setting have been effective in reducing illegal substance use compared to knowledge-based programs (Faggiano et. al., 2015).

**Strategies for Implementation**

To measure the effectiveness of this policy, adolescents can anonymously self-report their prescription opioid use status through an annual census conducted by individual schools and relayed to the Department of Education. Using criminal records, law enforcement officials can measure the rate of illegal opioid transaction and use and also gather statistics on the ages of those involved in such crimes. Statistics from the Department of Health can be used to determine the number of opioid-related hospitalizations. Population census information can be used to quantify deaths related to illicit and prescription opioid use. These statistics can measure the effectiveness of Drug Awareness Week in schools by determining opioid use levels over time in the adolescent population.

**Intervention #6: New Mexico Medical Board Requirements for Provider Education**

Despite the high burden of prescription opioid abuse and overdose in the US, most medical professionals receive little training on pain management and opioid prescribing. A small number of states have begun to address these shortcomings through legal and regulatory changes, including requiring physicians to receive continuing medical education (CME) on controlled substance prescribing best practices. Legislation recently introduced in Congress would extend these efforts nationally.

At the level of influencing policy and legislation, we propose that the New Mexico Medical Board augments the current policy to require all healthcare providers who hold a DEA registration and license to prescribe opioids to complete 10 CME hours on prescription drug misuse and abuse. CME is a requirement for license renewal, credentialing, and professional privileges. As of August 2015, at least 15 states require that physicians obtain CME in pain management or controlled substance prescribing. Additionally, several states impose CME requirements based on a provider’s licensure type, practice setting and patient characteristics. For example, Georgia requires physicians without a certification in pain management or palliative
medicine and whose opioid pain management patients comprise 50 percent or more of the provider’s patient population to obtain 20 CME hours pertaining to pain management or palliative care every two years. In Ohio, a physician owner/operator of pain management clinics must complete at least 20 hours CME in pain medicine every two years. In order for NM to decrease overdose of opioids, healthcare providers be educated about this issue. Via CME, providers will be better able to detect signs of drug abuse and provide effective care.

Projected Outcomes

Increasing the number of CME hours for healthcare providers will promote safer prescribing practices. In an issue of Annals of Family Medicine, Kiessling and her colleagues found that there is a strong association (and significance) with continuing education hours and population health outcomes. There is reason to believe that with an increased requirement of continuing education hours will come an improvement in patient outcomes and a decrease in mortality rates related to prescription drug overdose. According to The National Center on Addiction and Substance Abuse, only 40% of healthcare practitioners are adequately trained in identifying prescription abuse and addiction. Primary care providers are usually the ones prescribing opioid pain medications, but they do not have the specialized training that is needed for treating pain with controlled drugs. Among practicing primary care physicians, over 47 percent reported that their medical education was unsatisfactory in preparing them to address opioid dependence, and 40 percent reported that it was unsatisfactory in preparing them to address chronic pain. Increasing CME should help to resolve these discrepancies.

While these efforts are relatively new, there is some evidence that CME requirements improve provider knowledge and change behavior. In 2001, California passed legislation requiring physicians to receive a minimum of 12 hours of CME courses on pain control. In a survey of physicians who attended an October 2002 conference to satisfy this requirement, 67 percent of respondents indicated that they “planned to change their practice based on the information they had received.” Four months later, 90 percent of responding physicians, “indicated that they had, in fact, changed their practice based on the CME program.”
**Strategies for Implementation**

According to the New Mexico Medical Board, licensure renewal requires physicians to submit proof of 75 hours of continuing education units every three years. Of these 75 hours, 5 hours must be related to prescribing controlled substances. Currently, nurse practitioners in NM are required to submit proof of 50 hours of approved continuing education units. Of these units 15 must be from pharmacology, of which 5 contact hours must be related to management of non-cancer pain if the NP has a DEA registration. NM requires physician assistants to complete 3 hours of CME on the topic of controlled substance abuse. Implementing an increased requirement of 10 CME hours for all healthcare providers who have the ability to prescribe medications will ensure they are knowledgeable about current issues and trends within prescription opioid abuse, as well as new legislation and policies.

**FINAL SUMMARY**

Providing education across these different levels will help provide better access to care, information on prescription drug overdose, and preventative care. This initiative should significantly help reduce the amount of prescription drug overdoses in NM and promote successful rehabilitation.

Enacting this proposed policy will require strong collaboration between NM’s government, schools, parents, and healthcare providers in order to succeed. To accomplish all of this, we will also need to gain the support of the state legislature, Board of Education, and Medical Board.

With implementation of this comprehensive mandatory education policy, we hope to see higher rates of high school graduation for youth, lower rates of substance abuse during school years and beyond, higher rates of recovery and utilization of alternative pain management, and ultimately a decreased mortality rate overall. Continuing education is economical, effective, and will save lives.
References:


