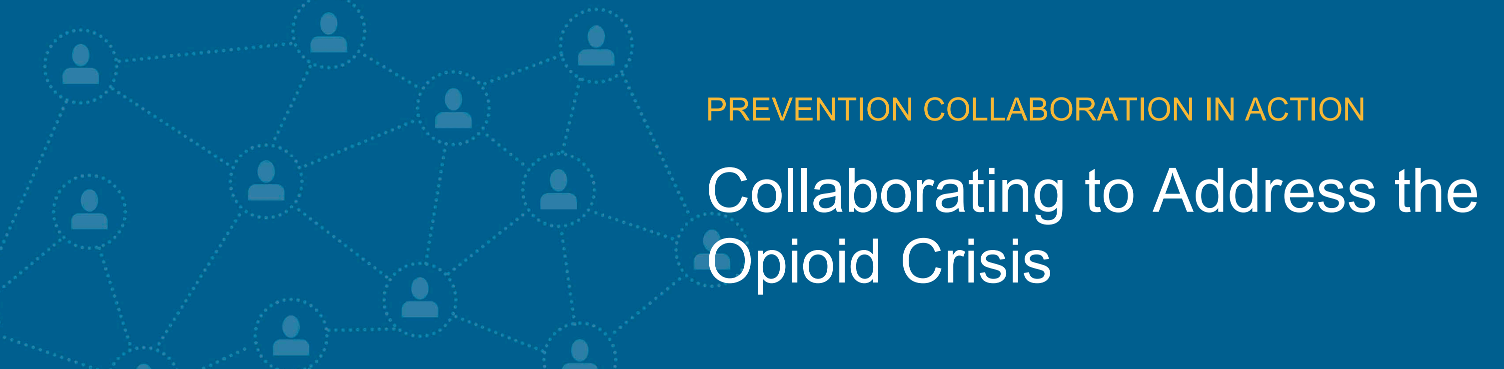

Opioid Overdose and the Role of Prescriber Education

The United States is facing an unprecedented opioid crisis. In 2015, more than 33,000 Americans died from opioid-related overdoses, more than any previous year on record.[1] One of the main factors underlying this crisis is the increase in the nonmedical use of prescription drugs (NMUPD).[2]

A key step towards addressing this public health crisis is working with medical professionals who have the authority to prescribe opioids and other drugs. According to a 2015 National Survey on Drug Use and Health (NSDUH), about one third of people who misused prescription opioid pain relievers received them from a prescriber, and about half received them from a friend or family member.[3] Prescribers can play a key role in controlling the supply of prescription medications by changing their prescribing habits to decrease unnecessary opioid use and educating their patients about the proper use, handling, and safeguarding of opioids.

What is Prescriber Education?

One strategy for preventing overprescribing and ensuring the safe use of prescription opioid pain relievers is to provide education to prescribers. In the context of prescription drug misuse, prescriber education seeks to accomplish one or more of the following, interrelated goals:

Increase prescriber and patient understanding of the benefits and risks of opioids

Raise prescriber awareness of unsafe opioid use and strategies to address it

Expand patient use of alternative treatment options instead of opioid treatment when appropriate

Improve patient access to opioid overdose antidotes and treatment for substance use disorders

Prevention Collaboration in Action was developed under the Substance Abuse and Mental Health Services Administration's Center for the Application of Prevention Technologies task order. Reference #HHSS283201200024I/HHSS28342002T

Why Engage in Prescriber Education?

Prescribers are gatekeepers for, and primary/credible sources of guidance on, prescription opioids. They are uniquely positioned to help maintain legitimate and appropriate access to opioids for patients, promote their safe use, and identify patients at risk for opioid overdose through their own prescribing practices and ongoing patient communications and interactions. Prescriber education can reduce opioid overdose by helping to:

Decrease the supply of prescription opioids.

Prescribers are most people's first point of contact for accessing prescription drugs. From 2000 to 2010, the number of office-based physician visits for pain that resulted in an opioid prescription almost doubled, from just over 11 percent to nearly 20 percent.[4] Educational interventions that help prescribers think critically about their prescribing practices and/or present clear prescriber guidelines can help to reduce the amount of opioids available for diversion (that is, non-medical purposes), as well as the number of people who later develop opioid misuse disorders.

Reduce the demand for prescription opioids.

Due to almost two decades of liberally prescribing opioids to address pain management, many patients meet prescribers with the expectation of receiving an opioid prescription to treat pain, while others go with the intention of obtaining opioids for deliberate misuse (i.e., doctor shopping). For these patients, prescribers can be a key source of information on both the benefits and risks of prescription drugs, including opioids, for pain relief. They are also uniquely positioned to engage in conversations about prescription drugs, identify patients with or who are at risk for opioid use disorders, and refer them to treatment.[5,6,7,8] Prescriber education approaches, such as provider detailing (i.e., peer-to-peer outreach to support the use of best practices), can help to prepare prescribers for these important conversations.[9]

Increase use of alternative approaches to address pain.

Prescriber education can also provide information on appropriate alternatives to opioids. From 2000 to 2010, the number of visits that resulted in a non-opioid pain reliever prescription has remained relatively stable, indicating that prescribers are not prescribing opioid alternatives for pain management to the full extent possible.[4] Evidence suggests that prescribers are eager for education on alternative methods to address pain management.[7,8,10]

Prescriber Education at Work

Existing research indicates that prescriber education shows promise as a strategy to reduce opioid overdose. Below are examples of evaluated prescriber education strategies:

In two United States census regions, continuing medical education for all prescribers on best prescribing practices for buprenorphine were associated with **improved prescriber knowledge and clinical behavior**.[11]

In Washington state, prescribers treating workers receiving disability compensation implemented voluntary prescriber guidelines that **reduced opioid prescriptions by 27% and reduced overdose deaths by 50%**.[12]

In North Carolina, implementation of a multicomponent* prescriber education strategy **resulted in the elimination (from 82% to 0%) of fatal overdoses** caused by a prescription issued by a prescriber participating in the program.[13]

Existing research suggests that prescriber education shows promise for reducing opioid overdose. However, additional research is needed to determine whether prescriber education is an effective means of reducing opioid overdose and which educational approaches are most effective.

Related Tools

For more information on prescriber education strategies, check out these tools from SAMHSA's Center for the Application of Prevention Technologies:

- **Opportunities for Collaborating with Medical Professionals to Prevent Opioid Misuse.** This tool presents examples of state- and local-level opportunities for collaborating with medical professionals across settings to plan and support prescriber education programming.
- **Preparing for Prescriber Education: Getting the Lay of the Land.** This practice-support tool identifies the different agencies responsible for prescribing and distributing prescription opioids in a community.

* The strategy included one-on-one education sessions in pain management ("academic detailing"), continuing medical education sessions on pain management, and promotion of prescription drug monitoring program.

References

1. National Institute on Drug Abuse. (2016). Overdose Death Rates. Retrieved from https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates

2. Cicero, T. J., Ellis, M. S., Surratt, H. L., & Kurtz, S. P. (2014). The changing face of heroin use in the United States: A retrospective analysis of the past 50 years. *JAMA Psychiatry, 71*(7), 821–826. doi:10.1001/jamapsychiatry.2014.366

3. SAMHSA. (2016). Prescription drug use and misuse in the United States: Results from the 2015 National Survey on Drug Use and Health. Retrieved from https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR2-2015/NSDUH-FFR2-2015.pdf

4. Daubresse, M., Chang, H. Y., Yu, Y., Viswanathan, S., Shah, N. D., Stafford, R. S., Kruszewski, S. P., and Alexander, G. C. (2013). Ambulatory diagnosis and treatment of nonmalignant pain in the United States, 2000–2010. *Medical Care, 51*(10), 870–878. doi: 10.1097/MLR.0b013e3182a95d86

5. Gore, M., Tai, K. S., Sadosky, A., Leslie, D., and Stacey, B. R. (2012). Use and costs of prescription medications and alternative treatments in patients with oseteoarthritis and chronic low back pain in community-based settings. *Pain Practice, 12*(7), 550–560. doi:10.1111/j.1533-2500.2012.00532.x

6. Haegerich, T. M., Paulozzi, L. J., Manns, B. J., & Jones, C. M. (2014). What we know, and don't know, about the impact of state policy and systems-level interventions on prescription drug overdose. *Drug and Alcohol Dependence, 145*, 34–47. doi:10.1016/j.drugalcdep.2014.10.001

7. Mathias, M. S., Parpart, A. L., Nyland, K. A., Huffman, M. A., Stubbs, D. L., Sargent, C., & Blair, M. J. (2010). The patient–provider relationship in chronic pain care: Providers' perspectives. *Pain Medicine, 11*(11), 1688–1697. doi:10.1111/j.1526-4637.2010.00980.x

8. Penney, L. S., Ritenbaugh, C., Debar, L. L., Elder, C., & Deyo, R. A. (2017). Provider and patient perspectives on opioids and alternative treatments for managing chronic pain: a qualitative study. *BMC Family Practice, 17*(1), 164. doi:10.1186/s12875-016-0566-0

9. Trotter, D.M., Bateman, B., & Avorn, J. (2017). Educational outreach to opioid prescribers: The case for academic detailing. *Pain Physician, 20*(2S), S147–S151.

10. Dionne, R. & Moore, P. A. (2016). Opioid prescribing in dentistry: Keys for safe and proper usage. *Compendium of Continuing Education in Dentistry, 37*(1), 29–32.

11. Lofwall, M. R., Wunsch, M. J., Nuzzo, P. A., & Walsh, S. L. (2011). Efficacy of continuing medical education to reduce the risk of buprenorphine diversion. *Journal of Substance Abuse Treatment, 41*(3), 321–329. doi:10.1016/j.jsat.2011.04.008

12. Franklin, G. M., Mai, J., Turner, J., Sullivan, M., Wickizer, T., & Fulton-Kehoe, D. (2012). Bending the prescription opioid dosing and mortality curves: Impact of the Washington State opioid dosing guideline. *American Journal of Industrial Medicine, 55*(4), 325–331. doi:10.1002/ajim.21998

13. Albert, S., Brason II, F. W., Sanford, C. K., Dasgupta, N., Graham, J., & Lovette, B. (2011). Project Lazarus: Community-based overdose prevention in rural North Carolina. *Pain Medicine, 12,* S77–S85. Retrieved February 24, 2015, from http://prescribetoprevent.org/wp-content/uploads/2012/11/pm2011albert.pdf