

EDITORIAL AND COMMENT

Opioid Prescribing: Can the Art Become More Science?*Daniel P. Alford, MD, MPH^{1,2}*

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There is controversy regarding the effectiveness and safety of long-term opioid therapy for the treatment of chronic pain. Since the 1980s, a four-fold increase in opioid prescribing has been correlated with a four-fold increase in unintentional opioid overdose deaths and a six-fold increase in substance abuse treatment admissions for prescription opioid addiction.¹ Unrealistic expectations by patients, patients' families and providers regarding the benefits of opioids, and lack of understanding of the potential risks and harms complicate opioid prescribing. While not all patients with chronic pain improve on chronic opioid therapy,² some do. For those patients who do not respond, uncontrolled dose escalation often ensues, all in a desperate yet futile attempt to obtain pain relief.

In this issue of JGIM, Becker and colleagues address important issues for the safe and effective use of opioids in treating chronic pain in primary care.³ They suggest key areas of research aimed at reducing inappropriate prescribing. They begin by characterizing “appropriate ongoing opioid prescribing” and then identify quality improvement priorities, including: 1) developing brief, patient-administered screening checklists that incorporate items related to safety, efficacy and misuse; 2) developing treatment pathways to manage safety-related issues, low efficacy and problems related to misuse; and 3) promoting patient-centered, multimodal treatment plans.

I agree with their characterization that appropriate prescribing should include measures of efficacy, safety and harm; however the devil is in the details. Measures of efficacy, safety and harm are subjective impressions of the patient and the provider, even when assessed using validated “objective” multidimensional scales such as the Brief Pain Inventory.⁴ How much improvement in pain, function and quality of life is enough to say the opioid treatment is efficacious for any given patient? Does a pain score that improves from 9 to 7 on a 10-point scale warrant continued opioid therapy? Is walking an additional block to the store once per week enough functional improvement to warrant long-term opioids? How much improvement in “enjoyment of life” is good enough? How

much loss of control (e.g., unsanctioned dose escalation) is enough to say there is too much risk or harm? How should a provider differentiate the patient who is inappropriately opioid-seeking from the patient who is appropriately seeking pain-relief from the patient with both pain and addiction—they all appear equally desperate for help. This is why “appropriate ongoing opioid prescribing” is so hard to define clinically. The problem is not simply a knowledge-base deficit that requires defining and “measuring” general elements of appropriate prescribing, but rather a skills-base deficit that requires training on how to appropriately assess, interpret and manage these subjective elements (i.e., efficacy, safety and harm) and effectively communicate with patients at the point of clinical care.

The development of feasible ways to monitor safety, efficacy and misuse are important goals. Tools that already exist^{5,6} are too long and are not rigorously validated in primary care settings. However, the development of brief, patient-administered screening checklists will likely not be enough to decrease inappropriate prescribing. How will providers learn how to properly use the “meaningful, actionable information” obtained from the patient checklist? How should the provider determine if lack of benefit is due to opioid resistant pain, opioid tolerance or opioid-induced hyperalgesia? All require different strategies. How should a provider manage the patient who is not benefiting from opioids and has tried and failed numerous non-opioid therapies when there is no pain medicine specialist available to offer consultation? How should the provider adequately manage the patient with suspected opioid misuse and possible addiction when there is no addiction medicine specialist available to offer consultation? Unlike other chronic diseases where specialists are available to co-manage complex cases, currently there are not enough pain⁷ and addiction medicine⁸ specialists. Therefore, primary care providers are often left to manage some of their most complex patients without adequate support from experts. Primary care providers need access to high quality pain and addiction medicine experts. While pain⁹ and addiction¹⁰ specialty societies address these workforce shortages, creative solutions such as using remote healthcare technology to deliver pain and addiction services (i.e., telemedicine¹¹) should be developed and evaluated.

Current treatment pathways, algorithms and protocols for safe opioid prescribing could benefit from refinement, but implementation is challenging. In order to make treatment pathways and decision support available for point of care

use, they must be integrated into electronic health records in a way that providers can use them in the exam room. Patients' unrealistic expectations and beliefs about opioids will complicate the use of treatment protocols. They often have strong opinions about suggested treatment plan changes, especially when it involves discontinuing opioids. The best treatment pathways will be of no use if providers aren't comfortable having the difficult and sometimes confrontational "conversations" with patients over opioid therapy. Conversations where the provider is concerned that the patient is addicted while the patient is convinced that they need an increase in their opioid dose will certainly be emotional. This is very different than changing treatment plans for other chronic diseases. It is less about algorithms for preventing and managing opioid withdrawal and more about mastering effective communication skills.

While a "patient-centered" approach is always preferred, there are times in managing patients with opioids for chronic pain where the provider needs to take a "provider-centered" approach, which may threaten the therapeutic alliance. The provider and patient may need to "agree to disagree" on changes to the treatment plan. Ultimately, it is up to the provider to determine what is safe and effective for any given patient. While transparent communication leading to a patient-centered approach is important, it only goes so far when a patient who has chronic pain may be addicted and "drug seeking". The addicted patient, by the nature of their addiction, will likely have a stronger relationship with the drug of abuse than with their provider. Patients who are convinced that the opioid is not working because they need a higher dose will be resistant to the provider's decision to taper opioids due to lack of benefit or increased harm.

Becker and colleagues³ have suggested a useful research agenda for evidence-based strategies to reduce inappropriate prescribing. However, many of the complexities and challenges of opioid prescribing are nuanced and involve assessing and managing subjective benefits, risks and harms and being skilled in patient communication strategies.¹² While we wait for improvements in the "Science" of pain medicine, including safer and more effective treatments, improved evidence-based

clinical tools and access to competent pain and addiction specialists, we must ensure that adequate training—not just education—is available for all healthcare providers in order to better master the "Art" of safe and competent opioid prescribing.

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REFERENCES

- Centers for Disease Control and Prevention (CDC). Vital signs: Overdoses of prescription opioid pain relievers—United States, 1999–2008. *MMWR Morb Mortal Wkly Rep.* 2011;60(43):1487–1492.
- Noble M, Treadwell JR, Tregear SJ, et al. Long-term opioid management for chronic noncancer pain. *Cochrane Database Syst Rev.* 2010;(1):CD006605.
- Becker WC, Fraenkel L, Kerns RD, Fiellin DA. A research agenda for enhancing appropriate opioid prescribing in primary care [published online ahead of print April 9 2013]. *J Gen Intern Med.* 2013. doi:10.1007/s11606-013-2422-4.
- Tan G, Jensen MP, Thornby JI, Shanti BF. Validation of the brief pain inventory for chronic nonmalignant pain. *J Pain.* 2004;5(2):133–137.
- Passik SD, Kirsh KL, Casper D. Addiction-related assessment tools and pain management: Instruments for screening, treatment planning, and monitoring compliance. *Pain Med.* 2008;9:S145–S166.
- Breivik H, Borchgrevink PC, Allen SM, et al. Assessment of pain. *Br J Anaesth.* 2008;101(1):17–24.
- Breuer B, Pappagallo M, Tai JY, Portenoy RK. U.S. board-certified pain physician practices: Uniformity and census data of their locations. *J Pain.* 2007;8(3):244–250.
- Rasyidi E, Wilkins JN, Danovitch I. Training the next generation of providers in addiction medicine. *Psychiatr Clin North Am.* 2012;35(2):461–480.
- Fishman SM, Young HM, Lucas Arwood E, et al. Core competencies for pain management: Results of an interprofessional consensus summit [published online ahead of print April 11 2013]. *Pain Med.* 2013 doi:10.1111/pme.12107.
- O'Connor PG, Nyquist JG, McLellan AT. Integrating addiction medicine into graduate medical education in primary care: The time has come. *Ann Intern Med.* 2011;154(1):56–59.
- American telemedicine association. <http://www.americantelemed.org/>. Accessed April 24, 2013.
- Nicolaidis C. Police officer, deal-maker, or health care provider? Moving to a patient-centered framework for chronic opioid management. *Pain Med.* 2011;12(6):890–897.