## THE LEONARD DAVIS INSTITUTE of HEALTH ECONOMICS



### A Randomized Trial Testing the Effect of Narrative Vignettes Versus Guideline Summaries on Provider Response to a Professional Organization Clinical Policy for Safe Opioid Prescribing

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**KEY FINDINGS:** Narrative vignettes outperform standard summaries in promoting engagement with opioid prescription guidelines among a national sample of emergency physicians.

#### THE QUESTION

Responding to the challenge of treating pain during a prescription opioid epidemic, the American College of Emergency Physicians (ACEP) published an evidence-based guideline for opioid prescribing. But engaging practitioners around clinical guidelines is a difficult task. Physicians use narrative sources to learn about health information, but most programs for disseminating clinical recommendations to providers use summary methods.

This study, led by LDI Senior Fellow Zachary Meisel, tests the use of narrative vignettes to disseminate guidelines to emergency physicians and to get this group to engage with clinical evidence. How do stories describing opioid prescription dilemmas perform against traditional guideline summaries?

#### THE STUDY

All physician ACEP members were randomized by state of residence to receive alternative versions of the Emergency Medicine Today newsletter by email. During the 9-week study period, 21,226 people received the newsletter, which varied in only one respect: how it presented information on the ACEP guideline. The intervention group received a newsletter with one of four vignettes, each describing

physicians using and acting on a guideline recommendation. The control group received a newsletter with descriptive text about the guideline. Both versions had links to the complete vignette or text, as well as to the full ACEP clinical policy and a web site providing assistance with prescription drug monitoring program enrollment. See the example newsletters below.

#### Stories from ACEP Physicians

"It's the same damn pain it always is, just worse. I just want my pain meds."

It was late on a Friday afternoon, and the waiting area was filling quickly. When Dr. Edelman came into the room, the patient was lying in the dark. He refused to sit up, gruffly mumbling that he needed something for the pain in his back. Click here to read more

Click here to see the ACEP Clinical Policy on Opioid Prescribing

Click here to get your state's PDMP

#### **ACEP Clinical Policy on Opioid Prescribing**

ACEP has published a clinical policy that deals with critical issues in prescribing of opioids for adult patients treated in the ED. The critical recommendations addressed in the clinical policy include... Click here to read more

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Vignettes were based on real stories gathered from interviews with emergency physicians, and generated using established techniques in narrative communication. The authors compared the intervention and the control by analyzing the percentage of subjects who visited any of the web pages embedded in the newsletter, and the odds of any one physician visiting these web pages during the study.

#### THE FINDINGS

The narrative and control groups were equally likely to open the newsletter, but physicians randomized to the narrative group were significantly more likely to take the next step and visit one of the linked web pages. Counting each physician only once during the study period, there were 509 'unique visitors' to the web sites in the narrative group, compared to 173 in the control group (4.8% versus 1.6%). After adjusting for state of residence, physicians in the narrative group were three times as likely to visit any of the guideline-related Web sites as the control group. The narrative vignettes not only engaged physicians at levels higher than the text summary, but also outperformed national marketing benchmarks for e-mail 'click engagement' campaigns.

#### THE IMPLICATIONS

Emergency departments are among the top sources of opioid prescriptions for patients under 40. In the current prescription opioid epidemic, it is more important than ever to ensure best-practice in physician prescribing. Clinical guideline adoption has historically been very low, so although the results of this study are modest, its findings are valuable for future guideline dissemination efforts.

The absolute difference between the narrative and control newsletters, as measured by unique web visits, was only 3.2%. However, the authors point out that this finding, if applied to the large number of ACEP members regularly receiving the newsletter, would mean that 680 additional physicians would read or open the guideline, or indicate an intention to pursue one of its recommendations.

Clinical guidelines are only as effective as they are understood and used. Reach and engagement with guidelines

has been identified as a necessary first step to outcomes such as adoption and implementation. Although the narrative prompted more providers to look at the guidelines, the frequency was still low and further study is needed to show any clinical impact. This study was unable to determine whether the physicians in either group - narrative or control - were more likely to change how they practice. Also, because of limitations in the data on the subjects, the authors could not examine whether sex, experience level, or other individual characteristics modified the effect of the intervention.

Meisel ZF, Metlay JP, Sinnenberg L, Kilaru AS, Grossestreuer A, Barg FK, Shofer FS, Rhodes KV, Perrone J. <u>A Randomized Trial Testing the Effect of Narrative Vignettes Versus Guideline Summaries on Provider Response to a Professional Organization Clinical Policy for Safe Opioid Prescribing.</u> DOI: 10.1016/j.annemergmed.2016.03.007. Annals of Emergency Medicine, April 2016

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Zachary Meisel, MD, MPH, MS, is an Assistant Professor in Emergency Medicine at Penn Medicine. His research focuses on how people decide to use emergency care resources, such as ambulance care. He

studies ways to improve the translation of research evidence, particularly for prescription opioids. He directs the Policy and Dissemination core for the NIDA funded Center for Health Economics of Treatment Interventions for Substance Use Disorder, HCV, and HIV. He also studies how written narratives can be used to improve the way patients, doctors and policymakers make decisions about health, particularly during medical emergencies. He has written for Time.com and Slate.

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