Naloxone Counseling for Harm Reduction and Patient Engagement

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Presentations

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INTRODUCTION

The notion that pain should be considered the fifth vital sign became popularized in 1999 and was subsequently incorporated into standards enforced by The Joint Commission.1 Over the following decade, both opioid prescribing and opioid overdose deaths quadrupled in the United States.2 In 2009, drug overdose deaths surpassed motor vehicle crashes as the leading cause of injury death.3

Naloxone, an opioid-antagonist, is the drug of choice for reversing acute opioid overdose. From 1996–2010, 48 overdose prevention programs distributed naloxone to 53,032 people with 10,171 overdose reversals reported.5 Data analyzed by the San Francisco Department of Public Health indicates that one life is saved for every 36 naloxone kits distributed.6 However, a recent survey of primary care providers demonstrated only 33% recalled receiving education about the use of take-home naloxone and only 8% had ever prescribed it.7

The UPMC St. Margaret Family Health Centers are each designated as Level-3 Patient-Centered Medical Homes by the National Committee for Quality Assurance. As training sites for physicians, pharmacists, and social workers, these health centers are positioned to implement interprofessional quality improvement projects that deliver patient-centered services while educating future primary care providers. In February 2014, an opioid harm reduction intervention utilizing naloxone was initiated across the three sites. The aims of this project were to increase naloxone prescribing, decrease opioid use, enhance provider satisfaction, and prevent opioid overdose deaths.

METHODS

A naloxone counseling intervention was implemented utilizing a naloxone outreach letter designed with input from health center providers (family physicians, clinical pharmacists, and social workers). The letter was integrated into an electronic health record, enabling providers to either mail it to patients’ homes or print copies for in-person discussions. An electronic order set was developed to include an order phrase for naloxone with a nasal atomizer, applicable
diagnosis codes, urine drug screen orders, and the controlled substance policy. Intranasal
naloxone kits were assembled for dispensing to patients free-of-charge from each health center.
The UPMC St. Margaret Institutional Review Board approved this project.

Patients were identified as high-risk if they admitted to past illicit opioid use or required
opioids for chronic pain. This included patients receiving opioid maintenance therapy with
methadone or buprenorphine. Specific prescription opioid features of concern for overdose were
described during staff training sessions, but providers were empowered to use clinical judgment
when determining patient risk. Clinical pharmacists provided education about the naloxone
counseling intervention before implementation and periodically thereafter. Clinical pharmacists
demonstrated and discussed naloxone administration with patients and caregivers. Patients and
resident physicians were surveyed after the intervention to assess their attitudes.

RESULTS

From February 1, 2014 through May 31, 2015, 71 outreach letters were mailed or printed,
and 97 naloxone kits were dispensed. Of the kits dispensed, 60% were prescribed for illicit opioid
use, 36% were prescribed for chronic pain requiring opioids, and 4% were prescribed to
concerned third parties as allowed under Pennsylvania law. Five successful opioid overdose
reversals were reported to health center providers.

Responses from the 22 resident physicians who completed the post-implementation
online survey indicated improved satisfaction caring for patients requesting opioid refills [Table
1]. Responses from 15 patients who were reached for the follow-up phone survey indicated high
levels of comfort discussing opioid use with providers [Table 2]. Five patients stated they had
discontinued opioid use altogether.

DISCUSSION

Because caring for patients who request (or demand) opioids can be a frustrating
experience, we hypothesized that using naloxone counseling for harm reduction could transform
these contentious visits into opportunities for education and shared decision-making. The results
of our post-implementation survey of resident physicians support this hypothesis. The tenor of these visits changed as harm reduction counseling medicalized opioid dependence, removing stigma and accusatory language. Provider satisfaction improved as a result, creating a powerful positive feedback loop.

An interprofessional approach was foundational to our success changing provider culture. The naloxone counseling protocol we developed is the result of a rewarding collaboration among providers from the professions of medicine, pharmacy, and social work. Clinical pharmacists took the lead in obtaining naloxone kits and developing teaching protocols. Social workers provided counseling and case management services to address substance use issues. Demonstrating collaborative care to learners from each of these professions prepared them for rewarding futures in primary care.

The most striking example of this initiative’s success and the importance of a team-based model of implementation was a patient who resuscitated the same family member on two occasions. While tearfully recounting the events, he admitted to relapsing into intravenous heroin use. Close communication with his family physician, clinical pharmacist, and social worker resulted in reconnecting him with an opioid maintenance therapy program.

Due to the success of these efforts, a similar counseling and distribution program has been implemented on the UPMC St. Margaret Family Medicine Residency’s inpatient service. To our knowledge, it is the first such project to offer take-home naloxone during hospitalizations. Several physicians in our practice have also signed standing orders authorizing community pharmacists to dispense naloxone to patients and caregivers at their discretion. We continue to search for additional methods to increase patient access to life-saving naloxone.
REFERENCES

1. Department of Veterans Affairs. Pain as the 5th vital sign toolkit. VA Website.

   MMWR 2011;60(43):1487-92.

3. Addressing Prescription Drug Abuse in the United States. CDC Website.

   prescriptions among older adults through direct patient education: the EMPOWER cluster

5. Community-Based Opioid Overdose Prevention Programs Providing Naloxone–United


   patients prescribed opioids in primary care: a qualitative study of primary care staff. *J
### Table 1: Resident Physician Post-Implementation Survey (n=22)

<table>
<thead>
<tr>
<th>Question</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that face-to-face counseling advising naloxone use can improve my satisfaction caring for new patients seeking refills of chronic opioids.</td>
<td>3 (13.6%)</td>
<td>17 (77.3%)</td>
<td>1 (4.55%)</td>
<td>1 (4.55%)</td>
<td>–</td>
</tr>
</tbody>
</table>

SA: strongly agree, A: agree, N: neutral, D: disagree, SD: strongly disagree

### Table 2: Patient Follow-Up Survey (n=15)

<table>
<thead>
<tr>
<th>Question</th>
<th>VC</th>
<th>SC</th>
<th>N</th>
<th>SU</th>
<th>VU</th>
</tr>
</thead>
<tbody>
<tr>
<td>How comfortable do you feel talking to your primary care provider about opioid use?</td>
<td>10 (62.5%)</td>
<td>1 (6.25%)</td>
<td>2 (12.5%)</td>
<td>1 (6.25%)</td>
<td>1 (6.25%)</td>
</tr>
</tbody>
</table>

VC: very comfortable, SC: somewhat comfortable, N: neutral, SU: somewhat uncomfortable, VU: very uncomfortable