Naloxone for Opioid Safety

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Disclosure Information

Gilead, Donated ledipasvir-sofosbuvir, Study, 2016-present
Alkermes, Donated ER-naltrexone, Study, 2014-2015
Fatal Opioid Overdose Rates by Naloxone Distribution in Massachusetts

In California, counties with naloxone programs had an overall slower rate in the growth in opioid overdose death compared to counties without naloxone programs.

Naloxone Cost-Effectiveness

Cost: $421 per quality-adjusted life-year gained

Benefit: 164 naloxone scripts = 1 prevented death

Emerging data suggests that providing naloxone may encourage patients to be safer with their opioid use. If this is the case, the intervention would be cost-saving and 36 prescriptions would prevent one death.

## Predictors of Receiving a Naloxone Prescription Among Primary Care Patients Prescribed Opioids for Chronic Pain (N=1,985)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>aOR</th>
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</thead>
<tbody>
<tr>
<td>Age (5 year units)</td>
<td>0.94 (0.89-1.00)</td>
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<tr>
<td>Log MEQ dose</td>
<td>1.73 (1.56-1.92)</td>
</tr>
<tr>
<td>Opioid-related ED visit in 12 months prior to program</td>
<td>2.54 (1.54-4.18)</td>
</tr>
<tr>
<td>Non-significant parameters</td>
<td></td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Provider type</td>
<td></td>
</tr>
<tr>
<td>Number of PMR patients seen by provider</td>
<td></td>
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</tbody>
</table>

Model also adjusted for patient clinic, number of days elapsed between the earliest data of program initiation (2/1/13) and patient baseline data and number of years elapsed between patient baseline date and subsequent follow-up date.

Expected Opioid-Related ED Visits / Month by Receipt of Naloxone

Behavior Change Tied to Receipt of Naloxone (N=60)

**Positive**
- More cautious about dosing or timing
- Improved knowledge about opioids and overdose
- Reduced polysubstance use
- Not using opioids alone

“I’ve probably been a little more cautious. Just being careful to take the right amount, count the hours...just thinking more cautiously about dosing.”

## Opioid / Overdose History of Patients on Opioids for Chronic Pain

<table>
<thead>
<tr>
<th>Patient Characteristics (N = 60)</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Previously received take-home naloxone</td>
<td>10%</td>
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<tr>
<td>History of overdose</td>
<td>37%</td>
</tr>
<tr>
<td>Overdose</td>
<td>20%</td>
</tr>
<tr>
<td>“Bad reaction” consistent with overdose</td>
<td>17%</td>
</tr>
<tr>
<td>Perceived risk of personal overdose</td>
<td>Low (2 / 10)</td>
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</tbody>
</table>

Interviewer: How many times would you say you’ve had these bouts of delirium, or you’ve stopped breathing because of opioids?

Patient: Ever? 8–10 times.

Interviewer: And how many times has [naloxone] been used on you?

Patient: Oh boy. That would be really hard to answer. I’d say somewhere in the neighborhood of 12–15 times.

Interviewer: So, around 12–15 times someone has given you [naloxone] because you’ve stopped breathing because of opioids?

Patient: Yes. Medical staff each time. Because of the opioids, I’ve stopped breathing.

Interviewer: Over what period of time?

Patient: Over 1 year.

“Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (>50 MME/day), or concurrent benzodiazepine use, are present.”
Co-prescribing naloxone with opioids is feasible and may have ancillary benefits.

The term “overdose” may not be appropriate for many patients prescribed opioids for pain.