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Public Health Policy Strategies to Address the Opioid Epidemic

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Introduction

Public health policy responses to the opioid epidemic require addressing both opioid supply and opioid demand. Growth in prescriptions of opioid analgesics, for example, is associated with escalating opioid overdose fatalities (1). Enhanced access to opioid agonist treatment, conversely, is required to curb demands driven by opioid use disorders. Oregon's multidimensional approaches toward opioid misuse and abuse achieved 20% reductions in opioid prescribing and a 30% reduction in the opioid overdose fatality rate.

Oregon's Opioid Problem

Oregon began to address its opioid crisis when data from the National Survey on Drug Use and Health suggested that Oregon led the United States in nonmedical use of opioid analgesics – 6.4% of residents 12 years of age and older reported past year nonmedical use (national rate = 4.6%); the rate was 15.0% among individuals 18 to 25 years (national rate = 10.4%) (2). Governor Kitzhaber directed the Oregon Alcohol and Drug Policy Commission to participate in the 2012/2013 National Governors Association's State Policy Academy on Reducing Prescription Drug Abuse. During the Academy, Oregon's delegation (i.e., the Governor's Taskforce) a) reviewed Oregon's need to reduce population levels of opioid use, b) proposed more opportunities for safe disposal of unused analgesics, c) outlined

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improvements in the Oregon prescription drug monitoring program, d) envisioned a lead role for 16 regional Coordinated Care Organizations managing medical and behavioral health care for Medicaid recipients, and e) formulated plans to host listening sessions with stakeholders (e.g., Oregon Medical Association, Oregon Pain Commission) (3). The public hearings used panel presentations and breakout groups to review descriptive data on opioid-related fatality trends in Oregon, examine trends in opioid prescribing using Oregon's prescription drug monitoring data, discuss best practices for prescribing opioids, and reach consensus that change was necessary.

To encourage more use of the prescription drug monitoring program, the Oregon Legislature amended the authorizing legislation and allowed physicians to delegate to clinical staff the review of a patient's opioid prescriptions. The Taskforce hosted two prescriber education opportunities with continuing medical education credits: 1) Boston University's "SCOPE (Safe and Competent Opioid Prescribing Education) of Pain training" (150 prescribers), and 2) Case Western Reserve's training "Prescribing Opioids for Chronic Pain: Balancing Safety and Efficacy" (200 prescribers). To sustain the work of the Taskforce, the Governor's Office empowered Lines for Life (a statewide prevention program) to build the Oregon Coalition for Responsible Use of Medications (OrCRM) (3).

OrCRM's statewide coalition catalyzes state and local efforts to prevent overdose and misuse of controlled medications. OrCRM implemented community engagement strategies modeled on the work of Project Lazarus, an early community effort to address opioid overdoses and mortality (4). Membership includes individuals from business, churches, health care, law enforcement, state and local public health offices, women and men in recovery, and family and friends of individuals with opioid use disorders. The Coalition has convened seven regional summits (more will be held in 2018) with more than 1,000 participants and promoted Regional Action Plans addressing six core strategies:

- prescriber, patient and family education on risks of opioid analgesics,
- improved access to alternative chronic pain treatments,
- easy disposal of unused medications,
- monitoring opioid prescribing and opioid overdose,
- distribution of naloxone as an overdose rescue medication, and
- access to opioid agonist and antagonist medications to support recovery from opioid use disorder.

Table 1 summarizes actions from OrCRM's first seven summits.

OrCRM uses the power of convening combined with technical assistance to help communities develop and implement action plans. The strongest implementation tool is the shared vision and messaging emerging from the summits. This shared vision, rooted in grassroots organizing, supports statewide change in prescribing and disposal practices. OrCRM has helped pharmacies install medication collection boxes so customers can safely dispose of the leftover opioids that fuel misuse and abuse. Community awareness of health plan initiatives to reduce opioid abuse has minimized resistance to the adoption of

prescribing guidelines and expanded access to opioid agonist and antagonist therapies for opioid use disorders.

With OrCRM's urging, the Oregon Health Authority implemented initiatives to address the epidemic. The 16 Coordinated Care Organizations managing care for Medicaid recipients were required to implement opioid prescribing plans that align with the Centers for Disease Control and Prevention's (CDC) Opioid Prescribing Guidelines (5). Based on the CDC guidelines (5), the Medicaid formulary no longer covers opioid analgesic prescriptions that exceed 90 morphine milligram equivalents for patients with chronic non-cancer pain (the restriction does not apply to cancer-related pain or palliative care) (6, 7). Prescribers must also verify that the patient is not at high risk for opioid misuse or abuse, is not on other opioids, and has sustained improvement in pain and function (6). Based on reviews by the Health Evidence Review Commission and the Oregon Health Plan's Pharmacy and Therapeutics Committee, the Medicaid also expanded coverage to include alternative pain management benefits (e.g., acupuncture, cognitive behavioral therapy, massage, physical therapy, yoga) (8).

In addition to the Medicaid changes, the State Opioid Treatment Authority works with counties and the Coordinated Care Organizations to promote opioid agonist and antagonist therapies. The State Public Health Department collaborates with county health offices to distribute naloxone for use as an opioid rescue medication to first responders, opioid users and their family members. The Public Health Department also maintains the Oregon prescription drug monitoring program and the Oregon Opioid Dashboard to monitor opioid trends.

OrCRM's work highlights two important lessons. First, by vesting a non-government organization with a leadership role, the Governor created an independent ally to accelerate change, provide leadership, and confront the status quo. Second, the Governor's emphasis on regional action planning recognized the need for local approaches to the opioid problem. The Eastern Oregon CCO (serving 12 large rural counties) facilitated access to opioid agonist therapy by training physicians to prescribe buprenorphine. The four CCOs serving Southwest Oregon collaborated to support new opioid treatment programs, used telemedicine to facilitate access to care in rural communities and developed community norms for opioid prescribing. The Columbia Pacific CCO selected a rural health center to induct and stabilize patients on buprenorphine then transfer the patients to clinics in local communities. OrCRM challenges policy makers, practitioners, and health plans to aggressively address Oregon's opioid problem.

Oregon actively monitors state and county opioid trends using Oregon's Opioid Dashboard (9). The Dashboard tracks prescriptions for controlled substances, opioid overdose hospitalizations and deaths, risky opioid prescribing (i.e., doses that exceed 90 morphine milligram equivalents), prescriber enrollment in the prescription drug monitoring program, and the number and location of pharmacies that stock and prescribe naloxone. Opioid prescribing rates declined 23% from 261 (fourth quarter 2014) to 201 (third quarter 2017) prescriptions per 1,000 residents. The rate of risky prescribing declined 44% from 12.8 (fourth quarter 2014) per 1,000 residents to 7.1 (third quarter 2017). The annual rate of

opioid overdose mortality dropped 30% from 8.6 per 100,000 residents (2011) to 6.0 (2016) without a substantive increase in heroin overdose mortality. See Table 2. Oregon still has an opioid epidemic but the dashboard suggests that the suite of policy changes and community interventions are beginning to slow key indicators.

Public Health Policy Challenges

Public health policy initiatives in other communities can echo Oregon's implementation of the CDC opioid prescribing guidelines to discourage risky prescribing practices. Co-prescribing of naloxone and community distribution of naloxone rescue medication may contribute to declines in opioid overdose deaths. Health plans and third party payers can authorize pain therapies that do not rely on opioids (e.g., yoga, physical therapy, cognitive behavioral therapy). Health plans should embrace the use of opioid agonist and antagonist medication to treat opioid use disorders, offer incentives to prescribers to enhance access to buprenorphine treatment (e.g., enhanced capitation or payment rates for practices prescribing buprenorphine for opioid use disorder) and, most importantly, eliminate fail first requirements before authorizing opioid agonist and antagonist therapies for opioid use disorders.

We need more effective tools to address the challenges of opioid use and misuse. Affordable and effective decision aids must be developed to help patients and prescribers understand the risks and potential limits associated with all opioid analgesics. Clinical investigators can develop and document protocols for effective opioid tapering. State medical associations can require continuing annual medical education on opioid use, misuse and opioid use disorders.

Public health authorities must also reach out to and collaborate with public safety. Restrictions on access to prescription analgesics will lead to greater use of heroin and other illicit opioids including fentanyl compounds. The criminal justice system, on the other hand, must permit prisoners, parolees, and drug court participants to use opioid agonist and antagonist therapies to reduce the risks of a return to use. Pharmaceutical companies can facilitate access to safe disposal options at local pharmacies and hospitals.

Multidimensional strategies that consider a range of public health policies and interventions are required to lead to sustained and lasting change in the use and abuse of opioid analgesics. There is great risk that the increased restrictions on access to opioid analgesics will lead to an increased demand for illicit opioids and that some patients will feel their chronic pain is untreated. We need systems in place to monitor both possibilities.

Suicides, for example, are a potential indicator. In Oregon, the suicide death rate has trended up from 15.8 per 100,000 residents (in 2008) to 18.8 (2014) (10) but the percent of suicides by poisoning has declined from 17.2% (2011) to 12.6% (2014) (more current data are not available) (10) suggesting that the restrictions on opioid prescribing are not contributing to the increasing suicide rate. See Table 2. Oregon also records deaths under the Death with Dignity Act and notes the percent attributed to "inadequate pain control". Deaths related to inadequate pain control hovered around 30% (2011 – 2015) and spiked at 35.3% in 2016 –

the jump could be associated with the increased restrictions on opioid prescriptions. These data will have to be monitored closely. See Table 2.

The work in Oregon illustrates one approach that appears to have influenced the opioid epidemic. The rates of opioid prescribing, however, remain elevated and patients and families remain at risk of opioid overdose. Much work remains to be done.

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Biography

Dwight Holton is the executive director for Lines for Life and the chair of the Oregon Coalition for Responsible Use of Medication (OrCRM). Elizabeth White is the project director for (OrCRM). Dennis McCarty is a member of OrCRM. Dennis McCarty drafted an outline for the manuscript and worked with the co-authors to complete the manuscript.

Table 1

Summary of Regional Action Steps and Commitments

OrCRM Goals	Regional Summits						
	Eastern OR	Central OR	Lane County	North Coast	Southwest OR	Douglas County	Willamette Valley
Reduce pills in circulation	<ul style="list-style-type: none">Form Pain Guidance GroupEncourage pharmacies to collect unused pills	<ul style="list-style-type: none">CCO supports safe prescribingDevelop PDMP groupEncourage pharmacies to collect unused pills	<ul style="list-style-type: none">Expand access to non-opioid pain therapiesEncourage pharmacies to collect unused pillsSeek pharmaceutical industry support for collection of unused pills	<ul style="list-style-type: none">CCO adopts CDC guidelinesCCO focus on opioids from dentists and EdsOne clinic and two hospitals agree to collect unused pills	<ul style="list-style-type: none">Form Pain guidance groupCCO identifies frequent prescribersLocal pharmacy agrees to collect unused medicationRegional support for statewide collection ordinance	<ul style="list-style-type: none">Joins Oregon Pain Guidance GroupDisseminate Medicaid guide-lines for back pain treatmentEncourage pharmacies to collect unused pills	<ul style="list-style-type: none">CCO coordinates pain care and prescribing guidelinesEncourage Practice level Interventions to Reduce use of Opioids
Improve pain management	<ul style="list-style-type: none">CCO develops pain schoolsCCO enhances prescriber education	<ul style="list-style-type: none">Train prescribers on CDC guidelines	<ul style="list-style-type: none">Increase prescriber education	<ul style="list-style-type: none">CCO expands alternative pain treatments	<ul style="list-style-type: none">CCO explores adoption of pain school	<ul style="list-style-type: none">CCO explores adoption of pain school	<ul style="list-style-type: none">Standardize patient educationCCO promotes team-based pain careCCO brings risk management to table
Public education on opioid risks	<ul style="list-style-type: none">Partner with OrCRM on prevention messaging	<ul style="list-style-type: none">Partner with OrCRM on prevention messaging	<ul style="list-style-type: none">Change public expectations for pain treatment and opioid use	<ul style="list-style-type: none">Partner with OrCRM on prevention messagingCCO expands public outreach	<ul style="list-style-type: none">Prescriber Training on ACESPartner with Tribal community	<ul style="list-style-type: none">Build regional portal on Oregon Pain Guidance web site for public education	<ul style="list-style-type: none">Public education to decrease stigma of addiction

OrCRM Goals	Regional Summits						
	Eastern OR	Central OR	Lane County	North Coast	Southwest OR	Douglas County	Willamette Valley
						<ul style="list-style-type: none">Foster community engagement	
Expand access to agonist therapy	<ul style="list-style-type: none">Form taskforce on buprenorphineCCO pilot testing Integrated care for addiction in primary care	<ul style="list-style-type: none">Taskforce to develop a continuum of care post incarcerationBuild Hub-And-Spoke model for buprenorphine prescribing	<ul style="list-style-type: none">Develop toolkit to promote integrated behavioral health care	<ul style="list-style-type: none">CCO enhances support for Integrated careCCO supports telemedicine to enhance access to buprenorphine	<ul style="list-style-type: none">Develop opioioid agonist therapy taskforceExpand training for buprenorphine prescribingImprove care integration for behavioral health	<ul style="list-style-type: none">Public education on treatments for opioioid use disorder	<ul style="list-style-type: none">Launch support network for opioioid agonist therapyConnect patients diagnosed with OUD in ED and Inpatient care with recovery services
Expand access to naloxone rescue	<ul style="list-style-type: none">CCO supports co-prescribing of naloxone with opioioid prescriptions	<ul style="list-style-type: none">Train and equip public safety and jails with naloxonePartner with syringe exchanges for naloxone distribution	<ul style="list-style-type: none">Build community awareness of naloxone and treatment interventions	<ul style="list-style-type: none">Expand access to syringe exchange and naloxone distributionPartner with drug courts for naloxone distribution	<ul style="list-style-type: none">Expand access to naloxone though public safety officers	<ul style="list-style-type: none">Public education on naloxone for opioioid overdose prevention	<ul style="list-style-type: none">Enhance community support for syringe exchange and naloxone distribution

Table 2

Opioid rates for prescriptions, risky prescriptions, opioid overdose deaths, heroin overdose deaths, suicide death rate, percent of suicides due to poisoning, and deaths under the Death with Dignity Act attributed to inadequate pain control.

Dashboard Measure	Year						
	2011	2012	2013	2014	2015	2016	2017
Opioid prescription rate per 1,000 residents ^{1 2}	241.3	247.9	245.4	261.3	255.5	224.6	201.1
Opioid prescriptions greater than 90 MME rate per 1,000 residents ^{1 2}	NA	NA	NA	12.8	11.7	9.0	7.1
Annual opioid overdose deaths rate per 100,000 residents	8.6	7.4	6.4	6.8	6.5	6.0	NA
Annual heroin overdose deaths rate per 100,000 residents	3.2	3.2	2.5	2.8	2.3	2.6	NA
Suicide death rates per 100,000 residents	17.0	18.4	17.8	18.8	18.2	NA	NA
Suicide deaths by poisoning in percent of all suicides	17.2%	16.9%	15.1%	12.6%	NA	NA	NA
Percent of Death with Dignity Act deaths attributed to inadequate pain control	32.4%	29.9%	28.2%	31.4%	28.7%	35.3%	NA

¹ 2011 – 2016 rates from quarter ending December 31;

² 2017 rate from quarter ending September 30

MME = morphine milligram equivalents

NA = not available

Source: Oregon Opioid Dashboard (9)

Suicide data from the Oregon Violent Death Data Dashboard (10)