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A Statewide Effort to Reduce High-Dose Opioid Prescribing Through Coordinated Care Organizations

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Abstract

Background—Oregon’s Medicaid program is delivered through 16 Coordinated Care Organizations (CCOs) participating in a statewide performance improvement program to reduce high-dose opioid prescribing. CCOs were allowed flexibility to develop their own dose targets and any policies, trainings, guidelines, and/or materials to meet these targets. In this study, we characterize CCO strategies to reduce high-dose opioid prescribing across the 16 CCOs.

Methods—We reviewed relevant CCO documents and conducted semi-structured interviews with CCO administrators to acquire opioid-related policies, practices, timelines and contextual factors. We applied a systematic coding procedure to develop a comprehensive description of each CCO’s strategy. We used administrative data from the state to summarize contextual utilization data for each CCO.

Results—Most CCOs selected a target daily morphine milligram equivalent (MME) dose of 90 mg. Sixteen issued quantity limits related to dose, eight restricted specific drug formulations (short-acting or long-acting), and 11 allowed for time-limited taper plan periods for patients over threshold. Many CCOs also employed provider trainings, feedback reports, and/or onsite technical assistance. Other innovations included incentive measures, electronic health record alerts, and toolkits with materials on local alternative therapy resources and strategies for patient communication. CCOs leveraging collaborations with regional partners appeared to mount a greater intensity of interventions than independently operating CCOs.

Conclusions—CCOs developed a diversity of interventions to confront high-risk opioid prescribing within their organization. As healthcare systems mount interventions to reduce risky opioid prescribing, it is critical to carefully describe these activities and examine their impact on process and health outcomes.

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Keywords

Opioid; coordinated care; opioid safety interventions; opioid policy; tapering; prescribing limits

1. Introduction

For much of the last two decades, prescription pain relievers have fueled the escalating opioid overdose epidemic.(Kolodny et al., 2015) Although deaths from heroin and illicit synthetic opioids such as fentanyl have risen sharply in recent years, over 40% of the 42,249 opioid-related fatalities in the United States in 2016 involved prescription pain relievers. (Seth, Scholl, Rudd, & Bacon, 2018) The vast majority of these prescriptions were obtained directly from a medical professional, or indirectly through a friend or family member. (“Substance Abuse and Mental Health Service Administration. (2016). Prescription Drug Use and Misuse in the United States: Results from the 2015 National Survey on Drug Use and Health. NSDUH Data Review. Retrieved from <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR2-2015/NSDUH-FFR2-2015.htm>.”) Accordingly, there has been a major push in the US to reduce opioid pain reliever prescribing through a variety of mechanisms.(Haegerich, Paulozzi, Manns, & Jones, 2014) Professional organizations and governmental health authorities have issued clinical practice guidelines advocating more conservative approaches to prescribing these drugs.(Dowell, Haegerich, & Chou, 2016; “Oregon Pain Guidance (OPG). Pain Treatment Guidelines: A provider and community resource. Retrieved from: https://professional.oregonpainguidance.org/wp-content/uploads/sites/2/2014/04/OPG_Guidelines_2016.pdf “; “U.S. Department of Veterans Affairs/U.S. Department of Defense. VA/DoD Clinical Practice Guideline for Opioid Therapy for Chronic Pain (2017). Accessed at www.healthquality.va.gov/guidelines/Pain/cot/ (August 31, 2017),”) States have uniformly implemented prescription drug monitoring program databases to assist clinicians and law enforcement officials in tracking controlled substance misuse and abuse.(“The PEW Charitable Trusts. Prescription Drug Monitoring Programs: Evidence-based practices to optimize prescriber use. 2016 Dec. Available from: http://www.pewtrusts.org/~media/assets/2016/12/prescription_drug_monitoring_programs.pdf.”) In some healthcare systems, decision support has been implemented to promote judicious prescribing practices.(Losby, Hyatt, Kanter, Baldwin, & Matsuoka, 2017; Trafton et al., 2010) Finally, healthcare payers are developing and aligning reimbursement strategies that incentivize safer opioid prescribing and encourage non-opioid interventions for pain management.(Cochran et al., 2017; Faul, Bohm, & Alexander, 2017; Garcia et al., 2016; Riggs et al., 2017)

Healthcare payers and systems can affect prescribing behavior through a variety of policy levers and interventions. Pharmacy formulary management tools such as prior authorization, step therapy, and quantity limits are among the most commonly employed approaches to manage utilization. Although traditionally employed for financial reasons, payers now commonly use pharmacy benefit restrictions to reduce inappropriate prescribing. A majority of state Medicaid programs have implemented prior authorization or step therapy policies aimed at reducing high-risk opioid prescriptions such as those with a high dose or co-prescribed with a benzodiazepine.(“Smith VK, Gifford K, Ellis E, Edwards B, Rudowitz R,

Hinton E, Antonisse L, Valentine A. Implementing coverage and payment initiatives: Results from a 50-state Medicaid budget survey for state fiscal years 2016 and 2017. Retrieved from: <http://www.kff.org/report-section/implementing-coverage-and-payment-initiatives-executive-summary/>,”) While these programs can effectively curb high-risk opioid prescriptions, their impact on health outcomes, specifically overdose, has not been firmly established. Additionally, nearly all state Medicaid programs employ lock-in programs which restrict beneficiaries to a specific prescriber and pharmacy with the intention of reducing provider shopping.(Roberts, Gellad, & Skinner, 2016) Finally, some payers have developed educational outreach or quality improvement programs to address deficiencies in opioid prescribing.(Lin et al., 2017; Trotter Davis, Bateman, & Avorn, 2017) While prior studies have evaluated the impact of these specific types of opioid safety interventions in health care settings, few have evaluated the initiation and implementation of multiple near-simultaneous interventions.

In July 2015, Oregon’s Medicaid program introduced a performance improvement program to reduce high-dose opioid prescribing.(“Oregon Health Authority. Office of Clinical Services Improvement: Statewide Performance Improvement Project. <http://www.oregon.gov/OHA/HPA/CSI/pages/Performance-Improvement-Project.aspx> (Accessed August 31, 2017),”) The Oregon Medicaid program is administered through 16 Coordinated Care Organizations (CCOs), which are community based healthcare delivery systems that coordinate a broad spectrum of care (physical, mental, addictions, dental) and accept full financial risk for their members, similar to Accountable Care Organizations.(McConnell, 2016; McConnell et al., 2017) CCOs are granted greater flexibility than traditional Medicaid programs to develop innovative care models to reduce the growth of healthcare expenditures while improving access and quality. The state’s high-dose opioid initiative holds greater weight than many state prescribing guidelines, as CCOs are required to participate and must demonstrate measurable reductions in high-dose prescribing. CCOs are granted flexibility to select dose targets, and develop and implement programs and policies to meet those targets. Prior research in this population indicates that rates of opioid prescribing and use are heavily concentrated among the top 10% of opioid users and prescribers, indicating that targeted initiatives may be more beneficial than generalized interventions.(Kim, Hartung, Jacob, McCarty, & McConnell, 2016) The objective of this case study was to characterize the variation in approaches to reduce high-dose opioid prescribing across Oregon’s 16 Medicaid CCOs.

2. Methods

Data collection, extraction, and analysis were performed based on the case study approach in order to fully describe and evaluate the details of each CCO’s initiative.(Bromley, 1986; Yin, 1992) The Oregon Health & Science University (OHSU) Institutional Review Board approved this study. Variation in opioid prescribing across CCOs was summarized using Medicaid administrative pharmacy claims and enrollment data for the year prior to launch of Oregon’s performance improvement project (7/1/2014 – 6/30/2015). This includes rates of opioid fills, fills per member, frequency of fills over 90 morphine milligram equivalents (MME) per day, and an estimate of pills dispensed per person, standardized to a 5 mg MME dose (approximate strength of one hydrocodone tablet) for each CCO. MME was computed

with established conversion factors using units dispensed, strength, and day supply dispensed. ("National Center for Injury Prevention and Control. CDC compilation of benzodiazepines, muscle relaxants, stimulants, zolpidem, and opioid analgesics with oral morphine milligram equivalent conversion factors, 2016 version.," 2016) We also summarized basic demographic characteristics of each CCO such as age, sex, and rural or urban residence.

To gain a baseline understanding of the types of interventions planned or implemented across Oregon CCOs, quarterly progress reports produced for monitoring purposes were collected by the research team for January, April, July, and October 2016. Supplementary documents sent by the CCOs to provide additional information, as well as relevant online resources (e.g., websites, guidelines, trainings) were also reviewed. Relevant intervention information was extracted by trained research staff (e.g., dose targets, interventions, timelines), and profile documents were created for each CCO.

These profiles were converted into telephone interview guides, wherein the intervention types were coupled with follow-up questions to probe for further details. An additional question examined whether the CCO was engaging in other opioid efforts (not driven by the high-dose prescribing initiative) that could influence members' opioid-related outcomes. Experienced qualitative researchers conducted the audio-recorded telephone interviews ($N=19$) with a representative from each CCO. Researchers consented the CCO representatives for the study and then, emailed participants their CCO intervention profile prior to the interview. Responses to interview questions were hand-recorded into the interview documents which were then uploaded to NVivo 11™.

An interdisciplinary team composed of a pharmacist, primary care physician, and two qualitative analysts with specialties in substance use disorders and social/health psychology participated in qualitative analysis. Codes were established and anchored in defined evaluation targets (e.g., pharmacy benefits, provider- and patient-targeted interventions, MAT strategies, etc.). Data were compared across CCOs to determine the level of consistency, or inconsistency, in intervention types and timelines for implementation. Findings were synthesized by individual team members and discussed among the team to establish consensus.

3. Results

About 90% of Oregon's one million Medicaid beneficiaries are enrolled in one of 16 regional CCOs (Figure 1). The largest CCOs cover the Portland metro area and the smallest cover Central and Eastern Oregon, which are sparsely populated rural areas. The largest CCO, Health Share of Oregon, provides healthcare through four health plans: CareOregon, Kaiser Permanente, Providence, and Tuality Healthcare. Each of the four plan partners have developed distinct initiatives while also participating in a joint information-sharing workgroup. In addition to serving as a plan partner within Health Share, CareOregon also owns or manages pharmacy benefits for three CCOs (Columbia Pacific CCO, Jackson Care Connect, and Yamhill Community Care) and established minimum pharmacy restrictions related to opioid dose for these CCOs. In an effort to prevent patient migration between

CCOs, four Southern Oregon CCOs with overlapping geographic service areas (AllCare, Jackson Care Connect, PrimaryHealth, and Western Oregon Advanced Health) formed a Regional Collaborative to implement key interventions in tandem.

Baseline opioid utilization and enrollment data for the 16 CCOs is summarized in Table 1. There was considerable variation in enrollment size, demographic composition, and opioid utilization across CCOs. While age and sex were similar and consistent with other Medicaid populations, CCOs differed substantially in the geographic characteristics of their enrollees. The largest CCOs, operating in the Portland Metro region (Health Share, Family Care), had only 8% of their enrollees residing in a rural location while many of the smaller CCOs predominately comprised enrollees living in a rural region. Overall, 18% of enrolled Medicaid beneficiaries had at least one opioid fill in the year prior to the initiative, but the prevalence varied by CCO from 15% to 21%. On average, CCOs paid for 75 opioid fills per 100 enrollees, but this ranged from 46 to 107 prescriptions per 100 enrollees. Overall, 10.5% dispensed prescriptions exceeded 90 MME per day (range 3.8% to 14%). Considering prescribing intensity, defined by both dispensed units and their MME conversion, enough opioids were dispensed during the year that every beneficiary could have the equivalent of 142 five mg hydrocodone tablets per year. However, this varied more than 7-fold from 43 five mg units to 323 units per enrollee.

3.1 Pharmacy Benefit Management Tools

Table 2 summarizes high-dose opioid initiatives implemented or planned by each CCO. Of the 19 CCOs and CCO sub-plans, 13 established a target opioid maximum daily dose of 90 MME, 5 used 120 MME per day, and one set a goal of 50. All but one CCO reported some type of opioid quantity limit restriction based on dose. The CCO not reporting an administrative quantity limit (Kaiser Permanente) delivers care through a vertically integrated healthcare system with advanced electronic health record decision support to manage utilization. Seven organizations also developed policies restricting payment for extended release opioids, most requiring prior authorization for new starts. One CCO (Eastern Oregon CCO) required failure first using a preferred formulary agent prior to use of branded extended release oxycodone. Only one CCO (Health Share; Tuality Healthcare) developed specific day supply restrictions for short-acting agents beyond standard quantity limits.

Four CCOs expanded formulary coverage for non-opioid pain medications such as gabapentin, NSAIDs and pain relief patches or topicals with lidocaine, capsaicin, menthol, salicylate, or diclofenac. One CCO (Western Oregon Advanced Health) removed a prior authorization for gabapentin.

3.2 Opioid Taper Programs

Eleven CCOs reported allowing time-limited taper plan periods for patients over the dose threshold set by the CCO. Most allowed providers to submit an initial request for a 90-day taper period, followed by a request for an additional 90 days. Two CCOs allowed 8 months for tapers, and one allowed two months for short-acting opioids and 6 months for long-acting. All but one CCO tied the taper plans to the quantity limit enacted at the pharmacy

point of sale: if a taper plan was not submitted for a patient, the dose limit was enforced within 30 days following the CCOs' notification to the provider of the patient's over-threshold status. CCOs reported providing a standard taper plan form to providers. We provide a copy of the Regional Collaborative's taper form in the supplementary material. Some used a spreadsheet developed by Washington State that included instructions and calculations for timing short-acting and long-acting tapers.

3.3 Provider-targeted Interventions

3.3.1. Letters—CCOs disseminated two types of letters to providers: preemptive notifications ($n=9$) sent to all providers about pharmacy benefit changes, and targeted letters ($n=10$) sent to providers with patients affected by the change. Six reported sending both and three provided neither. The four CCOs participating in the Regional Collaborative (AllCare, Jackson Care Connect, PrimaryHealth, and Western Oregon Advanced Health) sent cobranded letters to providers about the joint benefit restrictions. Other CCOs sent preemptive notification of their CCO-specific benefit changes.

Targeted letters were sent to prescribers with patients who exceeded the CCO dose limit. Letters differed in their level of detail, with some including a simple list of patients exceeding 90 MME per day, and others including a brief synopsis of issues identified for each patient and a list of resources. The Regional Collaborative included a toolkit of resources and materials, including tapering guidance and a taper plan form (see supplementary material). Six of the 10 CCOs that sent targeted letters to providers disseminated them at a single time-point with no defined plans for additional letters, two CCOs created quarterly letters to providers with high-risk prescribing patterns, and the remainder intended to send letters at multiple time-points but lacked the necessary resources. Five CCOs also sent targeted letters to patients, outlining their risk factors and next steps (e.g., report to your provider, discuss a taper plan).

3.3.2 Technical Assistance and Prescriber Reports—Onsite technical assistance, or one-on-one consultation, was offered by eight CCOs to providers with patients with a high daily dose or other risky pattern (e.g., benzodiazepine co-prescription). One-on-one consultations primarily focused on opioid prescribing age guidelines, and the development of taper plans. Three CCOs provided provider- and clinic-level reports on dose, opioid-benzodiazepine combinations, and/or comparison statistics of other prescribers and clinics. Only one CCO, Yamhill Community Care, offered both technical assistance and clinic-level reports.

3.3.3 Training Opportunities—Fifteen CCOs developed, or were planning to develop, provider-targeted opioid safety training. Topics and formats varied widely. Ten offered trainings on topics such as alternative therapies for pain management, opioid prescribing, PDMP use, or navigating difficult conversations. HealthShare Kaiser created the Support Team Onsite Resource for Management of Pain (STORM), made up of two pharmacists, a nurse, and a social worker to provide trainings and technical assistance; and Jackson Care Connect developed a learning collaborative on chronic pain in primary care. Eight CCOs provided Continuing Medical Education (CME) on opioid prescribing, risk stratification,

alternative medications in dentistry, opioid tapering, stimulants and benzodiazepines, and Medication Assisted Therapy (MAT), some of which included buprenorphine waiver training.

3.3.4 Guidelines and Educational Materials—Across CCOs, opioid prescribing guidelines were based on the CDC Guideline and/or adaptations of regional guidelines such as the Oregon Pain Guidance, the Oregon Tri-County Opioid Safety Workgroup, and the Washington State Agency Medical Directors Group. The majority of CCOs provided copies of their adopted guidelines either printed and delivered to clinics and/or posted online. Additional materials developed by CCOs included opioid tapering flashcards (InterCommunity Health Network), an opioid safety guide (HealthShare Providence), lists of resources for peer groups (Eastern Oregon CCO) or substance use treatment referrals (Yamhill Community Care), and a document comparing 2014 and 2016 prescribing guidelines (Yamhill Community Care).

The Regional Collaborative created a provider toolkit containing detailed instructions on implementing opioid tapers, including patient conversation guidance, addressing withdrawal symptoms, and non-opioid treatments and coverage. Umpqua Health Alliance developed the Douglas County Opioid Toolkit, which included sample pain agreements, tapering information, and opioid prescribing guidelines. Similarly, HealthShare Providence developed a toolkit that included teaching tools, videos, and opioid safety trainings.

3.4 Patient-targeted Interventions

3.4.1 Pain Classes—Five CCOs provided pain clinics and other pain education for patient members. HealthShare Providence conducted monthly virtual pain education webinars. Columbia Pacific CCO created 10-week pain clinics focusing on non-pharmacological strategies (e.g., movement therapy). PacificSource in the Columbia Gorge offered one-on-one pain classes in one community and a persistent pain education program in another, for which topics included physical therapy, nutrition, and sleep. PrimaryHealth helped sponsor a program of weekly cognitive behavioral and movement techniques to address chronic pain. Yamhill Community Care provided a 90-minute orientation and screenings for substance use disorder and mental health, followed by an 8-week course.

3.4.2 Educational Materials—The Regional Collaborative created and disseminated a video for providers and patients, available online. Eastern Oregon CCO created an Opioid Tapering FAQ for providers to disseminate to patients at point-of-care. InterCommunity Health implemented the PainWise website, part of a public health campaign to raise awareness around opioid risks; it provides opioid and pain-related resources for patients, friends, and families. Umpqua Health Alliance used their member newsletter to disseminate information about opioid safety and high dose opioid-related policy changes.

Three CCOs participated in or were in the process of organizing community education efforts. Western Oregon Advanced Health joined two local law enforcement-led community events to answer questions related to the opioid epidemic. Two CCOs were planning to implement community education campaigns (e.g., radio ads, forums).

3.5 Other Therapies

3.5.1 Medication-assisted Treatment—Three CCOs formed workgroups to explore models of care to increase access to medication-assisted treatment (MAT) for opioid disorder, and another three discussed MAT expansion in their existing pain committees. A few CCOs conducted educational sessions for clinicians on MAT or conducted outreach to encourage physicians to pursue waivers to prescribe buprenorphine. One had begun efforts to connect nearby opioid treatment programs able to provide buprenorphine induction with a few local prescribers willing to provide maintenance treatment. One CCO was preparing a policy change to remove prior authorization requirements for buprenorphine treatment.

3.5.2 Alternative Therapy—At the time of data collection, CCOs were developing responses to a statewide policy change introduced in July 2016 adding Medicaid coverage for alternative therapies for patients with back pain. The back pain policy expanded coverage for acupuncture, chiropractic and osteopathic manipulation, physical and occupational therapy, and cognitive behavioral therapy; and added coverage for yoga, massage, and supervised exercise therapy. Some CCOs reported that they intended to extend coverage for these therapies to patients with other pain diagnoses as well. CCOs serving rural areas reported challenges finding practitioners for some alternative therapies, and some CCOs reported that they were still in the process of outlining expectations for contracted alternative providers and process for communication with physicians.

AllCare reported covering transportation costs for travel to alternative therapies, a particular need in rural Oregon, and had also developed a “movement script” allowing clinicians to write prescriptions that served as vouchers for movement classes at the YMCA. The Regional Collaborative created a crosswalk outlining alternative therapy benefits covered by each of the 4 CCOs, including information about prior authorization requirements and a contact person for each CCO that providers could call for more information. Western Oregon Advanced Health had begun piloting a back pain specialty clinic offering physical and occupational therapy and a navigator to help patients access community services such as yoga, tai chi, cognitive behavioral therapy, and exercise for people with limited mobility.

3.6 Payment Incentives

Two CCOs developed alternative payment methodologies to incentivize adoption of practice recommendations. Yamhill Community Care provided an additional \$1 per member per month for practices who had no patients on daily opioids in excess of 120 MME. Health Share Kaiser offered incentive bonus pay for providers who reduced the number of individuals with opioid doses over 90 MME per day.

4. Discussion

Prescription opioid use and dosage patterns varied widely across CCOs. Yet CCOs with the highest intensity of opioid prescribing (Columbia Pacific, Intercommunity Health Network, Eastern Oregon, Jackson Care Connect) did not implement the most comprehensive set of interventions (with the exception of Jackson Care Connect). CCOs with the most robust programs (Jackson Care Connect, HealthShare of Oregon) operated within collaborative

organizations. Formation of, or capitalization on, networks appeared to be an indicator of a CCO's level of intervention engagement. Plan partners in the Health Share CCO and CCOs in the Regional Collaborative implemented the greatest number and variety of intervention types (e.g., quantity limits, targeted letters, taper plan support, trainings, consultation, and special events). With an expectation to reduce high-dose opioid prescribing, almost all CCOs implemented some form of quantity limit restriction, an approach that has generally been shown to curb high-risk opioid prescriptions.(Riggs et al., 2017) Many CCOs, recognizing that an adequate tapering plan is critical for patients on high opioid doses, established taper plan processes accompanied by varying levels of provider guidance. More robust provider guidance and support, however, may be needed to successfully taper patients who have received high-dose opioids for many years, including information about managing withdrawal symptoms, alternative treatments, and the need for psychosocial support for patients.

Nearly every CCO instituted at least one, and often multiple, educational interventions targeted to prescribers and/or patients in response to the initiative. In addition to one-on-one and CME training opportunities, toolkits, and websites, some CCOs also organized and/or distributed materials to providers in summits, workshops, and conferences structured around opioid-related topics. While some CCOs recognized the need to expand access to MAT to prevent unintended consequences, most were still in the planning stages of interventions in this area.

Because all Oregon CCOs were charged with selecting and implementing their own dose-reduction initiatives, the implementation provides an opportunity to compare the effect of varying implementation approaches and effort. Oregon CCOs are structured to increase responsiveness to community concerns, responsible for population-wide health of members, and incentivized to meet preventive health benchmarks (e.g., reductions in emergency department utilization, increases in screening and referral to substance use disorder treatment). These structural conditions may influence CCOs to consider unintended consequences of benefit restriction strategies and affect the manner of implementation of such strategies and the likelihood of implementing combined supportive strategies such as provider and patient educational interventions. Additionally, the capacity of CCOs to respond may be influenced by contextual factors such as enrollment and community characteristics (rural versus urban).

4.1. Limitations and Future Directions

In this paper, we report findings from the initial data collection phase of a multi-year evaluation of Oregon's high dose opioid performance improvement project. The research relies on data provided by CCOs through monitoring reports and interviews, which may be subject to self-report response bias. While opioid dose limits and tapering strategies are appropriate first steps in addressing overprescribing, little high quality data exist to inform how this policy alone will affect patient outcomes.(Frank, Lovejoy, Becker, & et al., 2017) Future research should build on finalized data on CCOs' implemented interventions to rigorously categorize Oregon CCOs by intervention intensity (types and levels of effort), assess prescribing outcomes overall and by intervention intensity; and examine health

outcomes, including opioid use disorder treatment and prescription opioid and heroin overdose outcomes. At the time of this data collection, CCOs had yet to implement the full array of their planned interventions, so there was incomplete information from which to develop an accurate coding schema to assess CCOs' level of intervention intensity. This variable will be an important factor to define evaluation outcomes at the close of the opioid safety performance improvement project period.

5. Conclusion

There has been an aggressive national response to the opioid epidemic at many levels of government and among healthcare systems and payers. Although overprescribing of prescription opioids has been a key driver of the epidemic, the epidemiologic shift toward illicit opioids complicates our national response. Healthcare systems must now consider multimodal strategies that recognize that abrupt cessation of opioid use without access to treatment resources may have unintended consequences. (Kertesz, 2017) Close collaboration between regionally proximal organizations appears to facilitate development of a multi-pronged approach, including pharmacy benefit tools, tapering programs, and provider education interventions. Interventions to expand access to MAT might be slower to develop but are critical in addressing the consequences of this public health crisis.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.
Map of Oregon Coordinated Care Organization Service Areas

Table 1

Summary of opioid utilization by CCO prior to performance improvement project (July 1, 2014 to June 30, 2015). CCO is Coordinated Care Organization. MME is morphine milligram equivalent

CCO	Enrollment	Average age	% female	% rural residence	% with opioid fill	Fills per 100 enrollees	Average daily MME per fill	% fills >90 MME per day	Average number of 5 MME units per enrollee
Portland Metro									
Health Share of Oregon	282,504	28.7	52.8%	8.1%	17.1%	81.6	47.2	13.0%	166
Family Care	151,498	27.5	51.3%	12.2%	15.5%	51.3	41.7	9.5%	53
Columbia Pacific	34,543	29.8	53.2%	92.5%	21.4%	107.4	53.3	14.2%	323
Mid Valley									
Yamhill Community Care	28,466	26.7	53.5%	88.6%	17.5%	70.3	40.8	10.3%	101
Willamette Valley Community Health	114,470	25.3	52.6%	28.3%	16.3%	63.4	40.8	8.8%	102
Intercommunity Health Network	68,006	28.7	52.4%	50.7%	20.6%	100.8	44.4	8.6%	230
Trillium Community Health Plan	108,558	29.5	52.2%	25.5%	19.2%	88.2	42.9	12.2%	179
Central / Eastern Oregon									
PacificSource Community Solutions CCO Central Oregon	62,661	27.3	52.4%	56.4%	19.9%	82.7	36.1	3.8%	102
PacificSource Community Solutions CCO Columbia Gorge	14,821	25.3	51.9%	95.5%	15.4%	62.2	42.0	5.8%	142
Eastern Oregon CCO	55,694	24.6	53.0%	96.8%	19.7%	108.5	45.4	11.5%	229
Southern Oregon									
Cascade Health Alliance	15,290	25.2	53.6%	95.5%	20.6%	61.7	41.0	9.6%	45
Umpqua Health Alliance	30,815	28.9	52.6%	95.4%	20.2%	47.3	42.7	9.6%	69
Western Oregon Advanced Health	58,735	29.1	52.4%	57.5%	18.2%	47.1	40.4	8.1%	75
AllCare Health Plan	25,125	31.9	52.9%	95.0%	19.6%	45.8	41.2	8.7%	43
Jackson Care Connect	36,094	28.4	53.1%	25.7%	17.9%	91.4	48.5	13.1%	250
PrimaryHealth	14,542	32.0	50.8%	94.5%	17.3%	58.5	41.5	10.1%	109
Total	1,101,822	28.0	52.5%	38.2%	17.9%	75.2	43.1	10.5%	142

Table 2

Coordinated Care Organization (CCO) Opioid Policies and Initiatives. MME=Morphine milligram equivalent, PA=prior authorization; QL=quantity limit; SA=short/immediate acting opioids; ER=extended release opioids; TA=technical assistance

CCO	Target daily MME	Preemptive Notification of Providers	Payment Incentives	Formulary Management Strategies			Tapering Programs		Provider Education		
				Quantity Limits	Long-Acting Opioid Restrictions	Short-Acting Opioid Restrictions	Taper Plan Mandate	Maximum amount of time allowed for taper	Targeted Letters to Providers	Provider Trainings	Prescriber or Clinic TA***
Portland Metro											
HealthShare CareOregon	90			X	X					X	X
HealthShare Kaiser	90	X	X	X ^a	X ^a		X	end of 2016	X	X	X
HealthShare Providence	120			X					X	X	X
HealthShare Tuality Healthcare	90	X		X	X	X ^b	X	90 days [*]		X	X
FamilyCare, Inc.	90			X ^c	X					X	
Columbia Pacific CCO	50 ^d	X		X ^d	X					X	X
Mid Valley											
Yamhill Community Care	90	X	X	X	X						X
Willamette Valley Community Health, LLC	90	X		X			X	SA: 60 days ER: 180 days		X	
InterCommunity Health Network CCO	120	X		X			X	90 days [*]	X	X	
Trillium Community Health Plan	90	X		X ^e	X						
Central / Eastern Oregon											
PacificSource Community Solutions CCO Central Oregon	120			X			X	8 months	X	X	X
PacificSource Community Solutions CCO Columbia Gorge	120			X			X	8 months	X		
Eastern Oregon CCO	120			X	X ^f					X	
Southern Oregon											
Cascade Health Alliance	90	X		X			X	90 days [*]	X	X	
Umpqua Health Alliance	90			X ^g					X	X	X
Western Oregon Advanced Health, LLC ^{**}	90	X		X ^g			X	90 days [*]	X	X	
AllCare ^{**}	90	X		X			X	90 days [*]	X		

CCO	Target daily MME	Preemptive Notification of Providers	Payment Incentives	Formulary Management Strategies			Tapering Programs		Provider Education		
				Quantity Limits	Long-Acting Opioid Restrictions	Short-Acting Opioid Restrictions	Taper Plan Mandate	Maximum amount of time allowed for taper	Targeted Letters to Providers	Provider Trainings	Prescriber or Clinic TA ***
Jackson Care Connect **	90	X		X			X	90 days *	X	X	X
PrimaryHealth *	90	X		X			X	90 days *	X	X	

* Additional 90 day available upon request

** Regional Collaborative

*** Prescriber/Clinic TA includes academic detailing, distribution of feedback dashboards to prescribers and clinics, providing Technical Assistance to prescribers/clinics, etc.

^a decision support enabled prescriber alerts

^b PA beyond 7-day supply, >4 fills in 30 days, or dose >90 MME per day

^c PA for immediate release opioids exceeding three units per day

^d set a 50 MED target, but pharmacy benefit restriction was 120.

^e PA for more than 120 units in 120 days

^f step therapy for extended release oxycodone: fail formulary product first

^g PA required for more than 30 days of therapy (for every 180 day period)