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Into practice

Partnership HealthPlan of California: Addressing opioid overuse with behavioral design principles

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1. Background

Opioid prescriptions in the US health care system – particularly those associated with high doses and longer treatment courses – have contributed to the ongoing crisis related to inappropriate opioid use.[1,2] Over a quarter of drug overdose deaths nationwide are associated with prescription opioids, and opioid-related deaths have steadily increased over several decades.[3–5] These trends are associated with substantial human and financial costs.

As payers for prescription medications, health plans can play an important role in preventing and managing inappropriate opioid use.[7] On one level, they can mitigate downstream overuse through coverage policy and provider engagement. On another, health plans can leverage resources such as addiction treatment programs to promote safer management of patients already using opioids chronically. In this case study, we describe the work Partnership HealthPlan of California (PHC) has undertaken to reduce overuse and misuse of prescription opioids.[8] Further, we highlight design aspects of the program that were motivated, at least from the perspective of PHC leadership, by behavioral economic principles and that may have contributed to program success.

2. Organizational context and problems

Established in 1993, PHC is a non-profit, County Organized Health System Medicaid plan responsible for providing a health care delivery system for 570,000 Medicaid beneficiaries in 14 Northern California Counties. PHC contracts with 220 providers who are mostly not-for-profit health centers to provide primary care services.

2.1 Problem 1. *Responsibility for counties with high opioid utilization rates*

Four years ago, after expanding into a number of new counties, PHC faced a major challenge regarding opioid use. Amid growing national urgency to address the opioid overuse epidemic, several of PHC's covered counties had the highest opioid death rates in the state and prescription rates far higher than the state average.[6] PHC covered seven of the ten counties with the highest rates of opioid-related deaths in 2013, with rates in its worst performing county six times the state average (29.4 versus 4.8 per 100,000 residents).

2.2 Problem 2. *Challenge of changing long-standing norms and behavior*

Within PHC's community of contracted providers, there was widespread misconception about the safety of opioids, particularly when used long-term in larger doses. In turn, health plan leadership identified local norms and behavior among contracted physicians as major drivers of high utilization rates.

2.3 Problem 3. *The need to collaborate with independent pharmacies*

PHC leadership also recognized that addressing physician behavior alone would be insufficient for addressing opioid overuse. Given the central role of pharmacies in controlling medication distribution, opioid reduction efforts would need to engage the small, independent pharmacies that service many patients in the Northern counties into which the health plan had expanded. Traditionally, these pharmacies had been subject to various incentive payments, including for generic prescription rates, medication reconciliation, and extended hours, but none directly related to opioid prescriptions.

2.4 Problem 4. *Challenge of implementing strategies within budget constraints*

As a community-based plan, PHC seeks to maximize the efficiency of expending health care resources, keeping administrative costs low (below 4% of total budget) to support payments to the delivery system that are more generous than typical Medicaid rates would allow. In this context, PHC needed to address opioid overuse with cost-efficient strategies and programs.

Together, these problems convinced PHC leaders of the need to enact programming to ensure safe, appropriate use among beneficiaries.

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3. Solution: the Managed Pain Safely Program

In January 2014, PHC responded to these challenges as well as a large influx of new plan members who became newly Medicaid eligible under the Affordable Care Act by launching the Managing Pain Safely (MPS) program. The effort was driven by internal working groups focused on levers for reducing overuse, including those related to pharmacy, provider networks, and care coordination. Groups were also formed to identify platforms for educating providers, influencing policy, and engaging community stakeholders.

3.1. Formulary changes

The most prominent strategy employed by PHC was a three-staged prior authorization formulary change. To reduce dose escalations, MPS implemented such requirements for new or escalating prescriptions of more than 120 morphine milligram equivalents (MMEs) daily. To reduce overall prescriptions of high dose opioids, stable prescriptions for more than 120 MMEs were also subjected to prior authorization. To prevent the inappropriate conversion of short-term opioid prescriptions for patients with acute conditions into long-term use, PHC explored limiting the number of allowable short-acting opioids. However, due to system restrictions, PHC instead implemented prior authorization requirements for new prescriptions of any prescription for more than 30 tablets in a 90 day period.

Formulary changes did not apply to patients on hospice, suffering new acute injury, or receiving treatment for active cancer, palliation, or in stable doses as part of a treatment plan from a pain specialist. To provide eligible clinicians and patients with opioid alternatives, PHC also expanded its benefits to cover pain management by chiropractors and acupuncturists, as well as behavioral services for patients with chronic pain. Anecdotally, formulary changes also improved some clinicians' ability to discuss opioid avoidance with patients using policy imperatives (i.e., that health plans were requiring these changes) as well as clinical rationale.

3.2. Provider education

PHC supplemented formulary changes through broad-based provider education. They leveraged guest speakers and organized sessions to improve prescribing behaviors (e.g., teaching clinicians safe medication titration strategies) and dispel prevalent myths (e.g., clarifying the considerable potential for addiction) among local providers. Best practices were codified within guidelines developed in partnership with local clinicians for use in clinics, emergency rooms, and pharmacies.

Additionally, PHC provided clinicians comparative feedback about their opioid prescription rates and sponsored clinics to participate in a peer-to-peer tele-monitoring program teaching safe prescribing practices. The health plan created a clinical toolkit to help providers create local committees to provide guidance and review challenging cases, and provided oversight for small practices unable to create their own committees.

3.3. Provider incentives

PHC also engaged providers through two dimensions of its pay-for-performance quality incentive program (QIP). First, leadership expanded the primary care physician QIP – which applies to a wide range of clinical and utilization metrics and represents approximately 30% of clinicians' payments from PHC – to compensate clinicians for checking urine toxicology screens (the percentage of members on medications with screening tests during a given measurement year) as an appropriate clinical measure for monitoring patients prescribed opioids. Additionally, clinicians who were credentialed buprenorphine prescribers were eligible for a $500 incentive to accept referrals for patients with chronic pain. Sites were also eligible for a $1000 annual incentive for hosting peer-led support groups, including those related to opioid dependence or chronic pain management.

Second, PHC adopted a novel incentive program in order to align its priorities with those facing small, independent pharmacies, the majority of which existed in Northern counties into which PHC had newly expanded. Under this pharmacy QIP, pharmacies were encouraged to create standardized "safe filling" policies and utilize the California Prescription Drug Monitoring Program to screen customers for inappropriate opioid use. In return for creating and following such processes, pharmacies were eligible to receive incentive payments per prescription fill worth approximately double their usual filling fees. Beginning in July 2017, PHC also incentivizes "take back" programs for pharmacies that help reduce risk of opioid diversion by encouraging safe disposal of excess, unneeded prescribed opioids.

3.4. Results

PHC observed several plan-wide improvements during the time period following implementation of these interventions. In the two and half years after the launch of MPS, the number of total opioid prescriptions decreased by 66%, the number of patients on unsafe, high doses decreased by 75%, and the number of initial prescriptions decreased by 50%. For the cohort that included new Medicaid eligible individuals, the percentage of prescriptions with dose escalations decreased over the evaluation period by 74%.

Importantly, over the intervention period, state-wide opioid prescriptions declined partially in response to other initiatives such as local opioid coalitions. However, PHC counties achieved greater decreases opioid utilization compared to non-coalition, non-PHC counties. For example, the baseline number of opioid prescriptions per 1000 residents (288 versus 212) and number of residents on high dose opioids per 1000 residents (16 versus 10) was higher in PHC counties. Between Q3 2014 and Q3 2016, PHC counties exhibited larger decreases in both number of opioid prescriptions (19% versus 15%) and number of individuals on high dose opioids (32% versus 23%). The strategies PHC adopted seemingly allowed it to simultaneously achieve enough monthly cost savings to cover MPS program costs and plan benefit changes.

4. Design principles

Prior authorization, a critical component in the success of MPS, is neither novel nor intrinsically behavioral in nature. However, PHC leadership deliberately utilized behaviorally-informed strategies in several ways to increase the acceptability of prior authorization policies, as well as educate and motivate behavior change among clinicians.

4.1. Encouraging broad behavior change using partial relative social ranking

Using site-level feedback, PHC leadership engaged site directors within each county through regular performance updates. In each, the top three highest performing clinics were ranked and visible to all site directors. To encourage behavior while maintaining a non-punitive environment, the remaining sites (including those ranked last) were not displayed.

This strategy exemplifies *relative social ranking* – a principle that describes the tendency of individuals or entities to change their behavior when ranked against others, particularly those whom are known and in close proximity (Table 1). Rankings are often most powerfully motivating for those at the top (who strongly desire to maintain high performance) and at the bottom (who often possess the strongest desires to improve).

However, they may be less effective for those with intermediate performance, who may feel complacent due to knowledge that they are