2021

STRATEGIES TO CONTROL THE OREGON HEALTH PROGRAM'S RISING PRESCRIPTION DRUG EXPENDITURES

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Prepared for the Oregon Health Authority

Acknowledgments

I would like to thank Professor Kirsten Gelsdorf, Professor Sebastian Tello-Trillo, and Professor Adam Leive for their invaluable guidance and for pushing me to push myself throughout the process of developing my expertise and creating this document. I would like to thank Jeff Scroggin and the Oregon Health Authority for their support and the information they provided. I hope that this document will help them to address the consequences and causes of rising drug prices for the Oregon Health Program. Many thanks to my friends, my sister Grete, and my parents, Elizabeth Terhune and Neil Feldman, for their moral support and for listening to me rant about how broken the American health care system is, as well as to my Uncle Chip for connecting me to OHA. It took a lot to get to this point, and I definitely could not have done it alone.

Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

Honor Pledge

On my honor as a student, I have neither given nor received aid on this assignment.

Signed: Benjamin T. Feldman

Date: April 9, 2021

Acronyms and Abbreviations

CCO	Coordinated Care Organization
CMS	Centers for Medicare and Medicaid Services
DUR(M)	Drug Use Review & Management
HERC	Health Evidence Review Commission
MDRP	Medicaid Drug Rebate Program
OBP	Oregon Board of Pharmacy
OHA	Oregon Health Authority
OHP	Oregon Health Plan (Oregon's Medicaid program)
P&T Committee	Pharmacy and Therapeutics Committee
PDMP	Prescription Drug Monitoring Program
SRA	Supplemental Rebate Agreement
VBP	Value-based pricing

Table of Contents

Executive Summary

Prescription drug prices in the United States are the highest in the world and they continue to rise each year faster than the rate of inflation. Many insurers will either negotiate better prices with manufacturers or pass some of the additional costs onto their program enrollees. However, due to federal policies, the unique structure of Oregon's Medicaid program, and the marginalized and vulnerable populations that it serves, these are not feasible options for the Oregon Health Authority to pursue. This document starts by outlining the problems rising prescription drug prices pose for the Oregon Health Plan and how it threatens future access to care for the state's Medicaid population. It outlines these patients and the state's taxpayers as the orienting stakeholders for the Oregon Health Authority. These interests guide this analysis of how to best address the problem: *rising drug costs threaten to exacerbate health inequities and endanger access to medical care*.

This document illustrates the background of the rising prescription drug price trend in the context of the United States. It then zooms in on Medicaid and the state of Oregon's efforts to address rising prescription drug costs. It lays out the relevant federal policies that limit what the Oregon Health Authority can do and gets into the current state policy climate before laying out three potential consequences for the state: lower adherence, shifting costs, and more taxes. It moves into the three paths to address rising costs from the consumer side–increase revenue, control consumption, and increase purchasing power–and how they could apply to the Oregon Health Plan before delving into the literature surrounding them. This document contains a review of the literature on substitution for cheaper alternatives, alternative pricing structures, and consolidated purchasing power.

Next, it outlines a Therapeutic Interchange Program, Outcomes-Based Pricing Structure, Mail-Order Encouragement, and Intrastate Purchasing Pool as potential policy alternatives and operationalizes the evaluative criteria of cost reduction, immediacy, and immediacy. After applying these criteria to the proposed alternatives, it ultimately recommends Therapeutic Interchange Program as a course of action for the Oregon Health Authority with Mail-Order Encouragement in the short term and exploring an Intrastate Purchasing Pool in the longer term. Finally, it concludes by giving steps for how the Oregon Health Authority can implement a Therapeutic Interchange Program modeled after the one in the state of Washington.

Introduction to the Problem

Rising drug costs threaten to exacerbate health inequities and endanger access to medical care. Across the United States, prescription drug prices are rising by approximately 10 to 20 percent each year, and they are up to five times higher than in other countries (Miller, 2020). Oregon's Medicaid program, the Oregon Health Plan (OHP), is unique in its structure. It provides health care coverage to over one million people in Oregon from all walks of life including working families, children, pregnant women, single adults and seniors. Prescription drug costs are included in this coverage and Oregon's 15 Coordinated Care Organizations[1] (CCOs) work independently to acquire prescription drugs for the Medicaid members they serve. However, the Oregon Health Authority's delegation of purchasing and administrative responsibilities coupled with restrictions from federal policies complicate efforts to control program expenditures on prescription drugs. This is especially true when considering the effects of rising prescription drug and medical treatment costs.

As the administrator of the Oregon Health Plan, the Oregon Health Authority (OHA) has a vested interest in reducing the costs of providing care to Medicaid beneficiaries without sacrificing quality of coverage. As prices increase, insurers pay more, and private insurers often pass these increasing costs onto enrollees (Stolberg, 2019). Instead, since the OHP covers all of its beneficiaries' medical costs, rising prescription drug costs mean continuing to extend the program budget. These continuous increases in the expenditures are not sustainable for the program because the state needs to remain budget-neutral. Any additional funding would have to come from raising state taxes. OHA does not have the authority to unilaterally raise taxes, so they would need the state legislature to do so; however, this is not politically feasible. Since taxpayers foot the bill for Medicaid, the state must balance cost-effectiveness with quality of care. Sometimes increasing prices shifts additional costs onto Medicaid-insured patients as the state tries to balance taxpayer interests with the needs of disadvantaged populations.

Rising prescription drug prices affect everyone, but they disproportionately affect poor individuals because the other option to reduce costs is to reduce benefits. This would create a coverage gap as is present in states that did not expand Medicaid coverage under the Affordable Care Act and add to the 2.2 million adults who currently fall in this coverage gap in non-expansion states (Garfield et al., 2021). 11.4 percent of the state's population lives in poverty and 23.8 percent of the state's population is

[1] CCOs are networks of all types of health care providers who work together in their local communities to serve people who receive health care coverage under the Oregon Health Plan (Medicaid).

insured under Medicaid, so rolling back coverage to only cover those in poverty would leave approximately 12.4 percent, or approximately 523,000 people uninsured or underinsured (*QuickFacts Oregon*, 2019; Division of Financial Regulation, 2018). Of the individuals in poverty, only 12 percent are white. 20 percent are Black, 22 percent are Indigenous, and 18 percent are Latino people, while these three minority groups make up only 2.2 percent, 1.8 percent, and 13.4 percent of the state's population respectively (Public Health Division, 2019; *QuickFacts Oregon*, 2019). Medicaid covers the most vulnerable quartile of the population due to the financial criteria to enroll in the program[2]. Low-wage workers face the lowest levels of job security, especially in the midst of a pandemic, so any pricing changes to prescription drugs disproportionately affect this population (Ganong et al., 2020). If rising prescription prices continue unabated, the state will run into budget constraints and face a difficult decision between restricting Medicaid coverage and sharing costs with the state's most marginalized populations, who rely on Medicaid for affordable coverage.

Overview of the Oregon Health Authority

The Oregon Health Authority (OHA) is the state agency charged with improving quality of and access to healthcare in Oregon. Their goals are to improve the state's health outcomes while containing healthcare's costs (*OHA Core Values*, n.d.). OHA works on public health policy, more specifically on regulation, coverage, and expanding access to care. As a state agency, OHA largely engages in policy implementation and administration and informs legislative efforts through its research and policy analysis. They administer Oregon's unique Medicaid program, the OHP, and work closely with the state legislature to help shape the healthcare landscape in the state of Oregon. In recent years, OHA and the Oregon state legislature have focused on addressing the lack of transparency in how manufacturers set drug prices. Now, they are looking to move into addressing the rising drug prices and the resultant increase in program expenditures more directly.

Background

National Landscape

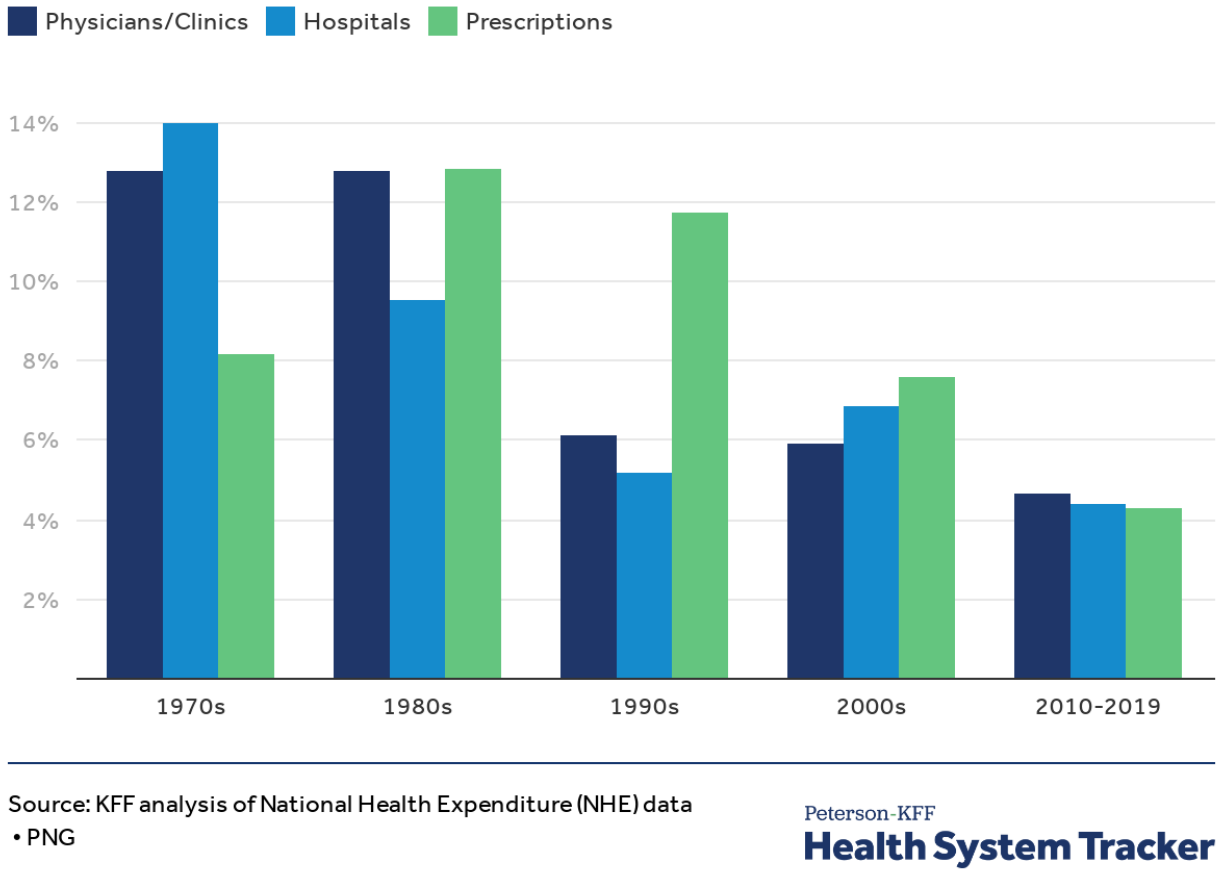
In 2015, the United States spent about $457 billion on prescription drugs, or 16.7 percent of all spending on health care services (ASPE, 2016). Until recently, spending on prescription medication was the fastest-growing form of health care spending in the United States, as shown in Figure 1 (Feldman, 2018; Kamal et al., 2020). While some

[2] Medicaid is categorically available to adults who make under 138 percent of the poverty line. The Oregon Health Plan covers adults (ages 19-64) who make up to $1,468 or families of four who make up to $3,013 monthly, as well as some children and pregnant individuals (*Apply for OHP*, 2020)

recent efforts have been effective, this is still an urgent problem facing the American health care system. The rise in prescription drug expenditures has been driven by several factors: increased utilization, the substitution of newer, more expensive drugs for less expensive drugs, and price increases for existing drugs (Gencarelli, 2005). The United States has high price growth relative to GDP when compared to other countries–an important consideration when applying comparative solutions to an American context (Danzon, 2018b). The magnitude of the problem is larger in the United States because prices are higher and economy as a whole is larger.

Figure 1

Average annual growth rate for select service types, 1970-2019



Source: KFF analysis of National Health Expenditure (NHE) data
• PNG

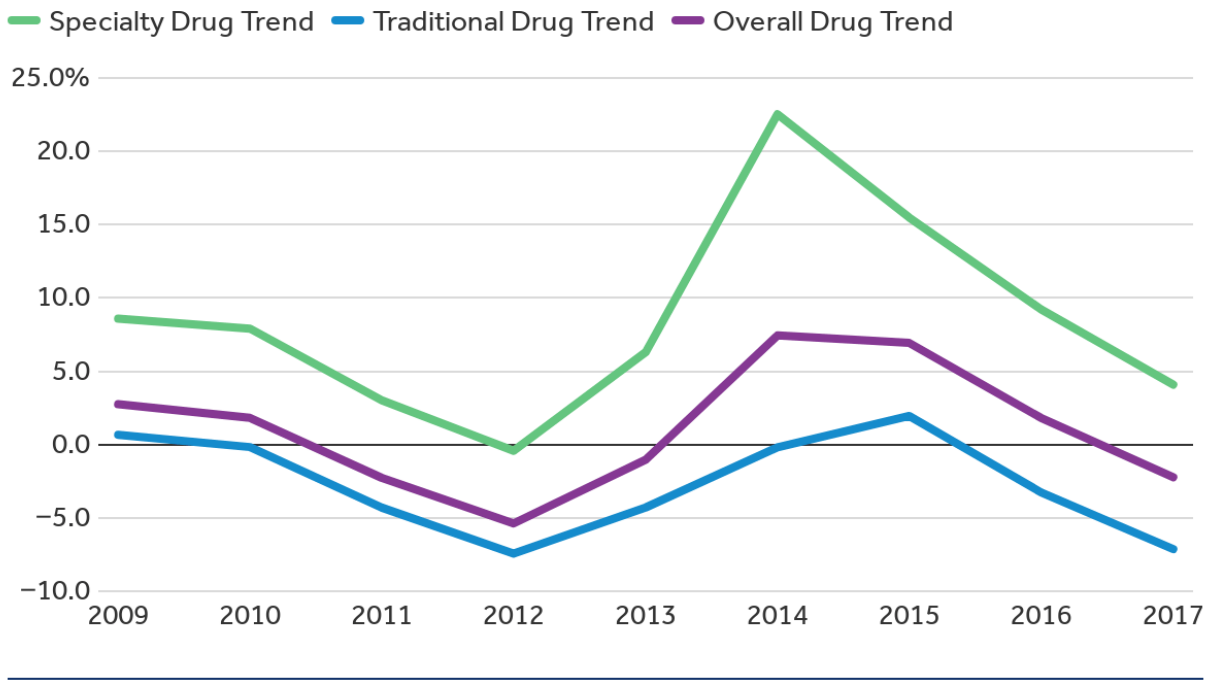
Peterson-KFF
Health System Tracker

There are a number of factors that contribute to the rising prescription drug costs in the United States. Some, like the retrospective pricing structure, are also linked to the overall rising healthcare costs in the country. Insurers pay based on the quantity of the treatment rather than the results, so they can face high prices for newly developed drugs and treatments or drugs that are marked up, supposedly to fund research and development of new drugs. Figure 2 shows this trend of growth in per capita spending on drugs. The United States is spending more on prescription drugs due to rising costs

and high launch prices. As medical technology continues to advance and innovate, newer and more expensive specialty treatment options become available. These specialty drugs enter the market with a high launch price that often does not reflect the manufacturer's cost of production. Manufacturers also continue to inflate the price that consumers–in this case, health insurers–pay to account for rebates such as those provided by the Medicaid Best Price Rule provision of the Medicaid Drug Rebate Program (MDRP) (Goldman & Jena, 2017).

Figure 2

Percent Growth in Per Capita Spending by Drug Type, 2009-2017



Source: IQVIA, Medicine Use and Spending in the U.S., April 2018; IQVIA Institute of Human Data Science.

Peterson-KFF Health System Tracker

Medicaid expansion under the Affordable Care Act and an influx of new drug approvals have led to skyrocketing Medicaid expenditures for prescriptions across the country. Many of the newly approved pharmaceuticals have high launch prices because the MDRP guarantees that Medicaid covers all of an enrolled manufacturer's FDA-approved drugs. The drug coverage guarantee means that Medicaid pays for novel and innovative drugs with no practical limit on launch price, even if they are still pending subsequent evidence of clinical effectiveness (FDA, 2018). While the current Medicaid rebate structure allows for access to a diverse array of FDA-approved drugs, this regulation is a significant barrier in changing the payment structure to keep up with the development of increasingly expensive treatments. Additionally, the MDRP's Best Price

Rule for Medicaid effectively sets a price floor by weakening purchasing power when negotiating with manufacturers (Baghdadi, 2017). It limits states' abilities to negotiate directly with manufacturers, which is especially problematic when it forces Medicaid programs to cover expensive new drugs simply because a manufacturer is enrolled in the MDRP (Dolan, 2019). States have limited negotiating power when it comes to the prices they pay for Medicaid coverage and the drugs that they have to cover.

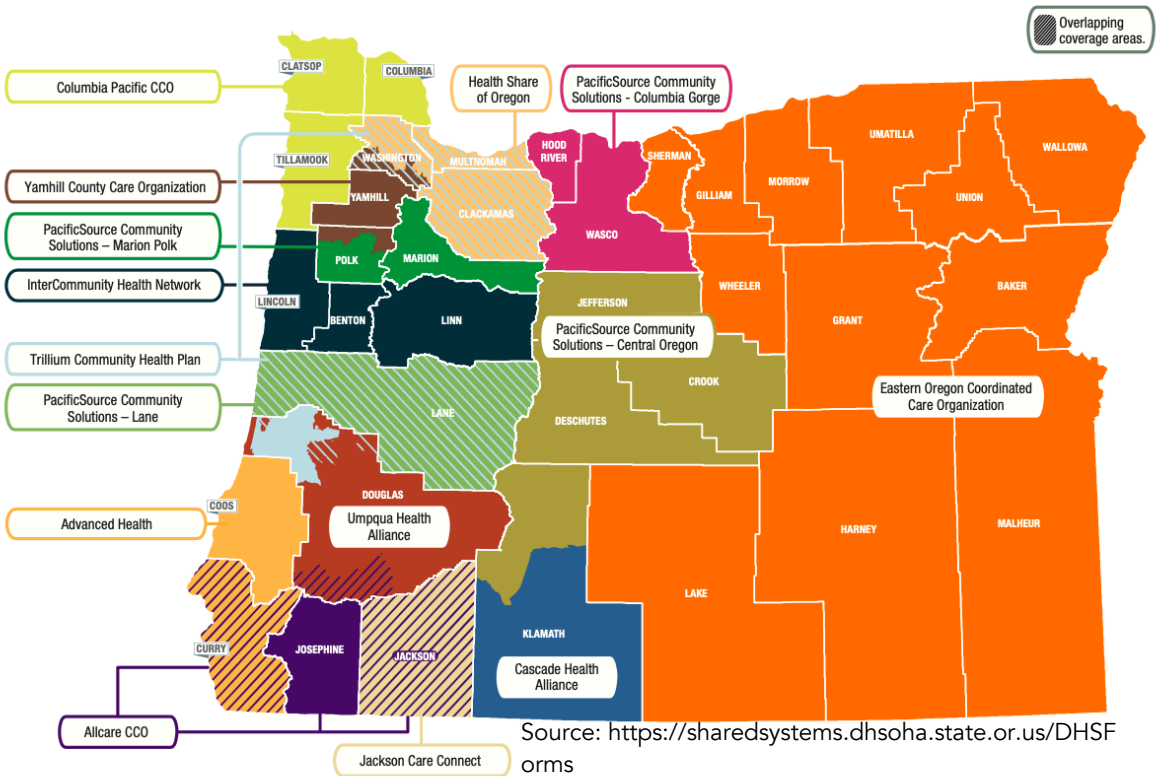
Oregon and Drug Pricing

The Oregon Health Authority and the state legislature have made efforts to address rising drug costs. Oregon has joined other states in introducing anti-price-gouging legislation, but so far the state legislature has not passed it (Padula, 2019). 22 states across the country have passed laws to increase drug pricing transparency to aid consumers since 2015 (Deb & Curfman, 2020). In 2018, Oregon state legislature enacted the Prescription Drug Price Transparency Act (House Bill 4005). The provisions of the act require prescription drug manufacturers to annually report information on prices and costs associated with developing and marketing prescription drugs to Oregon's Department of Consumer and Business Services. They must also report new drugs that cost more than the Medicare Part D threshold of $670 per month or price increases for drugs that cost more than $100 per month. Health insurance companies must also provide information on the top 25 most frequently prescribed and costly drugs, as well as those causing the greatest increase in insurance spending. The act also allows consumers to report prescription drug price increases that they experience. (Prescription Drug Price Transparency Act, 2018). These transparency regulations make it easier to prove when drug companies are price-gouging (Padula, 2019).

Additionally, there are some challenges when applying solutions from other states' Medicaid programs to Oregon's case simply because of the Oregon Health Plan's unique structure with 15 contracted regional CCOs providing coverage for most OHP enrollees. Figure 3 shows the service areas for each of the CCOs. Oregon is well-positioned to implement more a value-based pricing structures to reduce prescription coverage costs for their public insurance options. They have had an 1115 Waiver from CMS since 2012 that allows them to prioritize specific courses of care based on cost-effectiveness. At the beginning of 2017 OHA renewed the waiver through 2022. This waiver allows the state to promote the use of value-based payment by the regional CCOs and gives them more flexibility on pricing structures compared to other states' Medicaid programs (OHA, 2017). The OHA builds value-based pricing goals into their contracts with CCOs to provide coverage for the state's Medicaid population.

Figure 3

Oregon Health Plan CCO Regional Service Areas



Source: https://sharedsystems.dhsoha.state.or.us/DHSForms

Note: Each color represents a different CCO and diagonal lines represent overlapping coverage areas.

Consequences of Leaving the Problem Unaddressed

Somebody needs to pay the difference when prescription drug prices increase, so if prices continue to rise unabated there are two possible effects on the OHP: the amount that Medicaid covers increases–and places a higher burden on the state's tax base that funds it–or Medicaid patients bear the cost in the form of reduced coverage or the introduction of cost-sharing. Reducing coverage will actually cost the state more in the long term and increasing state taxes to fund the increasing cost of coverage is not politically feasible for OHA. The following causal chains outline these impacts of leaving the problem unaddressed in further detail.

Chain 1: Lower Adherence

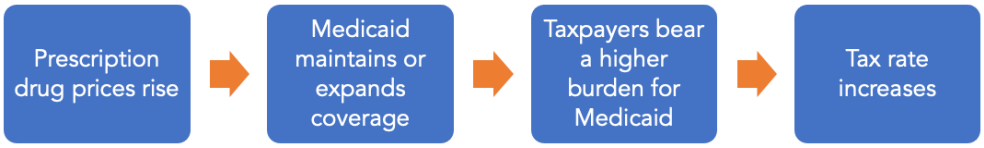
The logic of *Lower Adherence* is as follows: prescription prices increase, which leads to reduction of Medicaid coverage. Since financial eligibility for Medicaid requires low-income, enrollees have a harder and harder time affording their medication when the OHP does not cover it. While federal law limits cost sharing–how much, who must pay it and for which product–it is still problematic for low-income populations who already have disproportionately high rates of chronic disease and serious illness. In states with cost-sharing for Medicaid, it is associated with barriers to access, greater unmet health care needs, and financial burdens (Artiga et al., 2017). Enrollees can face a choice between medication and other costs of living. If the medication treats a chronic or invisible condition, then patients sometimes determine that the costs of a prescription outweigh the benefits, and opt not to take it (Brody, 2017). When they choose to go without their medicine in order to afford housing and food costs, it leads to more adverse long-term health outcomes. Non-adherence is associated with poor therapeutic outcomes and progression of disease, both of which lead to avoidable spending on further, more acute care (Iuga & McGuire, 2014). For Medicaid enrollees, these further expenditures are financed by Medicaid, and thus Oregonian taxpayers.

Chain 2: Shifting Costs

Shifting Costs is similar to *Lower Adherence*. Prescription prices increase and Medicaid coverage decreases in response. However, when faced with the decision about where to allocate their limited funds, patients instead choose to sacrifice spending on other needs in order to afford their prescriptions. Medicaid enrollees may be willing to pay for the drugs, but they no longer have the ability to pay for prescriptions and other necessities once prices increase past a certain point. Patients sacrifice other social determinants of health to keep taking necessary medicine. As a result, patients may seek out further support from other social welfare programs, which will increase joint enrollment across programs (Wheaton et al., 2011). Taxpayers still bear a higher cost in funding social welfare, just for programs outside of Medicaid. While *Lower Adherence* and *Shifting Costs* have different end results, both are likely results if Medicaid passes the burden of prescription cost increases onto patients who cannot afford it. The

difference lies in how sensitive individual patients are to the price increases (Gemmill et al., 2008).

Chain 3: More Taxes



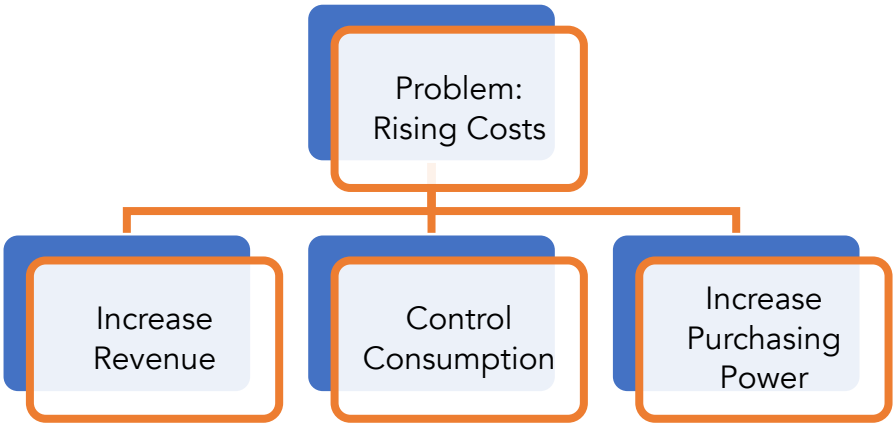
More Taxes is more straightforward. OHA recognizes the adverse effects of reducing coverage for Medicaid enrollees. Instead of passing the burden onto low-income patients, they opt to expand Medicaid's budget to pay for increasing prescription drug expenditures. However, since taxpayers fund Medicaid and Oregon has a balanced budget requirement, taxpayers will either face a tax rate increase for taxpayers across Oregon or cuts to other services as the government reallocates money to Medicaid. Support for social welfare programs like Medicaid is widespread, but increasing tax rates or reducing other services would likely meet resistance (Williamson, 2015).

The Three Paths to Address the Problem

In more general economic terms, there are three main paths to address rising costs from the consumer side. The United States' current intellectual property and pharmaceutical patenting system prevents the state from forcing more firms to enter the market to compete, which would bring down prices from the supplier side. As a consumer, OHA is left with three paths forward: increase revenue, control consumption, and increase purchasing power. Shown in Figure 4, these are the paths available to address rising costs in general from the demand side of the market, but not all of these options are available to OHA given the constraints within which it operates.

Figure 4

Consumer-Side Approaches to Address Rising Prices



Path 1: Increase Revenue

Oregonian taxpayers are one of the primary groups of stakeholders considered in this report. Any increase in costs would mean an increase in the state's taxes because of their required budget-neutrality and the lack of copayments from Medicaid patients. Coinsurance or any other cost-sharing options are indirect ways to increase revenue or at least to reduce the incidence of prescription drug costs borne by the state and offer a means to relieve the state's financial burden. However, these measures are also not presently a viable option for OHA given the economic vulnerability of the populations Medicaid covers and the political infeasibility of raising taxes preemptively. Additionally, these measures are purely reactive. They do nothing to address the causes of rising prescription drug costs.

Path 2: Control Consumption

Another way to address rising costs is to control consumption and reduce related expenditures outside of the cost of the drugs themselves. For OHA this could take the form of reducing administrative costs or finding cheaper alternatives for specific drugs or alternate suppliers. Increasing mail-order prescription fulfillment and substituting prescriptions for generics[3] or cheaper equivalents fall under this path and offer a feasible way for OHA do reduce its prescription drug expenditures. Changing to a different pricing structure based on the value or effectiveness a drug provides is another viable option (Medicaid.gov, 2020). This would control consumption by switching away from the current quantity-based model to one that is more value-based. Eight states, including Oregon's neighbor Washington, already have alternative pricing programs and Oregon has an 1115 Waiver with CMS that allows them to implement a more value-based pricing system. This path also does not address the root causes of the price increases, but it is probably the most feasible in Oregon's current situation.

Path 3: Increase Purchasing Power

The final path is to increase purchasing power to negotiate better prices on prescription drugs, and there are a couple of ways to do this. Oregon has been involved in multi-state supplemental rebate agreements (SRA) and has extended its own SRA to the CCOs since 2011 (Medicaid.gov, 2020). Oregon is one of thirteen states in the Sovereign States Drug Consortium. Altogether, these states' Medicaid programs cover 10.3 million people and spend over $11.6 billion on prescription drugs (SSDC, 2020). Expanding multi-state arrangements and coordinating between the regional CCOs as

[3] Generic drugs are defined by the FDA as medications created to be the same as an existing approved brand-name drug across dosage form, safety, strength, route of administration, quality, and performance characteristics.

their contracts come up for renegotiation or renewal could be an effective long-term goal, but it lies beyond the scope of this report. OHA could also coordinate pharmaceutical purchasing with other state programs. This may slightly increase purchasing power, but OHP is already the largest public insurance program in the state, and coordinating between competing agency goals and priorities would increase administrative costs.

To increase purchasing power without coordinating with other states or agencies, OHA would need to restrict which drugs the OHP covers to create leverage with manufacturers to bring down prices. However, federal rules limit Medicaid negotiating strategies and restrict access to many of the policy levers that OHA could pull to reduce prices. For instance, the MDRP mandates that state Medicaid programs cover all FDA-approved drugs from a manufacturer who gives a set rebate off of the listed price to comply with the Best Price Rule. This prevents Medicaid programs from refusing to cover drugs whose price tags outweigh their benefits.

Review of the Literature

In exploring the literature surrounding potential policy approaches that may effectively address the rising cost of prescription drugs and thinking about the two of the three paths available to the Oregon Health Authority, three main approaches seem the most promising. They are: substitution for cheaper alternatives, alternative pricing structures, and consolidated purchasing power. The following subsections delve into the existing research surrounding each of these approaches. They highlight any gaps in the research and how generalizable these approaches are to the OHP.

Substitution for Cheaper Alternatives

There are a number of strategies that prescription drug purchasers and intermediaries can use to reduce the costs associated with fulfilling prescriptions. They can focus on substituting for cheaper treatments, whether in the form of generic substitution or therapeutic interchanges for cheaper treatments, but they can also focus on reducing the ancillary costs of fulfillment outside of the drugs themselves. For instance, the Oregon Board of Pharmacy already has a generic substitution rule in place to try to reduce drug costs. Many states allow this practice because generic drugs tend to cost about 75 percent less than their brand-name counterparts (CBO, 2010). An intervention that takes generic substitution at the pharmacy level one step further is therapeutic substitution for cheaper drugs that treat the same conditions–even when they are not chemically identical to the prescribed drug.

As of 2018, Kentucky, Arkansas, and Idaho had passed laws to institute therapeutic interchange programs (TIP) that have since seen some success (Vanderholm et al., 2018). Since then, Washington also implemented a TIP in 2019, and six other states created their own programs in 2020 (NASPA, 2021). TIP is different from generic substitution because it is not reliant on the cheaper option being chemically identical to the drug–it must only have a similar therapeutic outcome at a lower cost. TIP is a long-standing cost-saving practice across institutions, with over 80 percent of hospitals already utilizing it in 2002 (Vanderholm et al., 2018).

Johansen and Richardson's 2016 cross-sectional study of claims data found that from 2010 to 2012, the United States could have saved $73 billion of the $144 billion it spent across all drug classes. Since the Centers for Disease Control finished conducting the Medical Expenditure Panel Survey in 2012, the authors noted that generic substitution has become more widely accepted and estimated that TIP can still offer savings by eliminating the 9.6 percent of wasteful spending across prescription drugs (Johansen & Richardson, 2016). They posit that TIP is an effective way to reduce wasteful spending on prescription drugs without adversely affecting the quality of care, and it is hard to argue with the rigor of their study. A common theme across the literature on TIPs is the concern that these programs impede physician autonomy and patient safety. However, making them opt-in, as all of the programs at the state level have done, can help to overcome this potential source of resistance (Vanderholm et al., 2018). Additionally, seven of thirteen Canadian provinces allow therapeutic interchange, including some where it is the default and does not require the physician to opt in, and there have been no reported safety issues (Vanderholm et al., 2018).

A 2011 cross-sectional study of a private insurer's interchange program found that savings ranged from $7.47 to $22.26 per claim (Look et al., 2011). As this was a private insurer, it may have limited generalizability to a program without cost sharing, such as the OHP. This same study only focused on successful interventions and investigated multiple cost-saving drug therapy modifications, so it is hard to determine which benefits came specifically from the interchange program. The likelihood of positive return on investment for cost-saving substitutions increases with number of refills (Look et al., 2011). This shows that the highest savings will likely come from efforts targeting maintenance drugs that people take for chronic conditions. This could be carried out by using mail-order pharmacies that have been historically underutilized by low-income populations like the ones Medicaid serves (Do & Geldsetzer, 2020).

Studies tend to estimate the cost savings for TIPs to be approximately ten percent using a difference-in-differences statistical model (Johansen & Richardson, 2016;

Vanderholm et al., 2018). Most, if not all, of these savings could be realized by OHA if Oregon were to implement a similar program. Much of the research in substituting for cheaper alternatives is based on cross-sectional investigations of existing claims data, so the researchers have identified areas in the current spending patterns where there is potential for savings and projected the efficacy of specific interventions like TIPs and more cost-efficient dispensing practices at the pharmacy level.

Alternative Pricing Structures

Historical trends of rising medical care expenditures in the United States are tied to advancement of medical technology (Weisbrod, 1991). While state Medicaid formularies reduce drug costs, they can also reduce drug companies' incentive to develop drugs with expensive research and development. Leveraging changes to payment structures could realign these incentives to promote developing more cost-effective treatments than those currently in existence, which saves the health care system money in the long run. Providers need an incentivize to reduce costs without reducing quality, which will happen if government imposes price regulations. A prospective payment system[4] creates this incentive to lower costs so long as quality does not suffer "too much" (Weisbrod, 1991). Since monitoring quality is difficult, a change in pricing structure is a fairly market-based solution that promotes self-regulation.

Value-based pricing (VBP) is a prospective pricing model wherein prices are determined by the value of the expected health improvement to the patient. It seeks to ground the prices paid and coverage decisions for pharmaceuticals on their value, as measured primarily by health gain to the patient (incremental efficacy and safety) plus any net savings in medical costs. It can shift the power to determine prices from manufacturers to purchasers. At its administratively simplest, a manufacturer would link a given drug's list price to an assessment of how effective it is. More sophisticated versions of value-based pricing include "outcome-based pricing," in which the marketplace would allow insurers and patients to receive rebates from manufacturers if a drug failed to work, and "indication-based pricing," in which drug companies charge different prices for the same drug when it is used to treat different conditions (Sachs et al., 2017).

In a 2018 case study on VBP, Patricia Danzon found that focusing on those with the highest risk of deterioration first and then stratifying treatment for stable patients spreads out the budget impact when treating a widespread condition (Danzon, 2018a).

[4] Prospective payment is a method of reimbursement for which insurance reimbursement is based on a predetermined payment based on diagnosis, regardless of the intensity of the actual service provided.

This, in turn, allows for potential savings from competitive treatments as drug manufacturers compete to develop more cost-effective alternatives. When it comes to cures, Danzon found that installments based on outcomes can realign payment flows and shift some of the risk to producers.

Outcomes-based agreements, which ensure that drug companies are paid for actual benefits to patients, are another way to better align pricing and coverage of drugs with their value (Goldman & Jena, 2017). This approach does, however, entail high administrative and incentive costs. Since this paper is a case study, its findings are not causally established–indeed, there is a lack of literature causally establishing the effectiveness of VBP practices. However, the economic reasoning behind these claims is conceptually valid. Oklahoma, Colorado, and Michigan all started implementing outcomes-based pricing in 2018 and 2019, so they are beginning to fill the gaps in data (Meyer, 2019). However, there is still no empirical analysis of how effective value-based pricing is in the context of state Medicaid programs. As of right now, there is no existing evidence that outcomes-based contracts reduce spending or increase access, despite their increasing prevalence across the United States (Seeley et al., 2018). Alternative pricing models show great promise in theory, but they lack evidence to support their efficacy in an American health care system with so many different market factors at play.

Consolidated Purchasing Power

It is difficult to leverage buying power when there is such a high demand for pharmaceuticals across many buyers in the United States. Most other rich nations have a unified system that provides coverage to everyone. This increases their purchasing power because the unified health care system is the only source of payment available to drug manufacturers (Reid, 2010). The Canadian health care system serves as a good analogy for what a single-payer Medicare for All model could look like if implemented in the United States. In a comparative study, Chown et al. found that Canadian drug prices are over 50 percent less than those in the United States–a difference that they could not explain through differences in cost-of-living (2019). Instead, they found that this difference is largely due to the Canadian government's willingness to exert its monopsonist power on prescription drug manufacturers. In the United States, this urge to exert monopsonist buying power may be tempered by concerns about disruptions to long term drug supply and due to the differences between competing state Medicaid programs (Chown et al., 2019; Danzon, 2018b). While this paper may not scale up to the United States level since Canada's system is much smaller, it does support the idea that utilizing purchasing power is a viable strategy for Oregon's state Medicaid program to negotiate lower drug prices.

Each state administers its own Medicaid program that receives both state and federal funding. As a result, each state organizes its program in a different way. In recent years, states have formed interstate purchasing pools to expand their buying power when negotiating with drug manufacturers. There are multiple interstate consortiums that increase the bargaining power of state Medicaid programs. Some of these consortia also negotiate with prescription drug manufacturers. This increases efficacy because price concessions from drug manufacturers are generally based on the volume of patients for whom the consortium is negotiating, or its market share (Gencarelli, 2005; NCSL, 2020). By working together to increase buying power, states can negotiate more effectively to improve on individually conferred rebates.

Even within states, there are ways to coordinate between actors to increase purchasing power. Public-public partnerships with other state agencies allow medical coverage to synergize with other services and to be provided in accordance with different cultures, goals, and demands. Medicaid agencies are not the only payers that are actively engaged in trying to get more value out of their health care purchase. While many states characterized multi-payer alignment and coordination as a challenge, they also acknowledged the value in engaging with other payers to advance successful and sustainable payment reform efforts (NAMD, 2016). In an Oregonian context, Medicaid already serves the largest patient pool of any state-administered program. However, negotiating in tandem with other public healthcare providers in the state can expand the OHP's purchasing power.

Successful programs have leveraged a single preferred drug list across all state health insurance programs in conjunction with an evidence-based review process to determine safety and effectiveness before considering cost (Waldrop & Calsyn, 2020). While there is little empirical evidence on the efficacy of such purchasing pools, but they would likely increase purchasing power based on the number of patients the partnership represents (RAND Corporation, 2009). Washington state, which is fairly geographically and demographically similar to Oregon saved five percent of what they were previously spending on prescription drugs with this consolidated and evidence-based coverage model (Bergman et al., 2006). This Bergman et al. paper is almost 15 years old at this point, so there is likely more up-to-date data on the impact of Washington's program, but the initial findings were promising. A similar program could work in Oregon if the OHP and other public agencies that provide health insurance or the state's CCOs negotiated together, as the recently enacted SB 131 establishing an Interagency Pharmacies Purchasing Council does for New Mexico (Interagency Pharmacies Purchasing Council, 2019).

Policy Alternatives

Option 1: Therapeutic Interchange Program

The Health Evidence Review Commission (HERC) evaluates evidence on a given treatment for a given condition using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system to make a strong or weak recommendation to the Oregon state legislature on whether the state should cover it (HERC, 2019). They maintain the Prioritized List of Health Services that informs the OHP and many of the state's private insurers' coverage decisions, reviewing it biennially (Wachino, 2017). The legislature allocates a health care budget that funds up through a specific line item of the prioritized list, and the OHP covers those specific treatments for those specific conditions.

Similar to the Prioritized List of Health Services maintained by the HERC, the OHA Pharmacy and Therapeutics (P&T) Committee maintains a Preferred Drug List (PDL) specifically for prescription drugs rather than treatments as a whole. The OHP covers drugs from the PDL, which also serves as a guide for healthcare providers when prescribing drugs. Patients can receive prior authorization to get coverage for drugs outside of the PDL, which means that they can still receive coverage for other drugs, but it may introduce a barrier to access, specifically for more marginalized populations that tend to make up the Medicaid patient base. Step therapies for some conditions mean that more expensive medicines cannot be prescribed until the provider and patient have demonstrated that preferred treatments are not effective.

The current structure tries to reduce general prescription drug expenditures by limiting coverage to only the most cost-effective substitute in most cases. It seeks to provide a financial incentive for drug manufacturers to offer lower prices in exchange for a place on the PDL (Waldrop & Calsyn, 2020). This alternative involves setting up a voluntary program modeled after the one in Washington state, wherein healthcare providers can opt in to allow pharmacists to substitute cheaper therapeutic equivalents for more expensive prescribed or non-preferred drugs. Currently, Oregon Board of Pharmacy (OBP) Rule 689.515 allows pharmacists to substitute for lower-cost generics (OBP Laws & Rules, 2021). OHA can recommend OBP amend the rule or create a new rule specifically for Medicaid pharmacies modeled after Washington Administrative Code 182-530-4150 (see Appendix A for full text).

Option 2: Outcomes-Based Pricing Structure

Current fee-for-service (FFS) pricing models tends to be quantity-based, which incentivizes providers to maximize the services provided while minimizing costs. In the case of prescription drugs, these incentives are probably slightly different given that

providers are neither paying nor receiving payment for the drugs, but the incentive structure still favors quantity over effectiveness and cost. This option will realign the incentives for drug manufacturers by renegotiating their contracts to shift to an outcomes-based pricing model. This model ties compensation for pharmaceuticals directly to its effectiveness in treating the patient's condition and forces the manufacturer to take on financial risk tied to inefficacy.

Under this alternative, the state's Pharmacy and Therapeutics Committee will set a value on a successful course of treatment that the OHP will pay for drugs prescribed to treat a given condition. Medical providers will then prescribe based on the Pharmacy and Therapeutics Committee's guidelines, and the state covers the cost of treatment for the intended outcome. If the treatment fails to meet their set threshold for efficacy, the drug manufacturer pays a set rebate back to the state. Enforcement would combine clinical electronic health record and prescription claims data to determine if the drug is effective in each case. This approach is especially effective for specialty treatments for conditions and with identifiable biomarkers to serve as an effectiveness metric. These tend to be the more expensive pharmaceutical products on the market, so there are potential savings for OHA even if they limit outcomes-based pricing to conditions with currently measurable biomarkers.

Using outcomes to structure the contracts with manufacturers allows the state to compare efficacy across drugs as treatments to prioritize those with the greatest cost-effectiveness. The main drawbacks of this alternative are the transaction costs associated with developing these new contracts with drug manufacturers and with setting up a mechanism for enforcement. While this option may be expensive, it offers a softer-handed alternative to mandatory generic substitution or a closed formulary by covering any prescription drugs that meet the Pharmacy and Therapeutics Committee's cost-effectiveness standard for a given condition. It also guarantees that the state only pays full price for effective courses of treatment, thus giving manufacturers a financial stake in patient outcomes in addition to sales quantities.

Option 3: Improve Access to Mail-Order Prescription Fulfillment

Mail-order prescription fulfillment tends to be cheaper than retail pharmacies because mail-order pharmacies can adhere more closely to PDLs. They are also able to deliver slightly better quality prescription drugs due to stricter safety controls (Hoadley, 2005). While many public and private insurance plans offer an option for mail-order prescription fulfillment, lower-income and younger individuals disproportionately underutilize mail-order fulfillment services (Ma & Wang, 2020). Promoting the use of mail-order pharmacies through supporting materials when patients enroll in the OHP and

developing resources to help patients navigate the process of setting up mail-order prescriptions will reduce the costs that the state pays due to the cheaper nature of these pharmacies.

Incentivizing the use of mail-order fulfillment, especially for maintenance drugs, is preferable to a mandate because it removes the potential barriers for Medicaid patients who do not have a stable mailing address. However, using community centers as a mailing address can also be promoted as an option for housing-insecure enrollees (Dee Weston, personal communication, March 8, 2021). Challenges associated with increased mail-order fulfillment can include reduced patient compliance with their drug regimens, and this alternative may introduce complications with federal regulations if mail-order pharmacies are based out-of-state. This alternative can mitigate some of the compliance concerns by including educational supplements about the consequences of noncompliance in the supporting materials patients receive upon enrollment in the OHP. Increasing mail-order pharmacy use can reduce costs by providing the same classes of drugs at a lower rate by complying with the PDL set by the Pharmacy and Therapeutics Committee.

Option 4: Intrastate Purchasing Pool

Forming an intrastate purchasing pool entails forming public-public partnerships with other state agencies that provide prescription drug coverage in Oregon. This will grow the size of the patient population that the purchasing pool can then use as leverage in price negotiations with drug manufacturers. Other state agencies that the OHP can partner with include the Department of Corrections, the State Mental Hospital, and the Office of Developmental Disabilities Services. Figure 5 shows the relative sizes of the patient pools served by each of these agencies. While the OHP serves the largest patient base, coordinating with these programs will greatly increase the number of enrollees that the purchasing pool represents and thus increase purchasing power.

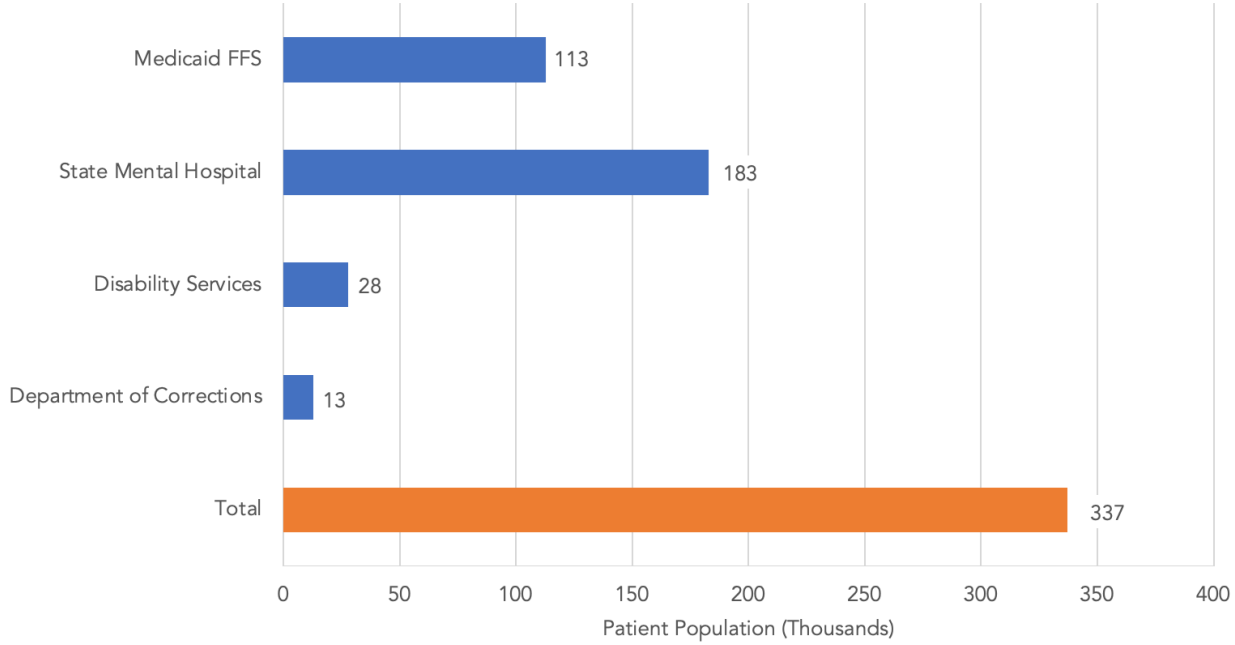
To realize this purchasing power OHA will need to approach the prescription drug coverage administrators from each of the other organizations to coordinate with them and then create or partner with a single, non-profit pharmacy benefit manager[5] (PBM) to broker deals for the larger patient pool. Using a single entity to negotiate for these bulk purchases will reduce the price the state pays for the drugs themselves and it will remove some of the administrative costs associated with for-profit PBMs that further inflate prescription drug prices. Since the regional CCOs operate their own formularies and

[5] A pharmacy benefit manager is a third-party administrator of prescription drug programs for health insurers who negotiates with drug manufacturers on their behalf.

negotiate with drug manufacturers on their own, the purchasing pool will likely start off serving only the FFS patient population. It would initially be open to CCOs to opt into before phasing them in as their contracts to administer the OHP come up for renegotiation.

Figure 5

Patient Pools Served by Oregon State Agencies



Note: Patient populations are in thousands.

Evaluative Criteria

The OHA's goal is to address the rising costs of prescription drugs on the state's Medicaid program without reducing the quality of coverage that the patients receive. Since the OHP does not have copays, all funding comes from federal block grants and the state's tax base. As such, the OHA is also concerned with limiting the effect of rising prescription drug expenditures on Oregonian taxpayers. With these considerations in mind, the evaluative criteria I will be using in my analysis are as follows:

Criterion 1: Cost Reduction

The OHA's focus is on reducing expenditures on prescription drugs. These increasing expenditures affect state taxpayers since Oregon's annual budget needs to be budget-neutral and the OHP covers the entire cost of care since it does not charge co-pays. The costs being compared will be those to taxpayers, which include any increases in annual state expenditures unless it is offset by taking money from

somewhere else in the state budget or by the projected reduction in spending on prescription drugs. Cost will be compared across alternatives based on the difference between the OHP's projected savings on prescription drugs and any costs of implementation over the alternative's first year (See Appendix B for methodology).

Criterion 2: Feasibility

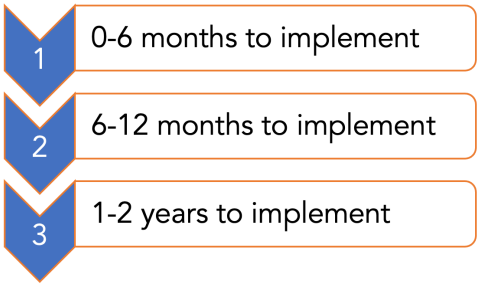
This criterion assesses how likely a given policy solution is to be successful in Oregon's specific political and organizational context. To determine a score, each alternative will be compared to similar programs from other states or countries and determine how the way that Oregon's Medicaid program is set up or administered would need to change to implement it. Based on these comparisons, a given alternative's feasibility score will capture the number of steps required to enact it, each multiplied by a difficulty modifier on a scale of 0 to 1. For example, one of the requisite steps for outcomes-based pricing is renegotiating purchasing contracts with drug manufacturers which would be difficult and thus receive a difficulty modifier of 1, whereas developing supplemental materials surrounding mail-order fulfillment would receive a modifier of 0.1 due to the relative ease of the step. The lower the feasibility score, the more feasible the option.

- Very Feasible (Low point value) – Alternative does not require structural/policy changes to the current system. Oregon has implemented similar policies in the near past.
- Moderately Feasible – Alternative requires some structural/policy changes and may meet resistance from stakeholders
- Not Very Feasible (High point value) – Alternative requires major structural/policy changes and is likely to meet political resistance from stakeholders

Criterion 3: Immediacy

Immediacy assesses how long it will take for the policy alternative to become effective once implemented. Given that the rising costs of prescription drugs cost Oregon taxpayers millions of dollars each year, a solution that addresses the problem quickly can save the state a lot of money. Immediacy measures based on what actions (e.g. modifying/applying for an 1115 Waiver) are prerequisites for implementation and a projection of how long it will take for the policy changes to take effect. Alternatives will be compared on a score from the below ex-ante rubric assigned based on an empirical projection of how many months it would take for the state to begin realizing the benefits from a given policy. For instance, any intervention that required changing the CMS 1115 Waiver would take up to 15 months since the current waiver runs through June of 2022,

and thus receive a score of 3. The lower the score, the more immediate the alternative's impact.



Evaluation & Findings

In this section, the alternatives Therapeutic Interchange Program, Outcomes-Based Pricing Structure, Promote Mail-Order Prescription Fulfillment, and Intrastate Purchasing Pool will be evaluated on Cost Reduction, Feasibility, and Immediacy as criteria. Cost Reduction was weighted the most heavily in the final rankings, as that is the best measure of the efficacy of an alternative and because as the administrator of the Oregon Health Plan, the Oregon Health Authority has a vested interest in reducing the costs of providing care to Medicaid beneficiaries without sacrificing the quality of coverage.

Option 1: Therapeutic Interchange Program

The therapeutic interchange program involves setting up a voluntary program modeled after the one in Washington state, wherein healthcare providers can opt in to allow pharmacists to substitute cheaper therapeutic equivalents for more expensive prescribed or non-preferred drugs. In order to do so, OHA can recommend to the Oregon Board of Pharmacy that they create a rule building on or amending OBOP rule 689.515 that is modeled after Washington Administrative Code 182-530-4150.

Cost Reduction

This alternative would be limited to fee-for-service (FFS) enrollees only, so it would have a smaller effect on prescription drug spending than a measure that impacts Coordinated Care Organization (CCO) administered plans as well. In a 2016 study, researchers found that therapeutic interchange programs reduced drug expenditures by 9.6% across a three year period (Johansen & Richardson, 2016). The savings for this alternative were assessed by applying that 9.6% savings rate to Oregon's FFS drug expenditures for FY20 (DURM Group, 2021). Based on a report prepared by the Maryland Advisory Council on Prescription Drug Monitoring, the administrative costs of setting up and maintaining the tracking system for the program for the first year would come out to approximately $1.1 million (MACPDM, 2009). This alternative projects to

reduce the OHP's annual expenditures on prescription drug coverage by up to $13.7 million.

Feasibility

There are three main actions needed to implement a Therapeutic Interchange Program. First, OHA needs to recommend that the Oregon Board of Pharmacy create a regulation modeled after Washington Administrative Code 182-530-4150. This receives a difficulty modifier of 1 because they will need to expend political capital to overcome likely resistance from pharmaceutical manufacturers worried about losing part of their market share. Next, OHA needs to convince providers to opt into the program as endorsing practitioners that it can function and pharmacy technicians can switch prescriptions to cheaper, preferred therapeutic alternatives. This receives a difficulty modifier of 0.5 because the program has been successful in Washington, and it does not require full buy-in to achieve savings. Additionally, OHA will need to expand the mandate of the Pharmacy & Therapeutics Committee to designate which drugs and therapeutic categories fall under the interchange program based on the best available medical evidence. This receives a modifier of 0.1 because it is a small modification to what the committee already does, and because this change falls completely within the jurisdiction of OHA. This alternative receives a feasibility score of 1.6 weighted steps.

Immediacy

A therapeutic interchange program requires the Oregon Board of Pharmacy or OHA to implement a new rule to create this program. OHA would then set up a system to keep track of prescriptions to enable pharmacists to make substitutions for therapeutic equivalents. All told, this process could take up to 10 months for the system to go into effect at the start of calendar year 2022. The program would not take longer than that because OHA could focus on encouraging providers to become endorsing practitioners between when the legislature passes the regulation and when it goes into effect. At 10 months, this alternative receives an immediacy score of 2.

Option 2: Outcomes-Based Pricing Structure

Under this alternative, the state's Pharmacy and Therapeutics Committee will set a value on a successful course of treatment that the OHP will pay for drugs prescribed to treat a given condition. Medical providers will then prescribe based on the Pharmacy and Therapeutics Committee's guidelines, and the state covers the cost of treatment for the intended outcome. If the treatment fails to meet their set threshold for efficacy, the drug manufacturer pays a set rebate back to the state. Enforcement would combine clinical electronic health record and prescription claims data to determine if the drug is effective in each case.

Cost

The cost-saving potential of this option is unknown. Savings are largely dependent on the contracts, and there is extremely limited research on the impact of outcomes-based pricing contracts in the context of the United States. Cost of renegotiating contracts with manufacturers means that they will likely only agree to these contracts on expensive, specialized drugs due to the risk and the fact that they are guaranteed coverage with set rebates under federal rules that govern state Medicaid coverage (*Reducing Prescription Drug Costs in Colorado*, 2019). As a result, the drugs with these contracts would affect a very small portion of Oregon's Medicaid population who utilize specialty drugs.

This alternative is limited to FFS enrollees, so it would have a smaller effect on prescription drug spending than any measure that also impacts CCO-administered plans. The state should wait for more research on the topic to come out as Oklahoma, Colorado, and Michigan continue to implement the outcomes-based contracts for which they received CMS approval (Murad, 2019). Additionally, initial iterations of an outcomes-based pricing structure may not generate net savings due to the costs associated with setting up, implementing, and monitoring the new pricing model (Stuard et al., 2016). There is currently not enough data available to project the costs and benefits of this alternative. Due to the costs of renegotiating contracts with manufacturers and the fact that this pricing structure is likely to be limited to high-cost and specialty drugs, savings would likely be low. This option receives a rating of inconclusive, but low.

Feasibility

There are four main actions OHA needs to take to realize an outcomes-based pricing structure. OHA will need to expand the mandate of the Pharmacy & Therapeutics (P&T) Committee to work determine which high-cost and specialty drugs are good candidates for outcomes-based contracts. As in the first alternative, this receives a modifier of 0.1 because it is a small modification to the committee's existing mandate. OHA needs to convince pharmaceutical companies to restructure contracts to be outcomes-based rather than quantity-based. This is possible only if they feel that the OHP may stop covering their drugs, especially for the more specialized (and expensive) products (Murad, 2019). However, this is difficult to do given the federal policies such as the Medicaid Best Price Rule requiring states to cover all FDA-approved drugs from manufacturers who offer the set rebate, so it receives a modifier of 1.

Upon achieving this agreement, the P&T Committee and manufacturers will need to determine measurable health outcome thresholds, as well as the rebates to agree on the terms of the contracts. This also receives a modifier of 1. Finally, OHA will need to set up infrastructure within the actuarial division to track the outcomes designated in contracts with drug manufacturers. This receives a modifies or 0.5 because while it falls under OHA jurisdiction, it requires setting up novel systems. This alternative receives a score of 2.6 weighted steps.

Immediacy

Oregon law requires state agencies to notify legislators of proposed rules at least 49 days before they take effect (Wolf & Alpaugh, 2017). This alternative would require a rule change to change the mandate of the P&T Committee before OHA could begin to negotiate with drug manufacturers to form outcomes-based contracts. After the P&T Committee determines which drugs to pursue value-based contracts for, OHA can begin negotiating with the manufacturers. Seeley et al. estimate that this renegotiation process for outcomes-based contracts can take up to nine months (2018). Due to the waiting period and the renegotiation time for outcomes-based contracts, this alternative would take at least 11 months to implement so it receives an immediacy score of 2.

Option 3: Mail-Order Encouragement

Mail-order prescription fulfillment tends to be cheaper than retail pharmacies because they can adhere more closely to PDLs. This alternative entails promoting the use of mail-order pharmacies through supporting materials when patients enroll in the OHP and developing resources to help patients navigate the process of setting up mail-order prescriptions.

Cost Reduction

This alternative is limited to FFS enrollees, so it would have a smaller effect on prescription drug spending than any measure that also impacts CCO-administered plans. Mail-order pharmacies are already available to FFS enrollees, so there would be limited costs to expand access. New enrollees would receive educational supplements informing them how to sign up for mail-order fulfillment of their prescriptions, which could be available for pickup at housing-insecure patients' doctors' offices or community programs. Projected savings associated with this option are based on historical utilization rates of mail-order fulfillment among low-income Americans and estimates of the savings associated with utilizing mail-order instead of retail pharmacies (Do & Geldsetzer, 2020; Centers for Medicare and Medicaid Services, 2013). Developing the materials and reaching all of the state's FFS enrollees by mail would cost approximately $245,000 (Lee

et al., 2011). An intervention that raises the utilization rate to the national average would save the state approximately $469,488 annually.

Feasibility

Promoting mail-order prescription fulfillment requires the fewest steps of these alternatives. First, OHA must develop materials explaining how to sign up for mail-order fulfillment and to convince them of its benefits, and then they must disseminate those materials among FFS patients, either as part of the materials given out during enrollment or to all enrollees. These actions receive difficulty modifiers of 0.5 and 0.1 respectively because development is within their purview but requires them to create new materials and because dissemination only requires a minor technical change to add them to the FFS enrollment process. This option receives a feasibility score of 0.6 weighted steps.

Immediacy

The two main steps to roll out mail-order encouragement are developing materials to distribute upon enrollment and negotiating prices with mail-order pharmacies. Developing the materials to nudge enrollees to utilize mail-order fulfillment would likely only take a few months. Since the prices would continue to reflect the standard Medicaid rebates, negotiating with mail-order pharmacies would not take very long–especially because there are already mail-order pharmacies available to FFS patients (Dee Weston, personal communication, March 8, 2021). This option would likely take between three and five months to implement, so it receives a score of 1 on immediacy.

Option 4: Intrastate Purchasing Pool

Forming an intrastate purchasing pool entails forming public-public partnerships with other public agencies that provide prescription drug coverage within the state of Oregon. This will grow the size of the patient population that the purchasing pool can then use as leverage in price negotiations with drug manufacturers. This could be modeled after New Mexico's Interagency Pharmaceutical Purchasing Council. Other agencies that the OHP can partner with include the Department of Corrections, the State Mental Hospital, and the Office of Developmental Disabilities Services.

Cost Reduction

This alternative is limited to fee-for-service (FFS) enrollees, so it would have a moderate effect on prescription drug spending. If it included CCOs in the intrastate pool for bulk-purchasing–which would be unlikely given their existing relationships with their own regional pharmacy benefit managers (PBMs)–this option would be able to save more with OHP enrollees alone making up over 25% of the population of Oregon (Division of

Financial Regulation, 2018). This is the case for mental health drugs, which OHA covers for all enrollees regardless of whether they receive coverage from a regional CCO or FFS.

The savings associated with this option are largely dependent on how many of the OHA's sister-agencies they can reach an agreement with and then how effectively the purchasing pool then leverages its increased purchasing power to buy in bulk. The FFS patient pool currently makes up approximately 2.7% of the market in the state. By working with the state's Department of Corrections, State Mental Hospital, and the Office of Developmental Disabilities Services, the intrastate purchasing pool could increase the OHP's market share by up to 5.31 percentage points. This could lead to an estimated savings of up to $8.2 million (Buzzell et al., 1975; Duggan & Scott Morton, 2006). Based off of the fiscal analysis of New Mexico SB 131, which set up an Interagency Pharmacies Purchasing Council, such a program would cost approximately $400,000 to administer each year (Felmley, 2019). Altogether, an intrastate purchasing pool would reduce costs by up to $7.8 million each year.

Feasibility

This alternative requires OHA to work with the heads of other state agencies that provide health care coverage to other segments of the population. OHA would recommend that the state legislature pass a bill similar to New Mexico's SB 131 to establish an interagency pharmaceutical purchasing board. Exerting this political capital earns this step a modifier of 1. The next step would be to negotiate through a single non-profit PBM to negotiate prices for drugs on the shared PDL on behalf of all involved agencies. This earns a modifier of 1 because it requires renegotiation contracts with drug manufacturers. This alternative receives a feasibility score of 2.0 weighted steps.

Immediacy

An intrastate purchasing pool similar to New Mexico's existing program requires the state legislature to pass a new piece of legislation in the next session that creates an interagency purchasing council. This legislation would go into effect at the start of the next calendar year, so it would take up to 10 months for the system to go into effect at the start of calendar year 2022. After the state legislature passes the law, the agencies would need to coordinate to develop a shared PDL that reflects all participating organizations' goals and demands. Upon the formation of an interagency council, said council would need to have a single non-profit PBM negotiate with drug manufacturers on their behalf, which could take a further nine months (Seeley et al., 2018). At 19 months to implement, this alternative receives an immediacy score of 3.

Outcomes Matrix

		Alternatives			
		1: Therapeutic Interchange Program	2: Outcomes-Based Pricing	3: Mail-Order Encouragement	4: Intra-State Purchasing Pool
Criteria	Cost Reduction (Dollars)	**$13,720,550**	Inconclusive, low	$469,488	$7,797,617
	Feasibility (Steps*Difficulty)	**1.6**	2.6	0.6	2.0
	Immediacy (1 to 3 ex ante rating)	**2**	2	1	3
	Final Ranking	**1**	**4**	**3**	**2**

Recommendation

After evaluating the four alternatives on the criteria of Cost Reduction, Feasibility, and Immediacy, my recommendation is that Oregon Health Authority proceed with implementing the first alternative, Therapeutic Interchange Program, to help control the state's rising expenditures on prescription drugs. In order to construct the ranking, I weighted cost reduction the most, followed by feasibility and then immediacy. The Therapeutic Interchange Program has the potential to save the state the most money on prescription drug expenditures. It could be implemented relatively easily and within the next year by modeling the program after an existing one in Washington. As additive solutions, OHA could also implement alternative 3, mail-order encouragement to create some smaller savings in the meantime. OHA and the Oregon state legislature could also look into alternative 4, creating an intra-state purchasing pool with other state agencies, in the longer term.

Implementation

Implementing a Therapeutic Interchange Program (TIP) in Oregon involves a couple of rule changes, convincing health care providers to opt into the program, and tracking the efficacy of the program. If successful, this program can save Oregon taxpayers millions in Medicaid prescription drug expenditures annually without reducing the quality of treatment that Medicaid populations receive.

The first step to implement a TIP is to convince the Oregon Board of Pharmacy (OBP) to amend or extend rule 689.515 to allow for substitution of drugs cost-effective drugs within the same therapeutic class as defined by the OHA P&T Committee. As it

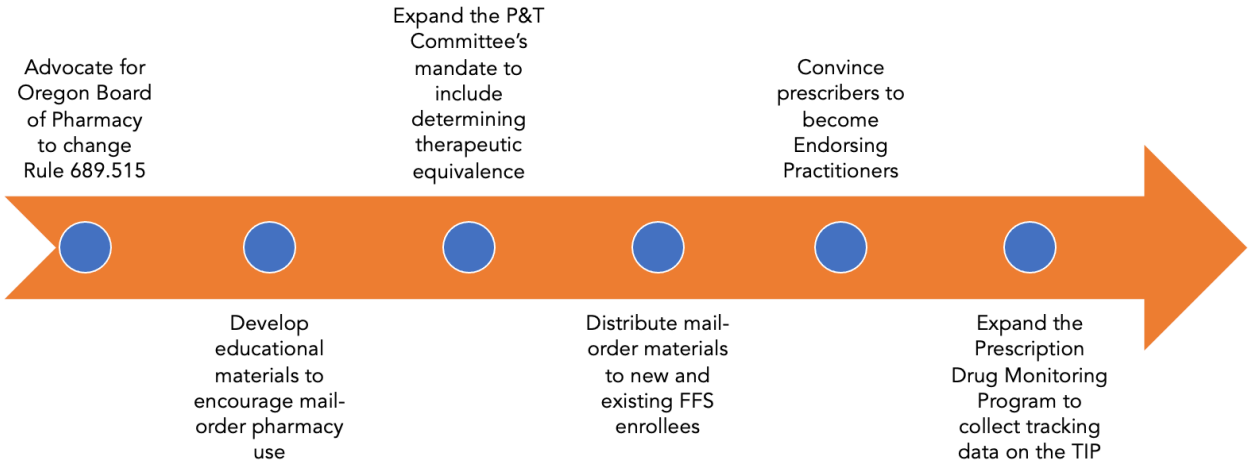
stands, this rule allows pharmacists to substitute for lower-cost generics, rather than any less costly alternative within the therapeutic class that the pharmacist deems equally as effective (OBP Laws & Rules, 2021). OHA can recommend such a rule change to the OBP Public Health & Pharmacy Formulary Advisory Committee. If the OBOP does not implement the OHA's proposed amendment, OHA can implement its own rule specifically governing Medicaid FFS pharmacies. Either of these rules can be modeled after WAC 182-530-4150, which is the rule establishing a TIP in Washington state (*WAC 182-530-4150*, 2019).

After either the OBP amends rule 689.515 or OHA implements its own version of the rule governing Medicaid pharmacies, OHA will then need to create a separate rule expanding the mandate of the P&T Committee to allow them to determine acceptable cheaper equivalents as substitutes within therapeutic classes. Following the requisite rule changes, prescribing healthcare providers will opt in as endorsing practitioners. Health care professionals will likely be supportive of this program because it reduces costs and is not binding in all cases. As they opt in, they can still prescribe what they would otherwise and the pharmacist will substitute it if appropriate unless they state not to. Additionally, the rules will keep them from being liable for negligence if they fail to specify not to substitute for a given prescription as they currently do under OBP rule 689.515 (OBP Laws & Rules, 2021).

After the rule changes, pharmacists will substitute therapeutic equivalents in accordance with the state's Medicaid PDL and P&T-defined therapeutic classes. Under the existing OBP rule, pharmacists already substitute between generics and for more expensive brand name drugs, so it is a small change on their end. The final aspect of implementation is to monitor the ITP's effect on prescription drug expenditures. By utilizing existing claims and drug utilization rate data, OHA can compare prescription usage before and after implementation to determine the TIP's efficacy. See Figure 6 for a rough timeline of implementation.

Figure 6.

Rough Timeline for Implementation



Drug manufacturers are the only stakeholder group likely to actively oppose a Therapeutic Interchange Program because they may lose market share as pharmacies swap more cost-effective therapeutic class equivalents for their products. In order to counteract any resistance from the pharmaceutical industry, OHA should form a coalition of supportive stakeholders that includes CCOs and other insurers, who will likely support a TIP due to its evidence-based nature and its emphasis on high quality, cost-effective patient care (AMCP Board of Directors, 2019). To garner the support of Oregon taxpayers, OHA can emphasize how the TIP will likely substantially reduces OHP's annual expenditures on prescription drugs, of which the state contribution is entirely taxpayer-funded (Johansen & Richardson, 2016). Pointing to the similarities with existing rules and the success of a similar program in Washington can also be helpful in building a coalition around implementing a TIP. While patients may have mixed feelings, reiterating that TIP is opt-in and that providers can ensure that their prescriptions not be substituted by explicitly asking that it not be can help to alleviate concerns about loss of access to needed drugs. In the event that the TIP fails to be implemented or the uptake rate among prescribers is too low to be ineffective, prescription drug spending will remain at similar levels to status quo without substantially raising state prescription drug expenditures for the Medicaid program.

Conclusion

A Therapeutic Interchange Program offers the Oregon Health Program the rare combination of prescription drug cost reduction without sacrificing quality or access to coverage. It allows pharmacists to distribute the most cost-effective options treat a given condition within therapeutic classes, which reduces costs in an environment of ever-increasing drug prices. It modifies an existing rule to realize savings for Oregon taxpayers

who bankroll the state's contribution to the Medicaid budget. While alternative pricing structures such as Outcomes-Based Pricing show some promise in addressing the causes of rising pharmaceutical costs, there is not currently enough data to confirm how effective or feasible they would be in Oregon's context. Combined with Mail-Order Encouragement and potentially an Intra-State Purchasing Pool arrangement between OHA and other state agencies, a Therapeutic Interchange Program will help to reduce the OHP's prescription drug expenditures and to preserve coverage for Oregon's most vulnerable populations for years to come.

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Appendix A. Washington Administrative Code 182-530-4150 Full Text

WAC 182-530-4150 Therapeutic interchange program (TIP).

This section contains the medicaid agency's rules for the endorsing practitioner therapeutic interchange program (TIP). TIP is established under RCW 69.41.190 and 70.14.050.

(1) TIP applies only to drugs:

(a) Within therapeutic classes on the Washington preferred drug list (Washington PDL);

(b) Included in a motion passed by the pharmacy and therapeutics (P&T) committee; and

(c) Prescribed by an endorsing practitioner.

(2) TIP does not apply to a drug when:

(a) The P&T committee determines that TIP does not apply to the drug or its therapeutic class on the Washington PDL;

(b) Prescribed by a nonendorsing practitioner;

(c) The endorsing practitioner signs the prescription "dispense as written (DAW)"; or

(d) Otherwise prohibited under RCW 69.41.190.

(3) The agency may impose nonendorsing status on an endorsing practitioner only under the circumstances outlined in RCW 69.41.190.

(4) Except as otherwise provided in subsection (5) of this section, the agency may restrict a client's first course of treatment within a therapeutic class, according to the provisions in RCW 69.41.190.

(5) In accordance with WAC 182-530-4125(3) and 182-501-0165, the agency will request and review the endorsing practitioner's medical justification for preferred and nonpreferred brand name drugs and nonpreferred generic drugs for the client's first course of treatment.

Appendix B. Costing Calculations

Option 1: Therapeutic Interchange Program

The cost figures for a Therapeutic Interchange Program are based on a 9.60% savings estimate from a 2016 study (Johansen & Richardson, 2016). I multiplied the Oregon Health Plan's FFS expenditures for FY20 of $154.4 million by this percentage to get approximately $14.82 million as the savings from a TIP (DURM Group, 2021). To calculate the costs of setting up a TIP, I used estimates from a Maryland Advisory Council on Prescription Drug Monitoring report in 2009 that looked at the costs of setting up and maintaining Prescription Drug Monitoring Programs (PDMP) across different states. The set-up costs ranged from $450,000 to $1.5 million, so I used $600,000 for the analysis since Oregon already has a PDMP. The operating costs ranged from $125,000 to almost $1 million, so I used $500,000 for the analysis (MACPDM, 2009). Using these estimates, the total costs are $1.1 million. Subtracting the costs from the savings, I estimated the total savings from a TIP to be $13,720,550.18.

THERAPEUTIC INTERCHANGE PROGRAM COSTING		
SAVINGS		**SOURCE**
Percent of total prescription drug expenditures saved by T.I.P	9.60%	Johanson & Richardson, 2016
Baseline FFS drug spending (FY20)	$ 154,380,731.00	DUR, 2020
Estimated savings from T.I.P.	$ 14,820,550.18	
COSTS		
Estimated administrative costs to expand PDMP	$ 600,000.00	MACPDM, 2009
Estimated additional annual administrative for expanded PDMP	$ 500,000.00	MACPDM, 2009
Total estimated Costs	$ 1,100,000.00	
TOTAL = SAVINGS - COSTS	**$ 13,720,550.18**	

Option 2: Outcomes-Based Pricing

There was not enough data available to accurately cost Option 2: Outcomes-Based Pricing.

Option 3: Mail-Order Encouragement

To calculate the potential savings from a mail-order encouragement program, I used the estimated savings per unit by switching from retail pharmacies to mail-order pharmacies of 9.3 percent from a 2013 case study (Centers for Medicare and Medicaid Services, 2013). I took the 5.0 percent average mail-order pharmacy usage rate for low-income individuals and the 10.3 percent national average from a recent longitudinal study (Do & Geldsetzer, 2020). I then calculated the savings from a 1 percentage point increase in mail-order usage by multiplying the 1 percent of the total FFS drug spending from FY20 by the 9.3 percent savings to get $134,806.85 (DURM Group, 2021). If the intervention increases mail-order usage from the low-income rate to the national average, that would be a 5.3 percentage point increase, so I multiplied the 1 percentage point figure by 5.3 to get $714,476.29 as the potential savings.

To calculate the costs of the alternative, I assumed a cost of $2,000 for labor to develop materials. I used the cost of $2.49 to reach each patient from a 2011 paper on mailed reminders for colon cancer screenings (Lee et al., 2011). Multiplying this number by the average FFS enrollment for FY20 of 97,987 and adding the $2,000 for development, I found the cost of this program to be $244,987.63 (DURM Group, 2021). When subtracted from the potential savings for the program, the total cost reduction for Mail-Order Encouragement comes out to be $469,488.66.

MAIL ORDER ENCOURAGEMENT COSTING		
SAVINGS		**SOURCE**
Savings per unit by switching from retail to mail-order fulfillment	9.3%	CMS, 2013
Average mail order usage rate among low-income individuals	5%	Do & Geldsetzer, 2020
Baseline FFS drug spending (FY20)	$ 154,380,731.00	DUR
National average mail order usage rate	10.3%	Do & Geldsetzer, 2020
Annual savings from a 1 percentage point increase in uptake	$ 134,806.85	
Annual savings from reaching national average usage rate (10.3%)	$ 714,476.29	
COSTS		
Costs to develop materials	$ 2,000.00	Assumption by analyst
Cost per patient to mail educational reminder	$ 2.49	Lee et al., 2011
Average FFS enrollment FY20	97,987	DUR, 2020
Cost to develop materials and send it to all FFS enrollees	$ 244,987.63	
TOTAL = SAVINGS - COSTS	**$ 469,488.66**	

Option 4: Intrastate Purchasing Pool

The $400,000 cost of the Intrastate Purchasing Pool comes from the fiscal impact report for New Mexico SB 131 establishing the Interagency Pharmaceutical Purchasing Council (Felmley, 2019). To calculate the potential savings, I totaled the patient enrollment figures for Oregon's State Hospitals, Department of Corrections, Medicaid FFS, and Disability Services to get 337,000 (*Oregon State Hospital - Salem*, 2020; Oregon Department of Corrections, 2020; DURM Group, 2021; Teninty, 2019). I divided the total by the population of Oregon and compared it to just the FFS patient pool divided by the state population to find that the Intrastate Purchasing Pool would increase the represented patient pool by 5.31 percentage points (*QuickFacts Oregon*, 2019). I found two papers that found an approximately 1:1 positive correlation between market share and purchasing power and so I found 5.31 percent of FFS spending for FY20, or approximately $8.2 million, to be the potential savings from this alternative (Buzzell et al., 1975; Duggan & Scott Morton, 2006; DURM Group, 2021). Subtracting the estimated cost from this figure, the total estimated savings from an Intrastate Purchasing Pool are $7,797,616.82.

INTRASTATE PURCHASING POOL COSTING		
SAVINGS		**SOURCE**
State hospital patient pool (Total Patient Days thousands)	183	American Hospital Directory
Department of corrections patient pool (thousands)	13	Oregon Department of Corrections, 2020
Medicaid FFS population (thousands)	113	DUR, 2020
Disability services patient pool (thousands)	28	Teninty, 2019
Population of Oregon	4,218,000	US Census Bureau, 2019
Potential market share increase	**5.31 pp**	
Current market share (FFS)	2.68%	
Baseline FFS drug spending (FY20)	**$154,380,731**	DUR, 2020
Savings Market share correlated to return on investment	$ 8,197,616.82	Buzzell et al., 1975
COSTS		
NM Staff and Consultant Costs to assist Interagency Pharmaceutical Purchasing Council	$ 400,000.00	Felmley, 2019
TOTAL = SAVINGS - COSTS	**$ 7,797,616.82**	