The debate about how to guarantee nationwide access to quality health care continues to intensify as a weak economy has forced many states to dramatically revise their Medicaid programs. The question for Medicaid directors is whether program changes are beneficial or detrimental to each state’s residents. In the 1990s, Oregon expanded its Medicaid program with a public/private partnership known as the Oregon Health Plan (OHP), which aimed to cover all uninsured residents with income up to 100 percent of the federal poverty level (FPL). The OHP Medicaid expansion was unique in its effort to make Medicaid coverage available to Oregonians living in poverty regardless of age, disability, or family status, and in providing benefits based on a priority list of conditions and treatments.1 A massive budget shortfall in 2003 forced the state to scale back its efforts, leading to Oregon Health Plan 2 (OHP2), a program that tried to reduce expenditures by cutting benefits and sharing costs with beneficiaries.

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The results of the project reveal a variety of unintended consequences from implementing OHP2, such as massive disenrollment from Oregon Health Plan 2, a program that tried to reduce expenditures by cutting benefits and sharing costs with beneficiaries. Jeanene Smith, M.D., M.P.H., and Bruce Goldberg, M.D., of the Office for Oregon Health Policy and Research (OHPR) recently led a two-part project exploring the impact of the cost-sharing and benefit reductions on former and current OHP beneficiaries. Concerned that Oregon’s as yet untested policies were gaining popularity with legislators across the nation, the researchers used Oregon as the site for a “natural experiment” to test the effectiveness and total impact of OHP2.

The results of the project reveal a variety of unintended consequences from implementing OHP2, such as massive disenrollment from the lowest income individuals. Implementing co-payments created no net savings for the Oregon Health Plan. Changes to the Oregon Health Plan resulted in an abrupt and sustained increase in ED visits by the uninsured.

### key findings
- Changes to the Oregon Health Plan resulted in disenrollment by the lowest income individuals.
- Implementing co-payments created no net savings for the Oregon Health Plan.
- Changes to the Oregon Health Plan resulted in an abrupt and sustained increase in ED visits by the uninsured.

**Surviving the Perfect Storm: Impacts of Benefit Reductions and Increased Cost Sharing in a Medicaid Program**

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The results of the project reveal a variety of unintended consequences from implementing OHP2, such as massive disenrollment from the lowest income individuals. Implementing co-payments created no net savings for the Oregon Health Plan. Changes to the Oregon Health Plan resulted in an abrupt and sustained increase in ED visits by the uninsured.
ilitators have learned valuable lessons and incorporated them into state policy decisions. For example, the results from this study and others by researchers from the Oregon Healthcare Research Evaluation Cooperative (OHREC) were instrumental in the Oregon legislature’s eventual decision to eliminate premiums for beneficiaries with incomes less than 10 percent FPL. Dr. Smith and others have presented study results to a number of other state legislatures contemplating changes to their Medicaid programs.

**Background**

OHP2 divided those covered by the state into three main categories: OHP Plus, which covers adults and children eligible for traditional Medicaid programs; OHP Standard, which attempts to cover those who fall outside of Medicaid’s traditional purview (adults 19-64, up to 100 percent FPL); and the Family Health Insurance Assistance Program (FHIAP), which subsidizes premiums for private health insurance plans. The beneficiaries of OHP Plus continued to receive full benefits with no premiums and minimal co-payments for some outpatient services and prescription drugs. OHP Standard increased premiums for most enrollees, eliminated premium waivers for vulnerable individuals, and implemented a six-month lock-out after failure to pay one month’s premiums. Furthermore, the plan eliminated coverage for outpatient mental health and chemical dependency services and a variety of benefits including vision and dental services and most durable medical equipment. OHP2 also instituted significant co-pays for nearly all medical services beyond basic preventive services and immunizations.

According to Smith, the project’s objective was to “inform state decision makers who continue to seek efficient cost-saving strategies and consider competing approaches for maintaining and rebuilding benefits following reductions in Medicaid and reshaping publicly financed health care.” To do so, the researchers conducted two related but independent studies. The Economics of Benefit Design study, led by Neal Wallace, Ph.D., and John McConnell, Ph.D., explored OHP2’s effects on the enrollment, treatment patterns, and expenditures of Standard beneficiaries. A complementary study led by Robert Lowe, M.D., M.P.H., Primary Care Access and Emergency Department Impacts, investigated changes in emergency department (ED) use as a result of changes to OHP.

**The Economics of Benefit Design**

Wallace and McConnell’s study used claims, encounter, and enrollment data for all OHP beneficiaries from July 2001 through July 2004 to identify the impact of the policy on disenrollment rates and the separate effects of the co-payments and benefit reductions on the utilization and expenditures of the remaining covered services. The researchers identified relative rates of disenrollment resulting from the policy by comparing groups of OHP Standard beneficiaries before and after the policy change. Similarly, they identified the impact of eliminating specific benefits by comparing pre- and post-policy expenditures for OHP standard enrollees who had used those benefits pre-policy to those who had not. To identify the changes in expenditures and utilization that resulted directly from the cost-sharing measures implemented by OHP2, the researchers compared the changes between OHP Plus and OHP Standard beneficiaries.

**Results**

In three months following the changes to the OHP, enrollment in OHP Standard dropped from more than 100,000 to approximately 60,000 individuals and continued to decline to fewer than 30,000 individuals by the end of the study period. Demographic data about the massive disenrollment showed that the lowest income individuals were much more likely to drop out of the program. The researchers attribute this primarily to the stricter premium payment rules which included a six-month lock-out period following disenrollment and a de facto premium increase for the poorest and most vulnerable through the elimination of premium waivers. Planned premium increases for higher income individuals and couples did not appear to contribute to disenrollment trends.

In contrast to the expected reductions in expenditures that are typically associated with co-payments, the study found that implementing co-payments created no net savings for OHP. While there was a clear

**Oregon’s Health Care Lottery**

At its inception, the Oregon Health Plan Standard served more than 100,000 low-income adults. Budget cuts in 2004 reduced that number to a little more than 17,000 residents. The program remained closed to new enrollees until January 2008, when the Department of Human Services (DHS) announced that it could accommodate up to 24,000 people. To guarantee fairness in the selection process, DHS established a lottery for all those eligible for coverage through OHP Standard. More than 91,000 Oregon residents put themselves on the “reservation list” to enter the lottery for an application.

Beginning in March, a computer randomly chose 3,000 people to receive applications. As of April 24, about 2,000 of those applications had been returned to DHS and more than 600 were deemed eligible for coverage. DHS continues to review applications from the March, April, and May drawings, and will continue mailing applications to randomly selected candidates for OHP Standard until the program is serving the state at full capacity.

State officials acknowledge that the lottery represents only a small step on the path toward universal health coverage and are actively considering broader policies that would help the state achieve this goal. For more information, visit the OHP Web site at http://egov.oregon.gov/DHS/healthplan/ or to learn more about health reform efforts in Oregon, visit the Oregon Health Fund Board Web site at http://www.oregon.gov/OHPPR/HFB/.
decrease in the percentage of individuals using services, the expenditures incurred by those using services increased at a corresponding rate, eliminating any potential savings. Use and expenditures for inpatient and outpatient hospital services actually increased with co-payments but were counterbalanced by decreased pharmacy use and expenses, the only covered services that responded to co-pays as expected. The researchers note, however, that using co-payments did save the state of Oregon money by directly shifting some of the cost to the beneficiaries.

Similarly, the researchers found evidence disputing the standard assumption that a major reason for high Medicaid expenses is overuse or inappropriate use of the ED for routine care. Analysis of study data suggests that this is a faulty assumption; expenses associated with ED visits that did not result in hospital admissions accounted for less than 7 percent of total Medicaid expenditures. Therefore, the researchers concluded that even very aggressive attempts to curtail ED use by Medicaid enrollees (such as a $50 co-payment) would, at best, generate savings of 2 percent or less.

In addition to changes aimed at shifting some of the cost burden onto the beneficiaries, the creators of OHP Standard hoped to reduce costs by eliminating certain benefits. The researchers sought to identify whether expenditures for the remaining benefits were influenced by these cuts. They were surprised to find that, while the expenditures of individuals who had accessed the substance-abuse benefit increased, those of individuals who had used the mental illness benefit remained constant. The researchers propose that, because the severely mentally disabled are covered by OHP Plus, the OHP Standard group may be less debilitated than the former mental health benefit users, forcing them to seek treatment more frequently. The researchers note that eliminating benefits did reduce costs on the whole, but at a lower rate than expected for some.

Policy Implications

Unfortunately for policymakers nationwide, these studies suggest that there are no easy solutions to reducing the expenditures associated with Medicaid patients. Wallace cautions policymakers that, if “co-payments exacerbate the already endemic problems of treatment access experienced by most Medicaid enrollees, it may be difficult to obtain savings from more efficient treatment use, regardless of the co-payment structure.” Other strategies, such as benefit reductions or changes aimed at reducing ED use, also appear to offer little in the way of overall savings. In some cases, they may even result in unintended expenditure increases. Based on the experience of the revised Oregon Health Plan, the researchers advise matching modest premiums or premium increases with administrative rules that do not necessarily inhibit low-income individuals from enrollment and premium payment.

Primary Care Access and Emergency Department Impact

Design

The second study examined changes in the use of the ED as a measure of access to primary care. The researchers analyzed billing data from 26 of Oregon’s 59 EDs, comparing average visits per month by user in 2002 and 2004, before and after the changes to the OHP.

Results

The researchers found that the changes to the OHP resulted in an abrupt and sustained increase in ED visits by the uninsured. Multivariable models showed a 20 percent increase in uninsured ED visits following the disenrollment period. Even more dramatic was the increase of visits for behavioral health conditions, with an 82 percent adjusted increase in uninsured alcohol-related visits and more than doubling of the adjusted number of drug-related and other psychiatric ED visits.

During this study, Lowe’s team attempted to analyze data using the Emergency Department Algorithm (EDA), a tool that has been widely adopted among health policy researchers to evaluate a community’s medical safety net. Developers of the EDA claim that it can determine whether a community’s primary care needs are being met by using ED diagnoses to assign probabilities that a visit falls into each of four categories: non-emergency, primary care-treatable emergency, preventable emergency needing ED care, and non-preventable emergency. By comparing results from the EDA with those from other methods, Lowe’s research team found that the EDA could not detect changes in access to primary care that were easily measurable with other methods. As a result of their experiences, the researchers encourage policymakers not to rely on the tool until it has been significantly refined.

Policy Implications

Abrupt policy changes that lead to disenrollment of Medicaid enrollees have implications for the health care system as a whole. These individuals do not disappear from the system; they seek access where they can find it. In Oregon, this was apparent in the dramatic increase in ED use by uninsured patients.

Conclusions

Taken as a whole, the researchers’ findings suggest that state Medicaid programs will likely have difficulty applying strategies that might be successful among higher-income, commercially enrolled individuals. In order for these types of cost-sharing and benefit design strategies to be successfully applied to Medicaid beneficiaries, policies must be carefully developed for the low-income individuals they will serve.

The application of rigid administrative premium payment rules effectively eliminated the ability of the program to flexibly
respond to beneficiaries’ income dynamics and appeared to be largely responsible for the massive disenrollment that occurred. Similarly, even commercial policies typically apply out-of-pocket limits on co-payments. Income adjusted limits on co-payments may have allowed for the effective cost-sharing in the OHP.

Policymakers must adapt traditional cost-saving measures to reflect Medicaid beneficiaries’ uniquely limited capacity to respond to such changes. By crafting policies specifically for the Medicaid-eligible population, policymakers can maximize insurance coverage for individuals otherwise excluded from quality health care.

About the Author
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Endnotes
2 The study was organized and managed by staff at OHPR, while specific project components were led by a large research team at a number of institutions.
5 Forthcoming article in Health Services Research: “Effect of Eliminating Behavioral Health Benefits for Selected Medicaid Enrollees.”