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## Medicaid Reforms and Emergency Room Visits: Evidence from West Virginia's Medicaid Redesign

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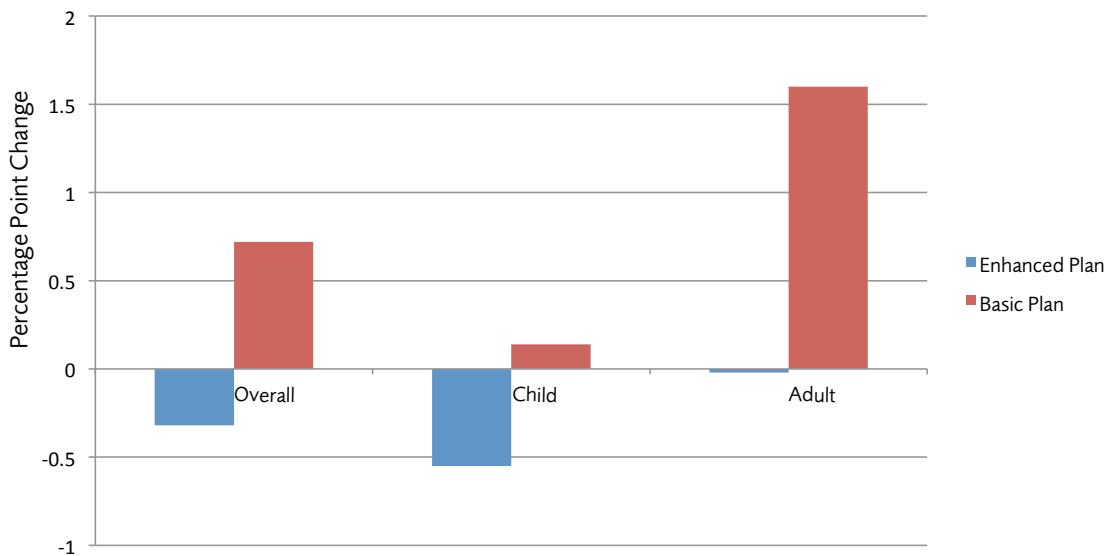
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**F**EDERAL AND STATE governments are under increasing pressure to limit Medicaid spending without negative health consequences. We examine a unique policy effort in West Virginia aimed at reducing spending and improving health through personal responsibility and preventive care. These efforts show promise for reducing emergency-room (ER) visits among those who chose the personal-responsibility plan but had the unintended consequence, at least in the short run, of increasing visits for those who defaulted into the plan with reduced benefits. Overall, the results suggest that a focus on diagnostic and preventive services reduces ER visits, and these types of redesigns might result in longer-term costs savings, particularly among children. However, plans that restrict benefits, specifically benefits for prescriptions and mental health services, may increase costly ER visits in the short term for children and adults.

### OVERVIEW

REFORMING MEDICAID PROGRAMS is becoming a critical policy concern because federal and state Medicaid spending is on an unsustainable path. Total Medicaid spending increased 118 percent from 1995 to 2005<sup>1</sup> and the Congressional Budget Office is predicting another 115 percent increase in federal spending from 2011 to 2021.<sup>2</sup> On average, states spend an additional 32 percent of the federal total.<sup>3</sup> Thus, policymakers are faced with the enormous challenge of containing Medicaid spending without endangering the health of a vulnerable population. One option is to provide incentives for Medicaid members to take actions to improve their own health, including the receipt of preventive care, and to encourage members to use lower-cost options in the health system.

**FIGURE 1. PERCENTAGE POINT CHANGE IN PROBABILITY OF AN ER VISIT AFTER MHC ELIGIBILITY**



Source: Author's calculations.

Note: Results are statistically significant at the 10 percent level for overall basic-plan enrollees, enhanced child enrollees, and basic adult enrollees.

In March 2007, West Virginia implemented a Medicaid redesign, Mountain Health Choices (MHC), aimed at reducing costs and improving care through increased personal responsibility and preventive care.<sup>4</sup> A major goal of the redesign was to limit use of the ER for non-emergency visits.<sup>5</sup> Other states have since announced coverage limits for the ER, including not covering visits deemed unnecessary (Washington) and limiting visits to six per year (Florida). However, the West Virginia efforts were unique in trying to encourage more health behaviors instead of restricting ER use directly.

Under MHC, the existing Medicaid program design ended and women and child members were either enrolled in an enhanced plan, in which they agreed to certain program rules and received more comprehensive benefits in return, or a basic option with fewer program rules that was less generous in prescription coverage and mental health and chemical-dependency services than the previous Medicaid design. The enhanced plan rules entailed completing and signing both a member-responsibility agreement and a health-improvement plan. The member-responsibility agreement was a pledge that included using the ER only for emergencies, relying on “medical homes” for services, keeping appointments with doctors, and “doing my best to stay healthy.” The health-improvement plan is an agreement developed during a visit to the primary-

care provider as part of the MHC enrollment process and outlines office visits, diagnostic services, and education programs the beneficiary agreed to receive in the coming year. The default option was the basic plan, and only about 14 percent of members chose to enroll in the enhanced plan.<sup>6</sup>

### CONSUMER AND PROVIDER INCENTIVES AFFECTING ER USE

A PRIMARY MOTIVE for instituting certain features of the reforms (like the personal responsibility pledges of the enhanced plan) was to reduce ER-related costs. However, we hypothesize that coverage restrictions in the basic option actually lead to higher unmet service needs relative to traditional Medicaid coverage, resulting in higher ER use. At the same time, we expect lower ER use from the enhanced plan relative to traditional Medicaid. This leads to an ambiguous prediction for the effect of the MHC program in general relative to traditional Medicaid but clear predictions for each of the two components separately.

Several features of MHC, particularly in the enhanced plan, were targeted toward reducing ER visits. Using the ER only for emergencies was one of the pledges included in the MHC member-responsibility agreement for enhanced members. In addition, enhanced-

plan members were encouraged to develop stronger ties with their primary-care physicians through an additional office visit and the development of a health-improvement plan. For those on the basic plan, limits on health services or prescription drug use in the basic plan might have led to substitutions toward treatments with a lower number of prescription drugs or drug rationing. Even if the limits are not binding, the nonpecuniary costs of requesting an exemption might have deterred providers from a treatment they otherwise would have prescribed, resulting in higher probabilities of an ER visit.

## ANALYSIS

WE USE FOUR years of administrative claims and enrollment data provided by the West Virginia Department of Health and Human Resources. ER visits are classified as nonemergency, primary-care treatable, emergency preventable, and emergency nonpreventable using the New York University Emergency Department Algorithm.

Using the natural experiment created by the staggered implementation of MHC and controlling for personal characteristics and time trends, we find that ER visits decreased for those on the enhanced plan and increased for those on the basic plan.<sup>7</sup> Further investigation indicates that the decrease in enhanced-plan ER visits is driven by child members and the increase in basic plan ER visits is driven by adult members (see figure 1). The probability of a child ER visit decreased by 0.55 percentage points for children on the enhanced plan. This represents a decrease of 5 percent compared to the overall probability of an ER visit of 10 percent. The probability of an adult ER visit increased by 1.6 percentage points, or about 8 percent for adults on the basic plan.

The above results indicate effects for members who enrolled in each plan. We conduct further analysis using IV regression to estimate whether the plans would have affected ER visits if members had been randomly placed in the enhanced and basic plans. These results suggest that enhanced-plan enrollment would reduce child ER visits for problems that could be addressed by their primary care provider.

## RECOMMENDATIONS

THIS RESEARCH SUGGESTS that insurance designs focused on personal responsibility and preventive care

have potential for reducing costly ER visits. The West Virginia redesign plan required members to meet with their primary-care physician and develop an agreement for preventive and diagnostic services that the patient would receive in the coming year. Conversely, reducing benefits, including limiting prescriptions and mental-health services, increased ER visits for adults. In this case, policies that encouraged more involvement with health care providers and more involvement in the member's (or child's) own health produced the desired reduction in ER visits. Policies that limited treatment options led to the unintended consequence of increased ER visits.

Based on this research, states should consider whether they can create a greater connection between health providers and members' involvement in their own health care. However, policymakers must be cognizant of what drives member decision making in their policy designs. In the West Virginia case, a majority of members did not enroll in the enhanced plan in the short term despite additional health coverage and no direct monetary costs to enrollment. Further, states should consider the possible costs, both near term and future, of restricting treatment options by limiting coverage levels.

## CONCLUSION

OUR ANALYSIS OF the effect of the West Virginia Medicaid redesign focuses on ER use. We find evidence that the enhanced plan, designed to encourage better health behaviors and increase personal responsibility in health care, results in a significantly lower probability of a primary-care treatable ER visit. This result remains after addressing the bias created when members self-selected into plans. However, most participants chose or were defaulted into the basic plan, and we find that the benefit reductions experienced by those enrolled in the basic plan led to a higher probability of a primary-care treatable ER visit. Overall, the program—which was intended to reduce costs, increase personal responsibility, and decrease ER use—had the unintended consequence in the short term of increased ER visits because of low enrollment in the enhanced plan.

## ENDNOTES

1. J. K. Inglehart, "Medicaid Revisited—Skirmishes over a Vast Public Enterprise," *The New England Journal of Medicine* (February 15, 2007): 734–40.
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3. Kaiser Family Foundation, "West Virginia Medicaid Spending," StateHealthFacts.org, <http://www.statehealthfacts.org/profileind.jsp?cat=4&sub=47&rgn=50>.
4. Tami Gurley-Calvez et al., "Mountain Health Choices Beneficiary Report" (report, West Virginia University, Bureau of Business and Economic Research, Morgantown, WV, 2009), [www.be.wvu.edu/bber/pdfs/BBER-2009-09.pdf](http://www.be.wvu.edu/bber/pdfs/BBER-2009-09.pdf).
5. Joe Manchin III, *Medicaid Redesign Proposal*, West Virginia Department of Health and Human Resources, November 7, 2005, <http://www.wvdhhr.org/medred/bmsredesignfinal11705.pdf>.
6. Tami Gurley-Calvez, Adam Pellillo, Paula Fitzgerald, and Michael Walsh, "Choice in Public Health Insurance: Evidence from West Virginia Medicaid Redesign," *Inquiry* 48, no. 1 (2011): 15–33.
7. Tami Gurley-Calvez, Genevieve M. Kenney, Kosali Simon and Douglas Wissoker, "Medicaid Reform and Emergency Room Visits: Evidence from West Virginia's Medicaid Redesign" (working paper 12-26, Mercatus Center at George Mason University, Arlington, VA, October 2, 2012), <http://mercatus.org/publication/medicaid-reform-and-emergency-room-visits-evidence-west-virginias-medicaid-redesign>.

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Tami Gurley-Calvez specializes in using large databases to address issues of health policy. Her previous research on Medicaid redesign in West Virginia examines choice and plan selection and was published in *Inquiry* and the *Journal of Public Policy & Marketing*.