WORKING PAPER

MEDICAID REFORM AND EMERGENCY ROOM VISITS:
Evidence from West Virginia's Medicaid Redesign

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Executive Summary

      We use an innovative redesign of West Virginia's Medicaid that took place from 2007 to 2010 to estimate the causal impact of incentives within Medicaid to encourage better health and health care behaviors and reduce emergency room (ER) visits. Starting in 2007 on a rolling basis, existing Medicaid recipients (and new enrollees) were moved from the traditional Medicaid program to the new Mountain Health Choices (MHC) program. They were given a choice of a "basic" or an "enhanced" Medicaid plan. The basic plan was less generous than the traditional Medicaid program while the enhanced plan was more generous. The basic plan restricted the number of prescriptions per month and stopped covering mental health care services, chemical dependency, and tobacco cessation treatments for adults—substantial restrictions for the Medicaid population. The enhanced plan provided more free services in return for the enrollees' completing a health improvement plan with their primary care physicians and signing a personal responsibility agreement not to use the ER for nonemergency care and to engage in better health behaviors.

      Because of the way the redesign was rolled out, we are able to estimate its causal impact on ER visits using a differences in differences technique with individual fixed effects by which we compare the same individuals before and after the reform. We estimate the impact of the basic and enhanced plans separately using two different methods. First, we estimate the effect the two plans had on those who enrolled in the plans, in which the results are most relevant for programs that offer enrollees a choice between plans. Next, we estimate the effect the two plans would have if the average member were assigned to one plan or the other using an instrumental variables (IV) strategy, in which the results are most relevant for reforms that chose one approach (that is, those that cut benefits or increase benefits with personal-responsibility nudging).

      Our estimates show that the enhanced plan is effective in reducing certain types of ER visits for children. Children and adults who experienced a benefit reduction on the basic plan have higher rates of ER visits. Overall, the net effect is an increase in the probability of an ER visit since far more individuals chose (or were defaulted into) the basic plan than the enhanced plan. The effects are largely driven by adults, who experienced a 7 percent increase in the probability of an ER visit and about a 10 percent increase in the probability of both nonemergency and primary-care treatable visits. We also find evidence

that placing the average member in the basic plan increases primary-care treatable ER visits and the opposite holds for the enhanced plan.

Introduction

Rising health care costs and the prevalence of chronic diseases are placing increasing pressure on state Medicaid programs. Finding ways to improve the performance and design of Medicaid programs will become even more important when nonelderly individuals in families earning under 133 percent of the federal poverty level (FPL) are eligible for Medicaid through the expansion scheduled for 2014 through the 2010 Affordable Care Act. Following the passage of the Deficit Reduction Act of 2005, a handful of states experimented with Medicaid program redesigns in an effort to limit costs and improve health behaviors among beneficiaries.

Reducing inappropriate emergency room (ER) use is a priority of Medicaid cost-reduction efforts nationally and in West Virginia's Mountain Health Choices (MHC) Medicaid reform, in which the perception that members were using the ER for nonemergency and primary care was a driving motivation for the structure of the new program (Manchin 2007). The MHC redesign, which began to be implemented in March 2007, is unique in its emphasis on patient responsibility and its linking of program benefits to individual actions.

Under MHC, the existing Medicaid program design ended and beneficiaries could opt in to an enhanced plan in which they agreed to certain program rules and received more comprehensive benefits in return. Alternatively, they defaulted to a basic option that was less generous in prescription coverage and mental health and chemical dependency services than the previous Medicaid design. The enhanced plan rules entail completing and signing both a member responsibility agreement and a health improvement plan.[1] The member responsibility agreement is a pledge that includes using the ER only for emergencies, relying on "medical homes" for services, keeping appointments with doctors, and "doing my best to stay healthy."

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[1] See Appendix, figures 3 and 4 for examples of a health improvement plan and a member responsibility agreement.

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 agrees to receive in the coming year. Beneficiaries may view these as costly actions to take in return for a financial reward of unlimited prescriptions and certain other services such as coverage of mental health and substance abuse treatment and free weight loss educational programs. Only 14 percent chose the enhanced plan when faced with the choice by July 2009. This low take-up figure is also consistent with research showing inertia in the use of default options (see, for example, Beshears, Choi, Laibson, and Madrian 2008 for 401K plans).

An important question in evaluating reform efforts is whether the program changes are likely to "bite," or in other words, whether the limits in the basic plan have real consequences for service utilization. Our examination of the data suggests the restrictions of the basic plan, relative to both the enhanced and traditional Medicaid plans, are likely to be binding. For example, the basic plan limits beneficiaries to no more than four prescriptions per month, but we found that more than 55 percent of adults and 40 percent of children who had at least one prior month with more than four prescriptions were found among those enrolled in the basic plan. While it is possible for a physician to call and receive exemptions from the State Department of Health to provide extra services for those in the basic plan, the extra effort required to get an exemption represents a hurdle and, thus, restricted access to care that may have ramifications for use of the ER. Perhaps a more interesting economic feature of the enhanced plan relative to the basic plan is the "nudge" factor (Thaler and Sunstein 2009). The very act of filling out a form with a physician (even of scheduling an appointment with a physician) and signing a pledge to change behavior may lead to changes even if not tied to direct financial penalties. By examining the effect of the MHC program, we will also be adding to the debate on how effective nudging can be within health care delivery and insurance systems.

Each Medicaid beneficiary received the opportunity to select a redesign plan through a two-stage rollout, which represents a natural experiment in timing. First, the program was implemented on a county-by-county basis with the first three pilot counties commencing in March 2007 and the remainder of the counties following soon after. When a county started its rollout, all Medicaid beneficiaries became eligible to choose either the basic or enhanced option on their next Medicaid reenrollment date.[2] New Medicaid beneficiaries joining the program after a county has adopted the program would make their choice at the time they enrolled.

The staggering of the redesign rollout provides natural treatment and control groups against which to judge causal effects on relevant outcomes (ER use). We test first the impact of the redesign on overall ER use and then by type of ER visit (emergencies versus nonemergencies). To study the causal effect of the overall Medicaid redesign on outcomes, we use a differences in differences method with longitudinal data in which the effect is identified by comparing the same person before and after the reform. These results address the overall effect of the program but not whether the two plans affected members differently. We next examine the program impact by type of redesign plan (enhanced or basic) for those who opted in to that plan. This analysis provides information on how the program affected ER utilization for those that chose or defaulted into each plan, which is important if future reforms will also allow the member to choose a coverage level. Finally, we assess the effects of the two different plans on an "average" member. That is, if a reform was implemented in which members did not have a choice between plans but automatically received the benefit cuts in the basic plan or the new services in the enhanced plan, would ER visits be affected? This question is of particular importance for future reforms that might involve cutting or increasing benefits or personal responsibility components across the board.

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[2] For children, the reenrollment date occurs every 12 months while for adults it occurs every 6 months starting with the date of initial program enrollment. For ease of exposition, we will refer to this as the enrollment anniversary (even though it is biannual for adults). Note that even though adults have biannual enrollment anniversaries, once they chose a plan, West Virginia commits them to that plan for a full 12 months—the "reenrollment" at the 6-month mark involves only paperwork.

Our data are from West Virginia's Department of Health and include enrollment details (such as age, location, and enrollment anniversary dates) and medical service and prescription claims information for all adults and children enrolled in Medicaid at any point from January 2005 to December 2008.[3] We have ER visit information for these members through October 2010.

In the remainder of this paper, we first describe the MHC program in more detail and discuss the hypothesized effects on different categories of ER use. After describing our data, we explain our methods of identification and present results on the effects of the redesign on ER use. We conclude with policy implications and areas for future work.

West Virginia's 2007 Medicaid Redesign

Following passage of the 2005 Federal Deficit Reduction Act, which allowed states more latitude in designing their Medicaid programs, West Virginia launched its Medicaid redesign. MHC serves the population of parents and children who qualify primarily based on income (that is, categorically eligible) and not the disabled (SSI) or long-term care populations.[4] Studying the program is particularly important given pending national reform implementation, the scarcity of large-scale reform efforts aimed at incentivizing individual behaviors, and increased demands on state Medicaid funding from rising enrollment, rising health care costs, and the increasing incidence of obesity-related chronic diseases.

Although the reforms were intended to reduce costs by eliminating waste and motivating individuals to improve behaviors, there are theoretical reasons to investigate possible unintended consequences because of the program design. The welfare ramifications of reform

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[3] West Virginia Medicaid operates almost exclusively in a managed-care environment in which eligible members have a choice between at least two managed care carriers in each county. Members who do not select a carrier are randomly assigned. West Virginia began the transition to managed care in 2003; carriers were operating in all but 4 of 55 counties at the time of the MHC rollout.

[4] West Virginia has a separate Children's Health Insurance Program (CHIP) to which children found ineligible for Medicaid may apply, but there is no such second program for adults. We do not have data on children under the West Virginia CHIP program.

are particularly pressing in West Virginia, as the state ranks low on myriad health measures. In 2008, West Virginia had the second-highest smoking rate among states, the fifth-highest adult obesity rate, and the third-highest rate of child poverty (America's Health Rankings 2008). The financial stakes of reforming Medicaid are also high; Medicaid programs were viewed as exhibiting unsustainable cost growth even before the recent economic downturn (Iglehart 2007) and pressures are increasing. For context, West Virginia represents about 0.6 percent of the national population and spends about $2.6 billion per year on Medicaid, or about 0.7 percent of the national total.[5] In 2010, the state contributed about 17 percent, with 83 percent contributed by the federal government. Nationally states contribute an average of 32.3 percent. West Virginia Medicaid spends more on long-term care (40 percent versus the national average of 31.5 percent) and long-term care and disabled citizens make up a larger portion of the West Virginia Medicaid population (50 percent versus the national average of 43 percent). Growth in West Virginia Medicaid spending was the same as the national average of 3.6 percent from 2004 to 2007 and lower than the national average from 2007 to 2010 (5.5 percent versus 6.8 percent).

State Medicaid programs have employed a variety of methods to contain costs including waiting lists for waiver services (extra services that are not federally mandated) (Kitchener, Ng, and Harrington 2004; Kitchener et al. 2005), preferred drug lists (Simon, Tennyson, and Hudman 2009), and managed care (Aizer, Currie, and Moretti 2007). More recently, states have experimented with the patient-centered medical home model (Pham et al. 2007; Sidorov 2008; Barr 2008; and Cooley, McAllister, Sherrieb, and Kuhlthau 2009) and pay-for-performance provider incentives (Christianson 2007; Felt-Lisk, Gimm, and Peterson 2007) but there is no consensus on the relative cost-effectiveness of such measures. Arguably the most understudied and contentious policy efforts are those aimed directly at changing individual behavior. Following implementation of the Deficit Reduction Act,, nine states implemented or considered

programs to reward members for desired behaviors (Redmond, Solomon, and Lin 2007). Idaho and Kentucky both sought to increase preventive care for children in Medicaid and the Children's Health Insurance Program by implementing increases in reimbursement rates and Idaho also introduced premium forgiveness. Recent evidence suggests that the policy changes resulted in increased well-child care in Idaho and preventive dental care in Kentucky (Kenney et al. 2011). Taking the move toward personal responsibility a step further, only West Virginia imposed coverage limits based on member behavior. The West Virginia reforms were met with skepticism and concern from policy researchers and medical professionals primarily worried that the reforms would result in the denial of essential services (such as mental health and substance abuse treatments, and prescription drugs—see Appendix figures 1 and 2 for a comparison of the benefits under the different plans) to vulnerable populations of children and adults (Redmond, Solomon, and Lin 2007; Steinbrook 2006; and Bishop and Brodkey 2006). This research provides the first rigorous empirical assessment of MHC program effects and adds crucial information to the policy debate surrounding the increased reliance on personal-responsibility incentives in Medicaid.

MHC provided beneficiaries with a choice between a basic plan and an enhanced plan; remaining in the prereform traditional version of Medicaid was not an option. The enhanced plan is comparable to the traditional plan with the addition of a few services such as coverage of weight management and nutritional education services. The basic plan represents a reduction in service coverage relative to the traditional plan. Key differences include limiting prescriptions to four per month and offering no coverage for tobacco cessation programs, diabetes education, and chiropractic, podiatry, and chemical dependence/mental health services. The traditional Medicaid plan did not place any of these restrictions on services.

Sixty days prior to being eligible to make a plan choice under MHC (on the enrollment anniversary after a county adopted the redesign), Medicaid beneficiaries received an information packet containing a breakdown of benefits available under the two plans, necessary

forms, and instructions for enrollment. To further inform beneficiaries of differences between MHC plan options, they receive a follow-up phone call. West Virginia Medicaid also conducted a media campaign across the state through radio, newspaper, and outdoor advertising in fall 2007. Beneficiaries were automatically defaulted into the basic plan on the first day of their redetermination month and had 90 days to submit the forms necessary for the enhanced plan.

If beneficiaries failed to complete these contracts to sign up for the enhanced option within the allotted 90 day time frame, they remained in the basic plan for a year. Plan enrollment occurs at the individual level; children and adults within the same family could be enrolled in different plans and likely have different reenrollment and eligibility periods based on the latest enrollment date. By adding personal-responsibility components, Medicaid officials intended for beneficiaries of the enhanced plans to take a more active role in their health outcomes as a result of the nudges and direct financial incentives (more generous insurance coverage of certain services) for individuals to engage in healthier behaviors and more efficient use of the health care system.

As of July 2009, our data show that 14 percent of those who had the opportunity to make a choice had selected the enhanced plan and that enrollment in the enhanced plan remained at about 14 percent through the program's conclusion in September 2010. Figures 1 and 2 illustrate how individual enrollments of all members are distributed over time. Using 2008 data, figure 1 indicates that new enrollments are generally just over 10,000 individuals per month with a large spike around the new school year. This may be due to school immunization requirements prompting parents to schedule children's medical appointments.[6] As shown in figure 2, MHC eligibility is similar to new enrollments with a smaller spike in July and an additional increase in December as more counties rolled out the new program.

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[6] Since these families are likely to differ in unobservable ways, the timing of implementation within a county will be viewed as nonexogenous for these children in our empirical work.

West Virginia's MHC program was meant to be a permanent reform when it started in March 2007. However, new Medicaid federal regulations in 2010 stipulated that adults cannot be placed into plans that are less generous than the previous Medicaid plan as a default. Since West Virginia would have had to make the enhanced plan the default option instead of the basic plan to comply with the new federal laws, this prompted the state effectively to end MHC in September 2010 and revert back to its earlier Medicaid design.

Contribution to the Literature

In numerous settings, program design aimed at cost control and health behavior improvements are being explored by private insurance companies, Medicare, large employers, and public health agencies. In an earlier attempt to control costs, states and other payers implemented managed care starting in the 1980s. Since then, a vast literature has evaluated the impact of insurance programs' designs (broadly construed) on behaviors. Research includes studies of waiver services (Kitchener, Ng, and Harrington 2004; and Kitchener et al. 2005) preferred drug lists (Simon, Tennyson, and Hudman 2009), managed care (Duggan 2004; Aizer, Currie, and Moretti 2007; and see Kaestner, Dubay, and Kenney 2005 for a review of the literature), and more recently, states' experiments with the patient-centered medical-home model (Pham et al. 2007; Sidorov 2008; Barr 2008; and Cooley, McAllister, Sherrieb, and Kuhlthau 2010) and pay-for-performance provider incentives (Christianson 2007; and Felt-Lisk, Gimm, and Peterson 2007).

Policymakers are paying increasing attention to the possibility of influencing individual behaviors through health policy. West Virginia's Medicaid redesign presents an opportunity to investigate the effects, intended and unintended, of a large-scale effort to apply personal-responsibility style nudging in a Medicaid context. The program effectively ended in September 2010, but the principles guiding the redesign are likely to remain relevant to ongoing policy debates. Our analysis is the first rigorous empirical assessment of MHC reforms on health

service utilization. We look here just at ER use, but in the future we plan to consider the pathways (use of health care services that received restrictions) to understand the causes of the ER use changes that we observe.

Although a public insurance plan is not necessarily concerned about issues of adverse selection (that is, the positive correlation between coverage levels and future health costs) and the plans are not priced based on health expenditure risk, selection into the basic or enhanced plans based on health is likely to occur. In prior work using these data, Gurley-Calvez, Pellillo, Fitzgerald, and Walsh (2010) find that members of West Virginia Medicaid with higher past service utilization levels are indeed more likely to enroll in the enhanced plan. Results suggest that members with one more doctor's visit per month have a 3.1 percentage point increase in the probability of enhanced plan enrollment (about 13 percent) and an additional prescription leads to a 1.3 percentage point increase in the probability (about 6 percent). Results presented separately for adult and child members suggest a similar story. While beneficiaries with greater service needs were more likely to opt into the enhanced plan, it appears that many beneficiaries with high service needs did not enroll in the enhanced plan despite the benefit limitations in the basic plan.

The staggered MHC plan rollout allows us to identify the causal effects of MHC by providing a control group of not-yet-eligible members who are very similar to those who are eligible. We assess the separate effects of the enhanced and basic plan in two ways. First, we assess the effect of each plan on the members that self-selected into each plan. Next, we use an IV approach to address plan-selection bias and estimate the impact of each plan on a randomly assigned member.

Consumer and Provider Incentives for ER Use

Although 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, we find

that the coverage restrictions in the basic option may actually lead to higher unmet service needs relative to traditional Medicaid coverage, resulting in higher ER use. This should be particularly true for ambulatory care sensitive (ACS) conditions.[7] On the other hand, we expect lower ER use, particularly for ACS conditions, 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.

Although many studies address policy effects of Medicaid coverage changes (for example, Aizer, Currie, and Moretti 2007; and Kenney and Cook 2010), ours is the first study of the effects of the West Virginia program, which is unique in its attempt to change health and health care behavior. Our hypotheses are as follows:

Overall ER Utilization Hypothesis: MHC results in increased ER utilization levels relative to traditional Medicaid. We expect the net effect to be negative because more beneficiaries with

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[7] There is one feature of the basic plan that may possibly reduce ER use. The basic plan does not cover ambulance services for nonemergency conditions. Although we do not yet know how often ambulances are the mode of arrival at the ER, we expect that it is not the most common form, especially for nonemergency care. However, the fact that the enhanced plan covers all ambulance rides and the basic plan does not cover some types may cause ER visits to be lower in the basic plan than otherwise.

a choice between the two programs ended up in the basic plan (the default). Thus, we expect overall ER utilization rates to be driven by those in the basic plan. Such beneficiaries did not sign the responsibility, pledge, or make an agreement for regular office visits and preventive care, and they experienced a reduction in benefits. We expect the increase to occur in avoidable ER visits rather than in true emergency care.

Relative ER Utilization Hypothesis (Basic versus Enhanced): Members enrolled in the enhanced plan are expected to experience a reduction in ER visits while use may increase for those enrolled in the basic plan. Enhanced-plan members make at least one office visit to their primary care provider during the enrollment process and create a plan for the services they should receive in the coming year to improve their health. This increases provision of primary care and preventive services. Further, the beneficiaries in the enhanced plan pledge to use the ER only for emergencies, which is expected to reduce ER visits for this group.

Data

We use four years of administrative claims and enrollment data provided by the West Virginia Department of Health and Human Resources. We limit the sample to the MHC-eligible population (that is, children and adults who qualify on the basis of income).[8] ER visits are identified using Current Procedural Terminology (CPT-4) service codes. CPT codes identify the medical, surgical, or diagnostic service provided, in this case, ER services. ER visits are then classified as nonemergency, primary-care treatable, emergency preventable, and emergency nonpreventable using the New York University Emergency Department (NYU ED) Algorithm.[9] The NYU ED Algorithm uses International Classification of Diseases (ICD-9) diagnosis codes to classify each encounter and reports the relative percentage of cases for which that diagnosis falls

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[8] Specifically, the program applies to Aid to Families with Dependent Children (AFDC) Medicaid recipients, deemed AFDC recipients (extended Medicaid), transitional Medicaid. Qualified children were born on or after October 1, 1983, and include poverty-level children aged 1–18 and continuously eligible newborns to age 1.
[9] Additional information and algorithm downloads are available at the Center for Health and Public Service Research, New York University, http://wagner.nyu.edu/chpsr.

into each of the four categories (thus, it does not provide one definitive category for each ER CPT code). When multiple diagnoses are reported for an ER visit, we use the classification indicating highest severity.[10] To measure ER visits in separate categories we aggregate the data to the monthly level and create binary variables indicating (a) any ER visit, (b) at least one nonemergency, (c) primary-care treatable, or (d) emergency preventable visit. The binary variables take a value of one if at least one ER visit for that person during the month has a 50 percent or greater probability for the relevant category.

Summary statistics are presented in table 1 for children and adults separately, by the pre- and postperiod separately, and further separated by those who eventually choose enhanced versus basic plans. Our data indicate that for children eventually in the enhanced plan, the rate of having any ER visit in a month is 0.117 in the pre-MHC enrollment period and 0.102 in the post-MHC enrollment period. If these results hold in a regression that imposes controls for extraneous effects, they would be consistent with our hypothesis that enhanced plans would reduce ER use. In the adult data for the enhanced plan, we see that the rate of any ER visit is .15 in the preperiod and 0.139 in the postperiod, also in a direction consistent with our hypothesis. In general, larger decreases are seen in the descriptive statistics in nonemergency care than in emergency nonpreventable care, as would be expected.

The second panel of results in table 1 shows similar statistics for those who eventually chose the basic plan. For these children, the pre-MHC rates of ER use are 0.15 and fall slightly to 0.142. The direction of change is not consistent with our hypothesis. The adult sample shows that ER visits rise from 0.198 in the preperiod to 0.203 in the post period, consistent with our hypothesis.[11]

The data are shown at the person month level but represent 200,490 individuals from 2005 to 2008. Children constitute the majority of the eligible population (165,379 individuals).

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[10] We define an ER encounter by person and day, where all ER diagnoses for a day are included in the same encounter.

[11] Note that percentages from each category do not add up to the overall percentage of ER visits, as some cases were ambiguous (did not have greater than or equal to 50 percent probability in any one category).

Child member observations are divided evenly among male and female members, while 87 percent of the adult members are women.

Regression Methods

To assess the causal effects of MHC (at first not differentiating between enhanced and basic plans) on ER visits, ideally one would assign members in a county randomly to the MCH and traditional Medicaid programs. West Virginia Medicaid implemented the program in a manner that closely mirrors random assignment. Once a county signed onto the new program, members in that county became eligible to make a choice of the two MHC plans on the anniversary of their most recent Medicaid enrollment.

We model the following form:

(1) Outcome$_{it}$ = γMHC_{it} +α_{i_cat} + τ_{ym} + λ_i + ε_{it}

where outcome is defined as above and MHC takes a value of 1 when the individual is enrolled in MHC (either the basic or enhanced plan). A set of age category dummy variables is included (α) as many diagnostic-service recommendations change with age.[12] An indicator variable is also included for each month in our data (*ym*). The individual fixed effect (λ) is included to capture time-invariant characteristics such as gender and race. Importantly, the effect of MHC (γ) is identified within each individual; that is, our differences in differences approach compares the before and after effects of the same person and uses the staggered implementation of MHC to control for time trends that might be affecting ER use. We also estimate equation 1 separately for children and adults and by gender.

To examine whether the effects of MHC differ by which plan was selected, we divide the data into two groups based on whether beneficiaries select the enhanced plan or the basic plan. We estimate the effects of MHC separately for individuals that eventually choose the enhanced

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[12] Age categories are defined as 5 and under, 6−17, 18−25, 26−35, 36−45, and over 45.

plan and those who eventually choose the basic plan in a specification similar to equation 2, in which MHC takes a value of one when the individual is enrolled in the enhanced (basic) plan.

Note that this approach addresses the effects on those who self-selected into each plan and does not attempt to estimate the effects of randomly assigning a member to a plan. It relies on the members' choices to define ex ante treatment and control groups. To estimate the effects of a given plan more generally, we must account for selection bias in plan choice, which is documented in the previous literature (Gurley-Calvez, Pellillo, Fitzgerald, and Walsh 2011). In the absence of a natural experiment similar to that exploited for the overall reform effect, we use an IV approach to isolate and take advantage of the exogenous portion of variation in plan selection:

$$(2)\ Outcome_{it} = \rho_1 Enhanced_{it} + \rho_2 MHC_{it} + \alpha_{i\_cat} + \tau_{ym} + \lambda_i + \varepsilon_{it}$$

where enhanced and MHC are indicators for the enhanced plan and eligibility for MHC, respectively, and:

$$(3)\ Enhanced_{it} = \mathbf{X}_{it}\eta + \alpha_{iv\_cat} + \tau_{ymv} + \lambda_{iv} + \nu_{it}$$

where X_{it} contains a set of instruments correlated with the outcome of interest only through their relationship with plan choice. In other words, the analysis requires instruments correlated with whether one enrolls in the enhanced plan during the enrollment period but not with future ER use. Because members must make a trip to the doctor to enroll in the enhanced plan, we use the number of days in the month with 12 inches or more of snow and the number of days in the month on which the minimum temperature is less than zero. We expect both of these weather variables to be negatively correlated with enrollment in the enhanced plan as large quantities of snow and very cold weather are both expected to make it more difficult to travel to the doctor. We acknowledge that it is possible that cold weather and snowfall might contribute to health problems that would make a doctor's visit more likely, making the instruments unsuitable. However, we would expect weather-related effects to be fairly immediate and not a significant issue for visits that are two months to almost three years later.

Results

Table 2 shows the coefficient and standard errors from linear probability models of equation 2 in which only the results on the key variable (MHCit) are shown for brevity. The number of observations (at the person/month level) are displayed in the last row. Table 2 shows only the effects of the aggregate MHC program, which is a weighted combination of the separate enhanced and basic results. The first column uses a binary indicator for any ER visit that month as the dependent variable. Our results show a statistically significant increase in the probability of an ER visit of 0.54 percentage points or about 3.6 percent. This is an aggregate over children and adults. In the next columns, we see that the increase in the probability of an ER visit is statistically significant only for adults (1.36 percentage points or about 7 percent). The increases come almost entirely from adults. Results also seem driven by the nonemergency and primary-care treatable visits.[13]

In tables 3 and 4, we break the analysis sample by whether a member eventually selected the basic or the enhanced plan. In table 3, we see that the basic plan is associated with an increase in the probability of an ER visit. The results are statistically significant for adults in all specifications and for children in the nonemergency care specification. Table 4 shows that relative to the basic plan the enhanced plan has the opposite effect on ER use, although we only reject the null of a zero coefficient in one of the nine specifications.

The natural experiment created by the staggered implementation of MHC allows us to identify the overall causal effect, which is consistent with our earlier hypotheses. To test the

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[13] We also experimented with pooled cross-sectional probit and linear regression models to see how sensitive our results are to the individual fixed effect and time controls. We first limited the analysis to one county (to limit geographic variations) and two time periods (one pre- and one postreform) and then expanded to more counties and time periods. When statistically significant, the results mirror those presented in this paper. Unfortunately, the timing of MHC implementation 2007–2008 precludes us from dividing the sample into clean 2005–20007 and post–2007 time periods. The nature of the outcomes (policy change at time *t* and ER use in time *t+2* forward) also make it difficult to conceptualize a cross-sectional model to test for difference across years. We also estimated the regressions with and without year controls and did not see a meaningful change in coefficient estimates across specifications, which suggests that time effects are not causing significant bias in our MHC estimates. In general, the coefficients on the year controls are negative and get more negative over time, suggesting that there is a downward trend in ER use.

mechanism behind these results, we divide the population into those who had a chronic health condition prior to March 2007 and those who did not.[14] We would expect that those with chronic health conditions would benefit the most from the additional benefits, primary care planning, and nudging toward better health behaviors in the enhanced plan. Conversely, those with chronic conditions would also be more likely to experience binding benefit constraints in the basic plan. We divide the sample based on pre-MHC diagnoses to avoid endogeniety problems such as reverse causation (for example, where the additional primary care visit needed for enhanced-plan enrollment leads to the diagnosis of a chronic condition).

Results for those with a pre-MHC chronic condition are presented in table 5 and for those without a chronic condition in table 6. We do find some support for the notion that the overall increase in the probability of an ER visit is larger for those with a chronic condition. However, these results should be viewed with caution as there is clear selection into the enhanced plan based on prior health care use (Gurley-Calvez, Pellillo, Fitzgerald, and Walsh 2011), and the difference in the distribution of chronic health conditions across the basic and enhanced plans is likely to bias the results. More specifically, those with an initial chronic condition are likely to choose the enhanced plan at higher rates, meaning there is a disproportionate share of enhanced plan enrollees in the table 5 regressions and a lower share in the table 6 regressions. Thus, the results in table 5 are likely biased downward and those in table 6 biased upward. That we find larger effects in most specifications for those with initial chronic conditions provides suggestive evidence consistent with our hypotheses.

Results from the IV analysis are presented in table 7. We find evidence that enhanced plan participants have significantly lower probability of a primary-care treatable ER visit. Conversely, basic plan participants have a higher probability of a primary-care treatable ER

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[14] We use the classification scheme developed by the Healthcare Cost and Utilization Project (HCUP) to identify services with a chronic condition diagnosis code. To further identify those with high-utilization conditions, we categorize an individuals as having a chronic condition if they have at least one HCUP chronic diagnosis code in any three months prior to MHC (March 2007).

visit. We note that the first stage equations produced test statistics indicating that our instruments are appropriate, although the evidence is weaker for the adult sub-sample. In each first-stage regression, we reject the null of a zero coefficient on both instruments at the 1 percent level. Our temperature measure is negatively correlated with enhanced plan enrollment in all specifications. The snow measure is negative as expected in the overall and child regressions but unexpectedly positive for the adult subsample. In every case, we reject the null hypothesis of underidentification (LM test) at the 1 percent level and fail to reject the null hypothesis (Sargen statistic) that instruments are valid and correctly excluded from equation 2 at the 5 percent level or more. In all but the adult subsample estimations, the Cragg-Donald Wald F statistic is greater than the 10 percent critical value level as calculated by Stock, Wright, and Yogo (2002) and Stock and Yogo (2005).

Conclusions and Future Research

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—has the unintended consequence of increased ER visits because of low enrollment in the enhanced plan.

Our IV results suggest a causal primary-care treatable ER impact of the enhanced and basic plans on the representative Medicaid beneficiary. That is, placing the "average" member

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into the enhanced plan would significantly reduce the probability of a primary-care treatable ER visit, while placing the same member in the basic plan would result in a small increase in the probability of a primary-care treatable visit. These results are consistent with the program design, which increased primary care for enhanced plan participants and reduced benefits for basic plan participants that might have deterred members from seeking treatment from a primary-care physician (for example, a member at the maximum prescription allotment might seek treatment in the ER to circumvent the limit).

Taken together, our results suggest a nuanced story for policymakers considering Medicaid reforms. Allowing selection into the two plans resulted in an overall increase in ER visits, driven by those who defaulted into the basic plan. There is some evidence that children in the enhanced plan experienced a decrease in ER visits, but the overall effect is dominated by those in the basic plan because those who defaulted into (or selected) the basic plan represent more than 85 percent of eligible members. Thus, to achieve a result of reducing ER visits with a similar program design, far more members would need to choose the enhanced plan, whether through more outreach activities or other incentives.[15] For those considering an either/or approach (benefit cut or benefit increases in a personal responsibility framework) our results suggest that it is possible to reduce ER visits in plans that focus on prevention, early intervention, and patient engagement. The research also suggests that many members do not respond to the added incentives in the enhanced plan, and future efforts will need to address information and enrollment to be successful. Further, the plan that represents a benefit cut primarily in prescription, mental health, and chemical dependency benefits has the unintended consequence of increasing ER visits.

In future research, we intend to examine the intermediate outcomes that may lead to changes in ER use. For example, the basic program may affect ER use by affecting use of

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[15] The original West Virginia *Medicaid Redesign Proposal* called for the establishment of "healthy rewards" accounts where members of the enhanced plan could accrue benefits for program compliance (Manchin 2007). This portion of the redesign was never implemented.

physician visits, , and other services restricted by the plan. In addition to looking at the effects by initial chronic condition, we will investigate whether the effects are greater among those with existing mental health problems. Future improvements to the IV analysis include improving our county-level match to weather data by using zip codes to fill in missing county information.

In general, our analysis serves as the first look at the effects of MHC on ER utilization. We find evidence that the personal responsibility and preventive care elements of the enhanced plan did lead to fewer ER visits for children. The analysis also provides a cautionary tale for states considering similar reforms as the overall effect was an unintended increase in ER utilization due to low enrollment in the enhanced plan.

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Table 1: Summary Statistics by MHC Plan Enhanced versus Basic, Children and Adults.

	Enhanced Plan				Basic Plan			
	Pre-MHC		Post-MHC		Pre-MHC		Post-MHC	
Variable	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.
Child								
Any ER Visit	0.117	0.322	0.102	0.303	0.150	0.357	0.142	0.349
Nonemergency	0.030	0.171	0.024	0.153	0.038	0.191	0.034	0.182
Primary-Care Treatable	0.054	0.227	0.046	0.210	0.069	0.254	0.066	0.248
Emergency Preventable	0.005	0.068	0.004	0.066	0.006	0.077	0.006	0.075
Emergency Nonpreventable	0.016	0.126	0.015	0.122	0.021	0.144	0.021	0.143
Male	0.499	0.500	0.512	0.500	0.496	0.500	0.505	0.500
Age	7.748	4.973	7.804	5.501	7.266	5.320	7.032	5.528
N	183,975		60,329		1,104,478		314,154	
Adult								
Any ER Visit	0.151	0.358	0.139	0.346	0.198	0.399	0.203	0.402
Nonemergency	0.054	0.226	0.049	0.216	0.070	0.256	0.066	0.249
Primary-Care Treatable	0.067	0.250	0.058	0.234	0.087	0.281	0.092	0.289
Emergency Preventable	0.006	0.080	0.006	0.076	0.007	0.081	0.007	0.086
Emergency Nonpreventable	0.027	0.163	0.028	0.166	0.034	0.182	0.038	0.192
Male	0.131	0.337	0.182	0.386	0.131	0.337	0.218	0.413
Age	34.555	8.172	35.088	9.233	30.170	8.344	31.082	8.745
N	42,065		19,019		333,451		121,237	

Source: Authors' calculations.
Note: We summarize the data for individuals who eventually switch to the enhanced or to the basic plans at the person-month level, in the period before the plan enrollment and after the plan enrollment. Although we do not present the comparable table for the overall MHC program effect, those numbers would be the sample weighted averages of the basic and enhanced columns combined.

Table 2: ER Use: Aggregate MHC Program Effect

	(1) Any ER	(2) Any ER Child	(3) Any ER Adult	(4) Non- Emerg.	(5) Non- Emerg. Child	(6) Non- Emerg. Adult	(7) Prim. Care	(8) Prim. Care Child	(9) Prim. Care Adult
MHC	0.0054***	0.0002	0.0136***	0.0040***	0.0033***	0.0072***	0.0027***	−0.0013	0.0091***
	(0.0011)	(0.0013)	(0.0023)	(0.0007)	(0.0007)	(0.0016)	(0.0009)	(0.0010)	(0.0018)
N	2,128,217	1,608,977	519,240	2,128,217	1,608,977	519,240	2,128,217	1,608,977	519,240

Source: Authors' calculations.
Note: Standard errors in parentheses. All specifications include age category variables, month effects, and robust standard errors.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Basic Plan ER Use

	(1) Any ER	(2) Any ER Child	(3) Any ER Adult	(4) Non- Emerg.	(5) Non- Emerg. Child	(6) Non- Emerg. Adult	(7) Prim. Care	(8) Prim. Care Child	(9) Prim. Care Adult
MHC	0.0072***	0.0014	0.0159***	0.0049***	0.0041***	0.0079***	0.0034***	−0.0012	0.0110***
	(0.0013)	(0.0014)	(0.0025)	(0.0008)	(0.0008)	(0.0018)	(0.0010)	(0.0011)	(0.0020)
N	1,839,852	1,381,085	458,767	1,839,852	1,381,085	458,767	1,839,852	1,381,085	458,767

Source: Authors' calculations.
Note: Standard errors in parentheses. All specifications include age category variables, month effects, and robust standard errors.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Enhanced Plan ER Use

	(1) Any ER	(2) Any ER Child	(3) Any ER Adult	(4) Non- Emerg.	(5) Non- Emerg. Child	(6) Non- Emerg. Adult	(7) Prim. Care	(8) Prim. Care Child	(9) Prim. Care Adult
MHC	-0.0032	−0.0055*	−0.0002	−0.0004	−0.0007	0.0025	−0.0009	−0.0013	−0.0030
	(0.0026)	(0.0030)	(0.0058)	(0.0016)	(0.0017)	(0.0041)	(0.0020)	(0.0022)	(0.0045)
N	288,365	227,892	60,473	288,365	227,892	60,473	288,365	227,892	60,473

Source: Authors' calculations.
Note: Standard errors in parentheses. All specifications include age category variables, month effects, and robust standard errors.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Chronic Initial Condition: Aggregate MHC Effect

	(1) Any ER	(2) Any ER Child	(3) Any ER Adult	(4) Non-Emerg.	(5) Non-Emerg. Child	(6) Non-Emerg. Adult	(7) Prim. Care	(8) Prim. Care Child	(9) Prim. Care Adult
MHC	0.0071***	0.0032	0.0092**	0.0029**	0.0033**	0.0034	0.0061***	0.0030*	0.0084***
	(0.0021)	(0.0025)	(0.0039)	(0.0014)	(0.0014)	(0.0029)	(0.0016)	(0.0018)	(0.0031)
N	727,404	517,185	210,219	727,404	517,185	210,219	727,404	517,185	210,219

Source: Authors' calculations.
Note: Standard errors in parentheses. All specifications include age category variables, month effects, and robust standard errors.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: No Chronic Initial Condition: Aggregate MHC Effect

	(1) Any ER	(2) Any ER Child	(3) Any ER Adult	(4) Non-Emerg.	(5) Non-Emerg. Child	(6) Non-Emerg. Adult	(7) Prim. Care	(8) Prim. Care Child	(9) Prim. Care Adult
MHC	0.0043***	−0.0017	0.0157***	0.0040***	0.0025***	0.0074***	0.0009	−0.0035***	0.0094***
	(0.0014)	(0.0015)	(0.0028)	(0.0008)	(0.0009)	(0.0019)	(0.0010)	(0.0012)	(0.0022)
N	1,400,813	1,091,792	309,021	1,400,813	1,091,792	309,021	1,400,813	1,091,792	309,021

Source: Authors' calculations.
Note: Standard errors in parentheses. All specifications include age category variables, month effects, and robust standard errors.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: IV Estimates of Enhanced and Basic Plan Effects

	(1) Any ER	(2) Any ER Child	(3) Any ER Adult	(4) Non-Emerg.	(5) Non-Emerg. Child	(6) Non-Emerg. Adult	(7) Prim. Care	(8) Prim. Care Child	(9) Prim. Care Adult
Enhanced	−0.1887	0.2314	−0.1472	−0.2486	−0.1563	0.2804	−0.5779**	−0.6192***	−0.1033
	(0.2959)	(0.2767)	(0.5560)	(0.2020)	(0.1766)	(0.4301)	(0.2547)	(0.2379)	(0.4691)
MHC	0.0177	−0.0155	0.0216	0.0202	0.0139	−0.0081	0.0401**	0.0406**	0.0147
	(0.0192)	(0.0188)	(0.0303)	(0.0131)	(0.0120)	(0.0235)	(0.0165)	(0.0161)	(0.0256)
N	2,115,652	1,598,719	514,598	2,115,652	1,598,719	514,598	2,115,652	1,598,719	514,598

Source: Authors' calculations.
Note: Standard errors in parentheses. All specifications include age category variables, month effects, and robust standard errors.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

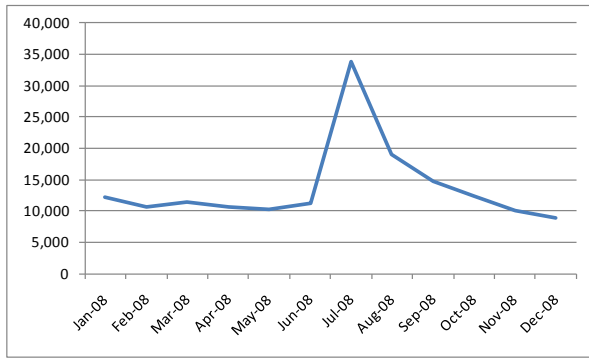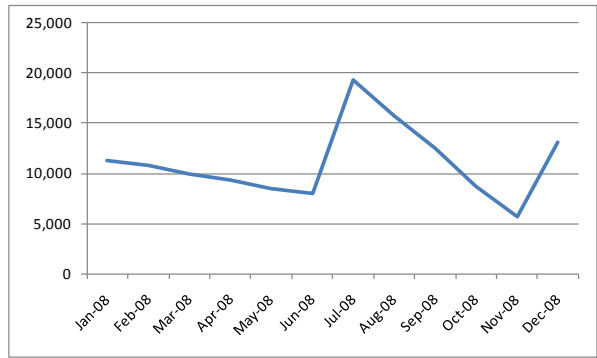**Figure 1: New Medicaid Enrollment Dates, 2008**

Figure 2: First Eligibility for MHC in 2008

Source: Author's calculations based on Medicaid enrollment data. Y-axis indicates the number of Medicaid members.

Appendix Figure 1: Overview of Services Available for Adults under Medicaid Redesign

Benefits Comparison—Adult			
Benefit Description	**Basic (Adult)**	**Enhanced (Adult)**	**Traditional**
Inpatient Hospital Care	Prior Auth. Required	Prior Auth. Required	Prior Auth. Required
Inpatient Hospital Rehabilitation	Not Covered	Not Covered	Not Covered
Inpatient Hospital Psychiatric Services	Not Covered	Prior Auth. Required: maximum benefit of 30 days/year	Not Covered
Outpatient Surgery/Services	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Diagnostic x-ray, laboratory services, and testing	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Primary Care Office Visits	Covered	Covered	Covered
Physician Office Visits—Specialty Care*	Covered	Covered	Covered
Occupational/Speech/Physical Therapy	Covered: Maximum Benefit of 20/year, Prior Auth. Required *(Total allowed for all therapies combined)*	Covered, Prior Auth. Required	Covered, 20/year, Prior Auth. Required
Weight Management	Not Covered	Covered	Not Covered
Home Health Services	Covered: Maximum Benefit of 25/year, Prior Auth. Required	Covered, Prior Auth. Required	Covered, Prior Auth. Required
Durable Medical Equipment	Covered: Limited to $1000/year, Prior Auth. Required if Limits Exceeded (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Nonemergency Medical Transportation	Covered: Maximum Benefit of 10/year (5 Round Trips)	Covered	Covered
Ambulance Services	Emergency Only	Covered	Covered
Prescriptions	Limited: Four/month	Covered	Covered
Hospice	Covered	Covered	Covered
Emergency Dental Services	Covered	Covered	Covered
Orthotics and Prosthetics	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Tobacco Cessation Programs	Not Covered	Covered	Covered
Family Planning	Covered	Covered	Covered
Cardiac Rehabilitation	Not Covered	Covered (Prior Auth. Required)	Not Covered
Pulmonary Rehabilitation	Not Covered	Covered (Prior Auth. Required)	Not Covered
Chiropractic Services	Not Covered	Covered (Prior Auth. Required)	Covered (Prior Auth. Required)
Podiatry Services	Not Covered	Covered	Covered
Chemical Dependency/Mental Health Services*(limited)	Not Covered	Covered: Maximum Benefit of 20 visits/year	Covered
Diabetes Education/Nutritional Counseling	Not Covered	Covered	Covered
Nutritional Educational Services	Not Covered	Covered	Not Covered
Nursing Home Services	Covered (Prior Auth. Required)	Covered (Prior Auth. Required)	Covered (Prior Auth. Required)

Source: West Virginia Bureau for Medical Services.

Note: Gray highlights indicate areas with plan differences. * Requires prior authorization for medical necessity only.

Appendix Figure 2: Overview of Services Available for Children under Medicaid Redesign

Benefits Comparison—Children			
Benefit Description	**Basic**	**Enhanced**	**Traditional**
Well Child Visits (EPSDT Services)	Covered	Covered	Covered
Inpatient Hospital Care	Prior Auth. Required	Prior Auth. Required	Prior Auth. Required
Inpatient Hospital Rehabilitation	Prior Auth. Required	Prior Auth. Required	Prior Auth. Required
Inpatient Hospital Psychiatric Services	Prior Auth. Required: Maximum Benefit of 30 days/year	Prior Auth. Required	Prior Auth. Required
Outpatient Surgery/Services	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Diagnostic x-ray, laboratory services, and testing	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Primary Care Office Visits	Covered	Covered	Covered
Physician Office Visits—Specialty Care	Covered	Covered	Covered
Birth to Three Services	Covered	Covered	Covered
Occupational/Speech/Physical Therapy	Covered: Maximum Benefit of 20/year, Prior Auth. Required (total allowed for all therapies combined)	Covered, Prior Auth. Required	Covered, 20/year, Prior Auth. Required
Weight Management	Not Covered	Covered	Not Covered
Home Health Services	Covered: Maximum Benefit of 25/year	Covered	Covered
Durable Medical Equipment	Covered: Limited to $1000/year with Prior Auth. Required if Limit Exceeded (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)
Nonemergency Medical Transportation	Covered: 10/year (5 round trips)	Covered	Covered
Ambulance Services	Covered	Covered	Covered
Prescriptions	Limited: Four/month	Covered	Covered
Hospice	Covered	Covered	Covered
Vision Services	Comprehensive eye exam and glasses, maximum benefit of $750/year	Comprehensive eye exam, glasses, contact lenses, vision training	Comprehensive eye exam, glasses, contact lenses
Emergency Dental Services	Covered	Covered	Covered
Dental Exams (dental check-ups)	Covered: Two/year	Covered	Covered
Hearing Services/Aids/Supplies	Annual exam and hearing aids when medically necessary	Covered	Covered
Orthotics and Prosthetics	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services)	Covered (Prior Auth. Required for Certain Services
Tobacco Cessation Programs	Covered	Covered	Covered
Family Planning	Covered	Covered	Covered
Cardiac Rehabilitation	Covered (Prior Auth. Required)	Covered (Prior Auth. Required)	Not Covered
Pulmonary Rehabilitation	Covered (Prior Auth. Required)	Covered (Prior Auth. Required)	Not Covered
Chiropractic Services	Not Covered	Not Covered	Covered
Podiatry Services	Not Covered	Covered	Covered
Chemical Dependency/Mental Health Services (limited)	Covered: Maximum Benefit of 26/year (Prior Auth. Required)	Covered (Prior Auth. Required)	Covered (Prior Auth. Required)
Diabetes Education/Nutritional Counseling	Covered	Covered	Covered
Nutritional Education Services	Not Covered	Covered	Not Covered
Skilled Nursing Care (Private Duty Nursing)	Not Covered	Covered, Prior Auth. Required (Limited to 180 days/year)	Covered

Source: West Virginia Bureau for Medical Services

Note: Gray highlights indicate areas with plan differences. * Requires prior authorization for medical necessity only.

Appendix Figure 3: Health Improvement Plan

Patient/Clinician Health Improvement Plan for Enhanced Medicaid Benefits
Child/Adolescent

Patient's Name_____   Medicaid ID Number_____

Date of Birth   _____   Medical Home_____

1. Please indicate how often you and this patient have agreed that he/she will be seen at health center (medical home) this year (**choose one**):

   O **One** visit to the primary care provider this year

   O **Three** visits to the primary care provider this year (approximately every 4 months)

   O **Quarterly** visits to the primary care provider this year (approximately every 3 months)

   O **Monthly** visits to the primary care provider this year

   O **Other** as per EPSDT periodicity schedule # _____visits

2. Please mark any of following preventive and/or chronic illness care tests/procedures you would recommend for this patient **in the next 12 months:**

   () Age appropriate immunizations   () Lipid screening

   () Lead Screening   () Glucose level

   () Other_____   () Dental Check-ups

3. Health Education Classes. Please place a check mark in the appropriate box indicating if this patient needs education on any/all of the listed topics:

Nutritional Education ( )	Weight Management ( )	Diabetes Education ( )	Tobacco Cessation Education ( )

( ) I do not wish to sign the Member Agreement or to work with my medical home to develop a health improvement plan. By signing this, I am showing that I know that I will have the Mountain Health Choices Basic Benefit Plan.

Signature_____   Date _____
(Parent or Guardian)

Witness _____

West Virginia Medicaid Member Agreement

This Agreement outlines your Rights and Responsibilities as a person in the West Virginia Medicaid Program. It also is about ways you can work with your doctor and other health care providers to become healthier.

MEMBER RESPONSIBILITES

1. I will follow the rules of the West Virginia Medicaid program.

2. I will do my best to stay healthy. I will go to special classes as ordered by my medical home.

3. I will read the booklets and papers my medical home gives me. If I have questions about them, I will ask for help.

4. I will pick a medical home within 30 days or one will be picked for me.

- I will go to my medical home when I am sick.
- I will take my children to their medical home when they are sick.
- I will go to my medical home for check-ups.
- I will take my children to their medical home for check-ups.
- I will take the medicines my health care provider prescribes for me.
- I will show up on time when I have my appointments.
- I will bring my children to their appointments on time.
- I will call the medical home to let them know if I cannot keep my appointments or those for my children.
- I will let my medical home know when there has been a change in my address or phone number for myself or my children.

5. I will use the hospital emergency room only for emergencies.

MEMBER RIGHTS

1. I have the right to pick my medical home. This is where I go for check-ups or when I am sick and where my health care records will be.

2. I have a right to decide things about my health care and the health care of my children. I have a right to see my medical records. I have the right to ask questions about my health care and the health care of my children.

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3. I will be treated fairly and with respect. I will get the care and treatment I need as soon as possible. I will not be treated differently because I am in the Medicaid Program.

4. I have a right to know about all laws and rules of the Medicaid Program.

5. I can contact Medicaid or my health plan with any questions about my health care.

6. I have a right to be sent a written notice when West Virginia Medicaid decides to deny or limit my Medicaid eligibility or services. I have a right to appeal a decision that says I have not kept my part of this agreement.

7. I have the right to appeal a decision that denies or limits my Medicaid eligibility or services. I have a right to appeal a decision that says I have not kept the member responsibilities in this agreement.

MEMBER ACKNOWLEDGEMENT

The information in this paper has been explained to me and I agree to follow this Medicaid Member Agreement.

_____   _____
West Virginia Medicaid Member Signature   Date

_____
Witness: Title:

Location:_____
                                                      Date

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