



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

DEC 27 2010

The Honorable Edward J. Kasemeyer
Chairman
Senate Budget and Taxation Committee
3 West Miller Senate Office Bldg.
Annapolis, MD 21401-1991

The Honorable Norman H. Conway
Chairman
House Appropriations Committee
121 House Office Bldg.
Annapolis, MD 21401-1991

RE: 2010 Joint Chairmen's Report (P. 90) – Report on Estimated Savings, Program Impact and Effects on Utilization of Implementing Premiums, Co-Payments and Limitations on Services

Dear Chairmen Kasemeyer and Conway:

In keeping with the requirements of the 2010 Joint Chairmen's Report (p. 90), the Department is submitting the attached report detailing estimated savings, program impact and effects on utilization of implementing premiums, co-payments and limitations on services. Please be advised that \$500,000 GF is being withheld pending approval of this report.

If you have questions or need more information on this subject, please contact Ms. Wynee Hawk, Director of Governmental Affairs, at (410) 767-6481.

Sincerely,

John M. Colmers
Secretary

Enclosure

cc: Simon Powell
John Folkemer
Susan Tucker
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**Estimated Medicaid Savings and Program
Impacts of Service Limitations, Copayments,
and Premiums**

**Submitted by
The Maryland Department of Health and Mental Hygiene**

December 15, 2010

Estimated Medicaid Savings and Program Impacts of Service Limitations, Copayments, and Premiums

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Estimated Medicaid Savings and Program Impacts of Service Limitations, Copayments, and Premiums

Introduction

The 2010 Joint Chairmen’s Report (JCR) requires the Maryland Department of Health and Mental Hygiene (DHMH) to study and estimate the impact of various program changes to the state’s Medicaid and Children’s Health Insurance Programs (CHIP). The JCR withholds \$500,000 of the appropriation for these programs pending the submittal of this report. Specifically, the JCR requires DHMH to submit

“a report detailing estimated savings, program impacts, and effects on utilization of implementing:

- (1) limitations on services including outpatient hospital, physician, clinics, federally qualified health centers, non-hospital and clinic laboratory and x-rays, nurse practitioner, targeted case management, and other services that are subject to material limits in other states. The analysis shall be based on the range of mandatory limitations in use in other states and up to the maximum in use in other states and allowable by federal law;
- (2) co-payments, to the extent permitted by federal law. The analysis shall be based on the range of co-payments currently applied in other states and up to the maximum in use in other states and allowable by federal law; and
- (3) premiums, to the extent permitted by federal law. The analysis shall be based on the range of premiums currently imposed on other states and up to the maximum in use in other states and allowable by federal law.”

This report seeks to address these three required study elements. Because an understanding of the federal rules governing service limitations, cost-sharing, and premiums is essential to this analysis, the report begins with an overview of these rules. Findings for each of the three required study elements are then presented; a conclusion section follows.

Federal Rules

Service Limitations

Federal Medicaid coverage requirements vary by the type of service and enrollee population. Besides having the choice of whether or not to cover a given non-mandatory service, states have some flexibility in determining the scope of coverage and in influencing utilization through controls such as prior authorization.

Mandatory and Optional Benefits

Medicaid statute and regulations mandate that state programs cover certain services for all enrollees. This promotes fairness in the distribution of federal funds by ensuring that all states cover specific basic services for eligible low-income individuals. The federal government allows states to expand the minimum benefit package to cover specified optional services. Table 1 lists mandatory and optional Medicaid benefits (Kaiser Commission on Medicaid and the Uninsured, 2005).

Table 1. List of Mandatory and Optional Acute and Long-Term Medicaid Benefits

| Acute Care Benefits | |
|--|---|
| Mandatory | Optional |
| Physician services | Prescription drugs |
| Laboratory and x-ray services | Medical care or remedial care furnished by other licensed practitioners |
| Inpatient hospital services | Rehabilitation & other therapies |
| Outpatient hospital services | Clinic services |
| EPSDT for individuals under 21 years | Dental services, dentures |
| Family planning and supplies | Prosthetic devices, eyeglasses, & durable medical equipment |
| Federally-qualified health center services | Primary care case management |
| Rural health clinic services | TB-related services |
| Nurse midwife and nurse practitioner services | Other specialist medical or remedial care |
| Certified pediatric & family nurse practitioner services | Non-emergency medical transportation |
| Emergency medical transportation | |
| Pregnancy-related services | |
| 60 days postpartum-related services | |
| Long-Term Services and Supports | |
| Mandatory | Optional |
| Nursing facility services for individuals aged 21 years and older | Intermediate care facility services for the mentally retarded (ICF/MR) |
| Home health services for individuals entitled to nursing facility care | Inpatient/nursing facility services for individuals aged 65 years and older in an institution for mental diseases (IMD) |
| | Home-and community-based waiver services |
| | Other home health care |
| | Targeted case management |
| | Respiratory care services for ventilator-dependent individuals |
| | Personal care services |
| | Hospice services |
| | Services furnished under a PACE program |

Amount, Duration, and Scope

Whether mandatory or optional, a covered service must be sufficient in “amount, duration, and scope” to reasonably achieve its purpose.¹ Early and periodic screening, diagnosis, and treatment (EPSDT) requires coverage of all necessary benefits and services for children under age 21 years. States may not impose absolute limits on services needed by children as they can in the case of services needed by adults. In effect, all medically necessary services are mandated for children regardless of whether the state covers them for adults, and regardless of other limits on amount, duration, or scope that are in place.

In defining sufficiency for mandatory services for adults, the Centers for Medicare and Medicaid Services (CMS) has concluded that states must demonstrate a sufficiency of 90 percent, i.e., approximately 90 percent of individuals needing the service must be fully served at these limits (CMS, 2010). For mandatory services, states may limit coverage only to the extent that no more than 10 percent of beneficiaries are not fully covered for that particular service (CMS, 2010). For example, a state interested in limiting inpatient hospital days per beneficiary per year may do so

¹ 42 CFR § 440.230(b)

as long as 90 percent of the beneficiaries needing inpatient hospital care are fully served by the coverage limitation proposed by the state (CMS, 2010).

Comparability

The federal comparability requirement generally prevents states from applying limitations on the amount, duration, and scope of services inconsistently among eligibility groups.² For example, limiting inpatient hospital services to 21 days per year for eligible parents but allowing individuals with disabilities unlimited hospital days would be inconsistent with the comparability requirement. Comparability applies regardless of whether recipients are in mandatory or optional eligibility categories, and regardless of whether the relevant benefit is mandatory or optional.

Medically Needy

States have the option to cover individuals who otherwise are not eligible for Medicaid through the medically needy program. This option allows individuals to spend down their income by incurring medical expenses, so that, after medical expenses, their income falls below a state-established income limit. The federal rules for the medically needy group vary somewhat from the categorically eligible populations.³ If a state elects to provide medically needy coverage, the state plan must make medical assistance available to:

1. Individuals under age 18 years who, but for income and resources, would be eligible under a mandatory categorically eligible group;
2. Pregnant women who, but for income and resources, would be eligible under either a mandatory or optional categorically eligible group;
3. Newborn children born on or after October 1, 1984, to a woman who is eligible as medically needy and is receiving Medicaid on the date of the child's birth; and
4. Women who, while pregnant, applied for, were eligible for, and received Medicaid services as medically needy on the day that their pregnancy ends.

Federal rules require that a medically needy individual may not have more services available to them than what are available to a categorically needy individual. For each person in a given medically needy group, the state must make available the same services in amount, duration and scope. In other words, states may furnish each group of medically needy a different service package that meets the needs of the specific group, e.g., the service package for medically needy individuals eligible because they are under age 18 years may differ from the service package provided to the medically needy who are eligible because they are pregnant. At a minimum any medically needy group must receive the following services:

1. Prenatal, delivery, and post-partum services for pregnant women
2. Ambulatory services for⁴ individuals under age 18 years and groups of individuals entitled to institutional services
3. Home health services to individuals entitled to skilled nursing facility services

² 42 CFR § 440.240

³ 42 CFR § 440.220

⁴ States define the term "ambulatory services," which is interpreted to mean physician, clinic, nurse practitioner, dental and/or preventive services.

4. If a state plan includes services in an institution for mental disease (IMD) or in an intermediate care facility for the mentally retarded (ICF-MR) for any group of medically needy, the state must provide either of the following sets of services to each of the medically needy groups:

- Inpatient hospital services
- Outpatient hospital services and rural health clinic services
- Laboratory and X-ray services
- Nursing facility services for individuals aged 21 years and older
- EPSDT
- Family planning services and supplies
- Physician services and medical and surgical services of a dentist
- Nurse midwives services (if allowed by state law)

Or any seven services listed below:

- Inpatient hospital services
- Outpatient hospital services and rural health clinic services
- Laboratory and X-ray services
- Nursing facility services for individuals aged 21 years and older
- EPSDT
- Family planning services and supplies
- Physician services and medical and surgical services of a dentist
- Other medical services provided by licensed practitioner other than a physician
- Home health services
- Private duty nursing services
- Clinic services
- Dental services
- Physical, speech, and occupational therapies
- Prescription drugs
- Diagnostic, screening and prevention services
- Inpatient hospital for individuals aged 65 years and older
- Intermediate care facility services
- Nursing facility services
- Inpatient psychiatric for individuals under age 21 years
- Nurse midwives services (if allowed by state law)

Tools to Limit Medicaid Services: State Plan Amendments

Each state plan is essentially a state's contract with the federal government governing the state's "traditional" Medicaid program. Section 1932(a) of the Social Security Act allows states to amend their Medicaid state plans without waiver approval, although CMS approval of the new state plan amendment (SPA) is still required. SPAs can be used to modify which optional services are covered, as well as the amount, duration, and scope of such services.

States may use SPAs to scale back benefits for a limited population. These reduced benefit packages must be tied to a benchmark or benchmark-equivalent health plan that is actuarially equivalent to the Federal Employees Health Benefits Program (FEHBP); Blue Cross/Blue Shield preferred provider organization (PPO); the state employee coverage plan; the health maintenance organization (HMO) with the largest number of non-Medicaid enrollees in a state; or any other plan approved by the Secretary of the U.S. Department of Health and Human Services (HHS). Certain groups of Medicaid beneficiaries are exempt from state benchmark coverage options. For these benchmark-exempt groups, states must provide coverage consistent with the standard state plan Medicaid coverage rules. Benchmark-exempt groups include:

- Children and adults who qualify for Medicaid under temporary assistance for needy families (TANF – called Temporary Cash Assistance [TCA] in Maryland)
- Individuals with disabilities who qualify for Medicaid under Supplemental Security Income (SSI) and SSI-related categories
- Mandatory pregnant women
- Individuals dually eligible for Medicare and Medicaid
- Terminally ill individuals receiving hospice services
- Individuals in institutions
- Medically frail individuals and individuals with special needs
- Individuals who qualify for long-term care services
- Women who qualify for Medicaid under breast or cervical cancer programs
- Children in foster care or receiving adoption assistance

Benchmark and benchmark-equivalent coverage provides states with an option for offering a somewhat different set of benefits for specified groups of enrollees (National Association of State Budget Officers, 2007). Since 2006, ten states have received CMS approval for the benchmark benefit option under Section 1937 of the Social Security Act (Kaiser Commission on Medicaid and the Uninsured, 2010). These states generally have used the benchmark option to provide specialized benefits to certain enrollees with special conditions rather than to limit benefits (Kaiser Commission on Medicaid and the Uninsured, 2010). Most benchmark plans offer traditional state plan benefits plus such additional services as preventive care, personal assistance services, and disease management to specific groups of individuals (Congressional Research Service, 2010, CMS, 2009). At least eight of the approved plans have been implemented.

The Affordable Care Act (ACA)⁵, signed into law by President Obama on March 23, 2010, modifies Medicaid benchmark and benchmark-equivalent coverage options by additionally requiring states to cover family planning services and supplies. As of January 1, 2014, coverage under benchmark or benchmark-equivalent plans must also include “essential health benefits.” Essential health benefits generally include a broader group of benefits than previously required. The specific categories of essential benefits defined in Section 1302 of the ACA include:

- Ambulatory patient services
- Emergency services
- Hospitalization
- Maternity and newborn care
- Mental health and substance abuse disorder services (including behavioral health treatment)
- Prescription drugs
- Rehabilitative and habilitative services and devices
- Laboratory services
- Preventive and wellness services and chronic disease management
- Pediatric services (to include oral and vision care)

As of the publication date of this report, the Secretary of HHS has not issued regulations or formal guidance regarding the contents of an essential benefits package. Benchmark benefit packages with essential health benefits will be required for those newly eligible for Medicaid through the ACA whose incomes are below 133 percent of the federal poverty level (FPL). In other words, for this new population, benefit packages must be at least as comprehensive as those described above.

Cost-Sharing

States have the authority to impose premiums and copayment on certain categories of enrollees. Cost-sharing allowances depend upon the enrollee’s household income. Table 2 below summarizes cost-sharing limits allowed under Medicaid by income level (Congressional Research Service, 2008):

Table 2. Summary of Medicaid Cost-Sharing Limits by Family Income Level

| | ≤ 100% of the FPL | >100 to ≤ 150 % of the FPL | >150% of the FPL |
|----------------------------------|-------------------------------|---|---|
| Premiums | No premiums | No premiums | Premiums allowed |
| Copayments | Cannot exceed nominal amounts | Cannot exceed 10% of the cost of item/service | Cannot exceed 20% of the cost of item/service |
| Total Cost-Sharing Limits | Capped at 5% of family income | Capped at 5% of family income | Capped at 5% of family income |

⁵ The Patient Protection and Affordable Care Act, P.L. 111–148 as amended by the Health Care and Education Reconciliation Act of 2010 P. L. 111–152.

General Medicaid requirements also prohibit cost-sharing for enrollees in certain eligibility categories. These include children in certain eligibility categories, individuals in foster care or adoption assistance, pregnant women, individuals in hospice, and individuals residing in institutions.

Copayments

In addition to limiting cost-sharing for certain categories of enrollees, states may not require copayments for certain services, including preventive services for children, pregnancy-related services, services for medical conditions that may complicate pregnancy, hospice services, emergency services,⁶ and family planning services (CMS, 2006). Since 2006, states may permit providers to withhold care or services to individuals with income above 100 percent of the FPL who do not meet their cost-sharing obligations (CMS, 2008). Maryland charges copayments for prescription drugs for non-exempt populations. Managed care organizations (MCOs) can charge a lower copayment or waive the copayment altogether. DHMH, however, sets the MCO payment rates assuming that they require enrollees to pay the entire copayment. Currently, recipients pay \$3 for brand-name drugs that are not on the state's preferred drug list. For all other prescriptions, enrollees are charged \$1. Pharmacy copayments under the Maryland Primary Adult Care (PAC) Program are slightly higher. PAC enrollees are charged \$2.50 for generic or preferred brand prescriptions and \$7.50 for non-preferred brand. With the exception of PAC enrollees, pharmacists cannot deny enrollees access to prescriptions for failure to pay a copayment. Maryland still, however, receives savings from the copayment amounts. Pharmacy payments are reduced by the copayment amount and do not distinguish when a copayment has been provided or not.

Premiums

The American Recovery and Reinvestment Act of 2009 (ARRA) provides states with an increased federal medical assistance percentage (FMAP) between October 1, 2008, and December 31, 2010 (CMS, 2009). In order to access these increased funds, states must ensure that their Medicaid "eligibility standards, methodologies, or procedures" are not more restrictive during this time period than those effective July 1, 2008. This is referred to as the maintenance of effort (MOE) requirement. CMS has interpreted this MOE requirement to include premiums:

"... CMS would consider changes in State eligibility policies to be more restrictive if the changes result in determinations of ineligibility for individuals who would have been considered eligible as of July 1, 2008. This includes changes that impose burdens on eligible beneficiaries that cause them to be determined ineligible.... [I]ncreases in premiums or enrollment fees that are a condition for eligibility would be considered more restrictive (CMS, 2009, 4)."

Therefore, as a condition for receiving the enhanced FMAP, Maryland may not impose new premium requirements on Medicaid enrollees. Further, the ACA extends the MOE requirement until January 1, 2014, for adults and September 30, 2019, for children.⁷ While CMS has yet to issue specific guidance on these MOE requirements, it is expected that CMS will use the same

⁶ Cost sharing may be imposed, however, for non-emergency use of a hospital emergency department under §1916A of the Social Security Act (as amended by the Deficit Reduction Act of 2005).

⁷ The ACA does allow states who are facing a deficit to apply for a MOE waiver for non-disabled, non-pregnant adults whose incomes exceed 133 percent of the FPL. Premiums, however, cannot be applied to eligible populations whose incomes are below 150 percent of the FPL.

interpretation it issued for ARRA. As such, it is expected that states will be prohibited from imposing new premium requirements on Medicaid enrollees.

Findings

The JCR requires DHMH to study the estimated Medicaid savings, program impacts, and utilization effects of implementing service limitations, copayments, and premiums. This section of the report presents the results of a literature review of the service limitation and cost-sharing policies and effects in other states, as well as an analysis of Maryland's Medicaid claims and encounter data to examine the potential impacts of implementing the specified program changes. The limitations in the data and literature also are discussed.

Service Limitations

Experience in Other States

There is a great deal of variation across states in coverage of optional benefits and in the amount, duration, and scope of coverage for a particular benefit, whether optional or mandatory. The number of states placing limits on Medicaid benefits increased over the past three years, with 3 states limiting benefits in 2008, 10 states in 2009, and 20 states in 2010 (Kaiser Commission on Medicaid and the Uninsured, 2009, 2010). On the other hand, 15 states reported that they expanded benefits in fiscal year (FY) 2010 (Kaiser Commission on Medicaid and the Uninsured, 2010).⁸ Benefit limitations included elimination of services for certain populations, reduction of service scope, or implementation of additional utilization control over existing benefits. Benefits subject to these limitations tended to be optional services, such as vision, podiatry, and adult dental services (Kaiser Commission on Medicaid and the Uninsured, 2009). No state has opted to cover only the mandated minimum Medicaid benefits, and most states cover many optional benefits.

The Kaiser Family Foundation's Medicaid benefits database compares benefit packages across states, including whether or not a particular benefit is covered and restrictions placed on the amount, duration, and scope (2008). Based on a review of this database, the following list specifies the number of states (including the District of Columbia) that offer certain optional Medicaid benefits for adults, the number of states that impose service limitations on those benefits, and examples of service limitations.

- *Dental Coverage* – Forty-five states and the District of Columbia offer adult dental benefits. Of these states, 42 have some form of coverage limitation. Some states cap services up to a specified dollar amount. For example, Hawaii covers adult preventive and restorative services only up to \$500 per year, and Nebraska limits adult dental benefits to \$1,000 per year. Other states place limits on the types of services provided. For example, Oregon limits dental services for adults in their Medicaid expansion population to emergency treatment for pain and infection. Maryland provides adult dental services only to pregnant women and adults with disabilities in the Rare and Expensive Case Management (REM) program. There are only about 300 adults receiving services in the REM program.

⁸ These expanded benefits include mental health and substance abuse treatment services (eight states), smoking cessation (two states), vision (three states), and dental (two states).

For the remaining adult population, Maryland limits dental services to emergency treatment for pain and infection.⁹

- *Eyeglasses* – Forty-three states and the District of Columbia offer this benefit to adults, and all have some form of coverage limitation. Some states place restrictions on replacement eyeglasses. For example, Mississippi only covers one pair of eyeglasses every five years. Other states limit this benefit to those who had an eye-related surgery. Tennessee provides one pair of eyeglasses or lenses following a cataract surgery. Maryland does not cover eyeglasses for adults.
- *Prescription Drugs* – All 50 states and the District of Columbia offer this benefit, and 32 states, including Maryland, have some form of coverage limitation. Limitations include restrictions on the number of prescriptions that may be dispensed per month, limits on supply units dispensed at one time, and specifications of preferred drug lists. Mississippi limits recipients who are not in nursing facilities to five prescriptions per month; only two may be brand name drugs. Texas covers no more than three prescriptions per month. New York limits prescriptions to 40 per year. Maryland limits maintenance medication prescriptions to a 100-day supply, with an overall maximum of 11 refills per prescription.¹⁰ Maryland operates a preferred drug list and charges a lower copayment amount for generic and preferred drugs.
- *Vision Services*– All 50 states and the District of Columbia offer this benefit to adults, and 47 have some form of coverage limitation. Some states place limits on the number and/or type of services. For example, Mississippi covers only one refractive examination every five years, while Nevada covers only the treatment of medical conditions, such as glaucoma and cataracts. Maryland limits adult vision services to one optometric examination every two years for enrollees aged 21 years or older.¹¹
- *Private Duty Nursing* – Twenty-two states and the District of Columbia offer this benefit, and 14 states have some form of coverage limitation, such as limiting the service to certain populations or restricting the number of service hours. Indiana covers this service only for beneficiaries who are ventilator-dependent. Delaware limits the service to 28 hours per week. Maryland only offers this service to adults enrolled in the model waiver¹² and REM programs.¹³
- *Physical Therapy* – Thirty-four states and the District of Columbia offer this benefit to adults, and 23 have some form of coverage limitation. North Dakota limits patients to 15 visits per year. Hawaii allows no more than two weeks of visits per year. For all covered therapies, Wyoming limits coverage to restorative services subsequent to trauma or illness, and these are limited to 20 visits per year. Other states, such as Arizona and California, do not limit the number of visits, but restrict physical therapy to patients with rehabilitation potential.

⁹ COMAR 10.09.05.04

¹⁰ COMAR 10.09.03.05

¹¹ COMAR 10.09.14.04

¹² Individuals in the model waiver who turn 21 can continue to stay on model waiver as long as they meet institutional level of care.

¹³ COMAR 10.09.69.11

Maryland covers adult physical therapy services that are prescribed by a physician, dentist, or podiatrist, and they must be reissued every month.¹⁴

- *Occupational Therapy* – Thirty-one states offer this benefit to adults, and 21 have some form of coverage limitation. Missouri limits coverage to adults who are pregnant, blind, or residing in nursing facilities. Washington limits recipients to 12 visits per year, while Hawaii restricts coverage to two weeks of therapy. Maryland does not cover community-based occupational therapy services for adults, with the exception of adults in the REM program.¹⁵
- *Speech Therapy* – Thirty-five states offer this benefit, and 26 have some form of coverage limitation. Maine covers speech therapy only when there is a demonstrable decline in the ability to chew, swallow, or communicate. Nebraska allows up to 60 visits per year in combination with other therapy visits, while Iowa limits services to an audiological assessment for a hearing aid. Maryland does not cover community-based speech therapy services for adults.
- *Dentures* – Thirty-four states and the District of Columbia offer this benefit, and 29 have some form of coverage limitation. Wyoming limits this benefit to one set of dentures per lifetime, while California allows one set of dentures per five years and one denture reline per year. Maryland does not cover adult dentures.
- *Personal Care Services* – Thirty states and the District of Columbia offer this benefit, and 24 have some form of coverage limitation. Nebraska provides 40 hours of personal care services per week, while Wisconsin limits this benefit to 250 hours per year. Maryland covers personal care services. Individuals receive services in accordance with a plan of care developed by a nurse monitor.
- *Prosthetic Devices* – For adults, 49 states and the District of Columbia offer this benefit, and 23 have some form of coverage limitation. Arkansas limits prosthetic devices to \$20,000 per year, and California limits payment to only devices and services that restore functionality. Kentucky allows up to \$1,500 per year for devices and services for only a part of their Medicaid population. Maryland limits replacements of individually form-fitted support stockings, prosthetic legs, and prosthetic arms to once every three years.¹⁶ Unless preauthorized, Maryland does not cover replacement of other prosthetic devices while under warranty, or prior to the date specified in the DHMH life expectancy schedule.¹⁷ Except for recipients with diabetes,¹⁸ Maryland does not cover orthotic devices.¹⁹

The following list presents mandatory Medicaid benefit limitations imposed by states and the District of Columbia:

- *Federally Qualified Health Centers* – Fourteen states and the District of Columbia have some form of coverage limitation. South Carolina limits beneficiaries to 12 visits per year, while Vermont allows up to five visits per month. Maryland limits

¹⁴ COMAR 10.09.17.04A

¹⁵ COMAR 10.09.69.10

¹⁶ COMAR 10.09.12.04A(7)

¹⁷ COMAR 10.09.12.05K

¹⁸ COMAR 10.09.67.24B(3)(a)

¹⁹ COMAR 10.09.12.05D(5); COMAR 10.09.15.05A(10)

this service to one visit per day to the same center, unless the additional visit is documented for emergency care or for a different specialty.²⁰

- *Hospital Inpatient (except IMD)* – Thirty-six states and the District of Columbia have some form of coverage limitation. Beneficiaries in Iowa and Alaska have a length of stay limitation up to the 50th percentile of published guidelines for the region. Beneficiaries in Mississippi are allowed 30 days per year, which includes emergency admissions. Maryland operated a hospital day limit policy for many years in the 80s and 90s, and most recently from January 2004 to July 2008. The Medicaid program did not pay for fee-for-service (FFS) hospital days provided above the day limit.
- *Hospital Outpatient* – Twenty-seven states and the District of Columbia have some form of coverage limitation. Beneficiaries in New York are allowed up to 10 visits per year in combination with other specified providers. Maryland does not have any limitations on these services.
- *Laboratory and X-ray (Other than hospital-based)* – Eleven states and the District of Columbia have some form of coverage limitation. Arkansas limits all laboratory and most x-ray services to \$500 per year. Maryland does not have any limits on these services.
- *Physician* - Thirty-five states and the District of Columbia have some form of coverage limitation. Georgia limits the benefit to 12 office visits and 12 nursing facility visits per year. Maryland does not have any limitations on these services.
- *Medical/Surgical Dentist* – Twenty-one states and the District of Columbia have some form of coverage limitation for adults. Arkansas restricts the benefit to a maximum of 12 visits per year combined with physician visits. Delaware limits the benefit to extraction of impacted wisdom teeth, while Iowa, Louisiana, Nebraska, and Oklahoma only cover services that a physician can provide. Maryland provides adult dental services to pregnant women and adults with disabilities in the REM program. For the remaining adult population, Maryland limits dental services to emergency treatment for pain and infection.²¹
- *Nurse Midwife* – Nine states and the District of Columbia have some form of coverage limitation. Arkansas limits these services to 12 visits per year. Florida allows only 10 prenatal visits per year, followed by two home visits and two postpartum visits per year. Maryland limits coverage of nurse midwife visits to one per day, unless documented as an emergency.²²
- *Nurse Practitioner (certified pediatric or family)* – Fifteen states and the District of Columbia have some form of coverage limitation. Arkansas and South Carolina limit the benefit to 12 visits per year combined with visits for other specified practitioners. Maryland limits coverage of nurse practitioner visits to one visit per day, unless documented as an emergency.²³
- *Home Health Services* – Thirty-two states and the District of Columbia have some form of coverage limitation. Alabama restricts the coverage to 104 visits per year

²⁰ COMAR 10.09.08.07L

²¹ COMAR 10.09.05.04

²² COMAR 10.09.21.05

²³ COMAR 10.09.01.05

with no more than 2 visits per week by a home health aide. Mississippi limits the benefit to 25 visits per year by any home health worker. Maryland limits home health care services to one visit per type of service per day and to four hours of care per day, unless more is preauthorized.²⁴

- *Hospice* – Nineteen states and the District of Columbia have some form of coverage limitation. Rhode Island limits coverage to 210 days per year. Maryland limits hospice care to two 90-day election periods, followed by one or more 30-day election periods; the provision of hospice services may continue for as long as the patient continues to meet hospice certification requirements.²⁵

Empirical evidence on cost savings and other program effects of implementing service limitations is limited. Three relevant evaluations on the effects of service limitations were identified through the literature review. One key finding from this review is that it is difficult to measure the impacts of changing benefit options. A recent evaluation of Idaho's experience indicated that this state has not been able to establish whether implementation of new benchmark benefit packages affected costs or access to care (Kenney and Pelletier, 2010).

Another key finding is that eliminating optional services may shift the costs to other providers. A recent study evaluated several policy changes made to Missouri's program in 2005, including the elimination of certain adult optional services (Zuckerman et al, 2009). The evaluation found that these policy changes reduced the overall number of visits paid by Medicaid (Zuckerman et al, 2009). However, hospital uncompensated care increased, and community health centers reported absorbing the costs of some of the eliminated services (Zuckerman et al, 2009). The evaluation also found that service reductions led to lawsuits; Missouri consequently reinstated some eliminated services (Zuckerman et al, 2009).

The final key finding is that service limitations may lead to increased utilization of more expensive services. One study evaluated changes made to Oregon's program, including benefit reductions (Commonwealth Fund, 2005). Although overall service utilization decreased after implementing these changes, utilization of more expensive services, including hospital inpatient and outpatient services, increased (Wallace et al, 2008). This is of particular concern because elimination of such benefits as community-based long-term care and mental health services could easily result in the need to place more individuals in nursing homes and state mental hospitals. In addition, elimination of less expensive optional services, such as surgeries performed in ambulatory surgical centers, would almost certainly result in increased utilization of mandatory and more expensive hospital-based surgical services.

Maryland Medicaid Data Analysis

Analyses were conducted to estimate the cost savings and other effects of implementing limitations on both mandatory and optional services. The federal MOE requirements prohibit states from reducing the number of unduplicated individuals eligible for home and community-based service waivers (HCBS). HCBS waiver participants receive services to allow them to live in the community and the services must not be more expensive than the cost of living in an institution. Since HCBS waivers must be able to support participants' needs in the community, this report assumes that the MOE requirement implies that these services cannot be reduced and, therefore, were not included in the list of optional services.

²⁴ COMAR 10.09.04.05

²⁵ COMAR 10.09.35.04C

An analysis of mandatory services estimated the effects of limiting physician, nurse practitioner, clinic, and non-emergency department (ED) outpatient hospital services for adults to the 90 percent threshold. The analysis identified the number of visits in which the cumulative frequency of enrollees reached 90 percent and the corresponding number of enrollees and services above this threshold. This analysis excluded children aged 0 through 20 years, pregnant women, and individuals dually eligible for Medicare and Medicaid.

Table 3 presents the total number of enrollees using physician office services, the total number of physician office visits, the 90 percent utilization threshold, and the estimated total and state savings for FY 2009. The 90 percent threshold for physician visits was 15 visits in FY 2009. If Maryland were to limit physician services to 15 visits per year, approximately 13,731 enrollees would be affected. The average cost per physician visit was \$89. The estimated savings when applying the average cost to visits above the 90 percent threshold would total \$11.8 million in state and federal funds. Maryland would accrue half of the savings, and the federal government would accrue the other half. Maryland's share of the savings would be \$5.9 million.

Table 3. Total Physician Visits and the 90% Utilization Threshold, FY 2009

| Physician Office Visits | FY 2009 | |
|--|--------------------|-------------|
| | FFS | MCO |
| 90% Threshold Visit Limit | 15 | |
| Number of Enrollees with a Visit | 73,629 | 87,129 |
| Number of Visits | 474,568 | 535,323 |
| Number of Enrollees above the 90% Threshold | 6,847 | 6,884 |
| Number of Visits for Enrollees above the 90% Threshold | 61,100 | 71,835 |
| Average Cost per Visit | \$89 | |
| Total Savings (State and Federal) | \$5,437,900 | \$6,393,315 |
| State Share | \$2,718,950 | \$3,196,658 |
| Total State Funds | \$5,915,608 | |

Note: These saving estimates do not account for shifts to other services. For example, limiting physician services may lead to an increase in outpatient hospital, ER, or clinic visits.

Table 4 presents the same data for nurse practitioner, non-ED outpatient hospital services, and clinic visits. The 90 percent thresholds were 6 nurse practitioner visits, 11 non-ED outpatient hospital visits, and 12 clinic visits. The estimated savings when applying the average cost to each service category would total \$46 million in state funds. Please note that the mandatory service categories are not necessarily mutually exclusive. For example, an enrollee may receive a nurse practitioner service within a clinic. This would make implementation of such a policy difficult because the state would have to devise an algorithm that describes how to assign services to particular visit categories. Additionally, providers would not know whether or not the enrollee has exceeded his or her service limit prior to seeing the patient. Providers would not be compensated for services provided above the limits. Finally, applying service limits according to utilization thresholds could disproportionately affect enrollees with disabilities and chronic conditions because they tend to use services at a higher rate than healthier enrollees.

Table 4. Total Nurse Practitioner, Non-ED Outpatient Hospital, and Clinic Visits, and the 90% Utilization Thresholds, FY 2009

| Nurse Practitioner Visits | FY 2009 | |
|--|---------------------|--------------|
| | FFS | MCO |
| 90% Threshold Visit Limit | 6 | |
| Number of Enrollees with a Visit | 5,024 | 6,935 |
| Number of Visits | 18,360 | 14,639 |
| Number of Enrollees above the 90% Threshold | 763 | 310 |
| Number of Visits for Enrollees above the 90% Threshold | 4,756 | 1,255 |
| Average Cost per Visit | \$76 | |
| Total Savings (Federal and State) | \$361,456 | \$95,380 |
| State Share | \$180,728 | \$47,690 |
| Non-ED Outpatient Hospital Visits | FFS | MCO |
| 90% Threshold Visit Limit | 11 | |
| Number of Enrollees with a Visit | 67,503 | 72,797 |
| Number of Visits | 316,331 | 306,739 |
| Number of Enrollees above the 90% Threshold | 6,149 | 5,005 |
| Number of Visits for Enrollees above the 90% Threshold | 78,727 | 56,753 |
| Average Cost per Visit | \$664 | |
| Total Savings (Federal and State) | \$52,274,728 | \$37,683,992 |
| State Share | \$26,137,364 | \$18,841,996 |
| Clinic Visits | FFS | MCO |
| 90% Threshold Visit Limit | 12 | |
| Number of Enrollees with a Visit | 21,506 | 21,122 |
| Number of Visits | 126,107 | 85,518 |
| Number of Enrollees above the 90% Threshold | 1,238 | 714 |
| Number of Visits for Enrollees above the 90% Threshold | 10,769 | 5,899 |
| Average Cost per Visit | \$93 | |
| Total Savings (Federal and State) | \$1,001,517 | \$548,607 |
| State Share | \$500,759 | \$274,304 |
| Total State Funds | \$45,982,840 | |

Note: These saving estimates do not account for shifts to other services. For example, limiting physician services may lead to an increase in outpatient hospital, ER, or clinic visits.

An analysis of optional services calculated the cost and number of enrollees using these services in calendar year (CY) 2009. When estimating savings for optional services, the average FFS cost was applied to each MCO service, since MCO payment amounts are not maintained in the Medicaid Management Information System (MMIS). Table 5 presents the total number of enrollees and costs associated with each optional service provided in Maryland. In CY 2009, optional services totaled \$311 million in state funds. Pharmacy is an optional benefit that all 50 states cover. Pharmacy was the most expensive optional service in Maryland, totaling \$151 million in state funds in CY 2009 (49 percent of all optional services). The next two most costly optional services were mental health services (\$71 million) and durable medical equipment and disposable medical supplies (DME/DMS) (\$33 million). Costs for these three service categories together totaled \$255 million in state funds, or 82 percent, of the costs associated with currently covered optional services.

Table 5. Costs of Optional Services Provided to Adult Maryland Medicaid Enrollees, CY 2009

| Optional Service | Provider Type | Total Enrollees | Total Funds | State Share |
|--|---------------|-----------------|----------------------------------|----------------------|
| Podiatry | 11 | 13,474 | \$4,002,057 | \$2,001,029 |
| Vision Care | 12 | 37,199 | \$1,640,478 | \$820,239 |
| Psychologist | 15 | 1,266 | \$771,201 | \$385,601 |
| Physical Therapist (Individual or Group) | 16 | 4,169 | \$1,814,530 | \$907,265 |
| Speech/Language Pathologist | 17 | 26 | \$4,816 | \$2,408 |
| Occupational Therapist (Individual or Group) | 18 | 128 | \$40,592 | \$20,296 |
| Audiology Services Provider | 19 | 409 | \$42,077 | \$21,039 |
| Nurse Anesthetists (Individual or Group) | 21 | 7,682 | \$1,016,585 | \$508,293 |
| Nurse Practitioner (Individual or Group) | 23 | 14,723 | \$2,893,751 | \$1,446,876 |
| Nurse Psychotherapist (Individual or Group) | 24 | 586 | \$155,097 | \$77,549 |
| Therapy Group Provider | 28 | 2,548 | \$1,194,130 | \$597,065 |
| Ambulatory Surgical Centers | 39 | 9,866 | \$2,479,747 | \$1,239,874 |
| ADAA Certified Addictions Outpatient Program | 50 | 814 | \$1,041,793 | \$520,897 |
| Residential Service Agency | 53 | 117 | \$97,946 | \$48,973 |
| Intermediate Care Facility - Addiction (ICF-A) | 55 | 4,838 | \$652,661 | \$326,331 |
| Dialysis Facilities | 61 | 2,741 | \$15,670,996 | \$7,835,498 |
| DME/DMS | 62 | 28,460 | \$66,016,157 | \$33,008,079 |
| Oxygen Services | 63 | 1,101 | \$1,686,249 | \$843,125 |
| Social Worker | 94 | 3,934 | \$2,026,435 | \$1,013,218 |
| CC Certified. Prof. Counselor | CC | 2,402 | \$1,204,220 | \$602,110 |
| Mobile Treatment Program | MT | 1,276 | \$9,801,249 | \$4,900,625 |
| IEP & IFSP Case Management | n/a | 580 | \$430,405 | \$215,203 |
| Private Duty Nursing | n/a | 199 | \$18,690,087 | \$9,345,044 |
| Clinic Services | | | | |
| Clinic, Drug Abuse (Methadone) | 32 | 4,617 | \$5,522,946 | \$2,761,473 |
| Clinic, Local Health Department | 35 | 3,423 | \$1,359,461 | \$679,731 |
| Clinic, Maryland Qualified Health Centers | 36 | 690 | \$107,562 | \$53,781 |
| Clinic, General | 38 | 5,046 | \$2,467,040 | \$1,233,520 |
| Subtotal | | | \$9,457,009 | \$4,728,505 |
| Personal Care Services | | | | |
| Personal Care Aide | 44 | 4,479 | \$24,584,511 | \$12,292,256 |
| Personal Care Aide Agency | 45 | 157 | \$442,817 | \$221,409 |
| Personal Care Monitor | 47 | 4,924 | \$9,642,425 | \$4,821,213 |
| Subtotal | | | \$34,699,753²⁶ | \$17,334,877 |
| Mental Health | | | | |
| Hospital, Special Other Acute Mental Health | 6 | 614 | \$3,459,058 | \$1,729,529 |
| Hospital, Special Other Chronic Mental Health | 7 | 711 | \$3,203,379 | \$1,601,690 |
| Mental Health Group Provider | 27 | 1,399 | \$539,057 | \$269,529 |
| Mental Health Case Management Provider | CM | 1,161 | \$863,348 | \$431,674 |
| Mental Health Clinic | MC | 32,416 | \$36,983,028 | \$18,491,514 |
| Mental Hygiene Administration | MH | 911 | \$2,636,515 | \$1,318,258 |
| Psychiatric Rehab Service Facility | PR | 9,317 | \$95,125,958 | \$47,562,979 |
| Subtotal | | | \$142,810,343 | \$71,405,172 |
| Pharmacy ²⁷ | RX | 268,523 | \$302,715,188 | \$151,357,594 |
| Total | | | \$623,025,552 | \$311,512,776 |

²⁶ Individuals who are dually eligible for Medicare and Medicaid are included in the calculations of Medicaid personal care service costs. Medicare does not cover personal care services.

²⁷ The 4.35 percent pharmacy rebate is included in this cost calculation.

Service Limitations Summary

Increasingly, states have reduced Medicaid benefits in response to the recession. The data show that Maryland could save money in the short term by reducing all or some combination of optional and mandatory benefits. However, some studies indicate that benefit reductions may lead to increased utilization of more costly services, such as inpatient hospitalization, as a result of delaying needed care. Additionally, nursing home placements may increase if community alternatives are not available, such as personal care, are not available. In some cases, covering the service under Medicaid is a mechanism for bringing in federal funds for services that the state is obligated to provide. As in Missouri, benefit reductions may also lead to lawsuits.

Further, the 90 percent threshold limitation on certain mandatory services would be administratively burdensome and costly to implement. For example, mandatory service categories are not necessarily mutually exclusive. An enrollee may receive a physician or nurse practitioner service within a clinic. In these cases, the state would have to develop a process of deciding which category to deduct the service from for all possible service combinations. Providers also would not know whether individuals have met the thresholds before treating enrollees, increasing the amount of uncompensated care placed upon providers. Moreover, the state may have to contend with rising costs, as elimination of needed optional services results in increased utilization of more expensive mandatory services.

Copayments

Experience in Other States

There is a great deal of variation across states in terms of which services have copayments and in the specific copayment amounts. In total, 45 states (including the District of Columbia) have some copayment requirements (Kaiser Commission on Medicaid and the Uninsured, 2010). Five states including Maryland require copayments on prescription drugs only, and six states do not have any copayments requirements (Kaiser Commission on Medicaid and the Uninsured, 2010). No states report imposing more than nominal copayment amounts, and no states report applying varying copayment requirements to different eligibility groups (Kaiser Commission on Medicaid and the Uninsured, 2010). Only six states added new or higher copayment levels in FY 2010 and FY 2011, and three states reduced or eliminated copayment requirements in those years (Kaiser Commission on Medicaid and the Uninsured, 2010).

Some states may have been hesitant to increase copayments in the past two years because providers are often unable to collect them, and states have been freezing or reducing provider payment rates at the same time, so copayment increases would further reduce provider payments (Kaiser Commission on Medicaid and the Uninsured, 2010). It is important to note, however, that states are now permitted to allow providers to withhold care or services to individuals with income above 100 percent of the FPL who do not meet their cost-sharing obligations. Of course, this may result in individuals forgoing care.

In general, copayments are most frequently charged for prescriptions (Ku and Wachino, 2005). The Kaiser Family Foundation Medicaid benefits database includes information on copayments for each service category (2008). Based on a review of this database, the following list offers examples of higher copayment requirements in states and the District of Columbia:

- *Dental Coverage* – Of the 46 states that offer this benefit to adults, 21 have a copayment requirement. Utah requires some beneficiaries to cover 10 percent of the payment per visit. New Mexico charges working enrollees with disabilities in the buy-in program \$7 per visit for non-preventive services. Maryland does not charge a copayment for this benefit, but it should be noted that Maryland mainly covers dental services for children.
- *Prescription Drugs* –All 50 states and the District of Columbia offer this benefit, and 41 states, including Maryland, have a copayment requirement. Utah has the highest copayment requirements, which vary according to eligibility group. Utah charges \$3 per prescription up to \$15 per month for traditional Medicaid beneficiaries, including children. Utah charges \$5 per generic prescription or preferred brand prescription as well as 25 percent of the costs for other drugs for parents of Medicaid-eligible children and adults with income levels below 150 percent of the FPL. For the last two groups, full payment for brand name drugs is required when comparable generics are available. Maryland charges \$1 per generic or preferred brand prescriptions and \$3 per non-preferred brand. Pharmacy copays under Maryland Primary Adult Care (PAC) Program are slightly higher. PAC enrollees are charged \$2.50 for generic or preferred brand prescriptions and \$7.50 for non-preferred brand.²⁸ Pharmacists can deny PAC enrollees access to prescriptions if they fail to pay the copayment.
- *Vision Services* – All 50 states and the District of Columbia offer this benefit to adults, and 29 have a copayment requirement. Utah charges enrollees in certain eligibility groups the balance of the exam cost above \$30 and charges a \$5 copayment per visit for other eligibility groups. New Mexico requires \$5 per visit for their Medicaid expansion population and \$7 per visit for working disabled buy-in beneficiaries. Maryland does not charge a copayment for this benefit.
- *Private Duty Nursing* – Of the 23 states that offer this benefit, 2 have a copayment requirement. Maine has the highest copayment, ranging from \$.50 to \$3 per day, depending on payment, up to \$50 per month. Maryland does not charge a copayment for this benefit, but a significant majority of beneficiaries of this service are children.
- *Physical Therapy* – Of the 35 states that offer this benefit to adults, 12 have a copayment requirement. New Mexico requires \$5 per visit for their Medicaid expansion population and \$7 per visit for working disabled buy-in beneficiaries. Maryland does not charge a copayment for this benefit.
- *Inpatient Hospital, Nursing Facility, Intermediate Care Facility Services in Institutions for Mental Diseases for Individuals Older than 65 years* – Of the 45 states that offer this benefit, 3 have a copayment requirement. There were various methodologies to cost-sharing for this benefit. In Tennessee, some enrollees are required to pay either \$100 or \$200 per hospital admission, depending on their income level. Maryland does not charge a copayment for this benefit.
- *Personal Care Services* – Of the 31 states that offer this benefit, 1 has a copayment requirement. Maine requires \$.50 - \$3 per day, up to \$50 per month. Maryland does not charge a copayment for this benefit.

²⁸ MCOs can charge a lower copay amount or waive altogether. The Department does not reimburse the MCOs for the lower copay amounts.

- *Prosthetic Devices* – Of the 50 states that offer this benefit to adults, 10 have a copayment requirement. Utah has the highest copayment for this benefit, requiring some beneficiaries to cover 10 percent of payment. Maryland does not charge a copayment for this benefit.

A review of the Kaiser database indicates the following copayments for mandatory Medicaid benefits:

- *Federally Qualified Health Centers* – Twenty-five states have a copayment requirement for this benefit. Montana requires a \$5 copayment per visit. New Mexico charges \$5 per visit for its Medicaid expansion population and \$7 per visit for its working disabled buy-in beneficiaries for non-preventive services. Maryland does not charge a copayment for this benefit.
- *Hospital Inpatient (except IMD)* – Twenty-eight states have a copayment requirement for this benefit. Colorado requires beneficiaries to pay \$10 per day up to 50 percent of payment for first day of care. Tennessee requires adults to pay either a \$100 or \$200 copayment per admission, depending on income level. Utah requires \$220 per non-emergent admission for traditional Medicaid beneficiaries. Maryland does not charge a copayment for this benefit.
- *Hospital Outpatient* – Thirty-six states have a copayment requirement for this benefit. Tennessee charges adults with incomes at or above 200 percent of the FPL \$50 per ED visit if the beneficiary is not admitted. Alaska requires 5 percent of the total payment for non-emergency services. Maryland does not charge a copayment for this benefit.
- *Laboratory and X-ray (Other than hospital-based)* – Twelve states have a copayment requirement for this benefit. Utah requires parents of Medicaid-eligible children and adults below 150 percent of the FPL to pay 5 percent of laboratory payments above \$50 and x-ray payments above \$100. Maryland does not charge a copayment for this benefit.
- *Physician* – Thirty-one states have a copayment requirement for this benefit. Tennessee has the highest copayments, charging \$5 or \$10 per primary care visit and \$15 or \$25 per specialty care visit for adults. The copayment amount depends on an individual's income level. Maryland does not charge a copayment for this benefit.
- *Medical/Surgical Dentist* – Eighteen states have a copayment requirement for this benefit for adults. Utah requires some adults to cover 10 percent of the payment. Tennessee requires either \$15 or \$25 per visit, depending on the beneficiary's income. Maryland does not charge a copayment for this benefit.
- *Nurse Midwife* – Fourteen states have a copayment requirement for this benefit. New Mexico charges either \$5 or \$7 per visit, depending on eligibility group and service provided. Montana charges \$4 per visit (both New Mexico and Montana charge these same copayment amounts for physician visits). Maryland does not charge a copayment for this benefit since most nurse midwifery visits are for prenatal care or family planning.
- *Nurse Practitioner (certified pediatric or family)* – Twenty-one states have a copayment requirement for this benefit. Utah charges \$5 per visit for parents of

Medicaid-eligible children and adults with incomes below 150 percent of the FPL. New Mexico charges either \$5 or \$7 per visit, depending on eligibility group and service provided. Maryland does not charge a copayment for this benefit.

- *Home Health Services* – Twelve states have a copayment requirement for this benefit. New Mexico has the highest copayment, charging \$5 or \$7 per visit, depending on eligibility group and service provided. Maryland does not charge a copayment for this benefit.
- *Clinics (Rural)* – Twenty-six states have a copayment requirement for this benefit. Montana charges \$5 per visit, while working disabled beneficiaries in New Mexico pay a \$7 copayment per visit for non-preventive services. Maryland does not have rural health clinics.
- *Hospice* – No states require copayments for this benefit.

Empirical evidence on cost savings and other program effects of implementing copayments is somewhat limited. In general, the research literature indicates that copayments decrease utilization of essential and other health services, which can result in utilization of more expensive services, such as ED and hospital services (Ku and Wachino, 2005). Further, copayments can be especially challenging for individuals with serious or chronic health conditions because these populations tend to require more services and prescriptions (Ku and Wachino, 2005).

A classic study that is frequently referenced in the literature is a comprehensive study conducted by the RAND Corporation in the 1970s, which found that service utilization is greatly influenced by cost-sharing: as cost-sharing increases, utilization decreases (Gruber, 2006). Since that time, evaluations of states imposing copayments on Medicaid services have yielded similar results. A study conducted by the Commonwealth Fund found that copayments imposed on enrollees in Oregon deterred members from using health services in general, but caused inappropriate delays in care that led to increased inpatient utilization and expenditures (2005). Similarly, a study conducted by the Center on Budget and Policy Priorities found that new copayments imposed on low-income parents and adults with disabilities in Utah led to a reduction in physician, inpatient, and outpatient hospital services (Ku et al, 2004).

Maryland Medicaid Data Analysis

To estimate the potential impact of imposing copayments on mandatory services for enrollees, CY 2009 Maryland Medicaid data were analyzed to (1) estimate enrollees and services eligible for copayments and (2) estimate the potential cost savings. First, enrollees and services exempt from copayments under federal Medicaid rules were excluded from the analysis. The remaining enrollees who are eligible for copayments include adults with disabilities, childless adults enrolled in the PAC program, parents and caretaker relatives enrolled in the Medicaid Expansion program, and parents and caretaker relatives who were eligible for Medicaid prior to the implementation of the Expansion program. Because household income is not available in the MMIS, it was estimated according to the following:

- Because the Medicaid Expansion and PAC programs cover adults with household income up to 116 percent of the FPL, 50 percent of the Medicaid Expansion enrollees and 10 percent of PAC enrollees were assumed to have an income level between 100 and 150 percent of the FPL. The federally-allowed maximum

copayment of 10 percent of the cost of the service was applied to these enrollees. The remaining Medicaid Expansion and PAC enrollees were assumed to have an income below 100 percent of the FPL. The federally-allowed maximum copayment of \$3 was applied to this group.

- All other enrollees eligible for copayments were categorized as having an income level below 100 percent of the FPL. This includes enrollees with disabilities, whose incomes must typically meet the SSI threshold, which is below approximately 75 percent of the FPL. This also includes parents and caretaker relatives who were eligible for Medicaid prior to the implementation of the Expansion program, whose incomes must be below approximately 40 percent of the FPL. The federally-allowed nominal copayment maximum of \$3 was applied to this group.

Table 6 describes how the number of enrollees eligible for copayments was estimated. The second column of the table lists the total number of CY 2009 Maryland Medicaid enrollees. Maryland’s total enrollment in CY 2009 was 993,929. The subsequent columns in the table remove the categories of enrollees who are exempt from copayments. After removing children (column 3), pregnant women (column 4), individuals in nursing/intermediate care facilities (column 5), women enrolled in the breast cancer and family planning programs (column 6), and individuals dually eligible for Medicare and Medicaid (column 7), there are 213,238 enrollees who are likely eligible for copayments, about 21 percent of all Medicaid enrollees.

Table 6. CY 2009 Maryland Medicaid Enrollees Eligible for Copayments

| Coverage Group | All Medicaid | Less Children and Foster Care | Less Pregnant Women | Less Inpatient NF/ICF | Less Breast Cancer/Family Planning | Less Dual Eligibles | Likely Final Count |
|-----------------------|----------------|-------------------------------|---------------------|-----------------------|------------------------------------|---------------------|--------------------|
| Expansion/PAC | 113,874 | 106,171 | 98,096 | 95,109 | 95,109 | 95,109 | 95,109 |
| Non-Expansion/Non-PAC | 880,055 | 319,000 | 278,163 | 227,642 | 209,818 | 118,129 | 118,129 |
| Total | 993,929 | 425,171 | 376,259 | 322,751 | 304,927 | 213,238 | 213,238 |

After identifying the enrollees eligible for copayments, copayment-eligible services were grouped into mandatory and optional categories. Table 7 presents the results of this analysis for enrollees with estimated household incomes between 100 and 150 percent of the FPL and includes the number of services eligible for copayments within each service category, the average cost per service, and the total savings to the state. The maximum 10 percent copayment was applied to copayment-eligible services for these enrollees. After exemptions, approximately 379,548 visits would be eligible for copayments. After applying the maximum 10 percent copayment, the category that would achieve the most savings is physician services, totaling approximately \$907,994 in state funds. The analysis does not consider the impact of utilization changes on total costs. The category that would achieve the least amount of savings is clinical services, totaling approximately \$10,007 in state funds. The estimated savings when applying the maximum allowable copayment to enrollees with household incomes between 100 and 150 percent of the FPL would total \$2.6 million in state funds.

Table 7. Maximum Potential Savings from Copayments for Enrollees with Incomes between 100 – 150% FPL, CY 2009

| Service Category | Number of Visits Eligible for Copayments | Average Cost per Visit | Total Saving at 10% Copayment Maximum | |
|------------------------------|--|------------------------|---------------------------------------|--------------------|
| | | | Total Funds | State Share |
| Optional Services | | | | |
| Clinical Services | 2,160 | \$93 | \$20,013 | \$10,007 |
| Mental Health | 14,699 | \$102 | \$149,255 | \$74,628 |
| Vision Care | 4,541 | \$92 | \$41,954 | \$20,977 |
| Therapy Services | 3,296 | \$71 | \$23,555 | \$11,777 |
| DME | 1,581 | \$469 | \$74,137 | \$37,068 |
| Other Services | 9,092 | \$96 | \$86,973 | \$43,487 |
| Subtotal | 35,369 | | \$395,887 | \$197,944 |
| Mandatory Services | | | | |
| Hospital Outpatient (Non-ED) | 12,934 | \$664 | \$858,804 | \$429,402 |
| Specialty Care | 125,129 | \$126 | \$1,576,628 | \$788,314 |
| Inpatient Services | 2,072 | \$2,989 | \$619,381 | \$309,690 |
| Physician Services | 204,044 | \$89 | \$1,815,988 | \$907,994 |
| Subtotal | 344,179 | | \$4,870,801 | \$2,435,400 |
| Total | 379,548 | | \$5,266,688 | \$2,633,344 |

Table 8 shows the savings Maryland could potentially achieve by imposing copayments at various levels below the maximum on enrollees with household incomes between 100 and 150 percent of the FPL. If Maryland imposed a 1 percent copayment on eligible services for this population, the estimated savings would total \$263,334 in state funds. If Maryland imposed a 5 percent copayment, the estimated savings would total \$1.3 million in state funds. Again, the analysis does not consider the impact of utilization changes on total costs.

Table 8. Potential Savings for Enrollees with Incomes between 100 – 150% FPL by Various Copayment Levels, CY 2009

| Service Category | Total Saving at 5% Copayment | | Total Saving at 1% Copayment | |
|------------------------------|------------------------------|--------------------|------------------------------|------------------|
| | Total Funds | State Share | Total Funds | State Share |
| Optional Services | | | | |
| Clinical Services | \$10,007 | \$5,003 | \$2,001 | \$1,001 |
| Mental Health | \$74,628 | \$37,314 | \$14,926 | \$7,463 |
| Vision Care | \$20,977 | \$10,488 | \$4,195 | \$2,098 |
| Therapy | \$11,777 | \$5,889 | \$2,355 | \$1,178 |
| DME | \$37,068 | \$18,534 | \$7,414 | \$3,707 |
| Other Services | \$43,487 | \$21,743 | \$8,697 | \$4,349 |
| Subtotal | \$197,944 | \$98,972 | \$39,589 | \$19,794 |
| Mandatory Services | | | | |
| Hospital Outpatient (Non-ED) | \$429,402 | \$214,701 | \$85,880 | \$42,940 |
| Specialty Care | \$788,314 | \$394,157 | \$157,663 | \$78,831 |
| Inpatient Services | \$309,690 | \$154,845 | \$61,938 | \$30,969 |
| Physician Services | \$907,994 | \$453,997 | \$181,599 | \$90,799 |
| Subtotal | \$2,435,400 | \$1,217,700 | \$487,080 | \$243,540 |
| Total | \$2,633,344 | \$1,316,672 | \$526,669 | \$263,334 |

Table 9 presents the results of this analysis for enrollees with household incomes below 100 percent of the FPL. After exemptions, approximately 3.9 million visits would be eligible for copayments. After applying the maximum nominal copayment of \$3, the category that would achieve the most savings is physician services, totaling approximately \$3.1 million in state funds. The category that would achieve the least amount of savings is clinical services, totaling approximately \$24,548 in state funds. The estimated savings when applying the maximum allowable copayment for adults with household incomes below 100 percent of the FPL would total \$5.8 million in state funds.

Table 9. Maximum Potential Savings from Copayments for Enrollees with Incomes below 100 % FPL, CY 2009

| Service Category | Number of Visits Eligible for Copayments | Nominal \$3.00 Copayment Maximum | Total Savings at Nominal \$3 Copayment Maximum | |
|------------------------------|--|----------------------------------|--|--------------------|
| | | | Total Funds | State Share |
| Optional Services | | | | |
| Clinical Services | 16,365 | \$3 | \$49,096 | \$24,548 |
| Personal Care Services | 18,107 | \$3 | \$54,321 | \$27,161 |
| Mental Health | 186,685 | \$3 | \$560,056 | \$280,028 |
| Vision Care | 25,535 | \$3 | \$76,604 | \$38,302 |
| Therapy Services | 20,920 | \$3 | \$62,759 | \$31,379 |
| DME | 51,934 | \$3 | \$155,801 | \$77,901 |
| Other Services | 158,170 | \$3 | \$474,511 | \$237,256 |
| Subtotal | 477,716 | | \$1,433,148 | \$716,574 |
| Mandatory Services | | | | |
| Hospital Outpatient (Non-ED) | 195,855 | \$3 | \$587,566 | \$293,783 |
| Specialty Care | 1,071,709 | \$3 | \$3,215,126 | \$1,607,563 |
| Inpatient Services | 35,551 | \$3 | \$106,652 | \$53,326 |
| Physician Services | 2,102,645 | \$3 | \$6,307,936 | \$3,153,968 |
| Subtotal | 3,405,760 | | \$10,217,281 | \$5,108,640 |
| Total | 3,883,476 | | \$11,650,429 | \$5,825,214 |

Table 10 presents estimated saving from various nominal copayment levels for adults with household incomes below 100 percent of the FPL. If Maryland imposed a \$1 copayment, the estimated saving would total \$1.9 million in state funds. If Maryland imposed a \$2 copayment, the estimated savings would total \$3.8 million in state funds.

Table 10. Potential Savings for Enrollees with Incomes below 100 % FPL by Nominal Copayment Levels, CY 2009

| Service Category | Total Saving at Nominal \$2 Copayment | | Total Saving at Nominal \$1.5 Copayment | | Total Saving at Nominal \$1 Copayment | |
|------------------------------|---------------------------------------|--------------------|---|--------------------|---------------------------------------|--------------------|
| | Total Funds | State Share | Total Funds | State Share | Total Funds | State Share |
| Optional Services | | | | | | |
| Clinical Services | \$32,731 | \$16,365 | \$24,548 | \$12,274 | \$16,365 | \$8,183 |
| Personal Care Services | \$36,214 | \$18,107 | \$27,161 | \$13,580 | \$18,107 | \$9,054 |
| Mental Health | \$373,371 | \$186,685 | \$280,028 | \$140,014 | \$186,685 | \$93,343 |
| Vision Care | \$51,069 | \$25,535 | \$38,302 | \$19,151 | \$25,535 | \$12,767 |
| Therapy | \$41,839 | \$20,920 | \$31,379 | \$15,690 | \$20,920 | \$10,460 |
| DME | \$103,867 | \$51,934 | \$77,901 | \$38,950 | \$51,934 | \$25,967 |
| Other Services | \$316,341 | \$158,170 | \$237,256 | \$118,628 | \$158,170 | \$79,085 |
| Subtotal | \$955,432 | \$477,716 | \$716,574 | \$358,287 | \$477,716 | \$238,858 |
| Mandatory Services | | | | | | |
| Hospital Outpatient (Non-ED) | \$391,710 | \$195,855 | \$293,783 | \$146,891 | \$195,855 | \$97,928 |
| Specialty Care | \$2,143,418 | \$1,071,709 | \$1,607,563 | \$803,782 | \$1,071,709 | \$535,854 |
| Inpatient Services | \$71,102 | \$35,551 | \$53,326 | \$26,663 | \$35,551 | \$17,775 |
| Physician Services | \$4,205,291 | \$2,102,645 | \$3,153,968 | \$1,576,984 | \$2,102,645 | \$1,051,323 |
| Subtotal | \$6,811,520 | \$3,405,760 | \$5,108,640 | \$2,554,320 | \$3,405,760 | \$1,702,880 |
| Total | \$7,766,952 | \$3,883,476 | \$5,825,214 | \$2,912,607 | \$3,883,476 | \$1,941,738 |

The data show that the total potential savings across all categories of enrollees would total \$8.5 million in state funds. This amount, however, overestimates the expected benefits because:

- Federal rules cap total enrollee cost-sharing (including copayments and premiums) at 5 percent of household income.
- Enrollees may decrease or delay utilization of essential and preventive health services, which may result in increased utilization of more expensive services later on.
- The analysis does not take into account the additional administrative costs of implementing new copayment requirements, including reprogramming the MMIS and tracking copayments.

It should be noted that no state has imposed a copayment on all eligible services. In addition, the 5 percent payment cap is difficult to track. Previously, some states required enrollees to track their copayments and request refunds from the state once they exceeded the 5 percent cap. Subsequently, CMS determined that this tracking method is not allowable and that states must track the percent of household income spent within their information systems. Currently, Maryland does not have the capacity to track this information. To do so, would require extensive costly and administratively burdensome changes to the MMIS.

Copayment Summary

In sum, most states and the District of Columbia require copayments for at least some services, and none charge the maximum allowable copayment (Kaiser Commission on Medicaid and the Uninsured, 2010). Across all states, the service that most frequently requires copayments is

pharmacy. Maryland already charges copayments for pharmacy. The data for Maryland show that, after removing exempt populations, only 21 percent of Medicaid enrollees are eligible for copayments. Although the maximum gross impact of imposing the maximum allowable copayments for eligible services would be a savings of \$8.5 million in state funds, the actual savings would be far less. It does not account for the federal cap on total cost-sharing at 5 percent of household income or for the cost of restructuring the current MMIS system to track the percent of household income spent on copayments for Medicaid services. As indicated by the literature, copayments may decrease or delay utilization of essential and preventive health services, which may result in increased utilization of more expensive services later on. Further, federal rules only permit Maryland to withhold treatment for nonpayment to enrollees with incomes above 100 percent of the FPL. For all other enrollees, the providers would be required to provide the service and absorb the copayment amount themselves. Additionally, these numbers include 10,760 enrollees who become eligible by spending down their income. These enrollees have incomes that exceed the income limits, but qualify for Medicaid because they have medical bills that equal or are greater than their “excess” income. These individuals are found to be eligible retroactively after incurring medical bills. Providers would not know that these individuals are Medicaid-eligible at the time of service and therefore, would not have the opportunity to collect a copayment. The current MMIS system would deduct copayment amounts from providers automatically and would not be able to determine whether or not a copayment had been collected.

Premiums

As previously discussed, federal MOE requirements prohibit states from increasing premiums from the levels that existed on July 1, 2008. Therefore, this report did not estimate the impacts of increasing premiums in Maryland. Maryland currently has two premium programs, which were in operation before the MOE requirements were issued. The MCHP Premium program is available to uninsured children with household income between 200 and 300 percent of the FPL. In order to participate, the parent or guardian must pay a monthly family premium that ranges from \$48 to \$60, depending on household income. The Employed Individuals with Disabilities (EID) program is available to low-income working adults with disabilities. In order to participate, enrollees must pay a monthly premium that ranges from \$25 to \$55, depending on household income.

Conclusions

Limiting Benefits

States have responded to recession-based budgetary challenges by limiting Medicaid benefits. There is a question about whether savings actually materialize, however. For example, a few studies indicate that benefit reductions can lead to increased utilization of more costly services, such as inpatient hospitalization, as a result of delaying needed care, and might also (as in Missouri) lead to lawsuits challenging the legality of eliminating or reducing benefits characterized as entitlements.

Maryland could potentially save money by limiting mandatory services for adults to the 90 percent threshold. However, these threshold limitations could be administratively burdensome and costly to implement. These thresholds would be difficult to operationalize because mandatory service categories are not necessarily mutually exclusive. For example, an enrollee

may receive a physician or nurse practitioner service within a clinic. In these cases, the state would have to develop a process of deciding which category to deduct the service from for all possible service combinations. Providers' uncompensated care would increase, since DHMH's systems would be unable to alert providers on whether or not enrollees already met the service limit requirements. Additionally, applying service limits according to utilization thresholds could disproportionately affect enrollees with disabilities and chronic conditions because they tend to use services at a higher rate than healthier enrollees.

Federal Medicaid rules require states to cover optional services for children under the mandatory EPSDT benefit. Maryland currently spends roughly \$311 million in state funds annually on adult optional services. Of the \$311 million state funds, three service categories are the most costly: pharmacy (\$151 million), mental health (\$71 million), and DME/DMS (\$33 million). Together these three service categories total \$255 million in state funds, or 82 percent, of the costs associated with optional services.

Elimination or reduction of these three most costly optional Medicaid services would have a substantial and disproportional negative impact on the most vulnerable of adult Medicaid enrollees, including those with special needs such as physical or mental disabilities and may well lead to re-institutionalization of the mentally ill and medically fragile. Eliminating pharmacy coverage would surely increase costs in other service categories, including hospitalization, medical and surgical services, and clinic services. Although the magnitude of these predictable increased costs is difficult to quantify, they are likely to be substantial, and may exceed any short-term savings that result from optional benefit reduction or elimination.

Recently, the Department proposed to reduce services for the medically needy when the Department considered options to save money through service limits. Specifically, the Department's proposal was to cut inpatient services for the medically needy. The hospitals, however, negotiated a hospital assessment with the Health Services Cost Review Commission in lieu of the Medicaid hospital service cuts.

Premiums

Federal MOE requirements under ARRA and the ACA prohibit states from increasing premium requirements from the levels that existed on July 1, 2008. Therefore, this report did not estimate the impacts of increasing premiums in Maryland.

Copayments

Most states require copayments for at least some Medicaid services. Across all states, the service that most frequently requires copayments is pharmacy. Maryland already charges copayments for pharmacy. No states require more than nominal copayment amounts, i.e., no states charge the maximum allowable copayments (Kaiser Commission on Medicaid and the Uninsured, 2010). After removing exempt populations, only 21 percent of Maryland Medicaid enrollees are eligible for copayments. The data for Maryland show that the maximum gross impact of imposing the maximum allowable copayments for eligible services would be a savings of \$8.5 million in state funds. However, the actual savings would be far less. The analysis does not account for the federal cap on total cost-sharing at 5 percent of household income or for the cost of restructuring the current MMIS system to track the percent of household income spent on copayments for Medicaid services. Further, federal rules only permit Maryland to withhold treatment for nonpayment to enrollees with incomes above 100 percent of the FPL. For all other enrollees, the

providers would be required to provide the service and absorb the copayment amount themselves.

In spite of the limitations of empirical evidence of the results of copayments, its negative effect on service utilization is well-documented (Ku et al, 2004; Ku and Wachino, 2005; Commonwealth Fund, 2005; Gruber, 2006). In general, the literature indicates that copayments decrease utilization of essential and other health services, which can result in utilization of more expensive services, such as ED and hospital services (Ku and Wachino, 2005). Further, copayments can be especially challenging for individuals with serious or chronic health conditions because these populations tend to require more services and prescriptions (Ku and Wachino, 2005). As is the case with elimination or reduction of services, the long-term effects of cost-sharing may be reduced utilization of essential and preventive health services, with a resulting increase in more expensive services.

References

- Centers for Medicare and Medicaid Services (2010, January 25). Email guidance to the Maryland Department of Health and Mental Hygiene.
- Centers for Medicare and Medicaid Services (2009). *Report on State Section 1937 Benchmark Plans*. U.S. Department of Health and Human Services. Baltimore, MD: Retrieved September 30, 2010, from <https://www.cms.gov/DeficitReductionAct/Downloads/070607benchmarkssection1937.pdf>
- Centers for Medicare and Medicaid Services (2009, August 19). *SMD #09-005 ARRA#5*.
- Centers for Medicare and Medicaid Services (2008, February). *Deficit Reduction Act: Important Facts for State Policymakers*. U.S. Department of Health and Human Services. Baltimore, MD: Retrieved September 30, 2010, from <http://www1.cms.gov/DeficitReductionAct/Downloads/Costsharing.pdf>
- Centers for Medicare and Medicaid Services. (2006). *Deficit Reduction Act Important Facts for State Policymakers*. U.S. Department of Health and Human Services. Baltimore, MD: Retrieved September 20, 2010, from <http://www1.cms.gov/DeficitReductionAct/Downloads/Costsharing.pdf>
- The Commonwealth Fund. (2005). *Impact of Changes to Premiums, Cost-sharing, and Benefits on Adult Medicaid beneficiaries: Results from an Ongoing Study of the Oregon Health Plan*. Washington, DC.: Retrieved September 17, 2010, from http://www.commonwealthfund.org/~media/Files/Publications/Fund%20Report/2005/Jul/Impact%20of%20Changes%20to%20Premiums%20%20Cost%20Sharing%20%20and%20Benefits%20on%20Adult%20Medicaid%20Beneficiaries%20%20Results%20of%20Wright_impact_changes_premiums_Medicaid_Oregon%20pdf.pdf
- Congressional Research Service (2010, August). *Medicaid and the state Children's Health Insurance Program (CHIP) Provisions in PPACA*. Library of Congress. Washington, D.C.: Retrieved September 21, 2010, from http://www.arkleg.state.ar.us/healthcare/medicaid/Documents/CRS%20Report%204_28_10.pdf
- Congressional Research Service. (2008, January). *Medicaid: A Primer*. Library of Congress: Washington, D.C.: Retrieved September 23, 2010, from <http://aging.senate.gov/crs/medicaid1.pdf>
- Gruber, Jonathan (2006). *The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond*. The Henry J. Kaiser Family Foundation. Washington, D.C.: Retrieved September 29, 2010, from <http://www.kff.org/insurance/upload/7566.pdf>.
- The Henry J. Kaiser Family Foundation. (2008). *Medicaid Benefits: Online Database*. Washington, D.C. Retrieved November 9, 2010, from <http://medicaidbenefits.kff.org/index.jsp>
- Kaiser Commission on Medicaid and the Uninsured. (2010, September). *Hoping for Economic Recovery, Preparing for Health Reform: A Look at Medicaid Spending, Coverage and Policy Trends. Results from a 50-State Medicaid Budget Survey for Fiscal Years 2010*

- and 2011. The Henry J. Kaiser Family Foundation: Washington, D.C.: Retrieved October 3, 2010, from <http://www.kff.org/medicaid/upload/8105.pdf>
- Kaiser Commission on Medicaid and the Uninsured. (2009). *The Crunch Continues: Medicaid Spending, Coverage, and Policy in the Midst of a Recession – Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2009 and 2010*. The Henry J. Kaiser Family Foundation: Washington, D.C. Retrieved September 21, 2010, from <http://www.kff.org/medicaid/upload/7985.pdf>
- Kaiser Commission on Medicaid and the Uninsured. (2009, December). *A Foundation for Health Reform: Findings of a 50 State Survey of Eligibility Rules, Enrollment and Renewal Procedures, and Cost-sharing Practices in Medicaid and CHIP for Children and Parents During 2009*. The Henry J. Kaiser Family Foundation. Washington, D.C.: Retrieved September 21, 2010, from <http://www.kff.org/medicaid/upload/8028.pdf>
- Kaiser Commission on Medicaid and the Uninsured. (2005, June). *Medicaid: An Overview of Spending on “Mandatory vs. “Optional” Populations and Services*. The Henry J. Kaiser Family Foundation. Washington, D.C.: Retrieved September 30, 2010, from <http://www.kff.org/medicaid/upload/Medicaid-An-Overview-of-Spending-on.pdf>
- Kenney, G. & Pelletier, J.E. (2010). *Medicaid Policy Changes in Idaho under the Deficit Reduction Act of 2005: Implementation Issues and Remaining Challenges*. The Urban Institute: Washington, D.C.: Retrieved September 15, 2010, from <http://www.shadac.org/files/shadac/publications/IdahoMedicaidDRACaseStudy.pdf>
- Ku, L., Deschamps, E., and Hillman, J. (2004, November), *The Effects of Copayments on the Use of Medical Services and Prescriptions Drugs in Utah’s Medicaid Program*. Center on Budget and Policy Priorities, Washington, D.C.: Retrieved September 15, 2010, from <http://www.cbpp.org/cms/index.cfm?fa=view&id=1398>
- Ku, L. and Wachino, V. (2005, July). *The Effect of Increased Cost-Sharing in Medicaid: A Summary of Research Findings*. Center on Budget and Policy Priorities, Washington, D.C., Retrieved September 29, 2010, from <http://www.cbpp.org/files/5-31-05health2.pdf>
- National Association of State Budget Officers (2007, September). *Issue Brief: Redesigning Medicaid Using the Deficit Reduction Act*. Washington, D.C.: Retrieved September 25, 2010, from <http://www.nasbo.org/LinkClick.aspx?fileticket=D40qyZFzFZU%3D&tabid=83>
- Wallace, N., McConnell, K.J., Gallia, C.A., & Smith, J.A. (2008, April). *How effective are copayments in reducing expenditures for low-income adult Medicaid beneficiaries? Experience from the Oregon Health Plan*. HSR: Health Services Research. Chicago, IL: Retrieved September 21, 2010, from <http://onlinelibrary.wiley.com/doi/10.1111/j.1475-6773.2007.00824.x/pdf>
- Zuckerman. S., Miller, D. M., & Pape, E.S. (2009, February). *Missouri's 2005 Medicaid cuts: How did they affect enrollees and providers?* Health Affairs. Bethesda, MD: Retrieved September 10, 2010, from <http://content.healthaffairs.org/cgi/reprint/28/2/w335>