# Fee-for-Service Medicaid in Wisconsin:

An Evaluation of Quality Improvement Initiatives
for the Aged, Blind and Disabled

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# Foreword

In Wisconsin, aged, blind and disabled (ABD) people who receive health-care coverage through the Medicaid program remain in a fee-for-service system, even as other Medicaid groups have been moved to managed care. This report examines five potential options for their estimated impact on the cost and quality of care provided to the ABD population in the fee-for-service system. These five alternatives are the status quo, pay-for-performance, primary care case management, chronic disease management, and a combination of primary care case management and chronic disease management.

This report is the product of a semester-long collaboration between the Robert M. La Follette School of Public Affairs at the University of Wisconsin–Madison and Wisconsin's Department of Health and Family Services. The La Follette School of Public Affairs offers a two-year graduate program leading to a master's degree in public affairs. Students study policy analysis and public management and pursue a concentration in a public policy area of their choice. They spend the first year and a half taking courses that provide them with the tools needed to analyze public policies.

Although acquiring a set of policy analysis skills is important, there is no substitute for doing policy analysis as a means of learning policy analysis. Public Affairs 869, required in the program's final semester, provides graduate students that opportunity. The authors of this report were all enrolled in Public Affairs 869, Workshop in Public Affairs, Domestic Issues (section 2). Workshop students collaborate to improve their policy analysis skills while contributing to the capacity of public agencies to analyze and develop policies on issues of concern to residents of the State.

The students in this Workshop section were assigned to one of five project teams. One team worked on this report, while the others worked on projects with the Wisconsin Joint Legislative Council, the U.S. Government Accountability Office, the Wisconsin Department of Natural Resources, and the Bureau of Environmental and Occupational Health in the Division of Public Health in the Wisconsin Department of Health and Family Services.

Linda McCart, Director of Policy and Research, Office of Policy Initiatives and Budget in the Wisconsin Department of Health and Family Services, suggested the topic of this report—the potential impact of policy initiatives on the quality of care provided and cost of care to the ABD population on Medicaid. This report would not have been possible without her support and encouragement or without ongoing assistance from Marlia Moore, Section Chief, Bureau of Benefits Management at the Division of Health Care Access and Accountability. A number of other people in the Department of Health and Family Services supported the students as they pursued data and policy documents. Their names are listed in the acknowledgments section. I add my gratitude to the appreciation expressed there.

The ABD is a high-cost population; as this report documents, they account for a disproportionate share of Medicaid costs. The report explores whether incentives layered on top of the existing reimbursement system would lead to Medicaid cost reductions without jeopardizing quality of care. This report evaluates alternative approaches using several criteria and makes recommendations to the Department of Health and Family Services. We hope all interested parties review this report's findings and conclusions and find them to be valuable input into the assessment of reforms in health-care coverage and delivery to a relatively high-cost population.

This report cannot provide the final word on the complex medical care issues the authors address, and the conclusions are those of the authors alone. They are graduate students constrained by the semester time frame, and the topic they address is large and complex. Nevertheless, much has been accomplished, and I trust that the students have learned a great deal, and that the Department of Health and Family Services will have been given valuable insight as its staff considers the state's health-care policies.

The report also benefited greatly from the support of faculty and the staff of the La Follette School of Public Affairs, especially that of Alice Honeywell, who edited the report, and La Follette Publications Director Karen Faster, who managed its production.

I am very grateful to Wilbur R. Voigt whose generous gift to the La Follette School supports the public affairs workshop projects. With his support, we are able to finance the production of the final reports, plus other expenses associated with the projects.

By involving La Follette students in the tough issues state government faces, I hope they not only have learned a great deal about doing policy analysis but have gained an appreciation of the complexities and challenges confronting state and local governments in Wisconsin. I also hope that this report will contribute to the work of the Department of Health and Family Services and to the ongoing public discussions about medical care policies in the state of Wisconsin and elsewhere.

Karen Holden
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# Executive Summary

Despite rapid advances in medical science and technology, recent studies have concluded that the quality of medical services rendered in the United States is low relative to accepted standards of care (Institute of Medicine, 2001). Public and private payers alike are beginning to address this issue by enacting reforms to ensure patients have access to high quality health care. In Wisconsin, the Department of Health and Family Services (DHFS)—the largest health care purchaser in the state—operates a host of quality improvement programs in managed care organizations serving BadgerCare Plus members. DHFS also operates several small-scale quality improvement initiatives for the remaining aged, blind, and disabled Medicaid members in fee-for-service plans. DHFS would like to expand the size and scope of quality improvement projects for this population. The authors of this report recommend that DHFS explore the feasibility of implementing a primary care case management (PCCM) program coupled with a chronic disease management (CDM) program to enhance the quality of care received by aged, blind, and disabled Medicaid members.

This report examines five policy alternatives for improving the quality of care for the aged, blind, and disabled population in fee-for-service Medicaid: (1) maintaining the status quo, (2) implementing a pay-for-performance system, (3) adopting a primary care case management program, (4) operating a chronic disease management program, and (5) pursuing a combination of primary care case management and chronic disease management.

Each policy alternative in this report is analyzed in terms of how well it meets the goals of increased efficiency, quality improvement, administrative feasibility, and political feasibility. A set of impact categories is associated with each goal, and each of the policy alternatives is analyzed in terms of how well it would achieve the impacts associated with each goal. A diagram outlining the five policy alternatives and the goals and impact categories selected for this analysis is provided in Appendix A. For this report, these goals and impacts have been weighted equally, but DHFS may determine that some goals and impacts deserve greater focus and attention than others when ultimately determining whether to pursue any of the policy alternatives proposed in this report.

Of the five proposed policies, adopting a PCCM program or pursuing a combination of PCCM and CDM would best increase efficiency by containing costs in Wisconsin's fee-for-service Medicaid program. Further, the combination of PCCM and CDM is the policy alternative that best achieves the goal of quality improvement. However, maintaining the status quo would be the most administratively feasible option. Implementing a pay-for-performance system would be most politically feasible, but such programs have not been shown to increase efficiency. All of the policy alternatives examined in this report, except for maintaining the status quo, are compatible with the stated quality improvement priorities of DHFS.

Based on this analysis, the authors recommend that DHFS explore the feasibility of adopting a PCCM program, as well as a CDM program, for aged, blind, and disabled members of fee-for-service Medicaid. These are the two policy alternatives that best meet the four main goals identified for this analysis. If carefully designed, a combined PCCM and CDM program would ensure that Wisconsin Medicaid dollars buy the highest quality care and achieve improved health outcomes for aged, blind, and disabled members.

## List of Acronyms

This section offers a listing of acronyms that are used frequently in this report.

| | |
|---|---|
| ABD | Aged, Blind, and Disabled |
| CDM | Chronic Disease Management |
| CMS | Centers for Medicare and Medicaid Services |
| DHFS | Wisconsin Department of Health and Family Services |
| FFS | Fee-for-Service |
| HEDIS | Health Plan Employer Data and Information Set |
| LFB | Wisconsin Legislative Fiscal Bureau |
| MCO | Managed Care Organization |
| P4P | Pay-for-Performance |
| PCCM | Primary Care Case Management |
| PCP | Primary Care Provider |

## List of Definitions

This section offers definitions of various terms that are used frequently in this report. Specific program qualifying conditions are those applying to Wisconsin and may in some cases be different from federal minimum guidelines and rules in other states.

**Aged:** An individual who is age 65 or older. Aged individuals may qualify for Medicaid if they meet the "categorically needy" or "medically needy" asset and income limits (Legislative Fiscal Bureau [LFB], 2007).

**Blind:** Individuals who have received a determination that they are totally and permanently blind from the Disability Determination Bureau at the Wisconsin Department of Health and Family Services (DHFS) (DHFS, 2008a). To receive Medicaid coverage, blind individuals must also be "categorically needy" or "medically needy" (LFB, 2007).

**Categorically Needy:** Individuals who meet the income and asset requirements for Medicaid eligibility. These include:

- Aged, blind, or disabled individuals who meet financial eligibility requirements for Supplemental Security Income program benefits (DHFS, 2008a)
- Aged individuals who are eligible as Qualified Medicare Beneficiaries or Specified Low-Income Medicare Beneficiaries (LFB, 2007).

**Chronic Disease Management (CDM):** Programs that aim to better manage and coordinate the care of Medicaid patients with long-term, chronic diseases such as diabetes, asthma, congestive heart failure, and hypertension. The goal of CDM programs is to improve health outcomes while lowering the overall costs associated with these patient populations. CDM programs educate patients and their providers about diet, adherence to medication schedules, and other self-management techniques. CDM programs may be built and administered "in-house" by a state Medicaid agency, or the state may contract with a private vendor to build and administer the program (Centers for Medicare and Medicaid Services [CMS], 2004).

**Cultural Competence:** A set of "behaviors, attitudes, and policies" among providers that aims to help them adapt to the unique "health beliefs, practices, and cultural and linguistic needs" of patients from diverse racial, ethnic, religious, or social backgrounds (U.S. Department of Health and Human Services, 2004).

**Disabled:** Individuals who are determined to be totally and permanently disabled by the Disability Determination Bureau at the Wisconsin Department of Health and Family Services (DHFS, 2008a). To receive Medicaid coverage, disabled individuals must also be "categorically needy" or "medically needy" (LFB, 2007).

**Dual Eligibles:** Medicaid beneficiaries who also are eligible for Medicare benefits. Medicare is the primary payer for covered health care; Medicaid pays for services not fully covered by Medicare (LFB, 2007).

**Evidence-Based Medicine:** Adherence to the medical literature's best, most current clinical evidence when making decisions about the treatment of patients. Evidence-based medicine also incorporates individual clinical experience and practice of providers (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996).

**Fee-for-Service (FFS):** A health care delivery model in which providers are paid a fee for each service rendered to a patient (Centers for Disease Control and Prevention, n.d.).

**Health Literacy:** Patients' ability to obtain and comprehend the information they need to make appropriate decisions about their health care (Scott, 2003).

**Health Maintenance Organization:** A private health care plan that provides comprehensive health care services through a specific network of providers in a designated geographic area. Providers are paid a fixed per-member, per-month rate, regardless of how many services each patient receives. Patients must seek services from providers and facilities that have contracted with the health maintenance organization (Centers for Disease Control and Prevention, n.d.).

**Managed Care:** A health care delivery model in which comprehensive health care services are offered under a fixed budget and costs. A health maintenance organization is an example of a managed care plan (Centers for Disease Control and Prevention, n.d.).

**Medically Needy:** An aged, blind, or disabled individual who is not categorically eligible for Medicaid but after deductions or after qualifying medical expenses has income below the needy limit. Assets must meet the Medicaid limits. An individual may "spend down" his or her income on medical expenses to qualify for medically needy Medicaid coverage (LFB, 2007).

**Member:** Any individual who is enrolled in FFS Medicaid or BadgerCare Plus in Wisconsin (DHFS, 2008a).

**Pay-for-Performance (P4P):** An emerging reimbursement mechanism that has been offered as a "complement" to FFS systems. There are many possible designs of a P4P system. Typically, the system will include a set of metrics, or "performance measures," for which data will be collected. These measures can target individual physicians, physician group practices, hospitals, nursing homes, managed care plans, or entire health systems. Some P4P programs include performance measures that target the "process" of care, such as whether a particular treatment or diagnostic exam was administered to a patient with a given diagnosis. Other P4P programs include performance measures that target "outcomes" of care, such as whether a provider was able to attain certain changes in health care status among patients with a particular diagnosis (Kuhmerker & Hartman, 2007).

**Primary Care Case Management (PCCM):** A model of health care management in which Medicaid patients choose or are assigned to a primary care provider (PCP) who coordinates their health care. Typically, all PCPs are required by the state to sign a contract agreeing to certain conditions, such as providing access to a defined package of primary care services (Dobson, Nye, Pasternick-Ikard, & Smith, 2001). PCPs are also responsible for providing preventive health services, arranging for specialists, and providing emergency treatment referrals. To encourage provider participation, PCPs receive small monthly case management bonuses in addition to regular FFS reimbursement for office visits. Some states also pay providers bonuses for meeting quality standards and/or for taking more Medicaid patients. Providers bear no financial risk for the services they provide or authorize (Barey, Gallegos, Morgan, & Whalen, 2000).

**Primary Care Provider (PCP):** A physician, physician assistant, or nurse practitioner who provides preventive health care services, treats common medical problems, and makes referrals to specialists when necessary. Individuals trained in such specialties as primary care, internal medicine, pediatrics, and obstetrics and gynecology often serve as PCPs (National Institutes of Health, 2007).

**Provider:** An individual who has been certified by DHFS to provide health care services to Medicaid beneficiaries and receive reimbursement. This includes physicians, nurse practitioners, and physician assistants (Wisconsin Administrative Code and Register, 2006).

**Qualified Medicare Beneficiaries:** Individuals eligible for Medicare but needing assistance to pay for Medicare services. Recipients must have assets and income that fall below a threshold with the income limit pegged to the federal poverty level. Medicaid pays Medicare premium and recipient charges for Medicare-covered services. QMB-Only Beneficiaries do not receive other Medicaid services (DHFS, 2008b).

**Quality:** "The degree to which health care services and supports for individuals and populations increase the likelihood for desired health and quality of life outcomes and are consistent with current professional knowledge" (CMS, n.d.).

**Specified Low-Income Medicare Beneficiaries:** A low-income group for which Medicaid will pay the Medicare Part B monthly premium. Individuals must be eligible for Medicare Part A and must have income and assets below a specified level. Part B premium payment is the only benefit received from Medicaid (DHFS, 2008b).

# Introduction

Despite rapid advancements in medical science and technology, recent studies have concluded that the quality of medical services in the United States is low relative to accepted standards of care. Medical innovation has simultaneously lengthened the life span and altered the health needs of the aging population. As a result, utilization of medical services has increased, as has the incidence of chronic disease. Providers now have "more to know, more to do, more to manage, more to watch, and more people involved than ever before" (Institute of Medicine, 2001, 1). Adherence to evidence-based medicine has suffered as providers struggle to keep pace with medical advancements (McGlynn et al., 2003). Moreover, the U.S. health care system is not structured efficiently enough to address the care needs of patients with multiple and complex conditions.

Quality improvement initiatives have emerged among private and public purchasers alike as a market-based approach to narrowing the gap between medical capability and practice. Quality, as defined by the Centers for Medicare and Medicaid Services (CMS), "is the degree to which services and supports for individuals and populations increase the likelihood for desired health and quality of life outcomes and are consistent with current professional knowledge" (CMS, n.d.).

CMS administers Medicare quality improvement demonstration projects in Medicare Advantage plans, hospitals, provider offices, and nursing homes. As of 2006, quality improvement initiatives had been implemented in 28 states, and 15 states were in the process of designing quality improvement initiatives for their Medicaid programs (Kuhmerker & Hartman, 2007).

The Wisconsin Department of Health and Family Services (DHFS) aims to ensure that all Medicaid members also have access to high quality, effective medical care. The state currently uses two different service delivery models for providing comprehensive health care services to Medicaid members: managed care (BadgerCare Plus) and fee-for-service (FFS). Under the recent BadgerCare Plus expansion, children, parents and caretakers, pregnant women, and youths aging out of the foster care system receive health care services through managed care programs. The medically fragile aged, blind, and disabled (ABD) population, however, remains in FFS plans.

Although DHFS administers a variety of quality improvement and assurance programs in their managed care plans, these efforts have been limited in the FFS population due to data gathering and reporting difficulties and other barriers to implementation. High-risk, high-cost ABD members suffer from a variety of chronic conditions and often face multiple diagnoses. The aged, blind, and disabled represent approximately 21 percent of the Medicaid population but account for nearly 60 percent of total expenditures (Legislative Fiscal Bureau [LFB], 2007). Managed care organizations (MCOs) are less likely to enroll ABD members because of the financial risk associated with serving this population. Thus, it has been difficult for Wisconsin Medicaid to move ABD members into

managed care. Given that the ABD population is likely to remain in FFS plans, Wisconsin Medicaid is seeking the best ways to improve the quality of care while ensuring members continued access to providers.

The report begins by providing a brief overview of Wisconsin Medicaid and describes the medical characteristics of the ABD population. Next, the report examines quality improvement initiatives already implemented in FFS plans by Wisconsin Medicaid. The report then describes and evaluates five different quality improvement alternatives—maintaining the status quo, pay-for- performance (P4P), primary care case management (PCCM), chronic disease management (CDM), and a combination of PCCM and CDM—in terms of efficiency, quality improvement, administrative feasibility, and political feasibility. The report concludes by making a recommendation to DHFS on how best to improve the quality of care for the ABD population in FFS while ensuring members continued access to providers.

## Limitations of the Analysis

This report provides an analysis of the possible effects of five quality improvement alternatives that could be implemented in Wisconsin's FFS Medicaid Program. A number of limitations, however, constrain this analysis, and DHFS should conduct additional research before deciding whether to adopt any of these alternatives.

Claims data for October 2007 are used to describe the most common and costly diagnoses for Medicaid FFS members. One month of data was used to get a representative snapshot of the ABD Medicaid population. Because of time and financial constraints, annualized data were not available. Thus, the data on the most common and costly FFS diagnoses in the ABD population are for October 2007. Unless otherwise specified, all other figures are annualized.

The policy alternatives examined in this report represent relatively new approaches to quality improvement. Even in states that have already fully implemented similar quality improvement programs in Medicaid, evaluations of their success or failure are limited and may not apply generally to Wisconsin. Many of the quality improvement programs adopted by other states have been implemented among more diverse, less medically fragile patient populations—including non-disabled children and families. Determining whether similar programs could be successfully implemented with Wisconsin's medically fragile ABD population in FFS Medicaid is difficult. Thus, the policy alternatives and analysis offered have been broadly framed and generally described.

These limitations make it difficult to predict precisely what changes in quality and cost savings, if any, would occur if DHFS decides to adopt any of the policy alternatives examined in this report. The authors hope, however, that this report will help DHFS understand the many different ways quality improvement initiatives have been designed and implemented in other state Medicaid FFS programs and suggest possible next steps for DHFS to pursue.

## Overview of Wisconsin Medicaid

Medicaid is a means-tested program that provides reimbursement for and assures access to appropriate medical services to eligible low-income families, pregnant women, and individuals who are aged, blind, and/or disabled. Each state administers its own Medicaid program within broad federal guidelines, and the programs are jointly funded by states and the federal government. State Medicaid programs must, at a minimum, cover individuals in the following groups:

- Children under age 19 with family incomes up to 100 percent of the federal poverty level.
- Pregnant women and children under age 6 with family incomes below 133 percent of the federal poverty level.
- Certain low-income Supplemental Security Income recipients
- Low-income Medicare beneficiaries.

It may be necessary for states to get approval from the Centers for Medicare and Medicaid Services (CMS) to cover individuals outside these groups. As of 2008, average monthly enrollment across all health care programs administered by DHFS, collectively called ForwardHealth, is approximately 650,800 people with total state and federal expenditures of $4.8 billion (LFB, 2008).

### Program Eligibility

While DHFS has many programs to address the health care needs of Wisconsin residents, this report focuses only on the Medicaid FFS program. However, in order to fully understand the FFS program, it is important to first grasp how it differs from Wisconsin's managed care program, BadgerCare Plus, Wisconsin's program for low-income pregnant women, children, and families.

BadgerCare Plus provides comprehensive health care services for:

- All children, regardless of income. Families with incomes above 200 percent of the federal poverty level pay premiums on a sliding fee scale.
- Parents and caretakers of children with family income below 200 percent of the federal poverty level.
- Pregnant women with family income below 300 percent of the federal poverty level.
- Children up to age 1 whose mothers were Medicaid-eligible on the date of their birth.
- Individuals between ages 19 and 21 who are aging out of the foster care system.
- Some migrant workers and their dependents.
- Certain self-employed individuals, including farmers, who meet income guidelines.

The Medicaid Fee-for-Service program provides comprehensive health care services for:

- Disabled individuals who presently receive Social Security Income or have in the past (providing they have the same disability they did while receiving Social Security Income).
- Aged individuals who are also eligible for Medicare Part A and have incomes less than 100 percent of the federal poverty level. Medicare is the primary payer, and Medicaid is the secondary payer.
- Aged individuals who are also eligible for Medicare Part A and Part B and have incomes between 100 percent and 135 percent of the federal poverty level. Medicare is the primary payer, and Medicaid is the secondary payer.
- Medically needy individuals whose health care expenses have reduced their income and assets below a certain threshold (individual income of $591.67 per month and $2,000 in assets, in 2008). This includes many aged and disabled individuals who receive nursing home care.

Although the FFS program does cover some non-disabled pregnant women, families, and children, the majority of the individuals covered by FFS are ABD (LFB, 2007).

## Reimbursement Mechanisms

Wisconsin Medicaid currently reimburses providers, including doctors and hospitals, for the delivery of comprehensive health care services through two different payment mechanisms: managed care and fee-for-service.

For the BadgerCare Plus population, members are typically enrolled in MCOs, which are administered by private insurers who contract with DHFS. Members are limited to a network of providers who receive a per-member, per-month payment, regardless of whether each of those members actually uses any health care services each month.

For the ABD population, members may obtain services from any provider who has been approved by DHFS to provide Medicaid services, and these providers are reimbursed on an FFS basis. Wisconsin Medicaid sets rates for covered health care services, and providers submit claims to the agency to receive payment for each service they provide to an FFS Medicaid member.

## The Aged, Blind, and Disabled: Expenditures and Diagnoses

According to aggregate claims data provided by DHFS, Medicaid and BadgerCare expenditures in 2007 totaled $3.7 billion; the ABD subgroup accounted for $2.0 billion. As Table 1 shows, 22.6 percent of expenditures went toward the aged and 31.8 percent of expenditures were used to provide care for the blind and disabled. Taking into account the percent of Medicaid and BadgerCare members that these subgroups represent, 5.3 percent and 15.4 percent, respectively, it can be seen that ABD members require a substantial outlay of expenditures relative to the their proportion of the population.

**Table 1: ABD's Proportion of Medicaid Population and Spending**

| Category | Aged | Blind/Disabled |
|---|---|---|
| **Medicaid Population** | 5.3% | 15.4% |
| **Medicaid Expenditures** | 22.6% | 31.8% |

Source: LFB, 2007; Wisconsin Medicaid claims data, fourth quarter 2007.

DHFS categorizes FFS claims data by six settings of care delivery—inpatient, outpatient, professional, pharmaceutical, skilled nursing, and dental. DHFS already has substantial quality improvement systems in place for its pharmaceutical program. Dental claims represent only one-third of 1 percent (0.33 percent) of ABD FFS claims. Because dental services are such a small percentage of FFS claims, they are not analyzed in this report. Finally, DHFS is not focusing on developing new quality improvement initiatives for skilled nursing care at present. Therefore, this report focuses only on inpatient, outpatient, and professional settings of care.

Visits that require admission to the hospital are considered inpatient, whereas patients are not admitted for outpatient hospital visits. For example, emergency room visits that are not followed with hospital admission are considered outpatient services. The professional category encompasses a wide range of patient-provider interactions, including visits with physicians, nurses, therapists, and non-emergency surgeons; transportation services; and other interactions that facilitate health care delivery. Table 2 shows spending in inpatient, outpatient, and professional care settings for ABD FFS members for the month of October 2007.[1] Spending in these settings of care totaled $138.98 million, $26.74 million, and $29.64 million, respectively.

[1] See limitations section for a discussion of why claims data are only sometimes annualized.

**Table 2: ABD Expenditures by Setting of Care, October 2007**

| Category | Expenditures | % of Total ABD FFS Spending |
|---|---|---|
| **Inpatient** | $138,976,855 | 46.3% |
| **Outpatient** | $26,744,542 | 8.9% |
| **Professional** | $29,639,856 | 9.9% |

Source: Wisconsin Medicaid claims data, October 2007

Beyond the aggregate expenditure levels, the October 2007 claims data provide detailed information on the most common and the most expensive health conditions that Wisconsin ABD members experience. Appendix B lists the top twenty conditions by expenditures and by occurrences (frequency) that patients in inpatient, outpatient, and professional settings of care were diagnosed with during October 2007. Understanding the medical conditions of the ABD population is essential for designing effective policy alternatives, because it allows the policies to be tailored toward the target population.

Some of the most common and costly inpatient diagnoses include respiratory failure, heart disease, septicemia (blood poisoning), injuries, kidney disease, lung infections, cancer, and complications of medical care. Outpatient care settings see large numbers of chronic renal failure patients. Patients also come in because of general symptoms, such as headache, chest pain, and shortness of breath, though the final diagnoses are unknown. Professional diagnoses include visits for mental disorders, such as multiple types of schizophrenia, hyperkinetic syndrome, and varying degrees of mental retardation. Other common professional diagnoses include cerebral palsy, Down syndrome, chronic airway obstruction, and complications of medical care. The fifth most common and second most expensive professional encounter is actually not a diagnosis, but simply transportation costs for driving patients to medical appointments when they live far from a hospital or other health care facility.

In all three settings of care, complications of medical care was one of the most expensive and/or common diagnoses. Professional care patient visits for complications of medical care accounted for 9 percent of all professional diagnoses in October of 2007. The ICD-9-CM, a manual for coding medical diagnoses, describes these professional visits as being for an "unspecified misadventure of medical care" (Price Management Information Corporation, 2005). Professional visits are the most frequented setting of care and, because nearly 1 out of 10 professional visits were for a "medical misadventure," complications in medical care must be addressed.

When designing and implementing quality improvement initiatives, DHFS officials should keep these common and costly diagnoses in mind.

## Criteria for Examining the Policy Options

This report examines five policy alternatives for improving the quality of care for the ABD population in FFS Medicaid: (1) maintaining the status quo, (2) implementing a pay-for-performance system (P4P), (3) adopting a primary care case management program (PCCM), (4) establishing a chronic disease management program (CDM), and (5) pursuing a combination of PCCM and CDM.

Each of the five policy alternatives is analyzed in terms of goals and potential impacts—whether efficiency improves, whether quality improves, whether it is administratively feasible, and whether it is politically feasible. A set of impact categories is associated with each goal, and each of the policy alternatives is analyzed in terms of how well it would achieve the impacts associated with each goal. A diagram outlining the five policy alternatives and the goals and impact categories selected for this analysis is provided in Appendix A. For this report, these goals and impacts have been weighted equally, but DHFS staff may determine that some goals and impacts deserve greater focus and attention than others when ultimately deciding whether to pursue any of the policy alternatives proposed in this report.

### Efficiency

Improving the efficiency of health care delivery for the ABD population is a focus of this report. Efficiency is measured by the potential for each alternative to contain program costs without diminishing the quality of care.

### Quality

Several impact categories have been selected to measure the effectiveness of each policy alternative in meeting the goal of improving the quality of health care delivery. The impact categories selected for this goal are:

- Management of disease and improvement of long-term health outcomes.
- Promotion of cultural competence by providers.
- Increased health literacy.

The U.S. Department of Health and Human Services defines cultural competence in health care as a set of "behaviors, attitudes, and policies" among providers that aims to help them adapt to the unique "health beliefs, practices, and cultural and linguistic needs" of patients from diverse racial, ethnic, religious, or social backgrounds (U.S. Department of Health and Human Services, 2004). Culturally competent providers strive to improve how information is communicated to patients with limited-English proficiency. They also respond to differences in beliefs about what is considered to be a health problem and account for the cultural beliefs and practices of patients and their families when deciding on a course of treatment.

Health literacy refers to patients' ability to obtain and comprehend the information they need to make appropriate decisions about their health care (Scott, 2003). Studies have shown that many patients are unable to understand the instructions on their prescription bottles, read and fill out insurance forms, or understand the preventive care recommendations given them by their doctors. Each of these deficits in health literacy could jeopardize patients' overall health status and quality of care.

## Administrative Feasibility

Determining how feasible it would be for DHFS to implement each of the five policy alternatives examined in this report is crucial. Administrative feasibility is measured both by the degree to which key stakeholders accept and are willing to participate in the program and in terms of the government's administrative and financial capacity to implement the program. The impact categories selected for this goal are:

- Acceptance by providers.
- Acceptance by members.
- Acceptance by patient advocates.
- Government's capacity to implement the program.
- Government's capacity to finance the program.

In deciding whether to pursue any of the policy alternatives proposed in this report, DHFS needs to consider whether the agency has the capacity to meet the financial, technological, and human capital demands of administering the program. Important considerations include whether data collection and reporting would be excessively burdensome for providers and DHFS, whether members' access to providers and needed treatment could be limited, and whether DHFS has the capacity to make large initial investments in the design and implementation of the chosen quality improvement initiative, given that it may take years to achieve cost savings.

## Political Feasibility

The final goal identified for this analysis is political feasibility. DHFS is seeking to build cost-efficient, high-quality programs that ensure access by all Medicaid members to timely care (Helgerson, 2007). Political feasibility is measured by the compatibility of each policy alternative with the progressive, quality improvement priorities of DHFS and the prospects for legislative approval.

## Background on Option 1: The Status Quo

DHFS contracts with a number of external organizations to support quality improvement initiatives for BadgerCare Plus and FFS members. DHFS is working with APS Healthcare on a variety of care management projects, with Automated Health Systems on the New Enrollee Health Needs Assessment survey, with the Center for Health Systems Research and Analysis at the University of Wisconsin–Madison on evaluation of quality improvement programs, and with MetaStar for data validation services and external quality reviews.

In 1997, DHFS began operating a host of quality improvement programs targeted toward MCOs serving BadgerCare Plus members. These included MCO performance improvement projects, care analysis projects, and pay-for-performance initiatives. More recently, DHFS began similar quality improvement programs for FFS providers and members. For example, in 2008, DHFS changed the criteria of coverage for bariatric surgery among FFS Medicaid members to ensure that all surgeries are medically necessary and performed in hospitals that have been certified as centers of excellence. DHFS has implemented four key projects to enhance the quality of care that FFS Medicaid members receive (Hladilek, Howe, & Carr, 2004).

### External Quality Reviews

In 2003, CMS began requiring state Medicaid programs to submit written plans for assessing the quality of care provided to managed care recipients. The regulations require states to "adopt standardized methods for quality review activities, specify mandatory and optional quality review activities, and provide specific protocols for conducting quality reviews" (Ireys, Krissik, Verdier, & Faux, 2005, vi). Most states, including Wisconsin, contract with an external quality review organization to conduct these evaluations.

Although not mandatory for the FFS population, DHFS contracts with MetaStar to conduct quarterly reviews of hospital and ambulatory services utilized by FFS members. Hospitals are evaluated on their provision of medical/surgical, mental health, and substance abuse services using measures such as patient length of stay and re-admission rates. Wisconsin conducts over 15,500 hospital reviews annually. Further, MetaStar contracts with nurses and physicians to conduct about 8,000 retrospective chart reviews annually to identify potential quality problems. When a quality issue is found, the provider is given a chance to respond, after which another physician review is conducted and a final determination is made. MetaStar submits quarterly reports to Medicaid on provider quality concerns and, based on these profiles, DHFS may take actions such as contacting the provider, requiring a plan of corrective action, or referring the matter to a quality committee (Hladilek et al., 2004).

## Pharmacy Management

DHFS uses a preferred drug list (PDL) to control pharmaceutical spending and ensure members receive clinically sound drug therapies. Prior-authorization requirements for certain brand-name drugs help ensure effective usage and control costs. DHFS has joined a pharmaceutical purchasing pool, the Optimal PDL $olution, which is administered by the current Wisconsin Medicaid preferred drug list administrator, Provider Synergies. Classes of drugs are reviewed on a semi-annual basis by the Pharmacy Advisory Committee, which is composed of physicians, pharmacists, and advocates. Coverage recommendations are made based on evidence-based research and supplemental rebate offers from the pharmaceutical companies. DHFS also operates three pharmaceutical quality assurance programs in FFS plans—Prospective Drug Utilization Review, Retrospective Drug Utilization Review, and Educational Interventions. The pharmacy benefit was modified in February 2008, so that all FFS and managed care members receive pharmacy services through the same benefit. Previously, BadgerCare Plus members received pharmacy coverage through their managed care organizations. As a result of this consolidation, all pharmacy management activities apply to FFS as well as managed care members.

First, the Prospective Drug Utilization Review system electronically notifies pharmaceutical providers at the point of sale of potential problems with filling prescriptions. Alerts include "drug/drug interaction, therapeutic duplication, late refill, early refill, and drug-age precaution," and the pharmacist must respond to the alert before payment is authorized by Medicaid (Hladilek et al., 2004, 59). The Wisconsin Medicaid Drug Utilization Review Board, composed of three physicians, five pharmacists, and one nurse practitioner, selects and establishes a hierarchy of alerts (DHFS, 2001).

Second, Wisconsin Medicaid conducts a Retrospective Drug Utilization Review to screen claims data and other records to identify patterns of fraud, abuse, gross overuse, or inappropriate or medically unnecessary prescriptions. Pharmacists review potential abuse of benefits, and in cases that merit attention, Wisconsin Medicaid sends informational letters describing the drug problem or pattern of usage to providers (Hladilek et al., 2004). About 2,200 intervention letters are sent annually to providers (DHFS, 2001). Medicaid members who are found to abuse or misuse prescription drugs are enrolled in the Recipient Lock-In Program. Members are locked in to a single provider and a single pharmacy for a period of two years. Approximately 129 profiles are reviewed monthly and result in about nine enrollments (Hladilek et al., 2004).

Finally, the Department of Health and Family Services analyzes data from the Drug Utilization Review programs to identify common drug therapy problems. Using this information, DHFS sends educational materials to providers with the goal of improving prescribing and dispensing practices.

## Targeted Interventions

Wisconsin Medicaid analyzes claims data to identify whether providers are using evidence-based medicine to provide high quality, cost-effective care. If a quality or cost problem is identified, Medicaid develops targeted intervention programs to alter provider and/or patient behavior. The four programs outlined in Table 3 have operated since at least 2004. These programs are limited in size, scope, and effect, however, because few members have been enrolled.

**Table 3: FFS Targeted Interventions**

| Condition | Goal of Targeted Intervention | Target Type/Group |
|---|---|---|
| Asthma | Reduce overuse of rescue medication and the number of emergency room and hospital visits that are not followed up with a physician visit. | Educational letter to members |
| Diabetes | Improve rates of diabetes (HbA1c) and cholesterol (LDL) testing. | Educational letter to providers and members |
| Acute Myocardial Infarction | Promote appropriate medication therapies including use of beta blockers, angiotensin converting enzyme inhibitor, and aspirin. | Educational letter to providers |
| Quarterly Lead Screening Report | Increase rates of required lead screening tests and follow-up. | Educational letter to providers |

Source: Hladilek et al., 2004

## Care Management

Although targeted interventions are relatively inexpensive and positive outcomes have been shown, such educational programs are not a panacea for reducing disparities in care. Therefore, members with more complex medical needs are targeted for participation in the Wisconsin care management program. Potential members are notified of their option to participate in the care management program. After electing to enroll, members receive information from Medicaid staff nurses about their condition and identify ways to improve compliance with evidence-based treatments (Hladilek et al., 2004).

In November 2006, DHFS began the Health Coach service pilot in Milwaukee County to address frequent use of the emergency room by Medicaid FFS members. The pilot program enrolled 40 Medicaid members who had used emergency room services at least six times in one year. Health coaches educated participants on proper use of the emergency room, taught them how to comply with treatment plans, and helped coordinate their care among different providers (DHFS, 2007). A final evaluation of program outcomes is not yet available.

## Analysis of the Status Quo

This section examines the efficacy of current FFS quality improvement initiatives for the ABD population in terms of identified policy goals—efficiency, quality improvement, administrative feasibility, and political feasibility. Although there could be slight modifications to size and scope of current quality improvement initiatives, this analysis assumes these programs will remain unchanged.

### Efficiency

Cost-containment is not a stated goal of the external quality review process and there are no measures in place to evaluate the effect of these reviews on overall Medicaid cost savings. A 1997 cost-benefit analysis of the pharmacy management Recipient Lock-In Program found that Medicaid saved $6.16 per dollar spent on the program. The study also cited significant decreases in costs associated with hospitalization, drug expenditures, and emergency room usage for program participants. According to an early evaluation, acute myocardial infarction targeted interventions were found to decrease emergency room visits by 32 percent (Hladilek et al., 2004). Evaluations of the Health Coach service pilot in Milwaukee are unavailable.

### Quality

Several distinct practices currently occur in DHFS that enhance the quality of care. Of the targeted interventions, the asthma program reduced gaps in treatment by 88 percent, diabetes patients marginally increased their use of recommended services, appropriate therapies for patients who experienced acute myocardial infarction saw increased use, and children in the lead-screening program were twice as likely as children not enrolled to receive follow-up testing (Hladilek et al., 2004).

The pharmacy management program helps educate providers on best-practices for treating members who abuse prescription drugs. For example, if a patient is believed to have a drug problem, the provider receives a packet of information including a "medication profile, current practice guideline information, a response form, and a postage paid envelope" (Hladilek et al., 2004, 60). Similarly, the goal of targeted interventions is to increase provider compliance with evidence-based medicine and member compliance with accepted treatment programs. Educational letters and materials are sent to providers and members alike to alter behavior and, ultimately, improve health outcomes (Hladilek et al., 2004). In addition, DHFS translates its member handbook into Spanish, Hmong, and Russian for members with limited English proficiency.

DHFS has expressed interest in improving patient and provider understanding and communication. The care management program may help promote cultural competency because it encourages communication between provider and patient, but no programs are in place to target cultural competency in the ABD FFS population specifically.

## Administrative Feasibility

The quality improvement practices currently being used are by definition administratively feasible. Wisconsin Medicaid has the capacity to operate and fund these programs, although rapidly increasing health care costs and state budget constraints may limit their use in the future.

## Political Feasibility

The programs discussed above are in line with the quality improvement priorities of DHFS, but they could be broadened to serve a greater share of the ABD population. The state legislature currently seems satisfied with these quality improvement initiatives; however, given budget concerns, lawmakers are interested in exploring more reforms that contain costs while improving quality.

## Background on Option 2: Pay for Performance

Pay-for-performance (P4P) programs have emerged among private and public purchasers alike as a market-based approach to narrowing the chasm between medical capability and practice. Although the size and scope of P4P initiatives vary—depending on the medical needs of disparate populations—all programs are designed to enhance the quality of medical services and/or to control costs through the efficient delivery of care.

More than 100 public and private health care purchasers throughout the United States have implemented P4P programs (Baker, Jaughton, & Mongroo, 2003). The Deficit Reduction Act of 2005 mandated that the U.S. Department of Health and Human Services implement a value-based purchasing model of hospital payment for Medicare enrollees. The Centers for Medicare and Medicaid Services (CMS) subsequently began operating quality improvement demonstration projects in hospitals, physician's offices, nursing homes, and in Medicare Advantage plans.

### Current Pay-for-Performance Programs

Research suggests that P4P programs are most likely to succeed when implemented by large purchasers in settings with pre-existing data gathering and reporting systems and strong administrative capabilities (Dudley & Rosenthal, 2006). Because MCOs are more likely to have such resources in place and the majority of Medicaid recipients nationwide are funneled into MCOs, over 70 percent of Medicaid P4P programs are targeted toward primary care providers practicing in managed care settings (Kuhmerker & Hartman, 2007; CMS, 2007). Other P4P initiatives focus on improving the quality of care in hospitals, clinics, nursing homes, and other institutional providers. The overwhelming majority of Medicaid P4P programs focuses on quality improvement rather than cost containment goals (Kuhmerker & Hartman, 2007).

The Medicare Physician Group Practice demonstration project provides the only relevant example of a public insurer implementing a comprehensive P4P program in an FFS setting. Implemented in 2005, the program offers financial incentives for physician group practices to engage in activities, such as care coordination and management, not traditionally reimbursed under an FFS payment system. The demonstration project is not slated for completion and final evaluation until the end of 2008; however, early reports indicate that the group practices are responding to the quality and cost improvement incentives (Trisolini, Pope, Kauter, & Aggarwal, 2006). Because the demonstration project does not incurporate providers who practice individually or in small groups, results may not be representative of the behavior of providers in Wisconsin FFS Medicaid.

### Design of Pay-for-Performance Programs

Program descriptions are based on implementation in the Medicare Physician Group demonstration project because there are no comprehensive P4P programs operating in small group or individual provider Medicaid FFS settings. Understanding the complexity of program design in large group

practices underscores the difficulty of implementing P4P in individual provider or small group FFS settings.

### *Target Populations*

The Medicare Physician Group demonstration project targets FFS Medicare recipients, a group comprised largely of adults over the age of 65. The proportion of disabled, non-aged participants in that group ranges from 11 to 22 percent, and the proportion of dual-eligibles is between 10 and 18 percent (Trisolini et al., 2006). For a detailed explanation of populations targeted by P4P programs in Medicaid managed care organizations, see Appendix C.

### *Performance Measures*

P4P initiatives use a variety of performance measurement indicators that are aligned with program improvement goals. The selection of appropriate measures depends largely on improvement priorities, data collection and validation capabilities, and provider groupings. For example, the Medicare Physician Group Practice demonstration project includes 32 quality measures for five different types of conditions—diabetes, heart failure, coronary artery disease, hypertension, and preventive care. The measures for the Medicare Project are drawn from CMS's Doctor's Office Quality Project (Trisolini et al., 2006). For a description of measures used in Medicaid managed care, including the Healthcare Effectiveness Data and Information Set (HEDIS) measures, see Appendix C.

### *Incentive Structures*

Adopters of P4P programs typically use one of four financial incentive structures —penalties, bonuses, differential reimbursement rates, and automatic assignment (Kuhmerker & Hartman, 2007). The Medicare Physician Group Practice demonstration project layers bonuses on top of the existing FFS reimbursement mechanism. However, the use of bonuses may lead to high-quality providers receiving payments without making any changes to their standards of care and to low-quality providers finding the thresholds too high and making little effort to meet performance targets (Dudley & Rosenthal, 2006). For a more detailed explanation of other incentive structures used in managed care P4P programs, see Appendix C.

## Analysis of Pay-for-Performance Programs

This section examines the efficacy of implementing P4P programs in FFS settings for the ABD population in terms of identified policy goals—efficiency, quality improvement, administrative feasibility, and political feasibility.

No state Medicaid programs have layered comprehensive P4P incentives on top of FFS reimbursement for the ABD population (Kuhmerker & Hartman, 2007). Therefore, this analysis draws largely on evaluations of the Medicare Physician Group Practice demonstration project. However, the applicability of outcomes to small group and individual FFS providers, and thus the effectiveness of the programs, may be limited depending on stakeholder acceptance, the medical fragility of the population, financial constraints, and technological barriers to implementation.

### Efficiency

Although designing and implementing P4P programs requires a significant outlay of funds, there is little empirical evidence showing increased returns on investment (Rosenthal, Landon, Howitt, Song, & Epstein, 2007). Pay-for-performance programs are relatively new and more time is needed to assess cost-effectiveness in the long run. Other than the Medicare Physician Group demonstration project, there are no studies of the cost-effectiveness of P4P in FFS settings. Early results from the Medicare demonstration project indicate that providers are responding to incentives; however, the effect of P4P on cost-containment remains inconclusive (Trisolini et al., 2006). Even if Medicare eventually finds evidence of cost reduction, savings may not necessarily translate to the individual and small group FFS provider market.

### Quality

This section discusses three aspects of quality improvement in existing P4P programs—improving long-term health, cultural competence of providers, and health literacy.

*Manage Disease and Improve Long-Term Health Outcomes.* Few formal evaluations have been conducted as to the efficacy of P4P programs in improving quality (Rosenthal, et al., 2007; Dudley, 2005). Studies of the Medicare Physician Group demonstration project provide inconclusive evidence of quality improvement, largely because P4P programs are relatively new and long-term health outcomes cannot yet be measured (Trisolini et al., 2006). Further, P4P programs do not exist in a vacuum—researchers have difficulty separating out the effects of P4P programs from other quality improvement projects as well as overall changes in the health care system (Rosenthal et al., 2007). Thus, the few evaluations of P4P programs that have been published are inconclusive (Rosenthal et al., 2007; Rosenthal, Frank, Li, & Epstein, 2005; Petersen, Woodard, Urech, Daw, & Sookanan, 2006).

Identifying and preventing unintended consequences that may result from P4P programs underscore the need for further evaluation. A 2006 survey of state

Medicaid directors identified five areas of quality and access concerns related to P4P (Kuhmerker & Hartman, 2007):

- Providers may not accept patients with complex medical problems to maximize their ability to meet performance goals.
- High-quality providers may have little incentive to improve the quality of care delivered.
- Providers may leave the Medicaid program.
- Auto-assigning and public reporting mechanisms may cause practices to become overloaded with patients and lead to diminished quality of care.
- Providers may only focus only on performance measurement goals, to the detriment of overall patient care.

*Cultural Competence of Providers.* Research has shown that minorities are less likely than whites to receive appropriate and effective care and that such health disparities can be partially explained by cultural differences between providers and patients (Smedley, 2008). P4P programs are designed to encourage the practice of uniform, evidence-based medicine rather than culturally specific and sensitive care. P4P programs, however, do not include measurement indicators or incentives to gauge and improve provider familiarity with and understanding of cultural differences among minority groups. Further, P4P initiatives do nothing to promote diversity among health care providers (Chien, Chin, Davis, & Casalino, 2007).

*Health Literacy.* Health literacy is not a direct focus of P4P programs; however, some state programs in managed care incorporate patient incentives, such as gift cards, to encourage participation (Verdier, Felt-Lisk, Smieliauskas, Wong, & Felland, 2004). Incentive programs may promote health literacy, because they promote contact with providers.

## Administrative Feasibility

Administrative feasibility can be assessed by considering the level of providers' acceptance, members' acceptance, patient advocates' acceptance, government implementation capabilities, and financial support.

*Acceptance by Providers.* Overall, providers support the idea of P4P but believe that established quality indicators do not accurately measure performance (Casalino, Alexander, Jin, & Konetzka, 2007; Verdier et al., 2004). In a recent survey, general internists also expressed concern that "quality measures are not adequately adjusted for patients' medical conditions or socioeconomic status; that measuring quality may lead providers to avoid high risk patients; and that measuring quality will divert providers' attention from important but unmeasured areas of clinical care" (Casalino et al., 2007, 495). Involving providers in the P4P design process may help address these concerns and ultimately lead to greater provider acceptance (Kuhmerker & Hartman, 2007; Verdier et al., 2004).

Evidence from the Medicare Physician Group demonstration project suggests that providers in FFS settings will respond to incentive payments in addition to regular reimbursement (Trisolini et al., 2006). Although there have not been any evaluations of P4P mechanisms that offer differential reimbursement rates in FFS settings, providers may respond positively to the opportunity to augment Medicaid reimbursement rates. Unlike providers in the Medicare project, individual providers may not have the e-health systems or administrative staff necessary to meet the demands of collecting and reporting data for a P4P program (Kuhmerker & Hartman, 2007).

*Acceptance by Members.* Pay-for-performance programs will not be effective if patients refuse to comply with treatment plans. Programs may provide incentives to encourage patient compliance; the responsibility for meeting performance targets, however, rests largely with providers (Verdier et al., 2004).

FFS members may resist P4P initiatives if mandatory participation causes them to lose access to their preferred providers or if they have less influence over the course of treatment. Health outcomes, however, may improve as a result of more efficient care management.

*Acceptance by Patient Advocates.* Patient advocacy groups largely support the overarching quality-improvement goals of P4P initiatives, but they are concerned that P4P may limit access to providers. For example, the National Patient Advocate Foundation supports P4P programs that layer incentive payments on top of existing reimbursement mechanisms while opposing initiatives that penalize providers for utilizing more costly services (National Patient Advocate Foundation, n.d.). Advocates for the aged have also endorsed P4P programs as a way to improve the quality of care received by seniors. For example, AARP (2005) endorsed legislation that allowed the use of P4P in Medicare. Disability rights groups, however, may oppose P4P initiatives because providers are given little incentive to accept members with multiple needs.

*Government Implementation Capabilities.* Pay-for-performance programs are not typically implemented in FFS settings because of the complexity of contracting with numerous individual providers (Kuhmerker & Hartman, 2007). States with low rates of electronic medical records usage by primary care providers are limited in their ability to implement such programs. According to the Centers for Disease Control and Prevention (2005), only one in four primary care practices nationwide used electronic medical records in 2005. In Wisconsin, the figure is slightly higher at 38 percent because of the prevalence of large group practices and managed care organizations (MetaStar, 2006). However, e-health systems usage remains low, and Wisconsin Medicaid may need to provide incentives to providers for implementing e-health systems in FFS settings before establishing a P4P program.

Alternatively, the state may select performance measures that do not rely on data systems, such as the Consumer Assessment of Healthcare Providers and Systems survey or other patient satisfaction indicators (Dudley & Rosenthal, 2006). Self-

reported measures, however, may be unduly biased against providers and thus less reliable indicators of performance.

*Financial Capacity.* State Medicaid programs face budget constraints that may effectively limit their ability to implement P4P initiatives. Providers typically prefer that states use new funding streams, unrelated to established provider compensation, to finance P4P programs (Baker et al., 2003). State budget realities, however, often lead Medicaid offices to set a portion of contracted revenues (usually less than 5 percent) at risk for performance (Dudley & Rosenthal, 2006). Using existing funds or instituting penalties may discourage providers from participating in the Medicaid program. For P4P to work effectively, the state would have to invest considerable time and resources in getting providers to participate, establishing e-health resources in physician offices, and creating performance measures that are comparable across provider populations.

## Political Feasibility

Because P4P programs aim to enhance medical outcomes, this policy alternative is ideologically compatible with the quality improvement goals of DHFS. P4P has been a popular topic of debate among legislators; however, limited evidence of quality improvement and cost effectiveness coupled with the high cost of design and implementation may weaken legislative support.

## Background on Option 3: Primary Care Case Management

Primary Care Case Management (PCCM) provides another alternative for improving quality in the FFS care system for the ABD Medicaid population. PCCM is a health care model several states use to provide services to Medicaid recipients. It combines features of both the traditional FFS and managed care Medicaid systems.

Under PCCM, Medicaid patients choose or are assigned to a primary care provider (PCP) who coordinates their health care. Typically, all PCPs are required by the state to sign a contract agreeing to certain conditions, such as providing access to a defined package of primary care services (Dobson, Nye, Pasternick-Ikard, & Smith, 2001). PCPs are also responsible for providing preventive health services, arranging for specialists, and providing emergency treatment referrals. Utilization of a PCP may reduce the need for specialist services because diseases tend to be diagnosed earlier and thus can be treated more effectively.

To encourage provider participation, PCPs receive small monthly case management bonuses in addition to regular FFS reimbursement for office visits. Some states also pay providers bonuses for meeting quality standards and/or for taking more Medicaid patients. Providers bear no financial risk for the services they provide or authorize (Barey, Gallegos, Morgan, & Whalen, 2000).

The PCCM model helps enhance the quality of care provided under Medicaid by encouraging a continuous relationship between PCPs and Medicaid patients. PCPs help identify the services needed by each Medicaid patient, coordinate referrals, and ensure appropriate use of specialists.

At least nine states currently operate PCCM programs covering their FFS populations. These states are Alabama, Georgia, Illinois, Indiana, Louisiana, North Carolina, Oklahoma, Pennsylvania, and South Carolina (Kuhmerker & Hartman, 2007). A state-by-state description of these programs is provided in Appendix D.

### Design and Implementation of PCCM Programs

States have taken a variety of approaches to designing and implementing PCCM programs. Some states have relied on state employees to design and implement the program. Other states, such as Illinois, have used a private contractor both to design and to implement their PCCM program. In contrast, Oklahoma designed and implemented its program in-house but contracts with a vendor for several services, such as provider-training.

Program design also varies by state. Several states have made enrollment in their PCCM program mandatory, though some studies have shown a trend toward voluntary enrollment (Dobson et al., 2001). Enrollment in the PCCM program in Illinois is mandatory for Medicaid patients, who are given a certain amount of time to choose a PCP. If a patient does not choose a PCP by the deadline, Illinois Medicaid automatically assigns the patient to a PCP. In Indiana, enrollment in the PCCM is voluntary. If a patient opts not to enroll in a PCCM program, he or she is then automatically enrolled in a health maintenance organization.

## Analysis of Primary Care Case Management

This section examines the efficacy of implementing PCCM programs in FFS settings for the ABD population in terms of identified policy goals—efficiency, quality improvement, administrative feasibility, and political feasibility.

### Efficiency

There are costs associated with the implementation of PCCM. Under PCCM, the state pays a case management fee to each PCP for every Medicaid patient they treat. The PCCM programs enacted in most states originally paid a case management fee of $3 per member per month to each PCP for coordination of care (Smith, Des Jardins, & Peterson, 2000). However, as PCCM evolved and states evaluated the success of the program, several states have opted for higher enhanced payments, ranging from $4 to $10 per member per month.

Despite the payment of provider fees, states that have performed evaluations have found that implementing PCCM programs resulted in overall cost savings. Provider fees and increased administrative costs have been more than offset by reductions in expensive hospital care for FFS recipients in some states. In 1998, Indiana reported the largest cost savings, reducing costs by approximately 20 percent per member per month in its PCCM program in comparison to FFS alone. Pennsylvania reported saving 13.7 percent with its PCCM model between 1995 and 1996 (Dobson et al., 2001). Ultimately, upfront costs from increased provider fees could lead to better coordination within the program and long-term savings.

### Quality

As in the P4P model, PCCM programs can be assessed by examining three aspects of quality improvement—improving long-term health, cultural competence of providers, and health literacy.

*Manage Disease and Improve Long-Term Health Outcomes*. PCCM has been shown to improve patient outcomes (Abedin, 2006). Researchers argue that the assignment of a Medicaid patient to a specific PCP helps facilitate a higher level of medical care than found in the traditional FFS system and thus leads to improved health outcomes. In addition, some believe that PCCM can improve access compared to traditional FFS Medicaid and also create a platform for quality monitoring and quality improvement activities of the type undertaken by many health maintenance organizations (Schneider, Landon, Tobias, & Epstein, 2004). For many Medicaid patients, access to a PCP increases their access to preventive medicine and decreases the need for specialist services because diseases are diagnosed earlier and treated more effectively.

*Cultural Competence of Providers.* One key part of the design of PCCM programs is the state or vendor's ability to control which PCPs participate in the program. Many states with PCCM programs have taken steps to ensure that they offer Medicaid patients the opportunity to choose PCPs who speak their language and who reside in the same geographic area. In addition, many states and vendors rely on enrollment brokers to help patients choose PCPs. While cultural

competence is not a key component of PCCM programs, it could feasibly be incorporated into program design. By increasing PCPs' ability to tailor each patient's treatment options to his/her medical plan, the PCCM program could increase cultural competence among providers.

*Health Literacy.* With the continuity of care fostered by PCCM, PCPs are able to increase patient education (Dobson et al., 2001). Under the PCCM program, patients have more one-on-one time with their PCPs to ask questions and obtain health literature. In addition, many states have implemented initiatives within their PCCM programs to target patients who have minimal understanding of their health conditions. Some states offer one-on-one counseling with nurses to help patients better understand their medical situations, while others provide a hotline for medical questions.

## Administrative Feasibility

As with the P4P model, administrative feasibility of implementing PCCM programs can be assessed by considering the level of providers' acceptance, members' acceptance, patient advocates' acceptance, government implementation capabilities, and financial support.

*Acceptance by Providers.* Providers in other states have faced limited costs associated with participating in PCCM programs and have in many cases gained financially from implementation (Connecticut Health Policy Project, 2007). Most of the costs that providers have faced under PCCM are similar to the costs faced under the traditional FFS system.

One concern expressed by providers participating in PCCM programs has been the inconsistency in the number of Medicaid patients they see. In some states, providers are frustrated by the fact that they do not have enough Medicaid patients to justify participating in the program. Others providers are frustrated by having too many (Dobson et al., 2001). Some providers also express concern about the need to be available 24 hours a day, 7 days a week.

However, the benefits of the PCCM program for providers far outweigh the costs. Under the Medicaid system, providers almost unanimously agree that reimbursement rates are too low. By compensating PCPs with care management payments in addition to FFS reimbursement, states have been able to motivate PCPs to participate in the program. Providers are attracted to PCCM programs because they can better manage their patients' care and they are financially compensated for doing so.

*Acceptance by Members.* In other states, patients have been hesitant to accept PCCM programs. The largest concern for Medicaid patients is that they may have limited choices when choosing a PCP. In some cases, Medicaid patients have found that they may not be able to stay with their health care provider if that provider is not a PCP under the PCCM program. Further, patients in PCCM, particularly those needing care for chronic conditions, have expressed concerns

about needing to get a referral from their PCP every time they need other health care services.

*Acceptance by Advocates.* Other states have been able to implement PCCM programs successfully without major opposition from patient advocates. Patient advocacy groups largely support the overarching quality-improvement goals of PCCM initiatives, but they are concerned that PCCM may limit access to providers.

*Government Implementation Capabilities.* Success of implementation could vary, depending on whether the state elects to build and administer the PCCM program in-house or contracts with a PCCM vendor. The burden of implementation could be less in cases where a state decides to contract with a vendor, but contracting out would require the state to monitor the contract and services provided by the vendor, which could have cost implications. In states that elect to build and administer their own PCCM programs, additional costs for designing the program and hiring new staff to carry out the program may be incurred.

*Financial Capacity.* The financial capacity of DHFS to run the program would depend on how the program was designed and managed. Several states implementing new PCCM programs have seen cost savings. DHFS would likely experience an initial increase in costs but savings could be achieved over time though better coordination of care.

## Political Feasibility

Because PCCM programs focus on care coordination and aim to enhance medical outcomes, this policy alternative is ideologically compatible with the quality improvement goals of DHFS. Although state legislators are largely unfamiliar with PCCM in FFS Medicaid settings, evidence of cost savings and quality improvement may make PCCM an attractive alternative.

## Background on Option 4: Chronic Disease Management

Chronic disease management (CDM) programs typically target patients with a specific diagnosis or group of diagnoses for which improved treatment has the potential to positively affect health outcomes and achieve cost savings. At least 21 states currently operate CDM programs in FFS Medicaid. A state-by-state description of these programs is provided in Appendix E. Since 2005, Medicare has been operating a CDM demonstration project, called Medicare Health Support, which targets about 70,000 beneficiaries with chronic diseases (CMS, 2008).

CDM programs aim to educate patients about their disease, motivate them to adhere to their provider's treatment plan, and engage in lifestyle changes that can help improve their health status. Common modes of communication to convey disease-specific information to patients in CDM programs include letters, nurse-staffed telephone centers, and nurse home visits.

Providers who participate in CDM programs often receive written and Internet-based training materials to update them on the most current disease management techniques and evidence-based medicine associated with the targeted disease or set of diseases. This ongoing education helps providers customize treatment plans to the needs of each patient.

CDM programs should include mechanisms for measuring health outcomes and assessing whether improvements in cost containment and quality of care are being achieved. In most states, there is no burden on providers to collect and report this data to the state Medicaid program. Instead, cost savings and quality improvement can be measured by the state or an outside entity responsible for monitoring claims data by periodically administering patient health assessments to track changes in health status over time.

States have taken a variety of approaches to designing and implementing CDM programs. Program administration varies, as do which diseases are targeted, strategies for initial implementation, and financing mechanisms.

### Administration: In-House vs. Contracting

In some states, CDM programs are fully built by the Medicaid department and administered by state staff in-house. In other states, Medicaid departments have issued requests for proposals to contract with private vendors to design, implement, and administer their CDM programs (National Conference of State Legislatures, 2007). For its CDM demonstration project, Medicare has contracted with eight different vendors to administer the Medicare Health Support program in eight different regions of the United States.

Indiana is one state that administers a CDM program in-house. After reviewing request for proposals from a number of vendors, the state Medicaid director and the state health commissioner ultimately decided to design and implement their own CDM program, using state and local resources (Rosenman et al., 2006). Jointly administered by the Indiana Family and Social Services Administration

and the Indiana State Department of Health, the Indiana Chronic Disease Management Program targets patients with asthma, congestive heart failure, diabetes, high blood pressure, and cardiovascular disease (Indiana Chronic Disease Management Program, n.d.).

Illinois is an example of a state that has purchased a CDM program from a vendor. After issuing a request for proposal and considering proposals from four vendors, the state contracted with McKesson Health Solutions in 2006 to design and implement a disease management program. Under this contract, McKesson is expected to identify and enroll members, perform member health assessments and risk stratification based on claims data, provide patient education and case management, operate a nurse consultation line, educate providers, measure health outcomes, and analyze cost savings (Illinois Department of Healthcare and Family Services, 2006).

An important consideration for states that decide to purchase a disease management program from a vendor is whether the contract should include a "guaranteed savings" requirement. This is one way states are holding contractors accountable for achieving targets for cost savings. In states that have contracted with a vendor to administer a disease management program, average savings guarantees are between 5 percent and 6.5 percent (Wheatley, 2002). If the contractor fails to achieve this goal, the state Medicaid program may be able to recoup some percentage of the fee paid by the state to the vendor for operating the program.

## Targeting Members and Conditions

When deciding which diseases to target, states look not only at which diagnoses or categories of disease are associated with the greatest spending but also at those conditions for which there is real potential to improve health outcomes (Cohen, 2003). Some diseases are more treatable than others, and disease management programs have been designed with this in mind. Asthma, congestive heart failure, and diabetes are among the most common conditions targeted by disease management programs. While mental health problems are among the most common and costly diagnoses for Medicaid members, disease management programs have targeted these conditions less often because fewer tested models for improving patient self-care exist. Dual eligibles, or members who are enrolled in both Medicare and Medicaid, are also often excluded from Medicaid disease management programs, because any savings that is achieved would accrue mostly to Medicare, rather than to Medicaid (Williams, 2004).

## Phased vs. Statewide Implementation

Indiana pursued a phased implementation for its CDM program, beginning in 2003 with interventions targeting diabetes and congestive heart failure among participants in the central region of the state. In 2004, asthma interventions were added, and the entire program was expanded to the remaining regions of the state. This regional, phased implementation gave the state time to hire and train personnel to administer the program, as well as to conduct outreach and achieve buy-in from providers, patients, and advocates (Rosenman et al., 2006).

In Illinois, on the other hand, after the contract with McKesson took effect, the CDM program was rolled out and implemented at the same time, statewide. Because the vendor had already made most of the investments associated with the design of the disease management program, more attention could be focused from the beginning on outreach to and enrollment of members and providers (Saunders, S., personal communication, March 4, 2008).

## Analysis of Chronic Disease Management

This section examines the efficacy of implementing CDM programs in FFS settings for the ABD population in terms of identified policy goals—efficiency, quality improvement, administrative feasibility, and political feasibility.

### Efficiency

Based on the experiences of other state Medicaid programs and Medicare, it is uncertain whether implementing a CDM program in Wisconsin would achieve cost savings for the FFS Medicaid population. Some states that have implemented CDM programs have observed shifts in spending from one category of service to another without overall cost containment for the Medicaid program.

For example, a 2002 evaluation of Florida's CDM program, which at the time targeted asthma, diabetes, hemophilia, and HIV/AIDS, found that while disease management helped reduce the costs associated with inpatient hospital admissions for Medicaid patients, this savings was offset by shifts in spending from hospital admissions to increased use of prescription drugs, as well as increased spending associated with administration of the CDM program (Wheatley, 2002).

Early evaluations of the Medicare Health Support demonstration project indicate that the program is not budget neutral and is failing to meet Medicare's goal of cost containment. Critics suggest that patients enrolled in the program are sicker and more medically fragile than the vendors had originally expected, and it has been difficult to reduce spending associated with inpatient hospital admissions in some cases. Also, because Medicare doesn't require beneficiaries to choose a PCP, efforts to improve the coordination of care and reduce unnecessary duplication of services for chronically ill enrollees have been hindered (Abelson, 2008).

### Quality Improvement

The same three criteria for quality improvement applied to the other options can be used to assess CDM programs also—improving long-term health, cultural competence of providers, and health literacy.

*Manage Disease and Improve Long-Term Health Outcomes.* By their nature, CDM programs are successful in achieving the goal of managing disease. Disease management programs focus on helping providers identify patients with specific diseases and better target treatments to those patients' specific needs. CDM programs also aim to educate patients about their diseases and give them the information they need to manage their own care.

Education and outreach efforts targeting providers and patients in CDM programs have led to an improvement in health outcomes in some states. For example, a CDM program in Mississippi resulted in decreased HbA1c levels among patients enrolled in the program, which is an outcome that indicates improved management of diabetes (Wheatley, 2002).

Improvement in long-term health outcomes has been observed less often in states that have chosen to operate more than one CDM program, each targeting a different disease. Patients diagnosed with multiple diseases may be enrolled in more than one of these programs, but if the programs are uncoordinated, such patients may not receive complete information about how to manage those diseases at the same time (Wheatley, 2002).

*Cultural Competence of Providers.* While cultural competence has not been a common focus in the design of CDM programs, it is possible for vendors and states to design a program in a way that would be responsive to the health beliefs, cultural practices, and linguistic needs of a racially, ethnically, and religiously diverse patient population in FFS Medicaid. Providers who participate in the program, as well as other health professionals who are engaged in the program and regularly interact with patients outside traditional office settings, could be trained to better respond to the cultural needs of patients with limited English proficiency and alternative health beliefs (Betancourt, 2006).

*Health Literacy.* The patient education and outreach components of CDM programs are well suited to achieving the goal of overcoming deficits in health literacy among the ABD population in FFS Medicaid. Written materials provided to patients enrolled in a CDM program could be drafted with health literacy needs in mind (Betancourt, 2006). Additional barriers to patients' understanding of self-management techniques can be overcome through personal interactions between patients and nurses who staff telephone centers and provide home visits.

## Administrative Feasibility

The administrative feasibility of implementing PCCM programs can be assessed by considering the level of providers' acceptance, members' acceptance, patient advocates' acceptance, government implementation capabilities, and financial support.

*Acceptance by Providers.* In states that have already implemented CDM programs, achieving acceptance from providers has not been a barrier to success. In Illinois, for example, 5,000 providers signed up to participate in the disease management program within the first year. Because there is no requirement for providers to collect and report data on treatment and outcomes to the state, administrative burdens to the individual provider are minor. Instead, the vendor maintains this information, through claims data and patient health assessments. On a quarterly basis, the vendor sends a profile to each provider, detailing how well he or she is meeting targets for managing the care of patients who are enrolled in the program (Saunders, personal communication, March 4, 2008).

*Acceptance by Members.* Prospects for achieving the acceptance of patients may vary, depending on whether a state decides to make its CDM program voluntary or mandatory for the FFS Medicaid population. If the program is voluntary and relies on members to opt in, participation may be low. One way to overcome this is for states to enroll all eligible members automatically and require them to opt out if they do not want to participate. Illinois adopted this strategy, and very few

patients have opted out of the CDM program once enrolled. Mandatory participation may make CDM programs less attractive to some patients.

In general, states have observed little post-implementation opposition from patients who are enrolled in CDM programs. If patients perceive the program as having a positive effect on their health and do not believe that it impedes their access to chosen providers or needed care, then the CDM program is more likely to be acceptable to patients.

*Acceptance by Advocates.* CDM programs have been successfully implemented in other states without opposition from patient advocacy groups, so it is unlikely that this would be a barrier to the success of CDM in Wisconsin. There are even some national-level patient advocacy groups that exist to promote disease management and combat the rising cost of health care among a variety of patient populations (Partnership to Fight Chronic Disease, 2008).

*Government Implementation Capacity.* The success of implementation for a CDM program in Wisconsin could vary, depending on whether the state elects to build and administer the CDM program in-house or via a disease management vendor. The burden of implementation may be less in cases where a state decides to contract with a vendor. In these cases, the vendor has already made most of the investment in designing the disease management program, so only the costs of implementation, administration, and monitoring the vendor are borne by the state. Contracting out, however, would require the state to monitor the contract and services provided by the vendor, which could have cost implications. In states that elect to build and administer their own CDM program, additional costs for designing the program and hiring new staff with the expertise necessary to carry out the program may be incurred.

*Financial Capacity.* It is difficult to predict whether DHFS has the financial capacity to invest in the adoption of a CDM program, because information about the costs associated with design and implementation of CDM programs in other states is limited. Cost information is especially difficult to obtain from states that have contracted with a vendor to design and administer a CDM program because such information is proprietary. Generally speaking, the costs associated with the initial design and implementation of a program may be significant and exceed any savings achieved in the first year or two, but some of the initial investment may be recouped through savings achieved in later years—from decreases in inpatient admissions, emergency room usage, and unnecessary or duplicative utilization of medical services.

## Political Feasibility

Because CDM programs focus on disease management and aim to improve health outcomes, this policy alternative is ideologically compatible with the quality improvement priorities of DHFS. Lawmakers have shown interest in CDM programs. A summer 2008 committee appointed by the Wisconsin Joint Legislative Council will study the efficacy of adopting disease management programs for all state health care programs.

## Option 5: Combined Primary Care Case Management and Chronic Disease Management

Many states have chosen to implement a primary care case management program in conjunction with a chronic disease management program. The goals of disease management are well aligned with the intent of PCCM programs, which try to improve care coordination and stress preventative services. Some states have found that primary care providers often do not coordinate with the specialists providing care to their chronically ill patients (Connors, Highsmith, & Croke, 2001). Others have found that if a patient is in several different disease management programs, there can be little communication between the programs. This break-down in communication can often lead to decreased quality of care. By requiring all patients participating in a chronic disease management program to choose a PCP, states have been able to improve communication between providers treating the same patients.

Because analysis of both the PCCM and CDM policy alternatives have already been completed and the results for implementing the programs together is extremely similar, the analysis for the programs implemented together is discussed in a limited fashion.

A joint PCCM and CDM program would see similar increased levels of efficiency and cost containment as the separate PCCM and CDM programs. Administrative costs would increase initially but would likely decrease as preventive services and care coordination increase.

Because both programs have been found to increase quality of care, it can be assumed that implementation of the programs together would increase the quality of care even further. Diseases could be better managed and health outcomes would likely improve under a joint program. The increase in cultural competence among providers and health literacy among patients would be similar to the level found under each program separately.

Joint implementation of these programs also shares the same administrative feasibility and political feasibility as the implementation of each program separately. Formal evaluations of programs that combine PCCM and CDM are limited. Almost all evaluations have chosen to assess either the PCCM portion of the program or the CDM portion of the program. Medicaid CDM programs have been evaluated more often than PCCM programs.

# Findings

To determine which quality improvement strategies the Wisconsin Department of Health and Family Services (DHFS) should pursue, it is useful to compare each of the five policy alternatives examined in this report and determine which alternatives best meet the goals outlined for this analysis. Appendix A provides a chart outlining these comparisons.

## Efficiency

Of the five proposed policies, adopting a PCCM program or pursuing a combination of PCCM and CDM would best achieve the goal of increasing efficiency by containing costs in Wisconsin's fee-for-service (FFS) Medicaid program. Some cost containment mechanisms in already in place in FFS Medicaid in Wisconsin. For example, the existing pharmacy management program provides the strongest cost containment mechanism in FFS Medicaid, but to date, efforts to control unnecessary and duplicative utilization of health care services in other areas of the program have been limited. There is no conclusive evidence that P4P programs contain costs in FFS environments. Also, cost savings have not been substantiated in CDM programs. Only PCCM programs have demonstrated cost containment where they have been implemented in FFS Medicaid programs.

## Quality Improvement

A combination of PCCM and CDM is the policy alternative that most successfully achieves the goal of quality improvement. Evaluations of P4P programs have not shown that these programs achieve significant improvement in long-term health outcomes, and P4P programs do little to promote cultural competence among providers or increase health literacy among patients. On the other hand, there is evidence to suggest that PCCM programs improve management of chronic disease and promote better long-term health outcomes by using primary care providers (PCPs) to coordinate patients' care. CDM programs target interventions to the specific needs of patients with chronic disease. It is also possible to design PCCM and CDM programs keeping in mind the value of cultural competence among providers and health literacy among patients.

## Administrative Feasibility

Maintaining the status quo would best meet the goal of administrative feasibility. Because DHFS already successfully administers the FFS Medicaid program, and providers, members, and advocates are largely satisfied with it, continuing to operate the program as-is would not be difficult. DHFS, however, has expressed interest in pursuing quality improvement initiatives for the aged, blind, and disabled (ABD) Medicaid population. CDM programs and PCCM programs do better than P4P programs in achieving acceptance among providers, members, and advocates. DHFS is also likely to achieve greater success in implementing and financing a combined CDM and PCCM program than it would in implementing and financing a P4P program.

## Political Feasibility

All of the policy alternatives examined in this report**,** including maintaining the status quo, are compatible with the stated quality improvement priorities of DHFS. However, DHFS and lawmakers have expressed interest in pursuing additional reforms to contain costs and increase quality.

# Recommendations

Based on this analysis, the authors recommend that DHFS explore the feasibility of adopting a combined PCCM and CDM program for the ABD population in FFS Medicaid. Those two programs best meet the four main goals identified for this analysis. If carefully designed, PCCM and CDM programs will ensure that Wisconsin Medicaid dollars buy the highest quality care and achieve improved health outcomes for ABD members. The following is a discussion of further recommendations and important issues for DHFS to consider if it decides to pursue these quality improvement strategies.

## Administration

Wisconsin Medicaid is open to the idea of contracting with private vendors for service delivery. For example, DHFS has contracted with private insurers to provide medical services for Medicaid members through managed care plans. Vendors also perform a variety of administrative functions. The authors recommend that DHFS issue a request for proposal to solicit bids from PCCM and CDM program vendors. Contracting with a private vendor that has demonstrated expertise in the areas of care coordination and disease management could save DHFS a significant amount of the investment associated with the in-house design of a PCCM and CDM program, and it could help speed implementation of the joint programs.

## Eligibility and Enrollment Considerations

One issue for Wisconsin Medicaid to consider is whether all FFS members will be enrolled in both the PCCM and CDM program, or whether certain populations should be excluded from one or both of the programs. In Illinois, for example, individuals who are dually eligible for Medicare and Medicaid have been excluded from the chronic disease management program because any savings that would be achieved in serving these patients would accrue largely to Medicare. All Illinois Medicaid beneficiaries, however, are enrolled in the PCCM program.

## Which Diseases to Target

DHFS should also consider whether the CDM program should be designed to target better management of a specific disease or set of diseases, or whether all medically diagnosed diseases will be targeted. Some states have chosen to identify a core set of diseases, while other states have chosen to monitor and improve management of the diseases of all patients enrolled in the CDM program, regardless of their diagnosis.

A number of high-cost, high-frequency diagnoses have been identified by the authors through analysis of claims data from October 2007 for inpatient, outpatient, and professional services in FFS Medicaid. Diagnoses for which a combined PCCM and CDM program may achieve cost savings and improve long-term health outcomes include but are not limited to the following:

- Asthma
- Breast cancer
- Chronic obstructive pulmonary disease
- Congestive heart failure
- Coronary artery disease
- Diabetes
- Lower back pain
- Lung cancer
- Renal failure
- Respiratory failure
- Sickle cell anemia

## Barriers and Obstacles

Before adopting these programs, DHFS should consider whether to pursue a phased or statewide approach to implementation. A phased implementation may give the state and the vendor time to conduct outreach and achieve buy-in from providers, members, and advocates. A statewide approach, on the other hand, could lead to more immediately observable improvements in health outcomes among the ABD population.

Another important issue to consider is whether all Medicaid providers will be required to participate in both the PCCM and CDM programs or if participation will be voluntary. If provider participation is voluntary, some patients could lose access to their preferred providers if those providers elect not to participate. Similarly, if provider participation is required, some providers may decide that they no longer want to participate in the Medicaid FFS program, which also would jeopardize patients' access to providers. Before deciding which quality improvement strategy to pursue, DHFS should engage in efforts to gauge the acceptance of providers and ensure that patients' access will be preserved after the program is implemented.

Another implementation challenge associated with adopting a combined PCCM and CDM program is the difficulty of maintaining contact with members, who often move or lose telephone access. Sometimes, patient contact information maintained by the state is outdated or incomplete (Williams, 2004). This could increase the administrative costs and reduce the overall savings that could be achieved by the program (Wheatley, 2002). When reviewing bids from vendors, DHFS should ensure that these costs have been accounted for.

## Conclusion

DHFS is committed to achieving efficient, high quality delivery of health care services for low-income and medically needy residents of Wisconsin. The majority of quality improvement efforts have focused on BadgerCare Plus members, who receive care through managed care organizations. DHFS recognizes, however, that additional improvement in the quality of health care delivered to the aged, blind, and disabled population in FFS Medicaid is needed. The authors of this report have offered several alternatives for reform that would lead to greater cost containment and quality improvement among the ABD population. Although a number of limitations are associated with this analysis, DHFS should act on the recommendations of the authors of this report and further explore the feasibility of implementing a combined primary care case management and chronic disease management program. The authors believe that this program has great potential for achieving Wisconsin's stated goals of high quality, cost-effective health care delivery in FFS Medicaid.

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## Appendix A: Alternatives Matrix – Goal Achievement Assessment

Each policy alternative is analyzed in terms of how well it meets the goals of efficiency, quality improvement, administrative feasibility, and political feasibility. A set of impact categories is associated with each goal, and each of the policy alternatives is analyzed in terms of how well it would achieve the impacts associated with each goal.

| Goal | Impact Category | Policy Alternatives | | | | |
|---|---|---|---|---|---|---|
| | | Status Quo | Pay-for-Performance (P4P) | Primary Care Case Management (PCCM) | Chronic Disease Management (CDM) | Combined PCCM & CDM |
| Efficiency | Cost Containment | Fair – Current program includes limited cost-containment mechanisms | Fair – Design and implementation costs significant; future savings not certain | Good – Design and implementation costs could be significant, but future savings possible | Fair– Design and implementation costs could be significant, and lack of PCP coordination may not reduce duplicative services, but future savings possible | Good – Design and implementation costs could be significant, but PCP coordination of care could reduce duplicative services. Future savings from both programs possible |
| Quality Improvement | Manage Disease and Improve Long-term Health Outcomes | Fair – Existing pharmacy management program; limited targeted interventions and small care management programs | Fair – No evidence that health outcomes improve. FFS population is medically fragile and P4P measures may not meet the specific needs of patients | Good – Evidence that medical home promotes preventive care and improves health outcomes | Good – Interventions targeted to the specific needs of the patient; focus on disease management and improved health outcomes | Excellent – Long-term health outcomes improve even more significantly when primary care management and disease-specific interventions are coupled |

| Goal | Impact Category | Policy Alternatives | | | | |
|---|---|---|---|---|---|---|
| | | Status Quo | Pay-for-Performance (P4P) | Primary Care Case Management (PCCM) | Chronic Disease Management (CDM) | Combined PCCM & CDM |
| Quality Improvement | Promote Cultural Competence among Providers | Poor – No current programs, but department has demonstrated interest in pursuing this area. | Poor – Cultural competence not a focus of the design of P4P measures | Fair to Good – Program could be designed to promote cultural competence | Good – Cultural competence a central component of many outreach and education efforts | Good – Cultural competence could be a central feature of these combined programs. |
| | Health Literacy | Poor – No current programs, but department has demonstrated interest in pursuing this area. | Poor – Health literacy not a focus of the design of P4P measures | Good – Outreach and education materials may be designed with the health literacy of patients in mind | Good – Outreach and education materials may be designed with the health literacy of patients in mind | Good – Outreach and education materials may be designed with the health literacy of patients in mind |
| Administrative Feasibility | Acceptance by Providers | Good – No evidence of reluctance among providers to participate in the program, though some concern about reimbursement rates | Poor – Providers reluctant to participate if reimbursement is tied to health outcomes for a medically fragile population. | Good – No financial risk; providers will not receive less compensation than they would otherwise. Administrative costs are limited | Good – No financial risk; providers will not receive less compensation than they would otherwise. Administrative costs are limited | Good – No financial risk; providers will not receive less compensation than they would otherwise. Administrative costs are limited |
| | Acceptance by Members | Excellent – Few barriers to providers and treatment; most patients are satisfied with the care they receive. | Fair – Patients may have to change providers, expectation to comply with treatment plan may be burdensome. | Fair – Patients may not be able to maintain current provider if provider does not enroll; need to obtain referrals could be burdensome. | Fair – Patients have concerns with mandatory requirements that some states have adopted. | Fair- Same concerns found in PCCM and CDM categories. |

| Goal | Impact Category | Policy Alternatives | | | | |
|---|---|---|---|---|---|---|
| | | Status Quo | Pay-for-Performance (P4P) | Primary Care Case Management (PCCM) | Chronic Disease Management (CDM) | Combined PCCM & CDM |
| Administrative Feasibility | Acceptance by Patient Advocates | Good– Current quality improvement measures accepted. | Fair – Support quality improvement measures; concerned with limited access to providers. | Fair – Support quality improvement measures; concerned with limited choice of providers. | Good – Support quality improvement measures. | Fair – Support quality improvement measures; concerned with limited choice of providers |
| | Government Capacity to Implement | Excellent- Government is currently implementing policy. | Poor – Could be extremely difficult to implement in FFS setting. | Good – State could implement in-house or contract out. | Good – State could implement in-house or contract out. | Good – State could implement in-house or contract out. |
| | Financial Capacity | Good – Currently has financial capacity to run programs; high health care costs and budget constraints could be problem in future. | Poor – High implementation costs; current budget constraints could limit capacity. | Fair – Higher initial costs but savings could be seen over time. | Fair – Higher initial costs but savings could be seen over time. | Fair – Higher initial costs but savings could be seen over time. |
| Political Feasibility | Ideological Compatibility and Legislative Support | Fair – The programs are in line with the quality improvement priorities of DHFS but could be broadened to affect a greater share of ABD population. | Fair – Well aligned with the quality improvement goals of DHFS, but high cost of implementation may weaken legislative support. | Good – Well aligned with the quality improvement goals of DHFS and the legislature. | Good – Well aligned with the quality improvement goals of DHFS and the legislature. | Good – Well aligned with the quality improvement goals of DHFS and the legislature. |

Source: Authors' assessment based on analysis of alternatives

## Appendix B: Top Twenty Diagnoses for ABD in FFS by Expenditures and Occurrences: October 2007

The Wisconsin Medicaid claims data for October 2007 provides detailed information on the most common and the most expensive health conditions that Wisconsin ABD FFS Medicaid members experience. This appendix details the top twenty conditions by expenditures and by occurrences (frequency) that inpatient, outpatient, and professional care setting members were diagnosed with during the month of October 2007 (Wisconsin Medicaid claims data, October 2007).

Top 20 Most Expensive Inpatient Diagnoses for the Aged, Blind, and Disabled in Fee-for-Service Medicaid

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Disease of the respiratory system | Respiratory failure | 327 | $5,894,612 |
| Heart disease/failure | Coronary atherosclerosis of native coronary vessel | 299 | $3,292,586 |
| Heart disease/failure | Primary cardiomyopathy | 28 | $3,256,663 |
| Blood poisoning | Septicemia | 276 | $3,084,058 |
| Heart disease/failure | Chronic ischemic heart disease | 23 | $2,656,317 |
| Injury | Fractured base of skull, deep coma | 28 | $2,647,749 |
| Heart disease/failure | Acute myocardial infarction, subendocardial infarction | 150 | $2,502,767 |
| Lung infection | Pneumonitis due to inhalation of food or vomitus | 190 | $2,138,669 |
| Care involving use of rehabilitation procedures | Other specified rehabilitation procedure | 239 | $1,974,821 |
| Disease of the musculoskeletal system | Osteoarthrosism, lower leg | 200 | $1,925,375 |
| Cerebrovascular disease | Moyamoya disease | 46 | $1,898,189 |
| Cerebrovascular disease | Cerebral artery occlusion w/ cerebral infarction | 196 | $1,857,673 |
| Disease of the respiratory system | Pneumonia, organism unspecified | 419 | $1,699,890 |
| Heart disease/failure | Congestive heart failure | 266 | $1,615,812 |
| Disease of the respiratory system | Obstructive chronic bronchitis | 252 | $1,475,985 |
| Complication of surgical and medical care | Complications due to cardiac devices, implant, or graft | 69 | $1,400,833 |
| Blood disease | Sickle-cell disease, Hb-SS with crisis | 289 | $1,343,570 |

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Lung cancer | Malignant neoplasm of upper lobe, bronchus or lung | 80 | $1,240,012 |
| Kidney disease | Acute renal failure | 231 | $1,235,838 |
| Disease of the respiratory system | Acute and chronic respiratory failure | 25 | $1,225,236 |
| | **Total for Top 20:** | **3,633** | **$44,366,657** |
| | **Total ABD Inpatient Diagnoses:** | **18,888** | **$138,976,855** |

## Top 20 Most Common Inpatient Diagnoses for the Aged, Blind, and Disabled in Fee-for-Service Medicaid

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Disease of the respiratory system | Pneumonia, organism unspecified | 419 | $1,699,890 |
| Disease of the respiratory system | Respiratory failure | 327 | $5,894,612 |
| Heart disease/failure | Coronary atherosclerosis of native coronary vessel | 299 | $3,292,586 |
| Blood disease | Sickle-cell disease, Hb-SS with crisis | 289 | $1,343,570 |
| Blood poisoning | Septicemia | 276 | $3,084,058 |
| Heart disease/failure | Congestive heart failure | 266 | $1,615,812 |
| Disease of the respiratory system | Obstructive chronic bronchitis | 252 | $1,475,985 |
| Symptoms, signs, and ill-defined conditions | Chest pain, other | 247 | $834,894 |
| Care involving use of rehabilitation procedures | Other specified rehabilitation procedure | 239 | $1,974,821 |
| Kidney disease | Acute renal failure | 231 | $1,235,838 |
| Disorder of fluid, electrolyte, and acid-base balances | Volume depletion | 207 | $662,890 |
| Disease of the musculoskeletal system | Osteoarthrosism, lower leg | 200 | $1,925,375 |
| Cerebrovascular disease | Cerebral artery occlusion w/ cerebral infarction | 196 | $1,857,673 |
| Disease of the nervous system | Epilepsy | 194 | $764,819 |
| Disease of urinary system | Urinary tract infection | 191 | $863,216 |
| Lung infection | Pneumonitis due to inhalation of food or vomitus | 190 | $2,138,669 |
| Disease of the respiratory system | Asthma with acute exacerbation | 175 | $446,201 |
| Encounter for chemotherapy | Antineoplastic chemotherapy | 171 | $817,825 |
| Disease of pancreas | Acute pancreatitis | 167 | $1,137,862 |
| Disease of endocrine glands | Diabetes with ketoacidosis, type I (juvenile type) | 165 | $463,733 |
| | **Total for Top 20:** | **4,701** | **$33,530,332** |
| | **Total ABD Inpatient Diagnoses:** | **18,888** | **$138,976,855** |

## Top 20 Most Expensive Outpatient Diagnoses for the Aged, Blind, and Disabled in Fee-for-Service Medicaid

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Kidney disease | Chronic renal failure | 5,569 | $6,290,094 |
| Encounter for radiotherapy | Radiotherapy | 508 | $522,827 |
| Symptoms, signs, and ill-defined conditions | Chest pain, other | 1,695 | $464,586 |
| Lung cancer | Malignant neoplasm of bronchus and lung, unspecified | 795 | $422,552 |
| Encounter for chemotherapy | Antineoplastic chemotherapy | 614 | $360,435 |
| Drug addiction | Opioid type drug dependence | 200 | $333,086 |
| Care involving use of rehabilitation procedures | Rehabilitation procedure, other specified | 315 | $318,343 |
| Encounter for therapeutic drug monitoring | Encounter for therapeutic drug monitoring | 1,542 | $304,790 |
| Aftercare following organ transplant | Aftercare following organ transplant | 1,126 | $260,750 |
| Complication of surgical and medical care | Postoperative infection, abscess or septicemia | 158 | $248,288 |
| Symptoms, signs, and ill-defined conditions | Chest pain, unspecified | 1,232 | $246,677 |
| Disease of urinary system | Urinary tract infection | 1,171 | $228,787 |
| Disease of hard tissues of teeth | Dental caries | 1,063 | $209,974 |
| Symptoms, signs, and ill-defined conditions | Headache | 997 | $192,582 |
| Symptoms, signs, and ill-defined conditions | Convulsions | 1,031 | $177,858 |
| Symptoms, signs, and ill-defined conditions | Abdominal pain, unspecified site | 967 | $170,307 |
| Blood disease | Sickle-cell disease, unspecified | 981 | $154,778 |
| Myeloid cancer | Acute myeloid leukemia | 354 | $150,556 |
| Disease of the musculoskeletal system | Lumbago (low back pain) | 757 | $139,911 |
| Disease of endocrine glands | Diabetes mellitus, Type II or unspecified type | 813 | $135,106 |
| | **Total for Top 20:** | **21,888** | **11,332,287** |
| | **Total Aged, Blind & Disabled Outpatient Diagnoses:** | **90,745** | **$26,830,456** |

## Top 20 Most Common Outpatient Diagnoses for the Aged, Blind, and Disabled in Fee-for-Service Medicaid

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Kidney disease | Chronic renal failure | 5,569 | $6,290,094 |
| Symptoms, signs, and ill-defined Conditions | Chest pain, other | 1,695 | $464,586 |
| Encounter for therapeutic drug monitoring | Encounter for therapeutic drug monitoring | 1,542 | $304,790 |
| Symptoms, signs, and ill-defined Conditions | Chest pain, unspecified | 1,232 | $246,677 |
| Disease of urinary system | Urinary tract infection | 1,171 | $228,787 |
| Aftercare following organ transplant | Aftercare following organ transplant | 1,126 | $260,750 |
| Disease of hard tissues of teeth | Dental caries | 1,063 | $209,974 |
| Symptoms, signs, and ill-defined Conditions | Convulsions | 1,031 | $177,858 |
| Symptoms, signs, and ill-defined Conditions | Headache | 997 | $192,582 |
| Blood disease | Sickle-cell disease, unspecified | 981 | $154,778 |
| Symptoms, signs, and ill-defined Conditions | Abdominal pain, unspecified site | 967 | $170,307 |
| Disease of endocrine glands | Diabetes mellitus, type II or unspecified type | 813 | $135,106 |
| Lung cancer | Malignant neoplasm of bronchus and lung, unspecified | 795 | $422,552 |
| Disease of the musculoskeletal system | Lumbago (low back pain) | 757 | $139,911 |
| Symptoms, signs, and ill-defined Conditions | Abdominal pain, multiple sites | 742 | $130,215 |
| Disease of the nervous system | Epilepsy | 651 | $116,039 |
| Encounter for chemotherapy | Antineoplastic chemotherapy | 614 | $360,435 |
| Disorder of the nervous system | Migraine | 592 | $100,965 |
| Disorder of soft tissue | Pain in limb | 561 | $101,856 |
| Routine examination of specific system | Dental Examination | 548 | $97,653 |
| | **Total for Top 20:** | **23,447** | **10,305,916** |
| | **Total ABD Professional Diagnoses:** | **90,745** | **$26,830,456** |

Top 20 Most Expensive Professional Diagnoses for the Aged, Blind, and Disabled in Fee-for-Service Medicaid

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Disease of the nervous system | Cerebral palsy | 17,861 | $1,319,692 |
| Unavailability of medical facility for care | Residence remote from hospital or other health care facility | 11,020 | $957,418 |
| Complication of surgical and medical care | Other and unspecified complications of medical care | 57,255 | $709,110 |
| Mental psychoses | Schizoaffective disorder | 18,679 | $604,053 |
| Dependence of respirator | Dependence on respirator, status | 2,681 | $584,912 |
| Mental retardation | Profound mental retardation (IQ<20) | 6,910 | $561,611 |
| Mental retardation | Severe mental retardation (IQ 20-34) | 7,054 | $449,922 |
| Mental psychoses | Paranoid schizophrenia | 14,458 | $447,189 |
| Mental retardation | Mental retardation, other | 7,842 | $412,914 |
| Symptoms, signs, and ill-defined conditions | Debility | 2,270 | $390,978 |
| Disease of the respiratory system | Chronic airway obstruction | 3,913 | $382,810 |
| Mental problem influencing health status | Mental problem influencing health status | 5,170 | $377,711 |
| Mental disorders, other nonpsychotic | Hyperkinetic syndrome of childhood w/ hyperactivity (ADHD) | 4,901 | $361,293 |
| Mental retardation | Moderate mental retardation (IQ 35-49) | 5,813 | $317,923 |
| Mental psychoses | Schizophrenia | 8,853 | $268,563 |
| Chromosomal anomalies | Down Syndrome | 5,183 | $264,858 |
| Symptoms, signs, and ill-defined conditions | Urinary incontinence | 4,678 | $261,884 |
| Heart disease/failure | Congestive heart failure | 2,937 | $241,265 |
| Disease of endocrine glands | Diabetes mellitus, Type II or unspecified type | 7,548 | $232,022 |
| Mental disorders, other nonpsychotic | Unspecified delay in mental development | 3,876 | $226,920 |
| | **Total for Top 20:** | **198,902** | **$9,373,049** |
| | **Total ABD Professional Diagnoses:** | **634,365** | **$29,639,856** |

## Top 20 Most Common Professional Diagnoses for the Aged, Blind, and Disabled in Fee-for-Service Medicaid

| General Diagnosis Category | Diagnosis Description | Occurrences | Total Paid |
|---|---|---|---|
| Complication of surgical and medical care | Other and Unspecified Complications of Medical Care | 57,255 | $709,110 |
| Mental psychoses | Schizoaffective disorder | 18,679 | $604,053 |
| Disease of the nervous system | Cerebral Palsy | 17,861 | $1,319,692 |
| Mental psychoses | Paranoid schizophrenia | 14,458 | $447,189 |
| Unavailability of medical facility for care | Residence remote from hospital or other health care facility | 11,020 | $957,418 |
| Mental psychoses | Schizophrenia | 8,853 | $268,563 |
| Disorder of the eye | Regular astigmatism | 8,192 | $69,464 |
| Mental retardation | Mental retardation. other | 7,842 | $412,914 |
| Disease of endocrine glands | Diabetes mellitus, Type II or unspecified type | 7,548 | $232,022 |
| Mental retardation | Severe mental retardation (IQ 20-34) | 7,054 | $449,922 |
| Mental retardation | Profound mental retardation (IQ<20) | 6,910 | $561,611 |
| Vaccination against communicable disease | Influenza vaccination | 6,273 | $21,043 |
| Mental retardation | Moderate mental retardation (IQ 35-49) | 5,813 | $317,923 |
| Chromosomal anomalies | Down syndrome | 5,183 | $264,858 |
| Mental problem influencing health status | Mental problem influencing health status | 5,170 | $377,711 |
| Mental disorders, other nonpsychotic | Hyperkinetic syndrome of childhood w/ hyperactivity (ADHD) | 4,901 | $361,293 |
| Drug addiction | Opioid type drug dependence | 4,899 | $126,134 |
| Symptoms, signs, and ill-defined conditions | Urinary incontinence | 4,678 | $261,884 |
| Mental retardation | Mild mental retardation (IQ 50-70) | 4,618 | $203,312 |
| Disease of the respiratory system | Chronic airway obstruction | 3,913 | $382,810 |
| | **Total for Top 20:** | **211,120** | **$8,348,926** |
| | **Total ABD Professional Diagnoses:** | **634,365** | **$29,639,856** |

# Appendix C: Pay-for-Performance in Medicaid Managed Care

This appendix details P4P program design in managed care settings. As of 2006, 28 state Medicaid programs had implemented and fifteen states were in the process of designing pay-for-performance (P4P) initiatives for their managed care programs (Kuhmerker & Hartman, 2007). Although specific quality improvement targets and program designs vary considerably across states, the overwhelming majority of Medicaid P4P programs focuses on quality improvement rather than cost containment goals (Kuhmerker and Hartman, 2007). Pay-for-performance programs are most successful when initiated among populations with the greatest potential for quality and efficiency gains (Dudley and Rosenthal, 2006). After selecting a target population, states choose multiple performance measures to assess quality and develop incentive structures to reward physicians for participation.

## Target Populations

Over 85 percent of existing Medicaid P4P programs focus on improving the quality of primary care received by children, adolescents, and women as these groups comprise the majority Medicaid recipients (Kuhmerker & Hartman, 2007). Ensuring access to primary care providers, preventive care, and pre-natal care are common goals of such P4P programs. States further target high-risk, high-cost populations with multiple chronic diseases and behavioral health issues. These initiatives tend to emphasize periodic screening for chronic conditions, use of appropriate medications, and provider compliance with standard care practices (Kuhmerker & Hartman, 2007).

## Measurement Indicators

State Medicaid P4P programs in managed care use a variety of performance measurement indicators according to their specific improvement goals. The most commonly used performance measures include Health Plan Employer Data and Information Set (HEDIS) measures, structural measures, cost/efficiency measures, measures based on patient experiences, and measures based on medical records (Kuhmerker & Hartman, 2007). The selection of appropriate measures depends largely on improvement priorities, provider and state data collection and validation capabilities, and provider groupings.

*HEDIS Measures.* The most commonly used performance measure is the Health Plan Employer Data and Information Set. The National Committee for Quality Assurance (n.d.), the association responsible for accrediting managed care organizations, developed seventy-one HEDIS measures that are used to gauge provider performance across eight areas of care. Focusing largely on primary, preventive, and chronic disease care, HEDIS measures address the following :

- Asthma medication use
- Persistence of beta-blocker treatment after a heart attack
- Controlling high blood pressure

- Comprehensive diabetes care
- Breast cancer screening
- Antidepressant medication management
- Childhood and adolescent immunization status
- Advising smokers to quit

HEDIS measures are widely accepted by public and private payers alike and HEDIS data are collected by most managed care organizations (Kuhmerker & Hartman, 2007). Wisconsin Medicaid is transitioning to the use of HEDIS measures to assess quality in managed care P4P programs (Moore, personal communication, April 11, 2008). Other commonly used performance indicators include structural measures, cost/efficiency measures, measures based on patient experiences, and measures based on medical records (Kuhmerker & Hartman, 2007).

*Structural Measures.* Structural measures are used to assess provider compliance with specific activities. For example, Wisconsin and Tennessee require all MCOs to be accredited by the National Committee for Quality Assurance to be eligible for P4P incentives (Kuhmerker & Hartman, 2007). Other examples of structural measures include adoption of health information technology systems, length of time to obtain an appointment, and hours of operation. While structural measures may be used to determine access to care, they do not necessarily measure the quality of care received.

*Cost/Efficiency Measures.* About one-third of existing and 20 percent of new Medicaid P4P programs utilize cost/efficiency measures. These measures are used to identify overall levels of spending on specific Medicaid subpopulations in one year as compared to a prior year (Kuhmerker and Hartman, 2007). Examples of cost/efficiency measures include rates of generic prescription drugs use, MCO claims processing time, and the speed of the grievance resolution process.

*Measures Based on Patient Experiences.* Customer satisfaction and family experience of care surveys are the most common tool used to measure patient experiences. Most states, including Wisconsin, use the Consumer Assessment of Healthcare Providers and Systems survey to assess provider performance. Although 20 percent of existing Medicaid P4P programs use measures based on patient experiences to evaluate the quality of care received, no states rely solely on patient-reported measures (Kuhmerker & Hartman, 2007).

*Measures Based on Medical Records.* Measures based on medical records are derived from reviewing patient files and assessing provider compliance with evidence-based medical practices and by examining patient health status over time. Only six P4P programs use these measures because of the potential strain on provider participation due to data collection and review (Kuhmerker & Hartman,

2007). The HEDIS data set already contains measures based on medical records, making the process redundant.

## Incentive Structures

State Medicaid agencies choose an incentive type based largely on financial constraints. The majority of incentive payments are made directly to managed care organizations, institutional providers, and large group practices. While some states require MCOs to pass on payments to providers, a few states, including Alabama, Louisiana, and Pennsylvania, pay group providers directly for meeting performance targets (Kuhmerker & Hartman, 2007). Performance is typically measured over a one-year period, and the time between evaluation of performance and payout ranges from one quarter to one year (Kuhmerker & Hartman, 2007).

*Penalties.* Under the penalty approach, providers of health plans are required to pay back part of their capitation payments to the state if they fail to meet performance goals. The use of penalties is controversial because it may cause doctors to cease participation in the Medicaid program (Dudley & Rosenthal, 2006).

*Bonuses.* Single or continuing payments to providers and/or health plans for meeting performance targets are the most common type of incentive. Bonuses may also be used to reward providers for improvement even if they do not fully meet the performance goals. High-quality providers may, however, receive the payments without making any changes to their standards of care, and low-quality providers may find the thresholds too high and opt not to participate (Dudley & Rosenthal, 2006).

*Differential Reimbursement Rates.* State Medicaid programs may opt to increase or decrease the reimbursement rate for providers according to whether or not they achieve performance thresholds. Augmented payments tend to be smaller than bonuses and are paid continuously (Kuhmerker & Hartman, 2007).

*Auto Assignment.* Although not a direct financial reward, state Medicaid programs may choose to assign Medicaid beneficiaries automatically to demonstrably high-quality MCOs or primary care providers. This approach is financially advantageous to states because auto-assignment costs virtually nothing to implement (Kuhmerker & Hartman, 2007).

## Appendix D: Primary Care Case Management Programs in Fee-for-Service Medicaid

Nine states—Alabama, Georgia, Indiana, Louisiana, Oklahoma, Pennsylvania, North Carolina, South Carolina, and Illinois—operate PCCM programs for their FFS populations (Kuhmerker & Hartman, 2007). This appendix provides a state-by-state description of these programs.

| State | Program Description | Program Administration | Implemented with CDM program? |
|---|---|---|---|
| Alabama | "Patient First Program" – Uses a PCCM case management fee and provides patient management tools to providers, at no cost to providers | Alabama Medicaid Agency | Yes – "Together for Quality" |
| Georgia | Assists communities in improving access to primary health care in rural and urban underserved areas | | Yes –"Georgia Enhanced Care" |
| Illinois | Mandatory Primary Care Provider Program – Program focus is on women and children | Contracts with Automated Health Systems | Yes – "Your Healthcare Plus" |
| Indiana | "Care Select" program-Reimbursed by Fee-For-Service | Contracts with Maximus | Yes – "Indiana Chronic Disease" |
| Louisiana | PCCM program that reimburses PCP based on certain activities and performance criteria | Louisiana Department of Health and Hospitals | No |
| Oklahoma | PCPs who participate in PCCM program are required to participate as part of their contract with the state | Oklahoma State Department of Health. Services such as provider training contracted out. | Yes – "SoonerCare Health Management Program" |
| Pennsylvania | "Access Plus" Enrollment in PCCM program voluntary | Managed by a State Contractor | Yes |
| North Carolina | "Community Care of North Carolina" – Uses PCCM fees (still considering different incentives) | North Carolina Department of Health and Family Services | Yes |
| South Carolina | PCPS are reimbursed with PCCM fee ranging from $2-$4 per member per month. Participation voluntary | | No |

## Appendix E: Chronic Disease Management Programs in Fee-for-Service Medicaid

At least 22 states are operating chronic disease management programs in fee-for-service Medicaid. This appendix provides a state-by-state description of these programs.

| State | Program Description | Administration | Disease(s) Targeted | Implemented with PCCM program? |
|---|---|---|---|---|
| Alabama | *Together for Quality:*<br>State received a Medicaid Transformation Grant to build a claims-based electronic medical record (EMR) with clinical decision support tools, treatment recommendations, etc. | Contract with ACS Government Healthcare Solutions to design and implement EMR (Alabama Medicaid Agency, 2007) | EMR has capacity to target management of many diseases, but focuses especially on patients with:<br>Asthma and Diabetes<br>(National Conference of State Legislatures, 2007) | Yes – *Patient 1st* |
| Arkansas | *Arkansas High Risk Pregnancy Program:*<br>Patient consultations via telephone and telemedicine (interactive video); referrals, nurse consultations, and continuing education services for health care professionals (University of Arkansas for Medical Sciences, n.d.). | Contract with University of Arkansas for Medical Sciences | High-risk pregnancy | No |
| Colorado | Voluntary enrollment. Benefits include nurse consultation line, coaching calls, and symptom monitoring (Colorado Department of Health Care Policy and Financing, 2008) | Contracts with several different vendors—each focuses on a different disease. | Asthma<br>Chronic obstructive pulmonary disorder (COPD)<br>Congestive heart failure<br>Diabetes<br>Depression | No |
| Connecticut | As of July 2007, state issued RFP for DM program. All FFS and managed care members will be eligible to enroll (NCSL, 2007). | Still requesting proposals from vendors | Cardiac conditions<br>Diabetes<br>Childhood obesity | No |
| Florida | *Healthier Florida:*<br>Participants are assigned a care manager who oversees all aspects of their care. Services are also provided by multi-lingual community health workers, social workers, pharmacists, and dieticians (Pfizer Health Solutions, n.d.). | Contract with Pfizer Health Solutions | Congestive heart failure<br>Diabetes<br>Hypertension<br>Asthma<br>End-state renal disease (ESRD)<br>COPD<br>Sickle cell anemia | No |

| State | Program Description | Administration | Disease(s) Targeted | Implemented with PCCM program? |
|---|---|---|---|---|
| Georgia | *Georgia Enhanced Care:*<br>On-site and telephone disease management, 24-hour nurse triage services, member services call center, provider education and training, reporting of clinical outcome measures (United Healthcare, n.d) | Two regional contracts:<br>APS Healthcare (Atlanta/North Georgia) and United Healthcare (Central/South Georgia) | Diabetes<br>Congestive heart failure<br>Asthma<br>Coronary artery disease<br>Hemophilia<br>Schizophrenia | Yes |
| Illinois | *Your Healthcare Plus:*<br>At-risk patients are identified and stratified through claims data. Educational and counseling services are provided via telephone and/or community-based contact by nurses, community- and hospital-based case managers, social workers, behavioral health specialists, and pharmacists. Interventions are customized, based on each patient's social, cognitive, and language needs. Providers receive educational materials in writing and via the Internet (Illinois Department of Healthcare and Family Services, n.d.). | Contract with McKesson | Asthma<br>COPD<br>Coronary artery disease<br>Diabetes<br>Heart disease<br>Mental illness<br>Hemophilia<br>HIV<br>ESRD | Yes – *Illinois Health Connect* |
| Indiana | *Indiana Chronic Disease Management Program:*<br>Care managers make calls to patients who have been identified and stratified through claims data. Patients receive health assessments and educational materials. Higher-risk patients are also assigned a nurse care manager, who works with their primary care provider to deliver a consistent message about management of the disease(s) to the patient (Indiana Family and Social Services Administration, n.d.). | Jointly administered by Indiana's Family and Social Services Administration and Indiana State Department of Health | Asthma<br>Congestive heart failure<br>Diabetes<br>Hypertension | Yes – *Indiana Care Select* |
| Iowa | *Iowa Medicaid Care Management*<br>Participation is voluntary. Care managers provide one-on-one support, education, and guidance, as well as assistance in locating community resources (Iowa Department of Human Services, n.d.). | | Asthma<br>Congestive heart failure<br>Diabetes | No |

| State | Program Description | Administration | Disease(s) Targeted | Implemented with PCCM program? |
|---|---|---|---|---|
| Maine | *MaineCare Care Management Program* | | Targets all diseases, with a particular focus on:<br>Asthma<br>Cardiovascular diseases<br>Diabetes<br>Depression<br>Lower Back Pain<br>(National Conference of State Legislatures, 2007) | No |
| Missouri | *Chronic Care Improvement Program*<br>Internet-based EMR, accessible by providers and patients. Contractor also performs aggressive patient outreach and education, offers a 24/7 telephone line for nurse consultations, and uses electronic monitoring devices to report vital statistics to health coaches. Providers receive incentive payments for participation (Missouri Department of Social Services, 2007). | Contract with APS Healthcare | Asthma<br>Cardiovascular disease<br>COPD<br>Diabetes<br>Gastroesophageal reflux Disease<br>Sickle cell anemia | No |
| New York | State is conducting six regional disease management pilot programs. A different assortment of diseases is targeted in each of the six regions. Different services, including 24/7 call centers, face-to-face visits, and educational mailings, are offered in each of the six programs. Participation by Medicaid beneficiaries is voluntary. The state is conducting an evaluation on whether programs led to an improvement in health outcomes and a reduction in spending among participating members of the Medicaid population, as compared to those who did not participate (National Conference of State Legislatures, 2007). | | Asthma<br>Bipolar disorder<br>Chronic kidney disease<br>Chronic mental health illness<br>Congestive heart failure<br>Coronary artery disease<br>COPD<br>Depression<br>Schizophrenia<br>Schizoaffective disorder<br>Sickle cell anemia<br>ESRD | No |

| State | Program Description | Administration | Disease(s) Targeted | Implemented with PCCM program? |
|---|---|---|---|---|
| North Carolina | Targeted case management program for Medicaid beneficiaries with HIV. Focus is on helping individuals gain access to health care and community-based services not offered by Medicaid (North Carolina Division of Medical Assistance, 2008). | | HIV | Yes |
| North Dakota | *Experience HealthND*<br>Nurses provide face-to-face and telephone consultation and education. Contractor is collaborating with North Dakota School of Medicine and Health Sciences to coordinate outreach to providers and bolster outreach and information services for patients (North Dakota Department of Human Services, 2007). | Contract with U.S. Care Management Inc. | Asthma<br>Diabetes<br>COPD<br>Congestive heart failure | No |
| Oklahoma | *SoonerCare Health Management Program*<br>Providers receive financial incentive for participating and work with "practice facilitators" to learn about developments in evidence-based medicine. Patients are stratified based on risk and receive different levels of service, including in-person and telephone nurse consultation, depending on their level of risk (Oklahoma Health Care Authority, 2008). | Contract with Iowa Foundation for Medical Care | High risk/high cost patients (no specific disease targeted, but may include congestive heart disease, coronary artery disease, hypertension, and diabetes) | No |
| Rhode Island | *Connect CARRE*<br>Combined PCCM and CDM program focusing on ABD population. Enrollment in the first phase is capped at 200 members (Rhode Island Department of Human Services, n.d.). | Rhode Island Department of Human Services | Congestive heart failure<br>COPD<br>Sickle cell anemia<br>Asthma<br>Diabetes<br>Depression | Yes |
| Texas | *Texas Medicaid Enhanced Care*<br>Medicaid beneficiaries are automatically enrolled but can opt out. Participants receive an initial letter and educational materials. Later, nurses perform follow-up monitoring, coaching calls, and visits (National Conference of State Legislatures, 2007). | Contract with McKesson | COPD<br>Heart failure<br>Coronary artery disease<br>Diabetes<br>Asthma | Yes |

| State | Program Description | Administration | Disease(s) Targeted | Implemented with PCCM program? |
|---|---|---|---|---|
| Vermont | *Chronic Care Management Program*<br>Teams of nurses and social workers perform initial health assessments and later assist patients and providers in better managing disease and coordinating care (APS Healthcare, n.d.). | Contract with APS Healthcare | Asthma<br>Arthritis<br>Chronic renal failure<br>COPD<br>Congestive heart failure<br>Depression<br>Diabetes<br>Hyperlipidemia<br>Hypertension<br>Ischemic heart disease<br>Low back pain | No |
| Virginia | *Healthy Returns Disease State Management Program*<br>Voluntary enrollment; dual eligibles and nursing home residents excluded from program. Services include initial health assessments, ongoing outreach and education, and a 24/7 nurse consultation hotline. (National Conference of State Legislatures, 2007) | Contract with Health Management Corporation | Asthma<br>Congestive heart failure<br>Coronary artery disease<br>Diabetes | No |
| Washington | Contractor stratifies potential enrollees by risk and offers enrollment to top quintile of patients. Teams of nurses and social workers collaborate to ensure that patients receive needed care (National Conference of State Legislatures, 2007). | Two contracts:<br>AmeriChoice Management Services Corporation (statewide, *except* for King County)<br>King County Health Partners in King County | High-risk patients (no specific diseases targeted) | No |
| Wyoming | *Healthy Together*<br>All patients receive educational materials by mail, and the highest risk patients receive additional one-on-one outreach and support from health coaches and case managers (National Conference of State Legislatures, 2007). | APS Healthcare | High-risk patients, including those with depression, asthma, diabetes and heart disease. | No |